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## **West Lindsey Local Wildlife Site Review 2007 – 08 Final Report**

Local Wildlife Site Review

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September 2010

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## REPORT CONTROL

Document: Final doc

Project: West Lindsey Local Wildlife Site Review 2007 – 08.

Client: West Lindsey District Council

Job Number: E011783

File Origin: \\Ecology\Projects E011500 on\E011753 West Lindsey\2010 Final Report

### Document Checking:

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Issue	Date	Status	Checked for Issue
1	07 / 09 / 2010	Final	TC
2			
3			
4			

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## 1 INTRODUCTION

White Young Green Environmental was commissioned by West Lindsey District Council (WLDC) in 2006 to carry out a review of Local Wildlife Sites (LWSs) in the District. These sites were previously assessed in the late 1970s and early 1980s and designated as Sites of Nature Conservation Importance (as LWSs were known at that time). The reason for the present review was to reassess them against the new, stricter criteria for LWS.

This review was undertaken during 2007 and 2008, in partnership with the Lincolnshire Farming and Wildlife Advisory Group (FWAG) as set out in the project agreement.

The West Lindsey Local Plan First Review which was adopted in June 2006 contained a total of 166 Sites of Nature Conservation Importance (SNCI); approximately 43 of these sites have been subjected a separate review in 2005 and 2006 respectively under the Lincolnshire Wolds Project and also the Biodiversity Action Plan Partnership. The remaining 123 SNCIs required a Phase 1 Habitat Survey to inform the emerging West Lindsey Local Development Framework using the criteria contained in the Lincolnshire BAP Partnership document "Local Wildlife Sites – Guidelines for their Identification and Selection in the Historic County of Lincolnshire."

Surveys could only take place with land owner permission and permission was granted to approximately 94% of the sites. Where access was refused, this was sometimes for health and safety reasons (for example one site being an M.O.D munitions dump) whilst in others, the ecological interest of the original SNCI had been destroyed by agriculture (this was checked through visual inspection where the land in question was visible from publicly accessible land and using Google Earth aerial photographs for those which weren't). For some other sites, no owner could be traced despite extensive investigation.

Survey results for all sites were given to their respective owners (and / or tenants where applicable) and management advice provided, also where applicable.

### 1.1 SURVEY METHODOLOGY

These sites were surveyed during the optimal survey season for recording vegetation (i.e. between late April and September) in either 2007 or 2008. Survey timing was generally tailored to individual habitat types so that woodland surveys took place during April to early June whereas wetland sites were surveyed between July and September due to the later flowering period for aquatic species. It was not always



possible to adhere to these timings for a variety of reasons although they were adhered to as far as reasonably practicable.

A very few grassland sites had been mown prior to the survey in 2007 and in these cases, the majority of sites in question were re-surveyed the following year prior to mowing.

Scheduled ancient woodland sites were identified using Natural England's interactive, web-based MAGIC (Multi Agency Geographic Information for the Countryside) database and included both semi-natural and re-planted ancient woodland. Some of the woodland areas, in particular around Market Rasen, had been replanted with coniferous species after the Second World War although they still retain a wide diversity of ancient woodland indicator plant species along the rides.

Natural England's ancient woodland register does not include woods below 2Ha in size so some such as Heaton's Wood, Larch Plantation and Kingerby Belt are not listed on the register but contain some ancient woodland indicators (such as native bluebells) but not sufficient for LWS designation.

As complete a species list as possible was created for each site, given that only a single survey visit was made to the majority of sites. The exception was for some sites with aquatic plants where additional survey work was carried out to identify submerged aquatic plants using a grapnel which significantly enhanced the species list for those sites. Landowner permission was sought and granted before any additional survey work was done.

Notes were also taken on habitat quality, management and suitability for any notable species which had been previously recorded during the original SSCI surveys; which were also searched for. Habitat quality was variable across the suite of sites surveyed with grassland sites showing the greatest decline in habitat quality. Several road verges which met the SSCI in the 1970s and early 1980s no longer did so at the time of the current survey. Possible reasons include lack of management (allowing spread of coarse grasses and scrub) and herbicide spraying on one verge near Ingham, which happened in 2008 after the original survey but which has caused a considerable decline in biodiversity. It is however recovering at the time of writing.

Ecological information on each site was written up and assessed against the LWS criteria for their relevant habitats. Any sites which failed to meet the LWS criteria by a narrow margin (typically by just 1 or 2 points) were highlighted as "near-miss" sites and recommendations were made to re-evaluate them at the next LWS review period.



## 2 SELECTION GUIDELINES: RATIONALE

### 2.1 LWS SCORING SYSTEM

The Lincolnshire Local Wildlife Site Selection Guidelines (2006 update) were used to determine which sites were selected as LWS. This document follows guidelines set down by DEFRA in Annex C (Defra 2006).

Within these guidelines, emphasis is placed on botanical data as data concerning most faunal groups is more difficult to obtain than is botanical data. Very few faunal groups are studied to a similar extent to flora (the most notable exceptions being birds and butterflies). To cope with this problem, the guidelines employ botanical recording as the primary means of identifying good habitat but also incorporates other approaches for recognizing faunal interest (see section 2.4).

The guidelines employ a scoring system for vascular plants on a one point per species basis. The list of qualifying plant species has been drawn up in consultation with local botanists who have specific knowledge of Lincolnshire habitats. In the case of woodlands, the major part of the list is composed of ancient woodland indicator species derived from a detailed study of woodlands in central Lincolnshire by Peterken (2000). The six rarest woodland species were omitted as they are all restricted to a single site. These were replaced by six fern species considered typical of woodlands (all ferns had been omitted from Peterken's study).

The one point per species rule has been amended for certain difficult-to-identify (critical) groups such as water starworts (*Callitriche*), bog mosses (*Sphagnum*), eyebrights (*Euphrasia*), bladderworts (*Utricularia*) and water-cresses (*Rorripa*). These species groups contribute no more than one point to the overall score. This method is considered appropriate because most surveyors do not differentiate between these critical species-groups.

### 2.2 SIZE THRESHOLDS

The level at which the LWS threshold was set was based on data from a 2004 pilot study carried out by Lincolnshire Environmental Records Centre (LERC) and the thresholds may be adjusted in future years reflecting local, regional and national trends in plant abundance and distribution. Minimum size thresholds have been set and the level of these depends on habitat type; for example size thresholds for grassland (whether acidic, neutral or calcareous) and heathland are set at 0.1Ha whereas the size threshold for



reedbeds, swamps and fens is 0.5Ha. No size limit has been set for ponds although garden ponds are excluded from LWS designation on the basis that their floral assemblages are likely to be artificial. No size threshold has been set for woodland sites.

There is no maximum size for LWSs provided that recording has been carried out to a satisfactory level (in the opinion of the LWS panel) and that the selection guidelines are satisfied for each of the component parts. Two woods which are adjacent to one another and which were split into two separate sites in the original SNCI designation were amalgamated into a single site under the LWS criteria (Thurlby Wood and Top Fox Covert). The amalgamation of two adjacent sites explains the apparent decrease in the total number of sites designated.

Linear habitats have a minimum size threshold of 50 metres; such sites include road and rail verges, tracks, green lanes and stream / river sides. Where verges on opposite sides of any given road occur and met the old SNCI criteria, these were surveyed as separate entities but, if both met the LWS criteria, they were amalgamated as one LWS by the panel as they are clearly a single ecological unit. Metalled roads are excluded from the LWS designated area.

## 2.3 HABITAT TYPE CRITERIA

The various habitat types in the LWS guidelines are largely self-explanatory although the habitat mosaic criteria require some explanation:

Habitat mosaics are important for a range of invertebrates and other fauna that require different habitat types within a limited distance, not all of these habitats are necessarily considered for LWS status; for example many invertebrates require areas of bare ground. There are three criteria which relate to habitat mosaics; these are outlined below:

Mos 1 allows selection of combinations of habitats, providing that each has an index score no more than three points below the appropriate threshold. This reflects the concept that groups of habitats can be of great wildlife value, even if their individual components are not particularly species-rich.

Mos 2 provides the option of designating important subsidiary habitat to land which qualifies as LWS. Examples of Mos 2 would include a hydrological buffer zone between intensively farmed arable land and wetland areas to prevent nutrient enrichment of the wetland through fertiliser run-off; or providing foraging opportunities for species which breed in the main site.



Mos 3 permits designation of linear habitat of little intrinsic interest if it forms a connection between LWSs, linking sites which are in effect stepping stones. These are often located within largely inhospitable intensively managed habitats, for example hedgerows or areas of scrub linking two LWS woodlands.

Mos 4 permits designation of habitats which fail to meet the criteria by just a few points but which contain nationally or locally rare plant species and which are also of significant importance for fauna. This criterion is applied using the professional judgement of the LWS panel members and in consultation with specialist groups such as Lincolnshire Bird Club and the county Bat Group. Additional specialist survey work may be required by the LWS panel prior to designation.

## 2.4 RECORDING OF FAUNA

The LWS selection criteria do not include assemblages of fauna although recording of fauna at sites is considered of significant importance by the LWS panel and faunal records were made where and when seen although specific surveys for fauna were outside the scope of the survey.

Recording of birds was of particular importance at Toft Newton Reservoir where the site did not qualify for LWS status on the floral assemblage, largely due to the concrete banks precluding any marginal flora although the LWS panel considered this site to be of importance for wintering and moulting wildfowl and deferred a decision on LWS status until further information had been acquired from the county Bird Club.

Recording of invertebrates was limited on some dates due to unsuitable weather conditions, as invertebrate surveys were beyond the scope of the brief. However, incidental records were made when invertebrates were observed during the surveys. The original SNCI proformas often listed notable invertebrate species. Habitat evaluation for these notable species was carried out where appropriate.



### 3 DECISION MAKING

#### 3.1 THE SELECTION PROCESS

Once all of the surveys were complete for each of the years 2007 and 2008, the results for each site were submitted to the LWS Panel for consideration. This panel is made up of personnel with ecological expertise appointed by the BAP steering group and their recommendations were based on the LWS guidelines.

Sites which have been designated as SSSI since the original SNCI designation were not considered for LWS status due to their higher designation.

Sites which clearly met the LWS criteria were recommended for selection and their boundaries were prescribed. Where very large sites, e.g. Messingham Ings, incorporated land outside West Lindsey, only the sections within the District were surveyed. Brief notes on habitat quality in the section outside the District were passed on to the Panel and recommendations to survey these additional areas were made. Provision was thus made to extend the site through future surveys by other surveyors outside West Lindsey.

#### 3.2 DEFERRED SITES

Sites which did not meet the LWS criteria but which failed by only one or two points were not necessarily rejected and the majority of these so-called "near-miss" sites were deferred for further information. A total of 17 sites were deferred for further information out of a grand total of 123 sites.

Table 1 below details the deferred sites and the reason for deferral:

<b>Site Name:</b>	<b>Grid Ref:</b>	<b>Reason for Deferral:</b>
Hardwick Crossing	SK884758	Survey was limited by access for health and safety reasons (site owned by Network Rail), likely to be more qualifying species. Requires further survey.
Riseholme Hall Wood	SK980758	Under ongoing student management (removing sycamore etc) and likely to qualify in the future. Good bat habitat, but requires further bat survey.
Ash Holt	SK919868	Likely to be Ancient Woodland, bit not listed on Inventory. RG <sup>1</sup> to check cartographical records held by WLDC
Glentworth Big Wood	SK911870	Possible Ancient Woodland - RG to check (as above)
Heatons Wood	SK903866	Possible Ancient Woodland – RG to check (as Ash Holt)
Larch Plantation	SK917867	Possible Ancient Woodland - RG to check (as Ash Holt)
Candley Beck	TA006065	Ancholme Internal Drainage Board records need checking

<sup>1</sup> RG – Richard Green: West Lindsey Development Plans Officer until 2009



<b>Site Name:</b>	<b>Grid Ref:</b>	<b>Reason for Deferral:</b>
		(drain cleared of vegetation prior to survey)
Grasby Meadows	TA085048	Requires re-survey in May/June (to avoid hay cut).
Sudbrooke Park	TF046764	Amend site boundary to exclude three arable fields and 'T-shape' of woodland to north of site. Historically good bat habitat. Requires bat survey. Resurvey southern section
Toft Newton Reservoir	TF035875	Owned by Anglian Water. Mos4 for birds? Lincs Trust to contact Bird Club for expert opinion (Graham Catley/Anne Goodall)
Kingerby Belt & Young's Wood (The Chase)	TF060913	Possible Ancient Woodland - RG to check (as Ash Holt)
Osgodby Wood	TF093923	Contact Wally Grice at FC to identify areas of active heathland management <sup>2</sup>
Starlings Meadow	TF151885	Surveyor (Barney Parker, FWAG) recommended deferral due to previous intensive grazing pressure – several species on the SNCI proforma could not be found but are considered likely to still be present.
Willingham Forest A631 to B1203	TF130895	Sufficient LWS qualifying species were recorded but over an area of approximately 3km. Further surveys of this area have been undertaken in 2010 by Lincolnshire Wildlife Trust and the wood will be re-considered at a future panel meeting in 2010/11.
Willingham Forest South of A631	TF140880	As above
Croxby Ponds	TF198998	LWS panel to contact Helen Gamble to clarify management (was managed in 90's). Grassland area not on LERC map, boundaries need confirmation.
Padley's Wood (Walesby Road Plantation)	TF116900	Lots of non-indicator Lichens and Sphagnum mosses. AT to refer to notes and contact Adam Kwolek (Natural England) to ascertain if this is Ancient Woodland.

<sup>2</sup> FC are felling blocks of conifers in this wood and heathland is the subject of habitat re-creation. In this instance, it was considered that the area of heathland meeting the LWS criteria could be enlarged following further clearance work in future years.



## 4 SUMMARY OF LWS PANEL RECOMMENDATIONS

### 4.1 SITES SELECTED FOR LWS DESIGNATION

Table 2 below shows sites selected for LWS in 2007 and 2008:

<b>Sites Designated LWS in 2007</b>		
Bass Wood & Park Springs Wood	Caistor's Wood	Lea Wood
Legsby Green Lane (east end only for c. 500m) – substantial reduction in area meeting LWS criteria	Nettleton Scarp North Verge (South Verge fails to meet LWS criteria)	Thornton-le-moor Verges (amalgamated to include both north and south verges)
Warren Wood (Brickyard Plantation fails to meet LWS criteria)	Fillingham (Ingham) North Verge (site boundary to include extension to west and east)	Walesby Top Verges (both north and south)
Cuxwold Verge	Lea Meadows (Gainsborough)	
<b>Sites Designated LWS in 2008</b>		
River Eau & Messingham Ings	Broom Hills	Knaith Park Wood
Thurlby Wood (including Top Fox Covert)	Upton Grange Verges (both NW and SE verges)	Whites Wood
Birch Wood (including an extension to the east)	Laughton Forest (including both North and East Sections and road verges at Susworth Road and Tuetoes Hill)	Owlet Plantation
Scotton Verges (including both north and south verges)	Somerby and Hornby Woods	Wharton Wood (including Corringham Scroggs, lake and surrounding land)
Ermine Street (east and west verges) – site re-named Ermine Street, Cammeringham	Norton Place Fish Ponds (including adjacent woodland)	Grasby Bottoms Green Lane (site boundary amended to adjoin LWS section in North Lincolnshire)
Brompton Dale	Cabourne High Wood	Caen Hill & Fox Dale
Cottagers Dale Wood	Great Limber Pit	Halliday Hill (site boundary amended to exclude non-wooded areas)
Hendale Wood	Irby Dales Wood (re-named Irby Dales Wood West)	Mausoleum Woods (includes Water Hills and Spa Bottom)
Brocklesby Park	Roxton Wood (includes section in North East Lincolnshire)	Roxton Wood Verges (both north and south)
Barling's Eau	Fiskerton Brick Pit and Bank	Greetwell Hall Wood
Pickerings Meadow	Highgate Lane (including both north and south verges)	Snarford Meadow
Kingerby Wood (site boundary amended to match extent of remaining woodland)	Bleasby and Lady Woods	Croppers Gorse Hay Field
Croppers Gorse Plantation	Eleanor Wood	Holtham Carrs Road Verges



Linwood Golf Course (boundary extended to cover additional land acquired since the survey)	Linwood Warren South Verge	Lynwode Wood
Market Rasen Ponds	Scrub Wood and Pingle Plantation	Claxby Wood
Middle Rasen Plantation (re-named Middle Rasen Heathland)	Oxgangs Hillside (amalgamating north and south sides)	Holds Hill

LWS Site proformas (including full species lists), site boundary plans and location maps have been provided to WLDC.

#### 4.2 SITES REJECTED FOR LWS DESIGNATION

Sites which were rejected as LWS failed to meet the criteria by some considerable margin and it was considered that habitat condition had deteriorated to such an extent that recovery to LWS standard would be unlikely within a realistic timescale. Those sites where recovery was considered feasible have been placed in the “near miss” category and were recommended for re-survey in the future.

Table 3 below shows those sites rejected for LWS designation

Naylor’s Hills	Newton Cliff	Normanby Gorse (including both Gorse Wood and Fox Covert)
Park Plantation (Knaith)	Laughton Common (woodland)	Harpwell and Peter’s Woods
Blyborough Wood (a.k.a The Islands)	Yawthorpe Fox Covert	Bigby Hill
Grasby Beck Woodland	Wellholmes Holt	Greetwell Wood
New Ten Acre Covert	Cold Hanworth Holt	Snarford Holt
Toft Newton Belt	Raspberry Plantation	Spinney Opposite Lodge
Usselby Roman Road Plantation (including Crawley Wood)	Bleasby Mount	Collow Holt
Little London Wood	North Willingham Pasture	Old Fox Covert
Sandwick Plantation	Goody Orchin Plantation	Nimbleton Plantation
Linwood Road Verge		

#### 4.3 SITES NOT SURVEYED

A total of ten sites were not surveyed in 2007 or 2008; these sites and the reason for lack of survey are given in Table 4 below:

Table 4 – Sites Not Surveyed

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<b>Site Name</b>	<b>Reason for not surveying</b>
Barling's Pit	No pits left, land is now a landfill site
Little Grange Field	Access refused by landowner
Faldingworth Wood	Access refused by landowner
Pleasure House Wood	Owner could not be traced
Hackthorn House Wood	Owner could not be traced, site possibly now destroyed
Tiger Holt	Access refused by landowner
North Kelsey	Site now arable field
Usselby Fish Ponds	Access refused by landowner
The Nook, Snarford	Access refused by landowner
Newton Fox Covert	Access refused by landowner, site M.O.D munitions dump.



## 5 REFERENCES

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