

APPENDIX 1: DATA BASELINE

Digital Data Sets

Table 1.1: Information sources available for biodiversity audit

Organisation/Source	Dataset	Format
Wigan Council	OS data: - 1:50,000 base maps - 1:10,000 base maps - MasterMap Aerial Photos (2005 & 2006) Phase 1 Habitat Maps (Paper maps) Derelict Land Survey Employment Land Review Greenbelt Greenheart boundary Historic Parks Gardens and Cemeteries Land Availability Land Reclamation and Renewal Local Nature Reserves Open Space Study River centrelines and floodzones Safeguarded Land SBI boundaries SSSI Contours Council owned land Rights of Way	Rasters Shapefiles 225 Paper Phase 1 maps covering borough (Date: 1986)
Greater Manchester Ecology Unit	SBI boundaries Species records	Shapefiles
Communities and Local Government	Generalised Land Use Database (2005)	MasterMap toid list with GLUD classification
Natural England	Ancient Woodland Environmental Stewardship Schemes National Habitat Inventories Ramsar sites Special Areas for Conservation Special Protection Areas SSSIs Open Access Areas	Shapefiles
Forestry Commission	National Inventory of Woodlands and Trees	Shapefiles
Red Rose Forest	Woodland Resource Survey	Shapefiles
National Biodiversity Network	Species records	Excel lists
South Lancashire Bat Group	Bat species records	Excel lists
Greater Manchester Bird Recording Group	Sch1 & UKBAP species records (excluding Pennington Flash)	Excel lists
Greater Manchester Bird Recording Group - website	Pennington Flash species list	

Supporting Documents supplied by Wigan Council / Wigan Biodiversity Partnership

- Whelley Loop Line South Amphibian Survey Report(2003) – produced by Ecology Services Ltd for Wigan Council
- Whelley Loop Line South and Kirkless Canalside Amphibian Survey Report (2006) – produced by Ecology Services Ltd for Wigan Council
- Kirkless Canalside Amphibian Survey Report (2003) – produced by Ecology Services Ltd for Wigan Council
- Pickley Green Railway Great Crested Newt Mitigation Method Statement (2003) - produced by Ecology Services Ltd for Wigan Council
- Mosslands of Northwest 1 (Merseyside, Lancashire and Greater Manchester) State and extent of surviving acid mossland habitats (2004) by Dr Paul Thomas and Martin Walker

Constraints and Information Gaps

Limitations of the available data and mapping, in terms of their age and present accuracy, were noted during the review of information available.

Field survey for this audit has been limited and confined to potentially interesting habitats on areas of Council owned and/or publicly accessible lands where discrepancies were noted between Phase 1 maps, aerial photographs and/or land use inventory layers.

The classification of habitats is tackled, reconciling different definitions previously used and working towards clear descriptions of these habitat types and their importance in Wigan, together with the identification of key linkages between them.

The total number of ponds within Wigan is difficult to accurately estimate. Ponds are lost and created within Wigan at a rapid rate through the course of development or land management. Numerous ponds were found through analysis of bird's eye aerial photographs or known to TEP ecological surveyors or members of the Biodiversity Partnership that did not appear on the Mastermap layer provided. Known ponds were consequently added to the water layer to reflect such changes, for example at Three Sisters Wetland and at Gibfield Park SBI, both areas where recent land restoration and pond creation have occurred. It is anticipated that many garden ponds may also be undercounted in this water layer. However, it is expected that the greater majority of ponds within Wigan have been accounted for in this appraisal.

The exact extent of reedbed is difficult to accurately map in the absence of field survey. Reedbed is classified as such, in separation from standing water or swamp, if the vegetation comprises 60%, or more, of common reed. Aerial photography is not a reliable tool for this determination and Phase 1 habitat survey information is outdated and does not specifically separate reedbed from other swamp habitats. Extents of reedbed mapped and used for analysis in this audit have been derived from information provided by the Wigan Biodiversity Partnership and the Lancashire Wildlife Trust. As such, the data largely focuses on managed areas within designated sites. This may be partly responsible for the significant proportion of reedbed within Wigan being located within designated sites; it is possible that reedbed habitats outside of the designated areas (which are, in general, well-managed and recorded areas) have been under-recorded.

There were no significant information gaps for rivers, canals, streams and brooks. However, the occurrence of ditches within Wigan is likely to be under-recorded or at least out-dated. These are dynamic habitats created, modified and in-filled within timeframes too short to be accurately mapped on nationally available databases. Phase 1 habitat maps are too historic to accurately represent the current distribution of ditch lines and linear habitats identified on the Phase 1 survey data did not provide quantifications for these habitats at the time of the survey.

It is suspected that further areas of peat may survive in Wigan above those areas identified and mapped as part of this audit. Field survey is required to record the location of areas of currently unknown information. Additionally, changing definitions of fen habitat will likely require previously mapped areas to be reviewed.

There are significant information gaps for areas of priority grassland habitats within the borough. The Phase 1 maps are outdated and do not identify priority from non-priority grassland. In addition, some grassland habitats are priority habitats due to their associated invertebrate assemblages and further survey work would be required to identify such sites.

Heathland is a relatively limited resource within Wigan. The extent of heathland mapped has largely been derived from information within designated site citations and provided by the Wigan Biodiversity Partnership, with some limited field survey results. It is likely that additional small areas of heathland may exist within the borough.

The full extent of woodland within Wigan was not contained within any one dataset; however aerial photography was used to determine additional areas of woodland and scrub within the Borough. While it was not possible within the scope of this study to examine all woodland blocks, information contained within various data sources, supplemented with aerial photograph interpretation and information provided by Wigan Biodiversity Partnership has been used to indicate woodland type.

There are no significant information gaps identified for urban managed greenspace or private gardens. However, the category of urban managed greenspace in the context of a regional priority habitat type is poorly defined and highly widespread. Urban managed greenspace in this study is mapped according to land use types included within the broad description of the regional habitat action plan, but this habitat type is extremely widespread and its character and value for biodiversity is not precisely recorded. For example, private gardens cannot be any further categorised into those which are paved out or otherwise built over, those containing only simple lawn and those containing substantial structural and biological diversity; all private gardens are included in this habitat type. Although extensive across the Borough, the value of this habitat type to the biodiversity resource in Wigan is therefore quite variable.

In the same way that ditch systems are poorly mapped, hedgerows too are a problematic habitat type to accurately map and measure. Hedgerows and field margins have not previously been measured in any audit of Greater Manchester, although the Wigan Nature Conservation Strategy 1994 quotes a distance of 300km but does not identify how this figure was derived. Trends in hedgerow and field margin occurrence and distribution are not identifiable. No available land use layers contained hedgerow data and Phase 1 habitat survey data was considered too out of date to accurately represent the distribution of this habitat. It was not possible within the scope of this audit to manually digitise all hedgerows identified in aerial photographs. Measurable data for hedgerows is therefore not available.