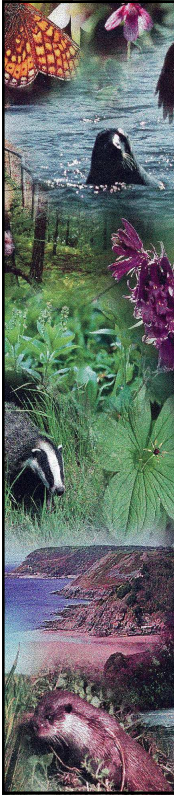


An overview of :

- Part 1 of the Environment (Wales) Act 2016
- Swansea's natural environment /biodiversity resource
- Examples of work undertaken by the Strategic Planning and Natural Environment Section to meet biodiversity duties
- Risks and challenges



Environment (Wales) Act 2016

- Part 1: SMNR
- Part 2 : Climate Change
- Part 3: Carrier bag charges
- Part 4 :Collection of Waste
- Part 5 and 6 :Fisheries and Shellfish licensing
- Part 7 : Flood and Coastal Erosion

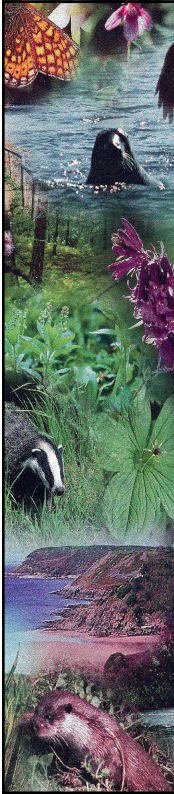
PART 1 :The sustainable management of natural resources (SMNR)

The overall objective is to help to reverse biodiversity decline and to maintain and enhance the resilience of ecosystems and the benefits they provide.



Part 1 of the Environment (Wales) Act 2016 provides a number of mechanisms to deliver the sustainable management of natural resources. These mechanisms include:

- **State of Natural Resources Report - SoNaRR**– the Environment Act places a duty on **NRW** to produce a report which will contribute to the evidence base for policy on how natural resources are managed and sustainably used.
- **National Natural Resources Policy- NRP** – the Environment Act places a duty on **Welsh Ministers** to prepare, publish and implement a National Natural Resources Policy, which will set out the Welsh Government's general and specific policies in relation to the sustainable management of natural resources.
- **Area statements** – to be produced by **NRW** in order to facilitate the implementation of the National Natural Resources Policy. Area statements will set out the key risks that need to be carefully managed and mitigated and the key opportunities and priorities for the sustainable use of natural resources at an area level.
- **The Biodiversity and Resilience of Ecosystems Duty** – all public bodies, LA's, Community Councils ,Police, Health Authority etc

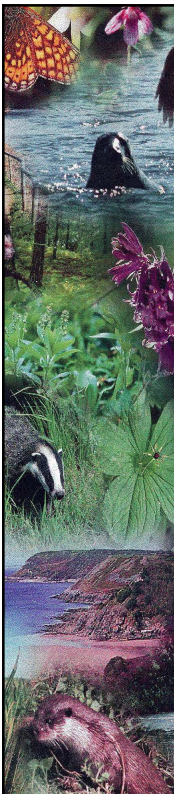


Section 6 : The Biodiversity and Resilience of Ecosystems Duty

This new duty under Section 6 of the Environment Act replaces the biodiversity duty in the Natural Environment and Rural Communities Act 2006 (referred to as the NERC Act) which required that public authorities **must have regard to conserving biodiversity**.

The Environment Act states that :

A public authority **must seek to maintain and enhance biodiversity** in the exercise of functions in relation to Wales, and in so doing promote the resilience of ecosystems, so far as consistent with the proper exercise of those functions.



What are ecosystems and biodiversity?

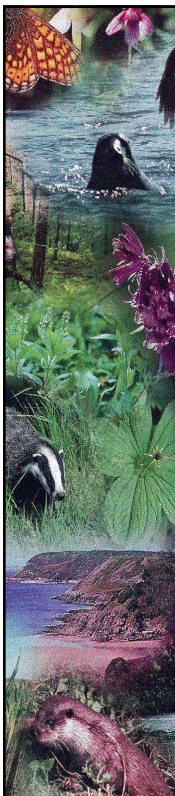
Biodiversity (biological diversity) means the diversity of living organisms, whether at the genetic, species or ecosystem level.

Ecosystem

A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.

An ecosystem includes all of the living things (plants, animals and organisms) in a given area, interacting with each other, and also with their non-living environments (weather, earth, sun, soil, climate, atmosphere).

A resilient ecosystem is one that is healthy and functions in a way that is able to address pressures and demands placed on it, and is able to deliver benefits over the long term to meet current and future social, economic and environmental needs.



Six key steps. In complying the Section 6 Biodiversity Duty a public authority :

1. Must take account of the resilience of ecosystems, in particular the following aspects

- (a) the **diversity** between and within ecosystems;
- (b) the **connections** between and within ecosystems;
- (c) the **scale** of ecosystems;
- (d) the **condition** of ecosystems (including their structure and functioning);

2. Should embed the consideration of biodiversity and ecosystems into their early thinking and business planning, including any policies, plans, programmes and projects, as well as their day to day activities.

3. Must prepare, publish and submit to Welsh Government a plan setting out what they propose to do to maintain and enhance biodiversity, and promote resilience (Section 6 Plan)

4. Must prepare and submit to Welsh Government a report on what the public authority has done to comply with the duty by the end of 2019 and then every three years after this date.

Environment (Wales) Act

The Duty to Promote the resilience of ecosystems

In complying with subsection (1), a public authority must take account of the **resilience of ecosystems**, in particular the following aspects

- **Diversity** - not only biological but also structural and physical



- **Connectivity** - within and between ecosystems facilitates the movement of genes, species and ecosystem components such as water across landscapes, allowing ecosystems to function effectively and to adapt spatially, for example in response to climate change
- **Extent** - bigger the ecosystem extends, without fragmentation, the more resilient it is likely to be

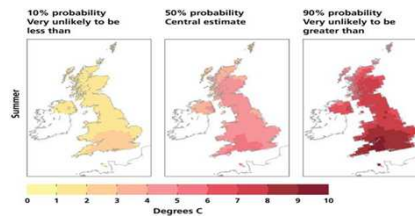


Promote the resilience of ecosystems

Condition - The underpinning supporting services of ecosystems need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services



Adaptability - The key question here is whether the ecosystem in question will adapt and change in the desired direction given future environmental, and socio economic changes and demands such as climate change.



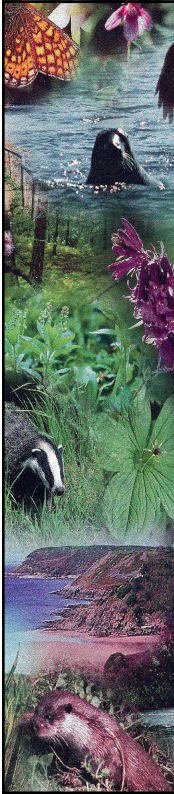
9



5. Must have regard to:

- The **section 7 list** of habitats and species of principal importance for Wales
- The **State of Natural Resources Report (SoNaRR)**, published by NRW
- Any **Area Statement** which covers all or part of the area in which the authority exercises its functions, once these are produced.

6. In addition, local authorities should take account of **The Nature Recovery Action Plan for Wales (NRAP)** overseen by the Welsh Government the Wales Biodiversity Partnership and published in December 2015. This is the national biodiversity strategy and action plan required under the Convention on Biological Diversity to reverse the decline of biodiversity in Wales.

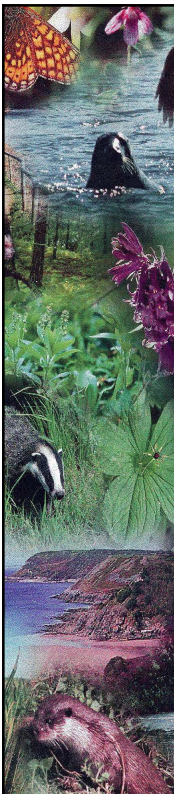


Section 6 Plan (Corporate Biodiversity Plan)

The Section 6 Plan should consist of a **statement** of what the public authority will do to maintain and enhance biodiversity, across **all** of its functions, and in so doing promote the resilience of ecosystems. **This statement should be embedded within any corporate and /or business planning document.**

The Plan should also include **the steps** that will be taken to fulfil this commitment **across each of the functions of the organisation.** These steps should, as far as possible, be guided by the **six objectives** of the Nature Recovery Action Plan for Wales, which are:

1. Engage and support participation and understanding to embed biodiversity throughout decision making at all levels
2. Safeguard species and habitats of principal importance and improve their management
3. Increase the resilience of our natural environment by restoring degraded habitats and habitat creation
4. Tackle key pressures on species and habitats
5. Improve our evidence, understanding and monitoring
6. Put in place a framework of governance and support for delivery.



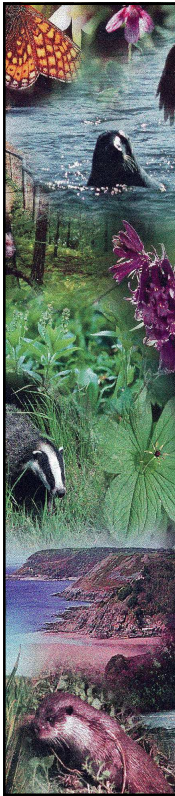
Integration and ownership

Key to compliance with the S6 duty is embedding biodiversity into decision making at all levels. This should start at the corporate level, where early thinking and planning should seek to maintain and enhance biodiversity, preventing its loss in the first instance.

Best practice would be that the S6 plan is an integral part of any business planning, asset management and/or corporate planning processes as this will demonstrate how the consideration of biodiversity is being embedded within the public authority

Each function of a public authority should consider where and how they can maintain and enhance biodiversity and promote resilience.

Biodiversity Questionnaire



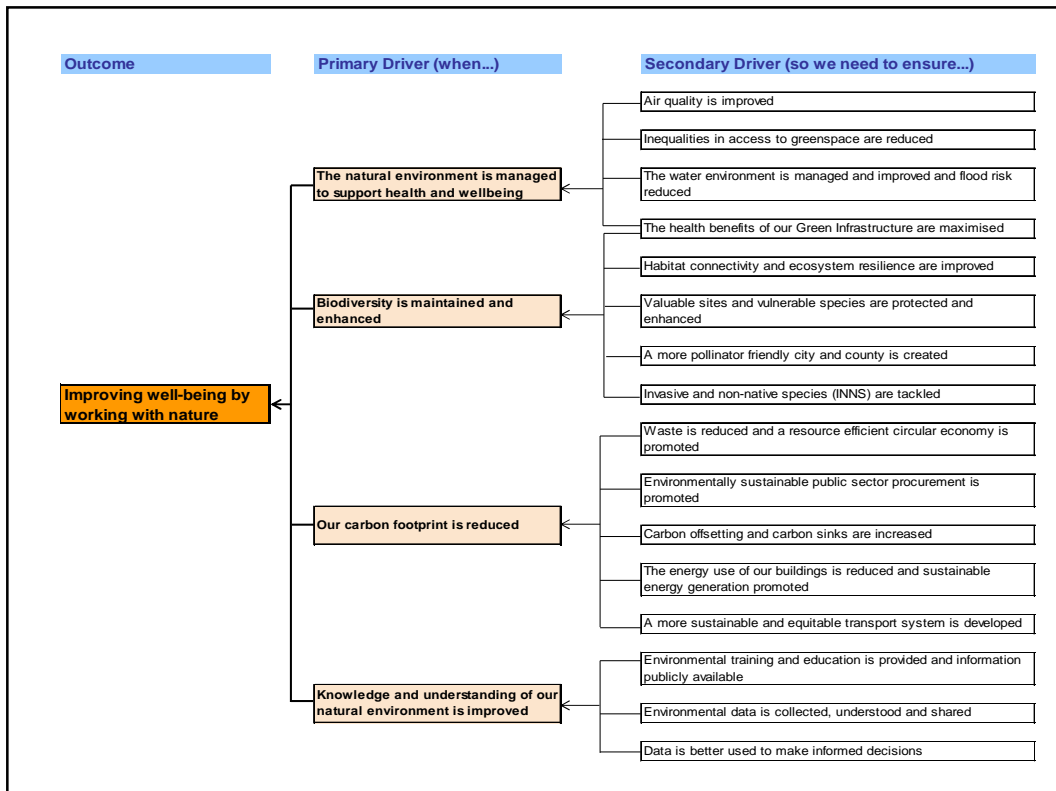
Links between the Environment (Wales) Act Section 6 Duty and the WCFG ACT

Complying with the S6 duty will help public bodies to maximise their contributions to the Well-being goals set out in the Well-being of Future Generations (Wales) Act 2015, in particular the Resilient Wales Goal:

‘A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change).

The S6 plan should be integrated into the Council’s statement of the steps to be taken to meet its well-being objectives, which in turn should be in their corporate plan.

Published well-being objectives and statements about them under the WFG Act must set out how biodiversity will be maintained and enhanced, and how in so doing the resilience of ecosystems will be promoted.



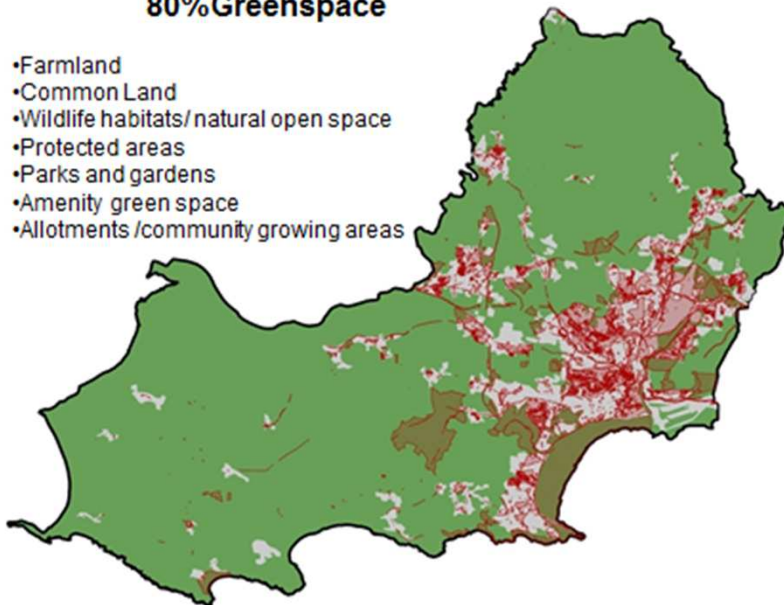


An Overview of Swansea's Biodiversity Resource



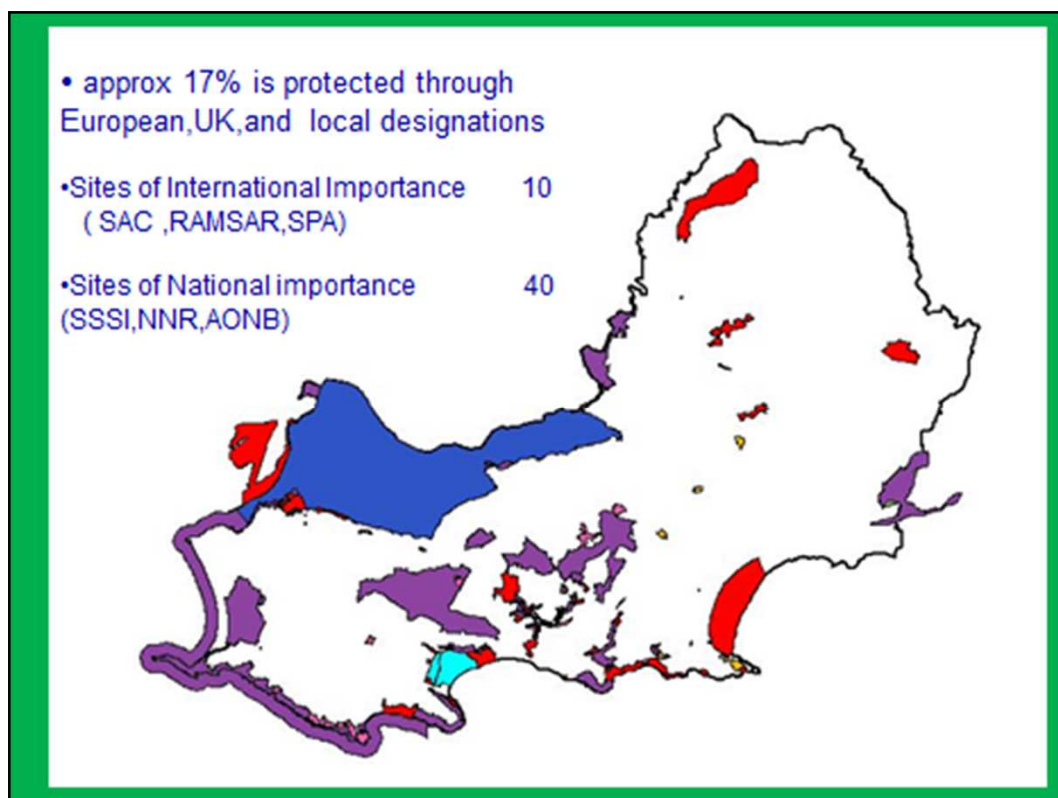
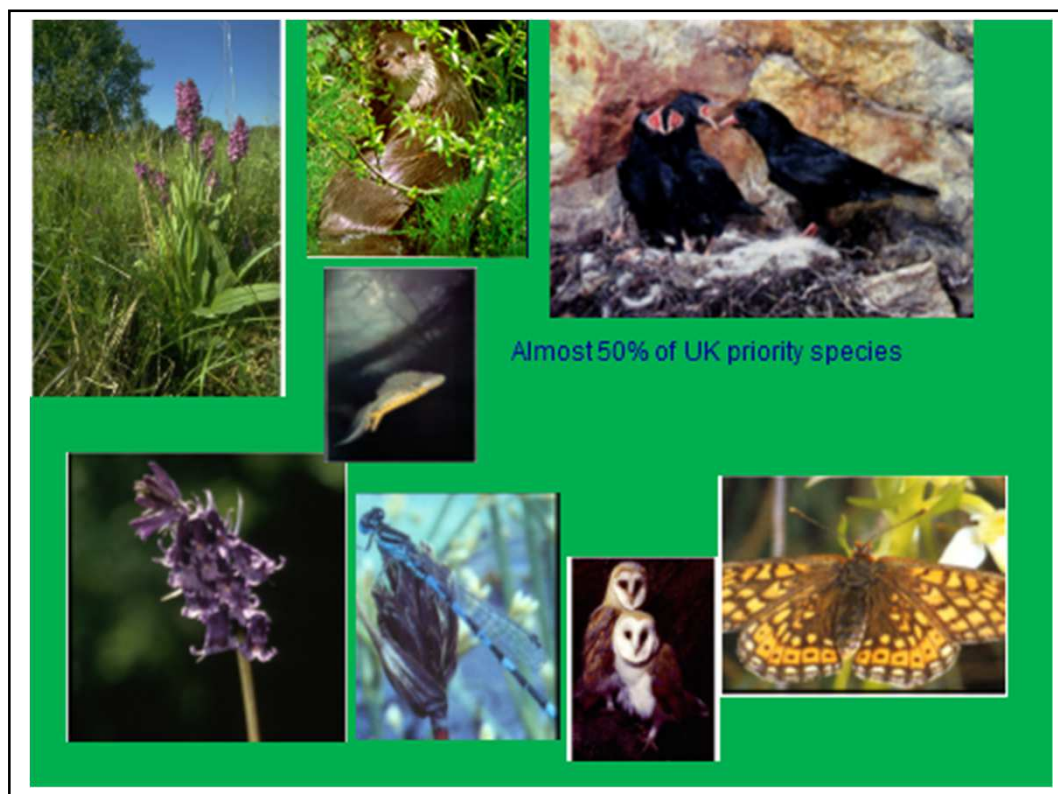
80% Greenspace

- Farmland
- Common Land
- Wildlife habitats/natural open space
- Protected areas
- Parks and gardens
- Amenity green space
- Allotments /community growing areas



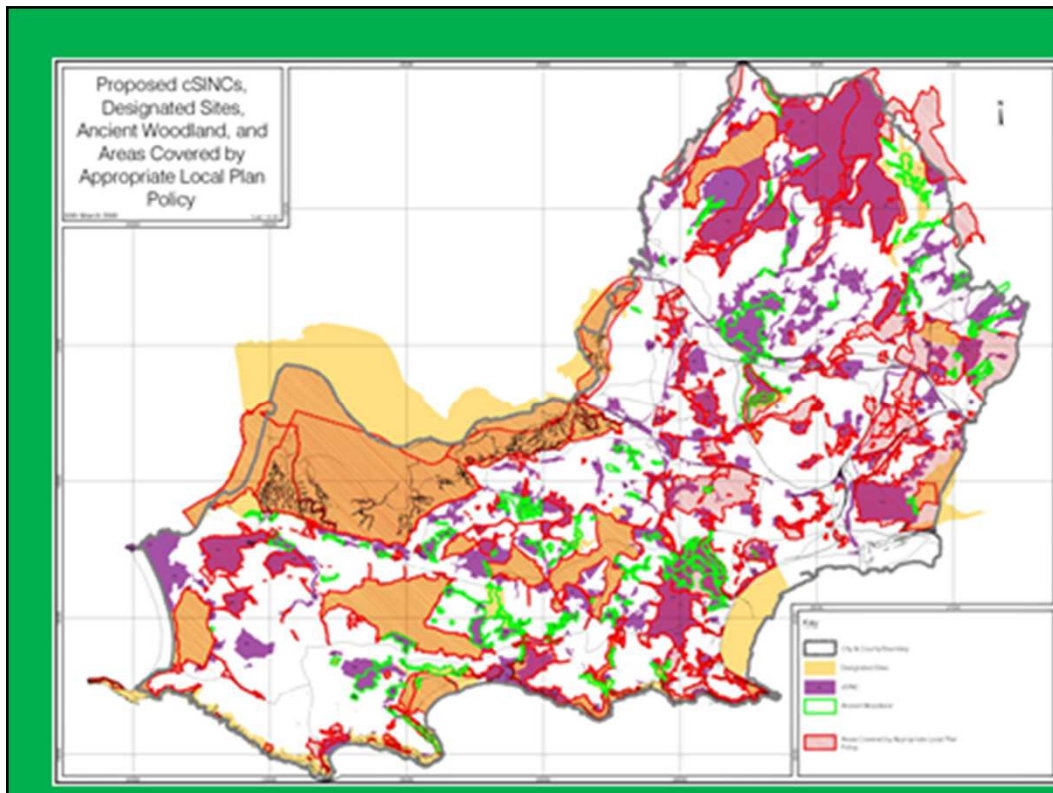


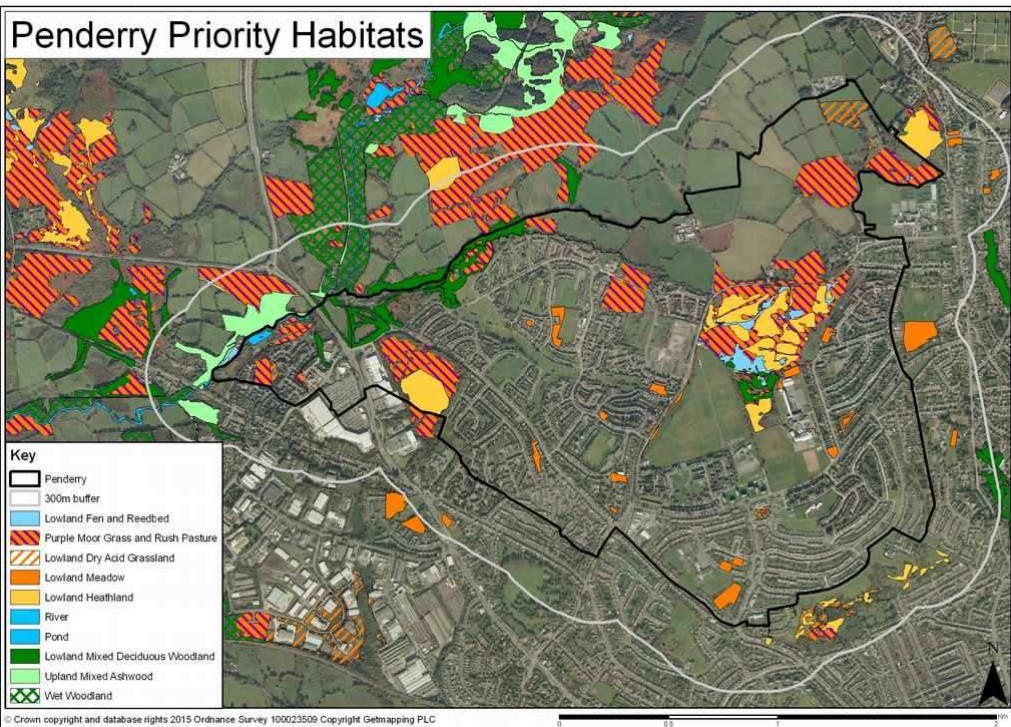
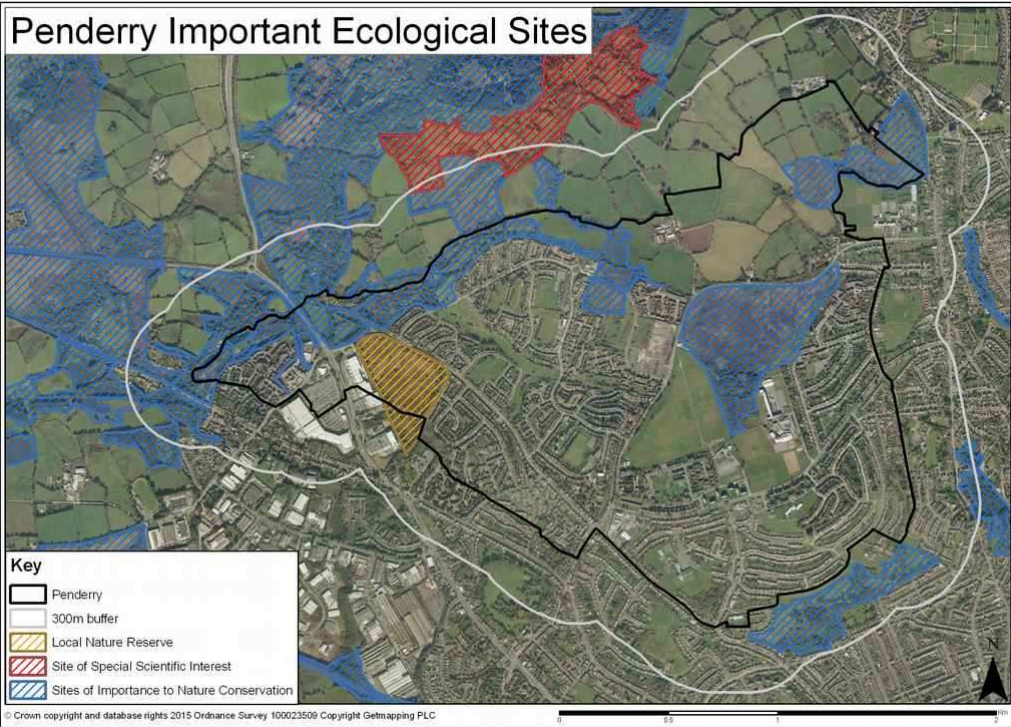


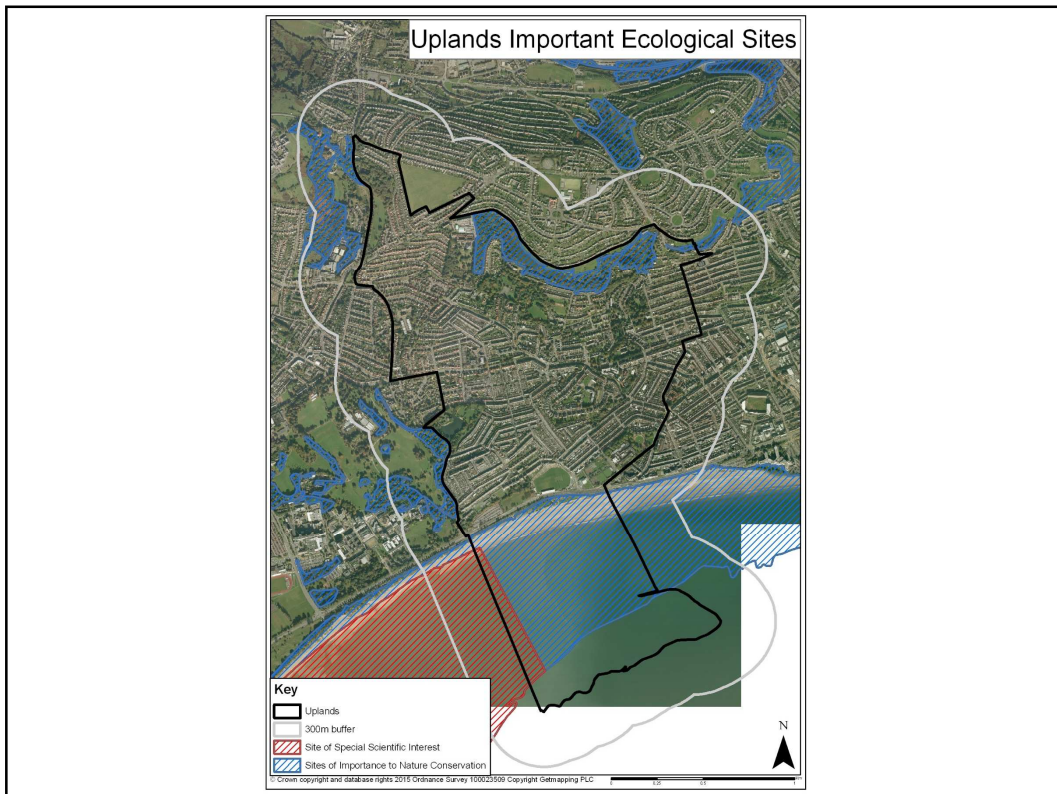


Sites of Importance for Nature Conservation

GUIDELINES FOR THE SELECTION OF LOCAL SITES IN WALES
Wales Biodiversity Partnership
2008







Promoting Swansea's natural environment

Hyrwyddo amgylchedd naturiol Abertawe

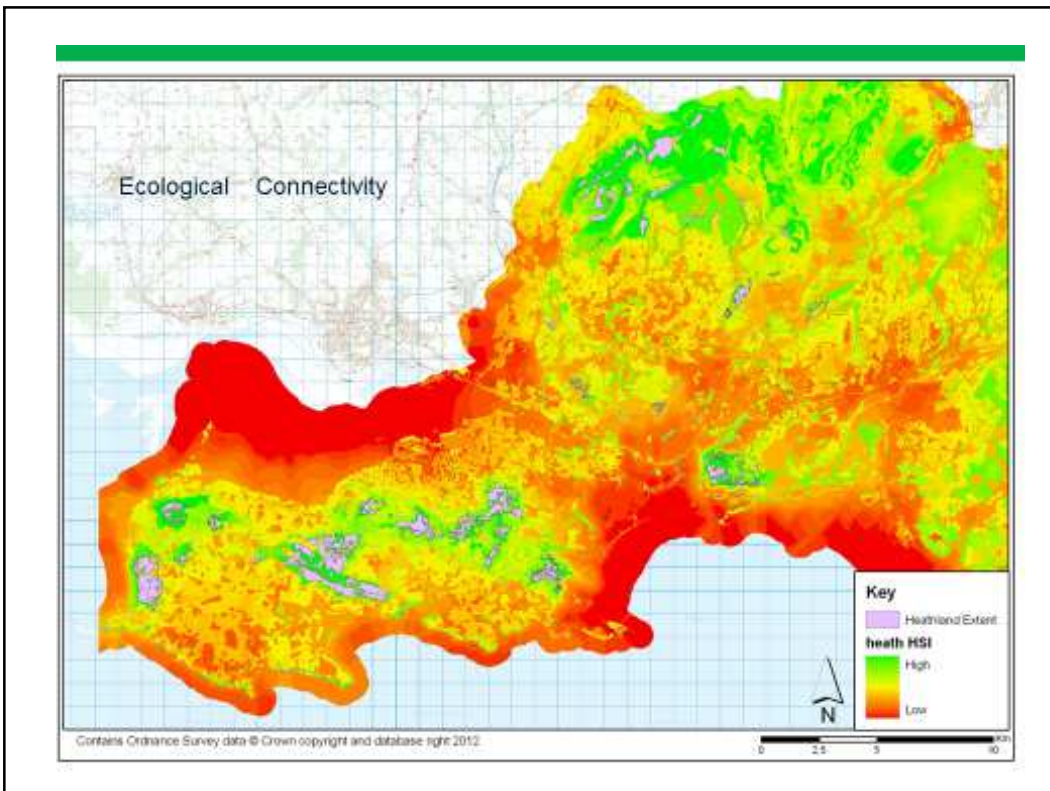
A Local Biodiversity Strategy and Action Plan
Strategaeth a Chynllun Gweithredu Bio-amrywiaeth lleol

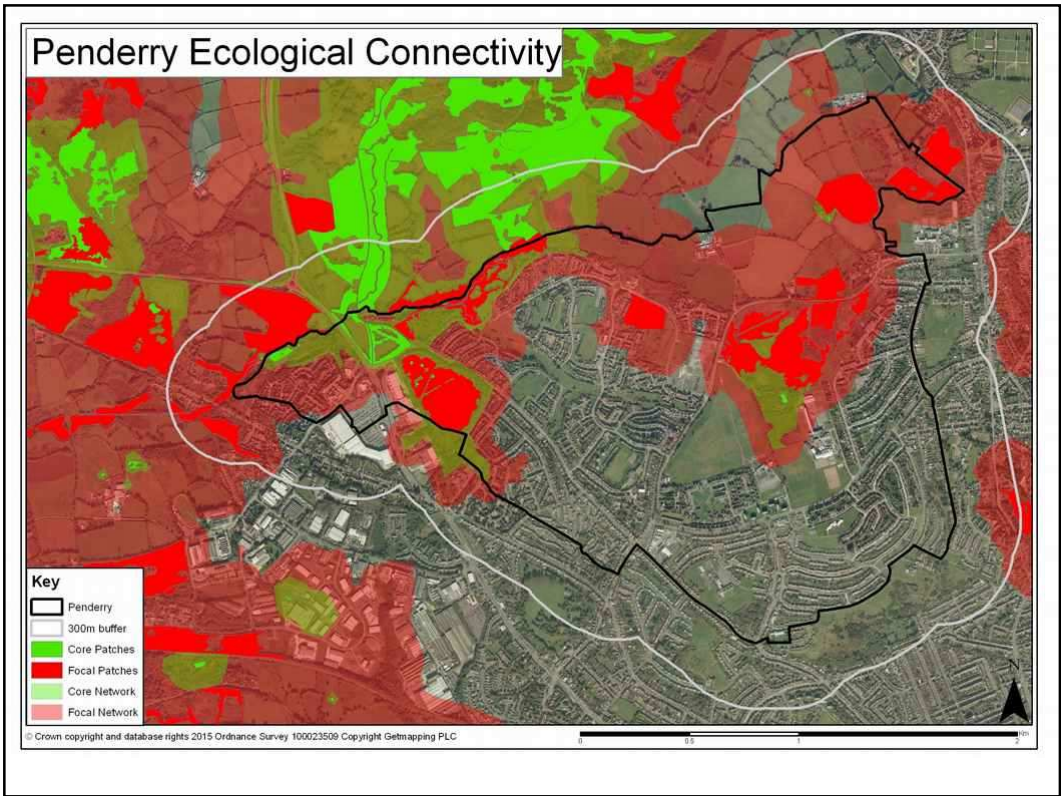
A Local Biodiversity Strategy and Action Plan for the protection, enhancement and promotion of Swansea's outstanding natural environment

The cover features a vibrant collage of nature scenes including a butterfly, a bird in flight, a swan, a badger, and various plants and flowers. The title is presented in both English and Welsh, with a green background for the text area.



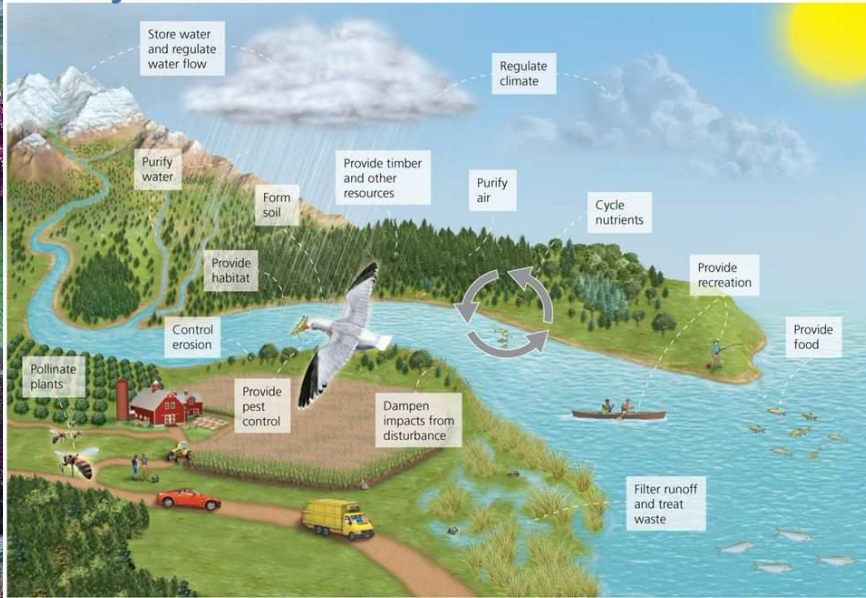
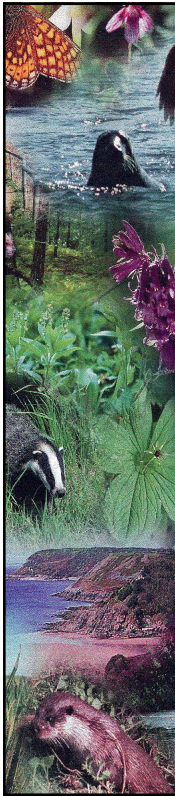
These designated areas and priority habitats represent only the very best of our biodiversity. They do not, however, encompass all that is irreplaceable and cannot by themselves maintain biodiversity. Even common habitats, urban wildlife sites, parks, gardens and green spaces, are important in maintaining a network of the biodiversity resource as a whole.





Benefits of Biodiversity

Ecosystem Services

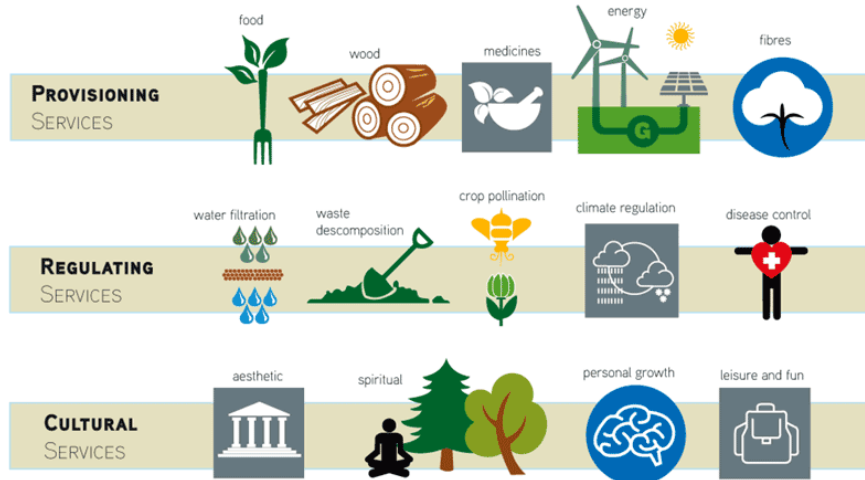


Ecosystem Services



Supporting= Functions
 Provisioning = Products
 Regulating= Results
 Cultural= Benefits

WHAT DO WE GET FROM ECOSYSTEMS?



Urban Tree Benefits



How much is our local ecosystem worth?



Case Study 1:
530,000 Trees in Tawe
catchment:

- Intercept 252m litres of water/yr = £339,000 in sewerage charges avoided
- Remove 136 tonnes pollutants/year = £715,500 saving in damage costs
- Remove 3000 tonnes of carbon/year worth £671,000
- Store 102,000 tonnes of carbon/year worth £23.1million
- Have a Replacement value of £234 million
- Have an Asset value of £816 million
- Collective value to local economy £1.72million/year

(Source Forest research i-Tree Eco Study, 2014)



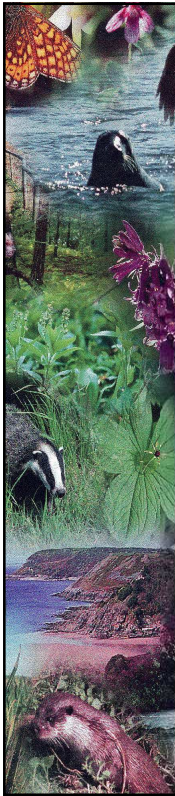
How much is our local ecosystem worth?



Case Study 2:
True Costs of Asset
Disposal

- Disposal of council land for £1m to accommodate 40 dwellings
- Value per dwelling plot = £25,000
- No of large trees to be felled = 50
- Estimated lifetime value of trees = up to £78,000 each
- Estimated asset value of trees on site = up to £3.9m





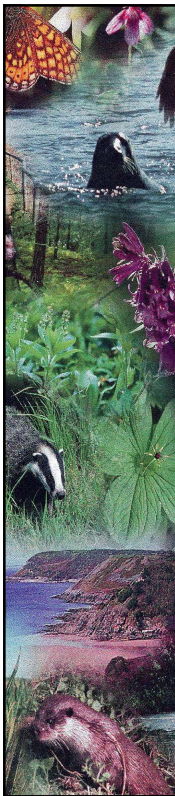
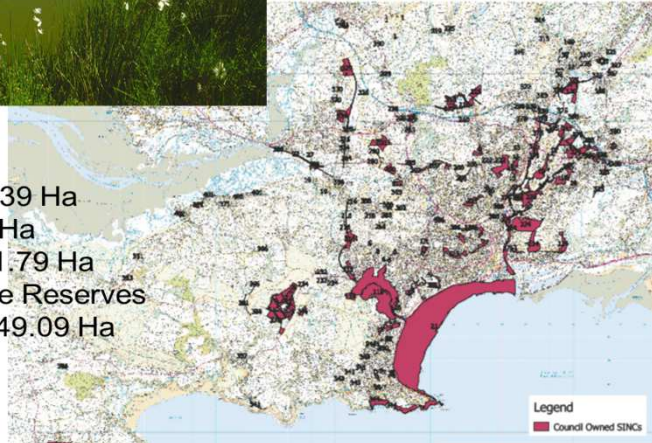
Objective 2: Safeguard species and habitats of principal importance and improve their management

- Understand our local biodiversity and how it can be enhanced; undertake surveys, seek expert advice
- Protect and enhance biodiversity on our own land
- Funding



Council owned

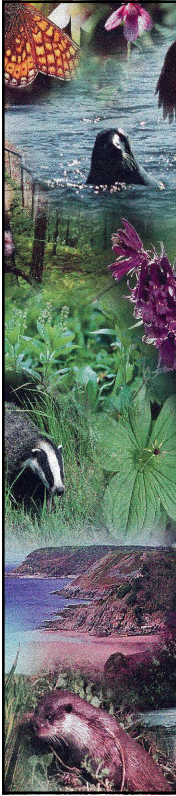
- Ramsar 15.39 Ha
- SAC 429.00 Ha
- 14 SSSI 961.79 Ha
- 6 Local Nature Reserves
- 98 SINC's 1849.09 Ha



Objective 3: Increase the resilience of our natural environment by restoring degraded habitats and habitat creation

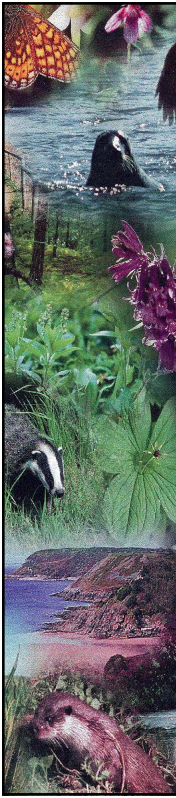
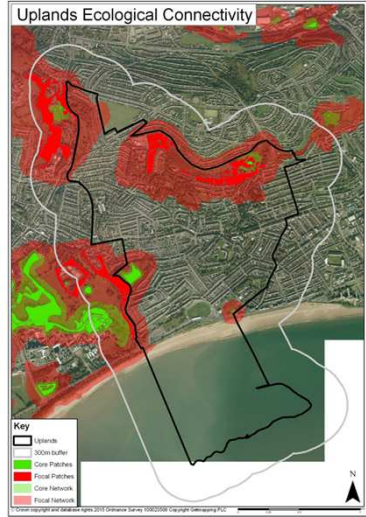
- Green Infrastructure and Habitat creation
 - Action for pollinators- wildflower meadows, Bee Lines
 - Ponds





Objective 3: Increase the resilience of our natural environment by restoring degraded habitats and habitat creation

- Restore – restore degraded habitats – improve condition, increase extent, improve diversity and increasing connectivity
- Tree/woodland planting
- Control INNS

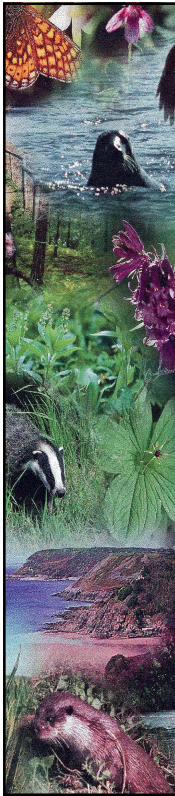


Objective 4: Tackle key pressures on species and habitats

Increase awareness, engagement and participation

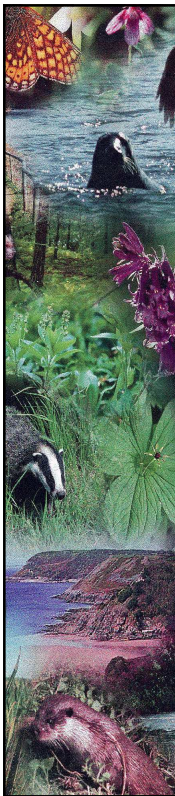
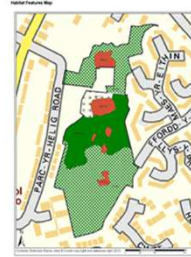
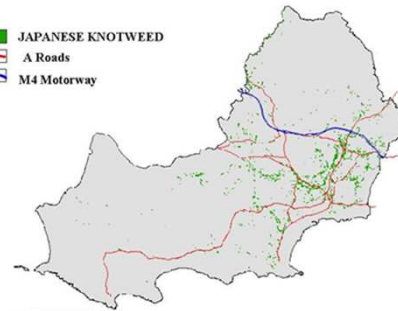
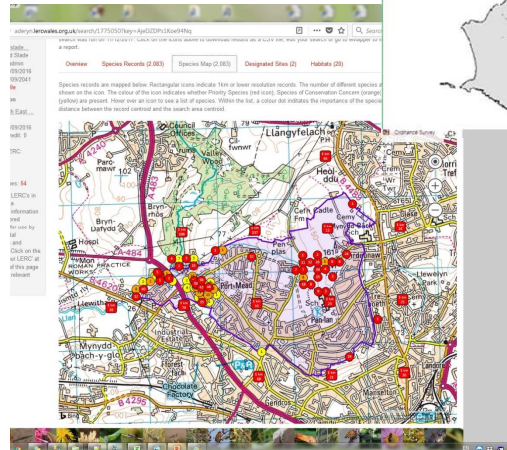
- Friends of Parks
- Volunteer engagement
- Events
- Interpretation
- Schools
- Bishop's Wood Centre





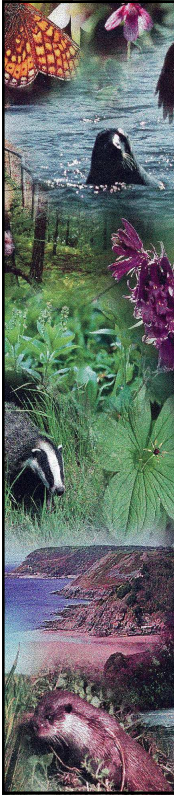
Objective 5: Improve our evidence, understanding and monitoring

- Survey Data
- SEWBREC
- Wild about your Ward
- INNS



Objective 6: Put in place a framework of governance and support for delivery

- Corporate Biodiversity Plan
- Well Being Plan PSB –Working with Nature Objective
- Swansea Corporate Plan - Current Priorities
 - Safeguarding vulnerable people
 - Improving pupil attainment
 - Creating a vibrant and viable city and economy
 - Tackling poverty
 - Building sustainable communities
- Service Plans
- Policy Commitments



ISSUES/CHALLENGES

- **Insufficient resource capacity (staff and funding) to meet legislative requirements and manage the Council's biodiversity estate**
- **Risk of loss of expertise and continuity due to temporary staffing, loss of grant aid etc.**
- **Lack of awareness, understanding and communication**
- **Land disposal and pressure for development**
- **Balancing competing/conflicting priorities**
- **BREXIT (potentially)**
- **Climate Change**
- **Invasive non-native species**
- **Inequalities in Access to natural Environment**
- **Nature deficit disorder**