

GUIDELINES
FOR THE PRODUCTION OF
LOCAL BIODIVERSITY
ACTION PLANS

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1. GUIDELINES FOR THE PRODUCTION OF LOCAL BIODIVERSITY ACTION PLAN

This guidance document is intended to assist Local Authorities in the preparation of a Local Biodiversity Action Plan and to provide background information on the UN Convention on Biological Diversity. The preparation of a Local Biodiversity Action Plan is part of an overall process that the government has initiated to address heritage concerns and to fulfil international obligations under the Convention on Biological Diversity. Local Biodiversity Action Plans are required under the National Biodiversity Plan which was adopted by Government in 2002. These guidelines were prepared by the Department of the Environment, Heritage and Local Government in co-operation with Liam Lysaght of the Heritage Council.

2. BIOLOGICAL DIVERSITY

Biological diversity, or biodiversity, is the term given to the variety of life on Earth and the natural patterns it forms. The biodiversity we see today is the result of billions of years of evolution, shaped by natural processes and, increasingly, by the influence of humans. It forms the web of life of which we are an integral part and upon which we so fully depend.

This diversity is often understood in terms of the wide variety of plants, animals and micro-organisms. So far, about 1.75 million species have been identified, mostly small creatures such as insects. Scientists reckon that there are actually about 13 million species, though estimates range from 3 to 100 million.

Biodiversity also includes genetic differences within each species, for example, between varieties of crops or between breeds of livestock. Chromosomes, genes, and DNA, the building blocks of life, determine the uniqueness of each individual and each species.

It is the combination of life forms and their interactions with each other and with the rest of the environment that has made Earth a uniquely habitable place for humans. Biodiversity provides a large number of 'goods and services' that sustain our lives.

‘Goods and Services’ provided by biological diversity include:

- Provision of food, fuel and fibre e.g. fish, livestock and crop varieties
- Provision of shelter and building materials e.g. timber for construction
- Provision of medicines
- Purification of air and water
- Detoxification and decomposition of wastes
- Stabilization and moderation of the Earth's climate
- Moderation of floods, droughts, temperature extremes and the forces of wind
- Generation and renewal of soil fertility, including nutrient cycling
- Pollination of plants, including many crops
- Control of pests and diseases
- Maintenance of genetic resources as key inputs to crop varieties and livestock breeds, medicines, and other products
- Cultural and aesthetic benefits
- Ability to adapt to change

3. LOSS OF BIODIVERSITY

Species, habitats and ecosystems, the planet’s whole natural heritage, is under an ever-increasing threat. Many species and habitats are in decline and in some cases their future is endangered. Irreversible losses have already occurred, with many species having already become extinct, and the rate of extinctions is increasing. The extinction of one species results in the irreversible loss of a unique suite of genetic adaptations that have been acquired typically over very long time scales of hundreds of thousands of years.

Undoubtedly human behaviour now causes, directly and indirectly, considerable loss of biological diversity. Globally, the degradation of biological diversity is principally due to habitat destruction, the introduction of non-native species and over-exploitation. The relative effects of these three factors vary in time and location. In Ireland today, habitat degradation and loss is the main factor eroding biodiversity. The influence of climatic change is becoming increasingly important.

4. INTERNATIONAL CONTEXT

In 1992, the largest-ever meeting of world leaders took place at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil, where a comprehensive strategy for "sustainable development" was agreed, meeting our needs while ensuring that we leave a healthy and viable world for future generations. An historic set of agreements was signed at the "Earth Summit", including two binding agreements, the Convention on Climate Change, which targets industrial and other emissions of greenhouse gases such as carbon dioxide, and the Convention on Biological Diversity, the first global agreement on the conservation and sustainable use of biological diversity. The biodiversity treaty gained rapid and widespread acceptance. Over 150 governments signed the document at the Rio conference, and since then more than 180 countries have ratified the agreement. Ireland signed the Convention on Biological Diversity in 1992 and ratified it in 1996.

5. THE CONVENTION ON BIOLOGICAL DIVERSITY

The Convention has three main goals:

- the conservation of biodiversity,
- sustainable use of the components of biodiversity, and
- the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The Convention is comprehensive in its goals, and deals with an issue so vital to humanity's future, that it stands as a landmark in international law. It recognizes, for the first time, that the conservation of biological diversity is "a common concern of humankind" and is an integral part of the development process. The agreement covers all ecosystems, species, and genetic resources. It links traditional conservation efforts to the economic goal of using biological resources sustainably. It sets principles for the fair and equitable sharing of the benefits arising from the use of genetic resources, notably those destined for commercial use. It also covers the rapidly expanding field of biotechnology, addressing technology development and transfer, benefit-sharing and biosafety. Importantly, the Convention is legally binding; countries that ratify it are obliged to implement its provisions.

The Convention reminds decision-makers that natural resources are not infinite and sets out a new philosophy for the 21st century, that of sustainable use. While past conservation efforts were aimed at protecting particular species and habitats, the Convention recognizes that ecosystems, species and genes must be used for the benefit of humans. However, this should be done in a way and at a rate that does not lead to the long-term decline of biological diversity.

The Convention also offers decision-makers guidance based on the precautionary principle - that where there is a threat of significant reduction or loss of biological diversity, lack of full scientific certainty should not be used as a reason for postponing

measures to avoid or minimize such a threat. The Convention acknowledges that substantial investments are required to conserve biological diversity. It argues, however, that conservation will bring us significant environmental, economic and social benefits in return. Stakeholder involvement in decision making is also an important element of the Convention.

Some of the many issues dealt with under the Convention include:

- measures and incentives for the conservation and sustainable use of biological diversity
- access to genetic resources
- access to and transfer of technology, including biotechnology
- technical and scientific co-operation
- impact assessment
- education and public awareness
- provision of financial resources
- national reporting on efforts to implement treaty commitments

6. IMPLEMENTATION OF THE CONVENTION

Implementation of the Convention on Biological Diversity is inherently integrative and cross-sectoral in character. It requires that biological diversity considerations be integrated into a wide range of policy areas, at the international, national and local level.

While the Convention on Biological Diversity was agreed in 1992, there is an ongoing process to further elaborate what is needed to implement it. Work is progressed by a number of means, with the ultimate responsibility for implementation resting with the Conference of Parties (COP). The COP takes decisions which define further obligations which countries must fulfil as well as setting out what is required at the international level.

A key means of measuring progress in the implementation of the Convention is through the analysis of national reports which Parties have to submit under the Convention. The first national reports were submitted to the fourth meeting of the COP in 1998 and the second national reports were submitted in 2001. National thematic reports on selected issues have also been submitted by many Parties. Ireland has submitted its first and second National Reports, as well as thematic reports on alien species, forest biodiversity, protected areas, and technology transfer which can be found on the website of the CBD.

Further information on the Convention on Biological Diversity is available on the Convention's web site <http://www.biodiv.org/>

Challenges to implementing the Convention on Biological Diversity and promoting sustainable development:

- meeting the increasing demand for biological resources caused by population growth and increased consumption, while considering the long-term consequences of our actions
- increasing our capacity to document and understand biodiversity, its value, and threats to it
- building adequate expertise and experience in biodiversity planning
- improving policies, legislation, guidelines, and fiscal measures for regulating the use of biodiversity
- adopting incentives to promote more sustainable forms of biodiversity use
- promoting trade rules and practices that foster sustainable use of biodiversity
- strengthening co-ordination within governments, and between governments and stakeholders
- securing adequate financial resources for conservation and sustainable use, from both national and international sources
- making better use of technology
- building political support for the changes necessary to ensure biodiversity conservation and sustainable use
- improving education and public awareness about the value of biodiversity

7. PREPARATION OF NATIONAL PLANS UNDER THE CONVENTION

A key provision of the Convention is the preparation of national biodiversity strategies or plans, and the integration of biological diversity concerns into all relevant sectors. This obligation is contained in Article 6 of the Convention, which sets out the general measure for conservation and sustainable use.

Article 6A requires each Contracting Party to ‘*develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adopt for this purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned.*’

Article 6B requires each Contracting Party to ‘*integrate, as far as possible and as appropriate, the conservation and sustainable use of biological*

diversity into relevant sectoral or cross sectoral plans, programmes and policies’.

8. PUBLICATION OF THE NATIONAL BIODIVERSITY PLAN

In response to Ireland’s commitment to the UN Convention on Biological Diversity, the Irish government adopted and published the National Biodiversity Plan in April 2002. This plan sets out a series of actions to promote and assist in the conservation of Ireland’s biological diversity, at a national and also local level, as well as to contribute to the conservation and sustainable use of biodiversity globally. The integration of biodiversity concerns into sectoral activities is a core focus of the National Biodiversity Plan. The key means of achieving this will be through the preparation of Biodiversity Plans by each Government Department, relevant State agencies and by Local Authorities. Such work is generally in its initial stages and these guidelines have been prepared to assist Local Authorities with the preparation of Local Biodiversity Action Plans. Complementary Guidelines have been drawn up to facilitate Government Departments and relevant state agencies in the preparation of their Biodiversity Action Plans.

An Interdepartmental Steering Group comprising representatives from all Government Departments has already been put in place. The purpose of this group is to drive and monitor implementation of the National Biodiversity Plan as well as to provide the necessary national co-ordination for, and input into, the Convention on Biological Diversity. A National Biodiversity Research Platform has been established and the establishment of a National Biodiversity Forum, representative of all stakeholders is at an advanced stage.

The National Biodiversity Plan has a section dealing with providing for biodiversity at local level, under which there are two specific actions for Local Authorities:

Action 10. *Each Local Authority to prepare a local Biodiversity Plan in consultation with relevant stakeholders.*

Action 11. *Each Local Authority to designate a contact officer for natural heritage conservation matters in its area.*

The section on ‘Providing for Biodiversity at Local Level’ states –
It is essential that action is also taken at the local level for the conservation of biodiversity. Local Authorities have potentially a key role here being in the best position to promote heritage conservation generally into local plans and programmes. To provide for the conservation and sustainable use of biodiversity at the local level, two key measures will be put in place, namely, the preparation and adoption of Local Biodiversity Action Plans and the designation of Natural Heritage Officers in all Local Authorities. The primary functions of these officers will be to promote and ensure the conservation of the natural heritage at the local level. The principal means of achieving this will be the formulation of the Local Biodiversity Plan by each Local Authority which will normally be prepared as part of integrated Local Heritage Plans. The initial focus of Local Biodiversity Plans will be on the identification and assessment of the local biodiversity resource.

Copies of the National Biodiversity Plan are available at www.environ.ie

9. WHAT IS A LOCAL BIODIVERSITY ACTION PLAN?

In Ireland, most of the effort to date has gone into the development and implementation of 'nationally (or internationally) elaborated frameworks or programmes' for biodiversity conservation. This national approach often results in biodiversity conservation at the local level (e.g. protected area networks – such as Natural Heritage Areas (NHAs) or Special Areas of Conservation (SACs), which result in the protection of local sites). However, virtually no work has been done on the elaboration or implementation of local frameworks for the conservation and sustainable use of biological diversity. There are however some existing initiatives at the local area, often in conjunction with local authorities, which contribute to the conservation of biological diversity at the local level. The initiation of the Local Biodiversity Action Plan process is a way of ensuring that these and the required new actions for local biodiversity are undertaken in the context of an overall framework, with individual projects contributing towards a common set of objectives and targets. The Local Biodiversity Action Plan should recognise existing initiatives, support new ones, and identify and prioritise areas where more actions are needed. In such a way, national and international targets for the conservation of biodiversity can be achieved while at the same time identifying and addressing local priorities.

The main functions of a Local Biodiversity Action Plan are:

- To translate international, European and Irish policies and obligations into effective action on the ground
- To conserve biodiversity of national and local importance
- To initiate a process and provide a framework for the conservation of biodiversity at the local level and to coordinate existing and new initiatives
- To assist sustainable planning and development, and provide a framework that is complementary to the County Development Plan and Local Agenda 21 initiatives
- To raise public awareness of, and involvement in, the conservation of biodiversity
- To collect and collate information on the biodiversity of the area
- To provide a basis for monitoring the success of conservation of biodiversity at a local level, and in turn to input into such monitoring at the regional and national level

10. RELATIONSHIP BETWEEN THE LOCAL BIODIVERSITY ACTION PLAN AND THE LOCAL HERITAGE PLAN

Following the publication of the National Biodiversity Plan, Local Authorities are required to take the lead role in the production of Local Biodiversity Action Plans. There is also a requirement for Local Authorities to prepare a Local Heritage Plan, and guidelines on this process (prepared by the Heritage Council) already exist. A number of such Heritage Plans have been produced. Generally, it is anticipated that the Local Biodiversity Action Plan will become an integral component of the Local Heritage Plan. Each Local Heritage Plan should include a commitment to produce a Local Biodiversity Action Plan. The production of the Local Biodiversity Action Plan should be undertaken by a Biodiversity Working Group - set up under the auspices of the Heritage Forum where one exists. The importance of biodiversity as part of our heritage, as well as its importance through the many goods, services and economic functions, it provides must be recognised. National co-ordination of this process is provided by the Heritage

Council which in turn, reports progress to the Inter-Departmental Steering Group referred to in 8 above.

11. THE ROLE OF THE LOCAL AUTHORITY IN THE CONSERVATION OF BIODIVERSITY

The local authority is the lead player in the Local Biodiversity Action Plan process. It is responsible for the preparation of the Local Biodiversity Action Plan and co-ordinating and monitoring implementation of the Plan. The Local Authority also plays a critical role, as the work of the local authority itself is a major influence on biodiversity at the local level. Consequently, a key component of each Local Biodiversity Action Plan should concern itself with the responsibilities, policies, programmes and activities of the Local Authority. An essential part of each Local Biodiversity Action Plan must be a detailed analysis of how all the areas of work of the Local Authority impact or potentially impact upon biodiversity - whether positively or negatively. There are many measures the local authority could put in place for the conservation of biodiversity. Appendix 5 of these guidelines outline ways that a Local Authority can contribute to a Local Biodiversity Action Plan. Appendix 6 lists examples of ways in which Local Authorities can contribute to the conservation and sustainable use of biodiversity through achieving sustainability in day to day activities and administrative functions of their activities.

12. MAIN ELEMENTS IN THE LOCAL BIODIVERSITY ACTION PLAN PROCESS

The process of developing and implementing a Local Biodiversity Action Plan involves several distinct elements. Analysis and evaluation of the biological diversity resource is a significant part of the process, and should assist in defining proposals for action within a specific period of time. In parallel with this is the development of an effective partnership with key players to identify appropriate actions and delivery and funding mechanisms. A third component is the programme for monitoring the effectiveness of the overall plan in achieving local targets.

While there are several distinct elements in the Local Biodiversity Action Plan process, and some of these follow a logical sequence of steps, work on different elements need not commence sequentially. Actions aimed at conservation of local biological diversity can commence immediately, with all of the initiatives being drawn together in the draft Local Biodiversity Action Plan.

Local Biodiversity Action Plan Process

- Establish a Biodiversity Working Group
- Promote and raise awareness of the conservation of biological diversity
- Consult with individuals and organisations
- Assess the role and impacts of the Local Authority in the conservation of biodiversity
- Establish a data-base on local biological diversity

- Audit of the local biodiversity resource
- Identify information gaps
- Establish priorities and set targets
- Produce draft Local Biodiversity Action Plan
- Agree and publish the Local Biodiversity Action Plan
- Monitor and review

13. ESTABLISH A BIODIVERSITY WORKING GROUP

Overall responsibility for the production of the Local Biodiversity Action Plan should lie with the Heritage Officer (or other designated officer where there is no Heritage Officer), though this may be facilitated by the appointment or designation of additional staff to assist the process. A Biodiversity Working Group should be established - under the auspices of the Local Heritage Forum where one exists, to drive the process forward. Membership of the Biodiversity Working Group may come from a wide range of sectors including:

- local government
- land owners
- state agencies, in particular National Parks and Wildlife Service (NPWS) in the Department of the Environment, Heritage and Local Government
- conservation and environmental non-government organisations
- local businesses
- community groups
- educational establishments.
- representatives from sectoral organisations

If necessary, a consultant or co-ordinator could be engaged to assist in the preparation of an initial draft of the Local Biodiversity Action Plan.

Different members will play different roles in contributing to the success of the Biodiversity Action Plan process. In identifying potential members of the working group, priority should be given to those who have greatest potential to contribute to the success of the biodiversity action plan process. Once the key members of the working group have been identified, and the work of the group is underway, additional members can be brought on board to provide support for specific tasks.

14. PROMOTE AND RAISE AWARENESS OF THE CONSERVATION OF BIOLOGICAL DIVERSITY

One of the first tasks of the biodiversity working group will be to familiarise itself with the National Biodiversity Plan and the principles and objectives of the Convention on Biological Diversity (CBD). Time should be spent on discussing how the National Biodiversity Plan and the CBD might be translated into action at the local level, and what implications this might have for the members of the working group and the organisations they represent.

Once this initial groundwork has been done, the working group must promote the need for action for the conservation of biological diversity, and raise awareness in the wider community of the Local Biodiversity Action Plan process that has been initiated. It is essential that as many people and organisations as possible are aware of the Local Biodiversity Action Plan process as their participation and support will be key to eventual implementation. Events such as workshops, presentations and competitions could be held and publicity through radio slots, newspaper coverage, *etc* will help promote the Local Biodiversity Action Plan process.

15. CONSULTATION

In order to ensure the widest possible involvement of the community in the Local Biodiversity Action Plan process, it is recommended that individuals and organisations not directly involved in the Working Group be consulted. This should take the form of a general call for submissions on the issues and concerns of the general public in relation to the conservation and sustainable use of biological diversity. Consultation could involve placing an advertisement in local newspapers calling for submissions, or holding seminars or workshops with relevant parties. There will also be some individuals and organisations that are not represented on the Biodiversity Working Group whose advice and experience would be of benefit to the process. Once identified, these individuals or groups should be contacted directly and invited to make proposals to assist the process. Consultation with these individuals and groups can help to estimate levels of support and future participation, as well as resources and expertise available. Efforts should be made to keep all participants and contributors to the process informed of any progress made, especially if they are not directly represented on the Working Group.

16. ESTABLISH A DATA-BASE ON LOCAL BIOLOGICAL DIVERISTY

A useful starting point for a Local Biodiversity Action Plan is to collate existing information and to establish a data-base at the local level on the state of knowledge of the local biological diversity. This will contain information of relevance to the local area, and could be built upon and added to, as the amount of information at the local level increases. Clearly information on designated sites will comprise a significant component of this data-base, but the focus of the local data-base should be to generate and make accessible information on the biological diversity of the wider countryside, outside designated sites.

The Heritage Council intends to create a database of sources of information on biological data, which the Local Biodiversity Action Plans can draw upon. The Heritage Council will endeavour to co-ordinate data management systems to ensure that a consistent approach will adopted by the individual local authorities. Agreement has been reached on the establishment of a Biological Records Centre. The Centre will provide national co-ordination and advice on the establishment of local data management systems.

17. AUDIT OF THE LOCAL BIODIVERSITY RESOURCE.

To build upon the compilation of information on the local biodiversity resource, a stock taking of the main habitats and species that occur within the area, or have occurred in the area in the relatively recent past should be done. This should identify features that are of -

- (i) international and national interest, or
- (ii) locally distinctive, or locally rare and therefore of local conservation interest.

This audit in its simplest form can comprise a list of species and habitats that fall into the two categories shown above, which over time can be added to as more information becomes available. However, ideally an audit should involve a review of selected key habitats and species, together with any information available on historical or current population/extent trends and status. In conjunction with the audit, information on pressures and threats to biodiversity should be compiled. Should there be insufficient information available to do a thorough audit of the biodiversity resource at this stage, data collection should be prescribed as a priority target in the Local Biodiversity Action Plan itself.

Aspect of Ireland's biological diversity which are of international and national interest include:-

- Species listed in Red Data Books (Appendix 1)
- Habitats listed for special conservation measures under the EU Birds and Habitats Directives (Appendix 2) *www.environ.ie*
- Protected areas – SACs, SPAs, NHAs, Nature Reserves, Refuges for Fauna, (*www.environ.ie*)
- Species afforded protection under the Wildlife Acts (*Copies available from Government Publications*)
- Species protected under Flora Protection Orders (Appendix 1) *www.environ.ie*
- Local breeds on the Food and Agriculture Organisation's list of endangered species

Aspect of local biological diversity interest

Those aspects of biodiversity that are of local importance for conservation will depend on the part of the country under consideration. Members of the Biodiversity Working Group and other local experts who are most familiar with their local area, are best placed to identify these aspects of local biodiversity. The selection of species and habitats considered to be of local importance will reflect the knowledge, understanding and interest of the local community, and this local perspective is to be encouraged.

Aspect of Ireland's biological diversity that may be of local interest include:

- Broad habitat groups of particular importance for wildlife:
 - Freshwater swamp,
 - Semi-natural grasslands,
 - Freshwater marsh
 - Heath
 - Bogs
 - Fens
 - Semi-natural woodland,
 - Scrub,
 - Hedgerows,
 - Coastland.
- Species or habitats that are not widely distributed within the local authority area, but which are not of national conservation concern
- Local varieties of fruit, grain and vegetables, etc and local breeds of animal
- Other species and habitats of particular interest to the Biodiversity Working Group *e.g.* species that are particularly characteristic of an area could serve as flagship species

18. IDENTIFY INFORMATION GAPS

It is inevitable that there will be gaps in our knowledge on aspects of biological diversity at the local level. At this early stage in the Local Biodiversity Action Planning process it is unrealistic to expect these information gaps to be filled, yet an appreciation of the extent to which information is lacking is an important element in the introduction of policies and programmes which address the conservation of biological diversity. The identification of information gaps will emerge from the collation of existing information and the biodiversity audit. The Biodiversity Working Group will also need to be aware of any surveys that are currently being undertaken or are planned by other agencies or organisations relevant to their local area.

Once information gaps are identified, a concerted effort should be made to ensure that some of these gaps are filled. The filling of these information gaps should comprise some of the key actions in the Local Biodiversity Action Plan.

19. ESTABLISH PRIORITIES AND SET TARGETS

The biodiversity inventory or audit will identify a large range of habitats and species and other components of biodiversity within the local authority area that are important for conservation. This list will invariably be far too long for action all at once. It is for this

reason that it is necessary to prioritise the actions that should take place first, and what targets should be set. Ideally, in identifying priorities for action, a balance should be struck between actions targeted at species and habitats of national importance, and those that are locally distinctive elements of the area. How the specific actions are identified is a matter for each Biodiversity Working Group, but they should reflect the degree of conservation concern and will also be dependent on factors such as the interests of the individual members, the enthusiasm and capability of the group, and the resources obtained for implementing actions.

Of crucial importance is that clear priorities are set, including realistic targets, and the progress with implementation of plan is monitored closely so that the process can be built upon in subsequent plans. Also as the production of national action plans develops, national targets and actions will need to be reflected in the local plans. The enforcement of all statutory obligations by local authorities with respect to species and habitat protection should be a priority.

In establishing priorities and targets, the Biodiversity Working Group should be cognisant of the need for these to be realistic as well as ambitious. Some of the actions may just relate to undertaking an inventory of an aspect of biodiversity for which there is poor information, and the target may simply be the completion of the survey. Other actions may be more far reaching, for example, seeking to implement a series of habitat enhancement measures for a locally important bird species.

One of the most effective ways to achieve action for local biodiversity is to prepare species, habitat or other action plans. The level of detail in these action plans will vary depending on the species or habitat type, according to the level of information available, and also according to how ambitious the plan is. Nevertheless, the individual species or habitat plans should follow a standard format, to include, as a minimum the following:

- species/habitat description
- current status and extent
- current factors causing threat to population and/or habitat
- current action or initiatives at national level
- Statutory obligations
- setting local objectives or targets including a timeframe
- proposed actions at local level with key partners and timeframe.

Depending on the circumstances in individual counties and the level of participation and expertise, the Biodiversity Working Group may wish to have action plans under thematic areas such as Education and Awareness or Coastal and Marine. In addition, a section which includes measures that reduce the ecological impact on global biodiversity, could be included.

20. STRUCTURE OF A LOCAL BIODIVERSITY ACTION PLAN

Although the overall structure of a Local Biodiversity Plan will vary depending on the decisions of the Biodiversity Working Group, it is imperative that it is user-friendly,

clear and consistent. Examples of the type of information that could be provided in the Local Biodiversity Action Plan are shown below:

- Vision statement/Overall aim
- Introduction – what is biodiversity?
 - why should we conserve biodiversity?
 - why is a Local Biodiversity Action Plan needed?
 - conservation of biodiversity in Ireland to date
- An analysis of the role and impact of the Local Authority in the conservation of biodiversity
- The need for widespread participation and community involvement can be emphasised with concrete examples provided as to how people can help.
- The criteria used in the selection of species and habitats or other components of biodiversity should be described
- List of habitats and species and other components of biodiversity in the local authority area
- The Species and Habitat Action Plans and any sectoral action plans, including targets, actions, timeframe, key partners and approximate costs and potential funding sources

21. IDENTIFY DELIVERY MECHANISMS AND FINANCIAL SOURCES

A range of agencies and partners will be able to play their part in implementing the actions outlined in the Local Biodiversity Action Plan. Some actions may require little additional funding if, for example, they can be done on a voluntary basis or involve adapting existing management measures at no extra cost. Others, however, will require funding. There are likely to be many opportunities for availing of existing financial sources or instruments to achieve biodiversity objectives outlined in the Local Biodiversity Action Plan, such as the Heritage Council Wildlife Grant Scheme. There will also be other priority actions that will require separate funding sources. Local businesses or local organisations may wish to sponsor certain actions. The Biodiversity Working Group should identify potential financial sources and the most effective means of delivery of the prioritised actions.

A Biodiversity Fund of €1 million spread over 2006 and 2007 has been established. The Fund will be administered by the Heritage Council and will be in respect of capital projects promoting biodiversity throughout the State.

It will be the responsibility of the individual partners to pledge their support and commitment for the objectives and actions identified for the conservation of biodiversity at the local level. Nevertheless, it is important for the Biodiversity Working Group to identify how it feels partners can contribute most effectively and efficiently towards the overall process. These proposals will then be considered formally by the relevant partner with the production and circulation of the draft Local Biodiversity Action Plan. However, an approximate estimate of how much funding will be required and how that funding will be delivered should be identified before publication of the Local Biodiversity Action Plan.

22. PRODUCE DRAFT LOCAL BIODIVERSITY ACTION PLAN

In addressing the above steps, very significant progress will have been made in establishing the groundwork necessary for the production of a Local Biodiversity Action Plan. At this stage, it may be advisable to produce a draft Action Plan, to set the work done to date in context, to set out clear achievable targets for action over a five-year period, and to galvanise the support of all of the local partners in meeting these targets.

A draft of the Local Biodiversity Action Plan may be agreed and produced by the Working Group. This draft plan may be submitted to the members of the Local Authority and the Heritage Council for consideration. It may be advisable to put the draft Action Plan on public display for a given timescale, with an invitation for the general public to make observations. The Local Authority should also send a copy of the draft Plan to all of the partners in the process, inviting their support for the plan, and also seeking a commitment from the partners on how they will contribute to achieving the objectives in the draft Plan.

23. AGREE AND PUBLISH THE LOCAL BIODIVERSITY ACTION PLAN

When the formal responses from the partners and general public are received, the draft Local Biodiversity Action Plan will need to be amended to incorporate these responses.

The final Local Biodiversity Action Plan should be endorsed by the Local Authority and published. It should be emphasised that the publication of the Plan is only one step of a continuous process and that momentum, participation and commitment must be maintained to ensure the effective implementation of the Plan.

24. MONITOR AND REVIEW

The conservation and sustainable use of biological diversity at the local level is an ongoing process, and the initiation of the Local Biodiversity Action Plan process is only the first significant landmark in this process, to be built upon by subsequent Action Plans. The working group should strive to have the Local Biodiversity Action Plan completed within one and at most two years of the establishment of the group.

Each Local Biodiversity Action Plan should be for a five-year period, and it is imperative that progress with its implementation is monitored and reviewed. The Heritage Officer in consultation with the Working Group and local authority should prepare a short annual report. A full review should be undertaken after three years, with the purpose of assessing progress and effectiveness and making modifications where necessary. This review should also allow the framing of the next Local Biodiversity Action Plan to commence.

The annual and mid-term review reports should be presented to the Local Authority, the Heritage Council and the Department of Environment, Heritage and Local Government and other partners. They should also be available to the public.

Appendix 1 – Checklist of protected species in Ireland

Key to Tables:

EU Directives

EU HD EU Habitats Directive [Council Directive 92/43/EEC]

II	Annex II animal & plant species
IV	Annex IV animal & plant species
V	Annex V animal & plant species

EU BD EU Birds Directive [Council Directive 79/409/EEC]

I	Annex I bird species
II(I)	Annex II, section I bird species
II(II)	Annex II, section II bird species
III(I)	Annex III, section I bird species
III(II)	Annex III, section II bird species
III(III)	Annex III, section III bird species

National legislation

WA	Wildlife Act, 1976 & Wildlife (Amendment) Act, 2000
FPO	Flora (Protection) Order, 1999 [SI 94/1999]

Published National Red* & Amber Lists

Plant Red Plant Red Lists^{1,2}

Ex	Extinct
E	Endangered
V	Vulnerable
R	Rare
I	Indeterminate (E,V or R, but not enough information available to say which)
K	Insufficiently known
DD	Data deficient

Vert. Red Vertebrate Red List³

Ex	Extinct
V	Vulnerable
R	Rare
I	Indeterminate (E,V or R, but not enough information available to say which)
II	Internationally important

BD Red Bird Red list⁴

BD Amb. Bird Amber list⁴

* Many national red lists are under review, to bring them into line with the IUCN 2001 criteria & categories.

¹ Curtis, T. G. F. & McGough, H. N. 1988 The Irish Red Data Book 1: Vascular Plants. Dublin: Stationery Office

² Stewart, N. F. & Church, J. M. 1992 Red Data Books of Britain & Ireland: Stoneworts. Peterborough: JNCC.

³ Whilde, T. 1993 The Irish Red Data Book 2: Vertebrates: Threatened Mammals, Birds, Amphibians and Fish in Ireland. Belfast: H.M.S.O.

⁴ Newton, S., Donaghy, A., Allen, D. & D. Gibbons. 1999. Birds of Conservation Concern in Ireland. *Irish Birds* 6(3) 333-344.

PLANTS, ALGAE & LICHENS

Angiosperms (Flowering plants)

Species		EU HD	FPO	Plant Red
<i>Adoxa moschatellina</i>				V
<i>Luronium natans</i>	Floating Water-Plantain	II		
<i>Allium schoenoprasum</i>	Chives		✓	R
<i>Asparagus officinalis</i>	Wild Asparagus		✓	R
<i>Simethis planifolia</i>	Kerry Lily		✓	V
<i>Mertensia maritima</i>	Oyster Plant		✓	R
<i>Callitriche truncata</i>	Short-leaved Water-Starwort		✓	R
<i>Campanula trachelium</i>	Bats-in-the-Belfry			V
<i>Arenaria norvegica</i>				DD
<i>Agrostemma githago</i>				Ex
<i>Arenaria ciliata</i>	Fringed Sandwort		✓	R
<i>Minuartia recurva</i>	Recurved Sandwort		✓	R
<i>Silene acaulis</i>				R
<i>Arthrocnemum perenne</i>	Perennial Glasswort		✓	V
<i>Helianthemum canum</i>	Hoary Rock-rose			R
<i>Helianthemum nummularium</i>	Common Rockrose		✓	R
<i>Tuberaria guttata</i>				R
<i>Colchicum autumnale</i>	Autumn Crocus		✓	E
<i>Carduus nutans</i>				DD
<i>Hypochoeris glabra</i>				DD
<i>Otanthus maritimus</i>	Cottonweed		✓	E
<i>Anthemis arvensis</i>				Ex
<i>Serratula tinctoria</i>				Ex
<i>Cirsium helenioides</i>				R
<i>Logfia minima</i>	Slender Cudweed		✓	R
<i>Omalotheca sylvatica</i>	Wood Cudweed		✓	R
<i>Saussurea alpina</i>	Alpine Saussurea			R
<i>Taraxacum gotlandicum</i>				R
<i>Erigeron acer</i>				V
<i>Inula salicina</i>	Irish Fleabane		✓	V
<i>Matthiola sinuata</i>				Ex
<i>Cardamine amara</i>				R
<i>Carda mine impatiens</i>	Narrow leaved Bitter-Cress		✓	R
<i>Cardaminopsis petraea</i>	Northern Rockcress		✓	R
<i>Draba incana</i>				R
<i>Rorippa islandica</i>	Marsh Yellowcress			R

<i>Teesdalia nudicaulis</i>					R
<i>Carex divisa</i>	Divided Sedge		✓		Ex
<i>Centaurea cyanus</i>					Ex
<i>Carex depauperata</i>	Starved Wood Sedge		✓		R
<i>Carex magellanica</i>					R
<i>Eriophorum gracile</i>	Slender Cotton Grass		✓		R
<i>Carex pauciflora</i>					V
<i>Centaureum littorale</i>					V
<i>Eleocharis parvula</i>					V
<i>Scirpus triquetar</i>	Triangular Club Rush		✓		V
<i>Elatine hydropiper</i>					R
<i>Orthilia secunda</i>					E
<i>Erica mackaiana</i>					R
<i>Monotropa hypopitys</i>					R
<i>Pyrola media</i>					R
<i>Pyrola rotundifolia ssp. maritima</i>	Round-leaved Wintergreen		✓		R
<i>Pyrola rotundifolia ssp rotundifolia</i>					R
<i>Erica ciliaris</i>	Dorset Heath				V
<i>Erica vagans</i>					V
<i>Euphorbia peplis</i>					Ex
<i>Centaureum pulchellum</i>	Lesser Centaury		✓		V
<i>Geranium purpureum</i>	Little Robin Cranesbill				V
<i>Geranium rotundifolium</i>					V
<i>Geranium sylvaticum</i>					V
<i>Geranium pratense</i>					y
<i>Hypericum canadense</i>	Canadian St. John's Wort		✓		R
<i>Hypericum hirsutum</i>	Hairy St. John's Wort		✓		V
<i>Hydrilla verticillata</i>	Irish Hydrilla		✓		V
<i>Scleranthus annuus</i>	Annual Knawel		✓		
<i>Juncus compressus</i>					R
<i>Scheuchzeria palustris</i>					Ex
<i>Ajuga pyramidalis</i>					R
<i>Lamiastrum galeobdolon</i>					R
<i>Salvia verbenaca</i>	Wild Clary				R
<i>Acinos arvensis</i>	Basil Thyme		✓		V
<i>Galeopsis angustifolia</i>	Red Hemp Nettle		✓		V
<i>Mentha pulegium</i>	Penny Royal		✓		V
<i>Stachys officinalis</i>	Betony		✓		V
<i>Lathyrus japonicus</i>	Sea pea		✓		DD
<i>Astragalus danicus</i>	Purple Milk Vetch		✓		R
<i>Lotus subbiflorus</i>	Hairy Birdsfoot Trefoil		✓		R
<i>Ornithopus perpusillus</i>	Birdsfoot				R
<i>Vicia lathyroides</i>					R
<i>Trifolium glomeratum</i>	Clustered Clover		✓		V
<i>Trifolium subterraneum</i>	Subterranean Clover		✓		V
<i>Vicia orobus</i>	Bitter Vetch		✓		V
<i>Najas flexilis</i>	Slender Naiad	II	IV	✓	R
<i>Epilobium alsinifolium</i>	Chickweed Willow Herb			✓	R
<i>Hammarbya paludosa</i>	Bog Orchid			✓	R
<i>Spiranthes romanzoffiana</i>	Drooping Lady's Tresses			✓	R
<i>Cephalanthera longifolia</i>	Narrow-leaved Helleborine			✓	V
<i>Epipactis phyllanthes</i>	Green-flowered Helleborine				V
<i>Orchis morio</i>	Green-winged orchid				V
<i>Pseudorchis albida</i>	Small-white Orchid			✓	V
<i>Orobanche rapum-genistae</i>	Greater Broomrape				R
<i>Papaver hybridum</i>	Round Prickly-headed Poppy			✓	E

<i>Hordelymus europaeus</i>					DD
<i>Lolium temulentum</i>					Ex
<i>Bromus racemosus</i>		16			R
<i>Calamagrostis epigejos</i>	Wood small-reed			✓	R
<i>Deschampsia setacea</i>	Bog Hair Grass			✓	R
<i>Hierochloe odorata</i>					R
<i>Poa alpina</i>	Alpine Poa				R
<i>Poa palustris</i>					R
<i>Puccinellia fasciculata</i>	Tufted Salt-marsh Grass			✓	R
<i>Calamagrostis stricta</i>					V
<i>Hordeum secalinum</i>	Meadow Barley			✓	V
<i>Alopecurus aequalis</i>	Orange Foxtail			✓	
<i>Polygonum viviparum</i>	Alpine Bistort			✓	DD
<i>Polygonum maritimum</i>	Sea Knotgrass				R
<i>Rumex maritimus</i>					R
<i>Groenlandia densa</i>	Opposite-leaved Pondweed			✓	V
<i>Hottonia palustris</i>	Water violet				R
<i>Ranunculus fluitans</i>					R
<i>Ranunculus tripartitus</i>	Three-lobed Water Crowfoot				R
<i>Trollius europaeus</i>	Globe Flower			✓	V
<i>Frangula alnus</i>					R
<i>Alchemilla alpina</i>					R
<i>Filipendula vulgaris</i>					R
<i>Potentilla fruticosa</i>					R
<i>Rubus chamaemorus</i>					V
<i>Sanguisorba officinalis</i>	Great Burnet			✓	V
<i>Salix phylicifolia</i>	Tea-leaved Willow				R
<i>Saxifraga granulata</i>	Meadow Saxifrage			✓	E
<i>Saxifraga hirculus</i>	Yellow Marsh Saxifrage	II	IV	✓	E
<i>Saxifraga aizoides</i>					R
<i>Saxifraga hartii</i>	Hart's Saxifrage			✓	R
<i>Saxifraga nivalis</i>	Alpine Saxifrage			✓	R
<i>Saxifraga oppositifolia</i>					R
<i>Limosella aquatica</i>	Mudwort			✓	R
<i>Sibthorpia europaea</i>					R
<i>Kickxia elatine</i>	Fluellen				V
<i>Melampyrum sylvaticum</i>					V
<i>Misopates orontium</i>	Lesser Snapdragon			✓	V
<i>Scrophularia umbrosa</i>					V
<i>Hyoscyamus niger</i>	Henbane				R
<i>Scandix pecten-veneris</i>					Ex
<i>Ligusticum scoticum</i>					R
<i>Oenanthe pimpinelloides</i>	Water dropwort				R
<i>Viola persicifolia</i>					R
<i>Viola hirta</i>	Hairy Violet			✓	V
<i>Viola lactea</i>	Pale Heath Violet			✓	V

Pteridophytes (Ferns & Fern allies)

Species		EU HD	FPO	Plant Red
<i>Cryptogramma crispa</i>	Parsley Fern		✓	R
<i>Asplenium septentrionale</i>	Forked Spleenwort		✓	R
<i>Asplenium obovatum</i> subsp. <i>lanceolatum</i>	Lanceolate Spleenwort		✓	V
<i>Polystichum lonjyititis</i>	Holly Fern			R

<i>Nitella tenuissima</i>				V
<i>Tolypella intricata</i>				V
<i>Lithothamnion corralloides</i>	Maerl	V		
<i>Phymatolithon calcareum</i>	Maerl	V		

Lichens

Species	FPO
<i>Fulgensia fulgens</i>	

ALL members of the lichen species *Cladonia* subgenus *Cladina* (Reindeer Moss) are protected under Annex V of the EU Habitats Directive [92/43/EEC].

MAMMALS

Species		EU HD		WA	Vert. Red	
<i>Erinaceus europaeus</i>	Hedgehog			✓	II	
<i>Sorex minutus</i>	Pygmy Shrew			✓		
<i>Rhinolophus hipposideros</i>	Lesser Horseshoe	II	IV	✓	II	
<i>Myotis mystacinus</i>	Whiskered bat		IV	✓	I	
<i>Myotis nattereri</i>	Natterer's bat		IV	✓	I	
<i>Myotis daubentonii</i>	Daubenton's bat		IV	✓	II	
<i>Myotis brandtii</i>	Brandt's bat		IV	✓		
<i>Nyctalus leisleri</i>	Leisler's bat		IV	✓	II	
<i>Pipistrellus pipistrellus</i>	Common Pipistrelle		IV	✓	II	
<i>Pipistrellus pygmaeus</i>	Soprano Pipistrelle		IV	✓		
<i>Pipistrellus nathusii</i>	Nathusius' Pipistrelle		IV	✓		
<i>Plecotus auritus</i>	Brown long-eared bat		IV	✓	II	
<i>Lepus timidus</i>	Irish Hare			V	✓	II
<i>Lepus europaeus</i>	Brown Hare			✓		
<i>Cethrionomys glareolus</i>	Bank vole					
<i>Rattus rattus</i>	Ship Rat				R	
<i>Sciurus vulgaris</i>	Red Squirrel			✓		
<i>Sciurus carolinensis</i>	Grey squirrel					
<i>Lutra lutra</i>	Otter	II	IV	✓	II	
<i>Martes martes</i>	Pine Marten			V	✓	II
<i>Meles meles</i>	Badger			✓	II	
<i>Mustela erminea</i>	Stoat			✓		
<i>Mustela vison</i>	American mink					
<i>Odobenus rosmarus</i>	Walrus					
<i>Halichoerus grypus</i>	Grey seal	II		V	✓	
<i>Phoca vitulina</i>	Harbour seal	II		V	✓	
<i>Canis lupus</i>	Grey Wolf				Ex	
<i>Cervus elaphus</i>	Red deer			✓		
<i>Cervus nippon</i>	Sika deer			✓		
<i>Dama dama</i>	Fallow deer			✓		
<i>Tursiops truncatus (tursio)</i>	Bottlenose Dolphin	II	IV	✓		
<i>Phocoena phocoena</i>	Harbour porpoise	II	IV	✓		

ALL cetaceans are protected under the EC Habitats Directive (Annex IV), the Whale Fisheries Act, 1937 (including an order made in SI 240/1982) and the Wildlife Act, 1976.

REPTILES

Species		EU HD	WA
<i>Dermochelys coriacea</i>	Leatherback turtle	IV	✓
<i>Lepidochelys kempii</i>	Kemp's Ridley turtle	IV	✓
<i>Caretta caretta</i>	Loggerhead turtle	II IV	✓
<i>Eretmochelys imbricata</i>	Hawksbill turtle	IV	✓
<i>Lacerta vivipara</i>	Common lizard		✓

The common lizard was added to the Wildlife Act, 1976 by regulations made in SI 282/1980, and Marine turtles were added by regulations made in SI 112/1990.

AMPHIBIANS

Species		EU HD	WA	Vert. Red
<i>Bufo calamita</i>	Natterjack Toad	IV	✓	y
<i>Rana temporaria</i>	Common frog	V	✓	y
<i>Triturus vulgaris</i>	Common newt		✓	

The common frog and common newt were added to the Wildlife Act, 1976 by regulations made in SI 282/1980.

INVERTEBRATES

Species		EU HD	WA
<i>Euphydryas aurinia</i>	Marsh Fritillary	II	
<i>Austropotamobius pallipes</i>	White-clawed Crayfish	II V	3
<i>Geomalacus maculosus</i>	Kerry Slug	II IV	3
<i>Vertigo angustior</i>	Marsh snail	II	
<i>Vertigo geyeri</i>	Marsh snail	II	
<i>Vertigo moulinsiana</i>	Marsh snail	II	
<i>Margaritifera margaritifera</i>	Fresh Water Pearl Mussel	II V	3

The White-clawed crayfish, Kerry slug and Freshwater Pearl-Mussel were added to the Wildlife Act, 1976 by regulations made in SI 112/1990.

FISH

Species		EU HD	Vert. Red
<i>Acipenser sturio</i>	Sturgeon	IV	
<i>Alosa alosa</i>	Allis Shad	II V	E
<i>Alosa fallax</i>	Twaite Shad	II V	V
<i>Alosa fallax killarneyensis</i>	Killarney Shad	II V	E

<i>Osmerus eperlanus</i>	Smelt			V
<i>Lampetra fluviatilis</i>	River Lamprey	II	V	I
<i>Lampetra planeri</i>	Brook Lamprey	II		I
<i>Petromyzon marinus</i>	Sea Lamprey	II		I
<i>Coregonus autumnalis</i>	Pollan		V	E
<i>Salvelinus alpinus</i>	Arctic Charr			V
<i>Salmo salar*</i>	Salmon	II	V	II

*This only refers to Salmon in freshwater.

Numerous fish and invertebrates are listed on the Wildlife (Fish and Aquatic Invertebrate Animals) (Exclusion) Regulations, 2001 [SI 372/2001], which excludes them from the provisions of the Wildlife (Amendment) Act, 2000.

BIRDS

Species		EU BD		BD Red	BD Amb.	Vert. Red
<i>Accipiter gentilis</i>	Goshawk				✓	
<i>Aquila chrysaetos</i>	Golden Eagle	I				Ex
<i>Circus aeruginosus</i>	Marsh Harrier					Ex
<i>Circus cyaneus</i>	Hen Harrier	I		✓		E
<i>Haliaeetus albicilla</i>	White-tailed Eagle					Ex
<i>Alauda arvensis</i>	Skylark				✓	
<i>Lullula arborea</i>	Woodlark					Ex
<i>Alcedo atthis</i>	Kingfisher	I			✓	
<i>Alca torda</i>	Razorbill				✓	
<i>Cephus grylle</i>	Black Guillemot				✓	
<i>Fratercula arctica</i>	Puffin				✓	
<i>Uria aalge</i>	Guillemot				✓	
<i>Anas acuta</i>	Pintail	II(I)	III(II)		✓	R
<i>Anas clypeata</i>	Shoveler	II(I)	III(III)			R
<i>Anas crecca</i>	Teal	II(I)	III(II)		✓	
<i>Anas penelope</i>	Wigeon	II(I)	III(II)		✓	
<i>Anas platyrhynchos</i>	Mallard	II(I)	III(I)			
<i>Anas querquedula</i>	Garganey	II(I)			✓	R
<i>Anas strepera</i>	Gadwall	II(I)			✓	R
<i>Anser albifrons</i>	White-fronted Goose	I	II(II)	III(III)	✓	II
<i>Anser anser</i>	Greylag Goose	II(I)	III(II)		✓	
<i>Anser brachyrhynchus</i>	Pink-footed Goose		II(II)			
<i>Aythya ferina</i>	Pochard	II(I)	III(II)		✓	R
<i>Aythya fuligula</i>	Tufted Duck	II(I)	III(II)		✓	
<i>Aythya marila</i>	Scaup		II(II)	III(III)	✓	
<i>Branta bernicla</i>	Brent Goose				✓	II
<i>Branta canadensis</i>	Canada Goose	II(I)				
<i>Branta leucopsis</i>	Barnacle Goose				✓	II
<i>Branta ruficollis</i>	Barnacle Goose	I			✓	
<i>Bucephala clangula</i>	Goldeneye		II(II)		✓	
<i>Clangula hyemalis</i>	Long-tailed Duck		II(II)			
<i>Cygnus bewickii</i>	Bewick's Swan	I			✓	
<i>Cygnus cygnus</i>	Whooper Swan	I			✓	II
<i>Melanitta nigra</i>	Common Scoter		II(II)	III(III)	✓	E
<i>Melanitta fusca</i>	Velvet Scoter		II(II)			
<i>Mergus merganser</i>	Goosander		II(II)		✓	R
<i>Mergus serrator</i>	Red-breasted Merganser		II(II)		✓	

<i>Somateria mollissima</i>	Eider		II(II)	III(II)	✓	
<i>Tadorna tadorna</i>	Shelduck				✓	
<i>Botaurus stellaris</i>	Bittern					Ex
<i>Egretta garzetta</i>	Little Egret	I			✓	
<i>Caprimulgus europaeus</i>	Nightjar	I			✓	E
<i>Charadrius alexandrinus</i>	Kentish Plover	I				
<i>Pluvialis apricaria</i>	Golden Plover	I	II(II)		✓	V
<i>Pluvialis squatarola</i>	Grey Plover			III(III)	✓	
<i>Vanellus vanellus</i>	Lapwing		II(II)		✓	
<i>Columba livia</i>	Rock Dove		II(I)			
<i>Columba oenas</i>	Stock Dove				✓	
<i>Columba palumbus</i>	Woodpigeon		II(I)	III(I)		
<i>Pyrhcorax pyrrhcorax</i>	Chough	I			✓	II
<i>Cuculus canorus</i>	Cuckoo				✓	
<i>Emberiza citrinella</i>	Yellowhammer				✓	
<i>Miliaria calandra</i>	Corn Bunting				✓	E
<i>Falco columbarius</i>	Merlin	I			✓	R
<i>Falco peregrinus</i>	Peregrine	I			✓	II
<i>Falco tinnunculus</i>	Red-footed Falcon	I				
<i>Carduelis flammea</i>	Redpoll				✓	
<i>Carduelis flavirostris</i>	Twite				✓	I
<i>Gavia arctica</i>	Black-throated Diver	I			✓	
<i>Gavia immer</i>	Great Northern Diver	I				
<i>Gavia stellata</i>	Red-throated Diver	I			✓	R
<i>Hirundo rustica</i>	Swallow				✓	
<i>Riparia riparia</i>	Sand Martin				✓	
<i>Hydrobates pelagicus</i>	Storm Petrel	I			✓	II
<i>Oceanodroma leucorhoa</i>	Leach's Petrel	I			✓	
<i>Larus canus</i>	Common Gull				✓	
<i>Larus melanocephalus</i>	Mediterranean Gull	I			✓	
<i>Larus minutus</i>	Little Gull	I			✓	
<i>Larus ridibundus</i>	Black-headed Gull				✓	
<i>Motacilla flava</i>	Yellow Wagtail				✓	
<i>Ficedula hypoleuca</i>	Pied Flycatcher				✓	
<i>Muscicapa striata</i>	Spotted Flycatcher				✓	
<i>Passer montanus</i>	Tree Sparrow					I
<i>Phalacrocorax carbo</i>	Cormorant				✓	
<i>Phalaropus lobatus</i>	Red-necked Phalarope	I			✓	E
<i>Coturnix coturnix</i>	Quail				✓	
<i>Perdix perdix</i>	Grey Partridge		II(I)	III(I)	✓	E
<i>Phasianus colchicus</i>	Pheasant		II(I)	III(I)		
<i>Podiceps cristatus</i>	Great-crested Grebe				✓	
<i>Podiceps nigricollis</i>	Black-necked Grebe				✓	R
<i>Procellaria diomedea</i>	Cory's Shearwater	I			✓	
<i>Puffinus gravis</i>	Great Shearwater				✓	
<i>Puffinus griseus</i>	Sooty Shearwater				✓	
<i>Puffinus puffinus</i>	Manx Shearwater				✓	
<i>Crex crex</i>	Comcrake	I			✓	E
<i>Fulica atra</i>	Coot		II(I)	III(II)	✓	
<i>Porzana porzana</i>	Spotted Crake				✓	
<i>Rallus aquaticus</i>	Water Rail				✓	
<i>Calidris alpina</i>	Dunlin	I			✓	V
<i>Calidris canutus</i>	Knot				✓	
<i>Gallinago gallinago</i>	Snipe		II(I)	III(III)	✓	

<i>Limosa lapponica</i>	Bar-tailed Godwit	I			✓	
<i>Limosa limosa</i>	Black-tailed Godwit				✓	R
<i>Lymnocyptes minimus</i>	Jack-Snipe	II(I)		III(III)	✓	
<i>Numenius arquata</i>	Curlew		II(II)		✓	
<i>Philomachus pugnax</i>	Ruff	I				
<i>Scolopax rusticola</i>	Woodcock	II(I)		III(III)	✓	
<i>Tringa glareola</i>	Wood Sandpiper	I				
<i>Tringa nebularia</i>	Greenshank					R
<i>Tringa totanus</i>	Redshank				✓	
<i>Chlidonias niger</i>	Black Tern	I				
<i>Sterna albifrons</i>	Little Tern	I			✓	V
<i>Sterna dougallii</i>	Roseate Tern	I			✓	E
<i>Sterna hirundo</i>	Common Tern	I			✓	
<i>Sterna paradisaea</i>	Arctic Tern	I			✓	
<i>Sterna sandvicensis</i>	Sandwich Tern	I			✓	
<i>Asio flammeus</i>	Short-eared Owl	I			✓	R
<i>Nyctea scandiaca</i>	Snowy Owl	I				
<i>Morus bassanus</i>	Gannet				✓	
<i>Acrocephalus scirpaceus</i>	Reed Warbler				✓	
<i>Locustella naevia</i>	Grasshopper Warbler				✓	
<i>Phylloscopus sibilatrix</i>	Wood Warbler				✓	R
<i>Sylvia curruca</i>	Lesser Whitethroat				✓	
<i>Lagopus lagopus</i>	Red Grouse	II(I)	III(I)		✓	
<i>Tetrao urogallus cantabricus</i>	Capercaillie			III(II)		Ex
<i>Panurus biarmicus</i>	Bearded Tit					R
<i>Oenanthe pleschanka</i>	Pied Wheatear	I				
<i>Phoenicurus phoenicurus</i>	Redstart				✓	
<i>Saxicola rubetra</i>	Whinchat				✓	
<i>Saxicola torquata</i>	Stonechat				✓	
<i>Turdus torquatus</i>	Ring Ouzel				✓	R
<i>Tyto alba</i>	Barn Owl				✓	I

ALL bird species occurring in Ireland are protected under both the EU Birds Directive [79/409/EEC] and the Wildlife Act, 1976 (including amendments made in SI 283/1980 and SI 397/1985).

APPENDIX 2. HABITATS OCCURRING IN IRELAND LISTED IN THE EU DIRECTIVE 92/431/EEC ON THE CONSERVATION OF NATURAL HABITATS OF WILD FLORA AND FAUNA

HABITATS

Priority

Lagoons
Fixed 'grey' dunes
Decalcified fixed dunes with *Empetrum nigrum*
EU- Atlantic decalcified fixed dunes
Machairs
Turloughs
Semi-natural dry calcareous grasslands rich in orchids
Species-rich siliceous *Nardus* grasslands in mountain areas
Active raised bogs
Active blanket bogs
Cladium fens
Petifying springs with tufa formation
Limestone pavements
Bog woodland
Yew woodland
Residual alluvial forests

Non-priority

Submerged sandbanks
Estuaries
Tidal mudflats and sandflats
Reefs
Large shallow inlets and bays
Annual vegetation of coastal shingle drift lines
Perennial vegetation of stony coastal banks
Vegetated sea cliffs
Salicornia swards
Spartina swards
Atlantic salt meadows
Embryonic shifting dunes
Marram white dunes
Dunes with creeping willow
Dunes with sea-buckthorn
Humid dune slacks
Lowland oligotrophic
Upland oligotrophic lakes
Hard oligo-mesotrophic lakes rich in stoneworts
Naturally eutrophic lakes
Dystrophic (peat-stained) lakes
Lowland rivers rich in water crowfoot
Pioneer river vegetation rich in annuals
Wet heaths

Dry heaths
Alpine and sub-alpine heaths
Juniper scrub
Grasslands on soils with a high heavy metal content
Semi-natural dry calcareous grassland other than those rich in orchids
Molinia meadows
Eutrophic tall herbs
Lowland hay meadows
Degraded raised bogs still capable of natural regeneration
Non-active blanket bogs
Transition mires and quaking bogs
Depressions on peat substrates
Alkaline fens
Siliceous scree
Calcareous scree
Vegetation of dry calcareous rocky slopes
Vegetation of dry siliceous rocky slopes
Pioneer vegetation of rock surfaces
Caves not open to the public
Submerged or partly submerged sea caves
Old oak woods in the British Isles

Appendix 3: Trees and Shrubs considered native to Ireland

Alder	<i>Alnus glutinosa</i>
Arbutus, the Strawberry Tree	<i>Arbutus unedo</i>
Silver Birch	<i>Betula pendula</i>
Downy Birch	<i>Betula pubescens</i>
Hazel	<i>Corylus avellana</i>
Hawthorn	<i>Crataegus monogyna</i>
Broom	<i>Cytisus scoparius</i>
Spindle	<i>Euonymus europaeus</i>
Alder Buckthorn	<i>Frangula alnus</i>
Ash	<i>Fraxinus excelsior</i>
Ivy	<i>Hedera helix</i>
Holly	<i>Ilex aquifolium</i>
Juniper	<i>Juniperus communis</i>
Privet	<i>Ligustrum vulgare</i>
Honeysuckle	<i>Lonicera periclymenum</i>
Crab Apple	<i>Malus sylvestris</i>
Sessile Oak	<i>Quercus petraea</i>
Pedunculate Oak	<i>Quercus robur</i>
Scots Pine	<i>Pinus sylvestris</i>
Aspen	<i>Populus tremula</i>
Bird Cherry	<i>Prunus padus</i>
Wild Cherry	<i>Prunus avium</i>
Sloe, Blackthorn	<i>Prunus spinosa</i>
Purging Buckthorn	<i>Rhamnus cathartica</i>
Dog Rose	<i>Rosa canina</i>
Burnet rose	<i>Rosa pimpinellifolia</i>
Bramble	<i>Rubus fruticosus</i>
Willow spp.	<i>Salix</i> spp.
Elder	<i>Sambucus nigra</i>
Rowan or Mountain Ash	<i>Sorbus aucuparia</i>
Whitebeam spp.	<i>Sorbus aria</i> <i>S. rupicola</i> <i>S. devoniensis</i> <i>S. latifolia</i> , <i>S. anglica</i> <i>S. hibernica</i> .
Yew	<i>Taxus baccata</i>
Common (or European) Gorse	<i>Ulex europaeus</i>
Western (or Mountain) Gorse	<i>Ulex gallii</i>
Wych Elm	<i>Ulmus glabra</i>
Guelder Rose	<i>Viburnum opulus</i>

Appendix 4 - List of relevant Irish, European and international legislation, strategies and conventions relevant to the conservation of biodiversity

Irish Wildlife and Planning Legislation and Plans

- The Local Government (Planning and Development Acts, 1963-2000).
- Planning and Development Act, 2000.
- The Heritage Act, 1995.
- Continental Shelf Act, 1968.
- The Wildlife Act, 1976.
- Wildlife (Amendment Act), 2000.
- European Communities (Natural Habitats) Regulations, 1997
- Sustainable Development: A Strategy for Ireland, 1997.
- The National Development Plan 2000-2006.
- Local Authorities and Sustainable Development: Guidelines on Local Agenda 21.
- National Spatial Strategy, 2002.
- National Climate Change Strategy, 2000.

European Directives

- EU Birds Directive (Council Directive 79/409/EEC), 1979.
- EU Habitats Directive (Council Directive 92/43/EEC), 1992.
- EU Water Framework Directive (Council Directive 2000/60/EC establishing a framework for Community Action in the field of water policy) 2000.
- EU Directive on Environmental Impacts (Council Directive 97/11/EC amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment) 1997.
- EU Directive on Public Access to Environmental Information (Council Directive 90/313/EEC on the freedom of access to information on the environment) 1990.

European Plans and Strategies

- European Biodiversity Strategy, 1998 (COM (98) 42 final).
- Biodiversity Action Plans in the areas of Conservation of Natural resources, Agriculture, Fisheries, and Development and Economic Co-operation, 2001 (COM(2001)162 final).
- The European Union Strategy for Sustainable Development, 2001 (COM(2001)264 final).
- The Sixth EU Environmental Action Programme, Our Future, Our choice, 2001 (COM(2001)31).

International Conventions

- UNESCO Convention for the protection of the World Cultural and Natural Heritage.
- Convention on the Conservation of European Wildlife and Natural Habitats (Berne Convention, 1979).
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), 1979.
- Agreement on Conservation of Bats in Europe (Bonn Convention), 1993.
- Convention of Wetlands of International Importance (Ramsar Convention, 1971).
- International Convention for the Regulation of Whaling, 1946.
- Convention on Biological Diversity, 1992.
- Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), 1974.
- Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) (Bonn Convention), 1996.
- International Tropical Timber Agreement 1994, (1996).
- Pan-European Biological and Landscape Diversity Strategy, 1995.
- United Nations Framework Convention on Climate Change, 1992.
- Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR), 1992 (including Annex V on marine biodiversity).

Appendix 5 - Example of how a Local Authority might contribute to a Local Biodiversity Action Plan

As the lead partner in the production of the Local Biodiversity Action Plan, the local authority may consider, for example, making the following commitment as its contribution towards achieving the objectives of the plan:

1. Managing its own land and activities to maximise their contribution to biological diversity by giving a commitment to adhere to or undertake the following–
 - Identify any conservation designations on land owned and/or managed by local authority and its conservation significance at both a local and a national level
 - Plant native trees and hedges as determined by the local landscape character
 - Use tree stocks from local seed sources (if available)
 - Introduce grass cutting regimes that are compatible with biodiversity enhancement
 - Introduce hedge cutting regimes to enhance biodiversity and which adhere to wildlife legislation (generally no cutting between 1st March and 31st August)
 - Reduce and where possible eliminate the use of pesticides, herbicides and chemical fertilisers
 - Eliminate peat based compost and instead use peat free products
 - When considering works on buildings or other structures (e.g. bridges), ensure, including through survey where appropriate, that protected or other important species are properly protected (e.g. it is an offence to interfere with or destroy the breeding or roosting places of bats)
 - Consider creating ponds or other wetland areas
 - Leave areas aside as wildlife havens
 - Restore degraded habitats
 - Safeguard and manage species of national significance which occur on its land
 - Ensure that biodiversity surveys are undertaken to inform changes to land use or when undertaking development
 - producing and implementing management plans for locally important sites in its ownership
 - Erect bird and bat boxes as part of local authority development works
 - Protect bat roosts when repairing bridges, buildings, etc
 - Manage water courses and their margins to benefit biological diversity
 - Discourage the canalisation or culverting of water courses and ensure the design of culverts and bridges allow for passage of aquatic life
 - Where relevant and appropriate, permit public access on lands owned and/or, provide educational and recreational facilities for the public use *e.g.* land in built up areas
 - Encourage contractors and consultants to adopt the principles of biodiversity enhancement in designing development sites and adhere to best practice
 - Promote the distinctiveness and quality of the area's biodiversity

2. Influencing, involving and informing others;
- through development control safeguard and enhance the area's biodiversity
 - incorporate habitat mapping as part of the Local Area Plan process
 - encourage contractors and consultants to adopt the principles of biodiversity
- enhancement in designing development sites and implementing best practice
- provide guidance on the source of advice and delivery mechanism
 - through demonstration and projects involve the local community in the decision-making process
 - provide incentives, through the criteria for grant support of projects
 - discourage the canalisation or culverting of water courses in development proposals
 - produce interpretative material
 - promote the distinctiveness and quality of the area's biodiversity
 - create support mechanisms for others to undertake action
 - support the voluntary sector in its efforts
 - establish partnerships to steer local biodiversity action
 - encourage awareness raising education initiatives in association with the voluntary sector

Appendix 6 - Examples of ways in which all Local Authorities can contribute to the conservation and sustainable use of biodiversity through achieving sustainability in day to day activities and administrative functions of their activities

1. Examine and Implement the National Sustainable Development Strategy

As a consumer of materials, furniture, paper, water etc and as a producer of waste

2. Use sustainable produced products
3. Use certified timbers for furniture and construction *etc*
4. Reduce resource consumption *e.g.* use recycled paper and purchase duplex printers, and double sided photocopiers so that both sides of the paper can be used.
5. Use recycled and recyclable products such as stationary and toilet tissues and products that come in recyclable packaging
6. Where non recycled paper is used, ensure that it is produced from sustainable managed forests.
7. Recycle and reuse paper, stationary, packaging and other equipment
8. Collect and recycle printer cartridges
9. Purchase organic and locally produced foods in the office and sustainable produced teas and coffees
10. Ensure that IT equipment complies with national and EU regulations on the use of environmentally hazardous substances
11. Ensure that all equipment is non-polluting and that it is free from ozone depleting chemicals or other damaging substances
12. Reduce water consumption
13. Choose environmentally friendly cleaning products
14. Install low flush toilets to reduce water consumption

As a consumer of energy

15. Using energy efficient equipment and electric goods
16. Buy fuel efficient vehicles
17. Buy vehicles that minimise damaging emissions to the environment
18. Use alternatively fuelled vehicles
19. Reduce business vehicle mileage
20. Organise office car shares for journeys to and from work and encourage the use of public transport
21. Switch to a green electricity scheme

As an operator

22. Monitor and mitigate pollution through emissions or waste disposal as result of Local Authority activities which may impact upon the environment
23. Minimise impacts to biodiversity when changing land use or management methods
24. Ensure that property managers comply with legal requirements for disposing of waste
25. Undertake all new construction in a sustainable manner, taking into account the impacts that the building materials used, building design and energy requirements etc may have on biodiversity

As a funder of projects, subsidies and contracts etc

26. Identify issues and activities in contracts awarded that may impact upon biodiversity and ensure that any negative impacts are mitigated and that measures to enhance biodiversity are incorporated
27. Ensure that the contract award criteria include, where possible, environmental and social requirements
28. Tender letters should request tenderers to identify environmental impacts and mitigation measures
29. Sponsor biodiversity conservation projects

Appendix 7 - Useful references:

- *Ireland's First National Report on the Implementation of the Convention on Biological Diversity, 1998.*
- *National Biodiversity Plan, (2002) Government of Ireland.*
- *National Heritage Plan, (2002) Government of Ireland.*
- *A methodology for Local Authority Heritage Officers on the Preparation of County/city Heritage Plans, (2001) The Heritage Council.*
- *A Guide to the Convention on Biological Diversity, (1994). I.U.C.N., Gland and Cambridge.*
- *Communication from the Commission to the Council and the European Parliament, Biodiversity Action Plans in the areas of Conservation of Natural Resources, Agriculture, Fisheries, and Development and Economic Co-operation, COM(2001)62 final.*
- *A Guide to the Habitats in Ireland. (2000) The Heritage Council.*
- *Biodiversity in Ireland (2001) The Environmental Protection Agency.*
- *The Irish Red Data Book: 1 Vascular Plants. T.G.F. Curtis & H.N. McGough (1988) Government Stationery Office.*
- *Threatened Mammals, Birds, Amphibians and Fish in Ireland. Irish Red Data Book 2: Vertebrates. A. Whilde (1993) HMSO, Belfast.*
- *Red Data Books of Britain & Ireland: Stoneworts. N.F. Stewart & J.M. Church (1992) JNCC, Peterborough.*
- *Birds of Conservation Concern in Ireland. Newton, S. Donaghy, A. Allen, D. & Gibbons, D. (1999) Irish Birds 6:333-344.*
- *The Millennium Atlas of Butterflies in Britain and Ireland. Asher, J. et al (2001). University Press, Oxford.*
- *The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991. D.W.Gibbons, Reid, J.B & Chapman, R.A. (1993) T.& A.D. Poyser.*
- *Evaluation of Environmental Designations in Ireland (second edition). The Heritage Council (1997).*
- *Irish Peatland Conservation Plan 2000. (1996) Irish Peatland Conservation Council.*
- *New Atlas of the British and Irish Flora. Preston, C.D. et al. (2002) Botanical Society of the British Isles.*