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Partneriaeth Bioamrywiaeth Abertawe



Swansea Biodiversity Partnership







































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Promoting Swansea's Natural Environment

A Local Biodiversity Strategy and Action Plan

Draft for consultation

May 2005

SUMMARY DOCUMENT

Biodiversity is the variety of life on earth. It encompasses the rich variation to be found in living organisms; the variety within a species, between species, from one habitat to another and between ecosystems. It is not restricted to just rare or threatened species but includes the whole of the natural world from the common place to the critically endangered.

"A healthy, rich and diverse environment is key to ensuring that we also have a healthy economy and healthy, safe and stronger communities. Our environment is not a renewable resource and must be protected, maintained and enhanced for present and future"

Carwyn Jones Minister for Environment Planning and Countryside – Welsh Assembly Government (July 2004)

1. INTRODUCTION

'Promoting Swansea's Natural Environment' is a strategy and action plan for the protection, management, enhancement and promotion of Swansea's outstanding natural environment and biodiversity. It outlines a number of strategic actions required for the conservation of the wider biodiversity resource together with a set of detailed actions for the protection of priority habitats and species.

The Local Biodiversity Strategy and Action Plan (LBAP) has three key parts:

Part 1 Strategy

This part provides a background to the biodiversity action planning process, identifies key issues affecting biodiversity in Swansea and priorities for future work. It proposes a number of broad actions to meet these priorities, and outlines procedures for measuring progress.

Part 2 Audit

This part provides an overview of Swansea's biodiversity resource and contains information on protected habitats and species present in the County, together with draft proposals for the identification of a network of non statutory Sites of Interest for Nature Conservation or candidate SINC's.

Part 3 Habitat and species action plans

This part provides detailed action plans for priority habitats and species which occur in the County in accordance with UK and Welsh Assembly Government Guidance. At the time of printing 23 Habitat Action Plans (HAP's) and 98 Species Action Plans (SAP's) have been included. There are plans to add additional HAP's and SAP's in due course.

The majority of parts 2 and 3 contain a considerable amount of detailed and technical information, which is not appropriate to include within this summary. The following sections provide a summary of the information contained within Part 1 together with some elements of parts 2 and 3.

2.0 SWANSEA'S UNIQUE NATURAL QUALITIES

The City and County of Swansea's natural environment -which makes up over 80% of the County's total area- is of outstanding quality and beauty. The diversity of landscapes and habitats which include upland moorland, coastal cliffs, sandy beaches, heathland, woodland, wetlands, river valleys and estuaries, make it one of the most attractive and ecologically rich counties in the UK, with over half of the County's area being of significant ecological importance. This wealth of wildlife habitats supports a huge diversity of plant and animal species. The collective term for this resource is **biodiversity**.

Nearly 70% of the habitats and 20 % of species identified as being a priority for biodiversity conservation in the UK can be found in the City and County of Swansea. Approximately 17 % of County's area is protected by designations at a European(SAC, SPA, RAMSAR) or National (SSSI, NNR) level.

These designated areas and priority habitats represent only the very best of our biodiversity. They do not, however, encompass all that is irreplaceable and cannot by themselves maintain biodiversity. All areas of semi-natural green space will have some value for wildlife. The spatial distribution and interrelationship of these sites is also important, both for wildlife and for people. Even common species and habitats, urban wildlife sites and green spaces, are important in maintaining a network of semi-natural sites and the quality and extent of the biodiversity resource as a whole. The natural environment of the City & County of Swansea also contains a wealth of important geological sites, areas of highly attractive landscape and many valuable archaeological sites. These are all in need of protection and sensitive management.

Collectively, these unique natural qualities make Swansea a special place to live and visit. They contribute significantly to quality of life, and the economy of the area. It is both our responsibility and in our own self interest to look after this resource now and for future generations

3. PURPOSE OF THE PLAN

The key aim of this document is to raise awareness of Swansea's outstanding natural environment, to show how this resource benefits everyone, and to ensure that it is effectively safeguarded and managed as one of the area's most precious assets.

The potential benefits to the City and County of Swansea of an improved and well-protected environment should not be underestimated. If managed sustainably the natural environment has the potential to improve quality of life and provide a significant competitive advantage to the promotion of Swansea as a distinctive European City.

The purpose of this document is to provide a strategic framework and series of detailed action plans to achieve the following aim:

To conserve, enhance and promote the special qualities of Swansea's unique and ecologically diverse natural environment, and to maximise the contribution it makes to the social, economic and environmental well being of the area.

Essentially to enhance and maintain Swansea's biodiversity resource.

Much is already being done for biodiversity in Swansea. There are a wide range of plans, projects and initiatives already in place, and numerous organisations involved. The past ten years have seen significant

improvements relating to the environment particularly in terms of planning policy, legislation, and practical action and the need to balance social, economic and environmental aspirations and to achieve more sustainable ways of living is now seen as essential to real and lasting progress. This strategic framework is needed to reflect these changes and provide a basis for future action.

This Local Biodiversity Strategy and Action Plan provides the opportunity to work together more effectively to review current activities and issues, identify new priorities and set specific objectives and targets for action by a wide range of partners. It provides a much-needed overarching strategy for everyone involved in safeguarding and enhancing Swansea's natural environment.

4. STATUS OF THE PLAN

This document has been prepared by the Swansea Biodiversity Partnership, and draws on information obtained from consultations undertaken with a wide range of agencies, individuals and the public over the last 6 years.

The plan has been prepared in accordance with guidance set out by the UK and Welsh Assembly governments in response to growing international concern about the alarming rate of degradation of habitats and species in the world. At the earth summit in Rio de Janeiro in 1992, over 150 countries including the UK signed up to the Convention on Biological Diversity in recognition of their responsibility to halt the decline of biodiversity within their own geographical boundaries. Local Biodiversity Action plans are the principal mechanism by which the Global and UK Action Plans can be translated into effective action at the local level.

Ten years later (2002) at the World Summit for Sustainable Development in Johannesburg, it was agreed to achieve by 2010 a significant reduction in the rate of loss of biodiversity. Both the UK and Welsh Assembly Governments have signed up to meeting this target.

Section 74 of the Countryside and Rights of Way Act 2000(CROW) places duties on the National Assembly for Wales in relation to biodiversity conservation. These duties are intended to enshrine in statute the biodiversity action plan process. The National Assembly must have regard to biodiversity in the exercise of all its functions; and take, or promote the taking by others of, steps to enhance the conservation of habitats and species included on a list or lists produced by the National Assembly. (A copy of the Section 74 list which was first published in November 2002 and updated in 2003 is contained within appendix 1)

The Welsh Assembly Government has made a commitment to enhance biodiversity by supporting the development of Local Biodiversity Action Plans and presses all local authorities in Wales to adopt LBAPs as Supplementary Planning Guidance in line with planning policy guidance, and use them to underpin their Community Strategies. NAW performance Indicator PI 7.8

requires LBAPs to be in place for all local authority areas. (This is also a CCS Corporate Indicator).

It is proposed that following consultation, the 'Promoting Swansea's Natural Environment' Biodiversity Strategy and Action Plan be adopted as Supplementary Planning Guidance in accordance with WAG guidelines.

The revised planning guidance, *Planning Policy Wales* places a greater emphasis on the need to take account of biodiversity considerations in dealing with planning applications. TAN 5 (under review) provides detailed guidance on this.

The draft UDP for Swansea already contains a number of policies which relate to the protection and enhancement of the natural environment and biodiversity. This Biodiversity Strategy and Action Plan will complement and support these existing biodiversity /natural environment policies.

Section 4(1) of the Local Government Act 2000 places on Local Authorities in Wales a statutory duty to prepare 'community strategies', for promoting or improving the economic, social and environmental well-being of their areas, and contributing to the achievement of sustainable development in the UK. Section 2(1) gives authorities broad new powers to improve local wellbeing as a means of helping them implement those strategies, (NAW 2001). Biodiversity is a key aspect of these strategies.

The need "To protect, enhance & promote biodiversity and our natural environment". has been incorporated as one of the 5 key challenges included within the Environment Section of the Swansea Community Plan (2004)

5.PARTNERSHIP PLAN

This strategy and action plan has been prepared by the Swansea Biodiversity Partnership. It does not belong to any one group or individual. The involvement, engagement and commitment of a wide range of partners, inclusive of all sectors of society is essential in achieving effective long term action. This strategy is a first step in building a consensus and support for action in the whole community.

Swansea Biodiversity Partnership was established in May 1999 to support and co-ordinate the preparation and implementation of a Local Biodiversity Action Plan for Swansea. (At the time of printing, the group has 45 individual members representing 33 local agencies.

6.0 SUMMARY OF KEY ISSUES AND STRATEGIC OBJECTIVES AND ACTIONS

In addition to the specific issues and actions relating to individual habitats and species as identified in the Species and Habitat Action Plans (Part 3) there are a number of general issues and strategic actions which are worth highlighting and that have been identified through the initial consultation process.

In total 15 strategic objectives and 73 priorities for action Biodiversity have been identified. These are outlined in part 1 under the following headings:

- Understanding the natural environment –Audit
- Protecting and safeguarding the natural environment plans, policies and legislation
- Managing and enhancing the natural environment
- Understanding, and appreciating the natural environment awareness raising and community involvement
- Finding the resources

A summary of the key issues, objectives and proposed actions detailed under these headings are provided below.

7.0 UNDERSTANDING THE NATURAL ENVIRONMENT - AUDIT Background and key issues

A sound knowledge and understanding of the biodiversity resource is essential in determining clear priorities and setting realistic targets for the conservation and enhancement of biodiversity and the natural environment and for providing a baseline against which to monitor change. It is also important to ensure compliance with legislation for protected species and habitats, and to provide a sound basis for making informed land use, land management and planning decisions.

A Swansea biodiversity audit has been compiled with the support of many agencies and draws together all known data on the county's biodiversity resource. The audit provides a detailed description of the nature, extent, distribution and conservation status of the biodiversity resource within the City and County of Swansea. The audit comprises a database/inventory of all known habitat and species surveys, and, GIS based map data including all designated sites, phase 1 habitat survey and a summary map of candidate Sites of Interest for Nature Conservation (SINC'S). Further details of information contained within the audit are set out in Part 2 of this document - Biodiversity Audit.

Whilst a considerable amount of data is held, the audit is by no means comprehensive and there will always be a need for additional information on

the extent, distribution and condition of habitats and species, and for ongoing surveys to monitor changes over time.

The landscape of the Swansea area is of particular importance both in historical and aesthetic terms and is again another area needing assessment and protection. Once complete, LANDMAP will provide useful information on these aspects.

It is important that biodiversity information is made widely available so that everyone can take biodiversity considerations into account in all of their decisions and actions. In this respect there is scope for improving access to biodiversity information to the public via the Internet in line with e- Government initiatives.

The recent establishment of the South East Wales Biological Records Centre (SEWBREC) will assist in providing better information on the biodiversity resource and it is important that this initiative be supported.

Objective 1 : Establish and maintain comprehensive information on the local biodiversity resource

Key actions:

- Identify and map all LBAP habitats to provide more accurate baseline for monitoring progress
- Carry out habitat and species surveys as identified in Part 3 Habitat and Species Action Plans
- Undertake further surveys and prepare detailed map of candidate Sites of Interest for Nature Conservation (SINCS)
- Establish and maintain interactive Biodiversity web site that will enable people from all sectors to obtain information on the local biodiversity resource
- Carry out/co-ordinate survey and audit of locally important geological sites/features
- Support the development of a Local Record Centre for South East Wales
- Identify and map green-space network of corridors reservoirs and pocket sites for whole county
- Identify potential sites for habitat creation work
- Maintain a local data base of biological survey information and improve mechanisms for capturing and adding in new survey data e.g. from

environmental assessments and ecological surveys carried out by other agencies and developers

- Carry out surveys of invasive species (e.g. continue to update Japanese Knotweed survey)
- Continue to involve schools, higher and further education and the public and others in collecting biodiversity information, e.g. through helping to provide training opportunities for biological recording etc.

8.0 PROTECTING AND SAFEGUARDING THE NATURAL ENVIRONMENT – PLANS, POLICIES AND LEGISLATION. Background and key issues

Legislation

Biodiversity protection is underpinned by a series of international agreements and national legislation going back many years. In particular the last 5-10 years have seen an increasing amount of legislation and policy guidance at a European and regional (Wales) level, which has given greater protection for biodiversity.

The most significant are two international obligations namely the Habitats Directive and the Birds Directive and three pieces of national legislation: the Conservation (Natural Habitats, &c.) Regulations, 1994; the Wildlife and Countryside Acts 1981 and 1985; and the Countryside and Rights of Way Act, 2000. These five legislative documents provide Britain's framework for the protection of biodiversity.

In order to fulfil its national and international obligations under these pieces of legislation, the UK government has to act and enable targeted practical protection work to be done on the ground. One of the main mechanisms for this is the production of Biodiversity Action Plans, the function of which is to identify and provide management prescriptions for the UK's most vulnerable species and habitats.

Key strategies, plans and policy guidance

In parallel with increased legislation, the last 5 years has seen the production of numerous plans, strategies and policy guidance at a national , regional and local level, which directly or indirectly, add further support for biodiversity conservation and the LBAP process.

Many of these have been taken into account in the preparation of this document

There is a recognised need for additional local strategies for example:

- a) A strategy and Action plan for the protection and management of Sites of Interest for Nature Conservation (SINC's).
- b.) The development of a green space plan which will identify a network of Wildlife corridors reservoirs and pocket sites, and opportunities for habitat

creation initiatives to ensure that all communities have access to areas of natural open space within walking distance of where they live.

- b) A Coastal Zone management plan setting out actions for better strategic protection and management of the coastal and marine environment.
- d) A strategy for the protection of important Geological Features

There is a need to ensure that existing legislation and policy guidance is complied with and used to maximum effect to protect local biodiversity. This will require increased awareness and understanding at all levels through provision of training, information and advice.

It is important to ensure that biodiversity principles are integrated into decision making across all relevant service areas and sectors, and into all relevant plans and strategies (eg the Asset Management Strategy, the Procurement Strategy, the Economic Development Strategy and the UDP).

Equally it is important that nature conservation considerations are taken into account at the earliest stages of planning and designing a project so that they can help to shape and improve policy and design decisions, rather than be seen as a problem or obstacle at a later stage.

It is proposed within the document that a policy for biodiversity be agreed and adopted by the Authority and other relevant organisations. The following wording is suggested:

"It is this organisation's policy that it will make a positive contribution to the conservation and enhancement of biodiversity in all of its actions and decisions."

Objective 2 - To promote ecological competence and best practice through ensuring compliance with and full use of all relevant policy and legislation relating to the natural environment

Key action

 That the Local Authority meets the standards outlined in the Association of Local Government Ecologists report entitled 'Increasing the Momentum' which sets out a series of hallmarks of a well performing local authority in relation to biodiversity Objective 3 - Continue to work to avoid development and land use which adversely and irreversibly affect irreplaceable natural assets, and encourage development which helps to enhance biodiversity

Key actions

- Prepare ecological design guidance for developers, planners and others.
- Continue to provide ecological inputs into the planning process including Development Control, Strategic Planning and Environmental Impact Assessments

Objective 4 - Encourage others to adopt policies and actions to ensure the integration and mainstreaming of biodiversity conservation in to all relevant service areas

Key actions

- Help develop in-house biodiversity action plans for relevant organisations and provide training and awareness for staff involved.
- Encourage the adoption by others of the proposed policy for biodiversity.

Objective 5 - Protect ecologically rich sites through appropriate designations

Key actions

- Identify and map the natural open space network, to comply with minimum standards for provision of open space as set out in Countryside Council for Wales (ANGST) and Association of Local Government Ecologist guidelines
- Designate new Local Nature Reserves (LNRs)
- Adopt Sites of Importance for Nature Conservation (SINCs) as Supplementary Planning Guidance

Objective 6 - To prepare and contribute to other relevant strategies/plan for sites, habitats and /or species as appropriate

Key actions

- Prepare/and or update minimum format management plans for LNRs and SINCS owned or managed by members of the Swansea Biodiversity Partnership
- Prepare a management scheme for Carmarthen Bay and Estuary European Marine Site

- Update strategy for the control of Japanese Knotweed and other invasive species.
- Provide input into the development of City & County of Swansea's Coastal Zone Management Plan for Swansea
- Provide ecological input into parks and other management plans

9.0 MANAGING AND ENHANCING THE NATURAL ENVIRONMENT Background and issues

There are many agencies involved in managing and improving Swansea's natural environment, and a large number of projects and initiatives being carried out. It is estimated that less than half of the biodiversity resource is under some degree of favourable management, and there are still large areas which are not managed. A comprehensive audit is needed of land ownership and current management action for sites of ecological interest.

The overall objective must be to maintain and, where possible enhance the total stock of natural assets for the benefit of people now and in the future. This will involve better management of ecologically important sites, and enhancement of remaining areas to improve their biodiversity value.

Management of ecologically important areas

It is essential to raise awareness of the LBAP requirements and to engage with a wider range of partners, particularly farmers, landowners, businesses and the community to encourage their support for and participation in management that contributes to the achievement of LBAP targets. Uptake of conservation schemes, for example Tir Gofal, needs to be encouraged together with more effective use of management agreements. Individual site management plans need to be updated to reflect LBAP targets.

This Council will play a key role in ensuring appropriate management of its own land (especially SSSIs, LNRs and SINCs), and in providing advice and support to other landowners. Under section 75, Schedule 9 of the CROW Act (2000) Local Authorities have a statutory duty to further the conservation and enhancement of SSSIs both in carrying out their operations and in exercising their decision making functions.

There is a real need for better strategic management and protection for the Coastal and Marine environment.

Biodiversity and landscape enhancement

There is considerable opportunity for increasing the biodiversity resource through habitat enhancement and creation initiatives e.g. through wildlife gardening, development of school nature areas etc. All green areas have the potential to become richer in wildlife through appropriate habitat creation or landscaping work.

The ultimate aim is to provide a green-space network of pocket wildlife sites, corridors and reservoirs to ensure that all communities have access to the natural environment within walking distance of where they live. Swansea should aspire to meet the minimum requirements for provision of natural open space as set out in guidelines produced by the Countryside Council for Wales (ANGST). This would ensure that everyone has access to good quality environment, and would improve the image of the city as well as contributing to biodiversity conservation.

Partnership working and Community Action

There is a need to build on existing partnerships between the many agencies involved in managing the natural environment and to more effectively promote and support community and volunteer participation and action.

Enabling communities to access, appreciate and enjoy wildlife sites More needs to be done to improve access to and within sites and to enable people of all abilities to enjoy these areas. There is a need to meet minimum quality standards on wildlife sites which are accessible to the public. This includes ensuring compliance with health and safety standards and the Disability Discrimination Act part 3 (1995). If the natural environment is to be promoted as a recreational and visitor resource, it is important to ensure that the sites being promoted are safe, and accessible, and that the quality of experience is positive and enjoyable. Where possible such sites should be maintained to Green Flag Standards.

Objective 7 - Ensure appropriate management of all sites of significant nature conservation interest

Key Actions

- Co-ordinate the implementation of HAPs and SAPs
- Implement existing site management plans for all relevant areas e.g. LNRs and candidate SINCs
- Involve a wider range of partners, volunteers and the community in management of biodiversity /natural environment
- Co-ordinate the implementation of the Japanese Knotweed control action plan
- Provide advice on management of sites for biodiversity

Objective 8- Enhance the biodiversity resource through habitat creation and landscaping initiatives

Key Actions

- Identify priority areas for habitat creation and habitat enhancement schemes
- Provide ecological input into major environmental improvement and landscaping schemes

- Initiate a percent for wildlife scheme
- Provide support for school grounds nature areas
- Promote and support wildlife gardening initiatives
- Provide information and advice to landowners and developers

Objective 9 - To actively involve local communities in the protection, management and, enhancement of the natural environment

Key Actions

- Provide support for community led environmental enhancement schemes e.g. by Communities First and Community Development Trusts, Community groups and Schools
- Support/co-ordinate/develop partnership working

Objective 10 - Enable communities to access, appreciate and enjoy wildlife Sites

Key Actions

- Assess current community usage of open space and wildlife habitat
- Develop and adopt quality standards for all publicly accessible wildlife sites and nature reserves, for example The Green Flag, the National standard for Parks and Green Spaces.

10. UNDERSTANDING AND APPRECIATING THE NATURAL ENVIRIONMENT

-Awareness raising and community involvement

Background and key issues

There is a need to increase awareness at all levels and across all sectors, of the unique quality of Swansea's natural environment and biodiversity; of the need to protect it and of the immense benefits it brings to our city in terms of quality of life, health, public enjoyment, tourism, and job creation.

Responses to Swansea's Biodiversity Ballot (CCS Biodiversity Ballot 2000, 2001, 2002) indicate that the vast majority of people (85%) think that the natural environment is very important to their quality of life. Despite this, biodiversity is still little understood and the natural environment is often taken for granted as something that always has, and always will be there. Subsequently protection of Swansea's biodiversity resource has been and is still afforded relatively low priority in terms of resource allocation.

Awareness raising is the first step in effecting change, and is a key area of work in terms of implementing the LBAP.

Equally the natural environment offers immense potential to enrich people's lives, and it is important that these benefits are available to all.

Many initiatives and projects are underway and a considerable amount of advice and support is being provided by members of Swansea Environmental Education Forum (SEEF)

Schools

The Foundation Phase (3-7 year olds), in consultation stage at present in Wales states that: the outdoor environment "should also enable children to learn about, enjoy and care for their environment and begin to understand issues such as conservation and sustainability so central to their long term future." (WAG, 2003).

There is potential to make more effective use of the natural environment as a teaching resource and outdoor classroom, and there is an increasing demand from schools for support to create wildlife gardens within their own grounds, for running after school environment clubs, and for Eco Schools. Many teachers would welcome the provision of advice, support and resource material.

More environmental education initiatives occur in Primary than Secondary schools and there is a real gap in provision for the 12-16 age group. This is partly due to constraints imposed by the National Curriculum and teaching timetable. In Swansea, several alternative curriculum groups are using the natural environment as a stimulus for engaging young people.

Field Education/Outdoor Classroom:

The varied landscape and ecology of the City and County of Swansea provides a vast range of source material for environmental education within a relatively small area and is an ideal resource for environmental education. Many groups both local and visiting already use this resource, although their exact numbers are unknown.

It is proposed that surveys be carried out to establish current levels and type of use of the countryside and an assessment of the carrying capacity, to determine sustainable levels of use.

There is potential to make more effective use of the natural environment as a teaching resource for local schools and colleges, but additional field staff resources and better marketing are needed to promote this.

Adult and Further Education:

A number of local colleges offer courses in environmental subjects, including biodiversity. A directory of provision has been produced by SEEF. There is scope to develop closer links between colleges and local environmental agencies, particularly in relation to student placements and research projects. There is also a need for more professional training in environmental education/interpretation for countryside and other staff, for example youth leaders and play workers, for more opportunities for training in ecological survey skills and for environmental Continuing Professional Development (CPD) training for decision-makers.

Public awareness and enjoyment

There is potential for people to gain considerable enjoyment from the natural environment through participating in informal recreation, practical action, and awareness raising events and activities. With increasing leisure time and greater mobility more people are visiting the countryside and increasing numbers are involved in environmental activities as a leisure pursuit.

Over 150,000 people pay to be members of Welsh environmental bodies, and many thousands more are engaged in voluntary environmental activities within their own areas, (NT et al 2001). The Environmental Events programme (produced annually by SEEF and CCS) is proving to be increasingly popular with thousands of people attending events each year.

Environmental interpretation/information is provided at a number of venues e.g. Bishop's Wood Countryside Centre, Crymlyn Reserve Centre, Borfa House and the Environment Centre. Interpretative panels, leaflets and trails have been prepared for many sites and numerous guided walks/talks and other events are organised for the general public. There is a need for better and more co-ordinated interpretation and promotion of the area's biodiversity to encourage and enable local people and visitors to the area to access, enjoy and appreciate it.

Young people

A number of environmental awareness activities are run for children and young people including the City Farm Club, Green Team, Forest School Swansea & Neath Port Talbot and Scouts/Guides conservation badges. There is considerable scope to expand these activities, for example by, establishing 'watch groups' and Young Ornithologists Clubs (YOC) and providing more support for after school and out of school activities, Links between youth and play workers and environmental project staff should be improved.

Community involvement

It is important that communities are able to contribute to decision making regarding their local environment and are encouraged and supported to take an active role in managing and improving it.

There is a need to provide better information, advice and support for community involvement and environmental action, e.g. support for management of wildlife areas/green-space and the preparation and implementation of community environmental appraisals and action plans, especially in the identified Communities First Areas.

It is important to promote understanding of biodiversity and sustainable development through innovative methods and demonstration projects and to celebrate, and promote best practice. There are many successful initiatives already in place and a number of effective partnerships have been established to help co-ordinate and support community action such as the Rosehill Quarry Group, the Sustainable Swansea Project and the Gower Commons Initiative.

Biodiversity Awareness Strategy

An overall partnership strategy is necessary for awareness raising and interpretation relating to the natural environment. It is proposed that a Biodiversity Awareness Strategy be prepared by the Swansea Biodiversity Partnership and the Swansea Environmental Education Forum. This should raise the profile of the importance Swansea's natural assets and provide a framework to achieve a co-ordinated, integrated and creative approach to their future protection and promotion.

Objective 11 - Develop partnership working and a strategic approach / framework for biodiversity awareness

Key Actions

- Prepare strategy and action plan for Biodiversity Awareness and Interpretation,
- Develop and support existing partnerships SEEF, SEF, SBP and GON
- Maintain audit of existing provision
- Establish and maintain a Swansea biodiversity web site

Objective 12 - Provide and Improve support for schools, adult education and field studies

Key Actions

- Assist with biodiversity INSET training
- Audit current levels of use of the countryside for field study work and apply the approach of the Gower Outdoor Network to the whole of the City and County.
- Provide support for field education use of outdoor classroom
- Help to develop local resource material for biodiversity education
- Provide support for Eco schools
- Provide support for development of school grounds (creation of wildlife areas)
- Provide support for after school environment clubs
- Provide support for Forest School Swansea & Neath Port Talbot
- Provide opportunities and support for continuing professional development and life long learning

Objective 13 - To provide opportunities for the community and visitors to understand, enjoy and appreciate the natural environment

Key Actions

- Provide interpretative /promotional materials (leaflets, panels, displays, web pages) which promote awareness of key sites/species and habitats
- Develop/support initiatives which provide sustainable forms of transport to the natural environment, e.g. green walks cycle routes, links with bus routes etc
- Develop Local Biodiversity Newsletter
- Provide support for youth environmental projects e.g. Green Team, youth festival and youth conference
- Participate in other major events e.g. Swansea Show, Gower Show, Wales Biodiversity Week
- Organise and deliver public lectures/guided walks/events, and prepare and distribute annual events programme, jointly with SEEF
- Promote awareness of the importance of Biodiversity through the Community Plan
- Prepare promotional material/leaflets celebrating/marketing Swansea's natural environment e.g. for tourists, visiting educational groups, business investment etc
- Promote/celebrate best practice e.g. through the Sustainable Swansea initiative, the Green Map and other demonstration projects.

Objective 14 -To provide and support opportunities for local people to become actively involved in conservation

Key Actions

- Provide support to community led environmental projects and groups
- Involve local communities in ecological surveying and monitoring work
- Provide opportunities for people to become involved in practical conservation work through volunteer tasks
- Develop mechanisms for consulting widely with the all sectors of the community on key plans and strategies relating to the natural environment

11. FINDING THE RESOURCES

Part s 1 and 3 of the LBAP outline a large number of priority actions needed to implement habitat and species action plans and to maintain and enhance the biodiversity resource as a whole. Currently there are insufficient resources available to undertake this work.

The Plan identifies an extensive programme of actions for biodiversity and landscape conservation, enhancement and promotion. Whilst there is currently no statutory requirement or time scale to undertake much of this work, the adoption of the strategy does require a commitment to finding resources for, and ways of implementing, actions in partnership with others.

Many resources already exist but there is a need for increased core funding to provide support for the ongoing management and enhancement of the natural environment and to support awareness raising and community initiatives. There is considerable potential to increase resources through:

- Refocusing existing budgets to achieve biodiversity action. For example
 developing links with other sectors (e.g. voluntary and business) to use
 existing resources more effectively for the benefit of wildlife.
- Obtaining additional external funding through grant aid etc. There is considerable external funding available for environmental initiatives. Access to this is currently limited due to other staff priorities. However it is proposed that the Swansea Biodiversity Partnership become a constituted organisation in order to apply for funds in their own right.
- Better partnership working and sharing of resources /synergy
- Encouraging and supporting greater community and volunteer and student involvement.
- Investigating potential for income generation e.g. from provision of environmental services, charging for events and training
- There is considerable potential to involve the business community in protecting, enhancing and promoting the natural environment. More effective links need to be developed to ensure that some of the funding derived from the promotion, use and enjoyment of the natural environment (eg through tourism) is invested in managing and maintaining the quality of this resource.

Objective 15 – To maximise the level of resources available to implement to the LBAP

Key Actions

- That a funding strategy be prepared for the implementation of the Biodiversity Strategy and Action Plan
- That the Swansea Biodiversity Partnership be constituted
- To work with LBAP partners to prepare grant bids.

 To make greater use of 106 Agreements to secure funding for habitat management and enhancement

12.0 MONITORING AND REPORTING PROCEDURES

The Swansea Biodiversity Partnership will undertake the fundamental role of monitoring progress in achieving actions set out in the Local Biodiversity Strategy and Action Plan, and reviewing priorities. This will include monitoring practical progress towards the targets and actions set out in the local habitat and species action plans (HAP's and SAP's) in Part 3, and in the strategic actions outlined in Part 1.

Ongoing reporting will be achieved using the newly established national Biodiversity Action Reporting System (BARS). BARS is a web-based information system created for the entire UK Biodiversity Partnership and provides a mechanism for reporting on actions at a local, Wales and UK level.

13. 0 BIODIVERSITY INDICATORS

A number of biodiversity indicators will be identified against which progress can be measured. These will include both nationally and locally determined indicators. A series of suggested indicators are listed in Part 1

14.0 REVIEW OF STRATEGY

LBAP's are living documents, and need to be capable of evolving as progress is continually made in biodiversity conservation, removing habitats or species as their status improves, or adding them as more come under threat.

This strategy will be constantly reviewed, updated, improved and supplemented as knowledge of the extent distribution and condition of local habitats and species increases.

15.0 CONCLUSIONS

A wide range of objectives and priorities for action have been identified in this strategy. The challenge now is to translate these into action on the ground.

The successful implementation of this plan will require:

 Awareness and understanding of the issues and actions required at all levels and across all sectors.

- Ownership of and commitment to the vision, policies, objectives and actions outlined in the Strategy –(in particular to the proposed biodiversity policy and to achieving the EU target to halt loss of biodiversity by 2010).
- Integration and mainstreaming of biodiversity principles and objectives across all other sectors, plans and projects.
- A co-ordinated partnership approach involving a wide range of sectors agencies and individuals.
- Clear action plans and responsibilities
 - A comprehensive and detailed Action Plan which shows how all existing partners will contribute through their own work programmes and actions.
- Appropriate levels of funding and staff resources.
 - Effective monitoring of outputs to keep everyone informed, and maintain momentum.
 - Sharing of information ,expertise and best practice
 - Celebration and promotion of achievements/success

The natural environment of Swansea is one of the best things it has to offer. This document provides a framework for action by all partners, outlining ways in which this resource can be better appreciated and managed for the benefit of all - now and in the future.

The Swansea Biodiversity Partnership will continue to play a key role in providing the co-ordination, advice, support and impetus to ensure the effective implementation of the plan.

APPENDIX 1

List of Species and Habitats of Principal Importance for Conservation of Biological Diversity, November 2003. Rhestr o Rywogaethau a Chynefinoedd sydd o Brif Bwysigrwydd o ran Diogelu Amrywiaeth Fiolegol

Mammals/Mamaliaid			Lead partner/Prif bartner	Contact point/ Pwynt cyswllt
Arvicola terrestris	Water vole	Llygoden bengron y dŵ r	EA	EA
Barbastella barbastellus	Barbastelle bat	Ystlum Barbastelle	Bat Conservation Trust	EN
Lepus europaeus	Brown hare	Ysgyfarnog	Mammal Society/GCT	CCW
Lutra lutra	Otter	Dyfrgi	Wildlife Trusts/EA	EA
Muscardinus avellanarius	Dormouse	Pathew	Wildlife Trusts/EN	EN
Myotis bechsteinii	Bechstein's bat	Ystlum Bechstein	Bat Conservation Trust	EN
Pipistrellus pipistrellus	Pipistrelle bat	Ystlum lleiaf	Bat Conservation Trust	EN
Rhinolophus ferrumequinum	Greater horseshoe bat	Ystlum pedol mwyaf	EN/CCW	EN
Rhinolophus hipposideros	Lesser horseshoe bat	Ystlum pedol lleiaf	Bat Conservation Trust	CCW
Sciurus vulgaris	Red squirrel	Wiwer goch	JNCC	EN

Birds/Adar				
Acrocephalus paludicola	Aquatic warbler	Telor y dŵr	RSPB	CCW
Alauda arvensis	Skylark	Ehedydd	RSPB	DEFRA
Botaurus stellaris	Bittern	Aderyn y bwn	RSPB	EN
Caprimulgus europaeus	Nightjar	Troellwr mawr	RSPB	FC
Carduelis cannabina	Linnet	Llinos	RSPB	DEFRA
Circus cyaneus	Hen harrier	Boda tinwyn		
Crex crex	Corncrake	Rhegen yr ŷd	SOAEFD/RSPB	SOAEFD
Emberiza citrinella	Yellowhammer	Bras melyn		
Emberiza schoeniculus	Reed bunting	Bras y cyrs	RSPB	EN
Melanitta nigra	Common scoter	Môr-hwyaden ddu	RSPB/WWT	SNH
Miliaria calandra	Corn bunting	Bras yr ŷd	RSPB	DEFRA
Muscicapa striata	Spotted flycatcher	Gwybedog mannog	RSPB	EN/CCW
Numenius arquata	Curlew	Gylfinir		
Passer montanus	Tree sparrow	Golfan y mynydd	RSPB	DEFRA
Perdix perdix	Grey Partridge	Petrisen	GCT	DEFRA
Pluvialis apricaria	Golden plover	Cwtiad aur		
Pyrrhocorax pyrrhocorax	Chough	Brân goesgoch		
Pyrrhula pyrrhula	Bullfinch	Coch y berllan	RSPB	DEFRA
Sterna dougallii	Roseate tern	Môr-wennol wridog	RSPB	EHS

Stretopelia turtur	Turtle dove	Turtur	RSPB/EN	DEFRA
Turdus philomelos	Song thrush	Bronfraith	RSPB	EN
Tetrao tetrix	Black grouse	Grugiar ddu	RSPB & GCT	SNH
Vanellus vanellus	Lapwing	Cornchwiglen		

Fish/Pysgod				
Alosa alosa	Allis shad	Herlyn	EA	
Alosa fallax	Twaite shad	Gwangen	EA	DEFRA

Reptiles and amphibians/ Ymlusgiaid ac Amffibiaid				
Bufo calamita Natterjack toad Llyffant y twyni HCT/EN EN				
Lacerta agilis	Sand lizard	Madfall y tywod	EN/HCT	EN
Triturus cristatus	Great-crested newt	Madfall gribog fwyaf	Froglife/HCT/BHS	EN

Argynnis adippe	hid Di-asgwrn-cefn High brown fritillary	Britheg frown	Butterfly Conservation	EN
		<u> </u>		CCW
Asilus crabroniformis	Hornet robber fly	Pryf lladd	CCW	
Austropotamobius	White-clawed	Cimwch crafangau	EA	EA
pallipes	crayfish	gwyn dŵr croyw		0.014
Bembidion testaceum	A ground beetle	Chwilen ddaear	EA	CCW
Bidessus minutissimus	a water beetle	Chwilen ddŵr	EA	CCW
Boloria euphrosyne	Pearl-bordered fritillary	Britheg berlog	Butterfly Conservation	SNH
Bombus humilis	a carder bumble- bee	Cardwenynen	Bombus Working Group /EN	
Bombus sylvarum	Shrill carder bee	Cardwenynen	Bombus Working Group	EN
Bombylius discolor	Dotted beefly	Gwenynbryf smotiog	EN	EN
Brachyptera putata	a stonefly	Pryf y cerrig	Action for Invertebrates	SNH
Cicindela germanica	a tiger beetle	Chwilen deigr	EN	EN
Cliorismia rustica	a stiletto fly	Pryf pigfain	EA	EA
Coenagrion mercuriale	Southern damselfly	Coenagrion Benfro	Wildlife Trusts	EA
Cosmis diffinis	White-spotted pinion	Adain wen fannog	Butterfly Conservation	EN
<u>Dolomedes</u> plantarius	Fen raft spider	Corryn rafftior gors glach	English Nature	EN
Eurodryas aurinia	Marsh fritillary	Britheg y gors	Butterfly Conservation	CCW
Eustroma reticulata	Netted carpet moth	Gwyfyn brith	Butterfly Conservation/National Trust	EN
Formica candida	Black bog ant	Morgrugyn du'r gors	Wildlife Trusts	CCW
Heliophobus reticulata	Bordered gothic	Gothig ymylog	Butterfly Conservation	EN
Hemaris tityus	Narrow-bordered bee hawkmoth	Gwalchwyfyn Gwenynog	Butterfly Conservation	CCW
Hirudo medicinalis	Medicinal leech	Gele feddyginiathol	RSPB	SNH
Hydrelia sylvatica	Waved carpet	Gwyfyn brith tonnog	Butterfly Conservation	EN
Hydrochara caraboides	Lesser silver diving beetle	Chwilen-blymio arianaidd leiaf	Balfour Browne Club	EN
Hydroporus rufifrons	a diving beetle	Chwilen blymio	Balfour Browne Club	EN
Hypena rostralis	Buttoned snout	Trwynog cnapiog	Butterfly Conservation	EN

Idaea dilutaria	Silky wave	Gwyfyn tonnog sidanaidd	Butterfly Conservation	CCW
Jodia croceago	Orange upperwing	Uwchadain melyngoch	Butterfly Conservation	EN
Lionychus quadrillium	a ground beetle	Chwilen ddaear	<u>EA</u>	CCW
Lipsothrix nervosa	a cranefly	Pryf teiliwr	CCW	EN
Lipsothrix nigristigma	a cranefly	Pryf teiliwr	EN	EN
Lucanus cervus	Stag beetle	Chwilen gorniog	PTES	EN
Lycia zonnia britannica	Belted beauty	Morwyn wregysog	Butterfly Conservation	CCW
Margaritifera margaritifera	Freshwater pearl mussel	Misglen berlog yr afon	SNH/EA	SNH
Melanapion minimum	a weevil	Gwiddonyn	University of Leeds	EN
Meotica anglica	a rove beetle	Chwilen grwydr	EA	CCW
Mythimna turca	Double line	Wensgot ddwylinell	Butterfly Conservation	CCW
Myxas glutinosa	Glutinous snail	Malwen lysnafeddog	EA	EA
Noctua orbona	Lunar yellow underwing	Isadain felenloerol	Butterfly Conservation	EN
Odontomyia hydroleon	a soldier fly	Pryf soldiwr	CCW	CCW
Osmia parietina	a mason bee	Saerwenynen	Bombus Working Group / EN	EN
Osmia xanthomelana	a mason bee	Saerwenynen	Bombus Working Group /CCW	CCW
Panagaeus crux-major	a ground beetle	Chwilen ddaear	CCW/EN	CCW
Pechipogon strigilata	Common fan-foot	Coes-wyntyll gyffredin	Butterfly Conservation	EN
Perileptus areolatus	a ground beetle	Chwilen ddaear	EA	CCW
Pisidium tenuilineatum	Freshwater pea mussel	Misglen	EA	EA
Plebejus argus	Silver-studded blue	Glesyn serennog	Butterfly Conservation	EN
Polia bombycina	Pale shining brown	Brown gloyw	Butterfly Conservation	EN
Procas granulicollis	a weevil	Gwiddonyn	CCW	CCW
Pseudanodonta complanata	Depressed river mussel	Misglen yr afon	EA	EA
Rheumaptera hastata	Argent and sable	Du a gwyn y llus	Butterfly Conservation	EN
Spiriverpa (Thereva) Iunulata	a stiletto fly	Pryf pigfain	EA	CCW
Synaptus filiformis	A click beetle	Chweilen glec		EA
Synanthedon scoliaeformis	Welsh clearwing	Cliradain Cymreig	Butterfly Conservation	
Thecla betulae	Brown hairstreak	Brithribin frown	Butterfly Conservation	
Thinobius newberyi	a rove beetle	Chwilen grwydr	EA	CCW
Vertigo moulinsiana	Desmoulin's whorl snail	Malwen droellog Desmoulin	EN	EN
Vertigo angustior	Narrow-mouth whorl snail	Malwen droellog	CCW	CCW
Vertigo geyeri	Geyeri's whorl snail	Malwen droellog	CCW	CCW
Xestia rhomboidea	Square-spotted clay	Clai-smotyn sgwâr	Butterfly Conservation	EN
Xylena exsoleta	Sword-grass	Gwyfyn y cleddyflys	Butterfly Conservation	SNH

Vascular plants/ Planhigion fasgwlaidd					
Asparagus officinalis	Wild asparagus	Merllys gorweddol	National Trust	CCW	

muricata				
Chamaemelum nobile	Wild chamomile	Camri		
Cotoneaster	Wild cotoneaster	Cotoneaster y Gogarth	CCW	CCW
integerrimus				
(cambricus)				
Dianthus armeria	Deptford pink	Penigan y porfeydd	Plantlife	EN/CCW
Euphrasia cambrica	An eyebright	Coreffros Cymreig	RBGE	CCW
Euphrasia rivularis	An eyebright	Effros yr Wyddfa	RBGE	CCW
Fumaria purpurea	Purple ramping fumitory	Mwg y ddaear glasgoch	EN	DEFRA
Galeopsis angustifolia	Red hemp-nettle	Penboeth culddail	Plantlife	DEFRA
Gentianella campestris	Field gentian	Crwynllys y maes		
Gentianella uliginosa	Dune gentian	Crwynllys Cymreig	CCW	CCW
Juniperus communis	Juniper	Merywen	Plantlife	FC
Endemic Limonium * (5 spp.)	Sea lavenders*	Lafant y môr	National Trust/BSBI	EN
Liparis loeselii	Fen orchid	Gefell-lys y fignen	Wildlife Trusts/EN/Kew	CCW
Luronium natans	Floating water- plantain	Dŵr-lyriad nofiadwy	British Waterways Board	CCW
Lycopodiella inundata	Marsh clubmoss	Cnwp-fwsog y gors	Plantlife	EN
Mentha pulegium	Pennyroyal	Brymlys	EN	EN
Pilularia globulifera	Pillwort	Pelenllys	CCW/Plantlife	SNH
Potamogeton compressus	Grass-wrack pondweed	Dyfrllys camleswellt	British Waterways Board	EN
Ranunculus tripartitus	Three-lobed water crowfoot	Crafanc trillob	Plantlife	EN
Rumex rupestris	Shore dock	Tafolen y traeth	Plantlife	EN
Scandix pecten- veneris	Shepherd's needle	Crib Gwener	Plantlife	DEFRA
Silene gallica	Small flowered catchfly	Gludlys amryliw	Plantlife	DEFRA
Sorbus leyana	A whitebeam	Cerddinen Darren Fach	National Botanic Garden of Wales	CCW
Trichomanes speciosum	Killarney fern	Rhedynen Cilarne	EN/NHM	CCW
Valerianella rimosa	Broad-fruited cornsalad	Gwylaeth-yr-oen llydanffrwyth	Plantlife	DEFRA
Woodsia ilvensis	Oblong woodsia	Coredynen hirgul	RBGE	SNH
Lichens/Cen				
	a liahan	Con	Diantlifo	SNH
Bacidia incompta	a lichen	Cen	Plantlife	
Bryoria smithii	a lichen	Cen	EN	EN
Caloplaca luteoalba	Orange-fruited elm lichen	Cen	NHM	EN
Catapyrenium psoromoides	Tree catapyrenium	Cen	RBGE	RBGE
			1	

Clychlys lledaenol

Hesgen bigog gynnar

Plantlife

ΕN

ΕN

Campanula patula

Carex muricata ssp.

Chaenotheca

phaeocephala

Cladonia peziziformis

Collema dichotomum

a lichen

a lichen

River-jelly lichen

Cen

Cen

Cen

Spreading

bellflower

Prickly sedge

CCW

ΕN

EΑ

CCW

EΑ

Plantlife

Heterodermia leucomelos	Ciliate strap-lichen	Cen	Plantlife	EN
Opegrapha paraxanthoides	a lichen	Cen		CCW
Pseudocyphellaria norvegica	a lichen	Cen	RBG(E)	RBG(E)
Schismatomma graphidioides	a lichen	Cen	RBG(E)	RBG(E)

Mosses and liverworts	s/ Mwsoglau a Llysia	au'r Afu		
Bartramia stricta	Rigid apple-moss	Mwsogl	CCW	CCW
Bryum neodamense H	Long-leaved thread moss	Mwsogl	Plantlife	EN
Bryum warneum	Sea bryum	Mwsogl	Plantlife	EN
Cephaloziella nicholsonii	Greater copperwort	Llysiau'r afu carped coch	EN/NHM	EN
Cryphaea lamyana	Multi-fruited river moss	Mwsogl	Plantlife	SNH
Ditrichum plumbicola	Lead moss	Mwsogl	EN/NHM	EN
Drepanocladus vernicosus	Slender green feather moss	Y mwsog pluog main gwyrdd	CCW	CCW
Fissidens exiguus	Tiny fern moss	Mwsogl	Plantlife	EA
Orthodontium gracile	Slender thread moss	Mwsogl	EN/RGB, Kew	EN
Pallavicinia lyellii	Veilwort	Llysiau'r afu gwylath y gors	RBG, Kew / Plantlife	EN
Petalophyllum ralfsii	Petalwort	Llysiau'r afu petalaidd	Plantlife	CCW
Riccia huebeneriana	Violet crystalwort	Llysiau'r afu grisialaidd	Plantlife	EA
Sematophyllum demissum	Prostrate feather moss	Mwsogl	CCW	CCW
Sphagnum balticum H	Baltic bog moss	Mwsogl	Plantlife	EN
Weissia multicapsularis	a moss	Mwsogl	EN	EN
Weissia rostellata	Beaked beardless moss	Mwsogl	Plantlife	EA

Fungi/Ffyngau				
<u>Armillaria</u> <u>ectypa</u>	a fungus	Ffwng	EN	EN
Clavaria zollingeri	a fairy club	Ffwng pastwng	Plantlife	
Hericium erinaceum	a hedgehog fungus	Ffwng draenog pigau hirion	EN	EN
Hydnoid fungi* (3 spp. In Wales).		Ffwng	Plantlife	EN
Hygrocybe calyptriformis	Pink meadow cap	Cap cwyrog pinc	Plantlife	CCW
Hygrocybe spadicea	Date coloured waxcap	Cap cwyrog melynddu	Plantlife	CCW
Microglossum olivaceum	an earth-tongue	Tafod fach felynwyrdd	Plantlife	CCW
Poronia punctata	Nail fungus	Ffwng-baw-ceffyl mannog	Wildlife Trusts	EN

Stoneworts/ Rhawn yr ebol				
Chara curta	Lesser bearded stonewort	Rhawn yr ebol barfog	Plantlife	EN
Nitella gracilis	Slender stonewort	Rhawn yr ebol main	Plantlife	EA
Nitella tenuissima	Dwarf stonewort	Rhawn yr ebol bach	NWWT	CCW

Marine/Morol				
Anotrichium barbatum	a red alga	Alga coch	CCW	CCW
Atrina fragilis	Fan mussel	Cragen adain	Marine Conservation Society	EHS
Caryophyllia inornata	a solitary coral	Cwrel		
Cetorhinus maximus	Basking shark	Heulgi	WWF/Wildlife Trusts/Shark Trust	EN
Eunicella verrucosa	Pink sea fan	Môr-wyntyll pinc	Wildlife Trusts	EN
Ostrea edulis	Native oyster	Wystrysen	Shellfish Assoc. of GB	EN
Phocoena phocoena	Harbour porpoise	Llamhidydd	JNCC	DEFRA
Raja batis	Common skate	Morgath	Shark Trust	SNH
	Baleen whales	Morfilod Balin	JNCC	DEFRA
	Commercial fish species	Pysgod môr sy'n cael eu pysgota: penfras, lleden goch, lleden wadn	DEFRA	DEFRA
	Marine turtles	Crwbanod môr	British Herpetological Society/Marine Conservation Society	SNH
	Small dolphins	Dolffiniaid bach	JNCC	DEFRA
	Toothed whales	Morfilod danheddog	JNCC	DEFRA

Habitats/Cynefin	Priority Habitats/Cynefin sy'n Flaenoriaeth		Lead Partner/ Prif Bartner
Terrestrial/Tirol			
Broadleaved, mixed and yew woodland	Upland oak woodland	Coetiroedd derw yn yr ucheldir	FC
	Lowland beech and yew woodland	Coetir ffawydd ac ywen ar dir isel	FC
	Upland mixed ash woodland	Coetiroedd ynn cymysg yr ucheldir	FC
	Wet woodland	Coetiroedd tir gwlyb	FC
	Wood pasture & parkland	Parciau a phorfeydd coediog	EN
	Lowland mixed deciduous woodland	Coedlan gollddail yr iseldir	FC
	Upland birch woodland	Coedlan fedw yr ucheldir	FC
Boundary and linear features	Ancient and/or species rich Hedgerows	Gwrychoedd hynafol a/neu wrychoedd sy'n gyfoethog o ran rhywogaethau	DEFRA
Arable and horticultural	Cereal Field Margins	Ymylon cae grawn	DEFRA
Improved grassland	Coastal and floodplain grazing marsh	Morfa bori arfordirol a gorlifdirol	EN
Neutral grassland	Lowland meadows	Dolydd gwair yr iseldir	CCW
Calcareous grassland	Lowland calcareous grassland	Glaswelltir calchaidd yr iseldir	EN
	Upland calcareous grassland	Glaswelltir calchaidd yr ucheldir	CCW
Acid grassland	Lowland dry acid grassland	Glaswelltir sych asid yr iseldir	EN
Dwarf shrub heath	Lowland heathland	Rhostir yr iseldir	EN
	Upland heathland	Corlwyni rhostir yr ucheldir	EN

Fen, marsh and swamp	Fens	Ffeniau	EN
	Purple moorgrass and rush pastures	Porfeydd glaswellt y bwla a brwyn (Molinia a Juncus)	CCW
	Reedbeds	Corsleoedd	EN
Bogs	Lowland raised mire	Cyforgors mewn iseldir	EN
	Blanket bog	Mignen, gorgors	SNH
Standing open waters and canals	Mesotrophic lakes	Llynnoedd mesotroffig	EA/SEPA
	Eutrophic standing waters	Dyfroedd llonydd ewtroffaidd	EA
	Aquifer-fed naturally fluctuating water bodies	Dyfroedd a gyflenwir gan ddyfrhaen, ac sy'n arddangos amrywiadau naturiol yn lefel y dŵr	EA
Inland rock	Limestone pavements	Calchbalmentydd	CC
Supralittoral rock	Maritime cliff and slope	Clogwyni a llethrau glan môr	CCW
Supralittoral sediment	Coastal sand dunes	Twyni tywod arfordirol	SNH
	Coastal vegetated shingle	Gro arfodirol gyda llystyfiant	EN
Littoral sediment	Saltmarsh	Morfa heli	EA

Marine/Morol	Seagrass beds	Gwelyau o forlas	EHS
	Marl beds	Gwely marl	SNH
	Mud habitats in deep water	Cynefinoedd mwd lleidiog mewn dŵr dwfn	SNH
	Mudflats	Gwastadeddau lleidiog	EA
	Sheltered muddy gravels	Graean lleidiog mewn man cysgodol	
	Subtidal sands and gravels	Tywod a graean islanwol	EN
	Saline lagoons	Lagynau heli	EN
	Tidal rapids	Rhuthrau Ilanw	EHS
Modiolus modiolus beds	Horse mussel beds	Gwelyau o gregyn gleision barfog	CCW
Sabellaria alveolata reefs	Honeycomb worm reefs	Riffiau	EN
Sabellaria spinulosa reefs		Riffiau	EN

Partneriaeth Bioamrywiaeth Abertawe



Swansea Biodiversity Partnership