Dearne Valley Landscape Partnership

Environmental and Biodiversity Review

CONSULTATION VERSION

23rd October 2013

Prepared by Louise Hill MA, DipLD MRB Ecology and Environment 206 Thorne Road, Doncaster, South Yorkshire, DN2 5AF Tel 01302 322956 louise.hill@mrbecology.co.uk www.mrbecology.co.uk



INTRODUCTION 1

Barnsley Metropolitan Borough Council Landscape Partnership Development Officer appointed Louise Hill of MRB Ecology and Environment to undertake a review of existing information on the biodiversity of the Dearne Valley in order to prepare a strategy for achieving the environmental and biodiversity aims of the Dearne Valley Landscape Partnership (DVLP).

The following key goals have been identified from Partnership documentation:

- 1) Protecting existing environmental assets In a better condition
- 2) Maintaining existing environmental assets Better managed
- 3) Improving Knowledge about Existing Assets Better identified and recorded
- 4) Reducing Environmental Impacts

5) Reducing Fragmentation

- Barrier removal
- Creating new habitats
- Improving existing low grade habitats
- 6) Connecting People with their Landscape
 - Education for employment
 - Education for enjoyment
- 7) Connecting People with their Landscape Practical Involvement (Volunteering)
- 8) Improving Local Distinctiveness
- 9) Sustainable Land Use Provisioning functions food and fuel production
- 10) Sustainable Land Use Regulating functions improving Flood-holding Capacity

To develop the strategy the following work has been undertaken:

- Consultations
- Analysis of Environmental Data Sources
- **Document Review** •
- Identification of Mapped Environmental Assets

Two day-tours around the cycleways of the Dearne Valley area were also made in order to re-familiarise the author with the area's character and to experience the network of recreational facilities already present.

2 CONSULTATIONS

The initial stage of the environmental review involved consulting the Nature Improvement Area (NIA) team, Local Authority representatives, and other Partner organisations to identify where there are known to be environmental problems or gaps in information and to discuss their plans for future projects, main areas of activity and capacity to undertake projects on the ground. A list of consultees is provided in Appendix 1.

This process has also identified a significant number of projects compatible with the aims of the DVLP which may already be at an early stage of planning and which the Landscape Conservation Action Plan could incorporate and expand upon.

Notes containing relevant information from these consultations are provided in Appendix 2.

3 ANALYSIS OF ENVIRONMENTAL DATA SOURCES

An analysis of data availability was undertaken. In this initial task the type and supplier of data available have been identified. These sources of data were identified from conversations and correspondence with a number of local biological record centre (LRC) staff, Yorkshire and the Humber Ecological Data Network (YHEDN) staff, Local Authority Biodiversity Officers and amateur naturalists and geologists. Additional information comes from experience of working as an ecologist in the South Yorkshire area for over 15 years and via the author's active role as President of one of the local amateur naturalist societies. Further information such as the format in which data are held and whether there are existing data-sharing agreements between the data provider and the DVLP has been provided, where known.

The results of this **data availability review** are presented in Table 1.

The intention had been to map the geographic area covered by the various data sources (categorised according to taxonomic specialism) so that it would be possible to see where there is a lack of recording of certain areas for specific taxonomic groups. This has not been possible due to data protection issues relating to the supply of individual recorder details. It also became evident that much of the Society-lead recording activity (with the exception of bird records) is at such a wide, regional, scale that mapping would not provide much useful additional information. Analysis of the geographical distribution individual recorder's recording 'territory' would, however, be a very useful tool for analysing whether a lack of records is due to a lack of recording effort or is in fact a real gap in a species' distribution.

Data Deficiencies

It is clear from Table 1 that there is, potentially, a large amount of recording effort which may be occurring in the Dearne Valley but there are some important deficiencies.

- Firstly, a large proportion of the data gathered by the various groups, recorders and national unlikely to be used to guide the work of the Landscape Partnership unless a means of difficult to monitor the effectiveness of habitat creation or management in enabling amateur naturalists should be a primary task for the Landscape Partnership.
- Secondly, whilst it appears that a wide range of taxonomic groups are recorded across the regional level (South Yorkshire or Yorkshire), recording from sites within the Dearne that this also applies to recording activity in the parts of the Dearne Valley which lie in connectivity of habitats. Therefore, it is important to have baseline data from the wider priority by the Barnsley Biodiversity Trust, as is identifying those species in decline
- Thirdly, the range of taxonomic groups recorded by individuals working at the more-detailed local level is restricted; birds and botany appearing to be particular

recording schemes does not find its way to the Local Records Centres and therefore is obtaining and interpreting the data can be found. Without such data as a baseline, it will be recolonisation or spread of species. Making the most of the existing recording effort of

Valley is comparatively poor. This is apparent from information supplied by the Barnsley Biological Records Centre (see Appendix 2 (23)) which shows that the distribution of records is very patchy outside the regular hotspot areas such as nature reserves and bird watching sites. Anecdotal information from Rotherham LRC officer and personal knowledge confirm Rotherham and Doncaster. One of the key aims of the Landscape Partnership is to improve Dearne Valley in order to locate isolated populations and target the creation of habitat corridors. It may be possible to promote additional recording coverage by existing amateur naturalists, supplemented by training local volunteers; however, it will also be necessary to commission surveys from professional ecologists to carry out work on the wider areas. Undertaking Biodiversity Audits of urban and domestic habitats is also considered to be a (however, a lack of historic data makes this a difficult task in the case of the Barnsley area).

strengths. Recording of other groups tends to be very limited and can often be the result of the activity of a single recorder. Therefore recorded distributions of species could easily be caused by recorder bias rather than by any natural distribution. It is difficult, without directly asking main recorders to map their recording areas, to assess whether lack of records is due to lack of recording effort. The NIA Biodiversity Study (2011) prepared species assemblage 'hotspot' maps for assemblages of UK BAP breeding birds, bats, other mammals, butterflies and amphibians and reptiles. The data range was restricted to records from the past five years. Information on the true distribution of indicator species assemblages of plants (based on axiophyte lists National Vegetation Classification communities), birds, mosses, fungi, lichens, all mammals, amphibians, fish, crustaceans, terrestrial invertebrates and aquatic invertebrates are needed to help to identify the best habitats and monitor the effectiveness of habitat management. Ideally, these assemblages should include gualifying species used for Local Wildlife Site (LWS) selection. There is a need to utilise historic data (especially for sedentary species) to target further detailed survey work. Museum archives/ herbaria and voucher specimens should be used to identify historic sites where these species might still be surviving in small fragments of relict habitat. The annual Bioblitz events may help to fill some of the gaps but it will also be necessary to commission surveys from professional ecologist of indicator species assemblages using standardised methodologies.

And finally, the recording effort in groups which are relatively well-recorded (namely birds) need to be marshalled so that this information is available in a format which will provide the maximum level of conservation protection to the most important habitats. This relates, in particular, to the use of separate Dearne Valley sites in Wetland Bird Survey counts rather than treating the valley wetlands as a single habitat unit.

DOCUMENT REVIEW 4

A range of existing environmental strategies, and action plans which apply to the Dearne Valley were reviewed. A list of reviewed documents is provided in Table 2. This included the Dearne Valley Landscape Partnership and Nature Improvement Area documentation, Local Biodiversity Action Plans (LBAP) and Green Infrastructure Plans where available. The main purpose of the review was to interpret how they interact with the aims of the DVLP and to assess the degree of overlap and co-ordination. The main aspects of these documents were summarised (a summary for each is provided in Appendix 3). Particular attention was given to identifying the delivery-actions contained within the three LBAPs which cover the Dearne Valley area; Barnsley, Rotherham and Doncaster. The LBAPs are at various stages of review and it should be noted that certain actions and priorities may alter in the near future.

The principal aim of these strategies and plans should be used to guide the development of projects within the Landscape Conservation Action Plan. In order to assist this an 'at a glance' single page **summary** of the key points has been provided in Figure 1.

A summary **comparison of the Priority Habitats** of the three LBAPs is provided in Table 3.

A preliminary list of **Priority Species** is provided in Table 4. This should be seen as a working document in need of further refinement. One of the key differences between the three LBAPs is the lack of a Biodiversity Species Audit for Barnsley and Rotherham. These audits identify the nationally-significant species which occur within the plan areas together will species considered to be locally-rare or notable. The published Species Audit list for Doncaster has been used together with a draft list being developed by Rotherham and a preliminary list of important species in the Barnsley used to develop their Local Wildlife Site Selection Criteria. The list has been refined to exclude those species which have not been recorded in the Dearne Valley where this information is known (in this case, for Doncaster only).

 The list of priority habitats and species could be further refined by referring to the Criteria used in the selection of Local Wildlife Sites across the Dearne Valley area and by considering the value of **seasonal assemblages of significant numbers** of other, more-common species.

Geology has featured in previous assessments of the environmental assets of the Dearne Valley. Linking the geology and landscape to historic industries and landuses is considered to be a vital part of the Landscape Partnership role. Therefore, it is important to place equal weight on the Geodiversity of the Dearne Valley and to include Local Geological Sites with identification and interpretation of geological features as a key role for future survey work.

5 **IDENTIFICATION OF MAPPED ENVIRONMENTAL ASSETS**

Site-based information (derived from recent Local Wildlife Site habitat data, Phase 1 Habitat Survey, habitat inventories and other sources) has been used to identify the key environmental features or 'assets' of the Dearne Valley and the existing connecting corridors of semi-natural habitats which lie in between. The brief description of the methodology used in preparation of the recent NIA Phase 1 Mapping supplied for use in this project indicates that the habitat data are based on Natural England Phase 1 Habitat mapping from the 1980s with some updating using more modern OS maps, recent Barnsley Local Wildlife Sites survey data. Visits to various parts of the Dearne Valley area were also made for the purposes of identifying any changes necessary to the 1980s mapped habitats (although information on the coverage of that field work is not supplied).

A broadbrush 'ecological functionality' methodology similar to that used by Professor John Rodwell in his 2005 review of the Dearne Catchment (Future Landscapes and Biodiversity for the Dearne Valley, Rodwell, Ling and Hey 2005) has been applied to the DVLP project area. This methodology categorised the ecological functionality of various landuses as depicted on Landcover Map (1990). In order to update this ecological functionality mapping exercise, more recent Natural England Priority Habitat Inventory data (2013) and the recently-prepared Phase 1 Habitat Map of the Dearne Valley Nature Improvement Area (2011) have been used. A diagram showing how the key habitat and areas have been identified and how this information should be used in conjunction with the other information to aid development of future Partnership Projects, is provided in Figure 2.

The Ecological Functionality map for the Dearne Valley is provided in Figure 3. The Phase habitat mapping data is also available on an overlay for use with Google-earth aerial images.

Data Deficiencies

By overlaying the Phase 1 and Single Habitat Inventory Data on recent aerial photography it has become apparent that even this more-up to date information has numerous deficiencies both in the interpretation of the nature of the landcover present, and also in mapping coverage (which show actual gaps). For example much of the ex-colliery site south of Dearne Valley Park SE 35640 06710 is missing from both mapping layers and as a consequence appears as an apparent gap in the habitat network when in fact this is an area of rough grassland, scrub and young woodland which is an important habitat corridor and may be of high ecological value in its own right. The mapping of the Magnesian Limestone scarp areas along the eastern boundary of the Project Area is particularly poor at picking up the high quality limestone grassland, for example, at Conisbrough Northcliff SK50228 99040 and Cadeby Rattles SK51150 99810. These are both Doncaster Local Wildlife Sites which, along with several other Doncaster LWS in the Dearne Valley, have recently been re-surveyed so accurate habitat information should be available once the habitat maps have been digitised.

Unfortunately the discrepancies in the Phase 1 Habitat Mapping occur across the Project Area. Improving knowledge about existing environmental assets is one of the main goals of the Landscape Partnership. This includes the identification and recording of such assets. Improving habitat connectivity is another primary aim of the Landscape Partnership and many of the reviewed

LBAPs and other strategies. It is suggested that in order accurately to gauge the habitat connectivity across the Project Area the following additional work be carried out:

- Digitise and incorporate recent LWS Phase 1 Habitat data into the GIS habitat layer for the Project Area.
- Commission an experienced habitat surveyor to verify and amend the Phase 1 mapping information by comparing the mapped data with recent aerial photography.
- Cross-check the additional semi-natural habitat identified in the above desk-top exercise with the Biological Records Database and target any sites with little or limited biological data for further field assessment work.
- Use aerial photographs and records of habitat indicator species contained within the Biological Records Database to target field surveys to identify any naturally recolonising areas, areas of relict heath and remaining areas of reclaimed colliery which have not been covered with top soil (and consequently still have open mosaic habitats).
- Make the sites identified by the above process the subject of combined **Phase 1 Habitat**, botanical and faunal habitat quality assessment fieldwork. This survey work should be commissioned from professional ecologists but could also include targeted work commissioned from local amateur experts where willingness and capacity allows. Such surveys also offer an opportunity to train members of the local community interested in developing survey or species-identification skills.

Figure 4 provides Biodiversity Opportunity Map. Biodiversity Land Target, Green Infrastructure corridor mapping, land already in Environmental Stewardship Agreements and the Integrated Habitat Network mapping layer for Broadleaved Woodlands to show the primary areas for implementing habitat improvement works.

6 ENVIRONMENTAL AND BIODIVERSITY STRATEGY FOR THE DEARNE VALLEY

Co-ordinate existing recording effort, and obtain and make best use of existing data sources.

Fill in the gaps in data by commissioning desk-based, habitat, and species survey work to inform habitat restoration or creation work.

Offer training and experience in ecological survey techniques by running an accredited 'work-shadowing' scheme for all survey work.

Involve the existing community of local amateur Naturalists to help to promote involvement in exploring local environments.

Offer education in ecological and environmental subjects by running identification workshops and surveying-courses in the Dearne Valley.

Utilise online and digital recording methods (including National Recording programmes and phone apps) to attract younger generation.

Influence landuse planning decisions to achieve sustainable development.

Table 5 contains a list of potential projects which, in addition to the actions to address data deficiencies highlighted in sections 3 and 4 above have been developed in order to meet the environmental and biodiversity aims of the Dearne Valley Landscape Partnership.

A wide range of potential projects is possible but finding a lead partner with the capacity to co-ordinate the project is critical. In order to provide potential projects which are practical and which could be **quickly implemented** the focus has deliberately been on the following:

- extensions to existing projects,
- ideas or schemes being considered by partner organisations
- **new project** suggestions which have arisen directly from consultations or the existing strategies
- A few additional less-detailed **project ideas** have also be included but not attributed to any lead partner.

The action plan provides an indication of potential lead partners and an indicative timescale, the partnership goals that the project would achieve, and details of support for the project from consultees and partnership organisations.

It is intended that the projects within the Action Plan be developed further in conjunction with the lead partners. As an example, a detailed project outline for a B-lines/Living Landscapes Projects (Project Code 13) has been drawn up and is included in Appendix 4.

A brief review of technological and digital aids to recording and identification is provided in Appendix 5.

A list of local community groups and organisations identified during the environmental review is provided in Appendix 6.

A list of key site identified during the environmental review is provided in Appendix 7.

Some important considerations when developing projects:

- uses Phase 1 or NVC. Survey data should be in sufficient detail for the relevant LWS selection criteria to be applied (e.g. there are currently no data which would allow criteria for running-water habitats to be applied to sites in Rotherham).
- Agri-Environment Schemes: there is still some uncertainty over future funding and themes for ELS/HLS/Woodland Grants. It is possible that HLS may become a 2-tier system, geographically tailored with options based on location, and may not be open to all landowners.
- Any species-monitoring projects should be designed to provide data which are compatible with the UK Environmental Observation Framework (see Appendix 5).

Choice of survey techniques: Reporting habitat creation or restoration work on BARS requires data to be based on Biodiversity Action Plan habitat areas whereas most detailed monitoring survey work

Figures, Tables and Appendices

Local Biodiversity Action Plans

(Rev Doc 19)

Themes

- Data Collection carry out a rolling programmes of habitat monitoring and species recording. Survey and monitor suites of indicator herptiles, birds, invertebrates, mammals, crustaceans or fish for each habitat.
- Education provide interpretive material, guided walks and management events, habitat-based species identification workshops.
- **Practical Habitat Group-based Actions**

Woodland - Establish Ownership and maintain register. Create a register of all veteran trees. Set up a Local Seeds project. Promote educational use of woodland.

- Lowland Mixed Deciduous/Limestone/Heathy Oak and Wet Woodlands - Review Ancient Woodland inventory.
- Wood Pasture, Parklands and Orchards identify parkland, wood pasture and orchard remnants by researching archives, audit important and veteran trees and survey them for invertebrates, promote wildlife value of public parkland sites, produce a fungi atlas of parkland sites. Identify relict orchards (including parkland and urban sites), produce a condition assessment of orchard sites, prepare inventory of fruit varieties, create new orchards, plant local fruit varieties, host Apple Day events, survey for biodiversity value especially of veteran fruit trees.
- **Hedgerows** Provide training in traditional management, collate historic information and survey hedges to prepare register of Important Hedgerows and then monitor their condition. Conduct detailed botanical survey of key ancient hedges.

Grassland – Monitor and manage scrub. Initiate conservation management of road verges. Set up a Local Wildflower Seeds project. Set up a local mowing/grazing scheme.

- Arable Field Margins review habitat extent.
- Limestone Grassland Support research of the period of transition from grassland to arable. Support research of the influence of fluctuating rabbit population on grassland/scrub/woodland transition zones.
- Lowland Meadows, Neutral and Wet Grasslands/Floodplain Grazing Marsh - Survey and monitor eel. Support research of the period of drainage and transition from grassland to arable. Improve meadow management for pollinators.
- Lowland Dry Acid Grassland, Lowland Heathland and Grass/Heath Mosaic - Improve management for pollinators.

Water and Wetlands – Audit quality of sites (water quality and diversity). Control Invasive species.

Reedbeds, Ponds, Rivers and Canals, Streams, Springs, Flushes, Mires and Fens- monitor reed establishment at key sites (e.g. Worsbrough), address problems of wildlife entrapment in canals, survey invertebrate on exposed river sediments, reinstate natural river morphology

Brownfield and Inland Rock and Open Mosaic – review habitat extent, create small areas of bare ground habitats in nature reserves and wildlife sites.

- **Urban** create wildlife areas, bug and beetle banks in urban green spaces and schools, survey veteran trees in towns, promote wildlife and pollinator-friendly gardening and horticulture, promote 'green gym' activities.
- Greenways manage historic routeways to improve/maintain their biodiversity.
- Crags, Caves and Tunnels establish forum of owners/managers and wildlife bodies, caving and urbex groups, map and record tunnel locations, carry out invertebrate, bat and archaeology surveys, install bat hibernation features.

Landscape Character Assessment (Rev Doc 5)

Ecoscapes

(Rev Doc 9)

- Ecoscape-based protection and creation
- Floodplain flood pasture, Woodland and Ings.
- Shale Vale woodland, acid grass/heath on colliery heaps.
- Sandstone Brow hedge, low-intensity grasslands, headlands, new woodlands and 'ecotones'.
- Limestone Scarp low-input grassland management.

Character Area-based Themes

- Lowland Valley Floor protect wetlands, washlands, meadows, relict fens. Control invasives, low-intensity farming, reclaim derelict sites to wetlands habitats integrated catchment management.
- Open Coalfield Farmland protect hedges, watercourses, woodland and hedgerow trees. Low-intensity farming, connect to valley floor, create heathland and grasslands, improve biodiversity of disused railway lines.
- Wooded Coalfield Farmland protect woodland, hedgerows, grassland and streams. Area-wide woodland management strategy, low-intensity farming, create heathland, recognise and maximise biodiversity on post-industrial sites (Grimethorpe Tip).
- Designed Estate protect woodlands, grasslands and wetlands. Low intensity farming, wetland management beside Elsecar Canal.
- Magnesian Limestone protect woodlands and industrial heritage (e.g. Conisbrough Viaduct) and parkland Estate features (quarrying). Natural regeneration of woodland on scarp and gorge, low intensity farming, manage valley floor wetlands, restore quarries and collieries to biodiverse habitat.

Landscape Partnership

(Rev Doc 2) Initiatives

- Conservation and Restoration
- Training Skills and Learning
- **Community Participation**
- Access and Learning (Rev Doc 1)

Actions

- Activities /Events
- Information Packs
- Marketing Information
- Management Improvements
- Preservation and Protection work •
- Training& Volunteering Opportunities •
- Access and Interpretation Improvements

The Don Network (Rev Doc 21)

Themes

- Point source pollution Diffuse pollution
- Highly- modified channel
- Actions
- Data sharing, collabo analysis - translating information.
- River channel mainte agree policies per river
- Catchment-wide SUD implementation
- Invasive species mon control - map, treat/rei and publicise risks.
- Riparian habitat impre ecological network and riparian development si
- Increase populations species - map potentia habitat and restore/imp barriers.
- Cleaning up legacy a pollution - e.g. Cudwo

(Rev Doc 25) Themes

- River and Water
- Culture Arts and Recreation
- Local Wildlife Sites, Parks and Woods
- Geology and Archaeology
- Industry and Manufacturing
- Visiting
- Pre-industrial Dearne
- Views, Walks and Trails
- Federation of Friends Groups
- Origins influences beyond the Valley
- Social Media and Technology

South Yorkshire Green Infrastructure (Rev Doc 17) Themes • Economic • Climate change • Communities • Biodiversity	 Barnsley Green Infrastructure (Rev Doc 14) Themes Sustainable economic growth and regeneration Climate change Health and well-being Biodiversity 	Actions Greening Towns Greening economic Development Sustainable Movement Woodlands Rivers for Life Forest of Barnsley Dearne Valley Country Park Dove Park
Lower Don – wetland and woodland quality, riverside habitat improvement	s for reducing flood risk, SUDS, cycle s. tourism investment, improve urban	linkages, brownfield redevelopment, water environment, GI in new urban

- developments, sub-region floodrisk management, Don Gorge protection and promotion, multifunctional openspace in housing renewal areas (e.g. Denaby), fish passes and weir removals.
- Dearne wetland habitat on washlands, community forest, woodland management for energy crop and woodfuel, restoration of contaminated land including GI, recreation use of Bolton Tip mountain bike, flood storage and slowing flood flows, visitor facilities, surface run-off management (woodlands), River Stewardship Company, continue improvements to Dearne Valley Park, new washland (Swaithe and Houghton).
- Dove new woodland and woodland management for woodfuel and biodiversity, surface run-off management (woodlands), new 'Dove Park' linking Worsbrough and Dearne, Barnsley and Dove canal restoration, visitor facilities (industrial, landscape and wildlife assets).
- Grimethorpe and Dearne landscape enhancement through regeneration, colliery reclamation, improved recreation and sustainable transport links.

Project Theme



el ration and raw data to useful nance – forum to stretch. S nitoring and	 Barnsley Woodland Strategy (Rev Doc 15) Themed Actions Biodiversity Surveys - PAWS, non-status woodlands and conifer plantations New woodlands - use planning gain funds. Target brownfield Skiers Bell Ground, Elsecar Main Colliery Promote Forestry – one-stop information point Woodland Management – promote coppice products, woodfuel businesses.
move, monitor ovements - GI functions on ites. of flagship al occupiable prove and remove nd chronic orth Dike	 South Yorkshire Forest (Rev Doc 27 and website) Actions Woodland creation. Sustainable resource use. Green infrastructure. Education and Recreation ' Green gym'. Woodfuel promotion. Woodland for water. Fuelling a revolution project.

Catchment Flood	Management Plan
(Rev Doc 28)	

Actions

- Better use of washlands in a more natural system work • with natural flood processes.
- Remove river regulators.
- Store flood water.
- Create better wildlife habitats. •
- Depending on assets at risk, reduce, maintain existing or • improve flood risk management.
- Upgrade management to keep pace with climate change.
- Reduce flood risk from all sources including surface water and sewer flooding.

NIA Interpretation Study

(Rev	Doc	19)	

Nature Improvement Area (Rev Doc 4) Actions

- Create and restore floodplain
- Restore woodland and farmlands
- Influence Planning Process
- Build popular support

Themed Actions

- **Illustrate and interpret** at visitor hotspots and improve access to wider area. Navigation Phone app. Tourist leaflets. Tourist Gateway
- Education education packs and college courses.
- Sustainability showcase re-engineering, habitat creation, management, biomass and eco-friendly businesses.
- Local support target audience: local community. Events and positive recreational activities (e.g. Bird box scheme). Positive News stories.
- **Greening the towns** street trees and Green Infrastructure.
- Stories from the valley Water, History, Land Reclamation and Restoration.
- Key habitats open water, fen, carr, marshland, hedgerow, ancient woodland and new plantations.
- Key Sites list of NIA partner sites and others in the wider landscape.

Figure 1

Cross-theme Projects:

Wombwell e-wood





.0	
	5 – Ancient Woodlands
	4 – Broadleaved Woodlands, Scattered Broadleaved Trees, Marshy Grassland, Tall Herb and Fern, Mires, Swamps, Open Water. Natural Inland cliffs and Ephemerals and Short Perennials (re-colonised spoil).
	3 – Gardens, Unimproved or semi-improved Grasslands, Mixed Plantation
	2 – Coniferous Woodland, Scrub, Improved Grassland, Poor Semi-improved Grasslands and Amenity Grasslands
	1 – Arable, Hard standing and Buildings.
	0 – No habitat Information.
	Nature Improvement Area Boundary



© Crown copyright and database rights 2013 Ordnance Survey License Number 100022264

Г		1
		L
		J.

Habitat Improvement Target Areas









Nature Improvement Area Boundary

Table 1 below lists some of the potential sources of biological data for the Dearne Valley

Local Recording Groups includes formal societies and groups as well as less formal associations of individuals who combine their data for a specified project (such as an Atlas)

Local Recording Groups

Source	Public Data Products?	Recording Frequency	Taxonomic Coverage	Habitat Coverage	Recording Sites	Geographic Coverage	Resolution	Temporal	Seasonality	Survey Type	Availability at original resolution	Data held by LRC	Named Contact	Reliabilit y
Barnsley Biodiversity Trust	-	Continuous	General	Any	Tends to be Site-based	Barnsley	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Amateur Naturalists	Yes	Barnsley	Peter Roberts	High
Barnsley Bird Sightings	Online Blog	Continuous	Birds	Any	Site-based	Barnsley and	Named Sites	Recent years	All Year	Amateur	No?	No	Barnleybirds.blo	Medium
Barnsley Breeding Bird Atlas (Barnsley Bird Study Group)	Summary Annual Report	Yearly	Birds	Any	Tends to be Site-based	Barnsley	1km O.S. Grid Squares	At least since 1972	All Year	Amateur Naturalists	Yes	Possibly Not (data quality problems?)	David Pearce. dmp.waxwings@ btinternet.com	High
Barnsley MBC Historic Records	Paper-based Archive	Irregular	All	All	General	Variable	?	Historic	All Year	Amateur Naturalists & BMBC Staff?	Yes	Barnsley	Trevor Mayne	
Barnsley Naturalists and Scientific Society	-	Continuous	Lichens, Mosses, Birds and Plants. Some plant galls and molluscs	Any	Tends to be Site-based	Barnsley	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Amateur Naturalists	Yes	Barnsley	Geoff Jackson	High
British Plant Gall Society	-	Continuous	Plant Galls and Gall Causers	Any	General	National (Divided into Vice Counties)	Minimum 6 Figure Grid Ref	Recent decades	All Year	Amateur Naturalists	Yes	?	Via Doncaster Nats (Tom Higginbottom)	High
Broomhill Ings Bird Recorder	Summary Annual Report	Yearly	Birds	Any	Site-based	Broomhill Village, Park Hill, Waterbodies along the Dearne from Wombwell Ings to Bolton including	Named Sites	Historic- Present Day	All Year	Amateur Naturalists	Yes	Barnsley?	Jeff Lunn	High
Doncaster and District Ornithological Society	Summary Annual Report	Yearly	Birds	Any	General	Manvers Lake Doncaster	1km O.S. Grid Squares	Historic- Present Day	All Year	Amateur Naturalists	Requires a formal Data Sharing agreement	?	Not published in recent years	High
Doncaster Birding	Online Blog	Continuous	Birds	Any	Tends to be Site-based	1km radius Doncaster Town Centre & nearby sites	Named Sites	Recent years	All Year	Amateur Naturalist	No?	No	http://www.donca	Medium
Doncaster Naturalists' Society	Occasional Journals	Continuous	Mostly Plants and incidental Fauna records. And Plant Galls	Any	General	Doncaster	1km OS Grid (Minimum 8 Figure Grid Ref for notable species)	Historic- Present Day	All Year	Amateur Naturalists	Yes	Doncaster	Pip Seccombe	High
Rotherham and District Ornthological Society	-	Irregular	Birds	All	General	Rotherham (but few records from NIA)	?	Historic- Present Day	All Year	Amateur Naturalists	Yes	Rotherham	Paul Leonard	High
Rotherham Naturalists	-	Continuous	General	Any	General	Rotherham (but few recent records from NIA)	Named Sites or 1km O.S. Grid Ref	Historic- Present Day	All Year	Amateur Naturalists	Yes	Rotherham	Enid and Derek Bailey	High
RSPB (Old Moor)	On-line Reserve-bas ed Sightings and Annual Reserve Report?	Occasional	Birds	Wetlands and Wet Grassland	Tends to be Site-based	RSPB Dearne Valley Wetlands Sites	Named Sites	Within Past Decade ?	All Year	Staff, Volunteers and Amateur Naturalists.	Yes	Barnsley	Matthew Capper, Pete Wall	High
Sheffield Bird Study Group	Annual Report	Irregular	Birds	All	General	Rotherham (but few records from NIA)	1km O.S. Grid Squares	Historic- Present Day		Amateur Naturalists	Yes	Rotherham & Sheffield?	_	High
Sorby Natural History Society including Sorby Breck Ringing Group	Sorby Record	Regular Journal	General	Any	General	Sorby Recording area (Sheffield, Barnsley and parts of Doncaster, Rotherham and Derbyshire)	1km O.S. Grid Squares and Minimum 6 Figure Grid Ref.	Historic- Present Day	All Year	Amateur Naturalists	Possible (original records will have accurate Grid References.	Sheffield	Derek Whitley (Database) & Roger Butterfield (Recorder) britishringers.co. uk	High
South Yorkshire Badger Group.	-	Continuous	Badger	Any	General	South Yorkshire	Restricted	Historic- Present Day	All Year	Experienced Amateur Naturalist.	Yes	To genuine enquirers	Monica Ward	High
South Yorkshire Bat Group	Database – searches based on 1km squares	Continuous	Bats	Any	General	South Yorkshire	Minimum 6 Figure Grid Ref	Past Decade	All Year	Professional Ecologists and Amateur Naturalists	Available but fee likely to be charged (£50).	No	Rob Bell	High
South Yorkshire Plant Atlas	Published Atlas	Up to 2010	Higher Plants	All	General	South Yorkshire	1km O.S. Grid Squares	Historic-2010	All Year	Amateur Naturalists and professional Botanists	Possibly	Roth & Barnsley (in part)	Data sharing agreement with Rotherham	High
YWT Reserve Reports (Denaby Ings)	Annual Reserve Reports	Occasional	Flora, Birds and other Fauna	All	Site-based	Denaby Ings	Named Sites	Recent decades	All Year	Amateur Naturalists and YWT staff	Yes	Doncaster	? (ask Bob Marsh)	High

Table 1 Data Sources for the Dearne Valley Area

Local Recorders active in the Dearne Valley area are listed where known, These are generally experienced amateur naturalists who specialise in a particular group or field of interest.

Regional Recording Groups are the larger organisations and county-wide groups which include the Dearne Valley within their area of interest.

Local Recorders:

Source	Public Data Products?	Recording Frequency	Taxonomic Coverage	Habitat Coverage	Recording Sites	Geographic Coverage	Resolution	Temporal	Seasonality	Survey Type	Availability at original resolution	Data held by LRC	Named Contact	Reliabilit y
British Bryological Society (Colin Wall)	-	Continuous	Mosses	Any	General	Doncaster area	1km Atlas with Minimum 6 Figure Grid Ref	Recent decades	All Year	Amateur Naturalists	Yes	Doncaster	Via Doncaster Naturalists	High
Carol Hobart	_	Continuous	Fungi	Any	General	Sheffield area and beyond	?	Recent decades	All Year	Amateur Naturalists	?	?	Via Sorby Natural History Society	High
Eric Bennett	_	Irregular	Bats	Any	Site-based	Barnsley	Minimum 6 Figure Grid Ref		All Year	Professional Ecologist	Yes	Barnsley	Eric Bennett	High
Estrada Ecology	_	Continuous	Bats	Any	General	South Yorkshire	Minimum 6 Figure Grid Ref	Recent decade	All Year	Professional Ecologist	Yes	Doncaster	Natasha Estrada	High
Heteroptera Bug Recorder	_	Continuous	Het Bugs	Any	General	Vice county	Minimum 6 Figure Grid Ref	Recent decades	All Year	Amateur Naturalist	?	Doncaster and possibly others	Stuart Foster/Jim Flannagan	High
John Coldwell.	-	Continuous	Invertebrate s	Any	General	Barnsley area	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Experienced Amateur Naturalist.	Yes	Barnsley	John Coldwell	High
Kevin Gilfedder	_	Continuous	Fungi	Any	Site-based	Doncaster	Minimum 6 Figure Grid Ref	Recent decades	Mostly in Autumn	Amateur Naturalists	Yes	Doncaster	Via Doncaster Naturalists	High
Local Bat Surveyors	-	Continuous	Bats	Any	General	South Yorkshire?	Minimum 6 Figure Grid Ref	Recent decade	All Year	Professional Ecologist	Yes	Doncaster	? Ask Bob Marsh at Doncaster LRC	High

Regional Recording Groups

Source	Public Data Products?	Recording Frequency	Taxonomic Coverage	Habitat Coverage	Recording Sites	Geographic Coverage	Resolution	Temporal	Seasonality	Survey Type	Availability at original resolution	Data held by LRC	Named Contact	Reliabilit y
Botanical Society for the British Isles (BSBI) Vice County 63 Tetrad Recording & Constant Effort monitoring sites	Periodic National Atlas	Continuous	Plants	Any	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Botanists	Requires a formal Data Sharing agreement	Not Known	Vice County Recorder Geoffrey Wilmore	High
DEFRA Habitat Surveillance	-	Single assessment	Plants	BAP Wetlands, BAP Grassland s, BAP Wet Grassland	Site-based	Yorkshire Pilot Project including South Yorkshire	Minimum 6 Figure Grid Ref	2012	Summer	Professional Ecologist	?	YHEDN	Dan Jones	High
Environment Agency	-	Continuous	All	Any	Site-based	North East Region	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	EA Staff and Commission ed Surveys	?	Not Known	Environment Agency	High
Sheffield Area Geology Trust	-	Continuous	Geology	Any	Site-based	South Yorkshire	Minimum 6 Figure Grid Ref	Historic- Present Day	N/A	Amateur and Professional Geologists	Yes	Doncaster, Rotherham and Barnsley	Ken Dorning	High
YNU /Butterfly Conservation Annual Butterfly and moth report. (Butterfly Transect Surveys)	Summary Annual Report	Yearly	Butterflies	Any	General	Yorkshire	1km O.S. Grid Squares	Historic- Present Day	All Year	Amateur Naturalists	Requires a formal Data Sharing agreement	YHEDN Some at Doncaster	Dan Jones and Via LepNET	High
YNU Bird Reports.	Summary Annual Report	Yearly	Birds	Any	General	Yorkshire	Named Sites	Historic- Present Day	All Year	Amateur Naturalists	Requires a formal Data Sharing agreement	?	Craig Thomas	High
YNU Coleoptera Recorder	-	Continuous	Beetles (Coleoptera)	Any	General	Watsonian Vice county of Yorkshire	Minimum 6 Figure Grid Ref	Recent decades	All Year	Amateur Naturalist	Yes	Doncaster	Bob Marsh	High
YNU Micro Moth Recorder	Annual Report	Continuous	Macro and Micro moths	Any	General	Watsonian Vice county of Yorkshire	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Amateur Naturalists	Yes	Doncaster - other LRCs unknown.	Harry Beaumont	High
YNU Recorders (Mammal and Lower Vertebrates, Botany, Choncology, Mycology and Lichenology, Freshwater Ecology and other Entomological sections)	Data base	Continuous	Mammals and lower vertebrates, Plants, Odonata, Aquatic Ecology, Molluscs, Lichens and other invertebrate s	Any	General	Watsonian Vice county of Yorkshire	Minimum 6 Figure Grid Ref	Historic- Present Day	Across the year	Amateur Naturalist	Requires a formal Data Sharing agreement	YHEDN	YNU Biological Records Officer (Post Vacant)	High
Yorkshire Water	-	Continuous	All	Any	Site-based	Yorkshire	Named Sites?	Historic- Present Day	All Year	YW Staff and Commission ed Surveys	?	Not Known	Don Network	High

Table 1 Continued Data Sources for the Dearne Valley Area

National Recording Schemes are co-ordinated and reported upon at a national level but may involve local recorders who gather data from sites in the Dearne Valley area.

National Recording Schemes

Julienies														
Source	Public Data Products?	Recording Frequency	Taxonomic Coverage	Habitat Coverage	Recording Sites	Geographic Coverage	Resolution	Temporal	Seasonality	Survey Type	Availability at original resolution	Data held by LRC	Named Contact	Reliabilit y
Bat Conservation Trust. National Bat Monitoring Programme	Summary Annual Report	Regular Intervals	Bats	Waterway s, Roost sites	Tends to be Site-based	National	Minimum 6 Figure Grid Ref	Recent years	Across the year	Professional Entomologist s and Trained Amateur Naturalists	Unknown	Not Known	Bats.org.uk	High
Bees Wasp and Ants Recording Scheme	Periodic National Atlas	Continuous	Bees, wasps and Ants	Any	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	-	High
British Lichen Society	Periodic National Atlas	Continuous	Lichens	Any	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	-	High
British Mycological Society	Periodic National Atlas	Continuous	Fungi	Any	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	-	High
British Trust for Ornithology (BTO) Garden Birdwatch, Waterways & Breeding Bird Surveys, Wetland Birds Survey (small Sites), Woodcock Survey, nest Recording, Heronries Census	National Atlases	Regular Intervals	Birds	Any	Site-based	Possible sites in the Dearne Valley	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Amateur Naturalists	unknown	No	BTO Thetford	High
Dipterists Forum	Periodic National Atlas	Continuous	Flies	Any	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	_	High
Dragonfly Society	National Atlas (2014)	Continuous	Odonata	All	General	National	1km O.S. Grid Squares and Minimum 6 Figure Grid Ref.	Last 5 years	Mostly Summer	Staff, Volunteers and Amateur Naturalists.	Yes	?	Raw Data shared with NEYEDC	High
Flea Recording Scheme	Periodic National Atlas	Continuous	Fleas	Any	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	-	High
Invertebrate Site Register	Printed Reports	Single assessment	Invertebrate t s	Any	Site-based	National	Named Sites	1970's	_	Professional Entomologist s	Yes	Not Known	Doncaster Museum Natural History Archive	High
National Vegetation Classification (Supporting Fieldwork)	Published Books	Single assessmen	Plants and mosses	Any	Site-based	National	Minimum 6 Figure Grid Ref	1970s	All Year	Experienced Botanists	Unknown	?	John Rodwell	High
Pond Conservation	Periodic National Atlas	Continuous	Plants, invertebrata, Birds, Amphibians, Reptiles,	Ponds and wetlands	Site-based	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	_	High
Riverfly Recording Scheme	Periodic National Atlas	Continuous	Riverflies	Rivers	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	-	High
Spider Recording Scheme	Periodic National Atlas	Continuous	Spiders	Any	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	-	High
The Mammal Society	Periodic National Atlas	Continuous	Mammals	Any	General	National	Minimum 6 Figure Grid Ref	Historic- Present Day	All Year	Professional and Amateur Naturalists	Requires a formal Data Sharing agreement	Not Known	-	High
Wildfowl and Wetlands Trust. WeBS Counts. (Waterbirds in the UK).	Summary Annual Report	Yearly	Birds	Any	Site-based	National	Named Sites	Since 1947	Mostly winter	Experienced Volunteers	Unknown	?	-	High

Table 1 Continued Data Sources for the Dearne Valley Area

A range of existing environmental strategies, and action plans which apply to the Dearne Valley were reviewed. A lists in presented in Table 2 below. The main purpose of the review was to interpret how they interact with the aims of the DVLP and to assess the degree of overlap and co-ordination.

Document Title	Partner	Review Products	Follow-up
REV Doc 1 DVGHLP Introduction	Landscape Partnership	Handwritten notes & Project ideas extracted	Themes and Actions incorporated into Project Guide (Figure 1)
Rev Doc 2 DVGHLP HLF bid extracts	Landscape Partnership	Handwritten notes Plus 3 Pages of Notes and 2 Page list of sites	u
Rev Doc 3 Landscape Partnership Final table of Selected Schemes.	Landscape Partnership	- not required	ú
Rev Doc 4 Dearne Valley NIA year 1 Report	NIA	Single summary sheet	ú
Rev Doc 5 DVGH Landscape Character Assessment	NIA	Table combining all Biodiversity-related opportunities.	u
Rev Doc 6 DVGH NIA Biodiversity Study	NIA	2 Page summary of Data Deficiencies identified – Phase 1 put on GIS	u
Rev Doc 7 DVGH NIA RDPE feedback	Defra	1 Page Summary	ú
Rev Doc 8 Barnsley GI Baseline Report	Barnsley MBC		Used as guide to map layers on GIS
Rev Doc 9 Future Landscapes & Biodiversity of the Deane Valley (Ecoscapes)	J Rodwell	Doc file summary – including Chapter 8 which suggests improvements.	Used as guide to analysis on GIS
Rev Doc 10 South Yorkshire Green Infrastructure Strategy Delivery Plan	South Yorkshire Forest	A3 Summary of Delivery Plan showing Corridor Sites	Use to focus site-based actions – on GIS
Rev Doc 11 Yorkshire and the Humber Green Infrastructure Corridor Descriptions	York and Humber Biodiversity Forum	Drawing summary	Used to focus site-based actions.
Rev Doc 12 YHBF Planning and Biodiversity Opportunity Areas Mapping Guidance.	York and Humber Biodiversity Forum	1 page extract on methodology	Layer transferred to GIS
Rev Doc 13 Barnsley Green Infrastructure Report	Barnsley MBC	1 Page Summary	Themes and Actions incorporated into Project Guide
Rev Doc 14 Barnsley Green Infrastructure Strategy Technical Report March 2010	Barnsley MBC	2 Page Project Summary and 1 page summary of comments from workshop events	u
Rev Doc 15ab&c BMBC Woodland Strategy Part 1, 2 and Appendices	Barnsley MBC	2 Page summary of relevant projects and local groups	Used to develop actions and creation Appendices 6 and 8. Use as supporting Information to guide further project refinement woodland management.
Rev Doc 16 South Yorkshire Integrated Habitat Network Report 2012	Forest Research	A3 Summary Maps of Habitat Enhancement Areas for 4 habitat types	Suggest obtaining GIS versions and incorporate into a revised Figure 4
Rev Dov 17 South Yorkshire Green Infrastructure Strategy Sections 1 - 12	South Yorkshire Forest	2 page summary of projects in the DVGH area to accompany Rev Doc 10	Themes and Actions incorporated into Project Guide
Rev Doc 18 NIA A1 plan of current projects	NIA	A3 Map – straight copy of data supplied	Used to develop action plan ideas. Suggest obtaining GIS version and incorporating into a revised Figure 4
Rev Doc 19 DVGH Interpretation Study	NIA	2 Page summary (including site based info) and map of Partnership sites.	Themes and Actions incorporated into Project Guide. Key Sites listed in Appendix 7
Rev Doc 20 Barnsley, Rotherham and Doncaster Local Wildlife Site Selection Criteria	DMBC, RMBC, BMBC and BBT	Combined List of Important Species created for the Landscape Partnership Areas	Presented in Table 4. Needs further Refinement
Rev Doc 21 The Don Network A Plan for the River Don	EA & YW	3 Page Summary	Themes and Actions incorporated into Project Theme Guide (Figure 1)
Rev Doc 22 Doncaster, Barnsley and Rotherham LDF Employment and Housing allocations	LDF	Used to gauge scale and locations of primary development pressure in the Dearne Valley.	Suggest site locations be transferred to project GIS and used to focus further development of Projects (Project Code 02 and 24 from the Action Plan in Table 5).
Rev Doc 23 Natural Heritage Sites Report to Barnsley MBC	Barnsley Biodiversity Trust	2 Page List of Management recommendations for LWS	(Appendix 8). Use as supporting Information to guide further project refinement
Rev Doc 24 DMBC LWS Management Recommendations	DMBC	9 Page list of detailed management recommendations for each habitat within each LWS	(Appendix 8). Use as supporting Information to guide further project refinement
Rev Doc 25 Emerging Themes Notes	Landscape Partnership	2 Page Document – straight copy of data supplied	Themes and Actions incorporated into Project Guide (Figure 1)
Rev Doc 26 Barnsley, Rotherham and Doncaster and Dearne and Dove IDB Biodiversity Action Plans	DMBC, RMBC, BMBC, BBT Dearne and Dove IDB	Combined Summary table of Priority Habitats Combined Summary list of actions. Combined Summary list of LBAP species. Yorkshire and Humber Biodiversity Targets	Themes and Actions incorporated into Project Guide. Habitats and Species used to create Tables 3 and 4.
Rev Doc 27 Fuelling a Revolution (FaR)	South Yorkshire Forest	Map showing FaR Woodlands (4 in the Dearne Valley) Info Pack for Wath Wood (as example)	(Appendix 8). Use as supporting Information to guide further project refinement
Rev Doc 28 Don Catchment Management Plan	Environment Agency		Themes and Actions incorporated into Project Theme Guide (Figure 1)

Suggestions for the further use of data in future project development are highlighted in red text Summary details provided in Appendix 3

Table 2 List of Documents Reviewed

Table 3 LBAP Habitats Comparison Table (based upon Barnsley, Doncaster, Rotheham and Dearne and Dove IDB Local Biodiversity Action Plans Equivalent habitats shown on the same row

Habitat Not Occurring in the Dearne Valley are highlighted in blue

Habitat Group	Barnsley	Doncaster	Rotherham (* = Nationa
Woodland	HAP1 Upland Oakwood		
	HAP2 Lowland Mixed Deciduous Woodland	Lowland Heathy Oak Woodland (LHW)	Lowland mixed deciduous
		Limestone Woodland (LW)	Broadleaved plantation
	HAP3 Wet Woodland	Wet Woodland (WW)	Wet woodland*
	HAP4 Wood Pasture and Parkland	Parkland, Wood Pasture and Veteran Trees (PWV)	Wood pasture and parkland
			Scrub
			Traditional Orchards*
			Community Orchards
Hedges	HAP5 Hedgerows	Ancient and Species Rich Hedgerows (ASH)	Hedgerows*
Grasslands	HAP6 Arable Field Margins	Arable Field Margins (AFM)	Arable field margins*
ondoonantao	HAP7 Floodplain Grazing Marsh	Neutral and Wet Grassland (NWG)	Floodplain grazing marsh*
	HAP8 Lowland Meadows		Lowland meadows (neutral
		Limestone Grassland (LG)	Lowland calcareous grassla
	HAP9 Lowland Dry Acidic Grassland	Lowland Heathland / Acid Grassland Mosaic (HAG)	Lowland dry acid grassland
	HAP10 Lowland Heathland		Lowland heathland*
	HAP11 Upland Heathland		
Miros	HAP12 Blanket Bog		
	HAP13 Purple Moor Grass and Rush Pasture		
		Lowland Raised Mire (LRM)	
Water and Wetlands	HAP14 Reedbeds	Reedbeds (RB)	Reedbeds*
	HAP15 Ponds	Marshes and Swamps, Lakes and Ponds, Ditches and Drains (MLD)	Ponds (< 2ha)*
			Eutrophic standing water*
			Ditch networks
			Wader scrapes
			Fishing ponds
			Sustainable Drainage Syste
	HAP16 Rivers	Rivers, Canals, Oxbows, Major Streams and Subsidence Flashes (RCF)	Rivers and Streams*
			Subsidence flashes*
		Minor Streams, Springs, Fens, Flushes, Mires and Fenny Fields (SFM)	Lowland fens*
Brownfield and Inland	HAP17 Open Mosaic Habitats on Previously	Post Industrial and Brownfield Land (PIB)	Open mosaic habitats on pr
ROCK HADITATS	Developed Land		
		Crage Caves and Tuppala (CCT.)	
			mand rock outcrop and scre
		Urban Greenspace (UG)	

al Priority Habitat) Dearne and Dove IDB

woodland*	
*	Veteran Trees
	SCIUD
grassland)*	
nd*	
t .	
	Drains and Ditches
ms (SuDS)	
. /	
	Subsidence Flashes
eviously developed land*	
al mosaics	
ee habitats*	

Table 4

Birds

Indicative Important Fauna Species* (Needs further refinement)

Arctic Tern **Bar-Tailed Godwit** Barn owl Bearded tit Bewick's Swan Bittern Black redstart Black tern Black-Headed Gull Black-tailed godwit Brambling (Branta bernicla subsp. Bernicla) Brent Goose Bullfinch Cetti's warbler Common crossbill Common Grasshopper Warbler Common Gull Common Scoter Corn bunting Corncrake Cuckoo Curlew Dunlin Dunnock Eurasian Marsh Harrier Eurasian Teal European Nightjar Fieldfare Gadwall Garganev Goldcrest Goldeneye Goshawk Great black-backed gull Greater Scaup Green sandpiper Green Woodpecker Greenfinch Greenshank Grey Heron Grey Partridge Grey Plover Grey Wagtail Greylag Goose Hawfinch Hedge Accentor Hen harrier Herring gull Hobby House Martin House sparrow

Kestrel Kingfisher Kittiwake Knot Lapwing Lesser Black-Backed Gull Lesser Redpoll Lesser spotted woodpecker Linnet Little ringed plover Little ringed plover Little Tern Long-tailed duck Marsh Harrier Marsh tit Meadow Pipit Mediterranean Gull Merlin Mistle Thrush Mute Swan Nightingale Nightjar Osprey Oystercatcher Peregrine falcon Pink-Footed Goose Pintail Pochard Quail Red grouse Red kite Red-Backed Shrike **Red-Necked Grebe Red-Necked Phalarope** Redpoll Redshank Redstart Redwing Reed bunting Ring ouzel **Ringed Plover** Roseate Tern Ruff Sand Martin Sandwich Tern Scaup Shelduck Short-Eared Owl Shoveler Skylark Snipe Song thrush

Spotted flycatcher Spotted Redshank Starling Stock Dove Stone-curlew Stonechat Swallow Teal Tree pipit Tree sparrow Turnstone Turtle dove Twite Water Rail Whimbrel White-fronted Goose Whooper Swan Whooper Swan Wigeon Willow Tit Willow Warbler Wood Lark Wood Nuthatch Wood Sandpiper Wood Warbler Woodcock Wren Yellow waqtail Yellow-legged Gull Yellowhammer Mammals Brandt's bat Brown Hare Brown Long-eared bat Common pipistrelle bat Daubenton's bat Harvest Mouse Hedgehog Leisler's bat Natterer's bat Noctule bat Otter Polecat Red Squirrel Soprano pipistrelle Water Shrew Water Vole Whiskered Bat

Crustaceans White Clawed Cravfish

Fish Brown trout Bullhead European Eel Salmon

Herptiles – Amphibians

Common Frog Common Toad Great-crested Newt Palmate Newt Smooth Newt

Herptiles – Reptiles

Adder Common/Viviparous lizard Grass snake Slow worm Sand Lizard

Invertebrates – Bees and Wasps

Crossocerus palmipes Ectemnius ruficornis Nomada lathburiana Omalus aeneus Omalus violaceus Pemphredon morio Priocnemis cordivalvata Stigmus solskyi

Invertebrates - Butterfles

Dark green fritillary Dingy skipper Duke of Burgundy Gravling Green-veined White Grizzled skipper Marsh Fritillary Pearl-bordered Fritillary Purple Hairstreak Silver-studded Blue Silver-washed fritillary Small Blue Small heath Small Pearl-bordered Fritillary Wall White-letter hairstreak Wood white

Invertebrates - Moths

Anomalous Argent and Sable August Thorn Autumnal Rustic Beaded Chestnut Blood-Vein **Bordered Gothic** Brindled Beauty **Brindled Ochre** Broom Moth Brown-spot Pinion **Buff Ermine** Centre-barred Sallow Cinnabar Common Fan-foot Crescent Dark Brocade Dark Spinach Dark-barred Twin-spot Carpet Dot Moth Double Dart Dusky Brocade Dusky Thorn **Dusky-lemon Sallow** Ear Moth Figure of Eight Flounced Chestnut Forester Garden Dart Garden Tiger Ghost Moth Goat Moth Grass Rivulet Green-brindled Crescent Grey Dagger Haworth's Minor Heath Rustic Hedge Rustic Knot Grass Lackey Large Wainscot Latticed Heath Lesser-spotted Pinion Lunar Yellow Underwing Minor Shoulder-knot Mottled Rustic **Neglected Rustic** Oak Hook-tip Pale Eggar Powdered Quaker

Rosy Minor Rosy Rustic Rustic Sallow Scarce Aspen Knot-horn September Thorn Shaded Broad-bar Shoulder-striped Wainscot Small Emerald Small Phoenix Small Square-spot Spinach Sprawler Streak V-moth White Ermine White-line Dart

t Invertebrates – Molluscs

Omphiscola glabra (Mud snail) Pseudanodonta complanata Segmentina nitida (shining ramshorn)

Invertebrates – Other

Black-tailed Skimmer Broad-tailed Chaser Emperor Dragonfly Glow Worm Mab's Lantern (Beetle) Migrant Hawker Rhizophagus picipes (Beetle) Tansy Beetle

Table 4 continued Indicative Important Flora and Fungi Species* (Needs further refinement)

Plants

Adonis annua Allium oleraceum Anthemis cotula Arabis glabra Armeria maritima Asparagus officinalis Berberis vulgaris Bidens cernua Blysmus compressus Buxus sempervirens Callitriche platycarpa Campanula patula Campanula rapunculus Carex ericetorum Carex vulpina Centaurea cyanus Cerastium fontanum? Chaerophyllum temulum Chamaemelum nobile Chenopodium bonus-henricus Chenopodium urbicum Cirsium acaule Clinopodium acinos Cochlearia officinalis Coeloglossum viride Colchicum autumnale Crataegus laevigata

Crepis mollis Cynoglossum officinale Dactylorhiza incarnata Dactylorhiza purpurella Daphne laureola Dipsacus pilosus Epipactis palustris Equisetum telmateia Euonymus europaeus Euphrasia pseudokerneri Euphrasia rostkoviana Fallopia dumetorum Filago minima Fritillaria meleagris Galeopsis angustifolia Galium tricornutum Gentianella campestris Glebionis segetum Helleborus foetidus Hottonia palustris Hypericum montanum Hypochaeris glabra Iberis amara Lithospermum arvense Matthiola sinuata Mentha pulegium Minuartia hybrida

Muscari neglectum Neottia nidus-avis Nepeta cataria Oenanthe fistulosa Ophrys insectifera Ophrys insectifera Orchis ustulata Persicaria mitis Pillularia globulifera Potamogeton acutifolius Potamogeton pusillus Pulicaria vulgaris Pulsatilla vulgaris Ranunculus arvensis Ranunculus auricomus Rhamnus cathartica Sambucus ebulus Samolus valerandi Scandix pecten-veneris Scleranthus annuus Silene gallica Sorbus torminalis Sorbus torminalis Spergula arvensis Stachys arvensis Stellaria palustris Tilia platyphyllos

Tilia platyphyllos x cordata = T. x europaea Torilis arvensis Veronica triphyllos Viola canina Viola lutea x tricolor x altaica = V. x wittrockiana Viola tricolor Vulpia bromoides Vulpia myuros

Mosses and Liverworts

Irish Threadwort (liverwort) Long-leaved Tail-moss Sausage Beard-moss Flamingo-moss

Fungi and Lichens

Date-coloured Waxcap Usnea florida (a lichen)

* As Defined by:

Doncaster Biodiversity Audit (Published 2007) - only those species that have been recorded in the Nature Improvement Area

Rotherham Priority Species - Section 41 NERC Act 2006 Species of Principal Importance in England that have been recorded in Rotherham (Work in prep - Carolyn Jones RMBC)

Barnsley Local Wildlife Site Selection Criteria (Documentation Published 2011): Fauna Species only (largely based on UK BAP)

Table 5 Action Plan

Numbers in brackets e.g. (6) in Supporting information section refer to Consultation Notes. Rev Doc – refers to reviewed Document Shading indicates existing projects capable of extension Whole Landscape Partnership Area Projects Partnership

Whole	Landscape Partnership	Area Projects					Partne	ship Go	als							
Project Code	Project Location	Project Name	Project Description	Lead Partner(s)	Supporting Partners	Indicative 1 Timescale	2 3 4	567	8 9 10	Supporting Information 1 - Document Ref/Main Contact	Supporting Information 2	Supporting Information 3	Supporting Information 4	Supporting Information 5	Supporting Information 6	Supporting Information 7
01	Landscape Partnership/ Nature Improvement Area	Data Observatory	Co-ordinate Environmental Data for NIA and DVLP projects. Gather data from all available sources. Provide analysis of data. Create NIA Biodiversity Audit List. Prepare a pipeline of pre-assessed Biodiversity Off-setting delivery sites.	YHEDN	NIA, LRCs, Biodiversity Groups	5 Years and beyond				Prepare 1km species /habitat presence/absence mapping to guide projects and as supporting evidence for Biodiversity work. Oversee Pre-assessment of Biodiversity Off-setting sites (both the proposed development and delivery sites). Lack of GIS staff time (4) Melissa Massarella	GIS support needed for NIA reporting by NIA team. Data co-ordination needed to get SSSI and SPA designation for the valley (3) Peter Wall	Prepare Barnsley Species Audit List and 'Hot Spot' maps. Lack of Data Sharing Agreements has caused problems in the past. 'summary' and 'trend' data would be useful (6) Trevor Mayne	Develop standard for Environmental Evidence base across LRC/LPA areas Provide data for NIA monitoring. Use Dearne Valley as a test area to develop a more versatile replacement for Recorder with data analysis facilities built in (8) Dan Jones	Use biodiversity hot-spot mapping to identify sites for further survey (9) Mike Guy	Analyse distribution of records from data- contributors to identify gaps in recording activity (11).	Link BAP species and habitats to NVC and Phase 1 Habitats. Prepare Species Audit for Barnsley. Identify species in decline in order to update the Local Biodiversity Action Plan. Co-ordinate bird records for Dearne Wetlands to support SSSI Designation (20) Peter Roberts
02	Landscape Partnership/ Nature Improvement Area	Dearne Valley Eco- enforcement	Oversee SUDS implementation and other mitigation required in planning conditions.	Local authorities, LEP	NIA	5 Years				Recognised as a weak point in the planning system (4).	Link to detailed planning guidance planned for developments in the NIA? (Barnsley only) (6)					
03	Landscape Partnership/ Nature Improvement Area	Web-based Interactive Dearne Valley Map	Provide a central source of information and place to advertise events and volunteering opportunities.	YHEDN?		Support for 5 Years and beyond				Use webmap style 'Live GIS' system as run by YNEDN. (8) Dan Jones	(3) Pete Wall	Link with Data Observatory/LRCs to allow species distribution maps to be available to amateur naturalists groups and potential community volunteers (11)				
04	Landscape Partnership/ Nature Improvement Area	Bioblitz	Hold a series of events across the DV area over a number of years	Sorby Nats, Barnsley Biodiversity Trust, YNU & YHEDN and local Natural History Societies	RSPB, YWT	Annual				Use Bioblitz tools developed by YNEDN/YNU (8) Build-in structured Surveillance projects (that could fulfil Defra monitoring requirements) which would be legacy projects to be continued in the future (15).	Combine with Pond (amphibian survey) Project being developed by YWT (16) Carys Hutton.	Hamess work of interested volunteers by involving Local Naturalists in identification support and education. Publicise events well at local level. (19) Peter Roberts	Link to Barnsley Biodiversity Trust Schools Project encouraging school field visits and involvement of parents. Hold training session for interested volunteers (past topics have included newts, bats and veteran trees) (19) Peter Roberts.	Include some geological background to the areas being studied by involving the Sheffield Area Geology Trust (25) Ken Dorning.	Include herptile surveys on the Limestone Scarp (focus on reptiles; adder and slowworm. Provide survey and identification training to volunteers in conjunction with SY Amph and Reptile Group assisted by Doncaster Naturalists (27) Louise Hill	
05	Landscape Partnership/ Nature Improvement Area	Forest of Dearne	Creating new woodlands by providing grant funding and landowner advice for new planting, Producing educational materials for Dearne Valley Woodlands, Re-instating woodland management on existing woodlands to promote biodiversity and wood products. Providing practical training in woodland management. Providing a source of advice for woodland owners and managers.	South Yorkshire Forest	Local Authorities (LNRs and woods in Public ownership). Private Estates and the Land Trust	3 years				Project outline includes creating education packs similar to those created during the Fuelling a Revolution Heritage Woodlands Project (22). Robin Ridley. Opportunity to link to Hidden Gem/Explore your Environment Projects.	Barnsley Green Infrastructure Strategy (Rev Doc 14) and Barnsley Woodland Strategy (Rev Doc 15).	Funds for management of Local Authority-owned woodlands are likely to be in short supply (28) Carolyn Jones.				
06	Landscape Partnership/ Nature Improvement Area	Local Seeds Project	Collect and grow on locally-sourced tree and wildflower seeds for use in habitat creation.	Schools/South Yorkshire Forest	NIA/Local authorities/ Flora Locale	5 Years and beyond				Share techniques and experience in collecting and germinating local provenance trees, shrubs and wildflowers. Provide a supply of plant material for use in habitat creation schemes. Habitat-based seed/plant collections & Yellow rattle seeds for grassland restoration work (3) & (27) Louise Hill	DBAP Habitat Action Plans (Rev Doc 26)					
07	Landscape Partnership/ Nature Improvement Area	Winter Bird Survey	Survey areas of farmland and semi-natural habitats in the wider farmland (i.e. outside the Wombwell Ings/Old Moor area) to provide wintering bird data and identify important bird roost and small/winter wetlands.	Commissioned surveys	Local Bird Watchers	Winter 2014/15				Combine survey work commissioned from professional ecologists with observations from volunteers trained in the required survey techniques. (23) Derek Whiteley. Use to support SSSI designation of the Dearne Valley sites.						
08	Landscape Partnership/ Nature Improvement Area	Urban Commons and Wildflower verges	Encourage local communities to create wildlife habitat in urban greenspace and on derelict sites. Improve habitats for urban Pollinators.	Local Authorities	Sheffield Wildlife Trust/ Nigel Dunnett, Buglife	3 Years				Local Provenance trees. Habitat-based seed collection. Yellow rattle seeds (3) Louise Hill	Rotherham BAP (Rev Doc 26)	Urban Pollinator habitat creation to be promoted as part of the B-Lines project. (21) Paul Evans.				
09	Landscape Partnership/ Nature Improvement Area	Mammal Survey	Supplement the survey work done by the NIA Riparian Advisor by extending to include harvest mouse survey in Phalaris arundinacea beds.	Local Naturalists, YWT/NIA Riparian Advisor		2014/15				Use Biodiversity Hot-spot mapping prepared by Data Observatory (9 & 15) to guide future work. Basic species occurrence maps can be provided by LRCs (11)	Train volunteers in survey techniques and commission surveys from professional ecologists. (23) Derek Whitley.					
10	Landscape Partnership/ Nature Improvement Area	Invertebrate Survey of Selected Sites	Commission a baseline study of the invertebrate fauna of key sites within the Dearne Valley.	Sorby Nats and YNU invertebrate groups and professionals.	RSPB, NIA,	3 years				Invite specialists recording groups to carry out surveys (23). Train local volunteers by holding workshops on survey techniques (e.g. pitfall trapping, sweep netting, moth trapping) and inviting volunteers to assist professional surveyors. Promote use of Museum specimens and identification guides by commissioning invertebrate identification workshop events open to interested volunteers.						

Project	Project Location	Project Name	Project Description	Lead Partner(s)	Supporting Partners	Indicative 1	Partne	ership Go I 5 6 7	als 8 9 10	0 Supporting Information 1 -	Supporting Information 2	Supporting Information 3	Supporting Information 4	Supporting Information 5	Supporting Information 6	Supporting Information 7
11	Landscape Partnership/ Nature Improvement Area	Urban Ecology	Encourage and promote exploration and recording of urban ecology through school-based projects, and wider community involvement in practical conservation projects in their own gardens. Focus initial projects within existing Biodiversity Opportunity Areas and Green Infrastructure Corridors.		NIA Connect Officer, Wildlife Trusts, and Biodiversity Partnerships, Groundwork, Voluntary Action Barnsley, TCV, Amateur Naturalists, BTO	3 years				Organise and run a co-ordinated community urban wildlife survey (19) Peter Roberts. e.g. urban bird survey (e.g. sparrow and starling) using BTO survey techniques. Follow up with street/community-based habitat improvements (nest box provision, sowing a patch of bird seed crops in garden and school grounds, supplying free berry-bearing shrubs for planting in gardens. Continue monitoring surveys to keep communities engaged in the projects over a longer period.	Link urban project to a similar habitat enhancement project in adjacent farmland around the urban community – using existing agricultural advisory schemes FWAG/ ADAS/ LEAF to encourage involvement. Promote sowing of winter bird seed crops along headlands.	Link project to a similar habitat enhancement project in industrial and commercial site within the urban community. Promote the fitting of nest boxes on buildings and provide advice and co-ordinate volunteer manpower to make habitat improvements (including providing berry-bearing shrut and annual seed crops, to replace areas of poor quality landscaping/ abandoned corners. Encourage links between employees and local nature reserve through free guided visits, publicity material and 'corporate' volunteer days.				
12	Landscape Partnership/ Nature Improvement Area	'History of the Dearne Valley Countryside' – E Book or online Documentary & Museum Displays	Commission an editor to collate data from the Hidden Gems, E-woods, Ecoscapes and other NIA and Landscape Partnership local research projects to publish a book/produce a downloadable filmed documentary describing the geological, natural history and human influences which have shaped the Dearne Valley. Inspire local interest and promote the area to a wider audience.	Doncaster Barnsley, Clifton Park and the Maurice Dobson Museums.	Old Moor, Canal and Rivers Trust	2 Years				Similar in style to 'Sheffield's Woodland Heritage' by Melvyn Jones or 'The History of the British Countryside' by Oliver Rackham or the 'Talking Landscapes' series presented by Aubrey Manning. Glaciers and Climate: how the landscape was shaped, Neolithic Times: The Don Gorge - the 'Creswell Crags' of South Yorkshire, Early Settlers: man's first modification of the landscape, Farms and Fuel: early subsistence, The Yeoman Farmer: tithes and tied houses, Estates of fun and folly; the Landed Gentry, Mines, Mills and Minerals: industrial exploitation, Nature as an Escape: the dedicated naturalists of the Dearne Valley, Dereliction and Abandonment: industrial decline, nature's reclamation and Man's 'restoration', and Future Landscapes.	Co-ordinate a year of special displays, talks, workshops showing the history of the Dearne Valley at local Museums. Use local natural history, geology and fossil specimens, cultural artifacts, documents and archive material in displays. Include a mobile exhibit of material for display at visitor sites in the Dearne Valley (e.g. Old Moor). Accompany with short illustrated talks by loca guest speakers e.g. John Rodwell, Sheffield Area Geology Trust, Dean Lomax (c/o Doncaster Museum).	Media equipment and a source of media training is available from the CRT (26) Jane Thompson.				
Site-ba Proiec	sed Projects	Proiect Name	Project Description	Lead	Supporting	Indicative 1	Partne	ership Go	als 8 9 10	0 Supporting Information 1 -	Supporting Information 2	Supporting Information 3	Supporting Information 4	Supporting Information 5	Supporting Information 6	Supporting Information 7
Code	Magnesian Limestone	B-Line /	Creating pollinator-habitat	Partner(s)	Partners	Timescale 3 years				Document Ref/Main Contact	High Melton College are	Support Local Wildlife Site	Potential for Doncaster			
	Scarp	Living Landscapes	corridors.		Groundwork Dearne Valley	, , , , , , , , , , , , , , , , , , , ,				pollinator habitats and link remnants together through changes to habitat management or the creation of new habitat corridors. (21) Paul Evans.	wanting to carry out some grassland restoration work on a former Golf Course (16) Tim Kohler.	Landowners to manage their land for pollinators and other wildlife (20) Peter Roberts (scheme had been discussed with Tom Hayek of YWT).	Naturalists members to support and train local volunteers in habitat survey and indicator species identification. Locate and survey spring lines and seepages as part of this project. (27) Louise Hill			
14	River Don and Navigation	Don Fish Passage improvements and River Don Footpath	Improving fish passage on weirs and creating links to the proposed long distance footpath along the River Don from Sheffield to Doncaster.	Local Authorities (PROW).	DCRT, CRT	?				DCRT submitting HLF bid for the footpath creation. The Landscape Partnership needs to make sure that there are improvements to the footpath network in the Dearne to link to this proposed new route. Add signposted loop walks off the main path to site such as Old Moor. (16) DCRT Chris Firth	Include physical improvements to the tow-paths. Canal and Rivers Trust Can provide interpretive information on their land including information on the waterway environment. (26) Jane Thompson – Include other information and waymarking of sites which may be nearby and accessible from the tow-paths/Long Distance footpath.					
15	Various Schools	Eels in Schools	Raising and releasing young eels into the wetlands of the Dearne Valley.	DCRT		2 Years?				Continue the project in schools in Dearne/Barnsley as well as the new school sites in Doncaster. (12)						
16	Various Sites	Explore Your Environment	Revealing the Hidden Gems in the Dearne Valley. E-woods events including guided walks, displays and talks with opportunities for local residents to provide background information and local histories.	NIA, Local Natural History Societies, SAGT	South Y Yorkshire Forest.	5 Years				Use interactive mapping facility to show what is known about the history, geology and biodiversity of a site, and where there are gaps which further research could fill. Link to presentations /talks to local groups (11).	Harness work of interested volunteers by involving Local Naturalists in identification support and education/illustrated presentations. Publicise events well at local level. (19) Peter Roberts	BBT has been directly involved in Bioblitz events and Hidden Gems visits. Publicise events well at loca level. (20) Peter Roberts	Involve SAGT to train an co-ordinate volunteers in mapping non-designated geodiversity assets. Use indoor 'map regression' studies looking at the links between geodiversity assets and the development of quarries and mines. Run guided events looking at building stones and the links to industrial heritage and wider landforms. (25) Ken Dorning	Also offering video-making workshops to enable local people to provide information about their area. (26) Jane Thompson.	Complete a habitat/species study of a Parish in the Dearne, concentrating on under-recorded areas. Doncaster Naturalists could include Adwick on Dearne in future field visits (open to the public) (27) Louise Hill.	
17	Dearne Catchment	Invasive Species and Tree Health	Record and monitor invasive riparian and aquatic species and tree health. Recruit and train volunteers. Co-ordinate with catchment-wide eradication programmes.	YWT	FERA YHEDN/ Yorkshire Water	5 Years and beyond				Existing phone app for reporting sightings. (8) Dan Jones (and Nick Simms (YWT)	Tree Alert Phone app for reporting tree health prepared by Food and Environment Research Agency.					

Supporting Information 5	Supporting Information 6	Supporting Information 7
Uso offering video-making vorkshops to enable local leople to provide information bout their area. (26) Jane 'hompson.	Complete a habitat/species study of a Parish in the Dearne, concentrating on under-recorded areas. Doncaster Naturalists could include Adwick on Dearne in future field visits (open to the public) (27) Louise Hill.	

Project Code	Project Location	Project Name	Project Description	Lead Partner(s)	Supporting Partners	Indicative 1 Timescale	1 2 3	4 5 6	78	9 10	Supporting Information 1 - Document Ref/Main Contact	Supporting Information 2	Supporting Information 3	Supporting Information 4	Supporting Information 5	Supporting Information 6	Supporting Information 7
18	Conisbrough	Kearsley Brook	Water-quality improvements to reduce contamination and sediment build-up in a public park.	EA, Yorkshire Water	DCRT & Friends of Conisbrough Mill Piece	?					Sedimentation and Combined Sewer Overflow affecting local Wildlife Site and Public Open Space. Active Local Community Group. (3) Pete Wall & (16) Anthony Downing.	Chris Firth aware of CSO problems (DCRT). Potential to link to pond improvements at Crook Hill Golf Course. DBAP (16)					
19	Old Denaby	Old Denaby	Biodiversity Improvements. Controlling scrub encroachment and preventing wetlands from drying out.	DMBC	Yorkshire Water?	?					Limited information (3) Pete Wall						
20	Eastern Landscape Partnership/ Nature Improvement Area	Reptiles Survey	Commission a baseline study of the reptile fauna of key sites within the eastern Dearne Valley.	South Yorkshire Amphibian and Reptile Group	Local Naturalists	3 Years					Anecdotal evidence suggests the Limestone Scarp and nearby shale Vales are home to adder and slow worm but there are few positive records (27) Louise Hill						
21	Barnburgh Colliery Tip, Cudworth Common, New Park Springs, Phoenix park, Rabbit Ings	Restored Colliery Sites – habitat management improvements	Implement practical biodiversity improvements. Creating edge habitat and improving grassland diversity using locally-sourced wild flower seeds.	NIA	BMBC, The Land Trust	5 Years and beyond					Change mowing regime (3) Pete Wall. Reduce sward vigour using yellow rattle. Create glades and transition/edge habitats along woodland blocks. Use plant materials from a Local Seeds Project.						
22	Rivers and Floodbanks and foodplains	River Dearne, Dove and Don Barn Owl Project	Place barn owl boxes along the River Dearne and Tributaries. Carry out associated habitat improvements for small mammals (barn owl prey). Adjust floodbank mowing regime and Yorkshire Water land management regimes.	EA, Yorkshire Water, IDB and YWT	NIA, SY Bio Forum, Hawk and Owl Trust	3 Years					Potential to link with Lower Don Revival scheme being planned by YWT (16) Carys Hutton.	Varying the floodbank management regime along suitable stretches of the river would create a diversity of habitats. Increase suitability for small mammals. (16)	Work with Yorkshire Water to improve habitats on their land. Management plan for land at Wombwell STW is being discussed (17) Kathryn Turner. Opportunity to extend this work to large sites such as Lundwood? Involve species monitoring survey projects birdwatching permits/viewing facilities overlooking sites. Encourage local volunteers to monitor foraging activity. (Boxes to be inspected regularly by Hawk and Owl Trust). (16)	Link to wet woodland planting being proposed at Cudworth Sewage Works (21)			
23	Eastern Landscape Partnership/ Nature Improvement Area	Springlines Survey	Commission a baseline study to identify and survey potential springs, flush and small streams, particularly lime-rich waters emerging below the Limestone Scarp.		Local Naturalists, YNU Freshwater Ecology Section	2 Years					Recent discoveries have highlighted the potential for small scale bio-diverse running-water habitat to have been overlooked and unprotected (27) Louise Hill						
24	Goldthorpe, Grimethorpe, Manvers, Hoyland,	Sustainable Developments	Promote the involvement of the business community in improving their environment. New developments are priority sites for high quality SUDS, including pollinator- habitat on green roofs. Provide a dedicated Advisor to work with planning officers to find practical way of achieving high quality green infrastructure.	BMBC, RMBC, LEP	Yorkshire Water (SUDS), Natural England	5 Years					Use Biodiversity Opportunity Maps to guide habitat creation as part of offsetting/S106/CIL (4)	Need to make sure it does not exacerbate existing WFD failures (2) Anthony Downing	Detailed planning guidance planned for developments in the NIA (Barnsley only) Funding of Eco-enforcement officer role could be included within planning brief (6).	Developments in the heart of the Dearne Valley NIA should include pollinator-friendly habitats including green roofs on large-scale developments. (21) Paul Evans.	Rev Dov 14 Barnsley Green Infrastructure Strategy.		
25	Swaithe	Swaithe Washlands	River floodplain habitat improvements – canalised river.	EA/NIA		?					Study done by EA (3) Pete Wall	HS2 mitigation possible source of funds? Hoyland development site – Bio offsetting/ S106					
26	Thumscoe Dike	Thurnscoe Dike	Thurnscoe Dike Ings Carr Water improvements.	EA		?					Addressing problems of channel morpohology, multiple sewage discharges, agricultural run-off, sediment load, cross connection, mine water and IDB management (2) Anthony Downing						
27	Kilnhurst Cut and Swinton & Mexborough Canal	Waterways	Offer accredited training (working with Groundwork). Promote volunteering on the Canal Network. Work with the Community Boat Project (Swinton) to develop accredited training opportunities. Provide interpretive information on the waterways and improve access on towpaths. Provide on-line education resources on water and rivers (joint with EA).	Canal and Rivers Trust, Groundwork, EA		5 Years					CRT are currently operating a accredited scheme with Dewsbury Groundwork. On-line education resources are available (26) Jane Thompson.						
28	All Local Wildlife Sites	Local Wildlife Site Landowner Support	Offer Local Wildlife Site landowners and others not in/eligible for agri-environment schemes, surveys, practical management assistance and financial support for site protection or enhancement work.		YWT Groundwork?	5 Years					Tom Hayek (YWT) and Janet Johnson (Groundwork) had been discussing a potential project for supporting owners of Local Wildlife Sites. (20) Pete Roberts	Helen Rhodes (New Hall Farm) would like to see better links between farmers. Landowners and environmentalists (pers comm R. King).					
29	Barnsley and Rotherham	Hedgerow Survey	Archival and field hedgerow surveys looking at the archival evidence of their age and assessing their condition-based on aerial photographs and field work).			1 Year					Data is lacking for Barnsley Detailed hedgerow and veteran tree surveys required to support the Barnsley BAP (20) Peter Roberts	Hedgerow survey using archival evidence has not been done. Mapping of species-rich hedges identified in previous surveys (2006) is needed (13) Carolyn Jones					

Landscape Partnership Organisations:



Danum (Dearne and Dove) IDB Rachael Brady

Ζ

0

C

S

0

Sheffield Areas Geology Trust Ken Dorning

Barnsley Ecologist Geoff Carr

Barnsley Ecologist Chris Needham

Volunteer co-ordinators:

Voluntary Action Barnsley Dan Wildsmith

Trust for Conservation Volunteers Dave Swales

Response Key

Contact made and information supplied





Appendix 1 List of Consultees

Year	Phase	Action	Support	Funding
Year 1	Start Up	Organise a local publicity campaign to inform people within the target area about the project aims.	Can YWT and Buglife assist with preparing publicity materials?	HLF bid to provide some funds for publicity materials/ adverts/ articles in local papers/radio? - YWT hosts project Website?
		Run introductory B-Lines/pollinator-friendly gardening events in villages in the target area to attract attention and support, build up a list of potential volunteers (who might assist in later habitat survey work) and gather contact details for local landowners. N.B. Advertise these events well, locally, by using parish magazines, local notice boards, local allotment sites, schools etc).	Supported by YWT Education staff and Local Naturalists Society members/ other local naturalists	HLF funding to hire venues, pay for publicity material – pay for volunteer expenses incurred whilst organising the events.
		Project-co-ordinator and NE/DEFRA land advisor share information on land already in agri-environment schemes within the target area (including, where possible, information on the HLS options chosen). Use existing local farming networks LEAF, FWAG, CFE, NFU, CLA) to make introductory contact with key land owners in the target area to gauge potential interest.		YWT fund the project co-ordinator's time and secretarial costs.
		Local Biodiversity Partnerships/Local Naturalists draw up list of indicator species by reviewing LWS criteria and Buglife advice.	Is information available from Buglife?	Local BAP officers co-ordinate this work. Their time is funded by Local
			Biodiversity Trusts/Groups contribute their time	Authority of Biodiversity Trust.
	Pollinator Habitat Survey	Invite volunteers and key interested landowners to talks in village halls/community centres where more background information is provided and guidance given to potential survey volunteers (and landowners) on what makes good pollinator habitats. Illustrate with pictures of good habitats, and indicator plant species.	Buglife to provide illustrative materials & provide staff member to be present?	HLF funding to hire venues, pay for publicity material – pay for volunteer expenses incurred whilst organising the events
		 Organise a series of pollinator habitat survey days where volunteers walk footpaths, cycle alongside road verges and, with landowner permission, look around private field and woodland edges to survey for good pollinator habitats and key indicator species. Co-ordinate coverage to avoid duplicated survey effort but encourage volunteers to carry out independent surveys in their own time on their own patch if they are willing to do so. Offer a free phone app. to allow surveyors to record the location of sites using a 	Involve local naturalists to guide less - experienced volunteers.	YWT & Buglife co-fund the project co-ordinator's time to organise these days? HLF funds volunteer expenses and funds the development of an appropriate phone app/modification to an existing app such as 'Nature
		 GPS. Provide guidance on responsible seed collection and ask volunteers to gather locally-native plant seeds (with landowner permission) for volunteers to grow on/ propagate in their gardens, allotments or school grounds. 		Notes'.
		Project co-ordinator gathers the survey data over the survey period and plots the habitat on a GIS (compatible with Buglife's planned Interactive Map and BARS) to show the location of key habitats and identify gaps in the network. Contacts interested landowners who have landholdings in the 'gaps' to discuss habitat restoration or creation options.		YWT fund the project co-ordinator's time and secretarial costs.
		Hold post-survey publicity events (open to all) in local communities (Village Halls/community centres) to present the survey results and show what kinds of practical works are likely to take place.		HLF funding to hire venues, pay for publicity material – pay for volunteer expenses incurred whilst organising the events. YWT fund the project co-ordinator's time.
Year 2	Pollinator Habitat Survey	Continue programme of pollinator-habitat survey work if not completed in the first year.	Involve local naturalists to guide less - experienced volunteers.	YWT & Buglife co-fund the project co-ordinator's time to organise these days?
	Pollinator Monitoring Survey	Commission detailed insect pollinator surveys of the original relict habitat fragments – to provide a baseline. For a selection of key sites, carry out detailed annual monitoring by experts (YNU/Sorby entomologists and local Naturalists) Experts to be accompanied by local trainees/new naturalists hopefully recruited from the local communities during the previous events.	Methodology to be advised by Buglife.	Surveys funded by HLF.
	Practical Works	 Project Co-ordinator works with NE/DEFRA Advisor and landowners /land managers (Parish Councils /Local Authority and Neighbourhood & Highways maintenance teams) to devise simple appropriate management schemes and locate funds for remedial restoration or habitat creation works. Uses plant material propagated from locally-gathered seed to establish locally-native species in the newly created habitats). (N.B. Scope for a much larger "local seeds" project to be set up) Project Co-ordinator continues to work with new landowners to undertake further restoration or creation work on new sites. 		YWT Living Landscapes – funds capital works, preparation of management agreements, and grazing agreements & project co-ordinator's time and secretarial costs.
	Publicity	 Hold publicity events (open to all) in local communities (Village Halls/community centres) to show what practical works are going to take place and report on progress. Agree some means of advertising accessible key habitats to passers-by. e.g.: Obtain permission to affix/spray an unobtrusive but recognisable bee logo to lamp-posts or on paths or road ways beside species-rich verges to remind people why a section might have been left uncut for a few weeks (and to remind verge 		HLF funding to hire venues, pay for display material fund staff and volunteer time to organise and advertise the events and the B-Line sites.
		 Place QR code plaques which link to the project website near to sites where habitat work has taken place. Nominate local bee-line wardens (probably one of the local survey volunteers) to feed back information on whether the agreed management is being carried out and keep an eye out for unpredictable events (utility company verge works. fly tipping of garden waste/rubbish on key habitats etc.) so that the relevant responsible organisation can be contacted and the appropriate action organised. 		project website
Years 3 - X?	Practical Works	Project Co-ordinator continues to work with new landowners to undertake further restoration or creation work for X years		(dependent on duration of YWT Living Landscape Funding).
	Publicity	Hold an annual project update gathering at a venue within the project area for volunteers, landowners/land managers and interested members of the public. Project co-ordinator to report on progress and future works. Invite entomological surveyors to present the highlights of their pollinator survey work. Provide an opportunity for volunteers and other groups (e.g Naturalists/Biodiversity Groups to share knowledge and experience).		HLF funding to hire venues, pay for display material, fund volunteer expenses incurred in organising and advertising the events.

Appendix 4 Example of Project outline: B-lines/Living Landscapes (Prepared by Louise Hill)

1) Online identification and record sharing

iSpot

http://www.ispotnature.org

The iSpot website is a place to share nature online. The iSpot smartphone app puts the power of the online iSpot community in your hand, wherever you are. You can use it to upload a photo of any wildlife and nature you have seen, or to get help with identification and to help identify other people's observations, add agreements or just to share comments.

The UK species dictionary is linked to the app too, so use it to have a go at identifying what you have seen and to win reputation points for getting it right.

You can use the app to browse your own album of observations and to show others what you have seen. Any helpful comments or new identifications from the experts on iSpot will appear in your album as soon as they are made.

As well as getting help with your own observations of wildlife and nature you can also interact with others using the app. You can see what they are observing, filter and explore what they have seen in your vicinity through the "Around Here" feature, and also add comments, give identifications and agree with identifications posted by others. You need to register with iSpot to use the app and this can be done directly, or by using an existing Facebook or Open University login.

By using iSpot to help check your identifications, you can also play a part in providing data to the range of organisations that help monitor and conserve wildlife. Data from observations on iSpot are now being supplied to the wide range of wildlife recording schemes that play a vital part in monitoring and researching species distributions.

There is a regional Forum for Yorkshire but unlike the American version described below, it does not appear to be possible to set up your own recording projects.

inaturalist

www.inaturalist.org

American smartphone recording app and website 'where you can record what you see in nature, meet other nature lovers, and learn about the natural world.'

Registered users can create Projects to pool their observations with other people on iNat. These can be used for starting a citizen science project or just keeping tabs on the birds in a nearby park with your local birding club.

OPAL

www.opalexplorenature.org

The Open Air Laboratories (OPAL) network is an initiative that is open to anyone with an interest in nature. It aims to create and inspire a new generation of nature-lovers by getting people to explore, study, enjoy and protect their local environment.

OPAL is developing a wide range of local and national programmes to encourage people from all backgrounds to get back in touch with nature. The project also generates valuable scientific data concerning the state of our environment. By bringing scientists, amateur-experts, local interest groups and the public closer together, lasting relationships are being formed and environmental issues of local and global relevance are being explored.

iRecord

www.brc.ac.uk/irecord

iRecord is a website for sharing wildlife observations, including associated photos - you can register guickly and for free. Once you've registered, you can add your own biological records for others to see, and you can see what has been recorded by others. Your data will be kept secure and will be regularly backed up. Automatic checks will be applied to your observations to help spot potential errors, and experts can review your sightings. All wildlife sightings for non-sensitive species are shared with other users and will be made available to National Recording Schemes, Local Record Centres and Vice County Recorders (VCRs). The goal of iRecord is to make it easier for wildlife sightings to be collated, checked by experts and made available to support research and decision-making at local and national levels. Join iRecord to share your sightings with the recording community, explore dynamic maps and graphs of your data and make a real contribution to science and conservation.

Indicia

www.indicia.org.uk

Indicia provides a solution for developing online biological recording. A toolkit that simplifies the construction of websites, Indicia supports wildlife observation recording forms that are as simple or advanced as you need, allow photo upload, reporting, mapping and verification of the records. By providing these facilities via a comprehensive set of highly configurable components, Indicia can be used to build diverse and unique recording solutions, which avoid reinventing the wheel and minimise the cost of development.

Indicia enables you to collect and map species records on your own website. You can use Indicia to create your own online nature survey. Whether you want to run a local bat survey, or collect species observations from all over the world, Indicia makes collecting records on your website easy, and it's free.

Developed by the National Biodiversity Network (NBN) and funded by OPAL, Indicia is simple to install and can be fully customised to suit your needs. There's even Instant Indicia for those that want to get up and running quickly but lack technical expertise.

Features:

- Customisable form request the exact information you need
- Collect date, location, and photos
- Defined species lists, so no confusion over data submitted
- Records displayed instantly on interactive map
- Customisable design
- Collected data easily submitted to the wider NBN database
- Completely free

UK Environmental Observation Framework

http://www.ukeof.org.uk

UKEOF works to improve coordination of the observational evidence needed to understand and manage the changing natural environment. It is a partnership of public sector organisations with an interest in using and providing evidence from environmental observations.

UKEOF commissioned NERC's Centre for Ecology & Hydrology (working with the Natural History Museum) to carry out a project looking at the role of volunteers in environmental monitoring, resulting in a step-by-step 'Guide to Citizen Science', providing evidence-based advice on how to set up and run a successful citizen science project. Citizen science can broadly be defined as the involvement of volunteers in science. It has a vital role in scientific research and education, and the potential to help meet some of the challenging demands of environmental monitoring at the national scale.

The project also looked at lessons learnt from past citizen science projects; the best ways to encourage more researchers and volunteers to get involved; and the potential for using available and emerging technologies for data recording. The Guide is underpinned by a comprehensive report, 'Understanding Citizen Science and Environmental Monitoring'

Appendix 5 Using Technology in Environmental Recording, and Promoting Citizen Science

2) Specialist Recording Smartphone apps



Nature Notes

www.mrbecology.co.uk/?page_id=62

Nature Notes is for recording GPS referenced sightings of British flora and fauna whilst in the field, using Ordnance Survey grid references.

It contains a full list of plant, bird, mammal, reptile, amphibian, butterfly, dragonfly and moth species. Species can be found and located by searching for either common or formal latin names (using 3 or more letters).

Records can be exported into a spreadsheet for later import into Recorder or GIS software on your PC.

It includes a moving Ordnance Survey map (sourced from OpenData, downloadable for offline use) for recording species away from the current location. If you have purchased 1.25k OS 10km map tiles these can also be used after some processing (please email for instructions).

It also supports GPS track recording, and additional fields for appropriate species – e.g. life stage for amphibians and DAFOR for plants.

Integration with iRecord is also in development. Free to download from googleplay

Biological Recording Software

www.nfbr.org.uk/wiki/index.php5?title=Category:Biological Recording Software

Many different computer programmes are available for handling biological data. Some have been developed to suit the needs of just one taxonomic group, whilst others handle a wide range of species or habitat data. Some conform to the new NBN data model, and many incorporate mapping facilities or can link to GIS or other programmes. Some software suits the individual recorder, whilst others better meet the needs of fully-fledged Records Centres. Support, cost and ease of use all differ.

Sites linked from the nfbr site are : AditSite Biobase Bird Recorder Birding Database FieldNotes Fieldworker Gilbert 21 Natural Resources Database Recorder 6 TREx

PlantTracker

www.planttracker.naturelocator.org

The PlantTracker project is a collaboration between the Environment Agency, the NatureLocator team at the University of Bristol and the Centre for Ecology and Hydrology. The main aim is to locate incidences of a number of high priority invasive plant species. There is currently a lack of information on exactly how serious the problem presented by invasive plant species really is. With your help we hope to build the most complete picture yet and provide the raw data to those that need it most in (almost) real time.

Obtaining accurate data about the distribution of invasive species is of paramount importance when it comes to assessing impact and formulating a response. But data provision is often patchy and records are usually unverifiable and lacking accurate geographic reference.

The PlantTracker project has addressed these problems by combining the development of a smartphone application with the power of crowd-sourcing data collection. Critically, each record collected is verifiable since it comprises a photograph along with other relevant metadata. Records are also accurately geo-located since the app utilises the phone's inbuilt GPS capabilities, often resolving the location to a matter of metres.

Another benefit of the app is that we have built photographic ID guides into it, so that you'll be able more easily to distingush those non-natives from our similar-looking indigenous plants.

Data collected by the PlantTracker app is being stored in the "Indicia" data warehouse, hosted by the Biological Records Centre on behalf of the volunteer recording community in Great Britain. Indicia provides a facility for verifying observations submitted through the App and ensures that data are made available to the national recording scheme for vascular plants, the Botanical Society of the British Isles.

Tree Alert

www.opalexplorenature.org/tree-health-app

From Ash dieback to Tortrix roller moth, key information about the problems that can affect our trees is now at your fingertips.

Learn how to identify some of the pests and diseases you might spot on Oak, Ash and Horse Chestnut trees, with ID tips and pictures.

Check for the signs of the six Most Unwanted, find out why their presence could be a concern and connect directly to Tree Alert to inform Government officials if you find the symptoms. The app can be used on its own or as part of the OPAL tree health survey.

Bioblitz tools

http://www.yhedn.org.uk

Apps and social media tools for use in bioblitz days. See http://yorkshirebioblitz.wordpress.com/

For more details contact Dan Jones, Yorkshire and the Humber Ecological Data Network.

Birding apps

There are numerous Bird watching apps which contain photos and information on birds of Great Britain and the British Isles. They can enable you to filter birds based on type, or status in the UK or search for them by name. Some provide images of birds and samples of bird sons to aid identification. Some apps also let you mark the birds that you've spotted to help keep track of which species have been seen.

3) Online Recording Projects

There are numerous online recording projects run by national and local organisations. Some examples are given below

Bird Track

www.blx1.bto.org/birdtrack/main/data-home.jsp

BirdTrack is an partnership project between the BTO, the RSPB, Birdwatch Ireland, the Scottish Ornithologists' Club and the Welsh Ornithological Society, that looks at migration movements and distributions of birds throughout Britain and Ireland. BirdTrack provides facilities for observers to store and manage their own personal records as well as using these to support species conservation at local, regional, national and international scales.

Plantlife Wildflowers Count

www.plantlife.org.uk/things_to_do/wildflowers_count

Wildflowers Count is the UK's only annual national wild plant survey. Every year you can help us keep track of some our most common wildflowers.

Many of our more common species of flower can easily be taken for granted, often overlooked while we study rare and endangered species. But common species are important and can be under pressure from problems such as pollution, or they may be doing well because of land management practices. This is why we need to count our more common wildflowers; they are indicators of how healthy our countryside is, and the more counts there are the better.

4) Digital Field Guides

Colour tablets offer the potential for numerous colour identification guides to be taken into the field but unfortunately, few of the best field guides are available as e-books.

Here are links to some which are available

Wild Flowers Collins Gem Birds Collins Gem Insects Collins Gem Trees

5) QR codes

QR (short for Quick Response) are codes used to take a piece of information from a media source and put it into your mobile phone.

It can provide details about a feature or show you a URL which you can click to obtain further information. They can also store (and digitally present) geo coordinates, and text. Many modern mobile phones are able to scan them. They have many potential applications outdoors. You can put QR Codes on small weatherproof labels or outdoor signs to link to changeable online information including videos, text, images and sound.

Local General Natural History Groups:

Barnsley Naturalist and Scientific Society Doncaster Naturalists' Society Sorby Natural History Society Rotherham Naturalists' Society

Most are keen to support projects which involve training Local volunteers to look for and record certain species and any projects that get more people interested in their Local environment (14) but fewer new younger recruits means that activity and recording coverage is reducing (18). Capacity to assist is dwindling (19). These groups are experienced at organising identification workshops and some have been actively involved in bioblitz events(19).

There is a need to revive natural history groups by involving younger participants.

Local Volunteer Groups

Dave Swales (Trust for Conservation Volunteers) has a Volunteer Team based in Sheffield. Wakefield TCV work in Barnsley. There is no local TCV team in Doncaster but Yorkshire Wildlife Trust have volunteers working on their Reserves.

Sheffield Wildlife Trust are active in Sheffield and Rotherham (10)

Groundwork Dearne Valley and Voluntary Action Barnsley are active in the Dearne Valley area.

Local Community Groups - Conisbrough area (Doncaster)

Conisbrough Local History Group - conisbroughlocalhistory/sitesgoogle.com Conisbrough and Denaby Main Heritage Group – conisbroughheritage.co.uk Don Gorge Community Partnership – dongorgecommunitygroup.com

Local Community Groups Barnsley (from Woodland Strategy Rev Doc 15)

The following is a list of projects and initiatives that were active when the Strategy was written:

British Trust for Conservation Volunteers (BTCV) – from time to time local woodland owners take on teams from BTCV in order to carry out conservation-based woodland management activities;

Woodland Trust - own a number of woods in Barnsley and manage them in conjunction with the local community;

RSPB - manage the Old Moor Wetlands Centre, which includes a number of woodland sites;

Wentworth Castle Volunteers – undertake conservation and restoration work with the Wentworth Castles and Stainborough Park Heritage Trust, including work in the woodland on the estate;

Parish Councils such as Silkstone, Hunshelf and Tankersley actively manage local woodland in conjunction with their local community;

Tankersley and Pilley Environment Group – carry out conservation and woodland activities in Potter Holes Plantation and Broad Ing Plantation;

Carlton Marsh Club - volunteers who assist with the management of the local nature reserve at Carlton Marsh;

Forestry Commission – work with community volunteers at Phoenix Park and to a lesser extent, Wombwell Wood;

South Yorkshire Orienteers - organise a variety of orienteering events in Barnsley Borough woods.

Local Community Groups Barnsley (from Woodland Strategy Rev Doc 15) Cont.

Past examples of community engagement included:

White City Wood Project – Community activities in West Haigh Wood, Grimethorpe, organised by a project officer based with Barnsley Council and funded by South Yorkshire Forest Partnership;

Wildspace! Community Liaison Officer – a Barnsley Council based, Natural England funded project that encouraged community activity in the local nature reserves and some proposed nature reserves in Barnsley, including Carlton Marsh, Dearne Valley Park, Potter Holes Plantation, Worsbrough Country Park, West Haigh Wood and Houghton Common;

Wombwell Wood Society – An established 'Friends of' group that has actively promoted community engagement in Wombwell Wood and its recent extension. In addition, The Forestry Commission, supported by South Yorkshire Forest Partnership, employed a community health ranger to organise activities in and around Wombwell Wood;

Forest Fever – this event, run by South Yorkshire Forest Partnership, was an annual event that organised woodland activities during the school summer holidays, discontinued due to loss of funding;

A number of local schools in the past have planted small areas of woodland in their school grounds, some of these under the umbrella of the 'Forest Schools' initiative.

Number in brackets '(3)' refers to consultation note (see Appendix 2).

Some of the major publicly-accessible environmental assets are listed below.

Partnership sites are asterisked

RSPB OLD MOOR* Situated in the centre of the Dearne Valley brief area, Old Moor is a 250 acre wetland nature reserve. Subsidence caused by mining combined with the naturally low-lying land created a valley that became liable to flooding. It was opened in 1998 by Barnsley MBC and has been in the ownership of the RSPB since 2003. The site is home to a large amount of wildlife along with a number of bird species. The TPT runs along the south of the site.

WOMBWELL INGS Flood plain with permanent lake, a haven for birdlife.

Both are areas of land where the soil is saturated with moisture. The sites are covered partially by shallow pools of water. Both areas act as a storage facility for the River Dearne, flood waters pass through a spillway to be temporarily stored to reduce the impact of flooding downstream. Wetlands perform two important functions in relation to climate change. They have mitigation effects through their ability to sink carbon, and adaptation effects through their ability to store and regulate water. They support a prevalence of vegetation typically adapted for life in saturated soil conditions and are home to a host of rare birds.

BROOMHILL FLASH Example of a subsidence Flash. This site was operated by the Yorkshire Wildlife Trust now by the Garganey Trust and covers an area of around sixty acres. This comprises open water, grassland, and marshland.

ADWICK WASHLAND A scheme in the planning stages to transform a large site north of the River Dearne into a natural flood plain with new habitats for wildlife. The site will be improved for visitor access and the TPT runs through the site. An active flood storage facility in extreme flood conditions downstream of Bolton-upon-Dearne.

WATH WOOD Ancient woodland situated at the southern edge of the Dearne Valley area. It is an important area for wildlife and contains the ancient Celtic earthworks known as "Roman Ridge" which are of national interest.

PARKHILL NATURE RESERVE* Nature conservation area on site of former brickworks.

GYPSY MARSH* A local nature reserve and lowland heath with wildflowers including orchids, and many varieties of birds.

HOUGHTON WASHLAND* Washland site crossed by the River Dearne, managed for flood defence and biodiversity. It is an area of floodplain that is allowed to flood or is deliberately flooded by the River Dearne for flood management purposes. Houghton washland is up stream of Darfield and has a flood embankment.

DENABY INGS Marshland and mixed woodland supporting a wealth of wild flowers.

PHOENIX PARK Former Hickleton colliery site transformed by the Forestry Commission in to a community woodland.

CUDWORTH COMMON Former spoil heap for Grimethorpe colliery now restored by the Forestry Commission for wildlife conservation and community use.

DEARNE VALLEY PARK Reserve developed from relict habitats and reclaimed colliery along the River Dearne. Former colliery site now country park home to Barnburgh colliery pit head wheel

FRICKLEY PARK Public open space located on the former Frickley colliery pit head and tip, the park has several sports pitches and landscaped areas.

WEST HAIGH WOODS* Publicly-accessible ancient woodland with preserved historic wood-bank and pre-industrial charcoal hearths.

HOWELL WOODS 17th century game reserve and ice-house now publicly accessible woodland.

WENTWORTH PARK Wentworth Castle Gardens and Park extends over 500 acres and includes historic gardens, childrens adventure playground and a fascinating collection of 26 listed buildings and monuments.

ELSECAR PARK Local nature reserve with community woodland, bandstand and terraced gardens.

ELSECAR RESERVOIR Local nature reserve around reservoir site.

ELSECAR HERITAGE CENTRE An Antique, History and Craft Centre set in the conservation village of Elsecar. It is located within restored former ironworks and colliery workshops that now house an antique centre, individual craft workshops, and exhibitions of Elsecar's past.

BOLTON-UPON-DEARNE WETLANDS* Publicly-accessible local wetland site

EDDERTHORPE INGS* Nature conservation area in subsidence flash comprising of open water, grassland and marshland.

EDDERTHORPE FLASH - Active flood storage area. It is a water-filled hollow created by flooding of land following subsidence, associated with movement or collapse of underground structures related to mining. The flash has become a wetland habitat site with reedbeds and fens.

SUNNY BANK, HORSE CARR AND STORRS WOOD* Publicly accessible woodland

STAIRFOOT DISUSED RAILWAY* Wooded footpath on disused railway line.

WOMBWELL WOODS* Semi natural broad leaf woodland and wildlife habitat.

BARROW COLLIERY SITE* Reclaimed former colliery site.

SKIERS SPRING WOOD* Ancient Woodland.

SWAITHE FLOOD MEADOWS*Area of grassland susceptible to seasonal flooding.

DENABY INGS* One of the most diverse wetlands in the county. Rich in aquatic plant, invertebrate and bird species.

OLD DENABY* Wooded river corridor.

CONISBROUGH CASTLE An impressive Norman castle and best preserved example of a circular keep from this period. It was originally built in the 12th century and is now restored with new roof and floors. The destination is one of the most popular attractions in South Yorkshire. Local Wildlife Site.

CONISBROUGH VIADUCT A dramatic piece of railway age architecture spanning the Don Valley. The viaduct was built in 1907 and is almost 500m long with 21 arches. The viaduct is disused and now forms a stretch of the TPT. Supports rare plants unique to the gorge – Flamingo moss and Danes Elder.

WORSBOROUGH MILL Worsbrough Mill is a 17th century working water powered corn mill, set in over 240 acres of country park. It has a designated local nature reserve with fishing, walking and cycling being just a few of the activities to take part in. The reservoir is a local wildlife site and support an interesting plant community including populations of sea clubrush.

SPROTBROUGH GORGE The River Don flows through Sprotbrough Gorge where ancient limestone woodlands line the sides of the river. It is an important site for rare plants, invertebrates and breeding site for birds.

Heritage

MEASBOROUGH DIKE Site of pit-head winding gear used at Barnsley Main colliery.

MAURICE DOBSON MUSEUM Local history museum telling the story of the Darfield area and Darfield people.

GUN BATTERY

Appendix 7 Key Sites (Identified from NIA Interpretation Study)