

# BIODIVERSITY

Communications Toolkit

## Biodiversity Communications Toolkit : Useful Definitions

### A

**Alien species:** A species which has become established in the wild in an area (most usually a country) in which it does not naturally occur. Alien (or non-native) species are introduced into an area as a result of human activities/intervention (whether accidental or deliberate). These species often have adverse effects on native species and habitats as a result of competition. Examples of alien species in Scotland are American mink, grey squirrel, New Zealand flatworm and rhododendron.

### B

**Biodiversity:** Biodiversity is the rich variety of life which exists on Planet Earth, and ensures the survival of people. It concerns all species of plants and animals, including people, their genetic variation and the range of habitats upon which all living things depend. It encompasses the whole of the natural world, not just the rare or the endangered. It touches and benefits all aspects of our lives.

**Biodiversity Action Plan (BAP):** A framework for achieving the conservation of biodiversity based on the targeting of resources towards priority habitats and species. BAPs also provide a means for the involvement in conservation of a wide range of organisations and members of local communities. BAPs can be prepared at a range of levels: country-wide (e.g. the UK Biodiversity Action Plan), for regions, or for recognised areas (known as Local Biodiversity Action Plans).

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

**Biodiversity Indicator:** Biodiversity indicators are quantified information that help to explain how the natural world is changing and responding to human-induced impacts over time.

**Biogeography:** A branch of geography that deals with the geographical distribution of animals and plants.

**Biological resources:** Includes genetic resources, organisms, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.

**Biologically unique species:** A species that is the only representative of an entire genus or family.

**Biome:** A major portion of the living environment of a particular region (such as a fir forest or grassland), characterised by its distinctive vegetation and maintained by local climatic conditions.

**Bioregion (bioregional planning):** A territory defined by a combination of biological, social, and geographic criteria, rather than geopolitical considerations; generally, a system of related, interconnected ecosystems.

**Biosphere:** The surface layer of the Earth where living organisms occur, comprising land, water and air.

**Biosphere reserve:** Biosphere reserves are a series of protected areas linked through a global network, intended to

# BIODIVERSITY

Communications Toolkit

demonstrate the relationship between conservation and development.

**Biota:** The living organisms of a region.

**Biotic:** Regarding any aspect of life, especially in relation to characteristics of entire populations or ecosystems.

**Birds Directive:** This aims to protect bird species within the European Union through the conservation of populations of threatened birds and the habitats used by these species.

**Breed:** A group of animals or plants related by descent from common ancestors and visibly similar in most characteristics.

## C

**Captive breeding:** The propagation or preservation of animals outside their natural habitat, involving control by humans of the animals chosen to form a population and of mating choices within that population.

## D

**Domesticated or cultivated species:** Species in which the evolutionary process has been influenced by humans to meet their needs.

## E

**Ecology:** The study of the inter-relationships between living organisms and their environment.

**Ecosystem:** A dynamic complex of plant, animal, fungal, and micro-organism communities and their associated non-living environment interacting as an ecological unit.

**Endangered species:** A species that is in danger of extinction throughout all or a significant portion of its range.

**Endemic species:** A species of animal or plant found only in a particular area.

**European Union Habitats and Birds Directives:** Requires the UK Government to designate and protect some of the most important areas for wildlife. They are or will be classified as Special Protection Areas (SPAs) and/or Special Areas of Conservation (SACs). These sites are also Sites of Special Scientific Interest (SSSI) but meet specific criteria for international importance. In the case of marine SACs, the SSSI designation only applies down to the low water mark.

**Extinct:** Species that are no longer known to exist in the wild after repeated search of locations where they were known or likely to have occurred.

## F

**Fauna:** All animal life.

**Flagship Species:** A species perceived favourably by the public for reasons of aesthetics or other value, used to promote and publicise nature conservation.

**Feral:** A domesticated species that has adapted to existence in the wild state but remains distinct from other wild species. Examples are the Soay sheep of St Kilda or feral cats in the Scottish Highlands.

**Flora:** All plant life.

# BIODIVERSITY

Communications Toolkit

## G

**Gene:** A chemical unit of hereditary information that can be passed from one generation to another.

**Gene bank:** A facility established for the conservation of individuals (seeds), tissues, or reproductive cells of plants or animals.

**Genetic diversity:** The variety of genes within a particular species, variety, or breed.

**Genetic material:** Any material of plant, animal, microbial or other origin containing functional units of heredity.

**Gene pool:** The collection of genes in an interbreeding population.

## H

**Habitat:** The environment in which an animal or plant lives. Often used in the widest sense referring to major groupings of plants and animals found together, such as woodlands or grasslands.

**Habitat Action Plan (HAP):** Priority Habitat Action Plans provide detailed descriptions for specific types of habitats such as upland oakwoods, lowland meadows and fens. They set out detailed actions that can be taken by a number of agencies in order to safeguard and enhance these habitats.

**Habitats Directive:** This promotes the conservation of certain key habitats and species within the European Union by requiring Member States to take measures to maintain or restore natural habitats and populations of wild species.

**Hotspot:** An area on earth with an unusual concentration of species, many of which are often endemic to the area.

**Hybrid:** An offspring of a cross between two genetically unlike individuals.

## I

**Inbreeding:** Mating of close relatives resulting in increased genetic uniformity in the offspring.

**Indicator species:** A species whose status provides information on the overall condition of the ecosystem and of other species in that ecosystem.

## K

**Keystone species:** A species whose loss from an ecosystem would cause a greater than average change in other species populations or ecosystem processes.

## L

**Local Biodiversity Action Plan (LBAP):** A Biodiversity Action Plan prepared for a local area. Government guidance recommends that LBAPs correspond to local authority boundaries. Each LBAP works on the basis of partnership to identify local priorities and to determine the contribution they can make to the delivery of the national Species and Habitat Action Plan targets.

# BIODIVERSITY

Communications Toolkit

**Local Nature Reserve (LNR):** A place with special local natural interest, set up to protect nature, and for people to enjoy and appreciate. LNRs can be near city centres, on the coast, or in the countryside.

**Living collections:** A management system involving the use of off-site methods such as zoological parks, botanic gardens, arboretums, and captive breeding programs to protect and maintain biological diversity in plants, animals, and micro organisms.

## M

**Marine Protected Area (MPA):** An area of sea (or coast) especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

**Megadiversity countries:** The small number of countries, located largely in the tropics, which account for a high percentage of the world's biodiversity because they contain very large numbers of species.

**Micro-organisms:** A diverse classification of all those organisms not classed as plants or animals, usually minute microscopic or sub-microscopic and found in nearly all environments. Examples are bacteria, cyanobacteria (blue-green algae), mycoplasma, protozoa, fungi (including yeasts), and viruses.

## N

**National Scenic Area (NSA):** NSAs are Scotland's only national landscape designation. They are areas of land considered of national significance on the basis of their outstanding scenic interest which must be conserved as part of the country's natural heritage.

**National Nature Reserve (NNR):** NNRs are areas of land managed for the benefit of both wildlife and people which help protect species and habitats of international importance. NNRs range from wide mountain expanses to ancient woodlands and from remote islands to lowland lochs.

**Native species:** Plants, animals, fungi, and micro-organisms that occur naturally in a given area or region.

**Natura 2000:** Natura 2000 is a European network of protected sites which represent areas of the highest value for natural habitats and species of plants and animals which are rare, endangered or vulnerable in the European Community.

**Non-native species:** See alien species.

## P

**Primary (or natural) forest:** A forest largely undisturbed by human activities.

**Priority habitat:** A habitat category targeted for action through a Habitat Action Plan, qualifying on the basis of international obligations, rarity and decline, functional importance and importance for priority species.

**Priority species:** Species targeted for action through Species Action Plans or Species Statements.

# BIODIVERSITY

Communications Toolkit

**Protected Area (PA):** An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

## R

**Ramsar:** Ramsar sites are designated under the Convention of Wetlands of International Importance. The Convention aims to stem the progressive encroachment on and loss of wetlands and promote the wise use of wetland wildlife.

**Restoration:** The return of an ecosystem or habitat to its original structure, natural complement of species, and natural functions.

## S

**Seedbank:** A facility designed for the conservation of individual plant varieties through seed preservation and storage.

**Sites of Special Scientific Interest (SSSI):** SSSIs represent the best of Scotland's natural heritage. They are 'special' for their plants, animals or habitats, their rocks or landforms, or a combination of such natural features. Together they form a network of the best examples of natural features throughout Scotland, and support a wider network across Great Britain and the European Union.

**Special Area of Conservation (SAC):** A site of European importance for wildlife designated under the Habitats Directive by the UK Government where the necessary management is applied for the maintenance or restoration of the habitats and/or species for which the site is designated.

**Special Protection Area (SPA):** A site of international importance for birds designated under the Birds Directive by the UK Government where appropriate action is taken to protect the bird species for which the site is designated.

**Species:** A group of organisms capable of interbreeding freely with each other but not with members of other species.

**Species Action Plan:** A 10-15 year summary plan which, based upon the ecological and other requirements of the species, sets out objectives and targets for the maintenance or enhancement of populations and range, and the actions necessary to achieve them.

**Subspecies:** A distinct form or race of a species.

**Sustainable development:** The goal of sustainable development is to enable all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations.

**Sustainable use:** The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.

## T

**Taxonomy:** The classification of animals and plants based upon natural relationships.

# BIODIVERSITY

Communications Toolkit

**Threatened species:** A species that is likely to become endangered within the foreseeable future, throughout all or a significant portion of its range.

## U

**UK Biodiversity Action Plan:** The UK Government's plan for the protection and sustainable use of biodiversity, published in 1994. It represents a commitment to joint action nationwide through the securing and better use of resources.

## W

**Wild species:** Organisms captive or living in the wild that have not been subject to breeding to alter them from their native state.

**Wildlife:** Living, non-domesticated animals.

## Sources

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