

Wirral Biodiversity Action Plan

A framework for local biodiversity
conservation

Produced by the Wirral Biodiversity
Partnership Technical Group
Approved February 2003

Wirral Biodiversity Action Plan Technical Group Members

Cheshire Wildlife Trust
The Dee Strategy
English Nature
The Environment Agency
The Mersey Strategy
Metropolitan Borough of Wirral
National Museums and Galleries on Merseyside
The National Trust
Riva 2005
RSPB

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FOREWORD

Wirral is sometimes described as “England in miniature” and for a peninsula of only sixty square miles with a population of over 300,000, the range and diversity of species and habitats is breathtaking.

The richness of Wirral’s biodiversity is also one of its best kept secrets. Take Hilbre Island for example: few of the thousands of people who visit this rocky outcrop in the Dee Estuary each year realise that, as well as playing host to seals and a great variety of visiting birds, it is one of only three sites in North West England for the rare and beautiful Rock Sea-lavender plant.

The North Wirral Coastal Park is home to the only site in England for the Belted Beauty moth and the very rare Natterjack Toad is making a comeback in the sand dunes at Red Rocks near Hoylake.

Significant areas of the increasingly threatened lowland heath habitat are found at Heswall Dales and Thurstaston.

Add to this the hundreds of thousands of birds that spend each winter on the mudflats and saltmarshes of the Dee and Mersey Estuaries and it is obvious that Wirral is no ordinary place.

Each of these species and habitats makes a small but important contribution to the variety of life found in our area and on our planet – in other words it’s biodiversity. Many need careful management by people in order to thrive – particularly in a densely populated area like the Wirral and this is where this document takes on a vital importance. It sets out a series of action plans for some of Wirral’s most important habitats and species, identifying opportunities for safeguarding and enhancing Wirral’s wildlife resource.

The publication of this Biodiversity Action Plan is only the start of the process. The many organisations and individuals who have contributed to this plan are committed to delivering real improvements in Wirral’s biodiversity over the next few years.

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- Small cetaceans
- Podalonia affinis (a wasp)
- Rock sea-lavender
- Sandhill rustic (a moth)
- Water vole

SELECT BIBLIOGRAPHY

ABBREVIATIONS

INTRODUCTION

What Is Biodiversity?

Biodiversity encompasses the whole range of animals, plants and micro-organisms on earth -including humans- from the tiniest bug to the blue whale, along with the ecosystems in which they live.

Biodiversity conservation is similar to the idea of traditional 'nature conservation' but it places specific emphasis on threatened habitats and species.

Biodiversity Under Threat

Although the countryside may appear visually attractive, it has become apparent that much of its richness and diversity has been lost, and more is disappearing each year. Some plants and animals that were once familiar are now rare, others have become extinct altogether. This century the UK has lost over 100 species including 7% of our dragonflies, 5% of our butterflies and more than 2% of our fish and mammals. Many more are in danger of disappearing, and we need to take action on a local level. The world is losing species at a faster rate than ever before as a result of human activity; evolution cannot compensate for losses at the current rate.

Why Is Biodiversity Important?

Biodiversity improves our quality of life through our health and our enjoyment of the outdoors. It gives variety and character to the countryside and boosts our economy, for example through tourism and ensuring inward investment.

There are many species on which we are dependent, not least those used in food and medicine production. A commonly used drug, aspirin, is derived from willow and many other species may turn out to have medical uses.

All organisms contribute in some way to maintaining the balance of nature, and the disappearance of any of them is likely to have effects on the well-being of the whole.

When species are lost, the ability of this and future generations to experience and enjoy nature is diminished and the pool of genetic resources, from which evolution can develop, is reduced.

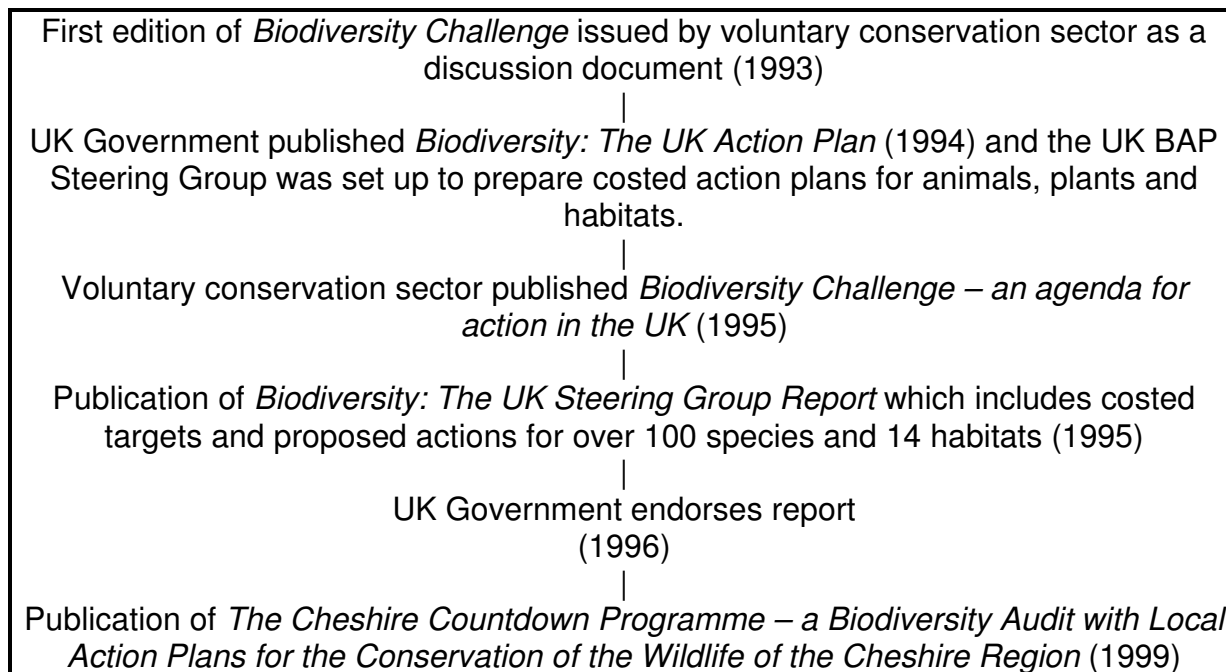
The National Context

The origin of local biodiversity action planning can be traced back to the Earth Summit held in Rio de Janeiro in 1992. Four key agreements came out of the summit:

- The Climate Change convention
- A statement of principles for the management, conservation and sustainable development of the world's forests
- Agenda 21
- The Convention on Biological Diversity

More than 150 heads of government, including the UK signed up to the Convention on Biological Diversity.

This was the start of the UK commitment to biodiversity. Since then there have been a number of key stages in taking forward biodiversity issues in the UK.



Wirral's Wildlife

Variety of life – or biodiversity – is one of Wirral's greatest assets and something that everyone who lives, works and visits the peninsula should know about.

The Mersey and Dee Estuaries and North Wirral Foreshore. Here tens of thousands of waders and wildfowl spend the winter, including redshank, dunlin, knot, turnstone, curlew teal and pintail.

Clay cliffs at Thurstaston attract geologists as well as biologists searching for unusual plants and invertebrates.

Sand dunes at Leasowe and West Kirby, where natterjack toads breed, and rare plants such as Mackay's horsetail grow.

Ancient woods still line the River Dibbin, much open to people. The spring shows of wood anemones, bluebells and other flowers are spectacular. These woods are also important for invertebrates, bats and birds.

Ponds are a Wirral speciality. They support a wide variety of water plants; and the mini-beasts beloved of children pond-dipping. Also frogs, toads and newts, including the legally protected Great Crested Newt, a species which is declining across Europe.

Lowland heathland, especially at Thurstaston Common and Heswall Dales. At least 80% of lowland heathland was destroyed in the last century. In late summer the heather and western gorse flower together, a mixture of purple and gold.

Small pockets of other wildlife lurk in unsuspected corners. A **remnant marsh** at Bidston, and new habitats on the former tip; some little gems of traditional **hay meadows** at Meols and Frankby; orchids and bees on the former RAF camp; butterflies on the goods yard to Bebington railway station (New Ferry Butterfly Park).

Special **maritime wildlife** on the **Hilbre Islands**.

Wildlife Designations

Wirral has twelve **Sites of Special Scientific Interest** (SSSI's) two of which – the Dee and Mersey Estuaries – are also listed as Wetlands of International Importance under the **Ramsar Convention** and as **Special Protection Areas (SPA)**, under European Habitat Regulations for their bird interest.

In addition to these, the Dee Estuary and North Wirral Foreshore are designated as a **Sensitive Marine Area**. The Dee Estuary is a candidate **Special Area for Conservation (SAC)** under European Habitat Regulations.

Wirral has five **Local Nature Reserves** (LNR's), and a further four: North Wirral Coastal Park, Caldy Hill and Stapledon Woods, The Wirral Way, and Eastham Woods are proposed for designation.

There are over 70 **Sites of Biological Importance**.

For more information about Wirral's official Wildlife sites, visit www.wirral.gov.uk and follow Services – Environment – Nature conservation.

THE DEVELOPMENT OF THE WIRRAL BAP

The purpose of Biodiversity action planning is to focus resources to conserve and enhance biodiversity by means of local partnerships, taking account of both national and local priorities.

The Wirral Biodiversity Partnership

Wirral's *Biodiversity Partnership* includes representatives from: Cheshire Wildlife Trust, English Nature, DEFRA, RSPB, Riva 2005, The Mersey Strategy, The Dee Strategy, The Environment Agency, LA 21, the Metropolitan Borough of Wirral (Department of Planning and Economic Development and Department of Education and Cultural Services), National Museums and Galleries on Merseyside, Merseyside and West Lancashire Bat Group, Wirral and Ellesmere Port Barn Owl Group. There is a wider group of organisations and individuals who have been kept informed and consulted.

A small technical group has been working on the details of the action planning process and on preparation of the Action Plans themselves.

Aims and Objectives of the Wirral Biodiversity Partnership

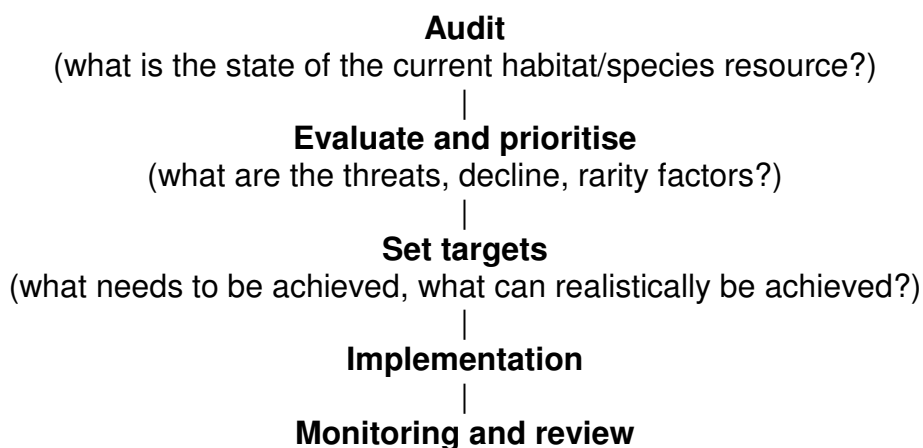
Wirral's Biodiversity Action Plan is part of a wider network of sub-regional, regional, national and international plans. These broad objectives reflect those of the UK plan.

Aim: to conserve and enhance biological diversity in Wirral, and to contribute to the conservation of regional, national and global biodiversity.

Objectives:

- 1) to maintain, and where practicable to and enhance and the quality and range of wildlife habitats and ecosystems on Wirral;
- 2) to maintain, and where practicable to enhance overall populations and natural ranges of native species on Wirral;
- 3) to contribute to the conservation of internationally and nationally important and threatened species;
- 4) to increase public awareness of and involvement in conserving biodiversity;
- 5) to identify priorities for habitat and species conservation and set realistic targets and timescales for these.

The Action Planning Process



The Implementation of Wirral's BAP

It is hoped that the Wirral BAP will stimulate a new, more focused approach to the conservation of biodiversity in the borough. It is an opportunity to initiate new projects, and extend or enhance existing ones and to demonstrate what can be achieved through a collaborative, co-ordinated approach.

The partnership will need to be widened further to extend beyond existing partners to include communities and businesses and to educate and raise awareness among the wider population. As a starting point it is essential that all the members of the partnership take their part in initiating the process.

Monitoring and Review

There will be a yearly update of this plan, linked in with the monitoring process being developed by the Cheshire Wildlife Trust. Monitoring will also be linked to English Nature's Biodiversity Targets for the North West Region and targets held by National Lead Partners for individual habitats and species. It is anticipated that the Action Plan will be subject to full review on a five yearly basis.

Links With Other Initiatives

The BAP process is not occurring in isolation and there are a number of independent but complimentary initiatives evolving in parallel.

These initiatives also influence nature conservation and include: development plans, shoreline and estuary development plans, the Environment Agency's LEAPs (Local Environment Agency Plans), English Nature's Species Recovery Programme, and agri-environment schemes such as DEFRA's Countryside Stewardship.

BAP targets and actions will be largely achieved through these initiatives so it is essential that they incorporate appropriate biodiversity targets and are committed to their implementation.

Wildlife does not respect political boundaries! The Wirral Biodiversity Partnership seeks to exploit all links to the appropriate geographic level, depending on the requirements of each species or habitat.

The Cheshire Countdown Programme

Wirral has historically had strong links with Cheshire in terms of the natural environment and is included with the County of Cheshire in Vice County 58, used for biological recording purposes.

Wirral is an active supporter of the Cheshire Region Biodiversity Partnership which is responsible for producing the Countdown Biodiversity Action Plan and co-ordinating biodiversity activity in the County. A number of Wirral's plans have been incorporated within Countdown, notably those for coastal habitats and species. It is intended that this plan will integrate as seamlessly as possible with the Countdown programme.

A priority for the future will be to ensure that opportunities for working together are maximised – for example in encouraging existing biodiversity action groups to extend their activities into Wirral where this is appropriate.

The North Merseyside Biodiversity Group

Wirral is also a member of the Merseyside Biodiversity Group, which has been responsible for producing the Biodiversity Action Plan for North Merseyside (the four Merseyside districts north of the Mersey). The Plan was issued on CD-Rom in September 2001. As with Cheshire, Wirral will look to maximise opportunities for working together, particularly in respect of the coast, where Wirral has much in common with Sefton. The Environmental Advisory Service (EAS) chair the Merseyside Biodiversity Group and represent the whole of Merseyside on the North West Biodiversity Forum.

Local Record Centres

Wirral is a partner in rECOrd - the Pilot Local Records Centre for Cheshire, Halton Warrington and Wirral - which forms part of the National Biodiversity Network. Now based at Chester Zoo, rECOrd will become the main source of data for sites, habitats and species in the Cheshire Region. It acts as a collection centre for biological records and other data, ensuring that biodiversity action planning preparation, implementation and monitoring processes are based on up-to-date information.

English Nature's Natural Area Profiles

English Nature has divided England into a series of Natural Areas. Their boundaries are based on the distribution of wildlife and natural features, land use patterns and human history of each area. They relate to variations in the character of the landscape and reflect our cultural heritage. This information is being used to determine priorities for nature conservation. Wirral falls into two Natural Areas: *Liverpool Bay* and *Urban Mersey Basin*.

Local Agenda 21

Biodiversity is a significant element of sustainable development and economic, social and environmental well-being.

It is important to recognise the links between biodiversity and local distinctiveness natural heritage lifelong learning, health and quality of life.

Local Biodiversity Action Plans are an integral part of the Agenda 21 process and Wirral's LA21 Strategy acknowledges this. Wirral's Biodiversity Partnership is linked into the LA21 process through the Natural Environment Topic Group. The LA21 process is a potentially important mechanism for raising awareness and engaging the wider community in the biodiversity process.

The Role of the Local Authority

The Local Authority in carrying out its functions can incorporate action that benefits biodiversity into most, if not all, areas of service delivery. At the same time it can ensure that adverse impacts that could arise from its activities are eliminated or reduced to a minimum. This will require the integration of biodiversity conservation objectives into all policy formulation, decision making and service delivery.

There are however three areas of particular importance:

The Community Strategy

Section 4 of the Local Government Act 2000 places a statutory duty on local authorities to prepare an overarching community strategy for the economic social and environmental well-being of their area. Wirral is in the mid-stages of developing its first Community Strategy in which Environmental issues and associated Performance Indicators will feature significantly.

Land Use Planning

The land use planning process has a key role to play in conserving the diversity of wildlife in Wirral. The Wirral Unitary Development Plan (UDP) sets out the Council's land use strategy for the Borough, and includes policies for the protection of sites of nature conservation importance together with legally protected species. A review of the current plan (adopted in 2000) will begin this year. A key task will be to ensure that it reflects the targets and objectives of Wirral's Habitat Action Plans (HAPs) and Species Action Plans (SAPs), so that where new development is proposed, appropriate measures can be secured to avoid or minimise losses in biodiversity. An important element of this is ensuring that ecological networks – the linkages between habitats – are safeguarded through the planning process. Equally, opportunities to add to or enhance Wirral's biodiversity resource through the planning and development process need to be maximised.

Management and Promotion of Wirral's Parks and Open Spaces

The Council has significant land ownership and management responsibilities, including significant areas of lowland heath and coast – both subject to Habitat Action Plans. It will therefore have an important role to play in delivering biodiversity targets and setting an example to others by adopting "biodiversity friendly" management practices.

Wirral's Ranger Service play an important role in the management of many of Wirral's habitats and they can also play an important role in education and awareness raising with visitors to these sites.

HABITAT ACTION PLANS

A habitat can be defined as an assemblage of plants and animals living in an environment that includes vegetation, soil and climate.

The actions proposed in these habitat plans form the backbone of the Wirral Biodiversity Action Plan.

List of habitats proposed for inclusion in the Wirral Biodiversity Action Plan

Coastal saltmarsh
Coastal sand dune
Coastal and floodplain grazing marsh
Field Boundaries
Lowland heath
Lowland meadows
Lowland mixed broad-leaved woodland (including ancient woodland)
Maritime cliff and slope*
Mudflats
Ponds
Reedbeds*

* These habitats have been selected for action, but the plan has not yet been completed.

This list of habitats proposed for inclusion in the Wirral Biodiversity Action Plan was developed from the national list of Broad Habitats and Priority Habitats (*UK Biodiversity Group: Index to the Steering Group Report and Tranche 2 Action Plans*, 2000). The list of habitats included in Cheshire Countdown and the Merseyside Biodiversity Action Plan were also considered.

The full national list of habitats was evaluated to identify priorities by the Wirral Biodiversity Technical Group using criteria provided by the Department of Environment and the Local Government Management Board (*Guidance Note 4 – Evaluating Priorities and Setting Targets for Habitats and Species*, 1997).

What	How	When	Who	Resource
COASTAL SALTMARSH				
5. Objectives				
5.1 Maintain, in favourable condition, the current extent and habitat quality of saltmarsh on Wirral.				
6. Proposed actions:				
6.1 Site safeguard	Avoid disruption to natural coastal processes during design and implementation of coastal protection works.	Ongoing	EA, EN, WMBC	As part of each scheme
6.2 Policy	<ul style="list-style-type: none"> Develop estuary-wide <i>Spartina anglica</i> policy. 	2005	LA's, EN, Dee/Mersey Strategies	Existing
	<ul style="list-style-type: none"> Develop agreed policies and management schemes for Wirral's beaches. 	Dec 2003	WMBC, EN, Beach Management Groups	Existing
6.3 Land Management	Prepare management plans for saltmarsh. WMBC:	Dec 2003	Landowners, EN	Existing
6.4 Advice	Promote targets in Wirral's BAP within other partnerships and programmes.	Ongoing	All	Existing
6.5 Research and Monitoring	<ul style="list-style-type: none"> NVC survey of Mersey Saltmarshes. 	Dec 2001	EN	Existing
	<ul style="list-style-type: none"> Prepare information to enable current and future areas of saltmarsh and NVC communities to be digitised. 	Dec 2003	EN	
	<ul style="list-style-type: none"> Monitor the extent and quality of saltmarsh every 5 years. 		EN	
	<ul style="list-style-type: none"> Encourage research project to look at Dee sediment budget. 		TDUG, Dee Strategy	
6.6 Communications and Publicity	Highlight importance of habitat in interpretative material.	Ongoing	All	Existing

What	How	When	Who	Resource
COASTAL SAND DUNES				
5. Objectives				
5.1 Protect existing resource from loss in area or degradation in quality.				
5.2 Improve the quality of existing sand dune habitat towards favourable conservation status.				
6. Proposed Actions:				
6.1 Site Safeguard	• Designate the North Wirral Coastal Park as LNR.	May 2003	WMBC	Existing funds
	• Identify funds for NVC surveys.	Dec 2003	WMBC	To be identified
	• Designate Meols and Leasowe dunes as SSSI.	Dec 2005	WMBC, EN	Existing
6.2 Policy	• Develop agreed management policies and schemes for Wirral's beaches to allow for natural succession to sand dunes away from the main amenity beaches.	Dec 2003	WMBC, EN, Beach Management Groups	Existing
	• As part of forthcoming UDP review, consider scope for including policies to control the impact of land uses which may have an indirect effect on dunes, e.g. riding stables.	From Jan 2003	WMBC	Existing
6.3 Land Management	• Identify ways to restrict the expansion in horse riding in the sand-dunes.	Dec 2003 annual thereafter	WMBC	Existing
	• Identify new works to benefit existing dunes.	Dec 2003 annual thereafter	WMBC, CWT	Grant aid
			WMBC, CWT	Grant aid

What	How	When	Who	Resource
	<ul style="list-style-type: none"> • Improve signage, way-marking and interpretation. • Prevent interference with natural forces creating new area of sand dune, except where these cause a safety hazard to the public. 	Dec2003 annual thereafter Dec 2003 ongoing thereafter	WMBC, EN	Existing
6.4 Advice	Advise golf courses about management to benefit their nature conservation value.	Dec 2003	WMBC, DEFRA, EN, WW	Existing
6.5 Research and Monitoring	<ul style="list-style-type: none"> • Continue recording of beach profiles. • Expand profiles to include dunes. • NVC survey of all dune habitats. • Establish sources of dune enrichment, and possible methods of control, e.g. dog fouling. 	Annual Dec 2005 WMBC sites by Dec 2005 Dec 2005	WMBC EN, CWT WMBC, Landowners	Existing To be identified To be identified To be identified
6.6 Communications and Publicity	Continue and improve onsite interpretation.	Ongoing	WMBC	Existing funds and LA21

What	How	When	Who	Resource
COASTAL AND FLOODPLAIN GRAZING MARSH				
5. Objectives:				
5.1 Maintain existing habitat extent and quality.				
5.2 Restore over-grazed or drained grazing marsh.				
5.3 Create new areas of grazing marsh.				
6. Proposed Actions				
6.1 Site Safeguard	No new action proposed			
6.2 Policy	<ul style="list-style-type: none"> Ensure flood defence schemes are undertaken in an ecologically sensitive way. Ensure issues relating to this habitat are included in LEAPs. 		EA, WMBC EA	To be included in the cost of each scheme
6.3 Land Management	No new action proposed			
6.4 Advice	<ul style="list-style-type: none"> Identify and actively involve landowners in restoration and maintenance projects. Comment on abstraction licenses. Promote the existing programme of water level management plans for grazing marsh SSSIs. Promote existing grant schemes. 		Lead organisation to be identified. EN	To be identified
6.5 Research and Monitoring	Survey habitat, in particular the area around Meols Meadow SSSI to establish existing wildlife potential and areas suitable for development and enhancement.		Lead organisation to be identified	To be identified

What	How	When	Who	Resource
6.6 Communications and Publicity	Raise awareness of the importance of grazing marsh habitat among the general public.		Lead organisation to be identified	To be identified

What	How	When	Who	Resource
FIELD BOUNDARIES				
5. Objectives				
5.1 Maintain the existing extent and quality of linear features such as ditches and hedgerows as wildlife habitats.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Protect field boundary features important for wildlife from damage and destruction. 	Ongoing	All	
	<ul style="list-style-type: none"> Ensure application of current policies/legislation to protect hedgerows. 	Ongoing	WMBC	
6.2 Policy	<ul style="list-style-type: none"> Include specific linear boundary policy in the UDP which takes into account the requirements of the Hedgerow Regulations and HAP targets. 	From Jan 2003	WMBC	
	<ul style="list-style-type: none"> Adopt specific policies to promote good management practice for hedges/footpath edges on the Borough's own landholdings. 	Dec 2003	WMBC	
6.3 Land Management	<ul style="list-style-type: none"> Promote reduction in the use of fertilisers and herbicides. 	Ongoing	RSPB, FWAG, DEFRA	
	<ul style="list-style-type: none"> Promote the planting, good management and maintenance of hedgerows, specifically gapping-up and laying etc. 	Ongoing	RSPB, FWAG, DEFRA	
	<ul style="list-style-type: none"> Encourage the retention of winter stubble. 	Ongoing	RSPB, FWAG, DEFRA	

What	How	When	Who	Resource
	<ul style="list-style-type: none"> Promote the creation of field margins. 	Ongoing	RSPB, FWAG, DEFRA	
6.4 Advice	Promote favourable management through appropriate agri-environment schemes. Increase uptake in Wirral.		RSPB, FWAG, DEFRA	
6.5 Research and Monitoring	<ul style="list-style-type: none"> Establish appropriate method for mapping and monitoring of hedgerows and other linear features. 	Dec 2003	WMBC, WW	To be identified
	<ul style="list-style-type: none"> Map hedgerows and linear features. 	Dec 2005	WMBC, WW	To be identified
6.6 Communications and Publicity	Increase public awareness of the importance of field boundaries for wildlife and encourage public involvement in survey work.		All	

What	How	When	Who	Resource
LOWLAND HEATH				
5. Objectives				
5.1 Contribute towards the favourable conservation status of heathland habitat.				
5.2 Maintain the extent and diversity of lowland heathland habitat on Wirral.				
5.3 Maintain existing managed heathland areas in favourable condition.				
5.4 Restore declining heathland habitats.				
5.5 Assess the potential for restoration/creation of heathland in marginal areas.				
6. Proposed Actions				
6.1 Site Safeguard	Declare Caldy Hill an LNR.	May 2003	WMBC	Existing
6.2 Policy	<ul style="list-style-type: none"> Form a Wirral Heathland BAP group. 	Sep 2002	WMBC, NT	Existing
	<ul style="list-style-type: none"> Provide secretariat for Heathland group. 	Ongoing	WMBC	
6.3 Land Management	Prepare site management plans for all sites and revise old ones.	WMBC: Dec 2003	WMBC, NT, EN	Existing
6.4 Advice	No new action proposed.			
6.5 Research and Monitoring	<ul style="list-style-type: none"> Agree common methodology for monitoring. 	Dec 2003	WMBC, NT, EN	Existing
	<ul style="list-style-type: none"> Re-survey all existing and potential heathland areas. 	Dec 2005	WMBC, NT, EN, CWT	Existing
	<ul style="list-style-type: none"> Add data to heathland inventory for Wirral to provide a new baseline for action. 		WMBC, NT, EN, CWT	Existing
	<ul style="list-style-type: none"> Develop funding opportunities. 	Ongoing	BAP group	
6.6 Communications and Publicity	Write a press and communication strategy.		BAP group	

What	How	When	Who	Resource
LOWLAND MEADOWS				
5. Objectives				
5.1 Arrest the decline in hay meadows and similar species-rich grasslands in Wirral.				
5.2 Secure favourable management for all existing sites.				
5.3 Create new grasslands close to existing sites.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Regain and maintain favourable status within the SSSI. Secure funding for long term management on the SBI through Countryside Stewardship. 		EN	DEFRA
6.2 Policy	No changes suggested.			
6.3 Land management	Investigate possibilities for habitat creation.			
6.4 Advice	Provide advice on management to landowners/tenants.	Ongoing	EN,WW	
6.5 Research and Monitoring	<ul style="list-style-type: none"> Monitor known sites for changes over time. 		WW,WMBC,EA,EN	To be identified
	<ul style="list-style-type: none"> Survey clifftops at Thurstaston and New Ferry, and riverside at Birket Old Courses to identify small examples and secure appropriate management. 	Dec 2005	WMBC,EA,WW	To be identified
6.6 Communications and Publicity	<ul style="list-style-type: none"> Publicise the importance of species-rich grasslands, particularly to horse-owners. 		WMBC	
	<ul style="list-style-type: none"> Encourage appropriate public access. 	Ongoing	Landowners	

What	How	When	Who	Resource
LOWLAND MIXED BROADLEAVED WOODLAND				
5. Objectives				
5.1 Maintain the current extent and quality of the habitat on Wirral.				
5.2 Seek to extend extent and improve quality of the habitat on Wirral.				
6. Proposed Actions				
6.1 Policy	Create policy for control of invasive species.	WMBC Dec 2003	WMBC, Landowners	Existing
	Establish programme for control of invasive species.	WMBC Dec 2003	WMBC, Landowners	To be identified
6.2 Site Safeguard	Ensure all ancient semi-natural woodlands are protected through the UDP as sites for nature conservation.	Jan 2003 ongoing thereafter	WMBC	
6.3 Land Management	<ul style="list-style-type: none"> Prepare list of appropriate species for planting in new and existing mixed broad-leaf woodland sites including suitable ground flora. 	Dec 2003	WMBC, FC, DEFRA	Existing
	<ul style="list-style-type: none"> Prepare management plans for all ancient woodland sites. 	WMBC Dec 2005	Land owners	WMBC Existing
	<ul style="list-style-type: none"> Prepare management plans for all mixed broad-leaved woodland sites. 	WMBC Dec 2010	Land owners	WMBC Existing
6.4 Advice	<ul style="list-style-type: none"> Promote targets in Wirral BAP to FC and DEFRA for inclusion in their targets and grant schemes. 	Ongoing	All	
	<ul style="list-style-type: none"> Develop the marketing and sustainable use of products from mixed broad-leaf woodland as a means of supporting management. 		Woodland BAP Group	To be identified

What	How	When	Who	Resource
	<ul style="list-style-type: none"> Distribute existing national advisory publications to all woodland owners/managers. 	Dec 2003	All	Existing
6.5 Research and Monitoring	<ul style="list-style-type: none"> Collect and collate information on the distribution, area, status and quality of mixed broad-leaf woodland in Wirral. Identify nurseries able to supply native provenance of local genetic origin stock for planting. 	Dec 2005	Woodland BAP Group	To be identified
6.6 Communications and Publicity	<ul style="list-style-type: none"> Form a Wirral Woodland BAP group to take forward actions. Highlight importance of the habitat in interpretative material. Involve communities in managing mixed broad-leaf woodland. 	Dec 2003 Ongoing Ongoing	BAP technical group All WMBC, WW, Woodland Trust	Existing To be identified Existing

What	How	When	Who	Resource
MUDFLATS				
5. Objectives				
5.1 Maintain mudflats in a favourable condition in terms of extent, distribution, and water/sediment quality.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Map extent and distribution of mudflats and other intertidal habitats and their usage by key species. Prevent further loss of mudflats by opposing development proposals that would result in direct or indirect habitat loss through changes in the pattern of erosion and accretion. 	Ongoing	EN, RSPB EA, EN, WMBC, NGOs	Existing
6.2 Policy	<ul style="list-style-type: none"> Consider whether further policy protection is needed as part of UDP review. 	Jan 2003	WMBC	Existing
	<ul style="list-style-type: none"> Develop estuary-wide <i>Spartina anglica</i> policy. 	Jan 2005	LAs, EN, DES, MS	Existing
6.4 Advice	Establish programme of raising awareness about the importance of intertidal habitats, particularly mudflats that are often regarded as unsightly or dangerous.	Dec 2003	WMBC, MS, DES, EN	Grant aid to be identified
6.5 Research and Monitoring	Collect and collate baseline biological fisheries and water/sediment quality data and make available to all that require it in a form readily accessible to the general public.		EA, WMBC, DES, MS	

What	How	When	Who	Resource
	<p>Establish a routine monitoring programme for the Wirral coast and Mersey/Dee estuaries.</p> <p>Initiate a research project aimed at defining the overall sediment budget for the Mersey and Dee estuaries.</p>		<p>EA</p> <p>WMBC, DES, Universities</p>	To be identified
6.6 Communications and Publicity	<p>Ensure data sharing between all organisation involved in coastal zone management.</p> <p>Raise public awareness of the implications for biodiversity of activities that impact on the quality and quantity of mudflats.</p>	<p>Ongoing</p> <p>Ongoing</p>	<p>All</p> <p>EA, EN, LAs,NGOs, DES</p>	<p>Existing</p> <p>Existing</p>

What	How	When	Who	Resource
PONDS				
5. Objectives				
5.1 Maintain, in favourable condition, the range of ponds and the pond landscape in Wirral.				
6. Proposed Actions				
6.1 Policy	<ul style="list-style-type: none"> Seek protection of ponds through UDP policies as required through the Habitats regulations (Section 37). Adopt a 'no net loss of ponds as a result of new development' policy for example through use of Section 106 Planning Obligations. Maximise opportunities to incorporate SUDS in new development proposals. Ensure existing legislation (in particular great crested newt) is fully implemented. 	<p>From Jan 2003 ongoing thereafter Jan 2003</p> <p>Ongoing</p> <p>Ongoing</p>	<p>WMBC</p> <p>WMBC</p> <p>WMBC, EA, United Utilities</p> <p>WMBC,EA,DEFRA, EN</p>	
6.2 Site Safeguard	Ensure ponds of high biodiversity value are designated SBI.	From Jan 2003	WMBC, WW	
6.3 Land Management	<ul style="list-style-type: none"> Agree appropriate long-term management for all ponds identified as SBI. Identify areas for creation of new ponds. <p>WMBC 1 per year</p>	<p>Dec 2005</p> <p>Dec 2002</p> <p>Annual</p>	<p>Landowners</p> <p>Landowners</p>	

What	How	When	Who	Resource
	<ul style="list-style-type: none"> • Include conservation clauses in farm business tenancies. 	Dec 2005	Landowners	
6.4 Advice	<ul style="list-style-type: none"> • Ensure that all agri-environment projects know the location, extent, importance and management requirements of ponds designated as SBI. • Promote targets in the Wirral BAP. 	Dec 2003 Ongoing	DEFRA, WMBC Pond BAP group	
6.5 Research and Monitoring	<ul style="list-style-type: none"> • Monitor, collate and disseminate information on changes in the extent and quality of the pond resource. • Encourage studies of pond animals, invertebrates, mammals and amphibians. 	Ongoing	WMBC, Universities, EN	To be identified
6.6 Communications and Publicity	<ul style="list-style-type: none"> • Ensure distribution of best practice in management and creation to land managers. • Form a pond action group to take forward actions. 	Ongoing Dec 2003	Pond BAP group BAP technical group	Existing Existing

SPECIES ACTION PLANS

List of species proposed for inclusion in the Wirral Biodiversity Action Plan

Barn Owl
Bats
Belted beauty (a moth)
Birds*
Brown hare
Small cetaceans (dolphins and porpoises)
Coelioxys mandibularis (a bee)
Colletes cunicularius (a bee)
Great crested newt
Grey seals*
Isle of Man Cabbage
Lymnaea glabra (a mud snail)
Mackay's horsetail**
Natterjack toad**
Podalonia affinis (a wasp)
Rock sea-lavender
Sandhill rustic (a moth)
Sand lizard*
Water vole

* These species have been selected for inclusion but the action plan has not yet been completed.

** These plans have been selected for action, however there is no action plan in this document as a specific plan already exists as part of Cheshire Countdown.

(Common names are used where possible).

The successful implementation of the habitat plans should achieve many of the goals of the individual species plans, though there are also tailored actions highlighted in these plans which will specifically benefit particular species.

The starting point for Wirral's list of species under consideration for Biodiversity Action Plans was the national list of priority species, (*UK Biodiversity Group Tranche 1 and 2 Action Plans 1998, 1999*). Also considered were species of conservation concern highlighted in English Nature's *North West Audit (1999)*.

A list of species for action was developed by the Wirral Biodiversity Technical Group from national and regional lists using local knowledge, after consultation with a range of groups and individuals. More plans may be added to this list as new information comes to light.

What	How	When	Who	Resource
ATLANTIC GREY SEAL, <i>Halichoerus grypus</i>				
5. Objectives				
5.1 To monitor threats to the seals, ensuring that grey seals ability to use the Dee and Mersey estuaries does not seriously decline.				
5.2 To increase understanding about seals among the local population, particularly people who use the estuary for leisure.				
5.3 To increase understanding between the conservation and fishing communities.				
6. Proposed Actions				
6.1 Site Safeguard	Consider the usefulness of using buoys to mark a protection zone for the seals.	Dec 2003	WMBC	Existing
6.2 Policy	No new action proposed.			
6.3 Land Management	No new action proposed.			
6.4 Species Management	No new action proposed.			
6.5 Advice	No new action proposed.			
6.6 Research and Monitoring	<ul style="list-style-type: none"> Monitor any commercial activity that may affect the population. 	Ongoing	CCW, CWT, EN, WMBC, Flint, Dee Estuary Forum, DECG, Mersey Estuary Conservation Group, Mersey Strategy	Existing
	<ul style="list-style-type: none"> Continue seal counts and log at Hilbre Bird Observatory. Pass information to Local Records Centre and other relevant recording schemes. 	Ongoing	HIBO	Existing
	<ul style="list-style-type: none"> Develop guidance and protocols for monitoring which can be used throughout the Irish Sea. 		CCW	Existing
	<ul style="list-style-type: none"> Identify research projects about the seals through liaison with local Universities. 	Dec 2003	WMBC, HIBO, Dee Strategy, Mersey Strategy, Sea Mammal Research Unit	Existing

What	How	When	Who	Resource
6.7 Communications and Publicity	<ul style="list-style-type: none"> Continue interpretation 		HIBO, WMBC	Existing
	<ul style="list-style-type: none"> Maintain and update list of interested parties including recreation users and fishers and circulate with up to date information. 	Annual	WMBC, HIBO	Existing
	<ul style="list-style-type: none"> Circulate appropriate leaflets and posters including a code of conduct for wildlife boat trips. 	Annual	HIBO, WMBC, DRUG, MEUF, <u>Dee Strategy</u> , Mersey Strategy	Existing

What	How	When	Who	Resource
BARN OWL, <i>Tyto alba</i>				
5. Objectives				
5.1 To maintain and enhance the present range and population.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Ensure that all regular breeding sites have SBI designation. 	From Jan 2003, ongoing thereafter	WMBC,WW	Existing
	<ul style="list-style-type: none"> Ensure that landowners are informed of the presence of breeding Barn Owls and their protected species status. 	“	WEPBOG,WMBC	Existing
	<ul style="list-style-type: none"> Ensure proper site surveys where development of sites is proposed. 	“	WMBC	Existing
	<ul style="list-style-type: none"> Provide alternative breeding and roosting sites where development is planned. 	“	Landowners	Existing
6.2 Policy	<ul style="list-style-type: none"> Promote uptake of agri-environment schemes including provision for Barn Owls on Wirral. 		DEFRA	
	<ul style="list-style-type: none"> Ensure Barn Owls are considered in the formulation of strategic nature conservation plans for Wirral. 	Ongoing	WMBC	
	<ul style="list-style-type: none"> Raise awareness of Planning Policy Guidelines in relation to Barn Owls. 	Ongoing	WMBC	
	<ul style="list-style-type: none"> Encourage formal reporting of criminal offences in relation to Barn Owls to 	Ongoing	All	

What	How	When	Who	Resource
	Merseyside Police Wildlife Liaison Officers and/or RSPB.			
6.3 Land Management	<ul style="list-style-type: none"> Encourage retention and development of grass margins. Eliminate severe vegetation-cutting regimes on banks of rivers, brooks and ditches. 		All Landowners	
6.4 Species Management	<ul style="list-style-type: none"> Provide nestboxes. Provide an artificial winter food supply near roost sites during periods of severe weather. 		WEPBOG WEPBOG	
6.5 Advice	<ul style="list-style-type: none"> Advise farmers and landowners about the status of owls, habitat requirements and availability of agri-environment schemes. Advise Local Authority about Planning Policy Guidelines in relation to Barn Owls and the location of Barn Owl breeding and roost sites. 		WEPBOG WEPBOG	
6.6 Research and Monitoring	<ul style="list-style-type: none"> Map all sightings to assess current population and distribution annually. Map existing areas of suitable habitat to aid identification of key areas for conservation effort. Weigh, measure and ring young birds. Analyse pellets to aid understanding of habitat preference. 		WEPBOG WEPBOG WEPBOG,BTO WEPBOG	

What	How	When	Who	Resource
	<ul style="list-style-type: none"> Implement a 'constant-effort' survey of a known breeding site with video cameras and microphones to study al aspects of breeding behaviour of local birds. 		University of Liverpool	
6.7 Communications and Publicity	<ul style="list-style-type: none"> Submit records and Annual Report to CWT, CAWOS, EN, LRC as appropriate. Distribute national guidance leaflets to farmers and landowners. Issue Press Releases and provide photograph opportunities, give illustrated talks to schools and interested groups. 	Ongoing	<p>WEPBOG</p> <p>WEPBOG</p> <p>WEPBOG, WMBC</p>	

What	How	When	Who	Resource
BATS				
5. Objectives				
5.1 Maintain the current local distribution of all bat species to ensure that healthy populations exist that are capable of expansion.				
5.2 Expand the local distribution of at least the commoner species by 2015.				
6. Proposed Actions				
6.1 Site Safeguard	• Map areas of importance for bats.	Dec 2005	MWLBG	To be identified
	• Seek designation of important feeding and roosting sites as SBI.	Dec 2006	MWLBG, WMBC	Existing
	• Seek to expand designated urban greenspace in Unitary Development Plan.	Dec 2006	WMBC	Existing
6.2 Policy	• Consider inclusion of policies to protect important bat habitats as part of UDP review.	Dec 2004	MWLBG, WMBC, EN	Existing
	• Consider targeting of agri-environment schemes on important bat feeding areas.		MWLBG, DEFRA	
	• Prepare Supplementary Planning Guidance for developers in respect of the requirements of bats.	Dec 2003	MWLBG, <u>WMBC</u> , EN	Existing
	• Instigate national policy change that prevents fighting for the same pieces of habitat on multiple occasions.			
6.3 Land management	• Encourage land owners to retain old and dead trees suitable as bat roosts.		MWLBG	

What	How	When	Who	Resource
	<ul style="list-style-type: none"> Promote creation and suitable management of linear features such as hedges, streams to increase linkage between feeding sites. Promote suitable management of field margins to increase availability of insect prey. 		MWLBG, DEFRA, EA MWLBG, DERFA	
6.4 Species management	Provide artificial roost sites. Provision of artificial roost sites should not be considered as an easy option to retaining suitable natural roost sites.		WMBC, MWLBG	To be identified
6.5 Advice	Continue to operate Bat Advice Line	Ongoing	EN	Existing
6.6 Research and monitoring	<ul style="list-style-type: none"> Continue surveying and monitoring of sites used by bats to assess changes in local distribution and population levels. Organise systematic survey of distribution for whole of Wirral. Monitor changes to habitats or farming practices that may have implications for bats. Establish database as part of Local Records Centre. 	Dec 2005	MWLBG MWLBG, EN, NMGM, WMBC MWLBG MWLBG, NMGM, CWT	To be identified Existing
6.7 Communications and Publicity	<ul style="list-style-type: none"> Raise awareness among general public through series of bat walks and lectures. Educate children about bats through schools. 	Ongoing Ongoing	MWLBG, WMBC WMLBG, WMBC	Existing Local Agenda 21 year 1 project

What	How	When	Who	Resource
	<ul style="list-style-type: none"> Educate decision-makers whose actions may affect bats. For example planning officers, forestry, arboricultural officers and contractors and land owners. Make sure they are aware of their legal obligations toward bats and how to help conserve them. 		WMLBG,WMBC,EN	

What	How	When	Who	Resource
BELTED BEAUTY MOTH, <i>Lycia zonaria britannica</i>				
5. Objectives				
5.1 Maintain existing population within the North Wirral Coastal Park.				
5.2 Enhance the population size within the North Wirral Coastal Park.				
5.3 Reintroduce moths to other suitable locations within Wirral.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Declare the North Wirral Coastal Park as a Local Nature Reserve. 	May 2003	WMBC,EN	Existing
	<ul style="list-style-type: none"> Designate the North Wirral Coastal Park as SSSI. 	Dec 2005	WMBC,EN	To be identified
6.2 Policy	Take into account the habitat requirements of the moth in relevant development policies, plans and proposals.	Ongoing	WMBC,EN	Existing
6.3 Land management	<ul style="list-style-type: none"> Double the available habitat through turf removal. 	Dec 2005	WMBC, Belted Beauty BAP Group	Existing
	<ul style="list-style-type: none"> Mow current areas to retain suitable habitat until turf removal areas are ready. 	2-yearly	WMBC, Belted Beauty BAP Group	Existing
	<ul style="list-style-type: none"> Restrict horse riding and motorcycle use in moth areas. 	Dec 2003	WMBC	Existing
	<ul style="list-style-type: none"> Liaise with Wallasey and Royal Liverpool Golf Clubs regarding management of roughs to create suitable habitat and possible re-introduction to their sites. 	Dec 2003	WMBC, Belted Beauty BAP Group	To be identified
	<ul style="list-style-type: none"> Have programme of Golf Club management in place. 	Dec 2006	WMBC, Belted Beauty BAP Group	To be identified

What	How	When	Who	Resource
6.4 Species Management	<ul style="list-style-type: none"> Collect any eggs found to have blown to unsuitable areas and raise in captivity. 	Ongoing	WMBC,Belted Beauty BAP Group	Existing
6.5 Advice	<ul style="list-style-type: none"> Advise volunteers and contract staff about the presence of the moth. 	Annual	WMBC,Belted Beauty BAP Group	Existing
	<ul style="list-style-type: none"> Provide training for volunteers to undertake monitoring. 	Annual	WMBC,Belted Beauty BAP Group	Existing
6.6 Research and Monitoring	<ul style="list-style-type: none"> Continue annual monitoring of the populations in the North Wirral Coastal Park. 	Annual	WMBC,Belted Beauty BAP Group	Existing
	<ul style="list-style-type: none"> Survey golf courses for possible management opportunities. 	Dec 2004	WMBC,Belted Beauty BAP Group	To be identified
	<ul style="list-style-type: none"> Undertake autecology study of the moth. Assess the need for salt water to aid in the pupation stage. Pass on information gathered during survey and monitoring of this species to Local Records Centre and other relevant data bases. 	Annual	Belted Beauty BAP Group Belted Beauty BAP Group WMBC,Belted Beauty BAP Group	Existing
6.7 Communications and Publicity	Promote opportunities for the appreciation of the species and the conservation issues associated with its habitat.	Ongoing	WMBC,Belted Beauty BAP Group,NMGM	

What	How	When	Who	Resource
BROWN HARE, <i>Lepus europaeus</i>				
5. Objectives				
5.1 Establish the current distribution for Wirral.				
5.2 Expand and maintain the existing population.				
5.3 Prevent further habitat fragmentation.				
6. Proposed Actions				
6.1 Site Safeguard	• Map important areas for brown hares.	Dec 2003	CWT, Cheshire Hare BAP Group. WMBC	To be identified
	• Prevent further fragmentation of populations by safeguarding land serving as corridors linking areas of hare habitat.	Dec 2003 ongoing thereafter	WMBC	Existing
	• Consider designation of important areas as SBI.	Dec 2004 ongoing thereafter	WMBC, Wirral Wildlife	Existing
6.2 Policy	Seek to influence targeting of countryside stewardship to include hares.		DEFRA	
6.3 Land Management	• Promote uptake of appropriate agri-environment schemes.	Dec 2003	DEFRA, FWAG	
	• Avoid cutting of non-agricultural grasslands where hares are present during breeding season.		WMBC, Landowners	
	• Promote correct usage of herbicides and fungicides.		DEFRA, FWAG	
	• Promote planting of small woodland copses on agricultural land.			

What	How	When	Who	Resource
6.4 Species Management	Liaise with police wildlife officers to combat the problem of poaching.	Ongoing	Landowners, Merseyside Police, Wirral Wildlife Officer.	
6.5 Advice	<ul style="list-style-type: none"> Distribute national advisory literature to landowners and managers. Ensure that gamekeepers, landowners and managers are aware of the Wildlife Incident Investigation Scheme based at the Central Science Laboratories and report hare deaths thought to be connected with chemical spraying. 		North West Mammal Group, DEFRA, FWAG Wirral Wildlife Officer, FWAG	
6.6 Research and Monitoring	<ul style="list-style-type: none"> Conduct local surveys on farmland. Compare with 1998-99 survey. Collate bag return data. Establish database as part of Local Records Centre. Encourage research into hare ecology. 		North West Mammal Group, Wildlife Trusts, Hare BAP Group North West Mammal Group, Wildlife Trusts, Hare BAP Group North West Mammal Group, Wildlife Trusts, Hare BAP Group Universities	
6.7 Communications and Publicity	<ul style="list-style-type: none"> Encourage submission of records. Use brown hare as a flagship species to highlight the impact on biodiversity of modern agricultural practices, the loss of mixed farms and habitat fragmentation. 		All RSPB, North West Mammal Group, Wildlife Trusts, Hare BAP Group.	

What	How	When	Who	Resource
CUCKOO BEE, <i>Coelioxys mandibularis</i>				
5. Objectives				
5.1 Maintain habitat for the host species.				
5.2 Provide additional nesting habitat for host species.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Designate North Wirral Coastal Park as SSSI. 	Dec 2005	EN, WMBC	To be identified
	<ul style="list-style-type: none"> Ensure that the species is included in site management documents for all relevant SSSIs. 	Dec 2005	EN, WMBC	Existing
6.2 Policy	Ensure <i>Coelioxys mandibularis</i> requirements are taken into account in all plans and strategies affecting the North Wirral Coast.		DEFRA, WMBC, EA, EN	Existing
	NWCP Management Plan:	Jun 2003		
	UDP:	Dec 2004		
6.3 Land Management	<ul style="list-style-type: none"> Maintain a full transition of dune vegetation. Use fences or boardwalks where necessary to minimise excessive disturbance. 	Ongoing	WMBC, Landowners	
	<ul style="list-style-type: none"> Continue any management that contributes toward the overall character and stability of the dune system. 	Ongoing	WMBC, Landowners	
6.4 Species Management	None proposed.			
6.5 Advice	Ensure that relevant landowners and managers of sites with <i>Coelioxys mandibularis</i> are aware of the species needs, the importance of the species and that management advice is available.	Dec 2003	WMBC, NMGM	

What	How	When	Who	Resource
6.6 Research and Monitoring	<ul style="list-style-type: none"> Implement regular monitoring of the species. 	Annual	WMBC, NMGM	To be identified
	<ul style="list-style-type: none"> Forward records to Local Records Centre and other appropriate data holders. 	Ongoing	WMBC, NMGM	Existing
6.7 Communications and Publicity	Produce and distribute a simple leaflet identifying conservation needs and aims for sand dune invertebrate species.	Dec 2003	WMBC, NMGM	Existing

What	How	When	Who	Resource
MINING BEE, <i>Colletes cunicularius</i>				
5. Objectives				
5.1 Maintain current colonies.				
5.2 Provide additional habitat for nest sites.				
5.3 Increase areas of creeping willow.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Designate the North Wirral Coastal Park as SSSI. 	Dec 2005	WMBC, EN	To be identified
	<ul style="list-style-type: none"> Ensure that the species is included in site management documents for relevant SSSIs. 	Dec 2005	WMBC, EN	Existing
6.2 Policy	Ensure Vernal Colletes mining bee's requirements are taken into account in all plans and strategies affecting the North Wirral Coast.		WMBC, EN, EA	Existing
	NWCP management plan:	Jun 2003		
	UDP:	Dec 2004		
6.3 Land Management	<ul style="list-style-type: none"> Maintain semi-fixed dunes with plenty of exposed sand that are sunny with south facing slopes. 	Ongoing	WMBC	Existing
	<ul style="list-style-type: none"> Maintain and increase creeping willow for pollen and nectar source by between 25 and 50%. 	Dec 2007	WMBC	Existing
	<ul style="list-style-type: none"> Maintain open sward and control scrub. 	Ongoing	WMBC	Existing

What	How	When	Who	Resource
	<ul style="list-style-type: none"> Manage public around vulnerable nest sites. 	Ongoing	WMBC	Existing
6.4 Species Management	None proposed.			
6.5 Advice	Ensure relevant landowners and managers are aware of the species needs, its importance and that management advice is available.	Dec 2003	WMBC, NMGM	
6.6 Research and Monitoring	<ul style="list-style-type: none"> Implement regular monitoring of the species. 	Annual	WMBC, NMGM	To be identified
	<ul style="list-style-type: none"> Forward information gathered during monitoring to Local Records Centre and other appropriate data bases. 	Ongoing	WMBC, NMGM	Existing
6.7 Communications and Publicity	Produce and distribute a simple leaflet identifying conservation needs and aims for sand dune invertebrates.	Dec 2003	WMBC, NMGM	Existing

What	How	When	Who	Resource
GREAT CRESTED NEWT, <i>Triturus cristatus</i>				
5. Objectives				
5.1 Maintain range, distribution and viability of existing Great Crested Newt populations.				
5.2 Prevent further habitat fragmentation and increase available habitats through linking appropriate sites.				
5.3 Where feasible, introduce populations to new sites.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Ensure that all ponds known to hold viable populations of GCN are designated as SBI and that the relevant protection policies in the UDP are adhered to (p24 DETR Policy Guidance Note: PPG9). Prevent further fragmentation of populations by identifying and safeguarding land serving as corridors. 	Dec 2005	WMBC, WW	
6.2 Policy	No new action suggested.			
6.3 Land Management	<ul style="list-style-type: none"> Prepare long term management plans for ponds designated SBI. Create new ponds to supplement those that are vegetating. 	WMBC: 2005 Others: 2007 WMBC: 1 per year	WMBC, Landowners WMBC, Landowners	
6.4 Species Management	None suggested			
6.5 Advice	<ul style="list-style-type: none"> Promote existing guidance to developers, land managers and planners on legal obligations for the species. Promote existing guidance on management and availability of management advice to land owners including the correct use of 	Ongoing Ongoing	EN, EA, DEFRA EN, EA, DEFRA	

What	How	When	Who	Resource
	<p>herbicides and fungicides.</p> <ul style="list-style-type: none"> • Prepare Supplementary Planning Guidance for developers in respect of requirements of bats and other protected species. • Increase uptake of appropriate agri-environment schemes on Wirral. • Promote training of professional and volunteer surveyors and those involved in the management of the GCN. 	<p>Dec 2003</p> <p>Dec 2004</p>	<p>WMBC</p> <p>EN, EA, DEFRA</p> <p>EN, EA, DEFRA, WMBC</p>	<p>Existing</p> <p>To be identified</p>
6.6 Research and Monitoring	<ul style="list-style-type: none"> • Map important areas for GCN on Wirral. Produce distribution maps. • Conduct local surveys to establish current population status and trends. • Identify sites with potential for supporting GCN. • Ensure data sharing between those carrying out survey work. • Collate data and establish database as part of Local Records Centre, and other relevant data holders. • Identify research into GCN ecology, particularly success of development mitigation schemes. 	<p>Dec 2004</p> <p>Dec 2004</p> <p>Dec 2004</p> <p>Dec 2004</p> <p>Dec 2004</p> <p>Dec 2004</p>	<p>WW, WMBC</p> <p>WW, WMBC</p> <p>WW, WMBC</p> <p>WW, WMBC</p> <p>WW, WMBC</p> <p>WW, WMBC</p>	<p>To be identified</p> <p>To be identified</p> <p>To be identified</p> <p>To be identified</p> <p>Existing</p> <p>Existing</p>
6.7 Communications and Publicity	<ul style="list-style-type: none"> • Establish Pond BAP group for Wirral to 	Dec2003	Wirral Technical Group	Existing

What	How	When	Who	Resource
	<p>improve communication between all parties, including Cheshire Wildlife Trust, national lead partners and other agencies.</p> <ul style="list-style-type: none"> • Encourage the submission of data to the Local Records Centre and other relevant data bases. • Promote the targets in the BAP and use GCN as flagship species for ponds HAP. 	<p>Ongoing</p> <p>Ongoing</p>	<p>Wirral Technical Group</p> <p>Wirral Technical Group</p>	<p>Existing</p> <p>Existing</p>

What	How	When	Who	Resource
ISLE OF MAN CABBAGE, <i>Coincya monesnis ssp. monensis</i>				
5. Objectives				
5.1 Maintain and extend current local range and distribution of Isle of Man Cabbage.				
6. Proposed Actions				
6.1 Policy	Ensure IoMC is taken into account in all sand dune management documents.	Dec 2004	WMBC	Existing
6.2 Site Safeguard	Designate the Gunsite section of the North Wirral Coastal Park as SSSI.	Dec 2005	WMBC, EN	To be identified
6.3 Land Management	Refer to sand dune HAP			
6.4 Species management	Investigate possibility of starting a further colony on Royal Liverpool Golf Course and/or the new dune line forming at Red Rocks.	Dec 2003	EN, WW	Existing
6.5 Advice	Ensure that Wallasey Golf Course is aware of the value of its dune habitats to IoMC and other uncommon dune plants.	Dec 2003 Ongoing thereafter	WW	Existing
6.6 Research and Monitoring	Monitor population regularly.	Annual	WW, WMBC	To be identified
6.7 Communications and Publicity	<ul style="list-style-type: none"> Promote protection of existing dunes. Promote formation of new dunes at Red Rocks as a positive good. 	Ongoing	WMBC	Existing
	<ul style="list-style-type: none"> Involve local people in management and monitoring. 	Ongoing	WMBC, Friends of Gunsite	Existing

What	How	When	Who	Resource
MUD SNAIL, <i>Lymnaea glabra</i>				
5. Objectives				
5.1 To maintain the population at Arrowe Park.				
5.2 To maintain the local gene pool by breeding local stock.				
5.3 Introduce to other ponds with similar habitat in Arrowe Park.				
6. Proposed Actions				
6.1 Site Safeguard	Ensure all land managers in the vicinity of the pond where the snail is present are aware of the management needs of the snail.	Dec 2002 ongoing thereafter	WMBC, NMGM	Existing
6.2 Policy	No changes proposed.			
6.3 Land Management	• Maintain partially shaded character of pond site.	Annual spring	WMBC	Existing
	• Remove leaf litter as required.	Annual spring	WMBC	Existing
	• Prevent anglers from stocking with fish. Remove fish if this does occur.	Annual spring	WMBC, AWAC	Existing
	• Include in site management plan	Dec 2002	WMBC	Existing
6.4 Species Management	• Establish captive breeding programme.		NMGM	To be identified
	• Act upon accumulated advice about particular needs for this species.	Ongoing	WMBC	Existing
6.5 Advice	Maintain contact with Cheshire Wildlife Trust and NMGM to keep abreast of new management advice	Ongoing	WMBC	Existing
6.6 Research and Monitoring	• Visit the site each spring to check for presence of the snail and assess management needs.	Annual spring	NMGM, CWT, WMBC	To be identified

What	How	When	Who	Resource
	<ul style="list-style-type: none"> • Provide training to site managers/volunteers to identify snail. 		NMGM	To be identified
6.7 Communications and Publicity	<ul style="list-style-type: none"> • Use species as flagship for pond HAP. • Involve local interest groups in management/monitoring. 	Dec 2005	All WMBC	Existing

What	How	When	Who	Resource
SMALL CETACEANS (DOLPHINS AND PORPOISES)				
5. Objectives				
5.1 Establish a baseline study of population and conservation status of small cetaceans within Liverpool Bay.				
5.2 Maintain the current range and abundance of local population.				
5.3 Seek to increase ranges of small dolphin populations by ensuring that no human factors inhibit their return to waters that previously held them.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Promote the targets set by ASCOBANS and encourage partnership activities. Ensure that SAC management schemes recognise the need for appropriate measures to protect against habitat modification, disturbance and contaminant inputs. 	Dec 2003	DEFRA, NAW All relevant competent authorities	
6.2 Policy	<ul style="list-style-type: none"> Promote The extension of the ASCOBANS boundary to include the Irish Sea through a bilateral treaty with the Republic of Ireland and agreement of ASCOBANS Parties. Seek to improve coastal water quality by reducing the discharge of substances that are toxic, persistent and liable to bioaccumulate. Continue the duty on sea fisheries regulators to take account of potential wider impacts on wildlife and habitats when deciding fishery management measures. 		DEFRA DEFRA, EA DEFRA	
6.3 Land Management	None suggested.			

What	How	When	Who	Resource
6.4 Advice	<ul style="list-style-type: none"> Advise fisheries managers and fishers on best practise to avoid accidental capture or by-catch. Review advice on the best measures to avoid disturbance of cetaceans. Ensure this advice is readily available to all organisations. 		DEFRA DEFRA, CCW, EN, JNCC	
6.5 Species Management	None suggested.			
6.6 Research and Monitoring	<ul style="list-style-type: none"> Continue to survey cetaceans in the Cheshire, Liverpool Bay and Irish Sea. Set up procedure to report by-catches of small cetaceans. Extend research effort to determine population status and conservation needs of the local population. Continue monitoring dead cetaceans. Continue with post mortems on stranded cetaceans to determine cause of stranding. If disturbance proves to be a threat in Cheshire, establish code of conduct. Pass information to JNCC or LRC to incorporate into national database. 		CCW, EN	
6.7 Communications and Publicity	Launch a local awareness programme to encourage reports of live sightings and strandings.	Aug 2002	CWT, MCS, Mersey Strategy, DES, WMBC, EA, DEFRA	Mersey Strategy, LA 21

What	How	When	Who	Resource
SAND WASP, <i>Podalonia affinis</i>				
5. Objectives				
5.1 Maintain current colonies.				
5.2 Provide additional habitat for nest sites.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Designate the North Wirral Coastal Park as SSSI. Ensure that the species is included in site management documents for relevant SSSIs. 	Dec 2005 Dec 2002	EN, WMBC EN, WMBC	To be identified
6.2 Policy	Ensure Polalonia affinis requirements are taken into account in all plans and strategies affecting the North Wirral Coast. NWCP management plan: UDP:	Jun 2003 From Dec2003	DEFRA, WMBC, EA, EN	
6.3 Land Management	<ul style="list-style-type: none"> Maintain good expanses of bare or sparsely vegetated sandy areas. Maintain open sward and control scrub. 	Ongoing Ongoing	WMBC WMBC	
6.4 Species Management	None proposed			
6.5 Advice	Ensure relevant landowners and managers are aware of the species needs, the importance of the species and that advice on its management is available.	Dec 2003	WMBC, NMGM	

What	How	When	Who	Resource
6.6 Research and Monitoring	<ul style="list-style-type: none"> Implement regular monitoring of the species. 	Annual	WMBC, NMGM	To be identified
	<ul style="list-style-type: none"> Forward information gathered to Local Record Centre and other appropriate relevant data banks. 	Annual	WMBC, NMGM	Existing
6.7 Communications and Publicity	Produce and distribute a simple leaflet identifying conservation needs and aims for sand dune invertebrate species.	Dec 2003	WMBC, NMGM	Existing

What	How	When	Who	Resource
ROCK SEA-LAVENDER, <i>Limonium britannicum ssp. celticum</i>				
5. Objectives				
5.1 Maintain a viable population of the species on Hilbre Island.				
6. Proposed Actions				
6.1 Site safeguard	No action proposed.			
6.2 Policy	No action proposed.			
6.3 Land Management	No action proposed.			
6.4 Species Management	Continue construction of retaining walls to prevent soil washing away, and control access.	Annual	WMBC	Existing
6.5 Advice	<ul style="list-style-type: none"> Ensure local plans and policy documents take account of the species. 	Jun 2003 ongoing thereafter Dec 203	WMBC, WW	Existing
	<ul style="list-style-type: none"> Make appropriate connections with other BAP areas where plants exist to aid information-sharing. 		WMBC, WW	LA 21
6.6 Research and Monitoring	Design appropriate methodology for baseline survey and regular monitoring.	Dec 2003	WMBC, WW	Lancs Wildlife Trust, LA21
6.7 Communications and Publicity	Continue onsite interpretative programme to raise awareness of trampling/picking problems.	Ongoing	WMBC	Existing

What	How	When	Who	Resource
SANDHILL RUSTIC MOTH, <i>Luperina nickerlii gueneei</i>				
5. Objectives				
5.1 Maintain population size between West Kirby and Hoylake.				
5.2 Enable new habitat to be created.				
6. Proposed Actions				
6.1 Site Safeguard	Safeguard the precise areas of habitat from severe disturbance by trampling of engineering works.	Ongoing	WMBC	Existing resources
6.2 Policy	Ensure that the requirements of the species are taken into account in relevant Shoreline Management Plans.	5-yearly Due 2005	WMBC	Existing resources
6.3 Land Management	<ul style="list-style-type: none"> Develop an agreed Beach Management Strategy. 	Dec 2003	WMBC, EN, Beach Management Groups	Existing resources
	<ul style="list-style-type: none"> Maintain habitat of strandline with sparse Sand Couch lapped by the highest tides. 	Ongoing with annual review	WMBC	Existing
6.4 Species Management	None proposed.			
6.5 Advice	Ensure that land managers are aware of the species needs, the importance of the species and that advice on its management is available.	Annual (as part of beach review)	WMBC, NMGM	Existing resources
6.6 Research and Monitoring	Implement regular monitoring of the species.	Annual	NMGM, Wirral branch of Butterfly Conservation	Apply for small grant?
6.7 Communications and Publicity	The moth is vulnerable to trampling and the location should not be excessively publicised, however accompanied visits by responsible people should be allowed as a way of encouraging awareness.	Ongoing	NMGM, WMBC	Existing resources

What	How	When	Who	Resource
WATER VOLE, <i>Arvicola terrestris</i>				
5. Objectives				
5.1 To determine and maintain the current status and distribution of water vole in Wirral.				
5.2 To increase the status and distribution of water vole in Wirral.				
6. Proposed Actions				
6.1 Site Safeguard	<ul style="list-style-type: none"> Designate sites where good populations of water vole are present as SBI. 	From Jan 2003	WMBC, WW	Existing
	<ul style="list-style-type: none"> Ensure that the conservation requirements of water voles are integral to the management of those SBIs and SSSIs where they are known to be present. 	Ongoing	WMBC, Landowners	Existing
	<ul style="list-style-type: none"> Avoid the use of rodenticides at sites where water voles are known to be present. 		WMBC, Landowners	Existing
	<ul style="list-style-type: none"> Inform WMBC pest control 	Dec 2003	EA	Existing
	<ul style="list-style-type: none"> Ensure that the needs of water voles and the presence of important water vole sites are identified in future Lower Mersey LEAPs and in EA's annual river maintenance schedule. 			Existing

What	How	When	Who	Resource
6.2 Policy	<ul style="list-style-type: none"> • Include the conservation of water voles and the appropriate management, enhancement or creation of suitable habitat in Countryside Stewardship applications on Wirral. • Seek to ensure that all relevant local authority plans and nature conservation strategies include policies for the protection of water voles and wetland habitats. • Ensure existing legislation is fully implemented. 	Ongoing	DEFRA WMBC WMBC, EN	Existing
6.3 Land Management	Reed bed project on River Dibbin	Nov 2002	WMBC, Riva 2005	Lever
6.4 Species Management	Determine the current status and distribution of mink in Wirral and consider appropriate control measures.		Riva2005	
6.5 Advice	<ul style="list-style-type: none"> • Distribute national literature. • Publicise local contact for advice. • Ensure landowners, managers are aware of presence of water voles, their conservation and legal requirements and the availability of management advice. 	Ongoing Ongoing From 2005	Wildlife Trusts All All	Existing Existing Existing
6.6 Research and Monitoring	<ul style="list-style-type: none"> • Carry out a systematic survey of Wirral. • Identify key sites and monitor. • Establish a readily available database and pass information to Local Record Centre and other relevant recording schemes. 	Dec 2005 Dec 2005 Dec 2005	Riva2005 Riva2005 Riva2005	Existing Existing Existing

What	How	When	Who	Resource
6.7 Communications and Publicity	<ul style="list-style-type: none"> • Raise awareness of needs of water voles. • Encourage community involvement through training in surveying. 		All To be identified	Existing To be identified

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Abbreviations and Acronyms used in this text

ASCOBANS	Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas
AWAC	Association of Wirral Angling Clubs
BAP	Biodiversity Action Plan
BAPAG	Biodiversity Action Plan Action Group
BASC	British Association of Shooting and Conservation
BHP	Broken Hill Planes (Gas Company)
BTCV	British Trust for Conservation Volunteers
BTO	British Trust for Ornithology
CAWOS	Cheshire and Wirral Ornithological Society
CCW	Countryside Council for Wales
CITES	Convention of International Trade in Endangered Species (of Wild Flora and Fauna)
CLA	Country Landowners Association
CLT	Cheshire Landscape Trust
CPRE	Council for the Protection of Rural England
CWARG	Cheshire and Wirral Amphibian and Reptile Group
CWT	Cheshire Wildlife Trust
DEFRA	Department of Environment, Food and Rural Affairs
DES	Dee Estuary Strategy
EC	European Community
EN	English Nature
EU	European Union
FC	Forestry Commission
FWAG	Farming and Wildlife Advisory Group
GCN	Great Crested Newt
GIS	Geographic Information System
HAP	Habitat Action Plan
HCT	Herpetological Conservation Trust
JNCC	Joint Nature Conservation Committee
LA	Local Authority
LBAP	Local Biodiversity Action Plan
LEAF	Link between the Environment and Farming
LEAP	Local Environment Agency Plan
LNR	Local Nature Reserve
NAW	National Assembly of Wales
NGO	Non-government Organisation
NMGM	National Museums and Galleries on Merseyside
NNR	National Nature Reserve
MAFF	Former Ministry of Agriculture Fisheries and Food

	– now DEFRA
MS	Mersey Strategy
MWLBG	Merseyside and West Lancs Bat Group
RAMSAR	A wetland of recognised International Importance
RDB	Red Data Book
RSPB	Royal Society for the Protection of Birds
RSPCA	Royal Society for the Prevention of Cruelty to Animals
SAP	Species Action Plan
SBI	Site of Biological Importance
SNH	Scottish Natural Heritage
SSSI	Site of Special Scientific Interest
TDUG	Tidal Dee Users Group
UK	United Kingdom
WCA	Wildlife & Countryside Act
WMBC	Wirral Metropolitan Borough Council
WW	Wirral Wildlife – The Wirral Branch of the Cheshire Wildlife Trust
WWT	Wildfowl and Wetlands Trust
WEPBOG	Wirral and Ellesmere Port Barn Owl Group