

**Lowland wet grassland  
Resource Survey: Module 2  
Volume 2: Biota reference  
Inventory and quality profiling report**



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Inventory and Quality Profiling report

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**LOWLAND WET GRASSLAND RESOURCE SURVEY**

**MODULE 2**

**INVENTORY OF BIOTA**

**MAIN REPORT**

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**A Report to English Nature  
Contract No. F72-08-18**

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## SUMMARY

1. This Module 2 main report of the Lowland Wet Grassland Resource Survey discusses inventory techniques used to abstract detailed Phase 2 information on the biota of lowland wet grassland habitat in England. It also covers database methods used to relate Phase 2 information to blocks of wet grassland habitat established in Module 1.
2. Results linking blocks with all identified sources are presented as 1:50,000 10km square maps marked with wet grassland blocks, with labels referring to any relevant biota reports and surveys added to the base of each map. A detailed abstract of each source and survey is appended to each set of maps. This information is presented in seven volumes corresponding to English Nature regions which were recognised until 1993.
3. In addition to abstracting and mapping information, Module 2 involved the development of first-stage quality profiling techniques to summarise the nature conservation value of the lowland wet grassland resource. This was applied at county scale to Essex and Norfolk. Key interests for wet grassland were defined as grassland sward, ditch habitat, rare plant species, breeding birds, wintering birds and invertebrates. Scales of nature conservation quality (strong, moderate and low interest) were developed for each key interest and Module 1 lowland wet grassland blocks in Essex (124 sites) and Norfolk (131 sites) were each classified into one quality class per key interest. Quality profile maps of each key interest were then developed together with a brief interpretation. Brief summaries of the information available for each wet grassland block were developed as contextual statements. Quality profiling techniques are reviewed and suggestions for improving and extending the approach are made.

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We are indebted to a very large number of people for their assistance with this wide-ranging project. Overall direction came from Dr Richard Jefferson and much detailed advice, information and critique came from his colleagues on the Steering Group: Dr Andy Brown (birds), Dr Clive Doarks (ditch vegetation, Broadland) and Dr Martin Drake (invertebrates). Helen Ainsworth assisted in the early stages of the project, identifying potential reports and developing a PARADOX database for recording results. Much of her initial time was spent using library facilities at English Nature HQ under the advice and supervision of Shirley Penny. Helen also abstracted tetrad data for breeding birds of lowland wet grassland blocks using the database available at the Joint Nature Conservation Committee (JNCC) with the assistance of George Boobyer. Invertebrate Site Register locations on lowland wet grassland were thoroughly accessed for Helen by Deborah Proctor (JNCC). Visits were made to many English Nature offices to read and abstract reports held only in those locations - a large number of staff, too many to acknowledge individually, assisted us in this process. Access to datasets and reports maintained by the Royal Society for the Protection of Birds was provided in Edinburgh by Dr Mark O'Brien. The Wildfowl and Wetland Trust provided information on lowland wet grassland sites in England and their associated bird records.





# 1 PROJECT OBJECTIVES AND APPROACH

## 1.1 Background

Lowland wet grasslands occur widely in England, supporting diverse communities of plant and animal species. The broad definition used here of this habitat is: "*managed land, periodically inundated by water, predominantly of permanent grassland and fen meadows within a flat area with a network of ditches containing standing water. Such areas may also include some wetter emergent swamp communities, but not extensive areas of emergent hydrophytes (e.g. *Typha* and *Phragmites*). Lowland wet grasslands, including grazing marshes, normally occur in lowland river valleys and behind sea defences. Salt marshes are not included.*" Such grasslands are especially notable for vascular plants, birds (particularly waders and wildfowl) and invertebrates of ditches and ditch margins. They are thus of considerable nature conservation value.

The extent and nature conservation value of much lowland wet grassland has been dramatically reduced over the last 30 years, principally by agricultural intensification. In response to this trend, large efforts have been made to maintain and improve the quality of such habitat in nature reserves (e.g. at Holkham, North Norfolk Coast SSSI) and in the broader countryside through Environmentally Sensitive Area designation. There is a reasonable documentation of the extent and nature conservation interest for the larger areas of coastal grazing marsh and river valley grassland but, at an all-England scale, there are major gaps in basic information on the distribution, extent and nature conservation interest of wet grassland. This volume is part of a resource survey project which maps all areas of probable lowland wet grassland exceeding 10 hectares in England (Module 1: Year 1 1992/93; Dargie 1993) and collates information on grassland biota as an inventory (Module 2: Year 2 1993/94; this study). Results are to be used in developing a national strategy for the conservation of lowland wet grassland.

## 1.2 Project objectives

Module 2 has two objectives:

1. To collate and summarise biological survey information for all lowland wet grassland in England as identified by Module 1 (see Section 1.3);
2. To develop first stage quality profiles and contextual statements for two selected areas, Essex and Norfolk, containing lowland wet grassland (see Section 1.4).

### **1.3 Collation of survey information and inventory production**

#### **1.3.1 Types of survey**

The following types of survey were considered relevant in the context of lowland wet grassland habitat:

- a. Phase 2 grassland surveys;
- b. Botanical surveys of ditch systems and other habitats characteristic of lowland wet grassland;
- c. Breeding and wintering bird surveys and/or data;
- d. Aquatic and terrestrial invertebrate surveys.

#### **1.3.2 Identifying, locating and inspecting potential survey information**

The first step in identifying potential survey material involved a lengthy interrogation of English Nature's bibliographic database (STATUS). This database lists all English Nature biological surveys undertaken since 1979 and uses a free text system. Sets of key phrases (Table 1) and National Vegetation Classification (NVC) types (Table 2) were developed for use in interrogation, plus 45 county names combined with the term grassland. A total of 102 separate interrogations was made using combinations of key phrases, NVC types and geographical locations. Each trawl revealed many references but, following removal of duplicates, 414 potentially relevant sources were produced overall. These were then sorted on a county basis. Of the 414 total, 116 were referenced as located at English Nature HQ, the remainder (298) at EN regional offices. One striking feature of this initial phase was the very poor source total for some counties (Bedfordshire 1; Buckinghamshire 0; Derbyshire 1; Hertfordshire 0; Greater Manchester 1; Merseyside 0; Tyne and Wear 0; Warwickshire 1).

The second step in this stage of the project was the development of a proforma for use in recording information in a relevant source. Several references in EN HQ and East Region HQ were used to evolve a satisfactory proforma and explanatory notes (Annex 1). The design of the proforma was also influenced by the early recognition that a relational database would be required to hold information on both wet grassland blocks (identified in Module 1) and biota survey sources (identified in Module 2 and related to Module 1 blocks). The proforma for each bibliographic source had to include a wide variety of detail: author, title, publisher, year details; listed in STATUS database or not; location of the source; confidentiality; details of wet grassland blocks involved (including survey coverage of all/part of block area); area surveyed; survey method, timing, dates; species/habitats covered; additional information in the report (management information, evaluation etc.)

**Table 1.1 Key phrases employed in interrogation of the STATUS database**

alluvium meadows	fenland	levels	water meadows
aquatic flora	flood meadows	lowland & grass	wet meadows
aquatic invertebrates	flood plain	marsh & grassland	wetland
birds & grass	flush	mire	wildfowl & grassland
culm	glacial trough valleys	neutral grassland	
ditch invertebrates	grassland inventories	pasture	
ditches & rhynes	grazing & marsh	swamp	
drains	hay meadows	terrestrial invertebrates	
dykes	ings	waders & grassland	
fen meadows	inundation community	washes	

**Table 1.2 NVC types employed in interrogation of the STATUS database**

S4	<i>Phragmites australis</i> reedbed
S5	<i>Glyceria maxima</i> swamp
S6	<i>Carex riparia</i> swamp
S7	<i>Carex acutiformis</i> swamp
S18	<i>Carex otrubae</i> swamp
S20	<i>Scirpus lacustris</i> ssp. <i>tabernaemontani</i> swamp
S22	<i>Glyceria fluitans</i> swamp
S28	<i>Phalaris arundinacea</i> fen
M22	<i>Juncus subnodulosus</i> - <i>Cirsium palustre</i> fen-meadow
M23	<i>Juncus effusus/acutiflorus</i> - <i>Galium palustre</i> rush-pasture
M24	<i>Molinia caerulea</i> - <i>Cirsium dissectum</i> fen-meadow
M25	<i>Molinia caerulea</i> - <i>Potentilla erecta</i> mire
M26	<i>Molinia caerulea</i> - <i>Crepis paludosa</i> fen
M27	<i>Filipendula ulmaria</i> - <i>Angelica sylvestris</i> tall-herb fen
MG4	<i>Alopecurus pratensis</i> - <i>Sanguisorba officinalis</i> flood meadow
MG6b	<i>Lolium perenne</i> - <i>Cynosurus cristatus</i> pasture, <i>Anthoxanthum odoratum</i> sub-community
MG7	<i>Lolium perenne</i> leys and related grasslands
MG8	<i>Cynosurus cristatus</i> - <i>Caltha palustris</i> flood-pasture
MG9	<i>Holcus lanatus</i> - <i>Deschampsia cespitosa</i> grassland
MG10	<i>Holcus lanatus</i> - <i>Juncus effusus</i> rush-pasture
MG11	<i>Festuca rubra</i> - <i>Agrostis stolonifera</i> - <i>Potentilla anserina</i> inundation grassland
MG12	<i>Festuca arundinacea</i> coarse grassland
MG13	<i>Agrostis stolonifera</i> - <i>Alopecurus geniculatus</i> grassland

The third step involved consulting all relevant surveys in EN Headquarters in Peterborough, plus a large number of visits to other EN offices throughout England to consult material. EN County Grassland Inventories published in 1993 were included in the EN material examined.

Much bird information was also gained via datasets held by the Joint Nature Conservation Committee and the Royal Society for the Protection of Birds (via Mark O'Brien in the Edinburgh office where a centralised collection of RSPB wet meadow reports and survey data is currently held). The Wildfowl and Wetlands Trust provided a full list of sites from their Wetland Bird Survey dataset within the category "river, canal or freshwater marsh". Much early BTO atlas data proved unsuitable, with recording done on a 10 km square basis, too crude a scale to relate to wet grassland blocks. Tetrad (2 km x 2 km squares) data (Gibbons, Reid & Chapman 1993) were used for the 1992 breeding bird national atlas, based on survey work between 1988 and 1991 involving two hour visits to tetrads during the breeding season. Wintering bird information is effectively summarised in the annual wildfowl and wader counts co-ordinated by the British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds, and the Joint Nature Conservation Committee. Their recording sites in Essex and Norfolk were used based on data presented for the 1992-93 winter (Waters & Cranswick 1993). A list of potential wet grassland Invertebrate Site Register (ISR) sites was supplied by Deborah Proctor of the Joint Nature Conservation Committee. This was derived by entering all wet grassland 10 km square codes into the ISR database and printing basic ISR data (including grid reference) for all ISR sites in each square. This ISR site list was then checked by grid reference against 1:50,000 10 km square maps of wet grassland blocks.

Several county wildlife trusts were approached but none held report information with detailed survey information on lowland wet grassland habitat or biota. County bird reports were considered but spatial referencing (either by site name or 10 km grid square grid reference) was too poor to relate to wet grassland blocks.

The third step was the most time consuming in the complete project. Each survey report or data set often had to be read in entirety. All map or six figure grid reference information had to be checked with a set (c. 670 total) of 10 km square maps marked with numbered wet grassland blocks from Module 1. A large number of EN reports revealed by STATUS proved unsuitable, either due to contents which did not focus on lowland wet grassland, or because spatial referencing was inadequate for relating to wet grassland blocks (e.g. no six figure grid references, only 10 km square references, very small-scale maps, maps without grid lines, sites with only place names). It often took some time for thorough consultation before rejecting a potential source. A consolidated list of rejections was given to the Nominated Officer. As a partial counterbalance to rejections new references (not entered into the STATUS database) were discovered in EN offices, usually via discussion with staff conservation officers. All accepted surveys and data sets were recorded in a standard fashion using the proforma designed early in the project (Annex 1).

### 1.3.3 Development of PARADOX relational database

A relational database was developed to hold grassland block (site) data, allow entry of biota survey references, and to produce grassland block labels and reference details for contract end products. The database was developed using Borland PARADOX software. A simplified version of the logical data structure of the database is shown in Figure 1, emphasising the central importance of block (site) and reference information. These act as key fields in the database.

The database is customised, using a main menu with three choices:

1. Viewing/editing wet grassland block information (Module 1 data);
2. Entering reference information;
3. Querying all data and printing reports, including labels to attach to 10 km maps, identifying blocks with specific reference sources.

Within the database, information is stored using a large set of tables, either holding block/reference data or a look-up list of multiple attributes (Table 3). Not all tables were used in Module 2 but the unused types were inserted in case the database is used in the future for storing detailed survey information. The largest data file by far (BTO\_SPP) is a list of all breeding bird species in a block, derived from the 1988-1991 British Trust for Ornithology (BTO) national tetrad survey (Gibbons, Reid & Chapman 1993). This was obtained by listing all tetrads for each lowland wet grassland block and then drawing a species list from the BTO database held by the Joint Nature Conservation Committee. A count of wet grassland breeding bird species (Nature Conservancy Council 1989) was made for each block with BTO tetrad data (data file BTO\_SUM3). It should be emphasised that the short recording period (2 hours) for each tetrad is unlikely to produce an exhaustive list of breeding birds, but it is the only recent national-scale data available.

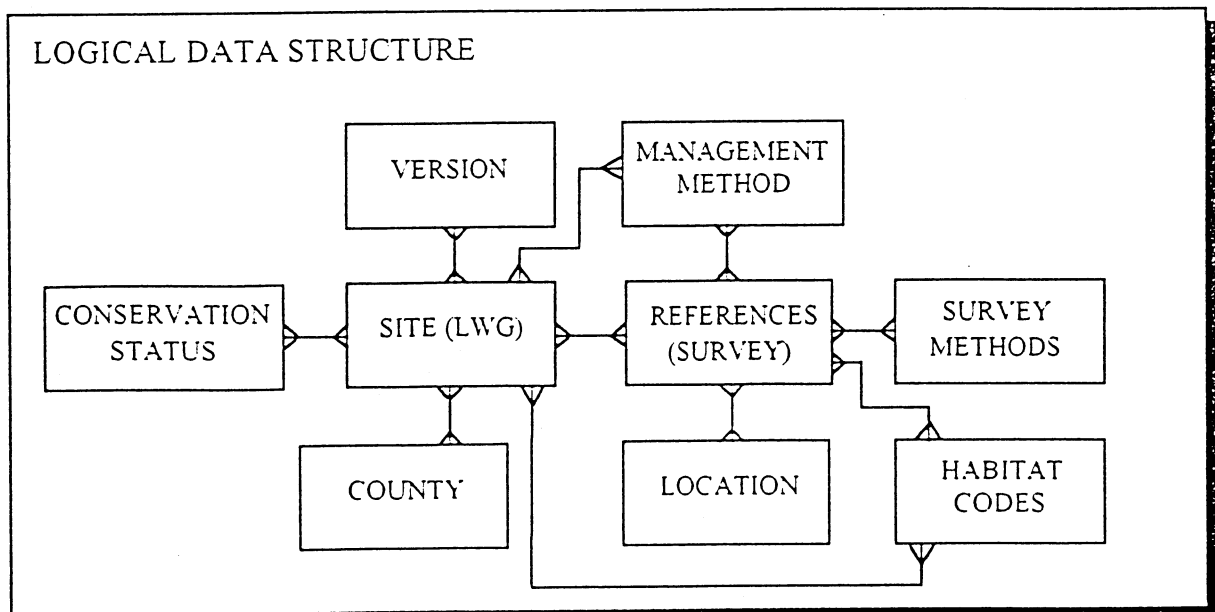


Figure 1.1 Simplified logical structure of wet grassland PARADOX database

All data entry, data viewing and data querying routines are menu driven, with options for updating look-up table contents, selecting wet grassland blocks with a particular combination of data attributes, printing facsimile copies of pro formas and printing labels for specific blocks. A set of sixteen customised menu forms is used for data entry, two forms for query routines (block selection, label selection), and two forms for printing routines (generating labels and proformas).

**Table 1.3 PARADOX tables within lowland wet grassland database**

BLOCK/REFERENCE DATA		LOOK-UP TABLES	
BLOCKS	Main block information (block, grid reference, area in ha, BTO or Devon bird atlas available)		
LOWREFS	Main reference information (reference number, date, authors, title, publisher, STATUS entry, area covered, confidentiality, abstract, number of sites, evaluation, grassland management, ditch management, historical, positive attributes, negative attributes, site potential, water quality, plant information, bird information, invertebrate information, other information).		
REF_BLX	Occurrence of blocks in a reference		
S_SOURCE	Survey sources of blocks	SOURCES	Survey sources list
COUNTY	County(ies) of block	COUNTIES	County list
SOILS	Soils present in block	SOIL	Soil type list
OS_SHTS	OS 1:50,000 map sheet of block		
LOWPLAN	Botanical information of ref.	LOWPLANS	Plant list
LOWBIRD	Bird information of ref.	LOWBIRDS	Bird list
LOWINV2	Invt. information of ref.	LOWINV1	Invertebrate list
LOWHABS	Habitats in ref.	LOWHAB	Habitat list
REF_METS	Methods used in ref.	METHS	Methods list
LOWLOCS	Office locations of ref.	LOWLOCS2	Locations list
OTHER	Other information of ref.		
BTO.SPP	BTO species/tetrad list by block	SPECIES	Lowland wet grassland bird species (SSSI status list)
BTO_SUM3	Count of wet grassland bird species per block		
DEVON	Devon bird atlas, species list per block		

### **1.3.4 Data entry and end product output**

Menus in the PARADOX database were used to enter reference proforma information. A total number of 748 references was achieved. This exaggerates the actual number of references identified. Very large data sets (the 1982 Breeding Birds of Wet Meadows survey, the 1989 RSPB sample survey follow-up) were entered in county groups, each county representing a single reference. Each wet grassland block equivalent to an ISR site was entered as a single reference.

A small label was designed using database software, holding information on wet grassland block number, the reference number (Ref\_key) and the type of biota information. Querying routines were then used to print all labels for a particular 10 km wet grassland map square, printing on to self-sticking paper. Individual labels were then cut and pasted on to the relevant 10 km map sheet. The final result of this work was a labelled set of c. 670 10 km map squares. The original 10 km map squares were copied from an all-England set of 1:50,000 outline sheets produced in Module 1. Labels were not added to this primary map set in case new wet grassland blocks might need to be added in the future, requiring moving of a label. The 10 km square maps were then aggregated into EN regional sets.

A further query menu was used to print facsimile proformas in a format giving all required details in a reference, including Module 1 wet grassland block numbers related to survey work. These were then added to the regional map sets. Introductory material was inserted into the regional volumes and Module 1 wet grassland block data were added at the end of each volume. The seven regional volumes constituted the end product covering collation and summarisation of biological survey information.

## **1.4 Developing quality profiles and contextual statements**

### **1.4.1 Quality profiles**

This pilot exercise aims to develop "first stage quality profiles" for two test areas, Essex and Norfolk. Quality profiles represent a simple system for representing the nature conservation interests of a defined area, in this case blocks of lowland wet grassland. On the basis of advice from the project steering group it was decided to represent nature conservation value using, as far as possible, established criteria for selecting Sites of Special Scientific Interest (SSSIs) (Nature Conservancy Council 1989). The following types of key interest were proposed by the steering group for use in evaluation: grassland sward, ditch habitat, rare vascular plants, breeding birds, wintering birds, invertebrates, other significant biota (Table 1.4). Available reports and readily-accessible data records for Essex and Norfolk were consulted to abstract data and any information on evaluation.



The results were compared with SSSI criteria and assembled into tables for each key interest, allocating one of the following categories to each Module 1 wet grassland block identified in Essex (Annex 2) and Norfolk (Annex 4):

Interest Level	Code	
?	I	No information available
Low	H	Little or no interest
Moderate	G	Important habitat attributes or species present but insufficient to reach strong level
Strong	A	High quality habitat attributes and species, equalling or exceeding SSSI standard (except for invertebrate data which cannot be related to an SSSI threshold - C.M. Drake pers. comm.)

Maps for each key interest were produced if information was available. These were produced in A4 format using the DMAP package (Morton 1993). In addition further maps of Essex and Norfolk were produced indicating the statutory status of wet grassland blocks (SSSI, non-SSSI). These latter maps were also produced as transparent overlays for comparison with key interest maps. Transparent overlays of numbered wet grassland blocks were also produced for Essex and Norfolk (simple numerical ordering to save space in areas of high block density, not wet grassland block numbers - both numbering systems are given in Annexes 2 - 5). These maps and key interest tables (Annex 2 - Essex, Annex 4 - Norfolk) constituted the "first stage" quality profile information for the project. A brief interpretation of results for Essex and Norfolk was also prepared, together with a critique of the general approach.

The interest classes used in evaluation were derived from information which is also included in contextual statements drawn up for each wet grassland block in Essex and Norfolk (Annex 3 - Essex, Annex 5 - Norfolk). Quality profile and contextual statement data are therefore directly compatible, with contextual statements providing a concise overview of data used for profiling.

**Table 1.4 Rules for categorising key nature conservation interests of wet grassland blocks in Essex and Norfolk (following Nature Conservancy Council 1989 for SSSI status unless otherwise stated).**

<b>Grassland sward</b>	<p>Presence of at least 0.5 ha of grassland communities of high biological interest (MG4, MG5, MG8, MG11, MG12, MG13), 5 ha of mixed wet neutral grassland and/or at least 5 ha of mire/swamp communities of high biological interest (S4, S5, S6, S7, S18, S20, S22, S28, M22, M23, M24, M25, M26, M27) - <b>strong interest</b> (SSSI threshold).</p> <p>Smaller extent of defined NVC types - <b>moderate interest</b>.</p> <p>Grassland/mire/swamp types of lower biological interest - <b>low interest</b>.</p>
<b>Ditch habitat</b>	<p>a Total ditch length &gt;5 km - initial threshold for possible strong interest (SSSI threshold)</p> <p>If a above valid, <b>strong interest</b> if one or more of following criteria met (based on NCC SSSI guidelines, adapted in survey reports to fit conductivity data and results from TWINSpan numerical analysis of ditch vegetation data (see Reid, Leach &amp; Newlands (1989), Doarks &amp; Storer (1990), Wolfe-Murphy, Leach &amp; Doarks (1991) for detailed explanations adapted to North Norfolk, Broadland and Essex conditions)):</p> <ul style="list-style-type: none"> <li>b Fine example of freshwater - brackish transition</li> <li>c High diversity of ditch vegetation types (12 or more)</li> <li>d Freshwater systems with average of 10+ aquatic/emergent species per 20 metre ditch length</li> <li>e &gt;50% of ditches having either 10+ (freshwater) or 6+ (brackish) aquatic/emergent species per 20 metre ditch length</li> </ul> <p><b>Moderate interest</b> if wet grassland block fails criterion a but achieves one or more of b - e inclusive</p> <p><b>Low interest</b> if none of a - e criteria are met.</p>
<b>Rare vascular plants</b>	<p>Total block score of 200+ for W&amp;CA 1981 Schedule 8 species (score value 200 each), nationally rare vascular plants (1-15 10 km squares, score value 100 each), nationally scarce vascular plants (16-100 10 km squares, score value 50 each) - <b>strong interest</b> (SSSI threshold).</p> <p>Score of &gt;0 - &lt;200 - <b>moderate interest</b>.</p> <p>Score 0 - <b>low interest</b>.</p>

**Table 1.4 contd.** **Rules for categorising key nature conservation interests of wet grassland blocks in Essex and Norfolk (following Nature Conservancy Council 1989 for SSSI status unless otherwise stated)**

**Breeding birds** Grassland block score of 16 or more for lowland damp grassland species breeding in tetrad(s) covering wet grassland block - **strong interest** (SSSI threshold).

Score of 8-15 - **moderate** interest.

Score of <8 - **low** interest

Based on breeding bird database (Gibbons, Reid & Chapman 1993) for 1988-91. Lowland damp grassland species weights (NCC 1989) for calculating site importance are: Mute Swan 3, Shelduck 2, Gadwall 4, Teal 3, Pintail 5, Garganey 5, Shoveler 4, Marsh Harrier 5, Quail 5, Corncrake 4, Lapwing 1, Ruff 5, Snipe 2, Black-tailed Godwit 5, Curlew 2, Redshank 2, Cuckoo 2, Short-eared Owl 3, Yellow Wagtail 1, Whinchat 2, Grasshopper Warbler 2, Sedge Warbler 1, Reed Bunting 1. Grassland block score derived by totalling weights for any of above species present in recording tetrads covering block.

**N.B. Data are based on tetrad records and wet grassland block scores for breeding birds do not necessarily mean that species were breeding in the block. Moreover, records made over a single 2 hour period and unlikely to produce an exhaustive list of breeding species. Results are indicative only and should be used with great caution.**

**Wintering** Grassland block part of Wetland Bird Survey (WeBs) site of international importance (regularly known to holding 1% of international wintering bird population) or national importance (regularly known to hold 1% or more of estimated British wintering bird population) of one species or subspecies of waterfowl (wildfowl and waders), or regularly holding a total of 20,000 or more waterfowl of all species - **strong interest** (SSSI/SPA/Ramsar threshold)

Grassland block part of WeBs site not of national importance - **moderate** interest.

No criterion available for low interest.

**Table 1.4** Rules for categorising key nature conservation interests of wet grassland blocks in Essex and Norfolk (following Nature Conservancy Council 1989 for SSSI status unless otherwise stated).

**Invertebrates** There are no firm SSSI guidelines covering invertebrates. Evaluation in specialist reports exists for Essex and sites of strong interest include those rated in A and B categories (Drake 1988, 1990). Wet grassland blocks in Essex covering Invertebrate Site Register (ISR) sites and not included in specialist reports are treated according to overall weighted scoring (Invertebrate Index) and the presence of Red Data Book species. This latter approach is also adopted for Norfolk which has no recent specialist reports. The Invertebrate Index (II) value for an ISR site is calculated as the sum of scores for regionally notable (Nr) species (20 points per species); nationally scarce (Nb) species (40 points per species); nationally scarce (Na), RDB Category 4 (Out of Danger) plus RDB Category 5 (Endemic) (50 points per species); RDB Category 1 (Endangered) plus RDB Category 2 (Vulnerable) plus RDB Category 3 (Rare) (100 points per species).

II 500 or more points or (Essex) category A & B sites of Drake - **strong interest**

II 100 - <500 points - **moderate interest**

II <100 points, category C of Drake - **low interest**

**N.B.** It is emphasised that this combination of expert recommendation in reports and arbitrary Invertebrate Index limits is *ad hoc* in character. Results are indicative only and should be used with great caution. In particular, it must be emphasised that the thresholds above do not relate definitively to any level used formally to rate invertebrate sites for SSSI status.

**Other interests** Information on amphibians and mammals is occasionally present but rarely in a consistent format. No interest evaluation made but details included in contextual statements.

### 1.4.2 Contextual statements

On the basis of information abstracted for Annex 2 and Annex 4, brief contextual statements were drawn up for each Module 1 wet grassland block identified in Essex (Annex 3) and Norfolk (Annex 5). Such statements are concise summaries of information available for each grassland block. The key sources used to obtain biota information for blocks are listed at the beginning of Annex 2 and Annex 4. Each statement included the following information (if available):

1. Site number (simple numerical sequence for use on maps and in tables) plus wet grassland block number, national grid reference, area of block, soil type (all derived from Module 1 results - see Dargie (1983) for full details);
2. Site name, county, district, English Nature natural area, conservation status (SSSI, non-SSSI, SPA, Ramsar status); and, for Broadland in Norfolk, Internal Drainage Board code and name;
3. Key interests: grassland sward, ditch vegetation, breeding birds, wintering birds, invertebrates, other. These interests each summarise available site or area information in a format which matches the interests used for quality profiles (Section 1.4.1). The information in contextual statements is therefore directly compatible with quality profile detail.

Other themes could also be used but lack of information prevented their inclusion. Examples of possible additional items are given for ornithological profiles developed for English Nature Natural Regions (Grice, Brown, Carter & Rankine 1994): general character of area, key issues, key objectives. Detail under these headings might cover historical and current management (including water management and flood defence), threats (e.g. gravel extraction) and opportunities (e.g. ESA agreements). Such themes are perhaps better developed at the different scale of natural areas where key wet grassland blocks could also be listed as 'core sites'.

The sources used to construct contextual statements for Essex and Norfolk do not represent an exhaustive review of all available information. Relatively few studies or data sets have information structured to allow direct correlation with Module 1 grassland blocks. Undoubtedly other sources exist but in the time available it was not possible to invest the effort of data abstraction and assessment as a suitable data source. Effort was concentrated on data sets either containing key interest evaluations or which covered a large number of blocks or a large geographical area, allowing an evaluation in the absence of other sources.

## 2 ESSEX QUALITY PROFILING SOURCES AND RESULTS

### 2.1 Sources and their limitations

Details on wet grassland block location and other attributes (size, soil types) were available in Dargie (1993). This data set was based on on-going Phase 1 habitat survey and no information is available for northwest Essex (Uttlesford District) which was unsurveyed at the time of collating results for the 1993 study. The undulating nature of this area (the northern edge of the London Basin) is unlikely to have any large blocks of wet grassland, although some river valleys will contain small extents in the floodplain zone. The 1993 study used a minimum size cut-off of 10 ha and potential blocks smaller than this size were ignored. There is therefore no information on blocks <10 ha in size throughout Essex. The distribution of blocks is illustrated in Fig. 2.1. A complete set of citation sheets for Essex SSSIs likely to contain lowland wet grassland was supplied by English Nature. These sheets were related to lowland wet grassland block information, noting overlaps of SSSIs and blocks on contextual statement sheets (Annex 3). Wet grassland block and SSSI overlap is illustrated in Fig. 2.2. No overview of the wet grassland sward was available apart from SSSI citation sheet information and it was not possible to produce a quality profile for this attribute. The ditch vegetation of coastal grazing marshes is examined by Wolfe-Murphy, Leach & Doarks (1991), covering habitat criteria and rare species (nationally rare and nationally scarce categories). The Inner Thames Marshes span the Greater London and Essex border and information on rare species for the Essex sector (Aveley Marshes) is given by Kite (1990). No equivalent detailed information on habitat or rare species exists for wet grassland further inland. Computer-based breeding bird data were available for tetrads covering wet grassland blocks and is reviewed by Gibbons, Reid & Chapman (1993). Wintering bird data were abstracted for Essex WeBs sites published in Waters & Cranswick (1993). Invertebrate information is largely confined to ditch studies on coastal grazing marshes (Drake 1988, 1990; Eversham, Greatorex-Davies & Harding 1989), with a small number of additional Invertebrate Site Register locations inland.

The major gaps in data are therefore likely to be all wet grassland in Uttlesford District, all wet grassland blocks <10 ha in size throughout Essex, Phase 2 grassland sward information for all sites, and wet grassland interest data for most inland sites (covering ditch habitats, rare species, wintering birds beyond WeBs sites, and invertebrates). As examples of such gaps, work by Drake (1988) and Wolfe-Murphy, Leach & Doarks (1991) identify two new wet grassland blocks at Bramble Island (TM0932) and The Naze (TM2524) which are <10 ha in size - both rate as low quality in site assessments. Inland, two SSSIs are overlooked due to size and lack of Phase 1 survey: Sawbridgeworth Marsh SSSI (TL492158, 6.3 ha), Little Hallingbury Marsh (TL491171, 4.5 ha, in Uttlesford District). These gaps must be borne in mind in interpreting quality profiles since they pose major restrictions on achieving an authoritative result, rendering much of the information for many key interests only indicative in character. All quality profile maps are therefore titled as indicative in character.

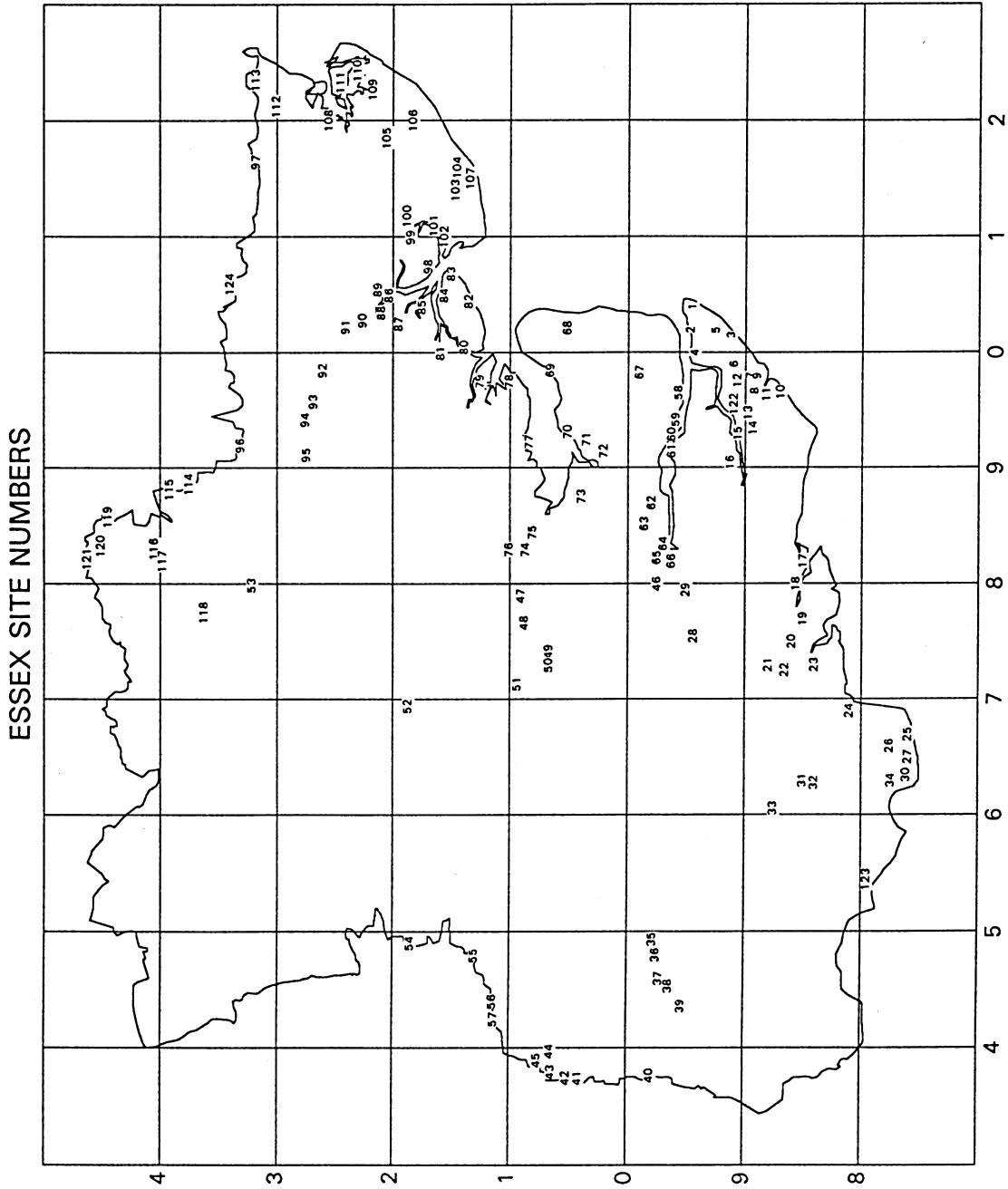


Figure 2.1 Location of lowland wet grassland blocks in Essex

OS grid lines are spaced at 10 km intervals

SSSIs WITH LOWLAND WET GRASSLAND BLOCKS

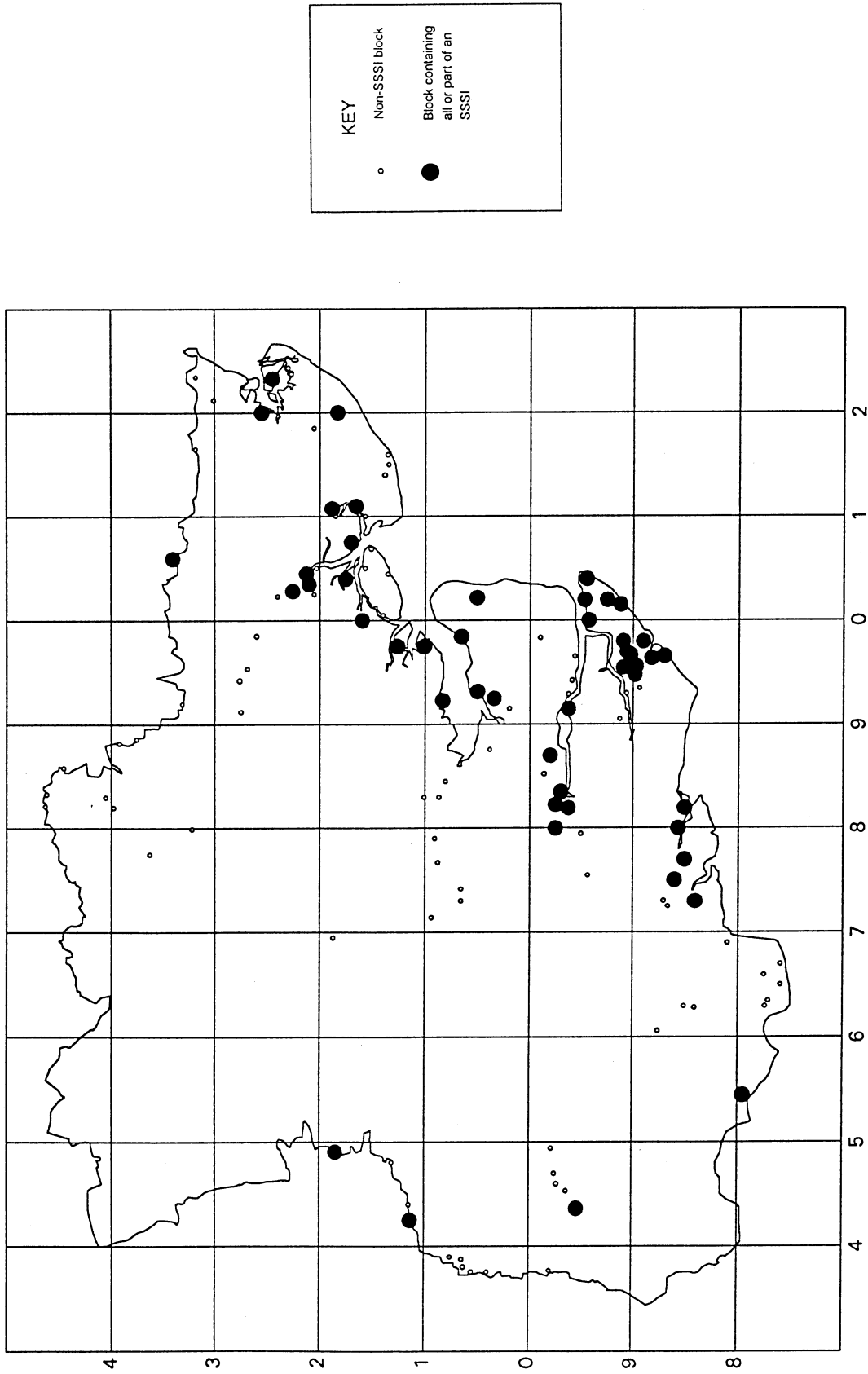


Figure 2.2 Location of Essex wet grassland blocks including all or part of an SSSI

OS grid lines are spaced at 10 km intervals



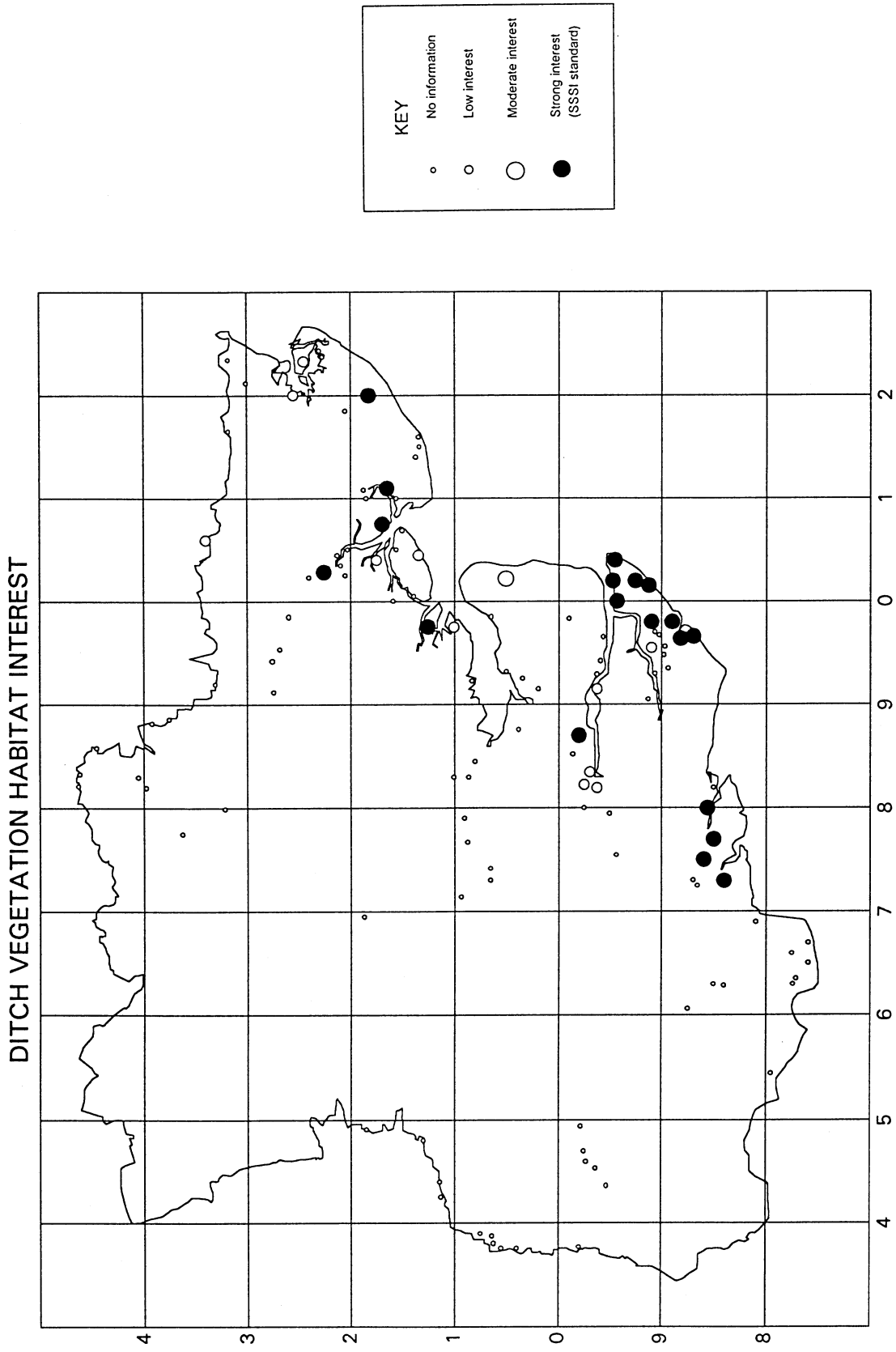
## 2.2 Quality profile results

### 2.2.1 Introduction

Wet grassland blocks in Essex (Fig. 2.1) are predominantly coastal and estuarine in location, with inland concentrations in the freshwater floodplains sectors of several rivers (Stour, Colne, Chelmer, Crouch, Roding, Lee). Individual blocks vary greatly in size (10 ha rising to 529 ha in block E23/23) and are fragmented by arable land, industrial and residential development. The rules for evaluating interests in a block are given in Table 1.4 and these were applied to sources to give site ratings for most significant attributes (Annex 2). The contextual statements summarising attribute information and evaluation are given for each wet grassland block in Annex 3. Quality profile maps for major interests (ditch vegetation habitat, rare vascular plant species, breeding birds, wintering birds, invertebrates) were produced on a county scale using the interest grades in Annex 2.

### 2.2.2 Ditch vegetation habitat interest (Fig. 2.3)

Ditch habitat evaluation is based on ditch length, presence or absence of a good freshwater - brackish transition, number of vegetation types in a site derived from numerical analysis (a measure of vegetation diversity), and species diversity based on average numbers of vascular plant species per 20 metre recording length of ditch. Survey information from Wolfe-Murphy, Leach & Doarks (1991) is confined to the coast and estuaries and results suggest that high quality (strong interest) ditch habitat remains extensive in many areas (notably as a scatter north of the Blackwater Estuary, most of Foulness Island, and west of Canvey Island). Outstanding sites which rate as strong interest for more than one attribute of the b - e set (Table 1.4) include St Osyth (block 101/E130, including a freshwater - brackish transition), Brightlingsea (block 98/E127), plus Vange and Fobbing Marshes (block 23/E23, including a freshwater - brackish transition). Lower quality sites (moderate and low classes) are present around Hamford Water, Mersea Island, head of the Crouch, and Dengie Marsh. Within the coastal zone there are many wet grassland blocks which lack habitat information but all are small blocks which are unlikely to have >5 km of ditch length. All are therefore likely to be low or moderate in quality. No statement on the quality of inland wet grassland blocks can be made due to no information.



**Figure 2.3 Indicative quality profile of ditch habitat interest in Essex lowland wet grassland**

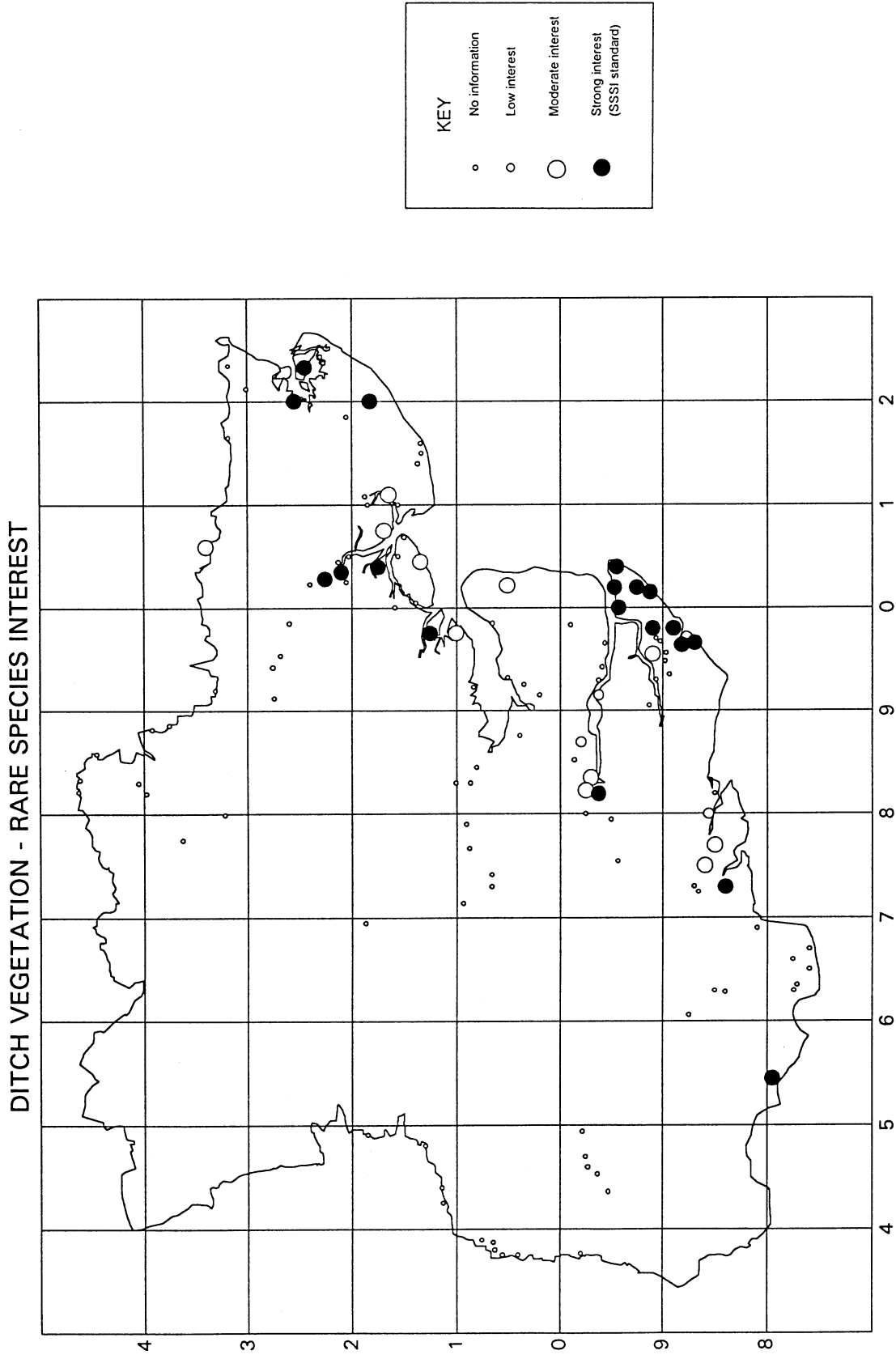
OS grid lines are spaced at 10 km intervals

### 2.2.3 Ditch rare species interest (Fig. 2.4)

The coastal grazing marshes of Essex have a fine assemblage of rare vascular plants, including the Red Data Book species *Peucedanum officinale*, two national rarities (*Halimione pedunculata*, *Polypogon monspeliensis*) and a large set of nationally scarce species: *Bupleurum tenuissimum*, *Carex divisa*, *Ceratophyllum submersum*, *Chenopodium botryoides*, *Hordeum marinum*, *Imula crithmoides*, *Puccinellia fasciculata*, *Puccinellia rupestris*, *Ranunculus baudotii*, *Rumex maritimus*, *Rumex palustris*, *Trifolium squamosum*. High block scores (300+) represent outstanding sites and these are found at Great Wakering, Foulness Island (maximum score in Essex of 450 covering blocks 10/E10, 11/E11), Old Hall Marshes, Blackwater Estuary (score 350, block E105), Langenhoe Hall Marshes, Colne Estuary (score 300, block 85/E111), and Rowhedge, Upper Colne Marshes (score 300, block 90/E116). There is a strong correlation between strong interest sites for ditch habitat and rare species, though a smaller number of coastal blocks achieve strong interest for rare species content. No statement on the quality of inland wet grassland blocks can be made due to no information.

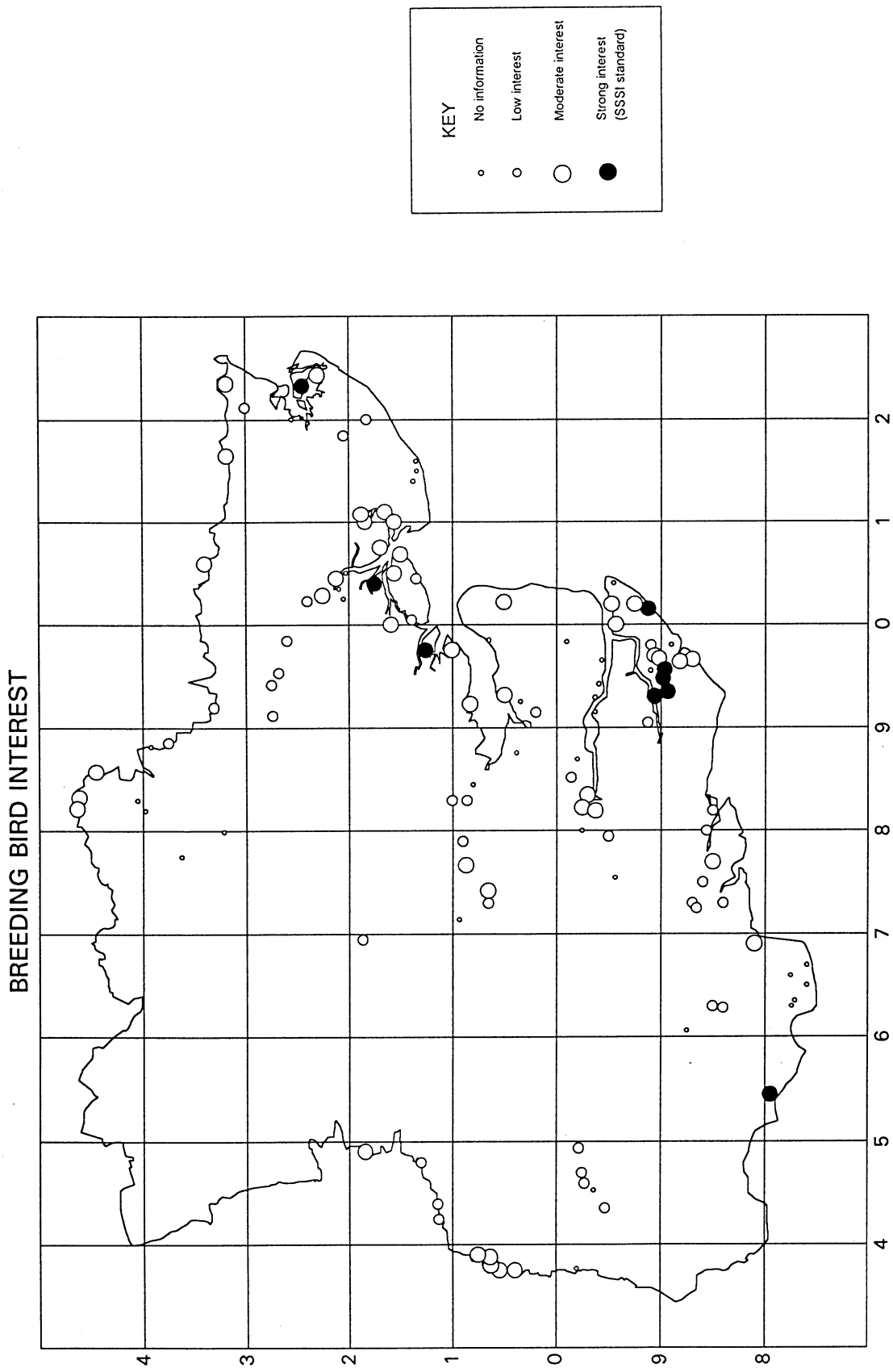
### 2.2.4 Breeding bird interest (Fig. 2.5)

The breeding wader populations of the Greater Thames Estuary, including all of the Essex coastal grazing marshes, are outstanding and wet grasslands form their key habitat (Grice, Brown, Carter & Rankine 1994). Seven SPAs are present (Stour - Orwell, Hamford Water, Colne, Blackwater, Dengie, Foulness, Crouch, Southend - Benfleet Marshes) to illustrate the importance of mudflats, saltmarsh, grazing marsh and shingle in the Maritime Natural Area M9: Languard Point to Whitstable. Against this background it is disappointing to record only nine wet grassland blocks of strong interest for breeding birds, suggesting that tetrad-derived scores provide a major underestimate of wet grassland quality. This result must therefore be regarded with great caution. It might result from both under-recording of breeding species and inadequate attention in this methodology to the very large numbers of breeding waders on Essex coastal grazing marshes. However, it is the only data set for Essex quality profiling which allows a comparison with inland wet grassland and all major rivers have locations with moderate interest, especially in the Lee Valley and along the Stour. Another feature of results is a negative correlation between strong interest blocks for breeding birds and rare ditch plants. Only two blocks have both attributes as strong quality, but there are a further 24 blocks with only one attribute as a strong interest. This raises the possibility of high bird numbers reducing rare plant interest but given the doubts on data quality for breeding birds this suggestion is highly speculative and would need rigorous investigation.



**Figure 2.4 Indicative quality profile of ditch rare vascular plant interest in Essex lowland wet grassland**

OS grid lines are spaced at 10 km intervals



**Figure 2.5 Indicative quality profile of breeding bird interest in Essex lowland wet grassland**

OS grid lines are spaced at 10 km intervals

### **2.2.5 Wintering bird interest (Fig. 2.6)**

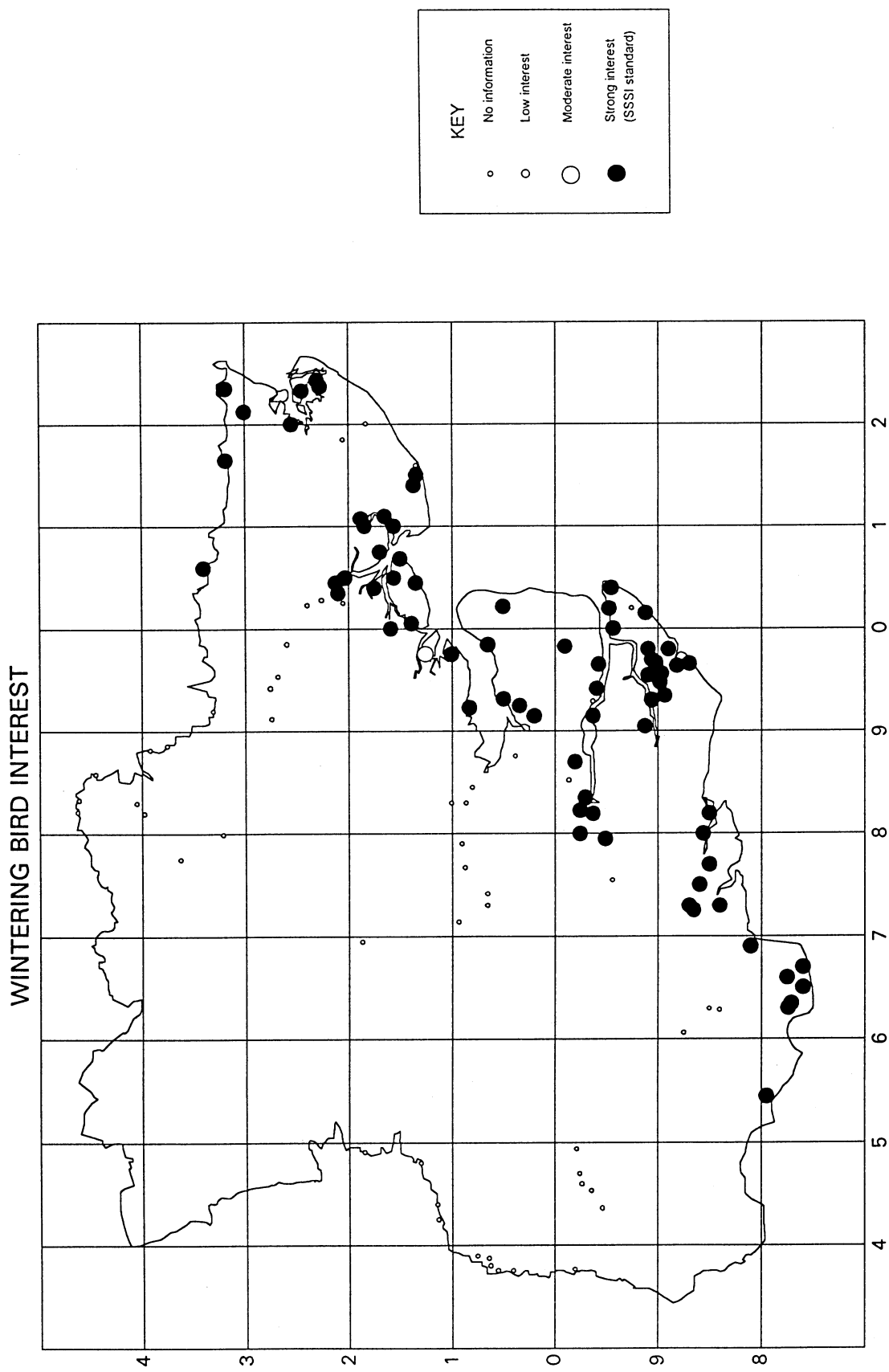
Data on numbers of wintering birds for individual wet grassland blocks are not readily available and information is instead derived from WeBs recording units, each of which covers a large area including several blocks. The outstanding quality of the Essex coast SPAs (see Section 2.2.4) results in a blanket application of strong interest to most coastal wet grassland sites, contrasting with a lack of information (and probably much lower interest) for inland locations. This concentration of strong interest on the coast and in estuaries is probably a correct reflection of wintering bird interest. However, it is unfortunate that it is not possible to disaggregate results to examine the variation in quality within the strong interest category and thus derive moderate and low interest categories applicable to individual grassland blocks. This results in likely exaggeration of interest for an unknown number of blocks. The extent of strong interest is also probably exaggerated by bulked application of all wintering bird interests, with no discrimination possible between the relative importance of mudflats, saltmarsh, grazing marsh and shingle within a WeBs recording unit. In particular, very small wet grassland blocks are likely to have low interest in terms of wintering bird numbers and their classification as strong interest is an important error.

### **2.2.6 Invertebrate interest (Fig. 2.7)**

Available invertebrate information is restricted to coastal sites and a very small number of Invertebrate Site Register sites on the coast and inland. A very large proportion of wet grassland blocks lack any information at all. It is therefore impossible to make any generalisation about the county-wide invertebrate interest of Essex. However, the detailed surveys of Drake (1988, 1990) highlight the importance of coastal grazing marsh habitat for invertebrates. Outstanding sites are recognised within the strong interest group and these are concentrated in the Thames Estuary (Aveley Marshes, Vange and Fobbing, Pitsea, Hadley, Canvey). The only outstanding site further north is Langenhoe. Most other recorded coastal sites are also of strong interest, with poor marshes restricted to St Osyth, Cattawade and Bramble Island (TM220265, not included as a wet grassland block due to small size <10 ha).

## **2.3 Essex SSSIs in relation to wet grassland interests**

Lowland wet grassland blocks overlapping with SSSIs are illustrated in Fig. 2.2. Two additional wet grassland SSSIs exist (Sawbridgeworth Marsh - TL492158; Little Hallingbury Marsh - TL491171, in Uttlesford District; see Section 2.1) but their small size (<10 ha) and lack of Phase 1 information prevented inclusion in this exercise. The great majority of SSSIs are located on the Essex coast and corroborates much of the key interest evaluations in highlighting coastal grazing marsh as a very important habitat. Inland exceptions are small floodplain locations, all of which appear to have been declared on the basis of extent of unimproved wet neutral grassland. Phase 2 grassland survey using the National Vegetation Classification (NVC) has not been used and it is not possible to confirm the grassland sward interest for these blocks. It is also important to understand that many wet grassland blocks only partially overlap with SSSIs, with much of their extent lacking protection. Key interests probably vary greatly in such blocks and a large proportion of block area might be of low quality.



**Figure 2.6 Indicative quality profile of wintering bird interest in Essex lowland wet grassland**

OS grid lines are spaced at 10 km intervals

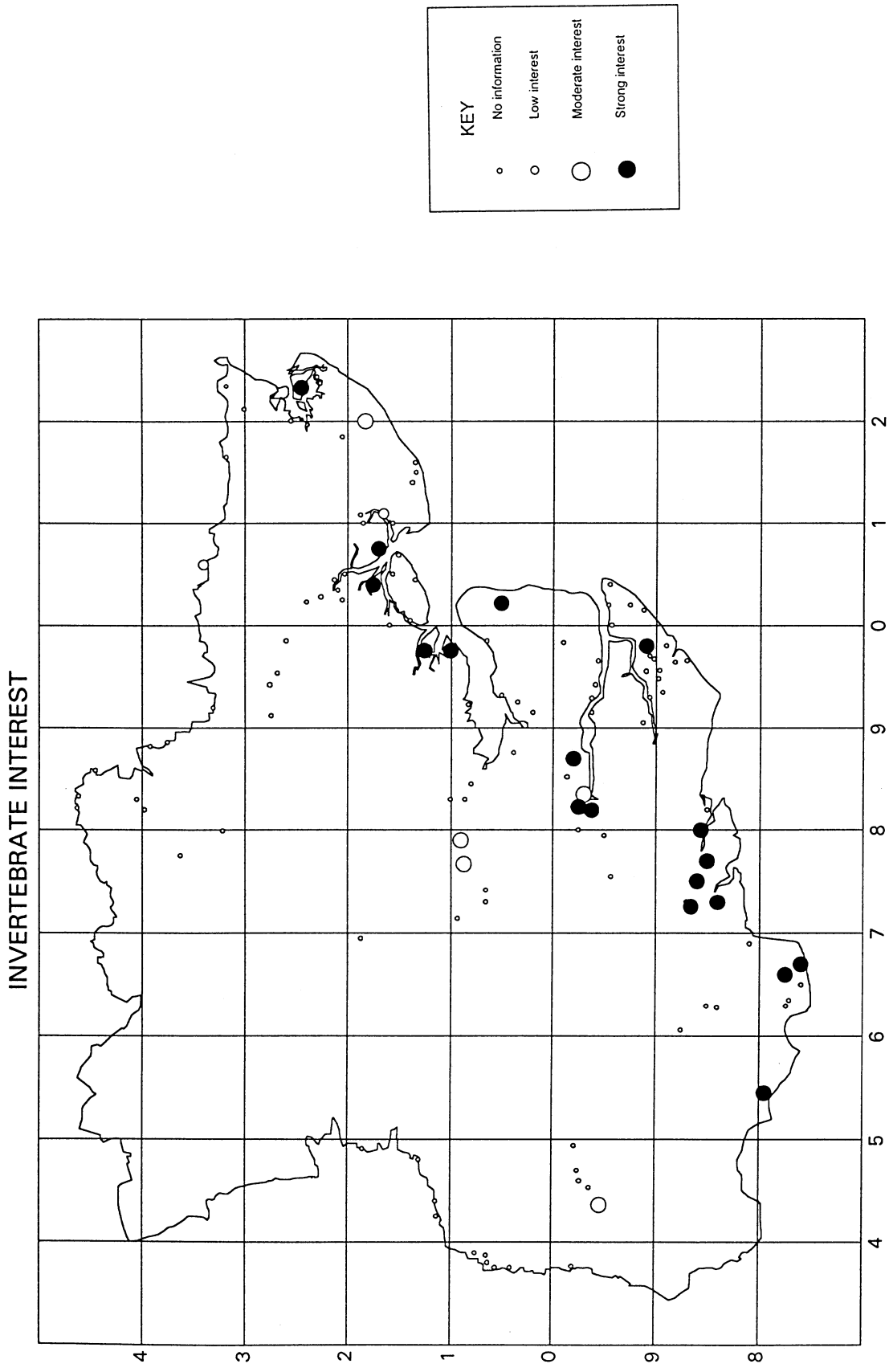


Figure 2.7 Indicative quality profile of invertebrate interest in Essex lowland wet grassland

OS grid lines are spaced at 10 km intervals



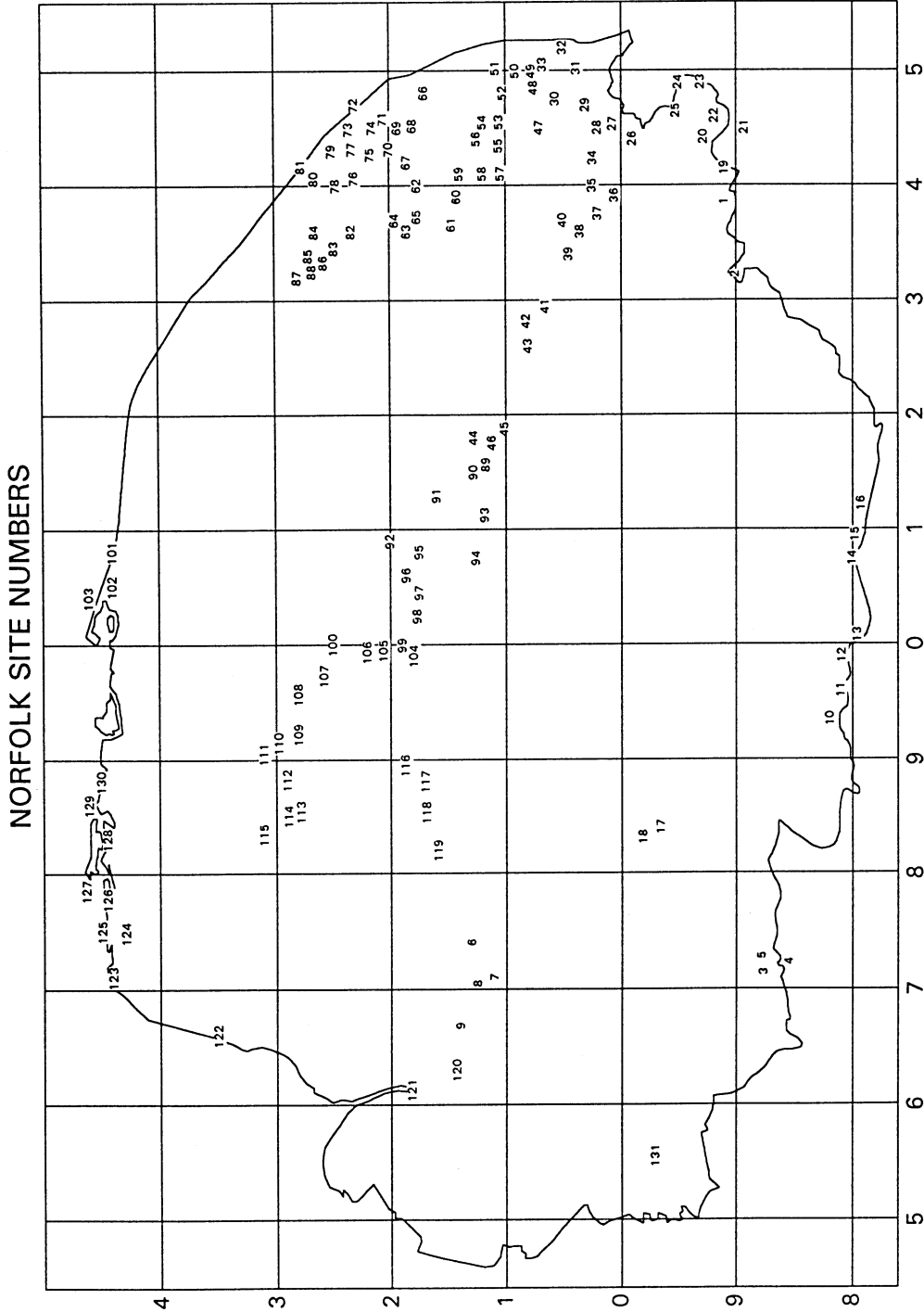


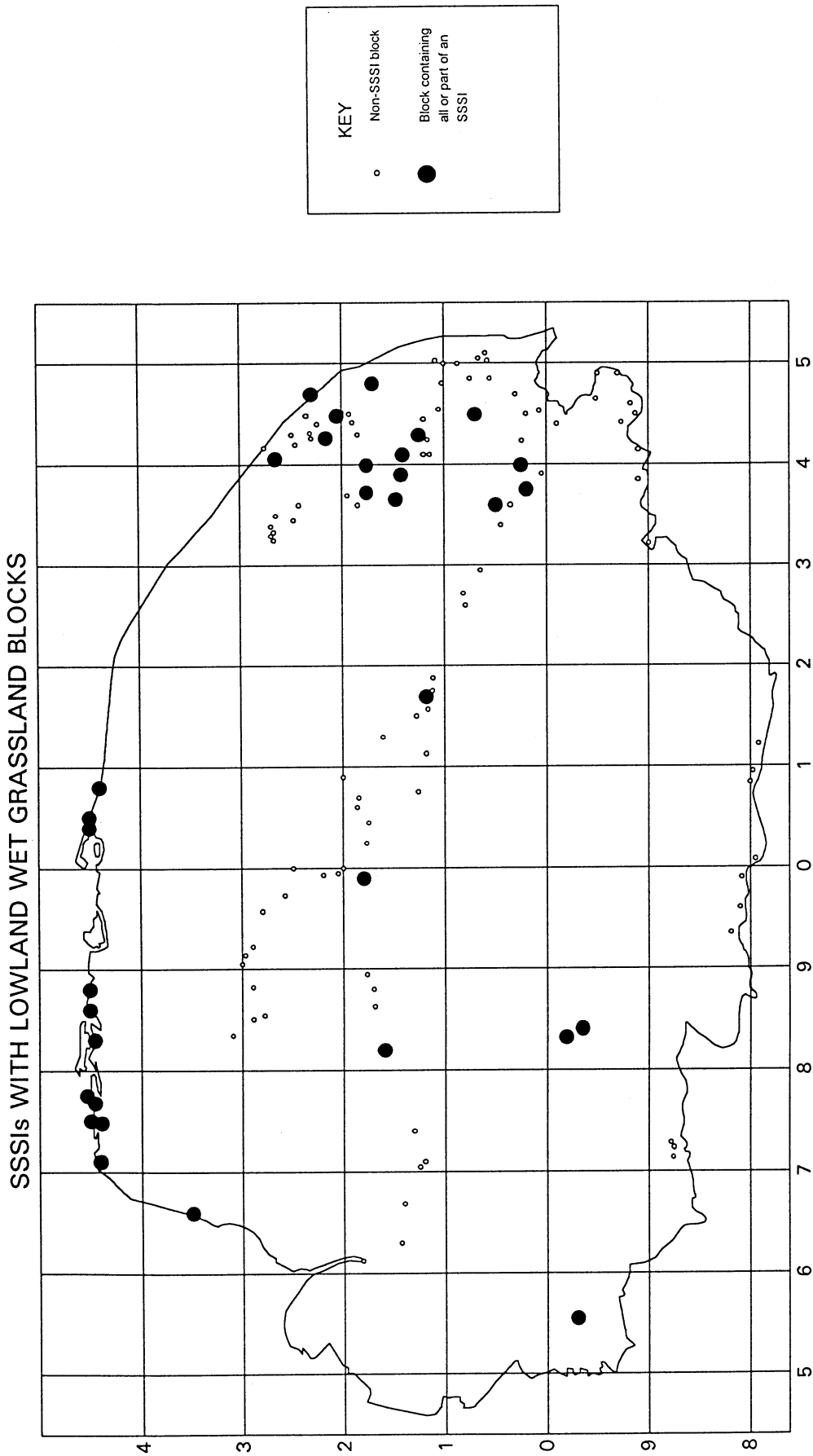
### 3 NORFOLK QUALITY PROFILING SOURCES AND RESULTS

#### 3.1 Sources and their limitations

Details on wet grassland block location and other attributes (size, soil types) were available in Dargie (1993). This data set was based on a variety of sources: detailed wet grassland botanical survey information for Broadland and the North Norfolk Coast, Phase 1 habitat data for the area of the River Wensum, SSSI habitat maps, and 1:10,000 colour air photos of some rivers (Waveney, Yare, Wissey, Nar). Aerial photography or Phase 1 data were not available for several areas with floodplain environments, principally the rivers Upper Bure, Tas, Tud, Glaven, Stiffkey and Thet. It is unlikely that these will have any large blocks of wet grassland, but small pockets will almost certainly be present. The 1993 study used a minimum size cut-off of 10 ha and potential blocks smaller than this size were ignored. There is therefore no information on blocks <10 ha in size throughout Norfolk. The distribution of blocks is illustrated in Fig. 3.1. A complete set of citation sheets for Norfolk SSSIs likely to contain lowland wet grassland was supplied by English Nature. These sheets were related to lowland wet grassland block information, noting overlaps of SSSIs and blocks on contextual statement sheets (Annex 5). Wet grassland block and SSSI overlap is illustrated in Fig. 3.2. Information on grassland sward is available in the Norfolk Grassland Survey (Roberts & Smyth 1990). The ditch vegetation of coastal grazing marshes is covered by Reid, Leach & Newlands (1989) for the North Norfolk Coast and by Doarks & Storer (1990) for Broadland (1990). Information on rare vascular species in Broadland is given in Doarks *et al.* (1990), and in Reid, Leach & Newlands (1989) for North Norfolk. Data on rare species (nationally rare and nationally scarce categories) were taken from both sources. No equivalent detailed information on habitat or rare plant species exists for other Norfolk wet grassland apart from rare plant details in SSSI descriptions and a small number of locations in the Norfolk Grassland Survey. Computer-based breeding bird data were available for tetrads covering wet grassland blocks and is reviewed by Gibbons, Reid & Chapman (1993). Wintering bird data were abstracted for Norfolk WeBs sites published in Waters & Cranswick (1993). Invertebrate information is confined to a small number of Invertebrate Site Register locations inland - a tetrad atlas of Norfolk dragonfly locations was ignored since this would be difficult to evaluate in relation to other invertebrate information.

The major gaps in data are therefore likely to be all wet grassland in valleys without information, all wet grassland blocks <10 ha in size throughout Norfolk, and wet grassland interest data for some inland sites (ditch habitats, rare species, wintering birds beyond WeBs sites, invertebrates). As one example of such gaps, Marston Meadows (22 ha, TG215054) was not recorded as a wet grassland block since it was not covered in sources used by Dargie (1993) but is an important small marshland identified in Roberts & Smyth(1990). As a second example, lack of information in sources used by Dargie (1993) led to no block being recorded for Shelfhanger Meadows SSSI (TM110828). These gaps must be borne in mind in interpreting quality profiles since they pose major restrictions on achieving an authoritative result, rendering much of the information for many key interests only indicative in character. All quality profile maps are therefore titled as indicative in character.





**Figure 3.2 Location of Norfolk wet grassland blocks including all or part of an SSSI**

OS grid lines are spaced at 10 km intervals

## **3.2 Quality profile results**

### **3.2.1 Introduction**

Wet grassland blocks in Norfolk (Fig. 3.1) are extensive, located primarily on the North Norfolk Coast, Broadland and in the valleys of the Wensum and Waveney. Individual blocks vary greatly in size (10 ha rising to 2642 ha in block 47/E512 - Halvergate Marshes). The rules for evaluating interests in a block are given in Table 1.4 and these were applied to sources to give site ratings for most significant attributes (Annex 4). The contextual statements summarising attribute information and evaluation are given for each wet grassland block in Annex 5. Quality profile maps for major interests (grassland sward, ditch vegetation habitat, rare vascular plant species, breeding birds, wintering birds, invertebrates) were produced on a county scale using the interest grades in Annex 4.

### **3.2.2 Grassland sward interest (Fig. 3.3)**

Detailed information on National Vegetation Classification types for individual blocks is available for only a small number of sites and is particularly lacking for SSSIs (see Fig. 3.2). A small number of SSSIs were ranked as strong interest on the basis of SSSI descriptions but no NVC knowledge, since other key interest seemed relatively unimportant. The overall quality profile for Norfolk wet grasslands is therefore far too incomplete to make any general conclusions, leaving an important gap in conservation knowledge given the importance of East Anglia for several types of NVC wet neutral grassland and mire types.

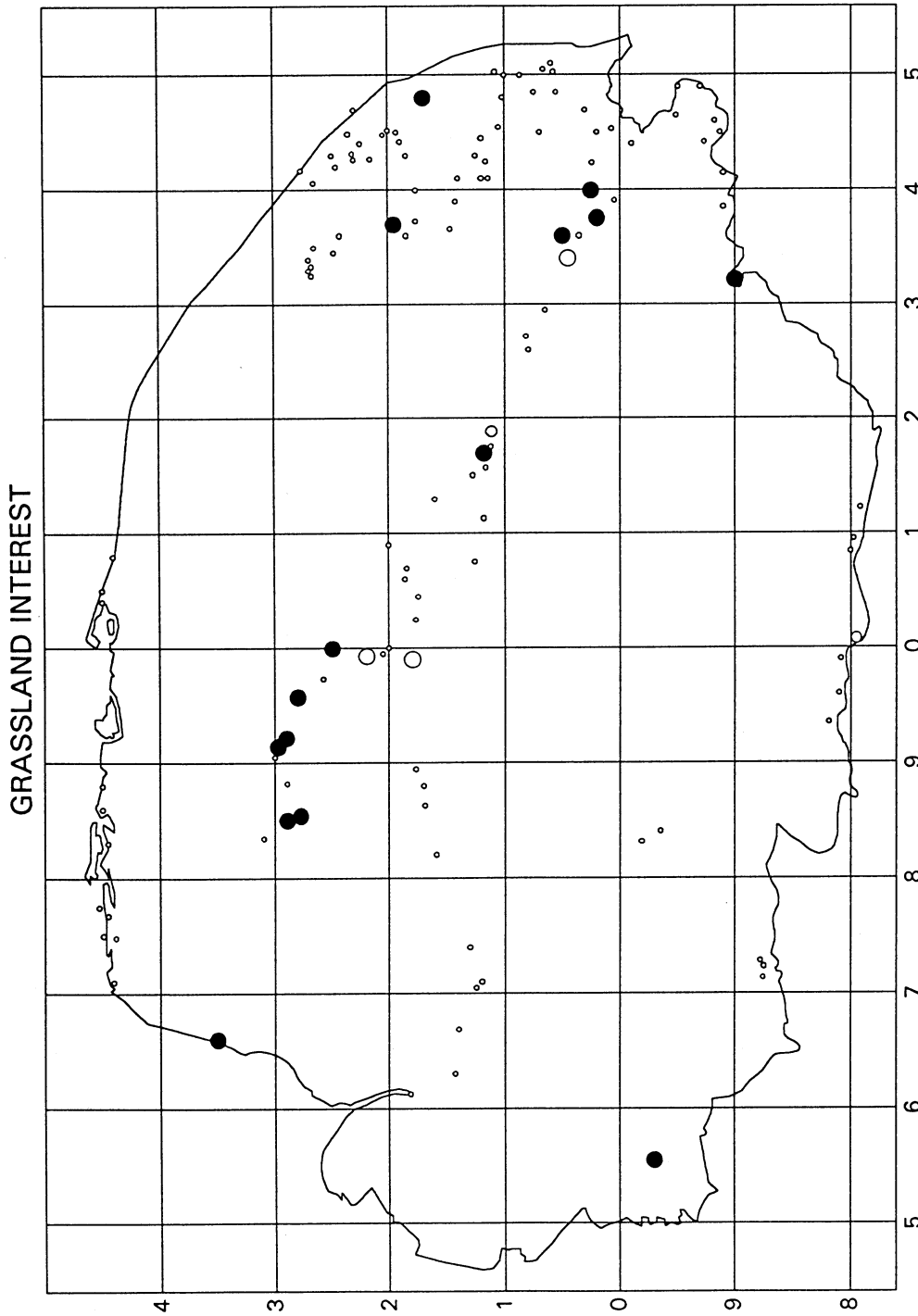
### **3.2.3 Ditch vegetation habitat interest (Fig. 3.4)**

Ditch habitat evaluation is based on ditch length, presence or absence of a good freshwater - brackish transition, number of vegetation types in a site derived from numerical analysis (a measure of vegetation diversity), and species diversity based on average numbers of vascular plant species per 20 metre recording length of ditch. Survey information (Read, Leach & Newlands 1989, Doarks & Storer 1990) is comprehensive for the North Norfolk coast and Broadland. The Broadland data are aggregated on the basis of Internal Drainage Board (IDB) units and data abstraction involved overlaying unit boundaries upon wet grassland block maps to relate the two polygon sets. Very large grassland blocks usually extended into two or more IDB units. Results suggest that high quality (strong interest) ditch habitat remains extensive, both on the North Norfolk coast and in Broadland. A feature of Broadland results is a slightly smaller extent of strong interest (SSSI quality) grassland compared with grazing marsh qualifying for SSSI selection in Doarks & Storer (1990, Figure 5). This is probably the effect of disaggregation of IDB unit data into wet grassland blocks, allowing a finer discrimination in many areas. Seventeen blocks achieve strong interest from two criteria in the b - e set (Table 1.4), fifteen blocks from three criteria, with four blocks having all four criteria. The latter outstanding grassland blocks are Norton and Thurlton Marshes (26/E491), Belton Marshes (29/E494), Reedham Marshes

(34/E499) and the large Halvergate complex (47/E512). One notable area of low interest is at Heigham Marsh (71/E536) which has >5 km ditch length but no further attributes. This is part of Upper Thurne Broads and Marshes SSSI. An important feature of Broadland grassland is the large number of moderate interest blocks in the north of the area. This is largely due to many blocks having a ditch length <5 km and thus failing the strong interest threshold, though all have at least one further acceptable criterion from the b - e set (generally d and e). There are many wet grassland blocks which lack habitat information but most are small blocks which are unlikely to have >5 km of ditch length. These are therefore likely to be low or moderate in quality. Despite lack of information for many smaller blocks beyond Broadland and North Norfolk, available information is probably accurate in locating areas of strong interest.

### 3.2.4 Ditch rare species interest (Fig. 3.5)

Norfolk wet grassland has a fine assemblage of rare vascular plants, predominantly associated with ditch and ditch edge habitat. North Norfolk coastal grazing marsh sites (Reid, Leach & Newlands 1989) include ten nationally scarce species: *Carex divisa*, *Ceratophyllum submersum*, *Hordeum marinum*, *Hydrocharis morsus-ranae*, *Myriophyllum verticillatum*, *Puccinellia rupestris*, *Ranunculus baudotii*, *Ruppia cirrhosa*, *Rumex palustris* and *Suaeda vera*. Most are associated with brackish ditches. This dominant brackish element is a distinctive feature, the result of predominant oligohaline (1-10 mS cm) and mesohaline (>10 mS cm). In Broadland, freshwater species are much more prominent. The nationally rare *Potamogeton acutifolius* and fourteen nationally scarce species (*Ceratophyllum submersum*, *Chara aspera*, *Myriophyllum verticillatum*, *Oenanthe fluviatile*, *Phleum phleoides*, *Potamogeton coloratus*, *P. compressus*, *P. friesii*, *P. trichoides*, *Puccinellia rupestris*, *Ranunculus baudotii*, *Rumex palustris*, *Sium latifolium*, *Stratiodes aloides*) make up the Broadland rare species set. Only three North Norfolk sites achieve strong interest (scores of 200+, Table 1.4): Snettisham (122/E587), Cley (102/E567) and Salthouse (101/E566). Twelve Broadland blocks show strong interest, with outstanding totals (400+) for Upton Marshes (score 400, 60/E525), Buckenham and Cantley Marshes (score 450, 40/E505) and the very large Halvergate complex (score 550, 47/E512). Size of a grassland block is naturally a very important factor in determining the number of rare species for an area with high quality habitat and a good total pool of rare species. There is a perfect correlation between strong interest sites for ditch habitat and rare species, though the much smaller number of strong interest blocks for rare plant species suggests that historical management factors might be restricting the distribution of rarities. The extent of nationally and locally rare species has declined in Broadland since the early 1970s (Doarks 1990) but the causes are not clear. No statement on the quality of inland wet grassland blocks can be made due to no information.

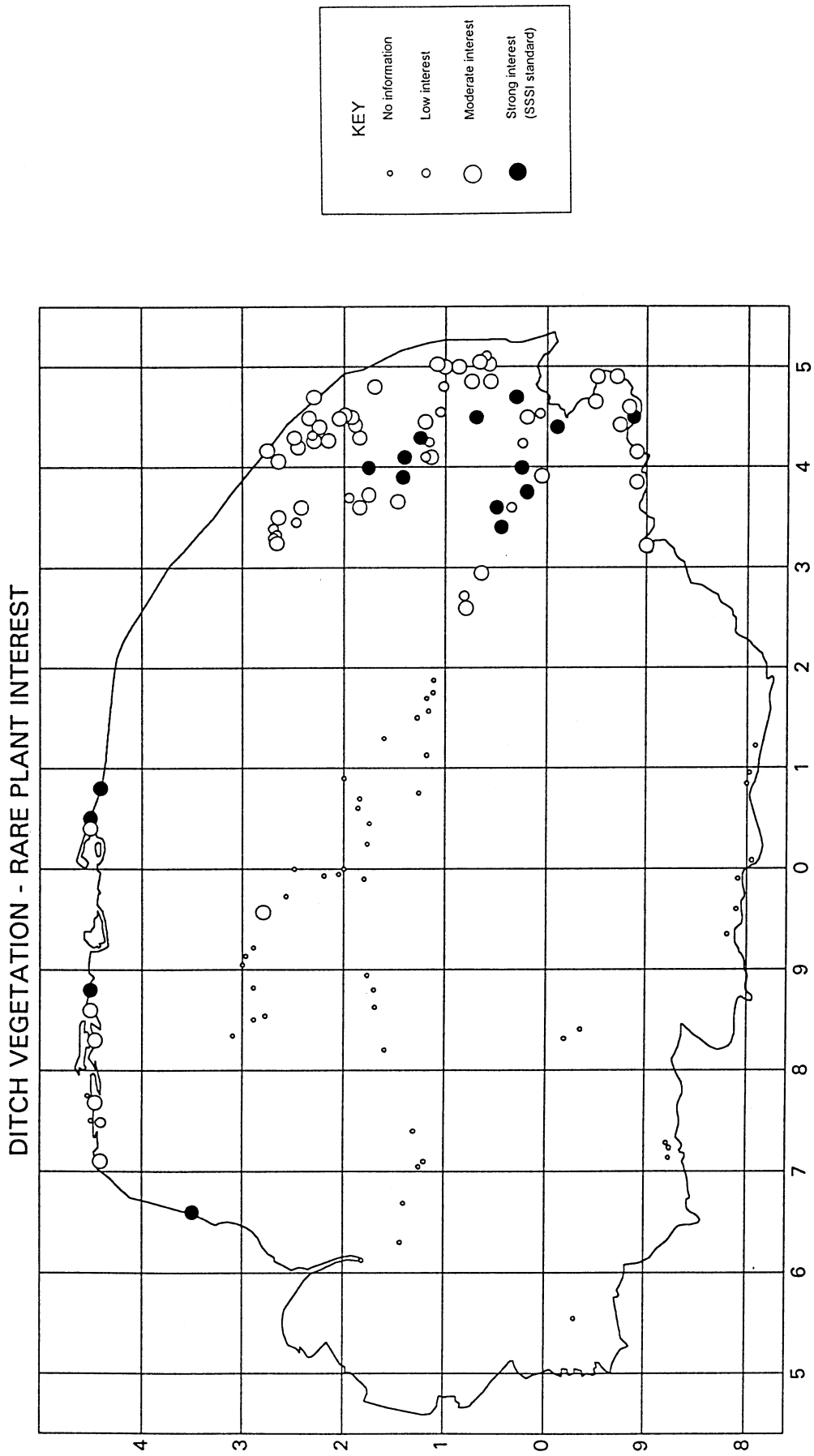


**Figure 3.3** Indicative quality profile of grassland sward interest in Norfolk lowland wet grassland

OS grid lines are spaced at 10 km intervals







**Figure 3.5 Indicative quality profile of ditch rare vascular plant interest in Norfolk lowland wet grassland**

OS grid lines are spaced at 10 km intervals

### 3.2.5 Breeding bird interest (Fig. 3.6)

The Broadland Natural Area and North Norfolk coast (Maritime Natural Area M6 Old Hunstanton to Sheringham) are regarded as outstanding for their bird interest, with the latter regarded as probably the most ornithologically rich natural area in Britain (Grice, Brown, Carter & Rankine 1994). Broadland is noted for extensive grazing marsh, one of the two most important bird habitats in England (together with reedbeds). The North Norfolk coast has several contrasting habitats in close juxtaposition (grazing marsh, saltmarsh, shingle, sand dune, sandflats, mudflats, freshwater, saline lagoons, reedbeds, inshore waters) and this diversity underpins much of the bird interest. The quality of the North Norfolk coast is reflected well in quality profile results, with seven blocks having strong interest. However, several blocks share the same tetrads and therefore score equally. It is therefore not possible to discriminate more finely for these cases and overall interest for some blocks is certainly exaggerated. For example block 125/E590, part of Brancaster Marsh, is only 10 ha in size and represents neutral grassland on rises within saltmarsh, yet it scores the highest (55) for any block in Norfolk and its tetrad has all lowland wet grassland species except Corncrake and Pintail. Such a small site is unlikely to actually have such a fine breeding bird assemblage and the value achieved probably represents the effect of adjacent high-quality contrasting habitats. In contrast to North Norfolk, it is disappointing to record for Broadland only 22 grassland blocks of strong interest for breeding birds - a good total but perhaps lower than might be expected for such an important area. There are good clusters of strong interest in core areas with large wet grassland extents, plus reedbeds and open water. Elsewhere interest is only moderate for many blocks, suggesting that tetrad-derived scores might provide a major underestimate of wet grassland quality. This result must therefore be regarded with caution. It might result from both under-recording of breeding species and inadequate attention in this methodology to the very large numbers of breeding waders on Norfolk wet grassland. However, it is the only data set for Norfolk quality profiling which allows a comparison across most wet grassland blocks. Smaller locations in central Norfolk show groups with moderate interest and strong interest is naturally achieved for the Norfolk sector of the Ouse Washes (131/E430). Another feature of results is a negative correlation between strong interest blocks for breeding birds and rare ditch plants, similar to that found in Essex (Section 2.2.4). Only four blocks have both attributes as strong quality, but there are a further 25 blocks with only one attribute as a strong interest. This raises the possibility of high bird numbers reducing rare plant interest but given the doubts on data quality for breeding birds this suggestion is highly speculative and would need rigorous investigation.

### 3.2.6 Wintering bird interest (Fig. 3.7)

Data on numbers of wintering birds for individual wet grassland blocks are not readily available and information is instead derived from WeBs recording units, each of which covers a large area including several blocks. The outstanding quality of the North Norfolk Coast and Broadland (see Section 3.2.5), plus the Ouse Washes, is reflected in several SPA and Ramsar designations, resulting in a blanket application of strong interest to many sites in these areas, contrasting with a lack of information (and probably much lower interest) for other Norfolk locations. This concentration of

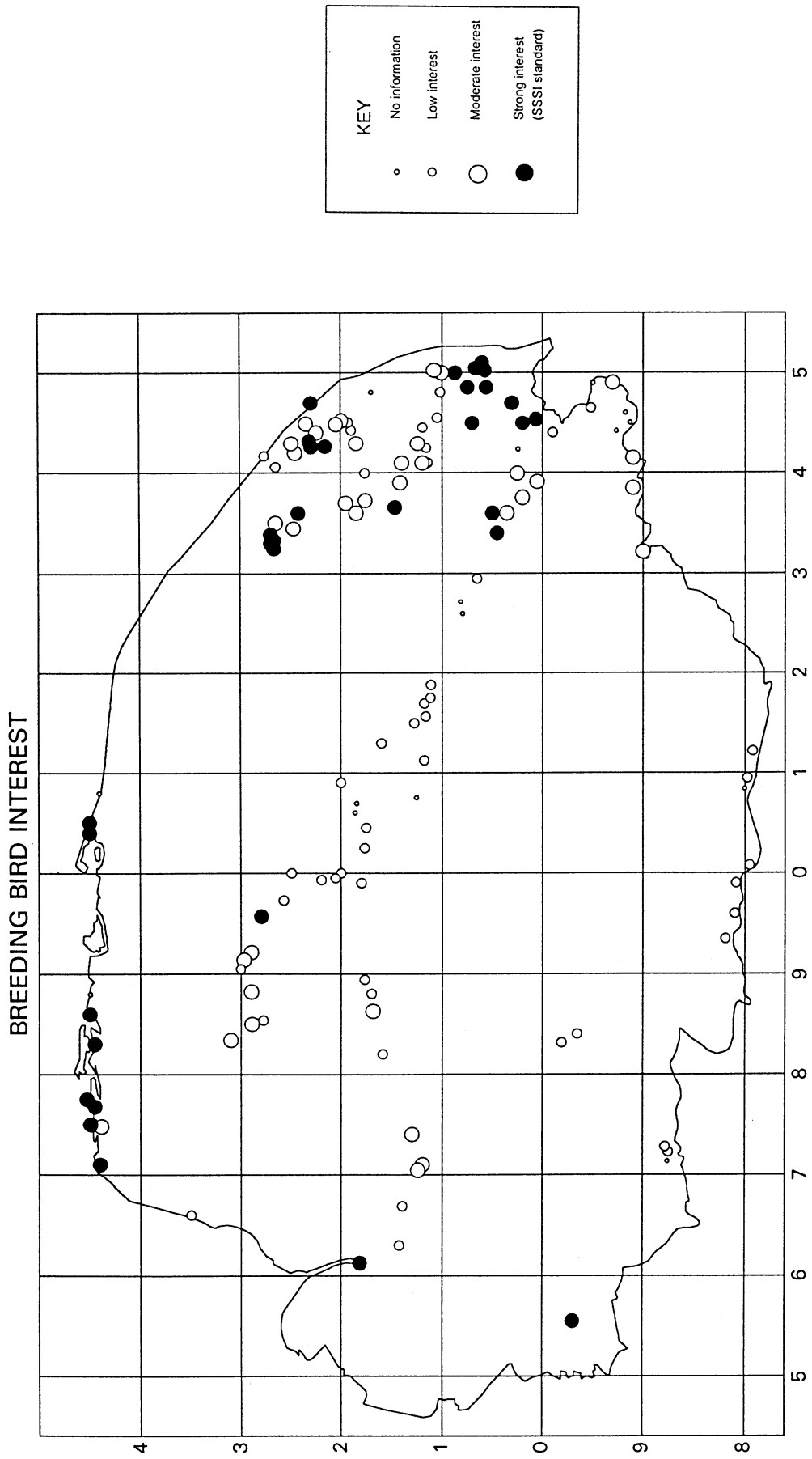
strong interest is probably a correct reflection of wintering bird interest. However, it is unfortunate that it is not possible to disaggregate results to examine the variation in quality within the strong interest category and thus derive moderate and low interest categories applicable to individual grassland blocks. This results in likely exaggeration of interest for an unknown number of blocks. The extent of strong interest is also probably exaggerated by bulked application of all wintering bird interests, with no discrimination possible between the relative importance of mudflats, saltmarsh, grazing marsh and shingle etc within a WeBs recording unit, especially on the North Norfolk Coast. In particular, very small wet grassland blocks are likely to have low interest in terms of wintering bird numbers and their classification as strong interest is an important error.

### **3.2.7 Invertebrate interest (Fig. 3.8)**

Available invertebrate information is quite widespread across Norfolk, but with concentrations in Broadland and on the North Norfolk Coast. A total of 44 Invertebrate Site Register locations show clusters of strong interest restricted Broadland and the North Norfolk Coast. A large proportion of wet grassland blocks lack any information at all. It is therefore difficult to make further generalisation about the county-wide invertebrate interest of Norfolk. Outstanding sites are recognised within the strong interest group, all characterised by very high Invertebrate Index (II) scores (>2000): Brancaster Marshes (II 2420, 127/E592) in North Norfolk, Strumpshaw Marsh (II 4180, 40/E505) and Reedham Marshes (II 5130, 63/E528) in Broadland. Other very high scores are found at Hickling Broad (II 9160, 71/E588) and Sutton Broad Fen (II 5470, 82/E547) but these reflect habitats other than wet grassland which is probably only a small proportion of such sites.

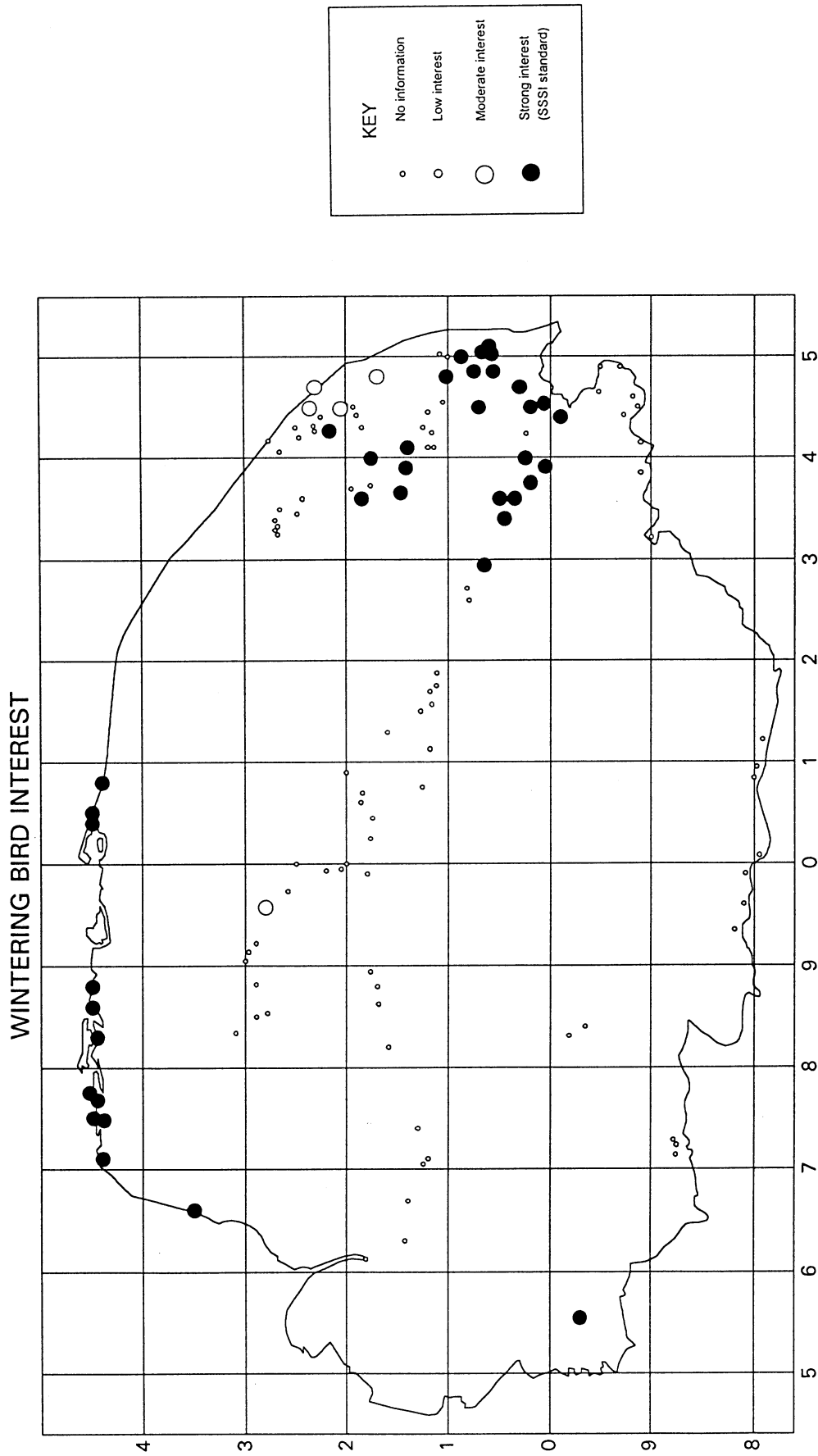
### **3.3 Norfolk SSSIs in relation to wet grassland interests**

Lowland wet grassland blocks overlapping with SSSIs are illustrated in Fig. 2.2. One additional wet grassland SSSI exists (Shelfanger Meadows TM110828) but cannot be linked to a wet grassland block due to lack of survey information (see Section 3.1). The great majority of SSSIs are located on the North Norfolk coast and Broadland, corroborating much of the strong key interest evaluations. The most important mismatch covers ditch habitat interest, with large areas of strong interest in southern Broadland which lack designation as SSSI. It is also important to understand that many wet grassland blocks only partially overlap with SSSIs, with much of their extent lacking protection. Key interests probably vary greatly in large blocks and a sizeable proportion of block area might therefore be of low quality.



**Figure 3.6 Indicative quality profile of breeding bird interest in Norfolk lowland wet grassland**

OS grid lines are spaced at 10 km intervals



**Figure 3.7 Indicative quality profile of wintering bird interest in Norfolk lowland wet grassland**

OS grid lines are spaced at 10 km intervals





## 4 REVIEW OF APPROACHES TO QUALITY PROFILING

### 4.1 Strengths of current approach

Quality profiles are interpretations of nature conservation interest derived from varied sources of different spatial scale, date, data collection method, data storage and result presentation. Such profiles are applicable to the key interests of a particular habitat (in this case lowland wet grassland), to one key interest itself (e.g. ornithology), or to a spatial area (e.g. a county, English Nature natural areas, or England as a whole). The basis of quality profiling is a classification of the degree of nature conservation interest and the presentation of results of that classification, in this case using four classes applied to a series of sites located on county maps. Three degrees of nature conservation quality (strong, moderate, low) are identified here for a set of key interests, together with lack of suitable information if this is the case for a particular locality. Contextual statements are prepared as part of this approach, one per site, and these summarise the nature of information available for each key interest and its degree of nature conservation interest. The major strengths of this approach are as follows:

1. Large amounts of diverse information are reduced to brief reviews and simple evaluation, located within contextual statements which function as a concise site-orientated summary of available data and evaluation;
2. Contextual statements serve as an effective link between original data sources, rules for classifying conservation interest, and quality profile maps;
3. Quality profile maps present the results of evaluation in a format which is readily appreciated and understood, with the same spatial scale and format allowing direct comparison of different key interests in simple visual form;
4. Interpretation of quality profile maps can be used to identify key interests and areas with a good information base, areas lacking data and perhaps requiring further survey, and to assist in formulating local and national conservation strategies for habitats and individual key interests.



## 4.2 Limitations to current approach

Despite the simplicity underpinning the methods used for quality profiling there are several difficulties which reduce the effectiveness of the technique and its potential development from an exploratory 'first stage' approach to an accepted and widely used tool. These limitations include:

- a combination of a series of data quality problems reduced the reliability of quality profiling maps to an extent that most are indicative, rather than definitive, of nature conservation interest. Each therefore requires careful interpretation and a detailed understanding of flaws in data quality. Overall, this is the most serious limitation to 'first stage' quality profiling. The data problems encountered were:
  1. Gaps in mapped distribution of lowland wet grassland blocks due to lack of Phase 1 survey information (NW Norfolk, smaller Norfolk rivers);
  2. Specification of a minimum size of 10 ha for a wet grassland block in Module 1 of the English Nature Lowland Wet Grassland Resource Survey (Dargie 1993) prevents inclusion of very small blocks, including some areas designated as SSSI;
  3. Poor spread of Phase 2 studies at the county scale, leaving large areas containing wet grassland without survey information (e.g. only coastal grazing marshes surveyed in Essex for ditch vegetation and invertebrates);
  4. Key interest data for breeding and wintering birds is collected in spatial formats which create difficulties when related to wet grassland blocks (e.g. tetrad records for breeding birds; large WeBs sites for wintering wildfowl covering several wet grassland blocks, applying *en bloc* a single level of conservation interest to all blocks within a WeBs site);
  5. As a converse to 4, some wet grassland blocks are very large (>500 ha) and probably vary considerably within in terms of level of conservation interest, and this fixed size prevents discrimination into sub-units of different quality;
- Problems were also encountered in determining levels of conservation quality for key interests. The upper tier of strong interest was readily developed using SSSI guidelines (NCC 1989) except for invertebrate data for which no SSSI criteria exist. Lower levels were more difficult. The rules adopted were arbitrary in defining moderate and low thresholds (e.g. block score of 8 for breeding bird interest), fitted to the type of information available which varies considerably with key interest (e.g. rare vascular plant score, breeding bird score, invertebrate interest). The effect of arbitrary interest-specific thresholds is to invalidate comparisons between different interests (i.e. moderate and low ratings are not additive). This is a major weakness if quality profile maps were to be considered for map analysis.

- The data storage formats adopted for generating quality profile maps and contextual statements proved cumbersome in operation. Quality profile codes for Essex (124 blocks x 5 key interest) and Norfolk (131 blocks x 6 key interests) were maintained in DMAP format which took time and care to check and modify if errors were detected. Contextual statements were maintained as single page tables for each block in a word processor file. Moving through this file again required time and care to check and maintain accuracy for the 1406 key interest evaluations. This structure proved particularly awkward in interpreting quality profile maps, with a continual need to identify a block code and then switch to a separate file or paper sheet for contextual statement information.

### 4.3 Potential modifications to quality profiling methodology

The limitations identified in Section 4.2 can probably be overcome to varying degrees using the following changes to methodology:

- continued use of Phase 1 type survey to identify new lowland wet grassland blocks;
- formal use of Conservation Officer expertise and selective Phase 2 survey to fill in important potential information gaps;
- development of a Geographical Information System (GIS) as a framework for data capture, storage, analysis and presentation. This will require a substantial amount of digitising (e.g. wet grassland polygons) but offers the opportunity to display precise block boundaries, overlaps between different key interest data layers in point, line and area formats, structured query language application to define levels of interest, and rapid linkage of quality profile maps with contextual statements;
- development of a two-tier approach to quality profiling:
  1. The first tier would examine the lowland wet grassland resource of each English Nature natural area. Results would be summarised in a format similar to that developed for ornithological interest (Grice, Brown, Carter & Rankine 1994), using a single or two page contextual statement to cover general character, key interests, key sites, key issues and key objectives. Maps could be developed to illustrate major points under interests, sites, issues and objectives. The results should then be examined as part of a national wet grassland strategy to decide which natural areas should be selected for second tier analysis.
  2. Depending on national priorities, selected natural areas should perform modified quality profiling along the lines developed in this report. Digitised wet grassland blocks, including breakdown of large blocks into smaller sub-blocks in relation to important features, should be the focus of a GIS database structure, generating quality profiles for use in examining the key issues and key objectives defined for the natural area.



## 5 BIBLIOGRAPHY

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- Drake, C.M. (1990) Monitoring the invertebrate fauna of managed ditches on Wennington Marshes, Inner Thames Estuary SSSI. England Field Unit Project No. 130. Peterborough, Nature Conservancy Council.
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- Wolfe-Murphy, S.A., Leach, S.J. & Doarks, C. (1991) A botanical survey of grazing marsh ditch systems on the Suffolk and Essex coasts, 1987. England Field Unit Project No. 49. Peterborough, Nature Conservancy Council.

ANNEX 1

PRO-FORMA DOCUMENTATION/GUIDELINES. Revised 10/10/93

PRO-FORMA Page 1

- 1) A pro-forma (PF) should be filled out whenever survey information coincides with blocks of LWG identified in Module 1 (M1), or blocks of potential LWG (PLWG) identified in M1. See 4 below.

Pro-forma items are outlined below with reference to the item title and row number.

- 2) 1/REF.# Refers to personal reference to relate PF to STATUS abstract and reference. Precede ref. with your initial.
- 3) 2/COUNTY(S) The County in which the survey was conducted.
- 4) 3/BLOCK# The block reference No. for LWG block identified in M1. If the survey provides data for 1 to 8 blocks enter the block No.s across the page in columns B to I. If there are more than 8 relevant blocks write "see over" in cell B3 and record the relevant block references on the other side of the PF.  
If a survey provides data for an area identified as PLWG in M1 then assign a new block ref. No. with your initial/P/Ref. No. of nearest identified block of LWG. For example for a potential new block found in a survey by Dominic near to block E 402 the new reference would be **D/P/E 402**.
- 5) 4/COVERAGE Tick 5/Part if survey data covers part of the geographical area of a LWG block. Tick 6/Complete if survey data corresponds exactly with the identified LWG boundary.
- 6) 7/SPECIES Add a species code in column B to describe the types of species information available in the source report. The species codes are as follows:

<i>Code No.</i>		<b>1</b>	<b>2</b>	<b>3</b>
<b>1</b>	<b>Plants</b>	<b>T</b> <i>Terrestrial</i>	<b>A</b> <i>Aquatic</i>	<b>E</b> <i>Emergent</i>
<b>2</b>	<b>Birds</b>	<b>B</b> <i>Breeding</i>	<b>P</b> <i>Passage</i>	<b>W</b> <i>Wintering</i>
<b>3</b>	<b>Invt.</b>	<b>T</b> <i>Terrestrial</i>	<b>A</b> <i>Aquatic</i>	<b>S/A</b> <i>Semi Aquatic</i>

The bold characters are the abbreviations from the key on the second page of the PF. The terms in italics are to explain the key. For example the key ref. to added to column B for wintering bird data would be 2.3.

- 
- 7) 11/METHOD Tick one or more of the rows 12-16 to describe the sampling methods employed in the survey. If you tick 16/Other specify the method in 40/NOTES.
- 8) 17/HABITAT Tick one or more of the rows 18-22 to describe the sampling methods employed in the survey. If you tick 18/NVC specify the habitat types recorded in 40/NOTES. If you tick 22/Other specify in 40/NOTES.
- 9) 23/CONS. STAT. Refers to the conservation status of the site(s) you are referring to. Enter SSSI, SSI, SBI, ESA, NNR, LNR, RAMSAR, *etc* as appropriate.
- 10) 24/MANAGMNT. Refers to management information supplied in the survey. Tick the relevant cells rows 24-30 if there is information in the report relating to **Grassland** management, **Ditch** management, **Historical** use/management, **Positive** influences (eg. sympathetic owner) on/in the site, **Negative** factors applying to the site (eg. water level decline), **Potential** of the site (eg. a water table rise could make this site better for... If you tick 31/Other comments on management specify in 40/NOTES.
- 11) 32/SCOPE Refers to the scope of the **survey**. 33/No. sites refers to the number of sites at which sampling was performed within the area covered by the survey (AOS).  
34/Date - Enter the date of **survey**.  
35/Timing refers to month(s) of survey.  
36/Water quality, tick if the survey provides data or comment on water quality.  
37/Other Sp./Habs. should be ticked if the survey provides further data on species or habitats not outlined above.  
38/Evaluation should be ticked if the survey makes any site evaluation in quality or conservation terms.  
39/Confidential should be ticked if the report is confidential.
- 12) 40/NOTES Add notes to expand any tick references made in rows 16, 18, or 31. Add any other short relevant points that do not fit into the structure of the form.  
41- Record the presence of any MG4 and its location. This should be recorded on the LWG maps where possible.

Go onto page 2 if you wish to record further species information, (PTO).

PRO-FORMA Page 2

- 1) Add the REF.# (Reference No. as in step 2 above.
- 2) Tick the species first tier code relevant to the information you are recording and cross out the other two row headings (on the right hand side of the form) that are not relevant to your record.
- 3) Add the block reference code as in step 4 above.
- 4) If there is a site name enter it under name. If SSSI tick under this column and add number of RDB (Red Data Book) species if given by the report.
- 5) For Plants (1), and Birds (2) there are columns for numbers of species that can be placed in the following categories:

INT.	Of international importance.
NAT.	Of national importance.
REGION	Of regional importance.
LOCAL	Of local importance.

For invertebrates (3) the following categories apply:

Na	Notable a species (occur in < 30 10km squares).
Nb	Notable b species (occur in < 31-100 10km squares).
N	Notable species (no distinction).
LOCAL	Of local importance.
BRACKISH	Brackish species.

- 6) A new PF should be used for Plants, Birds, and Invts. data respectively.
- 7) A new PF should be used for each different survey even if they refer to the same block.



B	A	B	C	D	E	F	G	H	I
1	<b>REF.#</b>								
2	<b>COUNTY(S)</b>								
3	<b>BLOCK #</b>								
4	<b>COVERAGE</b>								
5	Part								
6	Comp.								
7	<b>SPECIES</b>								
8	Plants (1)								
9	Birds (2)								
10	Inverts. (3)								
11	<b>METHOD</b>								
12	Quadrat								
13	Transect								
14	Trap								
15	Ditch Length								
16	Other *								
17	<b>HABITAT</b>								
18	NVC *								
19	Phase I								
20	Phase II								
21	NCR								
22	Other *								
23	<b>CONS. STAT.</b>								
24	<b>MANAGMNT.</b>								
25	Grassland								
26	Ditch								
27	Historical								
28	Positive								
29	Negative								
30	Potential								
31	Other *								
32	<b>SCOPE</b> (of survey)								
33	No. sites								
34	Date								
35	Timing								
36	Water quality								
37	Other Sp/Habs.								
38	Evaluation								
39	Confidential								
40	<b>NOTES *</b>								
41	Record any MG4 present								
42									
43									
44									
45									
46									
47									
48									
49									

LOWLAND WET GRASSLAND RESOURCE SURVEY - Module 2

		1	2	3
1	Plants	T	A	E
2	Birds	B	P	W
3	Invs.	T	A	S/A

REF.#	KEY	SPECIES								
	1	BLOCK#	NAME	SSSI	No.	RDB	INT.	NAT.	REGION	LOCAL
	2						INT.	NAT.	REGION	LOCAL
	3						Na	Nb	N	LOCAL BRACKISH



## ANNEX 2

### ESSEX QUALITY PROFILING DATA FOR WET GRASSLAND BLOCKS

The information here is derived from the listed set of sources below, using the rules for categorising key interests as set out in Table 1.3. Extensive data, together with evaluation information, is restricted to ditch vegetation (habitats, rare species), invertebrates (coastal grazing marshes plus other Invertebrate Site Register sites), breeding birds (BTO tetrad data) and wintering birds (WeBs site records). Many grassland blocks have no information available for any key interest.

The symbols in each column are those used in the DMAP mapping package for generating symbols of varying size, shape and shading on quality profile maps. Their meaning here is interpreted as follows:

I	No information available	H	Low conservation interest
G	Moderate conservation interest	A	Strong conservation interest

#### Sources

<b>Wet grassland blocks</b>	Dargie, T.C. (1993) The distribution of lowland wet grassland in England. English Nature Research Report No. 49. Peterborough, English Nature.
<b>SSSIs</b>	Maps attached to SSSI schedule descriptions.
<b>Grassland interest</b>	No source available in addition to SSSI descriptions.
<b>Ditch vegetation (habitat)</b>	S.A. Wolfe-Murphy, S.J. Leach & C. Doarks (1991) A botanical survey of grazing marsh ditch systems on the Suffolk and Essex coasts, 1987. England Field Unit Project No. 49. Peterborough, Nature Conservancy Council.
<b>Ditch vegetation (rare species)</b>	S.A. Wolfe-Murphy, S.J. Leach & C. Doarks (1991) A botanical survey of grazing marsh ditch systems on the Suffolk and Essex coasts, 1987. England Field Unit Report No. 49. Peterborough, Nature Conservancy Council.  D. Kite (1990) A habitat survey of the Wennington Marshes, Greater London. Peterborough, Nature Conservancy Council.
<b>Breeding bird interest</b>	Gibbons, D.W., Reid, J.B. & Chapman, R.A. (eds) (1993). The new atlas of breeding birds in Britain and Ireland 1988-1991. London, Poyser.
<b>Wintering bird interest</b>	Waters, R.J. & Cranswick, P.A. (1993) The Wetland Bird Survey 1992-93: wildfowl and wader counts. Slimbridge, BTO/WWT/RSPB/JNCC.
<b>Invertebrate interest</b>	C.M. Drake (1988) A survey of the aquatic invertebrates of the Essex grazing marshes. England Field Unit Project No. 50a. Peterborough, Nature Conservancy Council.  C.M. Drake (1990) Monitoring the invertebrate fauna of managed ditches on Wennington Marshes, Inner Thames Estuary SSSI. England Field Unit Project No. 130. Peterborough, Nature Conservancy Council.  B.C. Eversham, J.N. Greatorex-Davies & Harding, P.T. (1989) Inner Thames Marshes SSSI, Rainham. Report on preliminary invertebrate survey at Wennington & Aveyley Marshes. Monks Wood, Institute of Terrestrial Ecology.  Invertebrate Site Register, Joint Nature Conservation Committee, Peterborough.

ESSEX SITE NUMBER	LWG BLOCK CODE	GRID REFERENCE	SSSIs	DITCH VEGETATION (HABITAT)	DITCH VEGETATION (SPECIES)	BREEDING BIRD INTEREST	WINTERING BIRD INTEREST	INVERTEBRATE INTEREST
1	E1	TR040945	A	A	A	I	A	I
2	E2	TR020947	A	A	A	G	A	I
3	E3	TR015912	A	A	A	A	A	I
4	E4	TR000943	A	A	A	G	A	I
5	E5	TR020925	A	A	A	G	I	I
6	E6	TQ980910	A	A	A	H	A	A
7	E7	TQ970906	A	I	I	G	A	I
8	E8	TQ967902	A	I	I	G	A	I
9	E9	TQ980890	A	I	I	I	A	I
10	E10	TQ966870	A	A	A	G	A	I
11	E11	TQ964882	A	A	A	G	A	I
12	E12	TQ956897	A	I	I	A	A	I
13	E13	TQ948898	A	I	I	A	A	I
14	E14	TQ935894	I	I	I	A	A	I
15	E15	TQ930906	I	I	I	A	A	I
16	E16	TQ905913	I	I	I	H	A	I
17	E17	TQ820850	A	I	I	H	A	I
18	E18	TQ800856	A	A	H	H	A	A
19	E19	TQ770850	A	A	G	G	A	A
20	E20	TQ750860	A	A	G	H	A	A
21	E21	TQ730870	I	I	I	H	A	I
22	E22	TQ725866	I	I	I	H	A	A
23	E23	TQ730840	A	A	A	H	A	A
24	E24	TQ690810	I	I	I	G	A	I
25	E25	TQ670760	I	I	I	I	A	A
26	E26	TQ660775	I	I	I	I	A	A
27	E27	TQ650760	I	I	I	I	A	I
28	E28	TQ755944	I	I	I	I	I	I
29	E29	TQ795950	I	I	I	H	A	I
30	E30	TQ635771	I	I	I	I	A	I
31	E31	TQ630850	I	I	I	H	I	I
32	E32	TQ628840	I	I	I	H	I	I
33	E33	TQ606875	I	I	I	I	I	I
34	E34	TQ630774	I	I	I	I	A	I
35	E35	TQ494978	I	I	I	H	I	I
36	E36	TQ470975	I	I	I	H	I	I
37	E37	TQ460973	I	I	I	H	I	I
38	E38	TQ453964	I	I	I	I	I	I
39	E39	TQ436953	A	I	I	H	I	G
40	E40	TQ377980	I	I	I	I	I	I
41	E52	TL375040	I	I	I	G	I	I
42	E54	TL375055	I	I	I	G	I	I
43	E56	TL380063	I	I	I	G	I	I
44	E57	TL388064	I	I	I	G	I	I
45	E58	TL390075	I	I	I	G	I	I
46	E67	TQ800975	A	I	I	I	A	I
47	E68	TL790090	I	I	I	H	I	G
48	E69	TL767087	I	I	I	G	I	G
49	E70	TL742066	I	I	I	G	I	I
50	E71	TL730066	I	I	I	H	I	I
51	E72	TL714093	I	I	I	I	I	I
52	E73	TL695187	I	I	I	H	I	I
53	E74	TL799322	I	I	I	I	I	I
54	E76	TL491185	A	I	I	G	I	I
55	E79	TL480130	I	I	I	H	I	I
56	E81	TL440114	I	I	I	H	I	I
57	E82	TL425113	A	I	I	H	I	I
58	E84	TQ965957	I	I	I	I	A	I
59	E85	TQ942959	I	I	I	I	A	I
60	E86	TQ929963	I	I	I	I	I	I

ESSEX SITE NUMBER	LWG BLOCK CODE	GRID REFERENCE	SSSIs	DITCH VEGETATION (HABITAT)	DITCH VEGETATION (SPECIES)	BREEDING BIRD INTEREST	WINTERING BIRD INTEREST	INVERTEBRATE INTEREST
61	E87	TQ915963	A	H	H	I	A	I
62	E88	TQ870980	A	A	H	I	A	A
63	E89	TQ852986	I	I	I	H	I	I
64	E90	TQ835970	A	H	G	G	A	G
65	E91	TQ823975	A	H	G	G	A	A
66	E92	TQ820963	A	H	A	G	A	A
67	E93	TQ983990	I	I	I	I	A	I
68	E94	TM022051	A	G	G	G	A	A
69	E95	TL985065	A	I	I	I	A	I
70	E96	TL932050	A	I	I	G	A	I
71	E97	TL925035	A	I	I	I	A	I
72	E98	TL915020	I	I	I	H	A	I
73	E99	TL876039	I	I	I	I	I	I
74	E100	TL830086	I	I	I	H	I	I
75	E101	TL845080	I	I	I	I	I	I
76	E102	TL830100	I	I	I	H	I	I
77	E103	TL923083	A	I	I	G	A	I
78	E104	TL975100	A	H	G	G	A	A
79	E105	TL975125	A	A	A	A	G	A
80	E106	TM005139	I	I	I	H	A	I
81	E107	TM000159	A	I	I	G	A	I
82	E108	TM045135	I	H	H	H	A	I
83	E109	TM069150	I	I	I	G	A	I
84	E110	TM050156	I	I	I	G	A	I
85	E111	TM040175	A	H	A	A	A	A
86	E112	TM050203	I	I	I	I	A	I
87	E113	TM025205	I	I	I	I	I	I
88	E114	TM035210	A	A	A	I	A	I
89	E115	TM045213	A	I	I	G	A	I
90	E116	TM028226	A	A	A	G	I	I
91	E117	TM023240	I	I	I	H	I	I
92	E118	TL985260	I	I	I	H	I	I
93	E119	TL953268	I	I	I	H	I	I
94	E120	TL942275	I	I	I	H	I	I
95	E121	TL912274	I	I	I	H	I	I
96	E122	TL920331	I	I	I	H	I	I
97	E126	TM165318	I	I	I	G	A	I
98	E127	TM075170	A	A	G	G	A	A
99	E128	TM100185	I	I	I	G	A	I
100	E129	TM108188	A	I	I	G	A	I
101	E130	TM110165	A	A	G	G	A	H
102	E131	TM100156	I	I	I	G	A	I
103	E132	TM140137	I	I	I	I	A	I
104	E133	TM160135	I	I	I	I	I	I
105	E134	TM185205	I	I	I	H	I	I
106	E135	TM200183	A	A	A	H	I	G
107	E136	TM150134	I	I	I	I	A	I
108	E137	TM200255	A	H	A	I	A	I
109	E138	TM237227	I	I	I	I	A	I
110	E139	TM243230	I	I	I	G	A	I
111	E140	TM233245	A	H	A	A	A	A
112	E141	TM212300	I	I	I	H	A	I
113	E142	TM235318	I	I	I	G	A	I
114	E223	TL886375	I	I	I	H	I	I
115	E224	TL882392	I	I	I	I	I	I
116	E226	TL830405	I	I	I	I	I	I
117	E227	TL820398	I	I	I	I	I	I
118	E228	TL775363	I	I	I	I	I	I
119	E229	TL858445	I	I	I	G	I	I
120	E230	TL833461	I	I	I	G	I	I
121	E231	TL822463	I	I	I	G	I	I
122	E703	TQ955910	A	H	G	I	A	I
123	SE198	TQ545795	A	I	A	A	A	A
124	E125	TM060340	A	H	H	G	A	H



**ANNEX 3**

**ESSEX CONTEXTUAL STATEMENTS**





<b>1</b> <b>LWG BLOCK E1</b> <b>NGR TR040945</b> <b>Area 102 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Foulness Island</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>Foulness SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - oligohaline and mesohaline. a Ditch network > 5km. c1 High diversity of brackish ditch types (> 6). Strong interest.  Rare species score 200. Nat rare: <i>Polypogon monspeliensis</i> . Nat scarce: <i>Hordeum marinum</i> , <i>Ranunculus baudotii</i> . Strong interest.  No information.  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  No information.  No information.

<p>2 LWG BLOCK E2 NGR TR020947 Area 12 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Foulness Island Essex  39 - Thames Marshes Foulness SSSI</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - oligohaline and mesohaline. a Ditch network &gt; 5km. c1 High diversity of brackish ditch types (&gt; 6). Strong interest.  Rare species score 200. Nat rare: <i>Polypogon monspeliensis</i>. Nat scarce: <i>Hordeum marinum</i>, <i>Ranunculus baudotii</i>. Strong interest.  Moderate interest - LWG species weighted total 9  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  No information.  No information.</p>

<p>3 LWG BLOCK E3 NGR TR015912 Area 23 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Foulness Island Essex  39 - Thames Marshes Foulness SSSI</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - oligohaline and mesohaline. a Ditch network &gt;5km. c1 High diversity of brackish ditch types (&gt; 6). Strong interest.  Rare species score 200. Nat rare: <i>Polypogon monspeliensis</i>. Nat scarce: <i>Hordeum marinum</i>, <i>Ranunculus baudotii</i>. Strong interest.  Strong interest - LWG weighted species total 16 Marsh Harrier present in tetrad.  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark- bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  No information.  No information.</p>

<p><b>4</b>  <b>LWG BLOCK E4</b>  <b>NGR TR000943</b>  <b>Area 88 ha.</b>  <b>Soil Marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b></p> <p><b>Natural Area</b>  <b>Conservation status</b></p>	<p><b>Foulness Island</b>  <b>Essex</b></p> <p><b>39 - Thames Marshes</b>  <b>Foulness SSSI</b></p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No information.</p> <p>Habitat - oligohaline and mesohaline.  a Ditch network &gt; 5km.  c1 High diversity of brackish ditch types (&gt; 6).  Strong interest.</p> <p>Rare species score 200.  Nat rare: <i>Polypogon monspeliensis</i>.  Nat scarce: <i>Hordeum marinum</i>, <i>Ranunculus baudotii</i>.  Strong interest.</p> <p>Moderate interest - LWG weighted total 8.  Tetrad species list also includes Avocet.</p> <p>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations.  Strong interest.</p> <p>No information.</p> <p>No information.</p>

<p><b>5</b>  <b>LWG BLOCK E5</b>  <b>NGR TR020925</b>  <b>Area 60 ha.</b>  <b>Soil Marine alluvium</b></p>	<p>Site Name  County</p> <p>Natural Area  Conservation status</p>	<p>Foulness Island  Essex</p> <p>39 - Thames Marshes  Foulness SSSI</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward</p> <p>Ditch vegetation</p> <p>Breeding birds</p> <p>Wintering birds</p> <p>Invertebrates</p> <p>Other</p>	<p>No information.</p> <p>Habitat - oligohaline and mesohaline.  a Ditch network &gt; 5km.  c1 High diversity of brackish ditch types (&gt; 6).  Strong interest.</p> <p>Rare species score 200.  Nat rare: <i>Polypogon monspeliensis</i>.  Nat scarce: <i>Hordeum marinum</i>, <i>Ranunculus</i>  <i>baudotii</i>.  Strong interest.</p> <p>Moderate interest - LWG weighted species score  12.</p> <p>No information.</p> <p>No information.</p> <p>No information.</p>

<p><b>6</b>  <b>LWG BLOCK E6</b>  <b>NGR TQ980910</b>  <b>Area 525 ha.</b>  <b>Soil Marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b></p> <p><b>Natural Area</b>  <b>Conservation status</b></p>	<p><b>Foulness Island</b>  <b>Essex</b></p> <p><b>39 - Thames Marshes</b>  <b>Foulness SSSI</b></p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No information.</p> <p>Habitat - oligohaline and mesohaline.  a Ditch network &gt; 5km.  c1 High diversity of brackish ditch types (&gt; 6).  Strong interest.</p> <p>Rare species score 200.  Nat rare: <i>Polypogon monspeliensis</i>.  Nat scarce: <i>Hordeum marinum</i>, <i>Ranunculus baudotii</i>.  Strong interest.</p> <p>Low - LWG weighted species score 4</p> <p>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations.  Strong interest.</p> <p>B status (SSSI) Drake 1988 - most saline ditches surveyed in Essex, probably responsible for impoverished aquatic invt fauna  RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly)  RDB3 <i>Dixella attica</i> (Meniscus Midge)  Strong interest..</p> <p>No information.</p>





<b>8</b> <b>LWG BLOCK E8</b> <b>NGR TQ967902</b> <b>Area 10 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Foulness Island</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>Foulness SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Moderate interest - LWG weighted species score 8. Tetrad species list includes Avocet.  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  No information.  No information.

<p><b>9</b>  <b>LWG BLOCK E9</b>  <b>NGR TQ980890</b>  <b>Area 27 ha.</b>  <b>Soil Marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b></p> <p><b>Natural Area</b>  <b>Conservation status</b></p>	<p><b>Foulness Island</b>  <b>Essex</b></p> <p><b>39 - Thames Marshes</b>  <b>Foulness SSSI</b></p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No information.</p> <p>Habitat - oligohaline and mesohaline  a Ditch network &gt; 5km.  c1 High diversity of brackish ditch - types (&gt; 6).  Strong interest.</p> <p>Rare plants score 450.  Nat rare: <i>Halimione pedunculata</i>, <i>Polypogon monspeliensis</i>.  Nat scarce: <i>Bupleurum tenuissimum</i>, <i>Hordeum marinum</i>, <i>Inula crithmoides</i>, <i>Puccinellia rupestris</i>, <i>Ranunculus baudotii</i>.  Strong interest.</p> <p>No information.</p> <p>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations.  Strong interest.</p> <p>No information.</p> <p>No information.</p>

<p><b>10</b>  <b>LWG BLOCK E10</b>  <b>NGR TQ966870</b>  <b>Area 90 ha.</b>  <b>Soil Marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b></p> <p><b>Natural Area</b>  <b>Conservation status</b></p>	<p><b>Foulness Island (Great Wakering)</b>  <b>Essex</b></p> <p><b>39 - Thames Marshes</b>  <b>Foulness SSSI</b></p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No information.</p> <p>Habitat - oligohaline and mesohaline.  a Ditch network &gt; 5km.  c1 High diversity of brackish ditch - types (&gt; 6).  Strong interest.</p> <p>Rare plants score 450.  Nat rare: <i>Halimione pedunculata</i>, <i>Polypogon monspeliensis</i>.  Nat scarce: <i>Bupleurum tenuissimum</i>, <i>Hordeum marinum</i>, <i>Inula crithmoides</i>, <i>Puccinellia rupestris</i>, <i>Ranunculus baudotii</i>.  Strong interest - Highest rare plant score for all Essex grazing marsh ditches.</p> <p>Moderate interest - LWG weighted species score 11.</p> <p>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations.  Strong interest.</p> <p>No information.</p> <p>No information.</p>

<p>11 LWG BLOCK E11 NGR TQ964882 Area 10 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Foulness Island (Great Wakering) Essex  39 - Thames Marshes Foulness SSSI</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation        Breeding birds   Wintering birds     Invertebrates  Other</p>	<p>No information.  Habitat - oligohaline and mesohaline. a Ditch network &gt;5km. c1 High diversity of brackish ditch - types (&gt; 6). Strong interest.  Rare plants score 450. Nat rare: <i>Halimione pedunculata</i>, <i>Polypogon monspeliensis</i>. Nat scarce: <i>Bupleurum tenuissimum</i>, <i>Hordeum marinum</i>, <i>Inula crithmoides</i>, <i>Puccinellia rupestris</i>, <i>Ranunculus baudotii</i>. Strong interest - Highest rare plant score for all Essex grazing marsh ditches.  Moderate interest - LWG weighted species score 12.  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  No information.  No information.</p>

<b>12</b> <b>LWG BLOCK E12</b> <b>NGR TQ956897</b> <b>Area 20 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Foulness Island</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>Foulness SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Strong interest - LWG weighted species score 31.</b> <b>Tetrad species list also includes Avocet.</b>  <b>Part of Crouch and Roach Estuaries WeBs site</b> <b>which is of international importance for overall</b> <b>numbers (27,000 wildfowl and waders) and Dark-</b> <b>bellied Brent Goose populations. National</b> <b>importance for Shelduck, Gadwall, Shoveler and</b> <b>Ruff populations.</b> <b>Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<b>13</b> <b>LWG BLOCK E13</b> <b>NGR TQ948898</b> <b>Area 42 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Foulness Island</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>Foulness SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>     <b>Invertebrates</b>   <b>Other</b>	No information.  No information. Not surveyed by Wolfe-Murphy, Leach and Doarkes (1991).  Strong interest - LWG weighted species score 31. Tetrad species list also includes Avocet.  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  No information.  No information.

<p><b>14</b>  <b>LWG BLOCK E14</b>  <b>NGR TQ935894</b>  <b>Area 47 ha.</b>  <b>Soil Marine alluvium</b>  <b>and other</b></p>	<p><b>Site Name</b>  <b>County</b></p> <p><b>Natural Area</b>  <b>Conservation status</b></p>	<p><b>Barling Marsh</b>  <b>Essex</b></p> <p><b>39 - Thames Marshes</b>  <b>None</b></p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No information.</p> <p>No information.</p> <p>Strong interest - LWG weighted species score 27. Tetrads species list also includes Avocet.</p> <p>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.</p> <p>No information.</p> <p>No information.</p>





<b>16</b> <b>LWG BLOCK E16</b> <b>NGR TQ905913</b> <b>Area 12 ha.</b> <b>Soil Marine alluvium,</b> <b>other</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Great Stambridge</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low - LWG weighted species score 7.</b>  <b>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<b>17</b> <b>LWG BLOCK E17</b> <b>NGR TQ820850</b> <b>Area 40 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Benfleet and Southend</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>Benfleet and Southend SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Low interest - LWG weighted species score 6.  Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.  No information.  No information.

<p>18  <b>LWG BLOCK E18</b>  <b>NGR TQ800856</b>  <b>Area 71 ha.</b>  <b>Soil Marine alluvium,  other non-marine</b></p>	<p>Site Name  County</p> <p>Natural Area  Conservation status</p>	<p><b>Hadleigh Marsh</b>  <b>Essex</b></p> <p><b>39 - Thames Marshes</b>  <b>SSSI Benfleet and Southend Marshes</b></p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward</p> <p>Ditch vegetation</p> <p>Breeding birds</p> <p>Wintering birds</p> <p>Invertebrates</p> <p>Other</p>	<p>No information.</p> <p>Habitat - oligohaline ditches.  a Ditch network &gt; 5km.  e High floristic diversity (&gt; 50% with &gt; 9 aquatic/emergent speices/20m ditch length (freshwater) or &gt; 5 aquatic/emergent species/20m ditch length (brackish)).  Strong interest.</p> <p>Rare species score 0.  Low interest.</p> <p>Low - LWG weighted species score 6.</p> <p>Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations.  Strong interest.</p> <p>Grade A1 - Drake 88  Best example in Essex of transition marsh from brackish to clean fresh water. A small but very diverse site, aided by adjacent S-facing hillslope for active adults of some freshwater insects. Long grass and light scrub should be maintained on hillslope. Very high rarity score.  RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly)  RDB3 <i>Graptodytes bilineatus</i> (Water Beetle)  RDB3 <i>Stratiomys singularior</i> (Soldier Fly)  RDB3 <i>Hydrophilus piceus</i> (Water Beetle)  RDB3 <i>Bagous cylindrus</i> (Weevil)  RDB3 <i>Odontomyia ornata</i> (Soldier Fly)  Strong interest.</p> <p>No information.</p>

<p><b>19</b>  <b>LWG BLOCK E19</b>  <b>NGR TQ770850</b>  <b>Area 315 ha.</b>  <b>Soil Marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status</p>	<p>Canvey Island  Essex  39 - Thames Marshes  Benfleet and Southend Marshes SSSI</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - freshwater and oligohaline ditches.  a Ditch network &gt; 5km.  b Excellent example of freshwater - brackish transition.  Strong interest.  Rare species score 150.  Nat scarce: <i>Carex divisa</i>, <i>Ceratophyllum submersum</i>, <i>Ranunculus baudotii</i>.  Moderate interest.  Moderate interest - LWG weighted species score 8.  Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations.  Strong interest.  Grade A2 - Drake 88  High diversity ditches for low sampling effort, highest invertebrate index score per taxon for Essex.  RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly)  RDB3 <i>Salduia opacula</i> (Shore Bug)  RDB3 <i>Stratiomys singularior</i> (Soldier Fly)  RDB3 <i>Hydrochus elongatus</i> (Water Beetle)  Strong interest.  Great Crested Newt (Drake 88)</p>

<p>20 LWG BLOCK E20 NGR TQ750860 Area 275 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Pitsea Essex  39 - Thames Marshes Pitsea Marsh SSSI</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation      Breeding birds   Wintering birds      Invertebrates      Other</p>	<p>No information.  Habitat - oligohaline. a Ditch network &gt; 5km. Low interest.  Rare species score 100. Nat scarce: <i>Ceratophyllum submersum</i>, <i>Ranunculus baudotii</i>. Moderate interest.  Low interest - LWG weighted species score 7.  Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.  Grade A2 - Drake 1988 Diverse invt fauna in part reflecting varied water depths. RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly) RDB3 <i>Saldula opacula</i> (Shore Bug) RDB3 <i>Aedes flavescens</i> (Mosquito) RDB3 <i>Dixella attica</i> (Meniscus Midge) RDB3 <i>Stratiomys singularior</i> (Soldier Fly) Strong interest.  Great Crested Newt (Drake 88)</p>

<b>21</b> <b>LWG BLOCK E21</b> <b>NGR TQ730870</b> <b>Area 23 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Vange Marshes</b> <b>Essex</b>  <b>39 - Thames Marshes</b> Vange and Fobbing Marshes SSSI (small part of ditches only)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Low - LWG weighted species score 7.  Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.  No information.  No information.

<p>22 LWG BLOCK E22 NGR TQ725866 Area 30 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Vange Marshes Essex  39 - Thames Marshes Vange and Fobbing Marshes SSSI</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Drake 88 - Poor ditch vegetation dominated by <i>Phragmites australis</i>, <i>Scirpus maritimus</i>, <i>Agrostis stolonifera</i>, bare mud. Low interest.  Low - LWG weighted species score 7.  Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.  Grade A2 - Drake 1988 A good small block but with less interest than E23 which is outstanding. Northern (Vange) sector probably dry in summer, only shallow water for rest of year. Further south Fobbing sector has permanently wet drains and vegetation ranging from brackish to true freshwater types. Large area of transition marsh. Rarity differences between block uncertain. RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly) RDB2 <i>Graptodytes bilineatus</i> (Water Beetle) RDB3 <i>Aedes flavescens</i> (Mosquito) RDB3 <i>Odontomyia ornata</i> (Soldier Fly) RDB3 <i>Dixella attica</i> (Meniscus Midge) RDB3 <i>Stratiomys singularior</i> (Soldier Fly) RDB3 <i>Hydrophilus piceus</i> (Great Silver Diving Beetle) Strong interest.  Great Crested Newt (Drake 88)</p>





<b>24</b> <b>LWG BLOCK E24</b> <b>NGR TQ690810</b> <b>Area 15 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Mucking Marshes</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species score 12.</b>  <b>Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<p>25 LWG BLOCK E25 NGR TQ670760 Area 109 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>East Tilbury Marshes Essex  39 - Thames Marshes None</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Few wet ditches have sparse <i>Phragmites australis</i>, <i>Scirpus maritimus</i>, algae. No Phase 2 information.  <i>Hottonia palustris</i> (uncommon in Essex) and <i>Groenlandia densa</i> (extinct in Essex) noted in ditches outside LWG boundaries on Tilbury Marsh, close to Chadwell St Mary - Drake 1988. LWG block - no information (not surveyed by Wolfe-Murphy, Leach and Doarkes (1991)).  No information.  Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.  Grade A2 - Drake 88 High degree of interest despite low water levels and unpromising areas of arable, gravel pits, rubbish dumps. Best areas in south with brackish aquatic invt fauna. Some sampled ditches are outside LWG block boundaries. RDB3 <i>Saldula opacula</i> (Shorebug) RDB3 <i>Graptodytes bilineatus</i> (Water Beetle) RDB3 <i>Dixella attica</i> (Meniscus Midge) RDB3 <i>Stratiomys singularior</i> (Soldier Fly) RDB3 <i>Microvelia pygmaea</i> (Tiny Water Skater) pRDB3 <i>Baryphyra duffeyi</i> (Money Spider) Strong interest.  No information.</p>

<p>26 LWG BLOCK E26 NGR TQ660775 Area 12 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>West Tilbury Marshes Essex  39 - Thames Marshes None</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Few wet ditches. Sparse <i>Phrag austr</i>, <i>Scirp marit</i> or algae. No Phase 2 information. <i>Hottonia palustris</i> (uncommon in Essex) and <i>Groenlandia densa</i> (extinct in Essex) noted in ditches outside LWG boundaries on Tilbury Marsh, close to Chadwell St Mary - Drake 1988. Not surveyed by Wolfe-Murphy, Leach and Doarkes (1991).  No information.  Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.  Grade A2 - Drake 88 High degree of interest despite low water levels and unpromising areas of arable, gravel pits, rubbish dumps. Best areas in south with brackish aquatic invt fauna. Some sampled ditches are outside LWG block boundaries. RDB3 <i>Saldula opacula</i> (Shorebug) RDB3 <i>Graptodytes bilineatus</i> (Water Beetle) RDB3 <i>Dixella attica</i> (Meniscus Midge) RDB3 <i>Stratimys singularior</i> (Soldier Fly) RDB3 <i>Microvelia pygmaea</i> (Tiny Water Skater) pRDB3 <i>Baryphyra duffeyi</i> (Money Spider) Strong interest.  No information.</p>



<b>28</b> <b>LWG BLOCK E28</b> <b>NGR TQ755944</b> <b>Area 14 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Runwell</b> <b>Essex</b>  <b>38 - London Basin</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No information.  No information.  No information.  No information.

<b>29</b> <b>LWG BLOCK E29</b> <b>NGR TQ795950</b> <b>Area 74 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Battlesbridge</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low - LWG weighted species score 6.</b>  <b>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<b>30</b> <b>LWG BLOCK E30</b> <b>NGR TQ635771</b> <b>Area 19 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Tilbury</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information (not surveyed by Wolfe-Murphy, Leach and Doarkes (1991)).</b>  <b>No information.</b>  <b>Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<b>31</b> <b>LWG BLOCK E31</b> <b>NGR TQ630850</b> <b>Area 88 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Bulphan</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 3.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>



<b>32</b> <b>LWG BLOCK E32</b> <b>NGR TQ628840</b> <b>Area 34 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Bulphan</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 3.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>33</b> <b>LWG BLOCK E33</b> <b>NGR TQ606875</b> <b>Area 29 ha.</b> <b>Soil River, other</b> <b>non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Warley</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>34</b> <b>LWG BLOCK E34</b> <b>NGR TQ630774</b> <b>Area 16 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Tilbury</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>      <b>Invertebrates</b>   <b>Other</b>	<b>No information.</b>  <b>No information (not surveyed by Wolfe-Murphy, Leach and Doarkes (1991)).</b>   <b>No information.</b>  <b>Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.</b>  <b>No information.</b>   <b>No information.</b>

<b>35</b> <b>LWG BLOCK E35</b> <b>NGR TQ494978</b> <b>Area 41 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Abridge</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 1.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>36</b> <b>LWG BLOCK E36</b> <b>NGR TQ470975</b> <b>Area 20 ha.</b> <b>Soil River, other</b> <b>non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Abridge</b> <b>Essex</b>  <b>38 - London Basin</b> <b>Roding Valley Meadows SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 3.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>37</b> <b>LWG BLOCK E37</b> <b>NGR TQ460973</b> <b>Area 20 ha.</b> <b>Soil Other non-marine,</b> <b>river alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Abridge</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 3.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>38</b> <b>LWG BLOCK E38</b> <b>NGR TQ453964</b> <b>Area 49 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Abridge</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>39</b> <b>LWG BLOCK E39</b> <b>NGR TQ436953</b> <b>Area 29 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Roding Valley Meadows</b> <b>Essex</b>  <b>38 - London Basin</b> <b>Roding Valley Meadows SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No detailed information. SSSI description cites species rich flood meadows and marsh but no nationally rare or scarce species are listed.  No information.  Low interest - LWG weighted species score 6.  No information.  ISR site - moderate interest. 17 spp. - 1 cmn, 8 local, 8 Nb. Inv index 320, rarity score 81, Nrecs 23.  No information.





<b>41</b> <b>LWG BLOCK E52</b> <b>NGR TL375040</b> <b>Area 42 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Cheshunt - Lee Valley</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species score 8.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>42</b> <b>LWG BLOCK E54</b> <b>NGR TL375055</b> <b>Area 21 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Nazeing Marsh - Lee Valley</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>    <b>Wintering birds</b>    <b>Invertebrates</b>    <b>Other</b>	<b>No information.</b>    <b>Moderate interest - LWG weighted species score 8.</b>    <b>No information.</b>    <b>No information.</b>    <b>No information.</b>

<b>43</b> <b>LWG BLOCK E56</b> <b>NGR TL380063</b> <b>Area 25 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Nazeing Mead - Lee Valley</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species score 12. Hobby present in tetrad.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>44</b> <b>LWG BLOCK E57</b> <b>NGR TL388064</b> <b>Area 10 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Nazeing Mead - Lee Valley</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>    <b>Wintering birds</b>    <b>Invertebrates</b>    <b>Other</b>	<b>No information.</b>    <b>Moderate interest - LWG weighted species score 12. Hobby present in tetrad.</b>    <b>No information.</b>    <b>No information.</b>    <b>No information.</b>

<b>45</b> <b>LWG BLOCK E58</b> <b>NGR TL390075</b> <b>Area 15 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Nazeing Mead - Lee Valley</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>    <b>Wintering birds</b>    <b>Invertebrates</b>    <b>Other</b>	<b>No information.</b>    <b>Moderate interest - LWG weighted species score 12. Hobby present in tetrad.</b>    <b>No information.</b>    <b>No information.</b>    <b>No information.</b>



<p><b>47</b>  <b>LWG BLOCK E68</b>  <b>NGR TL790090</b>  <b>Area 65 ha.</b>  <b>Soil River alluvium,</b>  <b>other non-marine</b></p>	<p><b>Site Name</b>  <b>County</b></p> <p><b>Natural Area</b>  <b>Conservation status</b></p>	<p><b>Chelmer Valley</b>  <b>Essex</b></p> <p><b>33 - East Anglian Plain</b>  <b>None</b></p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No information.</p> <p>No information.</p> <p>Low interest - LWG weighted species score 6.</p> <p>No information.</p> <p>Moderate interest - ISR site  7 sp - 1 lc, 5 Nb, 1 Na  Inv ind 250, rarity score 58, Nrecs 7.</p> <p>No information.</p>



<b>48</b> <b>LWG BLOCK E69</b> <b>NGR TL767087</b> <b>Area 16 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Chelmer Valley</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>    <b>Wintering birds</b>    <b>Invertebrates</b>       <b>Other</b>	<b>No information.</b>     <b>Moderate interest - LWG weighted species score 10.</b>     <b>No information.</b>     <b>Moderate interest - ISR site</b> <b>7 sp - 1 lc, 5 Nb, 1 Na</b> <b>Inv ind 250, rarity score 58, Nrecs 7.</b>     <b>No information.</b>

<b>49</b> <b>LWG BLOCK E70</b> <b>NGR TL742066</b> <b>Area 17 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Chelmsford</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	No information.  No information.  Moderate interest - LWG weighted species score 11.  No information.  No information.  No information.

<b>50</b> <b>LWG BLOCK E71</b> <b>NGR TL730066</b> <b>Area 68 ha.</b> <b>Soil River alluvium,</b> <b>other non-marine, marine</b> <b>alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Chelmsford</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 5.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>51</b> <b>LWG BLOCK E72</b> <b>NGR TL714093</b> <b>Area 24 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Chelmsford</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>52</b> <b>LWG BLOCK E73</b> <b>NGR TL695187</b> <b>Area 11 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Cock Green</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 3.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>53</b> <b>LWG BLOCK E74</b> <b>NGR TL799322</b> <b>Area 11 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Cobbs Fenn</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No information.  No information.  No information.  No information.

<b>54</b> <b>LWG BLOCK E76</b> <b>NGR TL491185</b> <b>Area 19 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Thorley Wash</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>Thorley Flood Pound SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	No detailed information. SSSI description cites species-rich tall wash grassland, base-rich marsh and ill-drained permanent grassland. No nationally rare or scarce species are mentioned.   No information.   Moderate interest - LWG weighted species score 10.   No information.   No information.   No information.

<b>55</b> <b>LWG BLOCK E79</b> <b>NGR TL480130</b> <b>Area 15 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Old Harlow</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Low interest - LWG weighted species score 6. Hobby present in tetrad.  No information.  No information.  No information.



<b>56</b> <b>LWG BLOCK E81</b> <b>NGR TL440114</b> <b>Area 13 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Harlow</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 2.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>57</b> <b>LWG BLOCK E82</b> <b>NGR TL425113</b> <b>Area 83 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Roydon</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>Hunsdon Mead SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	No detailed information. SSSI description cites large area of unimproved grassland on alluvial soils subject to occasional winter flooding. No nationally rare or scarce species are listed.  No information.  Low interest - LWG weighted species score 2.  No information.  No information.  No information.

<b>58</b> <b>LWG BLOCK E84</b> <b>NGR TQ965957</b> <b>Area 34 ha.</b> <b>Soil Marine alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Burnham Wick</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>     <b>Invertebrates</b>    <b>Other</b>	<b>No information.</b>     <b>No information.</b>     <b>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.</b>     <b>No information.</b>     <b>No information.</b>

<b>59</b> <b>LWG BLOCK E85</b> <b>NGR TQ942959</b> <b>Area 16 ha.</b> <b>Soil Marine alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Creeksea</b> <b>Essex</b>  <b>39 - Thames Marshes</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>     <b>Invertebrates</b>   <b>Other</b>	No information.  No information.  No information.  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  No information.  No information.

<b>60</b> <b>LWG BLOCK E86</b> <b>NGR TQ929963</b> <b>Area 9 ha.</b> <b>Soil Marine alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Creeksea</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>



<p>62 LWG BLOCK E88 NGR TQ870980 Area 355 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Fambridge (Harris) Essex  39 - Thames Marshes River Crouch Marshes SSSI</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - freshwater and oligohaline a Ditch network &gt; 5km. b Excellent example of freshwater brackish transition. Strong interest.  Rare species score 0. Low interest.  No information.  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  B grade - SSSI interest in Drake 1988. Similar to E91 but poorer for species. RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly) RDB3 <i>Saldula opacula</i> (Shore Bug) RDB3 <i>Dixella attica</i> (Meniscus Midge) RDB3 <i>Stratiomys singularior</i> (Soldier Fly) Strong interest.  No information.</p>

<b>63</b> <b>LWG BLOCK E89</b> <b>NGR TQ852986</b> <b>Area 15 ha.</b> <b>Soil Marine alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Fambridge - Little Cooks</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	<b>No information.</b>    <b>Low interest - LWG weighted species score 6.</b>   <b>No information.</b>   <b>No information.</b>   <b>No information.</b>







<p><b>66</b>  <b>LWG BLOCK E92</b>  <b>NGR TQ820963</b>  <b>Area 97 ha.</b>  <b>Soil Marine alluvium,</b>  <b>other non-marine</b></p>	<p><b>Site Name</b>  <b>County</b></p> <p><b>Natural Area</b>  <b>Conservation status</b></p>	<p><b>Fambridge (West), Marsh Farm</b>  <b>Essex</b></p> <p><b>39 - Thames Marshes</b>  <b>River Crouch Marshes SSSI</b></p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No information.</p> <p>Habitat - oligohaline.  a Ditch network &gt; 5km.  Low interest.</p> <p>Rare species score 200  Nat scarce species: <i>Bupleurum tenuissimum</i>,  <i>Ceratophyllum submersum</i>, <i>Puccinellia rupestris</i>,  <i>Ranunculus baudotii</i>.  Strong interest.</p> <p>Moderate interest - LWG weighted species score 11.</p> <p>Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations.  Strong interest.</p> <p>Grade B - Drake 1988.  Similar to E88 but better for species. Field ditches probably dry in summer but borrowdykes have permanent water. Most interest at Fambridge West where there is a suggestion of transition to freshwater marsh. Same as E91.  RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly)  RDB3 <i>Saldula opacula</i> (Shore Bug)  RDB3 <i>Dixella attica</i> (Meniscus Midge)  RDB3 <i>Stratiomys singularior</i> (Soldier Fly)  Strong interest.</p> <p>No information.</p>

<b>67</b> <b>LWG BLOCK E93</b> <b>NGR TQ983990</b> <b>Area 22 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Wraywick Farm</b> <b>Essex</b>  <b>39 - Thames Marshes</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>      <b>Invertebrates</b>   <b>Other</b>	No information.  No information.  No information.  Part of Dengie Marsh WeBs site which is of international importance for overall numbers (30,000 wildfowl and waders) and Grey Plover and Knot populations. National importance for Red-throated Diver, Great Crested Grebe, Cormorant, Dark-bellied Brent Goose, Dunlin, Black-tailed Godwit, and Bar-tailed Godwit populations. Strong interest.  No information.  No information.

<p><b>68</b>  <b>LWG BLOCK E94</b>  <b>NGR TM022051</b>  <b>Area 17 ha.</b>  <b>Soil Marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status</p>	<p><b>Sandbeach Meadows</b>  <b>Essex</b>  <b>39 - Thames Marshes</b>  <b>Sandbeach Meadows SSSI</b></p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward    Ditch vegetation        Breeding birds      Wintering birds      Invertebrates        Other</p>	<p>No Phase 2 information. SSSI description cites semi-improved grassland.</p> <p>Habitat - freshwater and oligohaline.  a Ditch network &lt; 5km (not SSSI quality).  c High diversity of ditch types (&gt; 11).  Moderate interest.</p> <p>Rare species score 150.  Nat scarce: <i>Ceratophyllum submersum</i>,  <i>Ranunculus baudotii</i>, <i>Rumex palustris</i>.  Moderate interest.</p> <p>Moderate interest - LWG weighted species score 13.</p> <p>Part of Dengie Marsh WeBs site which is of international importance for overall numbers (30,000 wildfowl and waders) and Grey Plover and Knot populations. National importance for Red-throated Diver, Great Crested Grebe, Cormorant, Dark-bellied Brent Goose, Dunlin, Black-tailed Godwit, and Bar-tailed Godwit populations.  Strong interest.</p> <p>Grade B - Drake 1988  Small area of grassland with typical Essex aquatic invt fauna of reasonable quality, with nationally scarce species.  RDB3 <i>Dixella attica</i> (Meniscus Midge)  RDB3 <i>Stratiomys singularior</i> (Soldier Fly)  Strong interest.</p> <p>No information.</p>

<b>69</b> <b>LWG BLOCK E95</b> <b>NGR TL985065</b> <b>Area 21 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Bradwell Creek</b> <b>Essex</b>  <b>39 - Thames Marshes</b> <b>Blackwater Estuary SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>      <b>Invertebrates</b>   <b>Other</b>	No information.  No information.  No information.  Part of Blackwater Estuary WeBs site which is of international importance for overall numbers (60,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Slavonian Grebe, Goldeneye, Cormorant, Teal, Shoveler, Ringed Plover, Golden Plover, Ruff, Curlew, Redshank and Wigeon populations. Strong interest.  No information.  No information.

<b>70</b> <b>LWG BLOCK E96</b> <b>NGR TL932050</b> <b>Area 10 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Ramsey Marsh</b> <b>Essex</b>  <b>38 - London Basin</b> <b>Blackwater Estuary SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>     <b>Invertebrates</b>   <b>Other</b>	No information.  No information. Not surveyed by Wolfe-Murphy, Leach and Doarkes (1991).  Moderate interest - LWG weighted species score 11.  Part of Blackwater Estuary WeBs site which is of international importance for overall numbers (60,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Slavonian Grebe, Goldeneye, Cormorant, Teal, Shoveler, Ringed Plover, Golden Plover, Ruff, Curlew, Redshank and Wigeon populations. Strong interest.  No information.  No information.

<b>71</b> <b>LWG BLOCK E97</b> <b>NGR TL925035</b> <b>Area 90 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Steeple</b> <b>Essex</b>  <b>38 - London Basin</b> <b>Blackwater Estuary SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No information.  Part of Blackwater Estuary WeBs site which is of international importance for overall numbers (60,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Slavonian Grebe, Goldeneye, Cormorant, Teal, Shoveler, Ringed Plover, Golden Plover, Ruff, Curlew, Redshank and Wigeon populations. Strong interest.  No information.  No information.





<b>73</b> <b>LWG BLOCK E99</b> <b>NGR TL876039</b> <b>Area 14 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Mundon</b> <b>Essex</b>  <b>38 - London Basin</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>74</b> <b>LWG BLOCK E100</b> <b>NGR TL830086</b> <b>Area 100 ha.</b> <b>Soil River alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Maldon</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 6.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>75</b> <b>LWG BLOCK E101</b> <b>NGR TL845080</b> <b>Area 67 ha.</b> <b>Soil River alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Maldon</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>76</b> <b>LWG BLOCK E102</b> <b>NGR TL830100</b> <b>Area 9 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Langford</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	<b>No information.</b>     <b>Low interest - LWG weighted species score 1.</b>   <b>No information.</b>   <b>No information.</b>   <b>No information.</b>

<b>77</b> <b>LWG BLOCK E103</b> <b>NGR TL923083</b> <b>Area 35 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Goldhanger</b> <b>Essex</b>  <b>38 - London Basin</b> <b>Blackwater Estuary SSSI</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Moderate interest - LWG weighted species score 14.  Part of Blackwater Estuary WeBs site which is of international importance for overall numbers (60,00 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Slavonian Grebe, Goldeneye, Cormorant, Teal, Shoveler, Ringed Plover, Golden Plover, Ruff, Curlew, Redshank and Wigeon populations. Strong interest.  No information.  No information.

<p>78 LWG BLOCK E104 NGR TL975100 Area 166 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Tollesbury Wick Marshes Essex  38 - London Basin Blackwater Estuary SSSI</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation    Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.  Habitat - oligohaline and mesohaline. a Ditch network &gt; 5km. Low interest.  Rare species score 100. Nat scarce: <i>Hordeum marinum</i>, <i>Ranunculus baudotii</i>. Moderate interest.  Moderate interest - LWG weighted species score 11.  Part of Blackwater Estuary WeBs site which is of international importance for overall numbers (60,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Slavonian Grebe, Goldeneye, Cormorant, Teal, Shoveler, Ringed Plover, Golden Plover, Ruff, Curlew, Redshank and Wigeon populations. Strong interest.  ISR site. Strong interest. Drake 88 does not consider aquatic invt interest outstanding but terrestrial fauna probably better. Uniformly species-poor sinuous ditches - low diversity reflects strongly brackish conditions. RDB3 <i>Graptodytes bilineatus</i> (Water Beetle) RDB3 <i>Saldula opacula</i> (Shore Bug) RDB3 <i>Aedes flavescens</i> (Mosquito) RDB3 <i>Stratiomys singularior</i> (Soldier Fly)  No information.</p>

<p><b>79</b>  <b>LWG BLOCK E105</b>  <b>NGR TL975125</b>  <b>Area 312 ha.</b>  <b>Soil Marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status</p>	<p>Old Hall Marshes  Essex  38 - London Basin  Blackwater Estuary SSSI  RSPB reserve</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - oligohaline.  a Ditch network &gt; 5km.  c High diversity of ditch types (&gt; 11)  Strong interest..  Rare species score 350.  Nat scarce: <i>Carex divisa</i>, <i>Ceratophyllum submersum</i>, <i>Chenopodium botryodes</i>, <i>Hordeum marinum</i>, <i>Puccinellia rupestris</i>, <i>Ranunculus baudotii</i>, <i>Trifolium squamosum</i>.  Strong interest.  Strong interest - LWG weighted sp. score 29.  Black-tailed Godwit present in tetrad.  Part of Blackwater Estuary WeBs site which is of international importance for overall numbers (60,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Slavonian Grebe, Goldeneye, Cormorant, Teal, Shoveler, Ringed Plover, Golden Plover, Ruff, Curlew, Redshank and Wigeon populations.  Strong interest.  Grade B status - Drake 88. ISR site - low invt index (40). Typical Essex aquatic fauna but rather species poor and far from outstanding. Might have been impoverished since inundated by sea water in 1953 flood. There are RDB and Nb records for terrestrial invts and aquatic list does not fully reflect site quality.  RDB3 <i>Saldula opacula</i> (Shore Bug)  RDB3 <i>Aedes flavescens</i> (Mosquito)  RDB3 <i>Stratiomys singularior</i> (Soldier Fly)  Moderate interest.  No information.</p>



<b>80</b> <b>LWG BLOCK E106</b> <b>NGR TM005139</b> <b>Area 10 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>West Mersea</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>      <b>Invertebrates</b>    <b>Other</b>	<b>No information.</b>     <b>Low interest - LWG weighted species score 7.</b>   <b>Part of Blackwater Estuary WeBs site which is of international importance for overall numbers (60,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Slavonian Grebe, Goldeneye, Cormorant, Teal, Shoveler, Ringed Plover, Golden Plover, Ruff, Curlew, Redshank and Wigeon populations.</b> <b>Strong interest.</b>   <b>No information.</b>    <b>No information.</b>



<p>82  <b>LWG BLOCK E108</b>  <b>NGR TM045135</b>  <b>Area 22 ha.</b>  <b>Soil Other non-marine</b></p>	<p>Site Name  County</p> <p>Natural Area  Conservation status</p>	<p>Mersea Island  Essex</p> <p>33 - East Anglian Plain  None</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward</p> <p>Ditch vegetation</p> <p>Breeding birds</p> <p>Wintering birds</p> <p>Invertebrates</p> <p>Other</p>	<p>No information.</p> <p>Habitat - mesohaline.  a Ditch network &lt; 5km (not SSSI standard).  No habitat diversity interest.  Low interest.</p> <p>Rare species score 50.  Nat scarce: <i>Hordeum marinum</i>.  Moderate interest.</p> <p>Low interest - LWG weighted species score 7.</p> <p>Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations.  Strong interest.</p> <p>No information.</p> <p>No information.</p>





<p>85  <b>LWG BLOCK E111</b>  <b>NGR TM040175</b>  <b>Area 354 ha.</b>  <b>Soil Marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status</p>	<p><b>Langenhoe Hall Marshes, Fingringhoe Marshes</b>  <b>Essex</b>  <b>33 - East Anglian Plain</b>  <b>Colne Estuary SSSI, p SPA/Ramsar</b></p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.</p> <p>Habitat - oligohaline and mesohaline.  a Ditch network &gt; 5km.  Low interest.</p> <p>Rare species score 300.  Nat scarce: <i>Bupleurum tenuissimum</i>,  <i>Ceratophyllum submersum</i>, <i>Hordeum marinum</i>,  <i>Puccinellia fasciculata</i>, <i>Puccinellia rupestris</i>,  <i>Ranunculus baudotii</i>.  Strong interest.</p> <p>Strong interest - LWG weighted sp. score 26.</p> <p>Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations.  Strong interest.</p> <p>Two ISR sites.  Best site for aquatic invts in Essex outside of Thames Estuary (Drake 88). Interest is high and fairly consistent across site - also a small unsampled freshwater marsh. Unmanaged dry ground good for spiders and ground beetles.  RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly)  RDB3 <i>Graptodytes bilineatus</i> (Water Beetle)  RDB3 <i>Aedes flavescens</i> (Mosquito)  RDB3 <i>Dixella attica</i> (Meniscus Midge)  RDB3 <i>Stratiomys singularior</i> (Soldier Fly)  RDB3 <i>Microvelia pygmaea</i> (Tiny Water Skater)  Strong interest.</p> <p>No information.</p>



<b>87</b> <b>LWG BLOCK E113</b> <b>NGR TM025205</b> <b>Area 20 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Fingringhoe</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	<b>No information.</b>   <b>No information.</b>    <b>No information.</b>    <b>No information.</b>    <b>No information.</b>    <b>No information.</b>



<p>88 LWG BLOCK E114 NGR TM035210 Area 15 ha. Soil Marine alluvium, other non-marine</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Fingringhoe Essex  33 - East Anglian Plain Upper Colne Marshes SSSI</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No Phase 2 information. SSSI description cites species rich unimproved neutral grassland with several nationally scarce species: <i>Hordeum marinum</i>, <i>Puccinellia rupestris</i>, <i>Carex divisa</i>, <i>Bupleurum tenuissimum</i>, <i>Lepidium latifolium</i>, <i>Ranunculus baudotii</i>.</p> <p>No Phase 2 information. Not surveyed by Wolfe-Murphy, Leach and Doarkes (1991). SSSI description cites recent assessment of ditches as one of two best in North Essex for its range of brackish plant habitat when compared with results of Wolfe-Murphy et al (1991).</p> <p>Rare species score 300 (on basis of SSSI citation). Strong interest.</p> <p>No information.</p> <p>Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations. Strong interest.</p> <p>No information.</p> <p>No information.</p>

<p>89  <b>LWG BLOCK E115</b>  <b>NGR TM045213</b>  <b>Area 26 ha.</b>  <b>Soil Marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status</p>	<p>Wivenhoe  Essex  33 - East Anglian Plain  Upper Colne Marshes SSSI</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward    Ditch vegetation    Breeding birds    Wintering birds    Invertebrates    Other</p>	<p>No Phase 2 information. SSSI description cites species rich unimproved neutral grassland with several nationally scarce species: <i>Hordeum marinum</i>, <i>Puccinellia rupestris</i>, <i>Carex divisa</i>, <i>Bupleurum tenuissimum</i>, <i>Lepidium latifolium</i>, <i>Ranunculus baudotii</i>.</p> <p>No Phase 2 information. Not surveyed by Wolfe-Murphy, Leach and Doarkes (1991). SSSI description cites recent assessment of ditches as one of two best in North Essex for its range of brackish plant habitat when compared with results of Wolfe-Murphy et al (1991).</p> <p>Rare species score 300 (on basis of SSSI citation). Strong interest.</p> <p>Moderate interest - LWG weighted species score 11.</p> <p>Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations.  Strong interest.</p> <p>No information.</p> <p>No information.</p>

<p>90 LWG BLOCK E116 NGR TM028226 Area 40 ha. Soil River alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Rowhedge Essex  33 - East Anglian Plain Upper Colne Marshes SSSI</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation          Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.  Habitat - oligohaline and mesohaline. a Ditch network &gt; 5km. c1 High diversity of brackish ditch types (&gt; 6). Strong interest.  Rare species score 300. Nat scarce: <i>Bupleurum tenuissimum</i>, <i>Ceratophyllum, submersum, Hordeum marinum</i>, <i>Puccinellia fasciculata, Puccinellia rupestris</i>, <i>Ranunculus baudotii</i>. Strong interest.  Moderate interest - LWG weighted species score 11.  No information.  No information.  No information.</p>

<b>91</b> <b>LWG BLOCK E117</b> <b>NGR TM023240</b> <b>Area 34 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Colchester</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	No information.  No information.  Low interest - LWG weighted species index 4.  No information.  No information.  No information.

<b>92</b> <b>LWG BLOCK E118</b> <b>NGR TL985260</b> <b>Area 47 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Colchester</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	<b>No information.</b>     <b>Low interest - LWG weighted species interest 7.</b>   <b>No information.</b>   <b>No information.</b>   <b>No information.</b>

<b>93</b> <b>LWG BLOCK E119</b> <b>NGR TL953268</b> <b>Area 18 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>West Bergholt</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species interest 4.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>94</b> <b>LWG BLOCK E120</b> <b>NGR TL942275</b> <b>Area 18 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>West Bergholt</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	<b>No information.</b>   <b>No information.</b>   <b>Low interest - LWG weighted species interest 4.</b>   <b>No information.</b>   <b>No information.</b>   <b>No information.</b>

<b>95</b> <b>LWG BLOCK E121</b> <b>NGR TL912274</b> <b>Area 22 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Fordstreet</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species interest 7.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>



<b>96</b> <b>LWG BLOCK E122</b> <b>NGR TL920331</b> <b>Area 38 ha.</b> <b>Soil River alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Bures</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b>	<b>No information.</b>   <b>No information.</b>   <b>Low interest - LWG weighted species interest 2.</b>   <b>No information.</b>   <b>No information.</b>   <b>No information.</b>

<b>97</b> <b>LWG BLOCK E126</b> <b>NGR TM165318</b> <b>Area 20 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Wrabness</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species score 8.</b>  <b>Part of Stour Estuary WeBs site which is of international importance for overall numbers ((44,000 wildfowl and waders) and Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Great Crested Grebe, Cormorant, Dark-bellied Brent Goose, Shelduck, Wigeon, Pintail, Ringed Plover and Redshank populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<p>98 LWG BLOCK E127 NGR TM075170 Area 85 ha. Soil Marine alluvium</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Brightlingsea Essex  33 - East Anglian Plain Colne Estuary SSSI, Colne Estuary NNR, pSPA/Ramsar</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - freshwater and oligohaline. a Ditch network &gt; 5km. d High floristic diversity for freshwater ditches (&gt; 9/20m ditch length). e High floristic diversity (&gt; 5 aquatic/emergent species/20m brackish ditch length). Strong interest.  Rare species score 150. Nat scarce: <i>Carex divisa</i>, <i>Ceratophyllum submersum</i>, <i>Ranunculus baudotii</i>. Moderate interest.  Moderate interest - LWG weighted species interest 12.  Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations. Strong interest.  Grade B - Drake 1988. Small grazed marsh - northwestern sector with shallow water or dry ditches, plus agricultural enrichment. It is clearly brackish. Southeastern sector is much less brackish, with deeper ditches and water 20-60 cm depth. Has freshwater marsh with diverse flora. RDB3 <i>Saldula opacula</i> (Shore Bug) RDB3 <i>Graptodytes bilineatus</i> (Water Beetle) RDB3 <i>Dixella attica</i> (Meniscus Midge) RDB3 <i>Microvelia pygmaea</i> (Tiny Water Skater) Strong interest.  No information.</p>

<b>99</b> <b>LWG BLOCK E128</b> <b>NGR TM100185</b> <b>Area 27 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Greatmarsh Farm</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>   <b>Wintering birds</b>     <b>Invertebrates</b>   <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species interest 9.</b>  <b>Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations. Strong interest.</b>  <b>No information.</b>   <b>No information.</b>

<b>100</b> <b>LWG BLOCK E129</b> <b>NGR TM108188</b> <b>Area 13 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Greatmarsh Farm</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>Colne Estuary SSSI, pSPA/Ramsar</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Moderate interest - LWG weighted species interest 9.  Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations. Strong interest.  No information.  No information.

<p><b>101</b>  <b>LWG BLOCK E130</b>  <b>NGR TM110165</b>  <b>Area 50 ha.</b>  <b>Soil Marine alluvium,</b>  <b>other non-marine</b></p>	<p>Site Name  County  Natural Area  Conservation status</p>	<p>St Osyth  Essex  33 - East Anglian Plain  Colne Estuary SSSI, pSPA/ Ramsar</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - freshwater and oligohaline.  a Ditch network &gt; 5km.  b excellent example of freshwater brackish transition..  e High floristic diversity (&gt; 50% ditches with aquatic/emergent species &gt; 9/20m ditch length (freshwater) or aquatic/emergent species &gt; 5/20m ditch length (brackish)).  Strong interest.  Rare species score 150.  Nat scarce: <i>Hordeum marinum</i>, <i>Puccinellia rupestris</i>, <i>Ranunculus baudotii</i>.  Moderate interest.  Moderate interest - LWG weighted species interest 13.  Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations.  Strong interest.  C grade - Drake 88. ISR site, very low Invt Index. Small grazed marsh with very shallow water levels in all ditches. Landward half fresh water. flushed from land boundary. Despite transition one of poorest sites surveyed. Few rare species or brackish indicators. Freshwater fauna mundane.  RDB3 <i>Dixella attica</i> (Meniscus Midge)  RDB3 <i>Stratiomys singularior</i> (Soldier Fly)  Low interest.  No information.</p>

<b>102</b> <b>LWG BLOCK E131</b> <b>NGR TM100156</b> <b>Area 19 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>St. Osyth</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species interest 9.</b>  <b>Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<b>103</b> <b>LWG BLOCK E132</b> <b>NGR TM140137</b> <b>Area 44 ha.</b> <b>Soil Marine alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Jaywick</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>Part of Colne Estuary WeBs site which is of international importance for overall numbers (35,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Great Crested Grebe, Cormorant, Mute Swan, Shelduck, Pintail, Goldeneye, Grey Plover, Dunlin, Black-tailed Godwit and Redshank populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>





<b>105</b> <b>LWG BLOCK E134</b> <b>NGR TM185205</b> <b>Area 22 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Thorpe - le - Soken</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 4.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<p><b>106</b>  <b>LWG BLOCK E135</b>  <b>NGR TM200183</b>  <b>Area 177 ha.</b>  <b>Soil Marine alluvium,</b>  <b>river alluvium, other non-</b>  <b>marine</b></p>	<p>Site Name  County</p> <p>Natural Area  Conservation status</p>	<p><b>Holland Haven</b>  <b>Essex</b></p> <p><b>33 - East Anglian Plain</b>  <b>Holland Haven Marshes SSSI</b></p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward</p> <p>Ditch vegetation</p> <p>Breeding birds</p> <p>Wintering birds</p> <p>Invertebrates</p> <p>Other</p>	<p>No information.</p> <p>Habitat - freshwater, oligohaline and mesohaline.  a Ditch network &gt;5km.  b Excellent example of freshwater - brackish transition.  Strong interest.</p> <p>Rare species score 200.  Nat scarce: <i>Carex divisa</i>, <i>Ceratophyllum submersum</i>, <i>Hordeum marinum</i>, <i>Ranunculus baudotii</i>.  Strong interest.</p> <p>Low interest - LWG weighted species score 3.</p> <p>No information.</p> <p>Moderate interest (C grade - Drake 88). ISR site - 11 spp. Inv Ind 80, Rarity score 34, Nrecs 11. Only single sample taken, no detailed comment possible.  RDB3 <i>Stratiomys singularior</i> (Soldier Fly).  Moderate interest.</p> <p>No information.</p>





<b>109</b> <b>LWG BLOCK E138</b> <b>NGR TM237227</b> <b>Area 12 ha.</b> <b>Soil Marine alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Kirkby - le - Soken</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>SPA, Ramsar site</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  Part of Hamford Water WeBs site which is of international importance for overall numbers (31,000 wildfowl and waders) and Dark-bellied Brent Goose, Ringed Plover, Grey Plover, and Black-tailed Godwit populations. National importance for Avocet, Shelduck, Teal, Ruff and Dunlin populations. Strong interest.  <b>No information.</b>  <b>No information.</b>

<b>110</b> <b>LWG BLOCK E139</b> <b>NGR TM243230</b> <b>Area 12 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Walton - on - the - Naze</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>SPA, Ramsar site</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species score 9.</b>  <b>Part of Hamford Water WeBs site which is of international importance for overall numbers (31,000 wildfowl and waders) and Dark-bellied Brent Goose, Ringed Plover, Grey Plover, and Black-tailed Godwit populations. National importance for Avocet, Shelduck, Teal, Ruff and Dunlin populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<p>111 LWG BLOCK E140 NGR TM233245 Area 104 ha. Soil Marine alluvium, other non-marine</p>	<p>Site Name County  Natural Area Conservation status</p>	<p>Horse Island Essex  33 - East Anglian Plain Hamford Water SSSI, SPA, Ramsar site</p>
<p>KEY INTERESTS</p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - oligohaline and mesohaline. Ditch network &gt; 5km. Low interest.  Rare species score 250. RDB species: <i>Peucedanum officinale</i>. Nat scarce: <i>Ranunculus baudotii</i>. Strong interest.  Strong interest - LWG weighted species score 19.  Part of Hamford Water WeBs site which is of international importance for overall numbers (31,000 wildfowl and waders) and Dark-bellied Brent Goose, Ringed Plover, Grey Plover, and Black-tailed Godwit populations. National importance for Avocet, Shelduck, Teal, Ruff and Dunlin populations. Strong interest.  Grade B - Drake 88 Varied water depth, ditches dry in centre to 20 cm maximum depth in borrowdykes. Most ditches probably summer dry. Not fully sampled. Rated moderately highly due to very good example of brackish water fauna, certainly compared to other marshes in north Essex. RDB3 <i>Saldula opacula</i> (Shore Bug) RDB3 <i>Dixella attica</i> (Meniscus Midge) RDB3 <i>Stratiomys singularior</i> (Soldier Fly) Strong interest.  No information.</p>



<b>112</b> <b>LWG BLOCK E141</b> <b>NGR TM212300</b> <b>Area 30 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Ramsey</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 6.</b>  <b>Part of Stour Estuary WeBs site which is of international importance for overall numbers (44,000 wildfowl and waders) and Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Great Crested Grebe, Cormorant, Dark-bellied Brent Goose, Shelduck, Wigeon, Pintail, Ringed Plover and Redshank populations. Strong interest.</b>  <b>No information.</b>  <b>No information.</b>

<b>113</b> <b>LWG BLOCK E142</b> <b>NGR TM235318</b> <b>Area 13 ha.</b> <b>Soil Marine alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Parkeston</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>    <b>Invertebrates</b>   <b>Other</b>	No information.  No information.  Moderate interest - LWG weighted species score 11.  Part of Stour Estuary WeBs site which is of international importance for overall numbers (44,000 wildfowl and waders) and Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Great Crested Grebe, Cormorant, Dark-bellied Brent Goose, Shelduck, Wigeon, Pintail, Ringed Plover and Redshank populations. Strong interest.  No information.  No information.

<b>114</b> <b>LWG BLOCK E223</b> <b>NGR TL886375</b> <b>Area 30 ha.</b> <b>Soil River alluvium</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Workhouse Green</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Low interest - LWG weighted species score 1.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>115</b> <b>LWG BLOCK E224</b> <b>NGR TL882392</b> <b>Area 32 ha.</b> <b>Soil River alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Middleton</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>116</b> <b>LWG BLOCK E226</b> <b>NGR TL830405</b> <b>Area 40 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Belchamp Water</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No information.  No information.  No information.  No information.

<b>117</b> <b>LWG BLOCK E227</b> <b>NGR TL820398</b> <b>Area 11 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Gestingthorpe</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>118</b> <b>LWG BLOCK E228</b> <b>NGR TL775363</b> <b>Area 23 ha.</b> <b>Soil Other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Castle Hedingham</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>119</b> <b>LWG BLOCK E229</b> <b>NGR TL858445</b> <b>Area 68 ha.</b> <b>Soil River alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Long Melford</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species score 8.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>



<b>120</b> <b>LWG BLOCK E230</b> <b>NGR TL833461</b> <b>Area 12 ha.</b> <b>Soil River alluvium,</b> <b>other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Glemsford</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species score</b> <b>8.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<b>121</b> <b>LWG BLOCK E231</b> <b>NGR TL822463</b> <b>Area 32 ha.</b> <b>Soil Riveralluvium, other non-marine</b>	<b>Site Name</b> <b>County</b>  <b>Natural Area</b> <b>Conservation status</b>	<b>Pentlow</b> <b>Essex</b>  <b>33 - East Anglian Plain</b> <b>None</b>
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	<b>No information.</b>  <b>No information.</b>  <b>Moderate interest - LWG weighted species score 8.</b>  <b>No information.</b>  <b>No information.</b>  <b>No information.</b>

<p>122 LWG BLOCK E703 NGR TQ955910 Area 85 ha. Soil Marine alluvium</p>	<p>Site Name County Natural Area Conservation status</p>	<p>Potton Island Essex 39 - Thames Marshes Foulness SSSI</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - oligohaline and mesohaline. Ditch network &gt; 5km. Low interest.  Rare species score 150. Nat scarce: <i>Bupleurum tenuissimum</i>, <i>Hordeum marinum</i>, <i>Ranunculus baudotii</i>. Moderate interest.  No information.  Part of Crouch and Roach Estuaries WeBs site which is of international importance for overall numbers (27,000 wildfowl and waders) and Dark-bellied Brent Goose populations. National importance for Shelduck, Gadwall, Shoveler and Ruff populations. Strong interest.  No information.  No information.</p>

<p>123 LWG BLOCK SE198 NGR TQ545795 Area c.110 ha.* Soil Marine alluvium * part of 520 ha block centred on Greater London</p>	<p>Site Name  County  Natural Area Conservation status</p>	<p>Aveley Marshes (Purfleet Ranges) - part of larger Rainham, Wennington and Aveley Marshes. Essex  39 - Thames Marshes Inner Thames Marshes SSSI</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>Semi-improved with wetter hollows, plus ungrazed coarse grassland (<i>Festuca arundinacea</i>, <i>Elymus repens</i>, <i>Hordeum secalinum</i>). Scrub invasion in east around old army camp. Low interest.</p> <p>Not surveyed by Wolfe-Murphy, Leach and Doarkes (1991). Weighted species score of 250 based on nationally scarce species (<i>Carex divisa</i>, <i>Ceratophyllum submersum</i>, <i>Ranunculus baudotii</i>, <i>Rumex maritimus</i>, <i>R. palustris</i>). Two nationally rare species lost from the site in recent years <i>Lactuca saligna</i>, <i>Trifolium squamosum</i>) - see Kite (1990). Strong interest.</p> <p>Strong interest - LWG weighted sp. score 30. Ruff present in tetrads.</p> <p>Part of Thames Estuary WeBs site which is of international importance for overall numbers (143,000 wildfowl and waders) and Dark-bellied Brent Goose, Shelduck, Oystercatcher, Ringed Plover, Grey Plover, Knot, Dunlin, Bar-tailed Godwit, Redshank, and Turnstone populations. National importance for Little Grebe, Cormorant, European White-fronted Goose, Gadwall, Teal, Shoveler, Common Scoter, Avocet, Golden Plover, Sanderling, Black-tailed Godwit and Curlew populations. Strong interest.</p> <p>Strong interest likely (B grading of Drake). Drake 1990 records two RDB2 and two RDB3 species. Several notables recorded also by Eversham, Greatorex-Davies &amp; Harding (1989). RDB2 <i>Lestes dryas</i> (Scarce Emerald Damselfly) RDB2 <i>Bagous cylindrus</i> (Weevil) RDB3 <i>Hydrophilus piceus</i> (Great Silver Water Beetle) RDB3 <i>Divella attica</i> (Meniscus Midge) Strong interest.</p> <p>No information.</p>

<p>124 LWG BLOCK E125 NGR TM060340 Area 261 ha. Soil River and marine alluvium</p>	<p>Site Name                   Cattawade Marshes  County                        Essex/Suffolk  Natural Area                33 - East Anglian Plain Conservation status       Cattawade Marshes SSSI</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward</p> <p>Ditch vegetation           Habitat - freshwater, oligohaline and mesohaline. a Ditch network &gt; 5km. Low interest.  Rare species score 50. Nat scarce: <i>Ranunculus baudotii</i>. Moderate interest.</p> <p>Breeding birds             LWG weighted species score for tetrad 4 - probably major underestimate. SSSI description cites nesting area for Redshank, Lapwing, Oystercatcher, Shoveler, Teal, Tufted Duck , Water-Rail. Adding LWG species to tetrad score, modified value is 14. Moderate interest.</p> <p>Wintering birds            Part of Stour Estuary WeBs site which is of international importance for overall numbers (44,000 wildfowl and waders) and Grey Plover, Dunlin and Black-tailed Godwit populations. National importance for Great Crested Grebe, Cormorant, Dark-bellied Brent Goose, Shelduck, Wigeon, Pintail, Ringed Plover and Redshank populations. Strong interest.</p> <p>Invertebrates             Grade C - Drake 1988. RDB3 <i>Dixella attica</i> (Meniscus Midge). RDB3 <i>Microvelia pygmaea</i> (Tiny Water Skater). Small area of interest with fresh to brackish transition. Low interest.</p> <p>Other                        No information.</p>

## ANNEX 4

### NORFOLK QUALITY PROFILING DATA FOR WET GRASSLAND BLOCKS

The information here is derived from the listed set of sources below, using the rules for categorising key interests set out in Table 1.3. Data covering a large number of blocks are available, together with evaluation information, and are thus better than Essex. Information covers grassland, ditch vegetation (habitats, rare species), invertebrates (Invertebrate Site Register sites), breeding and wintering birds.

The symbols in each column are those used in the DMAP mapping package for generating symbols of varying size, shape and shading on quality profile maps. Their meaning here is interpreted as follows:

I	No information available	H	Low conservation interest
G	Moderate conservation interest	A	Strong conservation interest

#### Sources

<b>Wet grassland blocks</b>	Dargie, T.C. (1993) The distribution of lowland wet grassland in England. English Nature Research Report No. 49. Peterborough, English Nature.
<b>SSSIs</b>	Maps attached to SSSI schedule descriptions
<b>Grassland interest</b>	N. Roberts & Wesley Smyth (1990) Norfolk Grassland Survey 1987 - 1988. Norwich, Nature Conservancy Council (East Anglia Region).
<b>Ditch vegetation (habitat)</b>	C. Doarks & J. Storer (1990) A botanical survey and evaluation of marsh dyke systems in Broadland, 1988-89. England Field Unit Project No. 76. Peterborough, Nature Conservancy Council.  S.A.J. Reid, S.J. Leach & C. Newlands (1989) A botanical survey of grazing marsh ditch systems on the North Norfolk coast. Project No. 77. Peterborough, Nature Conservancy Council.
<b>Ditch vegetation (rare species)</b>	C. Doarks & J. Storer (1990) A botanical survey and evaluation of grazing marsh dyke systems in Broadland, 1988-89. England Field Unit Project No. 76. Peterborough, Nature Conservancy Council.  Doarks, C., Leach, S.J., Storer, J., Reid, S.A.J., Newlands, C. & Kennison, G.C.B. (1990) An atlas of the flora of grazing marsh dykes in Broadland. England Field Unit Project No. 76. Peterborough, Nature Conservancy Council.  S.A.J. Reid, S.J. Leach & C. Newlands (1989) A botanical survey of grazing marsh ditch systems on the North Norfolk coast. Project No. 77. Peterborough, Nature Conservancy Council.
<b>Breeding bird interest</b>	Gibbons, D.W., Reid, J.B. & Chapman, R.A. (eds) (1993). The new atlas of breeding birds in Britain and Ireland 1988-1991. London, Poyser.
<b>Wintering bird interest</b>	P. Heath (1989) A survey of wintering birds in the Yare Valley, Norfolk. Sandy, Royal Society for the Protection of Birds.  Waters, R.J. & Cranswick, P.A. (1993) The Wetland Bird Survey 1992-93: wildfowl and wader counts. Slimbridge, BTO/WWT/RSPB/JNCC.
<b>Invertebrate interest</b>	Invertebrate Site Register, Joint Nature Conservation Committee, Peterborough.

NORFOLK SITE NUMBER	LWG BLOCK CODE	GRID REFERENCE	SSSIs	GRASSLAND INTEREST	DITCH VEGETATION (HABITAT)	DITCH VEGETATION (SPECIES)	BREEDING BIRD INTEREST	WINTERING BIRD INTEREST	INVERTEBRATE INTEREST
1	E211	TM385910	I	I	A	G	G	I	H
2	E212	TM322900	I	A	A	G	G	I	I
3	E455	TL714876	I	I	I	I	I	I	I
4	E456	TL723875	I	I	I	I	H	I	I
5	E457	TL728878	I	I	I	I	H	I	I
6	E459	TF740130	I	I	I	I	G	I	H
7	E460	TF710120	I	I	I	I	G	I	I
8	E461	TF705125	I	I	I	I	G	I	I
9	E462	TF669140	I	I	I	I	H	I	I
10	E467	TL935819	I	I	I	I	H	I	I
11	E468	TL960810	I	I	I	I	H	I	I
12	E469	TL990809	I	I	I	I	H	I	I
13	E470	TM008795	I	H	I	I	H	I	I
14	E471	TM084800	I	I	I	I	I	I	I
15	E472	TM095798	I	I	I	I	H	I	I
16	E473	TM122792	I	I	I	I	H	I	I
17	E476	TL840965	I	I	I	I	H	I	I
18	E477	TL832981	I	I	I	I	H	I	I
19	E478	TM415910	I	I	A	G	G	I	I
20	E481	TM442927	I	I	A	G	I	I	I
21	E482	TM450913	I	I	A	A	I	I	I
22	E483	TM460918	I	I	A	G	I	I	I
23	E485	TM490930	I	I	A	G	G	I	I
24	E488	TM490950	I	I	A	G	I	I	I
25	E489	TM465952	I	I	H	G	H	I	I
26	E491	TM440990	I	I	A	A	H	A	G
27	E492	TG453007	I	I	A	H	A	A	I
28	E493	TG450020	I	I	A	G	A	A	G
29	E494	TG470030	I	I	A	A	A	A	H
30	E495	TG485056	I	I	A	G	A	A	G
31	E496	TG502058	I	I	A	G	A	A	I
32	E497	TG510060	I	I	A	H	A	A	I
33	E498	TG505067	I	I	A	G	A	A	I
34	E499	TG424024	I	I	A	H	I	I	I
35	E500	TG400025	A	A	A	A	G	A	G
36	E501	TG391005	I	I	A	G	G	A	I
37	E502	TG375020	A	A	A	A	G	A	H
38	E503	TG360035	I	I	H	H	G	A	I
39	E504	TG340045	I	G	A	A	A	A	I
40	E505	TG360050	A	A	A	A	A	A	A

NORFOLK SITE NUMBER	LWG BLOCK CODE	GRID REFERENCE	SSSIs	GRASSLAND INTEREST	DITCH VEGETATION (HABITAT)	DITCH VEGETATION (SPECIES)	BREEDING BIRD INTEREST	WINTERING BIRD INTEREST	INVERTEBRATE INTEREST
41	E506	TG295065	I	I	A	G	H	A	G
42	E507	TG272082	I	I	G	H	I	I	G
43	E508	TG260080	I	I	G	G	I	I	G
44	E509	TG170118	A	A	I	I	H	I	H
45	E510	TG188111	I	H	I	I	H	I	I
46	E511	TG175112	I	I	I	I	H	I	I
47	E512	TG450070	A	I	A	A	A	A	A
48	E513	TG485075	I	I	H	G	A	A	I
49	E514	TG500087	I	I	G	G	A	A	I
50	E515	TG500101	I	I	G	G	G	I	I
51	E516	TG502108	I	I	G	G	G	I	I
52	E517	TG480102	I	I	G	H	H	A	I
53	E518	TG455105	I	I	G	H	H	I	I
54	E519	TG445120	I	I	G	G	H	I	I
55	E520	TG425116	I	I	G	H	H	I	G
56	E521	TG430125	A	I	A	A	G	I	A
57	E522	TG410114	I	I	A	G	H	I	I
58	E523	TG410120	I	I	G	H	G	I	I
59	E524	TG410140	A	I	A	A	G	A	A
60	E525	TG390142	A	I	A	A	G	A	G
61	E526	TG366147	A	I	G	G	A	A	G
62	E527	TG400176	A	I	A	A	H	A	A
63	E528	TG360185	I	I	A	G	G	A	A
64	E529	TG370195	I	A	G	H	G	I	A
65	E530	TG373176	A	I	G	G	G	I	H
66	E531	TG480170	A	A	G	G	H	G	I
67	E532	TG430185	I	I	A	G	G	I	A
68	E533	TG442190	I	I	A	G	H	I	I
69	E534	TG450193	I	I	A	G	H	I	I
70	E535	TG452200	I	I	A	G	G	I	I
71	E536	TG448205	A	I	H	G	G	G	A
72	E537	TG470230	A	I	A	G	A	G	I
73	E538	TG449235	I	I	A	G	G	G	I
74	E539	TG440225	I	I	G	G	G	I	I
75	E540	TG427216	A	I	G	G	A	A	I
76	E541	TG426230	I	I	G	G	A	I	I
77	E542	TG432232	I	I	G	H	A	I	I
78	E543	TG420246	I	I	G	G	G	I	H
79	E544	TG430250	I	I	G	G	G	I	I
80	E545	TG406265	A	I	G	G	H	I	I



NORFOLK SITE NUMBER	LWG BLOCK CODE	GRID REFERENCE	SSSIs	GRASSLAND INTEREST	DITCH VEGETATION (HABITAT)	DITCH VEGETATION (SPECIES)	BREEDING BIRD INTEREST	WINTERING BIRD INTEREST	INVERTEBRATE INTEREST
81	E546	TG417276	I	I	G	G	H	I	G
82	E547	TG360243	I	I	G	G	A	I	A
83	E548	TG345248	I	I	H	H	G	I	I
84	E549	TG350265	I	I	G	G	G	I	G
85	E550	TG339270	I	I	G	H	A	I	I
86	E551	TG333267	I	I	G	H	A	I	I
87	E552	TG330270	I	I	G	H	A	I	I
88	E553	TG325267	I	I	G	G	A	I	I
89	E554	TG157117	I	I	I	I	H	I	I
90	E555	TG150128	I	I	I	I	H	I	I
91	E556	TG130160	I	I	I	I	H	I	I
92	E557	TG090200	I	I	I	I	H	I	G
93	E558	TG113118	I	I	I	I	H	I	I
94	E559	TG075126	I	I	I	I	I	I	I
95	E560	TG070185	I	I	I	I	I	I	I
96	E561	TG060186	I	I	I	I	I	I	I
97	E562	TG045175	I	I	I	I	H	I	I
98	E563	TG025177	I	I	I	I	H	I	I
99	E564	TG000200	I	I	I	I	H	I	I
100	E565	TG000250	I	A	I	I	H	I	G
101	E566	TG080440	A	I	A	A	I	A	I
102	E567	TG050450	A	I	H	A	A	A	I
103	E568	TG040450	A	I	A	G	A	A	I
104	E569	TF990180	A	G	I	I	H	I	I
105	E570	TF995206	I	I	I	I	H	I	I
106	E571	TF993220	I	G	I	I	H	I	I
107	E572	TF973258	I	I	I	I	H	I	I
108	E573	TF957280	I	A	I	G	A	G	I
109	E574	TF922290	I	A	I	I	G	I	I
110	E575	TF914297	I	A	I	I	G	I	I
111	E576	TF905300	I	I	I	I	H	I	I
112	E577	TF882290	I	I	I	I	G	I	H
113	E578	TF854278	I	A	I	I	H	I	I
114	E579	TF850289	I	A	I	I	G	I	I
115	E580	TF834310	I	I	I	I	G	I	G
116	E581	TF894177	I	I	I	I	H	I	I
117	E582	TF880170	I	I	I	I	H	I	I
118	E583	TF863169	I	I	I	I	G	I	I
119	E584	TF820159	A	I	I	I	H	I	G
120	E585	TF630143	I	I	I	I	H	I	I

NORFOLK SITE NUMBER	LWG BLOCK CODE	GRID REFERENCE	SSSIs	GRASSLAND INTEREST	DITCH VEGETATION (HABITAT)	DITCH VEGETATION (SPECIES)	BREEDING BIRD INTEREST	WINTERING BIRD INTEREST	INVERTEBRATE INTEREST
121	E586	TF613182	I	I	I	I	A	I	I
122	E587	TF660350	A	A	A	A	H	A	I
123	E588	TF710440	A	I	H	G	A	A	A
124	E589	TF748439	A	I	G	H	G	A	A
125	E590	TF750449	A	I	I	I	A	A	A
126	E591	TF768445	A	I	H	G	A	A	I
127	E592	TF775453	A	I	I	I	A	A	A
128	E593	TF830445	A	I	A	G	A	A	I
129	E594	TF860450	A	I	A	G	A	A	I
130	E595	TF880450	A	I	A	A	I	A	I
131	E430	TL555970	I	A	I	I	A	A	I



**ANNEX 5**

**NORFOLK CONTEXTUAL STATEMENTS**



<p><b>1</b>  <b>LWG BLOCK E211</b>  <b>NGR TM385910</b>  <b>100 ha</b>  <b>Soil: peat, river alluvium,</b>  <b>other non-marine soil.</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Geldeston Meadows/Marshes  Norfolk  33 - East Anglian Plain  Geldeston Meadows SSSI (&lt;LWG block)  3 - WV - Waveney Valley</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No Phase 2 information - SSSI description includes extensive probable MG6 grassland, a short-sward wetter type on peat, the presence of drier hay-meadow species (possibly MG5) and more swampy types close to the River Waveney.</p> <p>Habitat - freshwater, largely dominated by eutrophic end groups.  a Ditch network &gt; 5km  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length.  Strong interest.</p> <p>Rare species score 50  Nat scarce: <i>Myriophyllum verticillatum</i>.  Moderate interest.</p> <p>Weighted LWG score 15 from 9 species. No high-scoring species breed in tetrad.  Moderate interest.</p> <p>No information.</p> <p>ISR Site - Geldeston Marshes  NB 1 NSP 1 II 40 RS 8 SQI 8 NR 1  No RDB species, only a single NB record.  Low interest.</p> <p>No information.</p>

<p>2  <b>LWG BLOCK E212</b>  <b>NGR TM322900</b>  <b>984 ha</b>  <b>Soil: peat, river alluvium,</b>  <b>other non-marine soil</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Wortwell, Flixton, Bungay, Ditchingham,  Ellingham and Barsham marshes/meadows  Norfolk  33 - East Anglian Plain  None  4 - LWG - Lower Waveney (Geldeston)</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>Norfolk Grassland Survey site 126 - Ellingham Meadow.  Small area of MG5/MG8 (2ha) and M22b/S25 (1ha). Strong interest.</p> <p>Habitat - freshwater with infrequent brackish element.  a Ditch network &gt;5km  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt;50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.</p> <p>Rare species score 150.  Nat scarce: <i>Myriophyllum verticillatum</i>, <i>Oenanthe fluviatile</i>, <i>Potamogeton coloratus</i>.  Moderate interest.</p> <p>Weighted LWG species score 10 from 6 species.  No species of high weight. Moderate interest.</p> <p>No information.</p> <p>No information.</p> <p>No information.</p>

<b>3</b> <b>LWG BLOCK E455</b> <b>NGR TL714876</b> <b>37 ha</b> <b>Soil: Other non-marine soil, peat.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Hockwold Marshes (part) Norfolk 27 - Fenland None Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No information for this tetrad.  No information.  No information.  No information.



<p><b>4</b>  <b>LWG BLOCK 456</b>  <b>NGR TL723875</b>  <b>18 ha</b>  <b>Soil: peat, other non-marine soil.</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Hockwold Marshes (part)  Norfolk  27 - Fenland  None  Unknown</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information.   Weighted LWG score 7 from 4 species. Low interest. Same tetrad as 5.   No information.   No information.   No information.</p>

<b>5</b> <b>LWG BLOCK E457</b> <b>NGR TL728878</b> <b>19 ha</b> <b>Soil: other non-marine soil, peat.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Hockwold Marshes (part) Norfolk 27 - Fenland None Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score of 7 from 4 species. Low interest. Same tetrad as 4.  No information.  No information.  No information.

<p><b>6</b>  <b>LWG BLOCK E459</b>  <b>NGR TF740130</b>  <b>68 ha</b>  <b>Soil: peat, other non-marine soil.</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Narborough Marsh  Norfolk  30 - North Norfolk  None - River Nar SSSI is adjacent to block.  Unknown</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information.   Weighted LWG score 8 from 5 species. Moderate interest. Water rail recorded in tetrad.   No information.   Narborough Pits  NSP 2 II 0 RS 4 SQI 2 NR 2  No species of national interest  Low interest   No information.</p>

<b>7</b> <b>LWG BLOCK E460</b> <b>NGR TF710120</b> <b>25 ha</b> <b>Soil: other non-marine soil, peat.</b>	<b>Site Name</b> Narham Fen Marshes (part) <b>County</b> Norfolk <b>Natural Area</b> 30 - North Norfolk <b>Conservation status</b> None - River Nar SSSI is adjacent to block <b>IDB sub-area</b> Unknown												
<b>KEY INTERESTS</b>	<table border="0"> <tr> <td><b>Grassland sward</b></td> <td>No information.</td> </tr> <tr> <td><b>Ditch vegetation</b></td> <td>No information.</td> </tr> <tr> <td><b>Breeding birds</b></td> <td>Weighted LWG score 14 from 8 species, no high-scoring species in tetrad. Same tetrad as 8. Moderate interest.</td> </tr> <tr> <td><b>Wintering birds</b></td> <td>No information.</td> </tr> <tr> <td><b>Invertebrates</b></td> <td>No information.</td> </tr> <tr> <td><b>Other</b></td> <td>No information.</td> </tr> </table>	<b>Grassland sward</b>	No information.	<b>Ditch vegetation</b>	No information.	<b>Breeding birds</b>	Weighted LWG score 14 from 8 species, no high-scoring species in tetrad. Same tetrad as 8. Moderate interest.	<b>Wintering birds</b>	No information.	<b>Invertebrates</b>	No information.	<b>Other</b>	No information.
<b>Grassland sward</b>	No information.												
<b>Ditch vegetation</b>	No information.												
<b>Breeding birds</b>	Weighted LWG score 14 from 8 species, no high-scoring species in tetrad. Same tetrad as 8. Moderate interest.												
<b>Wintering birds</b>	No information.												
<b>Invertebrates</b>	No information.												
<b>Other</b>	No information.												
<b>OTHER COMMENTS</b>													

<p><b>8</b>  <b>LWG BLOCK E461</b>  <b>NGR TF705125</b>  <b>21 ha</b>  <b>Soil: other non-marine soil,</b>  <b>peat.</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Narham Fen Marshes (part)  Norfolk  30 - North Norfolk  None  Unknown</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information.   Weighted LWG score 14 from 8 species. No high scoring species present. Same tetrad as 7. Moderate interest.   No information.   No information.   No information.</p>

<b>9</b> <b>LWG BLOCK E462</b> <b>NGR TF669140</b> <b>83 ha</b> <b>Soil: Peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Denton's Farm Marsh Norfolk 30 - North Norfolk None - River Nar SSSI adjacent to block. Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No LWG species recorded among 36 species for tetrad. Low interest.  No information.  No information.  No information.

<b>10</b> <b>LWG BLOCK E467</b> <b>NGR TL935819</b> <b>38 ha</b> <b>Soil: Other non-marine soil, peat.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Rushford Marsh Norfolk 29 - Breckland None Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 4 from 3 species. Low interest.  No information.  No information.  No information.

<b>11</b> <b>LWG BLOCK E468</b> <b>NGR TL960810</b> <b>25 ha</b> <b>Soil: Other non-marine</b> <b>soil, peat.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Riddlesworth Marsh Norfolk 29 - Breckland None Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 2 from 1 species. Low interest.  No information.  No information.  No information.



<b>12</b> <b>LWG BLOCK E469</b> <b>NGR TL990809</b> <b>73 ha</b> <b>Soil: Other non-marine soil, peat.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Garboldisham Common Marsh Norfolk 29 - Breckland None Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 4 from 3 species. Low interest.  No information.  No information.  No information.

<p><b>13</b>  <b>LWG BLOCK E470</b>  <b>NGR TM008795</b>  <b>18 ha</b>  <b>Soil: Other non-marine soil, peat.</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Raydon Common Marsh  Norfolk  29 - Breckland  None  Unknown</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>Norfolk Grassland Survey Site 593 - Little Ouse Meadow  Small area of S26 (1ha).  Low interest   No information.   Weighted LWG score 4 from 3 species.  Low interest.   No information.   No information.   No information.</p>

<b>14</b> <b>LWG BLOCK E471</b> <b>NGR TM084800</b> <b>17 ha</b> <b>Soil: Peat, river alluvium.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Roydon Marshes (part) Norfolk 33 - East Anglian Plain None Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No information for this tetrad.  No information.  No information.  No information.

<b>15</b> <b>LWG BLOCK E472</b> <b>NGR TM095798</b> <b>36 ha</b> <b>Soil: Peat, river alluvium,</b> <b>other non-marine soil.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Roydon Marshes (part) Norfolk 33 - East Anglian Plain None Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No LWG species in 33 recorded for tetrad. Low interest.  No information.  No information.  No information.

<b>16</b> <b>LWG BLOCK E473</b> <b>NGR TM122792</b> <b>810 ha</b> <b>Soil: Peat, river alluvium.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Diss Marsh Norfolk 33 - East Anglian Plain None Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No LWG species in 25 recorded from tetrad. Low interest.  No information.  No information.  No information.

<p><b>17</b>  <b>LWG BLOCK E476</b>  <b>NGR TL840965</b>  <b>24 ha</b>  <b>Soil: Peat, other non-marine soil.</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Langford Marsh  Norfolk  29 - Breckland  Stanford Training Area SSSI  (SSSI much larger than block)  Unknown</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No Phase 2 information- the SSSI description mentions wet grassland in river valleys but not in sufficient detail to identify NVC type(s).   No information.   Weighted LWG score 2 from 1 species. Low interest.   No information.   No information.   No information.</p>

<b>18</b> <b>LWG BLOCK E477</b> <b>NGR TL832981</b> <b>20 ha</b> <b>Soil: Peat, other non-marine soil.</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b>  <b>IDB sub-area</b>	Bodney Marsh Norfolk 29 - Breckland Stanford Training Area SSSI SSSI much larger than block. Unknown
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No Phase 2 information for block. The SSSI description mentions wet grassland in valleys but not in sufficient detail to identify NVC type(s).  No information.  No LWG species in 11 recorded from tetrad. Low interest.  No information.  No information.  No information.

<b>19</b> <b>LWG BLOCK E478</b> <b>NGR TM415910</b> <b>132 ha</b> <b>Soil: peat, river alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Gillingham Marshes Norfolk 33 - East Anglian Plain None 4 - LW5 - Lower Waveney 5
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater. a Ditch network >5km d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length. Strong interest.  Rare species score 100 Nat scarce: <i>Myriophyllum verticillatum</i> , <i>Potamogeton friesii</i> Moderate interest.  Weighted LWG score 8 from 5 species. No high scoring species present. Moderate interest.  No information.  No information.  No information.



<b>20</b> <b>LWG BLOCK E481</b> <b>NGR TM442927</b> <b>10 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Aldeby Marsh Norfolk 31 - Broadland None 1 - LW2 - Lower Waveney 2
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater, mesotrophic and meso-eutrophic types. a Ditch network > 5km d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length. Strong interest.  Rare species score 50. Nat scarce: <i>Myriophyllum verticillatum</i> Moderate interest.  No information for this tetrad.  No information.  No information.  No information.

<p>21 LWG BLOCK E482 NGR TM450913 182 ha Soil: Marine alluvium, peat, river alluvium.</p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>Beccles Marshes Norfolk Broadland None 3 - LW3 - Lower Waveney 3 1 - LW7 - Lower Waveney 7</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation        Breeding birds  Wintering birds   Invertebrates  Other</p>	<p>No information.  Habitat - freshwater with mesotrophic, meso- eutrophic and eutrophic end-groups. a Ditch network &gt; 5km d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length. Strong interest.  Rare species score 200. Nat scarce: <i>Ceratophyllum submersum</i>, <i>Myriophyllum verticillatum</i>, <i>Potamogeton friesii</i>, <i>Potamogeton trichoides</i>. Strong interest.  No information for this tetrad.  No information.  No information.  No information.</p>

<p>22 LWG BLOCK E483 NGR TM460918 143 ha Soil: marine alluvium, peat, river alluvium.</p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>Long Dam Level Norfolk Broadland None 1 - LW2 - Lower Waveney 2</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation        Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - freshwater, with mesotrophic and meso- eutrophic types. a Ditch network &gt; 5km d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length. Strong interest.  Rare species score 150 Nat scarce: <i>Myriophyllum verticillatum</i>, <i>Potamogeton friesii</i>, <i>Stratioides aloides</i>. Moderate interest.  No information for this tetrad.  No information.  No information.  No information.</p>

<p><b>23</b>  <b>LWG BLOCK E485</b>  <b>NGR TM490930</b>  <b>56 ha</b>  <b>Soil: marine alluvium.</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Short Dam Level  Norfolk  31 - Broadland  None  4 - LW1 - Lower Waveney 1</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - mainly freshwater but oligohaline brackish types present (&lt; 20%).  a Ditch network &gt; 5km  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length.  Strong interest.   Rare species score 100.  Nat scarce: <i>Potamogeton friesii</i>, <i>Potamogeton trichoides</i>.  Moderate interest.   Weighted LWG score 11 from 5 species. Marsh Harrier breeds in tetrad. Moderate interest.   No information.   No information.   No information.</p>

<p>24 LWG BLOCK E488 NGR TM490950 228 ha Soil: Marine alluvium.</p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>Burgh Marshes Norfolk 31 - Broadland None 2 - LWS3 - Lower Waveney Second 3</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation      Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - freshwater (mainly eutrophic) and oligohaline brackish types. a Ditch network &gt; 5km d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Strong interest.  Rare species score 150. Nat scarce: <i>Potamogeton friesii</i>, <i>Potamogeton trichoides</i>, <i>Stratiotes aloides</i>. Moderate interest.  No information for this tetrad.  No information.  No information.  No information.</p>

<p>25 LWG BLOCK E489 NGR TM465952 10 ha Soil: marine alluvium.</p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>Wheatacre Marshes Norfolk 31 - Broadland None 2 - LWS2 - Lower Waveney Second 2</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation        Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - freshwater (mainly eutrophic types) and oligohaline brackish ditches. Ditch network &lt; 5km (not SSSI standard) d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length. Low interest.  Rare species score 100. Nat scarce: <i>Myriophyllum verticillatum</i>, <i>Potamogeton trichoides</i>. Moderate interest.  Weighted LWG score of 3 from 2 species. Low interest.  No information.  No information.  No information.</p>

<p><b>26</b>  <b>LWG BLOCK E491</b>  <b>NGR TM440990</b>  <b>820 ha</b>  <b>Soil: marine alluvium, peat,</b>  <b>other non-marine soil.</b></p>	<p><b>Site Name</b> Wheatacre, Haddiscoe, Thorpe, Thurlton and Norton Marshes  <b>County</b> Norfolk  <b>Natural Area</b> 31 - Broadland  <b>Conservation status</b> None  <b>IDB sub-areas</b> 2 - LYT3 - Lower Yare Third 3  3 - LYT4 - Lower Yare Third 4  2 - LYT5 - Lower Yare Third 5  3 - LYT6 - Lower Yare Third 6  2 - LWS1 - Lower Waveney Second 1  2 - LWS2 - Lower Waveney Second 2</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b> No information.</p> <p><b>Ditch vegetation</b> Habitat - freshwater, oligohaline and mesohaline ditches.  a Ditch network &gt; 5km (except LWS2 sector).  b Fine example of freshwater-brackish transition (LYT5).  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.</p> <p>Rare species score 300.  Nat rare: <i>Potamogeton acutifolius</i>.  Nat scarce: <i>Myriophyllum verticillatum</i>, <i>Potamogeton friesii</i>, <i>Sium latifolium</i>, <i>Stratiotes aliodes</i>.  Strong interest.</p> <p><b>Breeding birds</b> Weighted LWG score 5 from 3 species.  Low interest.</p> <p><b>Wintering birds</b> Thurlton/Thorpe sector of strong quality for wintering Snipe (218 in 1988). Of moderate importance for Mute Swan. Golden Plover. Lapwing, Teal and Coot. Norton sector is of low interest.  Strong interest.</p> <p><b>Invertebrates</b> ISR Site Norton Marshes  NB 3 RDB2 1 NSP 5 II 220 RS 58 SQI 11.6  NR 5 Moderate II score (220) - moderate interest.  ISR Site Thurlton Marshes  NB 1 NSP 1 II 40 RS 8 SQI 8 NR 1  Low interest.  Moderate interest overall.</p> <p><b>Other</b> No information.</p>

<p><b>27</b>  <b>LWG BLOCK E492</b>  <b>NGR TG453007</b>  <b>18 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Fritton Marshes  Norfolk  31 - Broadland  None  2 - LWT4 - Lower Waveney Third 4</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   Habitat - freshwater (mainly eutrophic) and oligohaline brackish (&lt; 20%) ditches. a Ditch network &gt; 5km  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.   Rare species score 0.  Low interest.   Weighted LWG score 21 from 10 species. Gadwall and Shoveler breed in tetrad.  Strong interest.   Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations.  Strong interest.   No information.   No information.</p>



<p>28 LWG BLOCK E493 NGR TG450020 644 ha Soil: Marine alluvium</p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>The Island (Chedgrave and Langley Marshes) Norfolk 31 - Broadland None 5 - LCT1 - Langley, Chedgrave &amp; Tofts Monk 1 5 - LCT2 - Langley, Chedgrave &amp; Tofts Monk 2 5 - LCT3 - Langley, Chedgrave &amp; Tofts Monk 3 5 - LCT4 - Langley, Chedgrave &amp; Tofts Monk 4</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - oligohaline and mesohaline brackish ditches. a Ditch network &gt; 5km (except LCT2 sector). e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length. Strong interest.  Rare species score 150. Nat scarce: <i>Ceratophyllum submersum</i>, <i>Rumex palustris</i>, <i>Puccinellia rupestris</i>. Moderate interest.  Weighted LWG score 29 from 12 species. Gadwall, Shoveler and Marsh Harrier breed in tetrad. Strong interest.  Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations. Strong interest.  ISR Site Chedgrave Marshes NB 5 Na 1 NSP 6 II 250 RS 56 SQI 9.33 NR 7 Small numbers of NB and Na species, moderate II score of 250. Moderate interest.  No information.</p>

<p><b>29</b>  <b>LWG BLOCK E494</b>  <b>NGR TG470030</b>  <b>144 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Belton Marshes  Norfolk  31 - Broadland  None  3 - LWT2 - Lower Waveney Third 2  2 - LWT3 - Lower Waveney Third 3</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>           <b>Breeding birds</b>     <b>Wintering birds</b>        <b>Invertebrates</b>      <b>Other</b></p>	<p>No information.   Habitat - freshwater plus oligohaline and (rarely) mesohaline brackish ditches.  a Ditch network &gt; 5km  b Fine example of freshwater-brackish transition  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.   Rare species score 250.  Nat scarce: <i>Myriophyllum verticillatum</i>, <i>Potamogeton friesii</i>, <i>Ranunculus baudotii</i>, <i>Rumex palustris</i>, <i>Stratiotes aloides</i>.  Strong interest.   Weighted LWG score of 19 from 10 species. Shoveler breeds in tetrad. Same tetrad as 30.  Strong interest.   Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations.  Strong interest.   ISR Site Belton Marshes  NB 1 NSP 1 II 40 RS 8 SQI 8 NR 1  One NB species only.  Low interest.   No information.</p>

<b>30</b> <b>LWG BLOCK E495</b> <b>NGR TG485056</b> <b>37 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Burgh Castle Marshes Norfolk 31 - Broadland None 2 - BC - Burgh Castle
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - water status uncertain (no conductivity data). a Ditch network > 5km c High diversity of ditch-types (12 or more) Strong interest.  Rare species score 100. Nat scarce: <i>Myriophyllum verticillatum</i> , <i>Potamogeton trichoides</i> . Moderate interest.  Weighted LWG score of 19 from 10 species. Shoveler breeds in tetrad. Same tetrad as 29. Strong interest.  Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations. Strong interest.  ISR Site Burgh Castle Marshes NB 6 Na 1 RDB3 1 NSP 15 II 390 RS 110 SQI 7.33 NR 16 Small numbers of NB and Na species, one RDB3 record. Moderate II (390) from good number of records (16). Moderate interest.  No information.

<b>31</b> <b>LWG BLOCK E496</b> <b>NGR TG502058</b> <b>10 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Gapton Marshes Norfolk 31 - Broadland None 2 - BC - Burgh Castle
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - water status uncertain (no conductivity data). a Ditch network > 5km c High diversity of ditch-types (12 or more) Strong interest.  Rare species score 50. Nat scarce: <i>Potamogeton trichoides</i> . Moderate interest.  Weighted LWG score of 19 from 11 species. No species of high LWG weight breed in tetrad. Strong interest.  Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations. Strong interest.  No information.  No information.

<p><b>32</b>  <b>LWG BLOCK E497</b>  <b>NGR TG510060</b>  <b>13 ha</b>  <b>Soil: Marine alluvium,</b>  <b>other non-marine soil.</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Gapton Marshes  Norfolk  31 - Broadland  None  2 - BC - Burgh Castle</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   Habitat - water status uncertain (no conductivity data).  a Ditch network &gt; 5km  c High diversity of ditch-types (12 or more)  Strong interest.   Rare species score 0.  Low interest.   Weighted LWG score 24 from 11 species.  Shoveler and Marsh Harrier breed in tetrad. Little Tern is also recorded. Same tetrad as 33.  Strong interest.   Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations.  Strong interest.   No information.   No information.</p>

<p>33  <b>LWG BLOCK E498</b>  <b>NGR TG505067</b>  <b>93 ha</b>  <b>Soil: marine alluvium.</b>  <b>other non-marine soil (not</b>  <b>peat or river alluvium)</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Fisher's Marshes  Norfolk  31 - Broadland  None  2 - BC - Burgh Castle</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - water status uncertain (no conductivity data).  a Ditch network &gt; 5km  c High diversity of ditch-types (12 or more)  Strong interest.   Rare species score 150.  Nat scarce: <i>Ceratophyllum submersum</i>,  <i>Myriophyllum verticillatum</i>, <i>Potamogeton trichoides</i>.  Moderate interest..   Weighted LWG score of 24 from 11 species.  Shoveler and Marsh Harrier breed in tetrad. Little Tern is also recorded. Same tetrad as 32.  Strong interest.   Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations.  Strong interest.   No information.   No information.</p>

<b>34</b> <b>LWG BLOCK E499</b> <b>NGR TG424024</b> <b>12 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Reedham Marshes Norfolk 31 - Broadland None 2 - LBH7 - Lower Bure & Halvergate 7
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater, oligohaline and mesohaline brackish ditches. a Ditch network > 5km b Fine example of freshwater-brackish transition c High diversity of ditch-types (12 or more) d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Strong interest.  Rare species score 0. Low interest.  No information for this tetrad.  No information.  No information.  No information.

<p><b>35</b>  <b>LWG BLOCK E500</b>  <b>NGR TG400025</b>  <b>281 ha</b>  <b>Soil:</b> marine alluvium,  other non-marine soil, with  small area of peat in  northern sector.</p>	<p>Site Name  County  Natural Area  Conservation status    IDB sub-area</p>	<p>Limpenhoe Marshes  Norfolk  31 - Broadland  Limpenhoe Meadows SSSI is a small 11.6 ha  portion of the block on its northern edge. Most of  the block is not an SSSI.  2 - LR - Limpenhoe, Reedham</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward    Ditch vegetation    Breeding birds    Wintering birds    Invertebrates    Other</p>	<p>Limpenhoe Meadows SSSI (only a small  proportion of the block) is listed as a large and  particularly fine example of unimproved fen  grassland with dykes. The meadows are  species-rich and are probably dominated by M22  and M24. Insufficient Phase 2 information to  provide accurate evaluation but recorded as strong  interest.</p> <p>Habitat - freshwater (mainly eutrophic) and  oligohaline ditches.  a Ditch network &gt; 5km  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic  or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or  6+ (brackish) aquatic or emergent species per  20m ditch length  Strong interest.</p> <p>Rare species score 350.  Nat rare: <i>Potamogeton acutifolius</i>.  Nat scarce: <i>Myriophyllum verticillatum</i>,  <i>Potamogeton friesii</i>, <i>Potamogeton trichoides</i>,  <i>Rumex palustris</i>, <i>Sium latifolium</i>.  Strong interest.</p> <p>Weighted LWG score of 14 from 6 species.  Gadwall and Shoveler breed in tetrad. Moderate  interest.</p> <p>Part of Yare Valley/Middle Yare Marshes WeBs  site which is of international importance for Bean  Goose and national importance for European  Whitefronted Goose populations.  Strong interest.</p> <p>ISR Site Limpenhoe Marshes  NB 2 RDB1 2 NSP 4 II 280 RS 80 SQI 20  NR 4  Some Red Data Book 1 species interest (2  species), moderate Invertebrate Index. Moderate  interest.</p> <p>No information.</p>



<b>36</b> <b>LWG BLOCK E501</b> <b>NGR TG391005</b> <b>11 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Norton Marshes (part) Norfolk 31 - Broadland None 2 - LYT3 - Lower Yare Third 3
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater and (rarely) oligohaline brackish ditches. a Ditch network > 5km c High diversity of ditch-types (12 or more) d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Strong interest.  Rare species score 50. Nat scarce: <i>Myriophyllum verticillatum</i> . Moderate interest.  Weighted LWG score of 8 from 5 species. Moderate interest.  Part of Yare Valley/Middle Yare Marshes WeBs site which is of international importance for Bean Goose and national importance for European Whitefronted Goose populations. Strong interest.  No information.  No information.



<b>38</b> <b>LWG BLOCK E503</b> <b>NGR TG360035</b> <b>16 ha</b> <b>Soil: marine alluvium, peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Langley Marshes (part) Norfolk 31 - Broadland None - LYS3 - Lower Yare Second 3
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no ditch water information due to < 5 sample dykes (low total ditch length). Low interest.  Rare species score 0. Low interest.  Weighted LWG score of 8 from 5 species. Same tetrad as 37. Moderate interest.  Part of Yare Valley/Middle Yare Marshes WeBs site which is of international importance for Bean Goose and national importance for European Whitefronted Goose populations. Strong interest.  No information.  No information.

<p><b>39</b>  <b>LWG BLOCK E504</b>  <b>NGR TG340045</b>  <b>203 ha</b>  <b>Soil: peat, marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Claxton Marshes  Norfolk  31 - Broadland  None  2 - LYS5 - Lower Yare Second 5</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>Norfolk Grassland Survey (no site number) - Ferry Road Meadow. Small area of M24a (1.4 ha) present. Moderate interest.</p> <p>Habitat - freshwater ditches.  a Ditch network &gt; 5km  c High diversity of ditch-types (12 or more)  Strong interest.</p> <p>Rare species score 300.  Nat rare: <i>Potamogeton acutifolius</i>.  Nat scarce: <i>Myriophyllum verticillatum</i>,  <i>Potamogeton coloratus</i>, <i>Potamogeton friesii</i>,  <i>Stratiotes aloides</i>.  Strong interest.</p> <p>Weighted LWG score of 24 from 11 species.  Shoveler and Hen Harrier breed in tetrad.  Strong interest.</p> <p>Part of Yare Valley/Middle Yare Marshes WeBs site which is of international importance for Bean Goose and national importance for European Whitefronted Goose populations.  Strong interest.</p> <p>No information.</p> <p>No information.</p>

<p><b>40</b>  <b>LWG BLOCK E505</b>  <b>NGR TG360050</b>  <b>368 ha</b>  <b>Soil: marine alluvium, peat</b></p>	<p><b>Site Name</b> Buckenham, Strumpshaw, Limpenhoe and Cantley Marshes  <b>County</b> Norfolk  <b>Natural Area</b> 31 - Broadland  <b>Conservation status</b> Yare Broads and Marshes SSSI covers western half of block E505  <b>IDB sub-area</b> 1 - LY5 - Lower Yare 5  3 - LY6 - Lower Yare 6  2 - LYF - Lower Yare F</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b> Yare Broads and Marshes SSSI description suggests M22 and M24 types are present in species-rich fen meadows but further information lacking. No Phase 2 data but evaluation recorded as strong interest.</p> <p><b>Ditch vegetation</b> Habitat - freshwater and oligohaline brackish ditches.  a Ditch network &gt; 5km  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.</p> <p>Rare species score 450.  Nat rare: <i>Potamogeton acutifolius</i>.  Nat scarce: <i>Myriophyllum verticillatum</i>, <i>Potamogeton coloratus</i>, <i>Potamogeton friesii</i>, <i>Potamogeton trichoides</i>, <i>Rumex palustris</i>, <i>Sium latifolium</i>, <i>Stratiotes aloides</i>.  Strong interest - one of the best LWG blocks in Norfolk for vascular plant rarities.</p> <p><b>Breeding birds</b> Inadequate information - weighted LWG score only 1 from 1 species but Yare Broads and Marshes SSSI is of major interest for Snipe, Marsh Harrier, Shoveler, Gadwall and Grasshopper Warbler. Probably badly under-recorded and likely to be of strong interest.</p> <p><b>Wintering birds</b> Part of Yare Valley/Middle Yare Marshes WeBs site which is of international importance for Bean Goose and national importance for European Whitefronted Goose populations.  Strong interest.</p> <p><b>Invertebrates</b> ISR Site Strumpshaw Marsh  NB 37 Na 8 RDB3 11 RDB2 9 RDB1 2  II 4180 RS 1397 SQI 7.47 NR 248  Large number of significant species (67), very high Invertebrate Index (4180) and Rarity Score (1397), well recorded.  Strong interest.</p> <p><b>Other</b> No information.</p>

<b>41</b> <b>LWG BLOCK E506</b> <b>NGR TG295065</b> <b>80 ha</b> <b>Soil: peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Postwick Marsh Norfolk 33 - East Anglian Plain None 3 - LY3 - Lower Yare 3
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater ditches. a Ditch network >5km d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Strong interest.  Rare species score 50. Nat scarce: <i>Myriophyllum verticillatum</i> . Moderate interest.  Weighted LWG score of 2 from 1 species. Low interest.  Important numbers of wintering Gadwall (56 in 1988) - strong interest. Of moderate interest for Coot. Strong interest.  ISR Site Postwick Marsh RDB2 1 NSP 1 II 100 RS 32 SQI 32 NR 1 One RDB2 species, only a single record. Moderate interest.  No information.

<p><b>42</b>  <b>LWG BLOCK E507</b>  <b>NGR TG272082</b>  <b>29 ha</b>  <b>Soil: peat</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Thorpe St Andrew Marsh  Norfolk  33 - East Anglian Plain  None  3 - LY23 - Lower Yare 23</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   Habitat - freshwater ditches.  &lt; 5km ditch network (not SSSI standard).  e &gt; 50% ditches having either 10+ (freshwater) or  6+ (brackish) aquatic or emergent species per  20m ditch length  Moderate interest.   Rare species score 0.  Low interest.   No information for this tetrad.   No information.   ISR Site Whitlingham Station  NB 2 Na 1 RDB1 1 II 230 RS 64 SQI 16  NR 4  Low numbers of nationally notable records, plus  one RDB1 species. Moderate II (230). Moderate  interest. Same tetrad as 43.   No information.</p>

<p>43  <b>LWG BLOCK E508</b>  <b>NGR TG260080</b>  <b>38 ha</b>  <b>Soil: Peat</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Trowse Newton Marsh  Norfolk  33 - East Anglian Plain  None  3 - LY1 - Lower Yare 1</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - freshwater ditches.  &lt; 5km ditch network (not SSSI standard).  Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Moderate interest.   Rare species score 50.  Nat scarce: <i>Myriophyllum verticillatum</i>.  Moderate interest.   No information for this tetrad.   No information.   ISR Site Whitlingham Station  NB 2 NA 1 RDB1 1 II 230 RS 64 SQI 16 NR 4  Low numbers of nationally notable records, plus one RDB1 species. Moderate II (230). Moderate interest. Same tetrad as 42.   No information.</p>



<p><b>44</b>  <b>LWG BLOCK E509</b>  <b>NGR TG170118</b>  <b>244 ha</b>  <b>Soil:</b> Peat, other non-marine soil (not river alluvium)</p>	<p><b>Site Name</b> New Costessey, Drayton and Taverham Marshes  <b>County</b> Norfolk  <b>Natural Area</b> 33 - East Anglian Plain  <b>Conservation status</b> Sweet Briar Road Meadows, Norwich SSSI is a 9.5ha area entirely within the block at its eastern end. The block is much larger than the SSSI. Also adjacent to River Wensum SSSI  <b>IDB sub-area</b> Unknown</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b> Sweet Briar Road Meadows, Norwich SSSI is a botanical SSSI consisting of unimproved wet meadows, grading from damp neutral grassland to mire and swamp in the valley bottom. NVC types cannot be inferred from the site description. No Phase 2 information.</p> <p>The block also contains or overlaps in part with 6 Norfolk Grassland Survey sites (249 North Costessey Meadow, 254 West Costessey Meadow, 255 Low Road Meadow, 1334 Fish Farm Meadow, 1453 Hellesdon Meadow, 1465 North Earlham Meadow). Together, these contain a large area of MG8 grassland (18 ha) and swamp (S28/MG1c 2 ha). Strong interest.</p> <p><b>Ditch vegetation</b> No detailed information for the block (beyond Broads area). Sweet Briar Meadows, Norwich SSSI description mentions ditches, mostly overgrown, with <i>Oenanthe fistulosa</i>, <i>Berula erecta</i> and <i>Lysimachia nummularia</i>.</p> <p><b>Breeding birds</b> Weighted LWG score 2 from 2 species. Low interest.</p> <p><b>Wintering birds</b> No information.</p> <p><b>Invertebrates</b> ISR Site Hellesdon Common  Nb 1 NSP 4 II 40 RS 14 SQI 3.5 NR 4  ISR Site Keswick, Norwich  Nb 1 NSP 1 II 40 RS 8 SQI 8 NR 1  Only 2 Nb records from two sites, low II scores. Low interest.</p> <p><b>Other</b> No information.</p>

<p><b>45</b>  <b>LWG BLOCK E510</b>  <b>NGR TG188111</b>  <b>11 ha</b>  <b>Soil: peat, other non-marine soil (not river alluvium)</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>New Costessey Marsh  Norfolk  31 - Broadland  None  Unknown</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>Norfolk Grassland Survey Site 243 (Red Bridge Meadow). Small area of MG10/M23 (1 ha). Low interest.   No information.   Weighted LWG score 5 from 3 species. Low interest.   No information.   No information.   No information.</p>

<p><b>46</b>  <b>LWG BLOCK E511</b>  <b>NGR TG175112</b>  <b>20 ha</b>  <b>Soil: peat, other non-marine soil (nor river alluvium)</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Costessey Marsh  Norfolk  33 - East Anglian Plain  None  Unknown</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information.   Weighted LWG score 2 from 2 species.  Low interest   No information.   No information.   No information.</p>

<p>47  <b>LWG BLOCK E512</b>  <b>NGR TG450070</b>  <b>2642 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b> Halvergate Marshes (including Halvergate, Reedham, Beighton, South Walsham and Wickhampton Marshes)</p> <p><b>County</b> Norfolk</p> <p><b>Natural Area</b> 31 - Broadland</p> <p><b>Conservation status</b> Damgate Marshes, Acle SSSI is a 63.9 ha area on the north-western edge of block E512. Halvergate Marshes SSSI is a 162 ha on the western side of the lower Bure valley, on the western edge of block E512. Most of block E512 has no conservation status.</p> <p><b>IDB sub-area</b> 1 - LBH4,9,10 - Lower Bure &amp; Halvergate 4,9,10  2 - LBH7 - Lower Bure and Halvergate 7  4 - LBH3, LBH8, LBH11, LBH15  Lower Bure &amp; Halvergate 3,8,11,15  5 - LBH1, LBH2, LBH12, LBH13, LBH14  Lower Bure &amp; Halvergate 1,2,12,13,14</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b> No information.</p> <p><b>Ditch vegetation</b> Habitat - freshwater, oligohaline and mesohaline ditches.  a Ditch network &gt; 5km  b Fine example of freshwater-brackish transition  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.</p> <p>Rare species score 550.  Nat scarce: <i>Ceratophyllum submersum</i>, <i>Myriophyllum verticillatum</i>, <i>Oenanthe fluviatile</i>, <i>Potamogeton coloratus</i>, <i>P. friesii</i>, <i>P. trichoides</i>, <i>Ranunculus baudotii</i>, <i>Rumex palustris</i>, <i>Sium latifolium</i>, <i>Stratiotes aloides</i>, <i>Puccinellia rupestris</i>.  Strong interest - highest LWG block score in Norfolk.</p> <p><b>Breeding birds</b> Weighted LWG score 21 from 10 species.  Gadwall and Shoveler breed in block tetrads.  Strong interest.</p> <p><b>Wintering birds</b> Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations.  Strong interest.</p> <p><b>Invertebrates</b> ISR Site Wiggs Carr  Nb 1 NSP 3 II 40 RS 12 SQI 4 NR 3  Only a single Nb record, low II - low interest</p> <p>ISR Site Wickhampton Marshes  Nb 8 RDB3 1 RDB2 1 NSP 23 II 520  RS 153 SQI 6.65 NR 25  Good number of Nb species and two RDB records. The II is strong (520). Strong interest.</p> <p>Damgate Marshes, Acle SSSI is noted for aquatic invertebrates, including several dragonflies.</p>

<p><b>48</b>  <b>LWG BLOCK E513</b>  <b>NGR TG485075</b>  <b>56 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Acle Marshes (part)  Norfolk  31 - Broadland  None  5 - LBH13 - Lower Bure &amp; Halvergate 13</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>      <b>Breeding birds</b>    <b>Wintering birds</b>     <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   Habitat - oligohaline ditches.  &lt; 5km ditch network (not SSSI standard).  Low interest.   Rare species score 100.  Nat scarce: <i>Ranunculus baudotii</i>, <i>Puccinellia rupestris</i>.  Moderate interest.   Weighted LWG interest 19 from 10 species.  Shoveler breeds in block tetrads. Strong interest.   Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations.  Strong interest.   No information.   No information.</p>

<p>49  <b>LWG BLOCK E514</b>  <b>NGR TG500087</b>  <b>101 ha</b>  <b>Soil: marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Acle Marshes (part)  Norfolk  31 - Broadland  None  5 - LBH1 - Lower Bure &amp; Halvergate 1</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - mesohaline brackish ditches.  &lt; 5km ditch length (not SSSI standard).  e &gt; 50% ditches having either 10+ (freshwater) or  6+ (brackish) aquatic or emergent species per  20m ditch length  Moderate interest.   Rare species score 100.  Nat scarce: <i>Ranunculus baudotii</i>, <i>Puccinellia  rupestris</i>.  Moderate interest.   Weighted LWG score of 24 from 12 species.  Shoveler breeds in tetrad. Little Tern and  Mediterranean Gull also recorded.  Strong interest.   Part of Berney Marshes and Breydon Water WeBs  site which is of international importance for overall  numbers (21,000) and Bewick's Swan populations.  National importance for Cormorant and Wigeon  populations. Strong interest.   No information.   No information.</p>

<p><b>50</b>  <b>LWG BLOCK E515</b>  <b>NGR TG500101</b>  <b>10 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Mautby Marsh (part)  Norfolk  31 - Broadland  None  3 - MSF1 - Muckfleet, South Fleggburgh 1</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>         <b>Breeding birds</b>         <b>Wintering birds</b>         <b>Invertebrates</b>         <b>Other</b></p>	<p>No information.   Habitat - no conductivity data available (probably freshwater).  &lt; 5km ditch length (not SSSI standard).  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length.  Moderate interest.   Rare species score 50.  Nat scarce: <i>Ruppia spiralis</i>.  Moderate interest.   Weighted LWG score 9 from 5 species. Same tetrad as 51.  Moderate interest.   No information.   No information.   No information.</p>

<b>51</b> <b>LWG BLOCK E516</b> <b>NGR TG502108</b> <b>14 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Mautby Marshes (part) Norfolk 31 - Broadland None 3 - MSF1 - Muckfleet South Fleggburgh 1
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no conductivity data available (probably freshwater). < 5km ditch length (not SSSI standard). Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length. Moderate interest.  Rare species score 50. Nat scarce: <i>Stratiotes aloides</i> . Moderate interest.  Weighted LWG score 9 from 5 species. Same tetrad as 51. Moderate interest.  No information.  No information.  No information.



<b>52</b> <b>LWG BLOCK E517</b> <b>NGR TG480102</b> <b>43 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Runham Marsh (part) Norfolk 31 - Broadland None 4 - MSF1a Muckfleet South Fleggburgh 1a 1 - MSF2 Muckfleet South Fleggburgh 2
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no conductivity data (probably freshwater and oligohaline ditches). < 5km ditch length (not SSSI standard). e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 0. Low interest.  Weighted LWG score 1 from 1 species. Low interest.  Part of Berney Marshes and Breydon Water WeBs site which is of international importance for overall numbers (21,000) and Bewick's Swan populations. National importance for Cormorant and Wigeon populations. Strong interest.  No information.  No information.

<b>53</b> <b>LWG BLOCK E518</b> <b>NGR TG455105</b> <b>27 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Runham Marsh (part) Norfolk 31 - Broadland None 1 - MSF2 Muckfleet South Fleggburgh 2
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no conductivity data (probably freshwater and oligohaline ditches). < 5km ditch length (not SSSI standard). e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 0. Low interest.  Weighted LWG score of 5 from 4 species. Low interest.  No information.  No information.  No information.

<b>54</b> <b>LWG BLOCK E519</b> <b>NGR TG445120</b> <b>72 ha</b> <b>Soil: marine alluvium, peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Burgh Common Marsh (part) Norfolk 31 - Broadland None, but adjacent to Burgh Common & Muckfleet Marshes SSSI 2 - MSF3 Muckfleet South Fleggburgh 3
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no conductivity data (probably freshwater ditches). < 5km ditch network (not SSSI standard). d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 50. Nat scarce: <i>Myriophyllum verticillatum</i> . Moderate interest.  Weighted LWG score 4 from 2 species. Low interest.  No information.  No information.  No information.

<b>55</b> <b>LWG BLOCK E520</b> <b>NGR TG425116</b> <b>26 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Muckfleet Marsh (part) Norfolk 31 - Broadland None 2 - MSF3 Muckfleet South Fleggburgh 3
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no conductivity data (probably freshwater ditches). < 5km ditch network (not SSSI standard). d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 0. Low interest.  Weighted LWG score 3 from 1 species. Low interest.  No information.  ISR Site Muck Fleet South Nb 2 RDB3 1 RDB1 2 NSP 6 II 380 RS 114 SQI 19 NR 7 Small numbers of nationally important species, including RDB1 records. Moderate II (380). Moderate interest.  No information.



<p>57  <b>LWG BLOCK E522</b>  <b>NGR TG410114</b>  <b>66 ha</b>  <b>Soil: marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Fishley Marsh  Norfolk  31 - Broadland  None  1 - MB1 Middle Bure 1</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - freshwater and oligohaline ditches.  a Ditch network &gt;5km  d Freshwater systems with average of 10 + aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10 + (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.   Rare species score 100.  Nat scarce: <i>Myriophyllum verticillatum</i>,  <i>Potamogeton friesii</i>.  Moderate interest.   Weighted LWG score of 4 from 2 species.  Low interest.   No information.   No information.   No information.</p>

<b>58</b> <b>LWG BLOCK E523</b> <b>NGR TG410120</b> <b>16 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Acle Bridge Marsh Norfolk 31 - Broadland None 2 - MSF5a Muckfleet, South Fleggburgh 5a
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - oligohaline ditches. < 5km ditch length (not SSSI standard). Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 0. Low interest.  Weighted LWG score of 11 from 7 species. Moderate interest.  No information.  No information.  No information.

<p><b>59</b> <b>LWG BLOCK E524</b> <b>NGRTG410140</b> <b>302 ha</b></p> <p><b>Soil: marine alluvium</b></p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>Thurne Marsh Norfolk 40 Broadland Shallam Dyke Marshes, Thurne SSSI 2 - RMT1 Repps, Martham, Thurne 1 2 - RMT2 Repps, Martham, Thurne2 2 - MSF5a Muckfleet, Sth Fleggburgh 5a 2 - MSF5b Muckfleet, Sth Fleggburgh 5b</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>SSSI description - seasonally wet semi improved pasture and tussocky grassland. No Phase 2 information.</p> <p>Habitat - freshwater and oligohaline (rarely mesohaline) ditches. a Ditch network &gt; 5km c High diversity of ditch-types (12 or more) d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Strong interest.</p> <p>Rare species score 250. Nat scarce: <i>Ceratophyllum submersum</i>, <i>Myriophyllum verticillatum</i>, <i>Oenanthe fluviatilis</i>, <i>Potamogeton friesii</i>, <i>Potamogeton trichoides</i> Strong interest.</p> <p>Weighted LWG score 9 from 6 species. Moderate interest.</p> <p>Part of St. Benet's Levels WeBs site which is of international importance for Bewick's Swan and Egyptian Goose (introduced). Strong interest.</p> <p>ISR Site - Ludham Marshes Nb 10 NA 2 R3 2 R2 1 R1 1 NSP24 II 900 RS 256 SQI 10.67 NRC 29. 16 notable species from 29 records, high II (900). Strong interest</p> <p>ISR site - Ashby with Oby Nb 4 NSP 4 II 160 RS 32 SQI 8 NRC 4. Low interest</p> <p>No information.</p>



<p><b>60</b>  <b>LWG BLOCK E525</b>  <b>NGR TG390142</b>  <b>274 ha</b>  <b>Soil: marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Upton Marshes  Norfolk  31 - Broadlands  Upton Broad and Marshes SSSI (only partial overlap of boundaries)  1 - MB1 - Middle Bure</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation           Breeding birds     Wintering birds     Invertebrates    Other</p>	<p>No information.   Habitat - freshwater and occasional oligohaline ditches.  a Ditch network &gt;5km  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.   Rare species score 400.  Nat scarce: <i>Eleocharis acicularis</i>, <i>Myriophyllum verticillatum</i>, <i>Oenanthe fluviatilis</i>, <i>Potamogeton coloratus</i>, <i>Potamogeton friesii</i>, <i>Sium latifolium</i>, <i>Stratiotes aloides</i> present.  Strong interest - one of highest LWG block scores in Norfolk.   Weighted LWG score 15 from 8 species.  Moderate, almost strong, interest. Shoveler breeds in tetrad.   Part of St. Benet's Levels WeBs site which is of international importance for Bewick's Swan and Egyptian Goose (introduced).  Strong interest.   ISR Upton Marshes (near SSSI)  Nb 2 R1 1 NSP 3 II 180 RS 48 SQI 16 NRC 3  Two NB, one RDB1 - moderate interest.   No information.</p>

<p><b>61</b>  <b>LWG BLOCK 526</b>  <b>NGR TG366147</b>  <b>12 ha</b>  <b>Soil: peat</b></p>	<p><b>Site Name</b> Ranworth Marshes  <b>County</b> Norfolk  <b>Natural Area</b> 31 - Broadlands  <b>Conservation status</b> Bure Broad and Marshes SSSI (very small sector of SSSI only)  <b>IDB sub-area</b> 3 - Middle Bure 2</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b> No Phase 2 information.</p> <p><b>Ditch vegetation</b> Habitat - freshwater ditches.  &lt; 5km ditch network (not SSSI standard).  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Moderate interest.   Rare species score 100.  Nat scarce: <i>Potamogeton friesii</i>, <i>Stratiotes aloides</i>  Moderate interest.</p> <p><b>Breeding birds</b> Weighted LWG score 18 from 9 species. Shoveler breeds in tetrad. Cetti's Warbler also recorded for tetrad.  Strong interest.</p> <p><b>Wintering birds</b> Part of St. Benet's Levels WeBs site which is of international importance for Bewick's Swan and Egyptian Goose (introduced).  Strong interest.</p> <p><b>Invertebrates</b> ISR Site South Walsham  Nb 1 R3 1 R1 1 NSP 4 II 240 RS 74 SQI 18.5  NRC 4 . Three notable species including 2 RDB and moderate II (240). Moderate interest</p> <p><b>Other</b> No information.</p>



<p><b>63</b>  <b>LWG BLOCK E528</b>  <b>NGR TG360185</b>  <b>30 ha</b>  <b>Soil: peat</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Reedham Marsh (part)  Norfolk  31 - Broadlands  None  2 - S7 - Smallburgh 7</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>           <b>Breeding birds</b>        <b>Wintering birds</b>        <b>Invertebrates</b>        <b>Other</b></p>	<p>No information.</p> <p>Habitat - freshwater and (rarely) oligohaline ditches.  a Ditch network &gt;5km  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.</p> <p>Rare species score 100.  Nat scarce: <i>Myriophyllum verticillatum</i>,  <i>Potamogeton friesii</i>  Moderate interest.</p> <p>Weighted LWG score 10 from 6 species. Moderate interest. Same tetrad as 64.</p> <p>Part of St. Benet's Levels WeBs site which is of international importance for Bewick's Swan and Egyptian Goose (introduced).  Strong interest.</p> <p>ISR Site Reedham Marshes SSSI  Nb 42 NA 7 R3 14 R2 13 R1 3 NSP 202 II 5130  RS 1678 SQI 8.31 NRC 295 Very large total of species of interest (79) with very high II 5130 and rarity score (1678). 295 records indicate well visited .  Strong interest.</p> <p>No information.</p>

<b>64</b> <b>LWG BLOCK E529</b> <b>NGR TG370195</b> <b>11ha</b> <b>Soil: peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Reedham Marshes (part) Norfolk 31 - Broadlands How Hill Marsh SSSI 1- S6 - Smallburgh6
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No Phase 2 information but recorded as strong interest on basis of SSSI status.  Habitat - freshwater ditches. < 5km ditch network (not SSSI standard). d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 0. Low interest.  Weighted LWG score 10 from 6. Moderate interest Same tetrad as 63  No information.  ISR Site How Hill Marsh SSSI Nb 5 NA 1 R3 1 R2 1 NSP 14 II 550 RS 162 SQI 11.57 NRC 20 Moderate numbers of notable species in all classes except RDB1. High II (550). Strong interest.  No information.

<p><b>65</b>  <b>LWG BLOCK E530</b>  <b>NGR TG373176</b>  <b>19 ha</b>  <b>Soil: other non-marine soil</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Ludham Marsh (part)  Norfolk  31 - Broadlands  Ant Broads and Marshes SSSI (part)  1 - S6 - Smallburgh 6</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   Habitat - freshwater and (rarely) oligohaline ditches.  &lt; 5km ditch network (not SSSI standard).  Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Moderate interest.   Rare species score 50.  Nat scarce: <i>Potamogeton friesii</i>.  Moderate interest.   Weighted LWG score 9 from 6 species. Moderate interest.   No information.   ISR Site Ludham Bridge  Nb 1 NSP 2 ll 40 RS 10 SQI 5 NRC 2 One Nb species, low ll. Low interest.   No information.</p>

<p><b>66</b>  <b>LWG BLOCK E531</b>  <b>NGR TG480170</b>  <b>21 ha</b>  <b>Soil: peat</b></p>	<p><b>Site Name</b> Hemsby Marsh  <b>County</b> Norfolk  <b>Natural Area</b> 31 - Broadlands  <b>Conservation status</b> Hall Farm Fen, Hemsby SSSI, SPA, Ramsar  <b>IDB sub-area</b> 1- MSF6 - Muckfleet, Sth Fleggburgh  -- MSF7 - Muckfleet, Sth Fleggburgh</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b> No Phase 2 information but recorded as strong interest on basis of SSSI status.</p> <p><b>Ditch vegetation</b> Habitat - freshwater ditches.  &lt; 5km ditch network (not SSSI standard).  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Moderate interest.   Rare species score 50  Nat scarce: <i>Myriophyllum verticillatum</i>.  Moderate interest.</p> <p><b>Breeding birds</b> Weighted LWG score 0 from 22 species present. Low interest. Given SPA and Ramsar status of area there is probably a major error in data for tetrad.</p> <p><b>Wintering birds</b> Moderate interest. Adjacent to Ormesby Broads WeBs site which is not cited in list of UK Principal Waterfowl Sites. Given SPA and Ramsar status of area there is possibly more interest than indicated.</p> <p><b>Invertebrates</b> No ISR information. SSSI description notes dykes with rich invertebrate fauna, including the nationally rare mollusc <i>Segmentina nitida</i>. Recorded as no information since no Invertebrate Index data available.</p> <p><b>Other</b> No information.</p>

<p><b>67</b>  <b>LWG BLOCK E 532</b>  <b>NGR TG430185</b>  <b>95 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Bastwick Marsh  Norfolk  31 - Broadlands  None  2 - RMT2 - Repps, Martham, Thurne 2  1 - RMT3 - Repps, Martham, Thurne 3</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>           <b>Breeding birds</b>    <b>Wintering birds</b>    <b>Invertebrates</b>      <b>Other</b></p>	<p>No information.   Habitat - freshwater and oligohaline ditches.  a Ditch network &gt; 5km  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.   Rare species score 100.  Nat scarce: <i>Myriophyllum verticillatum</i>,  <i>Potamogeton friesii</i>.  Moderate interest.   Weighted LWG score 11 from 7. Moderate interest   No information.   ISR Site Potter Heigham  Nb 10 NA 1 R3 2 R2 2 R1 2 NSP 26 II 1050 RS  306 SQI 11.77 NRC 29. High Nb and spread of notable species in all classes. High II (1050).  Strong interest.   No information.</p>



<p><b>68</b>  <b>LWG BLOCK E533</b>  <b>NGR TG442190</b>  <b>10 ha</b>  <b>Soil: marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Mustard Hym Marsh  Norfolk  31 - Broadlands  None  1 - RMT3 - Repps, Martham, Thurne 3</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - freshwater and oligohaline ditches.  a Ditch network &gt;5km  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.   Rare species score 100.  Nat scarce: <i>Myriophyllum verticillatum</i>,  <i>Potamogeton coloratus</i>.  Moderate interest.   Weighted LWG score 4 from 2 species.Low interest. Same tetrad as 68.   No information.   No information.   No information.</p>

<p><b>69</b>  <b>LWG BLOCK E534</b>  <b>NGR TG450193</b>  <b>17 ha</b>  <b>Soil: marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Moregrove Marsh (part)  Norfolk  40 Broadlands  None  1 - RMT3 - Repps, Martham, Thurne3</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - freshwater and oligohaline ditches.  a Ditch network &gt; 5km  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest.   Rare species score 100.  Nat scarce: <i>Myriophyllum verticillatum</i>,  <i>Potamogeton friesii</i>.  Moderate interest.   Weighted LWG score 4 from 2 species. Low interest. Same tetrad as 68   No information.   No information.   No information.</p>

<b>70</b> <b>LWG BLOCK E535</b> <b>NGR TG452200</b> <b>30 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Moregrove Marsh (part) Norfolk 31 - Broadlands None 1 - RMT3 - Repps, Martham, Thurne 3
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>          <b>Breeding birds</b>       <b>Wintering birds</b>    <b>Invertebrates</b>   <b>Other</b>	No information.  Habitat - freshwater and oligohaline ditches. a Ditch network > 5km c High diversity of ditch-types (12 or more) d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Strong interest.  Rare species score 100. Nat scarce: <i>Myriophyllum verticillatum</i> , <i>Potamogeton friesii</i> . Moderate interest.  Weighted LWG score 13 from 6. Moderate interest. Same tetrad as 71.  No information.  No information.  No information.



<p>72  <b>LWG BLOCK E537</b>  <b>NGR TG470230</b>  <b>337 ha</b>  <b>Soil: marine, other non-marine soil</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Hundred Streams Marshes  Norfolk  31 - Broadlands  Upper Thurne Broads and Marshes SSSI (72 extends beyond SSSI)  1 - HW1 - Happisburgh, Winterton 1  5 - HW2 - Happisburgh, Winterton 2</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   Habitat - oligohaline and mesohaline ditches (rarely freshwater).  a Ditch network &gt;5km  b Fine example of freshwater-brackish transition  c High diversity of ditch-types (12 or more)  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Strong interest except for poorer southern sector.   Rare species score 150.  Nat scarce: <i>Myriophyllum verticillatum</i>,  <i>Ranunculus baudotii</i>, <i>Chara aspera</i>.  Moderate interest.   Weighted LWG score 19 from 9 species. Strong interest. Marsh Harrier breeds in tetrad. Little Tern also recorded from tetrad.   Part of Horsey Mere WeBs site which is of moderate interest only with no species cited.   No information.   No information.</p>

<b>73</b> <b>LWG BLOCK E538</b> <b>NGR TG449235</b> <b>52 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Horsey Marsh Norfolk 40 Broadlands None 5 - HW2 - Happisburgh, Winterton 2
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - oligohaline and mesohaline ditches (rarely freshwater). a Ditch network > 5km  c High diversity of ditch-types (12 or more) e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Strong interest.  Rare species score 100. Nat scarce: <i>Ranunculus baudotii</i> , <i>Chara aspera</i> . Moderate interest.  Weighted LWG score 10 from 4 species. Moderate interest. Marsh Harrier breeds in tetrad. Same tetrad as 74.  Part of Horsey Mere WeBs site which is of moderate interest only with no species cited.  No information.  No information.

<b>74</b> <b>LWG BLOCK E539</b> <b>NGR TG440225</b> <b>67 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Brayden Marshes Norfolk 31 - Broadlands None 1 - S1 - Smallburgh 1
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater and oligohaline ditches (rarely mesohaline). < 5km ditch network (not SSSI standard). b Fine example of freshwater-brackish transition c High diversity of ditch-types (12 or more) Moderate interest.  Rare species score 50. Nat scarce: <i>Ranunculus baudotii</i> . Moderate interest.  Weighted LWG score 10 from 4 species. Moderate interest. Marsh Harrier breeds in tetrad. Same tetrad as 73  No information.  No information.  No information.

<p>75 LWG BLOCK E540 NGR TG427216 12 ha Soil: peat</p>	<p>Site Name County Natural Area Conservation status  IDB sub-area</p>	<p>Hickling Marsh Norfolk 31 - Broadlands Upper Thurne Broads and Marshes SSSI (SSSI &gt; 75 area), part of Hickling Broad/Horse Mere Ramsar site. 1 - S1 - Smallburgh 1</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation      Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - freshwater and oligohaline ditches (rarely mesohaline). &lt; 5km ditch network (not SSSI standard). b Fine example of freshwater-brackish transition c High diversity of ditch-types (12 or more) Moderate interest.  Rare species score 50. Nat scarce: <i>Ranunculus baudotii</i>. Moderate interest.  Weighted LWG score 24 from 10 species. Strong interest. Marsh Harrier and Shoveler breed in tetrad.  Part of Hickling Broad WeBs site which is of national importance for Gadwall. Strong interest.  No information.  No information.</p>



<b>76</b> <b>LWG BLOCK E541</b> <b>NGR TG426230</b> <b>50 ha</b> <b>Soil: peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Hickling Green Marsh (part) Norfolk 40 -Broadlands None 1 - S1 - Smallburgh 1
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater and oligohaline ditches (rarely mesohaline). < 5km ditch network (not SSSI standard). b Fine example of freshwater-brackish transition c High diversity of ditch-types (12 or more) Moderate interest.  Rare species score 50. Nat scarce: <i>Potamogeton trichoides</i> . Moderate interest.  Weighted LWG score 17 from 8 species. Strong interest. Marsh Harrier breeds in tetrad. Same tetrad as 77.  No information.  No information.  No information.

<b>77</b> <b>LWG BLOCK E542</b> <b>NGR TG432232</b> <b>10 ha</b> <b>Soil: peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Hickling Green Marsh (part) Norfolk 31 - Broadlands None 1 - S1 - Smallburgh 1
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater and oligohaline ditches (rarely mesohaline). < 5km ditch network (not SSSI standard). b Fine example of freshwater-brackish transition c High diversity of ditch-types (12 or more) Moderate interest.  Rare species score 0. Low interest.  Weighted LWG score 17 from 8 species. Strong interest. Marsh Harrier breeds in tetrad. Same tetrad as 76.  No information.  No information.  No information.

<p>78  <b>LWG BLOCK E543</b>  <b>NGR TG420246</b>  <b>44 ha</b>  <b>Soil: peat</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Lang Gore Marsh  Norfolk  40 -Broadlands  None  1 - S1 - Smallburgh 1</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - freshwater and oligohaline ditches (rarely mesohaline).  &lt; 5km ditch network (not SSSI standard).  b Fine example of freshwater-brackish transition  c High diversity of ditch-types (12 or more)  Moderate interest.   Rare species score 100.  Nat scarce: <i>Potamogeton coloratus</i>, <i>Stratiotes aloides</i>.  Moderate interest.   Weighted LWG score 10 from 7 species. Moderate interest. Same tetrad as 79   No information.   ISR Site Lang Gore Marsh  Nb 2 NSP 2 ll 80 RS 16 SQI 8 NRC 2 . Only two Nb species. low ll (80). Low interest.   No information.</p>

<p><b>79</b>  <b>LWG BLOCK E544</b>  <b>NGR TG430250</b>  <b>145 ha</b>  <b>Soil: peat, other non-marine soil</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Hickling Wall Marsh  Norfolk  31 - Broadlands  None  1- S1 - Smallburgh1  1 - HW3 - Happisburgh, Winterton3</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>           <b>Breeding birds</b>        <b>Wintering birds</b>        <b>Invertebrates</b>        <b>Other</b></p>	<p>No information.   Habitat - freshwater, oligohaline and mesohaline ditches.  &lt; 5km ditch network (not SSSI standard).  b Fine example of freshwater-brackish transition  c High diversity of ditch-types (12 or more)  Moderate interest.   Rare species score 50.  Nat scarce: <i>Myriophyllum verticillatum</i>.  Moderate interest.   Weighted LWG score 10 from 7 species. Moderate interest. Same tetrad as 78   No information.   No information.   No information.</p>

<b>80</b> <b>LWG BLOCK E545</b> <b>NGR TG406265</b> <b>57 ha</b> <b>Soil: peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Calthorpe Broad Norfolk 31 - Broadlands Calthorpe Broad (small part of 80 only in SSSI) 1 - HW3 - Happisburgh, Winterton3
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater, oligohaline and mesohaline ditches. < 5km ditch network (not SSSI standard). b Fine example of freshwater-brackish transition c High diversity of ditch-types (12 or more) Moderate interest.  Rare species score 50. Nat scarce: <i>Myriophyllum verticillatum</i> . Moderate interest.  Weighted LWG score 5 from 4 species. Low interest. Same tetrad as 81.  No information.  No information.  No information.

<b>81</b> <b>LWG BLOCK E546</b> <b>NGR TG417276</b> <b>26 ha</b> <b>Soil: peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Hempstead Marshes Norfolk 31 - Broadlands None 1 - HW3 - Happisburgh, Winterton 3
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - freshwater, oligohaline and mesohaline ditches. < 5km ditch network (not SSSI standard). b Fine example of freshwater-brackish transition c High diversity of ditch-types (12 or more) Moderate interest.  Rare species score 50. Nat scarce: <i>Ranunculus baudotii</i> . Moderate interest.  Weighted LWG score 5 from 4 species. Low interest. Same tetrad as 80.  No information.  ISR Site Hempstead Marshes Nb 3 NSP 4 II 120 RS 26 SQI 6.5 NRC 4. Three Nb species, rather low II. Moderate interest.  No information.

<p>82 LWG BLOCK E547 NGR TG360243 28 ha Soil: peat</p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>Sutton Broad Marsh Norfolk 31 - Broadlands None 1 - S9 - Smallburgh 9</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>No information.  Habitat - no water conductivity data available (inadequate ditch length). &lt;5km ditch network (not SSSI standard). d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 50. Nat scarce: <i>Myriophyllum verticillatum</i>. Moderate interest.  Weighted LWG score 16 from 8 species. Strong interest. Marsh Harrier breeds in tetrad. Bittern also recorded from tetrad.  No information.  ISR Site Sutton Broad Fens SSSI Nb 43 NA 7 R3 11 R2 15 R1 3 NSP 216 II 5470 RS 1798 SQI 8.32 NRC 338. High notable species total (79) present in all classes, especially NB. Very high II (5470) and rarity score (1798). Well visited (33) records. Data probably reflect adjacent wet grassland habitats as well. Strong interest.  No information.</p>

<b>83</b> <b>LWG BLOCK E548</b> <b>NGR TG345248</b> <b>10 ha</b> <b>Soil: peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Broad Fen Marsh Norfolk 31 - Broadlands None - S10 - Smallburgh 10
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no water conductivity data available. < 5km ditch network (not SSSI standard). Low interest.  Rare species score 0. Low interest.  Weighted LWG score 14 from 7 species. Moderate interest. Shoveler breeds in tetrad.  No information.  No information.  No information.



<p>84  <b>LWG BLOCK E549</b>  <b>NGR TG350265</b>  <b>52 ha</b>  <b>Soil: peat, other non-marine soils</b></p>	<p><b>Site Name</b> South Fen Marsh  <b>County</b> Norfolk  <b>Natural Area</b> 31 - Broadlands  <b>Conservation status</b> None  <b>IDB sub-area</b> 1 - S11 - Smallburgh 11</p>	
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No information.</p> <p>Habitat - no water conductivity data available.  &lt; 5km ditch network (not SSSI standard).  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Moderate interest.</p> <p>Rare species score 50.  Nat scarce: <i>Myriophyllum verticillatum</i>.  Moderate interest.</p> <p>Weighted LWG score 10 from 6 species. Moderate interest.</p> <p>No information.</p> <p>ISR Site Honing Common  Nb 3 NA 1 R3 1 II 270 RS 74 SQI 12.33 NRC 6.  Three NB, one NA, one RDB3, moderate II.  Moderate interest.</p> <p>No information.</p>

<b>85</b> <b>LWG BLOCK E550</b> <b>NGR TG339270</b> <b>12 ha</b> <b>Soil: other non-marine soil</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Honing Common Marsh (part) Norfolk 31 - Broadlands None 1 - S12 - Smallburgh12
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no water conductivity data available. < 5km ditch network (not SSSI standard). d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 0. Low interest.  Weighted LWG score 24 from 10 species. Strong interest. Gadwall, Marsh Harrier, Shoveler breed in tetrad. Same tetrad as 86,87,88.  No information.  No information.  No information.

<b>86</b> <b>LWG BLOCK E551</b> <b>NGR TG333267</b> <b>13 ha</b> <b>Soil: peat, other non-marine soil</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Honing Common Marsh (part) Norfolk 31 - Broadlands None 1 - S12 - Smallburgh 12
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  Habitat - no water conductivity data available. < 5km ditch network (not SSSI standard). Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e > 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Moderate interest.  Rare species score 0. Low interest.  Weighted LWG score 24 from 10 species. Strong interest. Gadwall, Marsh Harrier, Shoveler breed in tetrad. Same tetrad as 85, 87, 88.  No information.  No information.  No information.

<p>87  <b>LWG BLOCK E552</b>  <b>NGR TG330270</b>  13 ha  <b>Soil:</b> peat, other non-marine soil</p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Mill Common Marsh (part)  Norfolk  39/40 - East Anglian Plain/Broadlands  None  1 - S12 - Smallburgh 12</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>         <b>Breeding birds</b>      <b>Wintering birds</b>    <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   Habitat - no water conductivity data available.  &lt; 5km ditch network (not SSSI standard).  Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Moderate interest.   Rare species score 0.  Low interest.   Weighted LWG score 24 from 10 species. Strong interest. Gadwall, Marsh Harrier Shoveler breed in tetrad. Same tetrad as 85, 86, 88.   No information.   No information.   No information.</p>

<p>88  <b>LWG BLOCK E553</b>  <b>NGR TG325267</b>  14 ha  Soil: peat, other non-marine soil</p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Mill Common Marsh (part)  Norfolk  33 - East Anglian Plain  None  1 - S12 - Smallburgh 12</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - no water conductivity data available.  &lt; 5km ditch network (not SSSI standard).  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length  Moderate interest.   Rare species score 50.  Nat scarce: <i>Myriophyllum verticillatum</i>.  Moderate interest.   Weighted LWG score 24 from 10 species. Strong interest. Gadwall, Marsh Harrier, Shoveler breed in tetrad. Same tetrad as 85, 86, 87.   No information.   No information.   No information.</p>

<b>89</b> <b>LWG BLOCK E554</b> <b>NGR TG157117</b> <b>15 ha</b> <b>Soil: peat, other non-marine soil</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Costessey Park Marsh Norfolk 33 - East Anglian Plain None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 2 from 1 species. Low interest.  No information.  No information.  No information.

<b>90</b> <b>LWG BLOCK E555</b> <b>NGR TG150128</b> <b>13 ha</b> <b>Soil: peat, other non-marine soil</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Taverham Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 4 from 2 species. Low interest.  No information.  No information.  No information.

<p><b>91</b>  <b>LWG BLOCK E556</b>  <b>NGR TG130160</b>  <b>209 ha</b>  <b>Soil: peat, other non-marine soil</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Swannington and Ringland Marshes  Norfolk  33 - East Anglian Plain  River Wensum SSSI (adjacent)</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information.   Weighted LWG score 3 from 1 species. Low interest.   No information.   No information.   No information.</p>



<p><b>92</b>  <b>LWG BLOCK E557</b>  <b>NGR TG090200</b>  <b>79 ha</b>  <b>Soil: other non-marine soil,</b>  <b>peat</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Lenwade Marsh  Norfolk  39 East Anglian Plain  River Wensum SSSI (adjacent)</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information.   Weighted LWG score 4 from 3 species. Low interest.   No information.   ISR Site Whitwell Common  Nb 5 R2 1 NSP 25 II 300 RS 110 SQI 4.4 NRC 26. Five Nb and one RDB2 species, moderate II (300).  ISR Site Weston Park  NSP 1 RS 2 SQI 2 NRC 1. No interest for notable species.  Moderate interest overall.  No information.</p>

<b>93</b> <b>LWG BLOCK E558</b> <b>NGR TG113118</b> <b>22 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Honingham Marsh Norfolk 39 - East Anglian Plain None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 2 from 1 species. Low interest.  No information.  No information.  No information.

<b>94</b> <b>LWG BLOCK E559</b> <b>NGR TG075126</b> <b>25 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Hockering Marsh Norfolk 33 - East Anglian Plain None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No records for tetrad  No information.  No information.  No information.

<b>95</b> <b>LWG BLOCK E560</b> <b>NGR TG070185</b> <b>34 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Lyng Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No records for tetrad  No information.  No information.  No information.

<b>96</b> <b>LWG BLOCK E561</b> <b>NGR TG060186</b> <b>17 ha</b> <b>Soil: other non-marine soil</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Lyng Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (part)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  No records for tetrad  No information.  No information.  No information.

<p><b>97</b>  <b>LWG BLOCK E562</b>  <b>NGR TG045175</b>  <b>91 ha</b>  <b>Soil: other non-marine soil,</b>  <b>peat</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Mill Street Marsh (part)  Norfolk  33 - East Anglian Plain  River Wensum SSSI (adjacent)</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information.   Weighted LWG score 3 from 1 species. Low interest.   No information.   No information.   No information.</p>

<p><b>98</b>  <b>LWG BLOCK E563</b>  <b>NGR TG025177</b>  <b>87 ha</b>  <b>Soil: other non-marine soil, peat</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Mill Street Marsh (part)  Norfolk  33 - East Anglian Plain  River Wensum SSSI (adjacent)</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information.   Weighted LWG score 3 from 2 species. Low interest.   No information.   No information.   No information.</p>

<b>99</b> <b>LWG BLOCK E564</b> <b>NGR TG000200</b> <b>37 ha</b> <b>Soil: other non-marine soil, peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Billingford Marsh Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 6 from 4 species. Low interest.  No information.  No information.  No information.



<p><b>100</b>  <b>LWG BLOCK E565</b>  <b>NGR TG000250</b>  <b>147 ha</b>  <b>Soil: other non-marine soil,</b>  <b>peat</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Twyford and Guist Marshes  Norfolk  33 - East Anglian Plain  River Wensum SSSI (adjacent)</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>Norfolk Grassland Survey - Site 1054  Twyford Common.  Moderate area of M22b (4ha), S5/S7 (1ha),  S4(2ha). Strong interest.</p> <p>No information.</p> <p>Weighted LWG score 2 from 2 species. Very  low interest.</p> <p>No information.</p> <p>ISR Site River Wensum, Guist  R3 1 NSP 1 II 100 RS 32 SQI 32 NRC 1. One  RDB3 species, low to moderate II (100). Moderate  interest.</p> <p>No information.</p>

<p><b>101</b>  <b>LWG BLOCK E566</b>  <b>NGR TG080440</b>  <b>113 ha</b>  <b>Soil: marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Salthouse Marsh  Norfolk  30 - North Norfolk  North Norfolk Coast SSSI, SPA, Ramsar site</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - freshwater, oligohaline and mesohaline ditches.  a Ditch network &gt; 5km  b Fine example of freshwater-brackish transition  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  Strong interest, especially quality of mesohaline ditches.   Rare species score 250.  Nat scarce: <i>Ceratophyllum submersum</i>,  <i>Ranunculus baudotii</i>, <i>Hordeum marinum</i>, <i>Ruppia cirrhosa</i>, <i>Suaeda vera</i>.  Strong interest.   No records for tetrad.   Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced).  Strong interest.   No information.   No information.</p>

<p>102 LWG BLOCK E567 NGR TG050450 58 ha Soil: marine alluvium</p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>Fresh Marshes (part) Norfolk 30 - North Norfolk North Norfolk Coast (Cley) SSSI, SPA, Ramsar site</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation        Breeding birds        Wintering birds        Invertebrates  Other</p>	<p>No information.  Habitat - no water conductivity data available. &lt; 5km ditch length (not SSSI standard). Low interest.  Rare species score 200. Nat scarce: <i>Ceratophyllum submersum</i>, <i>Hordeum marinum</i>, <i>Puccinellia rupestris</i>, <i>Ranunculus baudotii</i>. Strong interest.  Weighted LWG score 30 from 12 species. Gadwall, Marsh Harrier, Shoveler breed in tetrad . Avocet also recorded from tetrad. Strong interest.  Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced). Strong interest.  No information.  No information.</p>

<p><b>103</b>  <b>LWG BLOCK E568</b>  <b>NGR TG040450</b>  <b>142 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Fresh Marshes (part)  Norfolk  30 - North Norfolk  North Norfolk Coast (Blakeney) SSSI, SPA,  Ramsar site</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>         <b>Breeding birds</b>         <b>Wintering birds</b>           <b>Invertebrates</b>    <b>Other</b></p>	<p>No information.</p> <p>Habitat - freshwater and oligohaline ditches.  a Ditch network &gt; 5km  b Fine example of freshwater-brackish transition  c High diversity of ditch-types (12 or more)  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  Strong interest, with high quality for all aspects of ditch habitat SSSI criteria.</p> <p>Rare species score 100.  Nat scarce: <i>Ceratophyllum submersum</i>,  <i>Ranunculus baudotii</i>.  Moderate interest.</p> <p>Weighted LWG score 30 from 12 species.  Gadwall, Marsh Harrier and Shoveler breed in tetrad. Avocet also recorded from tetrad. Same tetrad as 102. Strong interest.</p> <p>Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red-throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced).  Strong interest.</p> <p>No information.</p> <p>No information.</p>

<b>104</b> <b>LWG BLOCK E569</b> <b>NGR TF990180</b> <b>62 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Beetley Marsh Norfolk 33 - East Anglian Plain Beetley and Hoe Meadows SSSI (part)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	Norfolk Grassland Survey - Site 1033 West Hoe Meadow. Small area of M23b/S22 (2ha). Moderate interest. Norfolk Grassland Survey - Site 1040 Worthington Meadow. Small area of M23a/MG10 (2 ha). Moderate interest.  No information.  Weighted LWG score 1 from 1 species. Very low interest  No information.  No information.  No information.

<b>105</b> <b>LWG BLOCK E570</b> <b>NGR TF995206</b> <b>18 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	North Elmham Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 6 from 3 species.Low interest.  No information.  No information.  No information.

<b>106</b> <b>LWG BLOCK E571</b> <b>NGR TF993220</b> <b>63 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	North Elmham Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	Norfolk Grassland Survey Site - 1046 Boat House Meadow Good area of MG10b (6ha) and small area of S22/M23 (1ha). Moderate interest.  No information.  Weighted LWG score 5 from 3 species. Low interest.  No information.  No information.  No information.

<b>107</b> <b>LWG BLOCK E572</b> <b>NGR TF973258</b> <b>11 ha</b> <b>Soil: other non-marine soil, peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Ryburgh Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 7 from 4 species. Low interest.  No information.  No information.  No information.



<p><b>108</b>  <b>LWG BLOCK E573</b>  <b>NGR TF957280</b>  <b>186 ha</b>  <b>Soil: other non-marine soil,</b>  <b>peat</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Ryburgh Marsh (part)  Norfolk  33 - East Anglian Plain  River Wensum SSSI (adjacent)</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>Norfolk Grassland Survey Site - 1284  Pensthorpe Waterfowl Trust  Large areas of wet grassland M23a (17ha) and  swamp S28 (14ha). Strong interest.</p> <p>No habitat information.</p> <p>Rare species score 100.  Nat rare: <i>Phleum phleoides</i> cited in Norfolk  Grassland Survey. Moderate interest.</p> <p>Weighted LWG score 23 from 9 species. Gadwall,  Marsh Harrier and Shoveler breed in tetrad.  Mandarin also recorded from tetrad.  Strong interest.</p> <p>Part of Pensthorpe Lakes WeBs site which is of  moderate interest only with no species cited.</p> <p>No information.</p> <p>No information.</p>

<b>109</b> <b>LWG BLOCK E574</b> <b>NGR TF922290</b> <b>37 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Fakenham Marsh Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	Norfolk Grassland Survey Site - 1278 Fakenham Sewage Works Meadows Moderate area of wet grassland M23b (4 ha), M22b (3ha) and swamp S7 (1ha). Strong interest.  No information.  Weighted LWG score 12 from 6 species. Moderate interest.  No information.  No information.  No information.

<b>110</b> <b>LWG BLOCK E575</b> <b>NGR TF914297</b> <b>34 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Sculthorpe Fen Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	Norfolk Grassland Survey Site - 1277 Sculthorpe Meadows MG8 (3 ha), S4 (2ha), S5 (1ha), S28 (8ha). Strong interest.  No information.  Weighted LWG score 12 from 7 species. Moderate interest.  No information.  No information.  No information.

<b>111</b> <b>LWG BLOCK E576</b> <b>NGR TF905300</b> <b>15 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Sculthorpe Fen Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 3 from 2 species. Low interest. Mandarin also recorded from tetrad.  No information.  No information.  No information.

<p>112  <b>LWG BLOCK E577</b>  <b>NGR TF882290</b>  85 ha  Soil: other non-marine soil,  peat</p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Tatterford Marsh (part)  Norfolk  33 - East Anglian Plain  River Wensum SSSI (adjacent)</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>Norfolk Grassland Survey Site - 1266 Shereford Meadow  No information. - access refused.   No information.   Weighted LWG score 12 from 5 species. Moderate interest. Marsh Harrier breeds in tetrad.   No information.   ISR Site River Wensum, Sculthorpe  NB 1 NSP 1 II 40 RS 8 SQI 8 NRC 1. One NB, low II (40). Low interest.   No information.</p>

<b>113</b> <b>LWG BLOCK E578</b> <b>NGR TF854278</b> <b>17 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Tatterford Marsh (part) Norfolk 33 - East Anglian Plain River Wensum SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	Norfolk Grassland Survey - Site 582 Pynkney Meadow Large area of MG8 (21 ha). Strong interest.  No information.  Weighted LWG score 2 from 1 species. Very low interest.  No information.  No information.  No information.



<b>115</b> <b>LWG BLOCK E580</b> <b>NGR TF834310</b> <b>13 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Coxford Heath Marsh Norfolk 33 - East Anglian Plain None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 8 from 4 species. Moderate interest.  No information.  ISR Site Syderstone Common NB 2 R3 1 NSP 15 II 180 RS 72 SQI 4.8 NRC 15. Two NB, one RDB3, moderate II (180). Moderate interest.  No information.



<b>116</b> <b>LWG BLOCK E581</b> <b>NGR TF894177</b> <b>20 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Litchan Marsh (part) Norfolk 33 - East Anglian Plain River Nar SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 2 from 2 species. Very low interest.  No information.  No information.  No information.

<b>117</b> <b>LWG BLOCK E582</b> <b>NGR TF880170</b> <b>29 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Litchan Marsh (part) Norfolk 33 - East Anglian Plain River Nar SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 2 from 2 species. Very low interest.  No information.  No information.  No information.

<b>118</b> <b>LWG BLOCK E583</b> <b>NGR TF863169</b> <b>10 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	East Lexham Marsh Norfolk 33 - East Anglian Plain River Nar SSSI (adjacent)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 10 from 4. Moderate interest  No information.  No information.  No information.

<b>119</b> <b>LWG BLOCK E584</b> <b>NGR TF820159</b> <b>61 ha</b> <b>Soil: other non-marine soil,</b> <b>peat</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Castle Acre Marsh Norfolk 30 - North Norfolk Castle Acre Common SSSI (119 > SSSI)
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 5 from 6 species. Low interest.  No information.  ISR Site Broadmeadow Common NB 1 R3 1 NSP 4 II 140 RS 43 SQI 10.75 NRC 4. One NB, one RDB3, low - moderate II (140). Moderate interest.  No information.

<b>120</b> <b>LWG BLOCK E585</b> <b>NGR TF630143</b> <b>44 ha</b> <b>Soil: marine alluvium,</b> <b>other non-marine soil</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	Setchey Marsh Norfolk 27 - Fenland None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 4 from 3 species. Low interest.  No information.  No information.  No information.

<b>121</b> <b>LWG BLOCK E586</b> <b>NGR TF613182</b> <b>12 ha</b> <b>Soil: marine alluvium</b>	<b>Site Name</b> <b>County</b> <b>Natural Area</b> <b>Conservation status</b> <b>IDB sub-area</b>	King's Lynn Marsh Norfolk 27 - Fenland None
<b>KEY INTERESTS</b>	<b>Grassland sward</b>  <b>Ditch vegetation</b>  <b>Breeding birds</b>  <b>Wintering birds</b>  <b>Invertebrates</b>  <b>Other</b>	No information.  No information.  Weighted LWG score 17 from 8 species. Marsh Harrier breeds in tetrad. Strong interest.  No information.  No information.  No information.



<p>123  <b>LWG BLOCK E588</b>  <b>NGR TF710440</b>  <b>84 ha</b>  <b>Soil: marine alluvium</b></p>	<p>Site Name  County  Natural Area  Conservation status  IDB sub-area</p>	<p>Holme and Redwell Marsh  Norfolk  30 - North Norfolk  North Norfolk Coast SSSI, SPA, Ramsar site</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward   Ditch vegetation   Breeding birds   Wintering birds   Invertebrates   Other</p>	<p>No information.   Habitat - no water conductivity data available.  a Ditch network &gt; 5km  Low interest.   Rare species score 50.  Nat scarce: <i>Ranunculus baudotti</i>.  Moderate interest.   Weighted LWG score 20 from 10 species.  Ruff breeds in tetrad.  Strong interest.   Part of North Norfolk Marshes WeBs site which is  of international importance for overall numbers  (70,000 wildfowl and waders) and Pink-footed  Goose (Scolt Head Island), Dark-bellied Brent  Goose, Wigeon, Pintail, Knot and Bar-tailed  Godwit populations. National importance for Red -  throated Diver, Little Grebe, Shelduck, Gadwall,  Teal, Shoveler, Common Scoter, Sanderling,  European White-fronted Goose, Avocet, Ruff and  Egyptian Goose (introduced).  Strong interest.   ISR Site - Holme Dunes  NB 33 NA 6 R3 3 R2 1 R1 1 NSP 60 II 2320 RS  610 SQI 10.17 NRC 73. High notable total (44)  with numbers in all categories. Very high II  (2320), fairly high rarity score (610). Well visited  (73) records. High scores probably represent mix  of habitats (including dune), not just LWG.  Strong interest.   No information.</p>



<p><b>124</b>  <b>LWG BLOCK E589</b>  <b>NGR TF748439</b>  <b>22 ha</b>  <b>Soil:</b> marine alluvium,  other non-marine soil</p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Brancaster and Thornham Marsh (part)  Norfolk  30 - North Norfolk  North Norfolk Coast SSSI, SPA, Ramsar site</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   Habitat - no water conductivity data available (probably freshwater).  &lt; 5km ditch network (not SSSI standard).  d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length  Moderate interest.   Rare species score 0.  Low interest.   Weighted LWG score 8 from 6 species. Moderate interest.   Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced).  Strong interest.   ISR Site - Titchwell  NB 13 NA 2 R3 2 NSP 23 II 820 RS 212 SQI 9.22 NRC 26. As 125 - moderate NB total (17) with mainly NB species, high II (820).  Strong interest.   No information.</p>

<p>125 LWG BLOCK E590 NGR TF750449 10 ha soil: marine alluvium</p>	<p>Site Name County Natural Area Conservation status IDB sub-area</p>	<p>Brancaster Marsh (part) Norfolk 30 - North Norfolk North Norfolk Coast SSSI, SPA, Ramsar site</p>
<p><b>KEY INTERESTS</b></p>	<p>Grassland sward  Ditch vegetation  Breeding birds  Wintering birds  Invertebrates  Other</p>	<p>Interest uncertain. SSSI habitat map records small areas of mesotrophic grassland on high rises within saltmarsh, dissected by natural sinuous ditches.</p> <p>No information. Not examined by Reid, Leach and Newlands (1989).</p> <p>Weighted LWG score 55 from 20 species. Exceptionally strong interest with all LWG species except Corncrake and Pintail. SSSI interest. Gadwall, Garganey, Marsh Harrier, Quail, Ruff, and Shoveler breed in tetrad. Avocet, Bittern, Fulmar, Kittiwake, Little tern, Long eared Owl and Water rail also recorded from tetrad. The wet grassland interest is probably heavily exaggerated due to small area of grassland within area of very diverse habitat (mudflats, saltmarsh, dune, wet grassland,swamp) Strong interest.</p> <p>Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red-throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced). Strong interest.</p> <p>ISR Site - Titchwell NB 13 NA 2 R3 2 NSP 23 II 820 RS 212 SQI 9.22 NRC 26. As 124 - moderate notable total (17) with mainly NB species, high II (820). Strong interest.</p> <p>No information.</p>

<p><b>126</b>  <b>LWG BLOCK E591</b>  <b>NGR TF768445</b>  <b>32 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b> Brancaster Marsh (part)  <b>County</b> Norfolk  <b>Natural Area</b> 30 - North Norfolk  <b>Conservation status</b> North Norfolk Coast SSSI, SPA, Ramsar site  <b>IDB sub-area</b></p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b> No information.</p> <p><b>Ditch vegetation</b> Habitat - no water conductivity data available.  a Ditch network &gt; 5km  Low interest.   Rare species score 50.  Nat scarce: <i>Carex divisa</i>.  Moderate interest.</p> <p><b>Breeding birds</b> Weighted LWG score 26 from 12 species.  Gadwall and Marsh Harrier breed in tetrad.  Avocet also recorded from tetrad. Same tetrad as 127.  Strong interest.</p> <p><b>Wintering birds</b> Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red-throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced).  Strong interest.</p> <p><b>Invertebrates</b> No information.</p> <p><b>Other</b> No information.</p>

<p>127  <b>LWG BLOCK E592</b>  <b>NGR TF775453</b>  15 ha  <b>Soil:</b> marine alluvium,  other non-marine soil</p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Brancaster Marsh (part)  Norfolk  30 - North Norfolk  North Norfolk Coast SSSI, SPA, Ramsar site</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>   <b>Breeding birds</b>   <b>Wintering birds</b>   <b>Invertebrates</b>   <b>Other</b></p>	<p>No information.   No information. Not surveyed by Reid, Leach and Newlands (1989).   Weighted LWG score 26 from 12 species. Gadwall and Marsh Harrier breed in tetrad. Avocet also recorded from tetrad. Same tetrad as 126.  Strong interest.   Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red-throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced).  Strong interest.   ISR Site - Brancaster  NB 38 NA 8 R3 5 NSP 129 II 2420 RS 775 SQI 6.01 NRC 156. High notable total (46) from NB, NA and RDB3 categories. High II (2420) and rarity score (775). Well visited (156) records.  Strong interest.   No information.</p>

<p>128 LWG BLOCK E593 NGR TF830445 121 ha Soil: marine alluvium</p>	<p>Site Name Burnham and Norton Marsh County Norfolk Natural Area 30 - North Norfolk Conservation status North Norfolk Coast SSSI, SPA, Ramsar site IDB sub-area</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b> No information.</p> <p><b>Ditch vegetation</b> Habitat - freshwater ditches. a Ditch network &gt; 5km c High diversity of ditch-types (12 or more) d Freshwater systems with average of 10+ aquatic or emergent species per 20m ditch length e &gt; 50% ditches having either 10+ (freshwater) or 6+ (brackish) aquatic or emergent species per 20m ditch length Strong interest.  Rare species score 100. Nat scarce: <i>Ceratophyllum submersum</i>, <i>Ranunculus baudotii</i>. Moderate interest.</p> <p><b>Breeding birds</b> Weighted LWG score 21 from 10. Gadwall and Shoveler breed in tetrad. Bittern also recorded from tetrad. Strong interest.</p> <p><b>Wintering birds</b> Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red-throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced). Strong interest.</p> <p><b>Invertebrates</b> No information.</p> <p><b>Other</b> No information.</p>



<p><b>130</b>  <b>LWG BLOCK E595</b>  <b>NGR TF880450</b>  <b>181 ha</b>  <b>Soil: marine alluvium</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Holkham Marsh  Norfolk  30 - North Norfolk  North Norfolk Coast SSSI, SPA, Ramsar site</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b>   <b>Ditch vegetation</b>         <b>Breeding birds</b>    <b>Wintering birds</b>           <b>Invertebrates</b>    <b>Other</b></p>	<p>No information.   Habitat - freshwater and brackish ditches.  a Ditch network &gt; 5km  b Fine example of freshwater-brackish transition  c High diversity of ditch-types (12 or more)  Strong interest.   Rare species score 200.  Nat scarce: <i>Carex divisa</i>, <i>Ceratophyllum submersum</i>, <i>Hydrocharis morsus-ranae</i>, <i>Ranunculus baudotii</i>  Strong interest.   No records for tetrad.   Part of North Norfolk Marshes WeBs site which is of international importance for overall numbers (70,000 wildfowl and waders) and Pink-footed Goose (Scolt Head Island), Dark-bellied Brent Goose, Wigeon, Pintail, Knot and Bar-tailed Godwit populations. National importance for Red-throated Diver, Little Grebe, Shelduck, Gadwall, Teal, Shoveler, Common Scoter, Sanderling, European White-fronted Goose, Avocet, Ruff and Egyptian Goose (introduced).  Strong interest.   No information.   No information.</p>

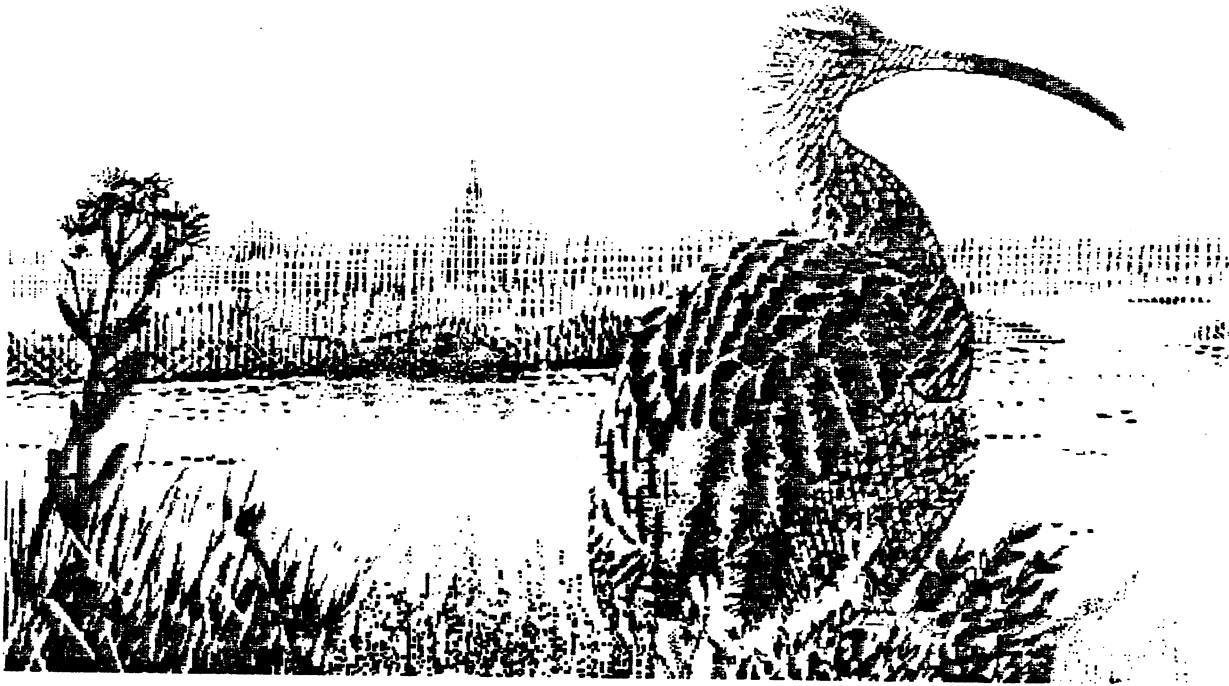
<p><b>131</b>  <b>LWG BLOCK E430</b>  <b>NGR TL55970</b>  <b>698 ha</b>  <b>Soil:</b></p>	<p><b>Site Name</b>  <b>County</b>  <b>Natural Area</b>  <b>Conservation status</b>  <b>IDB sub-area</b></p>	<p>Ouse Washes  Norfolk (most of block in Cambridgeshire)  27 - Fenland  Ouse Washes SSSI, SPA and Ramsar site  No information.</p>
<p><b>KEY INTERESTS</b></p>	<p><b>Grassland sward</b></p> <p><b>Ditch vegetation</b></p> <p><b>Breeding birds</b></p> <p><b>Wintering birds</b></p> <p><b>Invertebrates</b></p> <p><b>Other</b></p>	<p>No Phase 2 information. SSSI description notes large area of unimproved neutral grassland (probably MG13) mixed with swamp and probable tall-herb fen types (S5, S22, S28). Recorded as strong interest.</p> <p>No Phase 2 information. SSSI description notes richness of aquatic flora within associated watercourses, including many <i>Potamogeton</i> spp., <i>Nymphoides peltata</i>, <i>Sium latifolium</i> and four <i>Lemna</i> spp.</p> <p>Weighted LWG score 33 from 13 species, with Gadwall, Garganey, Pintail and Shoveler recorded as high-scoring species breeding in tetrad. Strong interest.</p> <p>Of international importance for overall numbers (53,000 wildfowl and waders) and Bewick's Swan, Whooper Swan, Wigeon, Gadwall, Teal, Pintail and Shoveler populations. National importance for Cormorant, Mute Swan, Mallard, Pochard, Tufted Duck and Coot populations. Strong interest.</p> <p>No detailed information. SSSI description notes aquatic fauna of great interest.</p> <p>SSSI description emphasises that one of few remaining areas of extensive washland habitat in Britain, with regular winter flooding and summer cattle grazing and hay production using traditional methods. Majority of area under nature reserve management (two county trusts, RSPB, Wildfowl Trust).</p>





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LOWLAND WET  
GRASSLAND



R E S O U R C E S U R V E Y

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