

## Galway City Biodiversity Action Plan 2014-2024: Actions

No	Action	Objectives			Potential partners	Time-frame	Measuring success
		1	2	3			
1	<b>Designate Role of Biodiversity Officer by Formal Managers' Order</b> <ul style="list-style-type: none"> <li>To immediately facilitate and co-ordinate the implementation of the BAP.</li> <li>To advise the City Council on biodiversity-related issues and the council's obligations in relation to protecting biodiversity</li> <li>To facilitate the implementation of national species and habitat action plans, as appropriate.</li> <li>To apply for funding to implement the action plan.</li> <li>Examine Shared Service element with Galway County Council</li> </ul>	✓	✓	✓	Heritage Council, NPWS, Galway County Council, NUIG	Short-term	Set PI's on Action Plan.
2	<b>Seek Long-term appointment of Full Time Biodiversity Officer</b> <ul style="list-style-type: none"> <li>Actions as above on an ongoing long-term basis</li> </ul>				DoECLG	Short-term	Departmental Approval for Full/ Contract Appointment.
3	<b>Establish a Biodiversity Forum</b> <ul style="list-style-type: none"> <li>The role of this group would be to promote a partnership approach to conserving natural heritage and biodiversity within the city, and to assist the work of the Designated Biodiversity Officer.</li> </ul>	✓	✓	✓	NUIG, GMIT, NPWS, WRBD, IFI, GCCF, ENGOS	Short-term	Group established and regular meetings held.
4	<b>Conduct a biological audit for Galway City.</b> <ul style="list-style-type: none"> <li>Collate all available information on biodiversity in Galway City and store in a database.</li> <li>Identify gaps in biodiversity information by reviewing and analysing existing data.</li> <li>Develop linkages with the National Biological Records Centre.</li> <li>Ensure that copies of all Environmental Impact Statements received by Galway City Council are stored (preferably electronically) in a central location.</li> </ul>			✓	NUIG, GMIT, IFI, NPWS, ENGOS	Ongoing	Biological diversity database established
5	<b>Survey attitudes of the people of the Galway to nature and biodiversity</b> <ul style="list-style-type: none"> <li>Use results to inform awareness-raising initiatives and community-led natural heritage projects</li> </ul>	✓			Community Forum	Short-term	Results of survey published.

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6	<b>Develop a biodiversity awareness, education and training programme.</b> <b>Target audience 1: General public</b> <ul style="list-style-type: none"> <li>Run public awareness-raising events and activities, especially during Heritage Week and Biodiversity Week e.g. tree planting events, talks and guided walks.</li> <li>Produce a series of information leaflets e.g. Wildlife Gardening, Nature in Galway City, Invasive Aliens.</li> <li>Work with schools in the city to promote a pride in our city's wildlife habitats (e.g. poster and photo competitions).</li> <li>Develop &amp; promote a dedicated biodiversity section on the Galway City Council website with information, event listings and useful links.</li> <li>Install interpretive panel at entrances to Terryland Forest Park &amp; other parks with information about flora &amp; fauna found in the Park including bats.</li> <li>Erect signage at key viewing points with information about birds e.g. the Claddagh, Salthill, Barna Woods, Mutton Island and Rusheen Bay.</li> <li>Encourage people to log wildlife sightings with the National Biodiversity Data Centre and Birdwatch Ireland</li> <li>Offer residents associations advice and training on enhancing biodiversity in their localities.</li> <li>Install dispensers with appropriate swan feed at Claddagh Pier to raise awareness of the dangers of bread to swans.</li> </ul>	✓			ENGOS, NPWS, IFI, WRBD, NUIG, GMIT, GCCF, VEC, DES, NPWS, NBDC, BWI GCSR, Residents Associations	Short-term	At least two high profile events run per year, leaflets produced, website updated regularly, signage erected.
7	<b>Develop a biodiversity awareness, education and training programme.</b> <b>Target audience 2: Galway City Council staff and officials</b> <ul style="list-style-type: none"> <li>Develop best practice biodiversity guidelines for all departments.</li> <li>Provide targeted biodiversity training for all existing and new staff.</li> <li>Quarterly meetings between the R&amp;A dept. and other relative departments to promote biodiversity in proposed schemes.</li> <li>Promote the use of organic pesticides and herbicides in place of damaging synthetic chemicals.</li> </ul>	✓	✓	✓	NPWS, IFI, WRBD, NUIG, ENGOS, GCCF, VEC	Ongoing	Guidelines produced; biodiversity training ongoing.
8	<b>Develop a biodiversity awareness, education and training programme.</b> <b>Target audience 3: Developers, architects, engineers and landowners</b> <ul style="list-style-type: none"> <li>Develop best practice guidelines in relation to protecting and enhancing natural heritage value of development sites.</li> <li>Produce clear and informative leaflets on a number of relevant topics: E.g. how to assess the natural heritage value of sites, how to manage natural areas or features (e.g. wetlands, ponds, woodland), how to retain trees and hedgerows in developments, natural landscaping, how to create wildlife habitats in new developments (e.g. ponds, native</li> </ul>	✓	✓		NPWS, IFI, WRBD, ENGOS, EI, RIAI, ILI, NUIG, GMIT	Ongoing	Guidelines and leaflets produced.

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	hedgerows, install bird and bat boxes etc.).						
9	<b>Promote creation of new wildlife habitats in developments including housing estates, industrials sites and golf courses</b> <ul style="list-style-type: none"> <li>Examine the feasibility of developing a reward system for developers who make an effort to protect and/ or enhance biodiversity in developments.</li> <li>Raise awareness of the economic, social, and environmental benefits of having local biodiversity areas within new developments; provide examples from other jurisdictions.</li> </ul>	✓	✓		NPWS, NUIG, GMIT, ENGOs, GCCF, OPW	Ongoing	Biodiversity element evident in new landscaping projects.
10	<b>Promote community participation in nature conservation.</b> <ul style="list-style-type: none"> <li>Advise and assist local community groups, including ENGOs, embarking on biodiversity-related projects including identifying potential funding sources.</li> <li>Encourage local groups to adopt a local biodiversity area. Local working groups could be established to collect litter, plant trees, develop walks and/or develop local biodiversity plans.</li> </ul>	✓	✓		GCCF, ENGOs, NPWS	Ongoing	Community-led projects initiated.
11	<b>Establish a network of Local Biodiversity Areas and associated wildlife corridors</b> <i>(based on the twelve areas already identified in the Galway City Habitats Inventory 2005). See Appendix 2.</i> <ul style="list-style-type: none"> <li>Resurvey proposed Local Biodiversity Areas; map and list these areas in the Galway City Development Plan.</li> <li>Resurvey wildlife corridors proposed by Kindermann (2004), map and list in the Galway City Development.</li> <li>Seek to identify additional wildlife corridors.</li> <li>Develop and publish management plans for each of the Local Biodiversity Areas.</li> <li>Monitor and report on the condition of the Local Biodiversity Areas on an annual basis.</li> <li>Recommend Development Plan policy to ensure that any new developments that may impact on the Local Biodiversity Areas, and associated wildlife corridors, must complete an appropriate environmental assessment.</li> <li>Investigate further mechanisms for protecting these areas.</li> <li>Develop criteria for the inclusion of any additional Local Biodiversity Areas.</li> <li>Adjust grass cutting schemes in public areas to encourage the establishment and survival of wildflowers.</li> </ul>		✓	✓	NUIG, GMIT, GCCF, ENGOs, NPWS, IFI,	Medium-term	LBAs surveyed and mapped; listed in next City Development Plan; annual monitoring programme established; policy developed to afford these areas some level of protection.

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12	<b>Tree survey and preservation</b> <ul style="list-style-type: none"> <li>Seek to appoint a Tree Officer to conduct survey of trees within city, propose Tree Protection Orders, promote the protection and retention of trees, and to offer advice to those working with or near trees.</li> <li>Mapping and tagging of all trees in urban areas for creation of tree database.</li> </ul>	✓	✓	✓	Arboricultural Association, TCI	Short-term	Tree survey completed; TPOs proposed.
13	<b>Key habitat: Urban woodlands and hedgerows</b> <ul style="list-style-type: none"> <li>Develop management plans for all the urban woodlands in Galway City.</li> <li>Develop woodland recreation-use policies.</li> <li>Promote participation in any future Forest Service Neighbourhood Schemes.</li> <li>Promote the retention of hedgerows, recognising their importance as wildlife corridors.</li> <li>Engage with tree/forest organisations to promote tree planting and management.</li> <li>Promote the retention of dry stone walls</li> </ul>		✓	✓	NUIG, NPWS, GCCF, Forest Service, Crann, HLAI, NWT	Short-term	Management plans and policies developed.
14	<b>Key habitat: Wetlands and watercourses</b> <ul style="list-style-type: none"> <li>Develop management plans for wetland areas along the Corrib system and the Terryland River.</li> <li>Promote the adoption of a policy that aims for no net loss of wetlands within the city.</li> <li>Conduct a survey of wetland invertebrates e.g. groups that are indicative of water quality such as water beetles and marsh flies.</li> <li>Develop guidelines to promote best practice in relation to works that may impact on freshwater lakes, turloughs, rivers and waterways.</li> <li>Initiate preparation of river conservation management plan for the Corrib system in consultation with stakeholders.</li> <li>Survey fish in streams that may be impacted upon by urbanisation.</li> <li>Investigate means to improve access to Lough Corrib for Sea Lamprey.</li> </ul>		✓	✓	NUIG, NPWS, BWI, IFI, CNT, Galway County Council, WRBD, GCT, OPW	Medium -term	Management plans developed; policy adopted; invertebrate study completed, and results published, guidelines produced; fish surveys initiated.
15	<b>Key habitat: Exposed limestone habitats</b> <ul style="list-style-type: none"> <li>Map remaining area of exposed limestone rock.</li> <li>Develop management plans for these areas.</li> <li>Protect remaining area from quarrying.</li> </ul>		✓	✓	NUIG, Teagasc, IFA	Long-term	Map and management plans produced.
16	<b>Key Habitat: Peatlands</b> <ul style="list-style-type: none"> <li>Develop habitat management plan for peatlands in the city, including survey and educational information for landowners.</li> <li>Survey especially for the protected Marsh Fritillary.</li> </ul>	✓	✓	✓	IPCC, NPWS, NUIG, NBDC	Long-term	Management plan produced; survey ongoing.

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16	<b>Key zone: Coastal zone</b> <ul style="list-style-type: none"> <li>Promote sustainable use of the marine environment.</li> <li>Ensure appropriate assessment conducted for any proposed works within the coastal zone.</li> <li>Biodiversity survey and habitat mapping of coastal zone, including public awareness campaign.</li> <li>Habitat enhancement on Mutton Island causeway and proposed new docks.</li> </ul>	✓	✓		RI, NUIG, GMIT, MI, IFI, WRBD	Medium-term	Promotional material produced.
17	<b>Key species group: Bats</b> <ul style="list-style-type: none"> <li>Ensure foraging grounds of bats are protected e.g. urban woodlands, wetlands and hedgerows.</li> <li>Ensure a bat survey is carried out before old structures are developed or restored in order to consider possible mitigation measures.</li> <li>Ensure public buildings have one aspect unlit to allow bats to roost.</li> <li>Bridge repair work preceded by bat survey and bat access points conserved.</li> <li>Bat box schemes including workshops.</li> <li>Develop species action plan for <i>Rhinolophus hipposideros</i> (lesser horseshoe bat)</li> <li></li> </ul>	✓	✓		VWT, BCI, NPWS	Medium-term	No net loss of bat roosts and foraging grounds.
18	<b>Key species group: Birds</b> <ul style="list-style-type: none"> <li>Ensure adequate protection of important bird habitats in and around the city waterways, urban woodlands and hedgerows.</li> <li>Develop guidelines in relation to works in or adjacent to waterways, woodlands and hedgerows in relation to bird conservation.</li> <li>Ensure a bird survey is carried out before old structures are developed or restored in order to consider possible mitigation measures.</li> </ul>	✓	✓		BWI	Medium-term	No net loss of bird habitats, guidelines produced.
19	<b>Key species group: Small mammals</b> <ul style="list-style-type: none"> <li>Continue monitoring small mammal populations in Terryland Forest Park and adjacent wildlife corridors.</li> </ul>		✓	✓	NUIG, VWT	Short-term	Monitoring study ongoing and results published.
	<b>Key Species: Common swift (<i>Apus apus</i>)</b> <ul style="list-style-type: none"> <li>Identify and protect existing nesting sites, identify suitable new nesting sites and install swift nest boxes with simulated calls.</li> <li>Encourage developers to install 'swift bricks' into new developments</li> </ul>		✓	✓	BWI, NISG, RIAI	Short-term	

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	<b>Key Species: Common seal (<i>Phoca vitulina</i>)</b> <ul style="list-style-type: none"> <li>Develop local species action plan</li> </ul>	✓	✓	✓	NPWS	Medium-term	Species action plan produced.
	<b>Key Species: Red squirrel (<i>Sciurus vulgaris</i>)</b> <ul style="list-style-type: none"> <li>Survey areas with reported sightings, such as Merlin Woods</li> </ul>			✓	NPWS, NUIG	Medium-term	Survey ongoing.
20	<b>Develop appropriate strategies for preventing the introduction and spread of invasive alien species.</b> <ul style="list-style-type: none"> <li>Continue to raise awareness of the threat of invasive alien species to biodiversity and the environment. Examples of problem species include the zebra mussel, Japanese knotweed and African waterweed.</li> <li>Develop a programme for eradicating invasive aliens in co-operation with other relevant agencies.</li> <li>Encourage members of the public to record sightings of alien invasives to <a href="http://www.invasivespeciesireland.com/alien-watch/">http://www.invasivespeciesireland.com/alien-watch/</a></li> <li>Support the IFI <i>Lagarosiphon</i> and <i>Dreissena</i> control programmes</li> </ul>	✓	✓		IFI, Galway County Council, NUIG, WRBD, ISI	Ongoing	Eradication programme underway.
	<b>Graveyards and Historic sites</b> <ul style="list-style-type: none"> <li>Incorporate biodiversity in the management aims of graveyards, monuments, and archaeological sites.</li> </ul>		✓		Heritage Officer, Private Graveyards	Long-term	Biodiversity aims incorporated.
21	<b>Support implementation of national Species and Habitat Action Plans within Galway City, as appropriate, and current National Biodiversity Action Plan</b>	✓	✓	✓	NPWS, ENGOS, NUIG, GMIT, IFI, NBDC	Ongoing	National plans implemented locally.

Abbreviations			
BSBI	Botanical Society of the British Isles	BCI	Bat Conservation Ireland
CNT	Corrib Navigation Trust	BWI	BirdWatch Ireland
DoECLG	Department of Environment, Community and Local Government	DES	Department of Education and Skills
EI	Engineers Ireland	ENGO	Environmental Non-Governmental Organisation
GBG	Galway Botanic Garden	EU	European Union
GCDB	Galway City Development Board	GCCF	Galway City Community Forum
GCT	Galway Civic Trust	GCSR	Galway & Claddagh Swan Rescue
HLAI	Hedge Laying Association of Ireland	GMIT	Galway Mayo Institute of Technology
IPCC	Irish Peatland Conservation Council	IFA	Irish Farmers' Association
IFI	Inland Fisheries Ireland	ISI	Invasive Species Ireland
LBA	Local Biodiversity Area	MI	Marine Institute
NHA	Natural Heritage Area	NISG	Northern Ireland Swift Group
NPWS	National Parks and Wildlife Service	NUIG	National University of Ireland, Galway
NWT	Native Woodland Trust	OPW	Office of Public Works
RI	Ryan Institute	RIAI	Royal Institute of the Architects of Ireland
SAC	Special Area of Conservation	SPA	Special Protection Area
TCI	Tree Council of Ireland	VWT	Vincent Wildlife Trust
WRBD	Western River Basin District		