

What is Biodiversity? - People and Nature

Introduction

Biodiversity is short for 'biological diversity. It was defined in the 1992 Convention on Biological Diversity as:

“The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.”

Biodiversity is a collective term for all the different living organisms on the planet including bacteria, plants and animals as well as their habitats. Biodiversity encompasses the range of differences between species, differences between individuals of the same species (genetic diversity) and the different ways in which all these living things interact with each other and the world around them

Put simply, biodiversity is the variety of life on Earth and the natural patterns it forms.

Why is Biodiversity Important?

Variety is the spice of life! But variety is also essential to keeping life on this planet. All the living organisms on this planet have evolved over millions of years and each of them is adapted to their own role in their natural environment. Plants and animals depend on each other for survival. Humans too are part of this intricate web of life and depend on biodiversity to provide us with all the necessities of life including food, shelter, oxygen, medicine and services such as air and water purification.

When we damage biodiversity, we can upset this delicate balance of nature which may have long-lasting and far-reaching consequences for ourselves and the living world around us. Thus it is important that we use the products of nature wisely to ensure that future generations may also have enough natural resources to meet their needs.

Biodiversity Loss

Biodiversity is disappearing world wide at an alarming rate. It is estimated that 10-30% of all mammals, birds and amphibians are currently threatened with extinction. Huge parts of some of the most species rich habitats in the world such as the coral reefs and the rain forests of Asia and South America are being destroyed every year by human activity. It is feared that biodiversity loss may be further aggravated in the future by global warming.

In Ireland, some of the main threats to our Biodiversity are posed from our booming economy. Many of our towns and cities are experiencing unprecedented growth as our economy has improved and our population expands. Unfortunately, along with this accelerated development, we are also seeing a corresponding decline in our Natural heritage. Pollution, building and development, the urbanisation of rural areas, over-exploitation of natural resources and the intensification of agriculture are some of the main problems faced by our natural heritage.

Protecting Biodiversity

The Convention on Biological Diversity is a binding agreement that emerged at the United Nations Conference on Environment and Development, 1992 in Rio de Janeiro, Brazil.

The three main goals of the Convention on Biological Diversity are:

- “ the conservation of biological diversity
- “ the sustainable use of the components of biodiversity, and
- “ the fair and equitable distribution of the benefits arising from this utilisation of biodiversity.

Under the convention, each country agrees to undertake a number of actions to halt the loss of biodiversity, including the development of National Biodiversity Plan or Strategy. Ireland signed the Convention in 1992 and ratified it in 1996.

For more information go to www.biodiv.org

In 2002, Ireland's National Biodiversity Plan [SP1] was published which sets out a series of actions designed to promote and conserve biodiversity at the national and local level. Recognising the 'key role Local Authorities have in being in the best position to promote heritage conservation generally into local plans and programmes', the Plan sets out two specific actions for Local Authorities:

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

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

The People and Nature Project

In Galway, we are fortunate to have such a rich natural heritage, much of it relatively unspoilt. Galway is such a large county that it contains a whole range of rare and valuable wildlife habitats ranging from the raised bogs and turloughs in the east to the sand dunes and blanket bogs in the west, from the limestone grasslands of the Burren to the granite grasslands of Connemara.

Galway is one of the first Counties in Ireland to have a dedicated Biodiversity Project. The aim of the Galway Biodiversity Project is to provide the basis for the development of the Local Biodiversity Action Plan (LBAP) for County Galway through raising awareness of our biodiversity among all sectors of the community while increasing our knowledge of the habitats and species of County Galway through gathering information and promoting research relevant to the biodiversity of the county.

People and Nature is a Partnership Project run between Galway County Council and NUI, Galway with the support of Galway Rural Development, The Heritage Council and the Galway County Heritage Forum.

The project has three main objectives:

- Public Awareness and participation: To foster a greater awareness and understanding of natural heritage by the local community, and encourage local people to become actively involved in the promotion, preservation and enhancement of the local natural heritage.
- Biodiversity Audit and Data Inventory: To inventory natural heritage in the region, and compile natural heritage information and data in an accessible and updateable format
- Promoting knowledge: Increase the knowledge of biodiversity in County Galway through supporting and promoting research in the County.
- Biodiversity Action Plan: To be developed and implemented in consultation with stakeholders, the BAP will set out our priorities and actions to promote and protect biodiversity in the county in the coming years

About Us

The People and Nature project began as a pilot biodiversity project that ran in the North East of the County in 2005. With the support of the Galway County Heritage Forum

People and Nature is run as a Partnership Project between Galway County Council and NUI, Galway. Financial backing and support comes from Galway County Council, Galway Rural Development and The Heritage Council while the Applied Ecology Unit in NUI, Galway employs the project manager and provides office accommodation, administrative support and access to biodiversity expertise and information.

Elaine O'Riordan MSc is the manager of the Galway County Biodiversity Project and is responsible for the co-ordination and day to day running of the project.

The project is supervised by Marie Mannion, Heritage Officer with Galway County Council, Dr Mike Gormally from the Centre for Environmental Science, NUI, Galway and Miriam Stewart, Galway Rural Development. The project is advised by a steering group with members from Galway County Council, Galway County Heritage Forum, Applied Ecology Unit, NUI, Galway, National Parks & Wildlife Service, Galway-Mayo Institute of Technology, Landowners, the Forest Service, the Fisheries Board, BirdWatch Ireland (Galway Branch), Galway Rural Development, Heritage Groups and the Local Community, Galway Education Centre.

It is intended to produce a Local Biodiversity Action Plan (LBAP) for County Galway this year which will set out our priorities and actions to promote and protect biodiversity in the county in the coming years. It is expected the LBAP will be similar to that produced in County Clare recently. It will be strongly linked and form an integral part of the County Heritage Plan in the future.

The plan will be developed in consultation with the Natural Heritage Working group with input from the other (built and cultural) heritage working groups and other stakeholders. Submissions from the public will also be invited. The consultation process will begin early in the New Year and the document will be published in early summer.

For more information contact:

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