



GLOSSARY

Agenda 21

Action plan for the next century, endorsed at the Earth Summit.

Agri-environment schemes

Schemes offering payments to farmers to promote farming compatible with the requirements of the protection of the environment and the maintenance of the countryside under EC Regulation 2078/92. Schemes applicable in all countries of the UK are Environmentally Sensitive Areas, Countryside Access Scheme, Organic Aid Scheme, Habitat Scheme and the Moorland Scheme. Nitrate Sensitive Areas and Countryside Stewardship are applicable in England only and Tir Cymen in Wales only.

Agrochemicals

Chemical substances used in agricultural production including fertilisers, herbicides, fungicides and insecticides.

Ancient woodland

Woodland that is known to have existed before 1600. In Scotland ancient woods are those which were present at the 1750 survey of General Roy.

Arable area payments scheme

The EC system of arable support which offers payments per hectare on the main cereal, oilseed and protein crops. All but the smallest farmers have to set land aside to receive the payments.

Arthropod

Animal with a hard outer casing (exoskeleton) segmented body and jointed limbs, eg an insect or crustacean.

Bern Convention on the Conservation of European Wildlife and Natural Habitats

This imposes obligations to conserve wild plants, birds and other animals, with particular emphasis on endangered and vulnerable species and their habitats. The provisions of the Convention underlie the EC Habitats Directive as well as the UK's wildlife legislation.

Bioaccumulation

The accumulation of substances in living organisms. Where the substances are toxic, this can lead to progressive and irreversible harmful effects.

Biodiversity

The variety of life on Earth or any given part of it.

Biodiversity Convention

The Convention on Biological Diversity. This Convention was signed by the Prime Minister and 150 other Heads of State or Governments at the Earth Summit in Rio de Janeiro in June 1992.

Biogeographical Zones

Major parts of the Earth's surface, including its seas and oceans, characterised by distinctive assemblages of plants and animals.

Biota

All the plants and animals of a given area or region. Thus a UK Biota Database would hold all types of information about the range of species occurring in the UK.

Biotechnology

The application of biological organisms or their products in industrial and chemical processes.

Bonn Convention on the Conservation of Migratory Species of Wild Animals

This requires the protection of listed endangered migratory species, and encourages separate international agreements covering these and other threatened species.

Bryophytes

A major group of plants comprising the mosses and liverworts.

Common Agricultural Policy (CAP)

A European Community wide policy, explicitly provided for in the founding treaty of the Community, which supports agriculture through commodity support measures and market management and through measures to improve agricultural structures.

Common Fisheries Policy (CFP)

A European Community wide policy for fisheries and agriculture which provides for rational and responsible exploitation of living marine resources on a sustainable basis in appropriate economic and social conditions taking account of implications for the marine ecosystem and the needs of producers and consumers.

Contaminant

A substance which is present in elevated concentrations, but not at levels which cause harm or exceed an environmental quality standard.

Convention

An international agreement through which nations agree to work together co-operatively to implement certain defined policies or take other action. International Conventions are voluntarily entered into by countries, although once a country has signed a Convention, it agrees to implement or be bound by the condition specified, eg through its signature of the Ramsar Convention on Wetlands, the UK has agreed to promote the conservation and wise use of all wetlands in the UK.

Convention on Climate Change

Signed by the Prime Minister and other Heads of State and

Governments at the Earth Summit in Rio de Janeiro in June 1992. This Convention commits countries to prepare national programmes to contain greenhouse gas emissions and to return emissions of carbon dioxide and other greenhouse gases to 1990 levels by the year 2000.

Convention on International Trade in Endangered Species (CITES)

This prohibits or regulates international trade in species which are threatened with extinction or likely to become so and are subject to significant trade.

Coppicing

The traditional form of management of much of the broadleaved woodland in the UK, by cutting down trees and shrubs near ground level, allowing the tree to regrow from the stump, and re-cutting at intervals of one or more decades to provide long straight poles.

Countryside Stewardship

An agri-environment scheme which enables farmers and land managers to enter 10 year management agreements to maintain or enhance certain landscapes and features including chalk and limestone grassland; lowland heath; waterside land; coast; uplands; historic landscapes; old traditional orchards; old meadows and pastures; community forests; the countryside around towns and throughout England hedgerows and field boundaries which need restoring. The scheme which was set up and administered by the Countryside Commission completes its five year pilot phase in April 1996 when administration will transfer to MAFF.

Countryside Survey 1990

A survey initiated by the Institute of Terrestrial Ecology and developed by a consortium of other bodies co-ordinated by DOE. Consists of a series of maps covering a sample of 508 1km squares recording details of land cover, field boundaries of habitats and soils. The satellite images, analyses and detailed ecological surveys provide an overview of the condition of the British countryside.

Diffuse pollution

Pollution caused by the general use or manufacture of certain substances, which does not readily lend itself to control at the point of use. Examples are the release of solvents into the air through the use of some paints and adhesives, or the discharge of phosphates from washing powders into the sewerage system.

Earth Summit

United Nations Conference on Environment and Development held in Rio de Janeiro in June 1992.

EC Birds Directive (79/409/EEC)

This applies to birds, their eggs, nests and habitats. It provides for the protection, management and control of all species of naturally occurring wild birds in the European territory.

EC Directive

A European Community legal instrument, binding on all Member States but leaving the methods of implementation to national Governments, and which must, therefore, generally be transposed into national legislation.

Ecosystem

A community of interdependent organisms and the environment they inhabit, such as ponds and pond life.

Endemic species

A species of animal or plant confined to a particular region or island and having, so far as is known, originated there.

Environmental appraisal

The process of defining and examining options, and of weighing costs and benefits before a decision, particularly one having significant environmental costs and/or benefits, is taken.

Environmentally Sensitive Areas

An agri-environment scheme, run by agricultural departments designed to promote traditional farming practices to protect and enhance the environment. The scheme operates in 43 designated areas of the UK where farmers and other land managers can enter into 10 year agreements to manage their land in designated ways to maintain and restore particular landscapes and habitats.

Ex-situ conservation

Conservation of species away from their natural habitats, eg long term storage in germplasm banks for future needs.

Extensive agriculture

A term generally used to signify the use of low input (ie without large scale use of agrochemicals in arable farming or high stocking densities in livestock farming) low output crop and livestock husbandry systems.

Eutrophication

Enhanced primary production of coastal inland waters through nutrient enrichment (typically from sewage discharge or agrochemical run-off) resulting in an imbalance of the normal flora and fauna associated with the area.

Farm and Conservation Grant Scheme

A scheme run by the Ministry of Agriculture, Fisheries and Food to help farmers maintain efficient farming systems and

meet the cost of combatting pollution and conserving the countryside and its wildlife.

Farm Woodland Premium Scheme

A scheme under EC Regulation 2080/92 run by agricultural departments, which offers farmers payments over 10 or 15 years for the planting of new woods on agricultural land.

Fauna

All animal life.

Flora

All plant life.

Gene

The basic physical unit of inheritance of animals and plants.

Gene pool

The total genetic information possessed by the reproductive members of a population of sexually reproducing organisms.

Genome

Strictly, the set of chromosomes found in each nucleus of a given species. More loosely used to describe general genetic variation between species.

Genotype

The genetic composition of an organism.

Geomorphology

The study of the evolution of land forms, or the arrangement and forms of the Earth's crust.

Germplasm

Hereditary material transmitted to offspring via the gametes (male or female reproductive cells).

Going for Green

A committee, under the chairmanship of Professor Graham Ashworth, whose purpose is to get the message of sustainable development through to the man and woman in the street, and to influence them to change their lifestyles.

Greenhouse effect

Processes by which certain gases in the atmosphere behave like glass in a greenhouse; glass allows solar radiation which heats the interior, but reduces the outward emission of heat radiation.

Habitat

A place in which a particular plant or animal lives. Often used in a wider sense, referring to major assemblages of plants and animals found together.

Habitat Scheme

An agri-environment scheme, run by agricultural departments, which offers payments to farmers over 10 or 20 years to create and maintain specified wildlife habitats on agricultural land.

Habitats and Species Directive (92/43/EEC)

This requires Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status in the Community, giving effect to both site and species protection objectives.

Indicative Forestry Strategy

The Department of the Environment's Circular 29/92 encourages local planning authorities in England and Wales to prepare Indicative Forestry Strategies to guide the development of forestry in their area. The production of such strategies is voluntary and their status advisory. Indicative Forest Strategies originated in Scotland and are currently widely used there.

In-situ conservation

Plants and animals in the wild state, in contrast to ex-situ conservation in zoos, botanical gardens or other collections.

Integrated Pollution Control (IPC)

An approach to pollution control in the UK, which recognises the need to look at the environment as a whole, so that solutions to particular pollution problems take account of potential effects upon all environmental media.

Intensive agriculture

A term generally used to signify the use of high input, high output crop and livestock husbandry systems in order to produce the optimum possible economic return from the available land which involve high usage of fertilisers and agrochemicals, mechanisation and so on.

Invertebrates

Animals without a backbone.

Livestock Quotas

Limits on the numbers of ewes or suckler beef cows on which a farmer can claim support payments. Milk support is limited by an annual quota on the number of litres of milk a farmer can sell without being subject to penalties.

Local Agenda 21 Initiative

An initiative set out in the publication Agenda 21: A Guide for Local Authorities in the UK.

Marine Nature Reserve

An area of the sea, including the seabed extending below low water, notified under the Wildlife and Countryside Act 1981

as being of special nature conservation interest. The designation applies throughout Great Britain and sites are notified by the appropriate Secretary of State.

Metadata

Data about data. A second level of information about other data sources. Thus a dictionary of all those who hold information on different groups of species could be described as species metadata.

Monoculture

Cultivation of only a single crop on a given area of land.

Montane

Above the potential tree line (at about 700m).

Moorland scheme

An agri-environment scheme, run by agriculture departments, which offers farmers on moorland in hill areas, outside the ESAs, payments over five years for reducing their sheep stocking densities and managing the land in order to improve the condition of heather and other shrubby moorland.

Morphology

The physical form of an organism.

National Nature Reserve

A reserve declared under law and managed either by one of the statutory nature conservation agencies or by an approved body.

National Park

Designated in England and Wales under the National Parks and Access to the Countryside Act 1949 for the purpose of preserving and enhancing the natural beauty of areas specified by reason of their natural beauty and the opportunity they afford for open-air recreation.

Natural Areas

These biogeographic zones reflect the geological foundation, the natural systems and processes and the wildlife in different parts of England, and provide a framework for setting objectives for nature conservation.

Nature Conservation Topic Centre

One of several international topic centres set up by the European Environment Agency, in this case to provide information and advice on issues relating to nature conservation and biodiversity in the countries of the Agency (the European Union countries plus Iceland and Norway).

Nitrate Sensitive Areas (NSAs)

An agri-environment scheme run by MAFF which aims to safeguard the future viability of selected public drinking water sources by compensating farmers for voluntarily changing their farming practices in ways which significantly reduce nitrate leaching.

Nitrate Vulnerable Zone

An area of land designated according to the provisions of the EC Nitrate Directive (91/676/EEC). The land forms the catchment of a surface or groundwater body which has been identified as a "polluted water" either on the grounds that a drinking water source exceeding 50mg/litre under specified monitoring conditions, or else that a water body, usually coastal or estuarine, is subject to specified undesirable ecological disturbance as a result of nitrogen-enrichment caused by agriculture.

Nitrogen dioxide (NO₂)

A gas which mainly arises from fuel combustion in vehicles, boilers and furnaces, which is toxic in high concentrations and contributes to ozone formation and acid rain.

Nitrogen oxides (NO_x)

A range of compounds formed by the oxidation of atmospheric nitrogen. Some of these oxides contribute to acid rain and smog, and can affect the stratospheric ozone layer.

Organic Aid Scheme

An agri-environment scheme, run by agriculture departments, which offers payments over five years to farmers who convert to organic production.

Photochemical reaction

Chemical reaction where the energy is supplied by sunlight.

Point source pollution

Pollution from specific sources which can be controlled directly, such as power stations whose emissions to the air can be controlled by scrubbing the exhaust gases, or through the use of cleaner fuel.

Pollutant

A substance which is present in concentrations which cause harm or exceed an environmental quality standard.

Polluter Pays Principle

States that the cost of measures decided by authorities to ensure that the environment is in an acceptable state should be reflected in the cost of goods and services which cause pollution in production and/or consumption.

Precautionary principle

Defined in the 1990 White Paper in the following terms “where there are significant risks of damage to the environment, the Government will be prepared to take precautionary action to limit the use of potentially dangerous materials or the spread of potentially dangerous pollutants, even where scientific knowledge is not conclusive, if the balance of likely costs and benefits justified it”.

Protozoa

The simplest form of animal life; most are single cells and can be seen only with a microscope. They live mainly in freshwater, on sea shores and in soil.

Ramsar Convention

Originally agreed in 1975 to stem the progressive encroachment on, and loss of, wetlands, it requires the designation of Wetlands of International Importance.

Red Data Book species

Catalogues published by the International Union for the Conservation of Nature (IUCN) or by National Authorities listing species which are rare or in danger of becoming extinct globally or nationally. Sometimes species are included for which the national authority hosts a large part of the world's population, and has an international responsibility to conserve them.

Semi-natural habitats

Habitats or communities that have been modified to a limited extent by man, but still consist of species naturally occurring in the area.

Set-aside

Normally arable land removed from agricultural production as a requirement for receiving agricultural support.

Special Area of Conservation

A site designated by the UK Government under EC Directive 92/43 on the conservation of natural habitats and of wild fauna and flora.

Special Protection Area

A site designated under Article 4 of EC Directive 79/409 on the conservation of wild birds. Together SACs and SPAs form a network of European sites known as Natura 2000.

Species action plan

A conservation plan for a species based upon knowledge of its ecological and other requirements, which identifies the actions needed to stabilise and improve its status.

SSSIs - Site of Special Scientific Interest

An area of land notified under the Wildlife and Countryside Act 1981 as being of special nature conservation interest. The SSSI designation applies throughout GB. Sites are notified by the appropriate country conservation agency.

Statement of forest principles

Agreed at the Earth Summit in 1992. Countries are encouraged to prepare national plans for sustainable forestry.

Sub-species

A group of interbreeding populations with different characteristics (physical and genetic) from other populations of the same species, frequently isolated geographically from other populations of the same species.

Sustainable development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Systematics

The study and arrangement of living things into groups as closely as possible according to their evolutionary relationships.

Taxonomy

The science of describing, naming and classifying living things.

Tir Cymen

A voluntary whole farm scheme for countryside conservation in Wales, designed and operated by the Countryside Council for Wales. Farmers may be offered annual payments in return for the positive management for the benefit of wildlife, landscape archaeology and geology and for providing new opportunities for quiet enjoyment of the countryside.

Vascular plants

Plants that have a vascular system, ie contain vessels for conducting liquids. This includes all of the flowering plants, conifers, and ferns and their allies.

Vertebrates

Animals with a backbone; mammals, birds, reptiles, amphibians and fish.

Wildlife Enhancement Scheme

A scheme run by English Nature for SSSI owners and occupiers to encourage positive land management for wildlife or geology.

ABBREVIATIONS

ADAS

Agricultural Development and Advisory Service

ASSI

Area of Special Scientific Interest (Northern Ireland)

BRC

Biological Records Centre (Institute of Terrestrial Ecology)

BTCV

British Trust for Conservation Volunteers

BTO

British Trust for Ornithology

CAP

EC Common Agricultural Policy

CBC

Common Birds Census

CCBR

Co-ordinating Commission for Biological Recording

CEE

Council for Environmental Education

CIS

Countryside Information System

CCW

Countryside Council for Wales

CFP

EC Common Fisheries Policy

DFE

Department for Education

DOE

Department of the Environment

DOENI

Department of Environment (Northern Ireland)

DOT

Department of Transport

DTI

Department of Trade and Industry

EC

European Community

EEA

European Environment Agency

EN

English Nature

ESA

Environmentally Sensitive Area

EU

European Union

FC

Forestry Commission

FCO

Foreign and Commonwealth Office

FHE

Further and Higher Education

FWAG

Farming and Wildlife Advisory Group

GB

Great Britain: England, Scotland and Wales

GIS

Geographical Information System

GMO

Genetically Modified Organism

IMO

International Maritime Organisation

IPR

Intellectual Property Rights

IT

Information Technology

ITE

Institute of Terrestrial Ecology

IUCN

International Union for the Conservation of Nature

JNCC

Joint Nature Conservation Committee

LAA

Local Authority Associations

LBAP

Local Biodiversity Action Plans

LEA

Local Education Authorities

LGMB

Local Government Management Board

MAFF

Ministry of Agriculture, Fisheries and Food

MNR

Marine Nature Reserve

NERC

National Environmental Research Council

NGO

Non-Governmental Organisation

NRA

National Rivers Authority (to become part of the Environment Agency on 1 April 1996)

PCB

Polychlorinated biphenyls

PPG

Planning Policy Guidance Note (England and Wales)

RSPB

Royal Society for the Protection of Birds

SAC

Special Area of Conservation

SNH

Scottish Natural Heritage

SOAEFD

Scottish Office Agriculture, Environment and Fisheries Department

SPA

Special Protection Area

SQL

Structured Query Language

SSSI

Site of Special Scientific Interest (Britain)

STW

Sewage Treatment Works

SWQO

Statutory Water Quality Objective

UK

United Kingdom: England, Scotland, Wales and Northern Ireland

UKBD

United Kingdom Biodiversity Database