

Deddf yr Amgylchedd (Cymru) 2016 Rhan 1 – Adran 6
Dyletswydd Bioamrywiaeth a Chydnerthedd Ecosystemau Adroddiad
CYNGOR BWRDEISTREF SIROL MERTHYR TUDFUL

Environment (Wales) Act 2016 Part 1 – Section 6
The Biodiversity and Resilience of Ecosystems Duty Report
MERTHYR TYDFIL COUNTY BOROUGH COUNCIL



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1. Introduction & Context

- The [State of Natural Resources Report](#) (SoNaRR, 2016) published by Natural Resources Wales (NRW) demonstrates continuing biodiversity loss in Wales. The report states that the value of natural resources and ecosystems is not afforded appropriate consideration in various decision-making processes. The Environment (Wales) Act 2016, offers an opportunity to address these issues and take a more integrated approach to better manage our natural resources.
- The Environment (Wales) Act 2016 (Section 6, Subsection 1) introduced an enhanced biodiversity and resilience of ecosystems duty (the S6 duty) for public authorities in the exercise of their functions in relation to Wales.
- The S6 duty – as a public authority MTCBC must seek to maintain and enhance biodiversity wherever possible within the proper exercise of their functions and in doing so, seek to promote the resilience of ecosystems.
- Merthyr Tydfil County Borough Council (MTCBC) is an organisation that:
 - owns or occupies office buildings
 - owns, occupies or manages land and its own buildings and grounds
 - owns or manages land beyond its own grounds
 - has functions connected with the above that are directly connected to biodiversity and/or land management
- MTCBC has a legal duty under the Well-being of Future Generations (Wales) Act 2015 and has published a [Statement of Wellbeing](#), is a statutory member of the [Cwm Taf Public Services Board](#) and has published a [Focus on the Future Plan](#).
- The MTCBC Countryside Team consists of a Specialist Advisor Ecologist (post provides a planning ecology function for MTCBC), a Biodiversity Officer (organises and chairs the Merthyr Tydfil Nature Partnership), a Landscape Architect and a GIS and Spatial Data Officer.
- There is an aim to embed corporate policies, objectives, performance indicators across departments. Reporting S6 activities, using data from all departments is co-ordinated by the Ecologist. See Objective 1 in the Action Report section below for further details.
- Maintaining and enhancing biodiversity is also included, or is due to be included, in other MTCBC plans and documents:
 - [MERTHYR TYDFIL NATURE RECOVERY ACTION PLAN 2019-2024](#).
 - NB there have been three annual reviews of the actions in this document (2020, 2021, 2022)
 - [MERTHYR TYDFIL OPEN SPACE STRATEGY 2016](#).
 - METHOD STATEMENT PROTECTION OF WILDLIFE SPECIES AND HABITATS IN RELATION TO ASH DIEBACK MANAGEMENT 2021.
 - [FOCUS ON THE FUTURE. Well-being in our Community 2017-2022](#).
 - [FIRST REPLACEMENT LOCAL DEVELOPMENT PLAN 2016-2031](#).
 - CORPORATE ASSET MANAGEMENT PLAN – updated plan to be adopted late 2022 / early 2023.
 - CORPORATE PLAN – updated document planned for 2023.

2. Highlights, Key Outcomes & Issues

- All departments are now engaged in contributing to the Council's S6 duty.
- The *Integrated Impact Assessment* (IIA) is a document used at the outset of any Council proposals, initiatives or projects to help shape the activity and must accompany all reports to Council/Cabinet¹. The IIA now includes a section on the Section 6 duty. As such, the Maintenance and Enhancement of Biodiversity and Resilience of Ecosystems is considered as part of every decision made by the Cabinet and Full Council.
- 14 sites have been chosen within MTCBC as priority Biodiversity sites (see Case study 1), meaning a fundamental shift away from intensive grassland management and towards a management regime aimed at increasing biodiversity. Since the new grassland management regime has been used, >200 species of flora and >50 species of fauna have been recorded. The previous grassland regime would not have allowed these species of flora to grow and flower and therefore attract and sustain the species of fauna.
- Awareness of the Section 6 duty has led to inclusion of the principles of the duty being proposed to be included in upcoming wide-ranging MTBC plans, for example, the Corporate Asset Management Plan (updated plan to be adopted late 2022 / early 2023) and the Corporate Plan (updated document planned for 2023).
- Problems with fulfilling the Section 6 duty included a lack of resources (both staff and funding) to undertake projects. This has been partially negated by the influx of funding opportunities provided by Welsh Government, for example, 'Local Places for Nature' fund and 'Local Nature Partnership Challenge' fund.

¹ The IIA is an internal document, but is available upon request. Please contact Equalities@merthyr.gov.uk for a copy.

3. Action Report

Objective 1: Engage and support participation and understanding to embed biodiversity throughout decision-making at all levels

- Biodiversity is already embedded within higher-level decision-making. Examples include:
 - Within policy - the adoption of the First Replacement Local Development Plan 2016-2031.
 - Within the Council's planning system (see also Objective 2, page 5). In support of this, the most recent Planning Policy Wales (Edition 11, February 2021) describes the planning system as having a key role to play in reversing the decline in biodiversity and increasing the resilience of ecosystems (in line with the Environment (Wales) Act 2016). Planning Policy Wales (2021) is supplemented by Technical Advice Note (TAN) 5 - Nature Conservation and Planning 2009.
 - Within the Council's 'Integrated Impact Assessment (IIA). This has been produced in line with its duties under the Well-being of Future Generations (Wales) Act 2015. The IIA must be used at the outset of a proposal/initiative/project to help shape the activity from its inception and must accompany all reports to Council/Cabinet. Section 7 of the IIA deals with 'Biodiversity and Resilience of Ecosystems. As such, the Biodiversity and Resilience of Ecosystems duty is considered as part of every decision made by the Cabinet and Full Council.
- Other examples of upcoming initiatives include:
 - A replacement Corporate Asset Management Plan is due to be adopted by MTCBC in late 2022 / early 2023 – the replacement plan will include specific actions and references, not only, to the Environment (Wales) Act 2016, but also to a range of other wildlife-related legislation and both national and local planning policy.
 - An update to the Council's Corporate Plan is currently being drawn up following public consultation. Biodiversity will have a high priority within the Corporate Plan (alongside Decarbonisation). This is planned to be adopted in the early part of 2023.
- In addition:
 - Council Officers in departments across the Council have been contacted on an annual basis to raise awareness of the Environment (Wales) Act 2016 and explain the S6 duty. Where required, advice has been provided to help link the functions of departments with biodiversity and to devise actions that will contribute to its maintenance and enhancement.
 - Each department has produced details and evidence of the actions they have taken since the Act came into effect in 2016 and in every year since the first Section 6 Plan was published (January 2020).
 - A number of sessions and workshops have been held for Cabinet and Councillors providing training regarding the Maintenance and Enhancement of Biodiversity and the Resilience of Ecosystems.

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

Planning

- The planning process, in line with Planning Policy Wales (Edition 11), has a key role to play in helping MTCBC to reverse the decline in biodiversity and increase the resilience of ecosystems within the County Borough.
- The presence of a protected species and habitats under:
 - European legislation (Conservation of Habitats and Species Regulations 2017, as amended)
 - UK legislation (Wildlife and Countryside Act – WACA – 1981, as amended)
 - Section 7 of the Environment (Wales) Act 2016

is a material consideration when a planning authority is evaluating a development proposal which, if undertaken, would be likely to result in disturbance or harm to the species or its habitat. The aim is to ensure that the range and population of the species is sustained.

- Developers will be required to undertake all relevant protected species ecological survey work on development sites. This will inform appropriate mitigation and compensation measures where protected species and / or habitats are impacted.

Designated sites

- Important areas of nature conservation value have been statutorily designated within the County Borough. The statutory designation of a site does not necessarily prevent development; however, the proposals must be assessed to ensure the impacts on its designated features are fully understood. Development will be refused where there are adverse impacts on the features for which a site has been designated.
- Statutorily designated sites will be protected from damage and deterioration with their important features conserved and enhanced through appropriate management.
- SSSIs are of national importance. WACA 1981 (as amended) places a duty on public bodies (including planning authorities) to further the conservation and enhancement of a SSSI's designated features. There is a presumption against development likely to damage a SSSI. MTCBC will give notice to NRW should any proposed development be likely to damage the designated features of a SSSI and will take account of the advice provided. There are two SSSIs found within MTCBC - Cwm Glo a Glyndyrys and Cwm Taf Fechan Woodlands.
- Non-statutory designated sites carry less weight than statutory designated sites, however, they can make an important contribution to the maintenance and enhancement of biodiversity and the resilience of ecosystems. Prior to authorising development likely to damage a local wildlife designation, the Planning Department of MTCBC will consult the Council's Ecologist. Assessments will consider protected species and / or habitats on the Section 7 lists. Where a proposed scheme will have no impacts on the features of a non-statutorily designated site, development is not precluded.
- There are currently 64 Sites of Importance for Nature Conservation (SINCs) and one Local Nature Reserve (LNR) within Merthyr Tydfil County Borough.

Other

- Land management undertaken by landowners and leaseholders can be positively influenced by the provision of support and advice and through joint working with voluntary sector. In so doing, MTCBC can improve ecosystem resilience within the County Borough.

Example 1

Taf Fechan Local Nature Reserve: The Wildlife Trust of South & West Wales leases and manages Taf Fechan LNR in the north of the County Borough. It is in the process of updating the lease and making amendments to the boundaries of the reserve. In addition, a management programme is being drawn up by the Wildlife Trust to inform management of the reserve in the coming years. The LPA Ecologist has reviewed the plan and offered comments/suggestions for the final draft.

Example 2

Grazing Licences: in 2021, a new clause was added to licence agreements designed to help protect biodiversity (for example, ensuring correct stocking densities to avoid overgrazing, animals being removed in wet conditions to avoid poaching and destruction of the sward, no use of artificial fertilisers or herbicides, dung removal, no chain harrowing during vulnerable times for ground-nesting birds).

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

- Sites within local authority ownership, for example, prior to being released are consulted on internally within Council departments and with Councillors to identify and manage wellbeing, community use, flood risk management, minimising the impacts of pollutants, biodiversity enhancement, ecological connectivity and ecosystem resilience.
- In addition, on sites within local authority ownership, MTCBC seek to enhance the capacity of natural resources to provide essential ecosystem services, for example, water management, climate regulation, pollution mitigation, wellbeing enhancement and environmental enhancement.
- Case study 1 concerns changing the grass cutting regime on specific sites owned by MTCBC with the aim of increasing biodiversity – see Case Study 1 below.

Case Study 1

BIODIVERSITY SITES

In 2020, five areas of grassland totalling 2.44ha were chosen as priority biodiversity areas, meaning a fundamental shift away from intensive grassland management and towards a management regime aimed at increasing biodiversity. NB previously, these sites were cut multiple times each year without removal of the arisings. The change in management saw a reduction in the number of cuts down to just one cut each year, crucially with arisings removed.

In 2020, funding was secured by the MTCBC Countryside Team from The National Heritage Fund and Welsh Government’s new grant programme ‘Local Places for Nature’. The funding was used to purchase a tractor-mounted cut-and-collect machine (Amazone Smartcut 2100).

In 2021, the five sites were cut just once with the arisings collected. Information boards have been placed at each of the five sites explaining the reasons for the change in management.

Again in 2021, a further nine smaller biodiversity sites, totalling 1.13ha, were chosen to expand the scheme. Each of the smaller sites was given a specially commissioned ‘bee’ sign to demarcate them as biodiversity areas. These nine sites were also cut only once in 2021: they were strimmed, with arisings manually raked off. MTCBC took receipt of a smaller cut & collect machine in early 2022 (funding again from The National Heritage Fund and Welsh Government’s new grant programme ‘Local Places for Nature’), which will be capable of dealing with these smaller sites going forward.

Ecological surveys of all 14 sites were undertaken by the LPA Ecologist in 2021 to form baseline data and to inform the management of each site.

Main headlines

- >200 species of flora and >50 species of fauna were recorded
- The previous intensive management regime would not have allowed these species of flora to grow and flower and therefore attract and sustain the species of fauna.

NB this already represents a success on these sites with biodiversity clearly shown to have been enhanced. Based on this baseline survey work, some initial management prescriptions were passed on to the Parks Department for implementation. Moving forwards, the baseline data will be used to show improvements in biodiversity taking place and to adjust the new grassland management regime as appropriate on a site-by-site basis.

So the total area with a new management regime for biodiversity has increased by 46% between 2020 and 2021 (see Table below).

Year	2020	2021	TOTAL
Biodiversity Area Dimensions (hectares)	2.44	1.13	3.57

The aim is to expand the change in grassland management in more areas across the County Borough.

- Case study 2 concerns the transformation of a disused tennis court into a type of physic garden.

Case study 2

NATURE'S GIFT GARDEN

'Changing grey to green through working with nature'

As a continuation of investment in public parks and gardens, the former disused tennis court in Troedyrhiw Park was identified as a space that offered an opportunity to transform the area from tarmac, to a green oasis of useful plants. In 2020, funding was secured by the MTCBC Countryside Team the Welsh Government - Local Nature Partnership Fund in order to achieve this.

Being a well-used public open space, the park lacked floral diversity and educational opportunities. The area was set out along the lines of a traditional physic garden with a twist. The poor quality of the material beneath the tarmacadam, while not found to be contaminated, contained a mixture of shales, ashes, stone, brick and a degree of domestic refuse in the form of bottles, shoes etc. Contained beds were created using aluminium edgings and re-cycled green waste was incorporated to provide some organic content for the plants. Soil fungi were added to improve the health of the growing conditions. The geometrically designed beds contained plants in the following groupings:

- Medicinal plants
- Culinary herbs
- Edible plants
- Drought tolerant plants
- Colour grouped native wildflowers for pollinators

Seating was introduced to follow the shape of the design, interpretation panels were added and a circular structure incorporated, paid for from the Winter of Well Being (WG) fund. Specialist plants were sourced from all over the UK and some were even grown by our own staff from specialist seed companies. Volunteers helped to stone pick, weed, prune and plant the selection of plants. We have received countless complimentary comments from local park users. Children like to watch the hoverflies on the wild carrots and the bees on the borage. The blackcurrants and raspberries were quickly gobbled up! The scents from a wide range of aromatic herbs is regularly enjoyed by old and young alike. Colour is never far away. The garden is bordered by rosemary and cistus which underplant the pleached hornbeams. Our challenge remains, to set up a group of interested local people to help look after the space.



Clockwise from left to right, the drought garden, medicinal plants, interpretation panel, white wild flowers.

- Case study 3 describes the creation of an accessible wetland habitat resource.

Case study 3

THE MARSH FIELD, PRINCE CHARLES HOSPITAL

'Shaping Landscapes, for Wildlife and Well-being'

Identified as a Priority Open Space within the Merthyr Tydfil Open Space Strategy Action Plan, this open space was put forward in a bid for the Welsh Government - Local Nature Partnership Challenge Fund.

The purpose of the project was to bring people closer to nature and enhance the opportunities for wildlife within the Gurnos ward, which is urban in character and located just north of Merthyr Tydfil town centre. Given the site size, its potential and strategic location the development addresses pent up demand by providing a wider opportunity for by local people, users of the hospital as a public service and staff for recreational benefit.

Three wetlands were created, two improved access points, and new footpath link that takes in the wet meadows and wetlands, seating area and stone wall entrance features. The site also provides an orchard, small allotment plots, amenity tree planting, native tree and shrub planting and enhanced wildflower plug

planting. Two information panels have been installed and a third telling the history of the site is due to be installed shortly. The entrance feature panel was designed by local artist Andy O'Rourke (Malarky Arts) and students from Pen y dre school. The orchard and wildflower plugs were planted with volunteers from the Gurnos Mens Group. Early consultation was carried out, a Client group formed from the hospital and Merthyr Valley Homes representatives, local ward members and staff from the community hub. A site walkabout with local residents took place in the summer of 2021 and work commenced in February 2022. The site is substantially complete and ward members have received much positive feedback from local residents.



Clockwise from left to right, entrance wall panel, wetlands under construction, allotments plots, panel about insect life and footpaths.

- Case study 4 outlines the creation of a mini wetland/nature reserve on a waterlogged and therefore unusable area of land.

Case study 4

TRELEWIS WETLAND

Summary: the project created a mini nature reserve, wetland / bog with bird hides, walkways extended access and usage of an under-utilised piece of land in Trelewis Park that formerly contained disused play equipment and was too wet to use. Baseline data for species will be used to help measure the number of species attracted as a consequence of the development. The site will be a 'hot spot for nature' and convert an area of waterlogged, seepage and clay ground to an area that attenuates water as marsh, open water thereby diversifying the current landscape value of the open space.



- In addition, there are further projects planned for 2023. See examples in the boxes below.

Case study 5

DOWLAIS HIGH STREET GREEN GATEWAY

Summary: New green space created in public domain from existing tarmacadam in the carriageway enhancing aesthetic, pollinator opportunities and resilience reducing flooding, creating rain gardens. Envelope includes adjacent verges and roundabouts.

Funding for the project has been secured by the MTCBC Countryside Team from the Welsh Government Local Places for Nature Challenge Fund.

The aims of the project are as follows:

- **Creation of floral diversity on embankments and roundabouts:** the existing embankments and roundabouts remain low in floral diversity. The proposals will significantly improve the grassland species, enable the planting of flowering, fruiting and berry trees and shrubs as a food resource for birds and small mammals.
- **Increase in the numbers of street trees:** following location of service utilities within the existing carriageway, street trees will be planted at specific available locations within the central carriageway, where previously there has only been hard surfacing. Tree species will be selected clones of native species chosen for their regular form and suitability to prevent conflict with road users.
- **Improved connectivity and habitat along highway:** as cover to trees planted in the central reservation, ground cover species will be selected from native species to form a low maintenance ground level green space. Species will be selected for their visual characteristics and colour and form, making use also of native grasses and sedges that will be able to accommodate fluctuations in temperature and ground moisture levels.
- **Increase in net green areas to advantage pollinator friendly species:** in total the proposals will increase the net area of pollinator friendly species. These species will be flowering native herbs as the majority of this increase, although trees and shrubs will also be selected that provide a wider range of nectar sources.
- **Improved air quality and water management:** air quality, noise pollution and flooding are all threat to the local environment. Trees and shrubs will trap airborne particulates, remove carbon dioxide and nitrogen through fixation, reduce noise levels through planting in the central reservation, water quality will be improved through partial filtration and slowing down the rate of run off through the creation of a retro fit Sustainable Urban Drainage system through the installation of rain gardens. Adaptability to wet and dry condition will create a range of habitat conditions for invertebrates.
- **Restoring civic pride:** as an approach to Dowlais from the south west and as an interface with Penydarren the proposals will lift the visual appearance and appeal of the area as a whole. Investment and improvements to green infrastructure are now more widely recognised as an important response to the changing climate and offer a beacon of hope and positivity to the communities this proposals will affect. The scheme will also serve as catalyst for future initiatives to raise the quality of the local environment.

- Further examples are shown in Box 1 below.

Box 1

- **Abercanaid Riverside Public Open Space**

- The creation of an enhanced entrance to the Abercanaid Riverside Open Space. Complete with interpretation of the landscape, ecology and history of the River Taff at this point. Existing grassland to be further diversified, through the introduction of native bulbs beneath existing trees.
- Taff riverside edge to be surveyed and treated for invasive vegetation (INNS). A meadow landscape augmented with additional wildflower plugs, additional tree planting, introduction of living willow structure to evoke the shape of salmon (*Salmo salar*) as part of a nature based arts trail running the length of the open space.

- **Taff River Crossing**

- The lifeline footbridge that links the communities of Abercanaid and Pentrebach, will be further enhanced on the approaches. Such work will include where possible the introduction of street trees and the control of invasive non-native species within the banks of this section of the river.
- Introduced signage, interpretation and nature base art embellishment to the footbridge as part of the interpretation of the river story.

- **Abercanaid Community School**



- A re-imagining of the external school environment. Abercanaid School was constructed at the turn of the century as a modern community school. However, the footprint of the school site is very constrained space it remains a school environment devoid of access to nature within its environs. The project would, in its first phase introduce green infrastructure into an environment that is lacking. The project will provide food growing opportunities, a green wall (see below), boundary treatments and other initiatives where practicalities and space permits.

- **Abercanaid Riverside Recreation Ground**

- Natural play, tree planting in amenity green space extension of circular nature based arts trail utilising riverine sculptures.
- The existing recreation ground to the south of the school consists principally a playing field and associated formal playground. In order to improve the quality of this space it will be necessary to introduce boundary planting and extend the play offer to incorporate other themes. Access to existing watercourse on adjacent land as an educational resource. The school are enthusiastic about using the area within the environmental curriculum, although the site would require investment and design to accommodate this.'

- Case study 6 outlines a scheme designed to correct the continued degradation of an online lake system due to the build-up of silt.

Case study 6

RESTORE THE RIVER



The Welsh Government's Rural Communities – Rural Development Programme 2014-2020 Sustainable Management Scheme (funded by the European Agricultural Fund for Rural Development and the Welsh Government). In 2019, the Council agreed to accept funding towards total project costs of £507,287 for the restoration of Taf Bargod river catchment landscape.

The scheme was completed in 2022, and provided new fencing, tree planting (contributing to the reconnection of fragmented habitats), river bank restoration, anti-erosion initiatives and measures undertaken to regulate the flow of water through the on-line lakes in Parc Taf Bargod effectively making it an off-line system in an attempt to prevent the build-up of silt within the lakes. These measures will help to maintain and enhance biodiversity and build resistance into local ecosystems.

- Case study 7 describes a project aimed at creating community spaces and environmental improvements in selected park settings across MTCB.

Case study 7

PARKS ALIVE

In October 2019, the Countryside Team within the Planning Department of MTCBC were successful in a bid for grant funding from The Landfill Disposals Tax Communities Scheme (a new Welsh Government funding programme managed by Wales Council for Voluntary Action). A total of £49,999 was awarded to fund a nationally significant project. The project was focussed within a 'Wider Environmental Enhancements' theme with crossover into two other themes ('Biodiversity' and 'Waste Minimisation and the Diversion of Waste from Landfill').

The project, entitled 'Parks Alive', is designed to create community spaces and wider environmental improvements within five selected Welfare Parks within the County Borough:

- THOMASTOWN PARK
- TROEDYRHIW PARK
- ABERFAN PARK
- TREHARRIS PARK
- TRELEWIS PARK

The project will run from November 2019 to September 2021 and will be managed by the Countryside Team in association with the Parks Department.

Project elements included:

- Detailed consultations undertaken with the communities associated with each park.
- A programme of events/activities to deliver (where feasible) on the aspirations of each community for their own park.
- Activities designed to suit the skills and experience of each community.

The project will aimed to:

- Achieve a greater sense of pride in the five Welfare Parks (originally created for and by local communities).
- Re-imagine the relevance of the parks to local people.
- Renew lost heritage
- Share skills
- Address green infrastructure and biodiversity issues
- Ultimately, establish either 'Parks Buddies' or 'Friends of parks' groups for each park.

Examples of the outcomes for each park can be seen below:

- THOMASTOWN PARK

- Shrubs planted at park entrance;
- New welcome sign designed and installed;
- Area around the fountain planted with plants to attract pollinators;
- Orchard planted using trees locally grafted from Welsh provenance varieties;
- *A Friends of Thomastown Park* group formed;
- Event day held (hellebores, trees and shrubs were planted at the rockery area).



Figure: planting at the rockery area in Thomastown Park

- TROEDYRHIW PARK

- Entrance sign (designed by a local school pupil) installed;
- Raised planters planted up by local school children (e.g., chillies, chard, kale, pumpkins, squashes and marigolds);
- Long flowering Icelandic poppies grown on and planted at the front of the war memorial.

- ABERFAN PARK

- Entrance sign designed & installed;
- Tree management to make the site safe & allow in more light in. Resultant chippings & timber board edging utilised to create a footpath across the site;
- Hedging planted to replace the removal of conifer trees;
- Approximately three quarters of the site cleared of bramble and chippings to create a meadow;
- Yellow rattle sown in bare patches to help to reduce growth of vigorous grass species etc;
- Orchard trees grafted from local provenance stock still to be planted;
- Forest garden fruiting shrubs delivered awaiting planting;
- Former bowling green gates painted;
- Butterfly interpretation board installed;
- Regular weekly volunteer group now in place.



Figure: New entrance sign at Aberfan Park

- TRELEWIS PARK

- Pond life interpretation board installed;
- Recycled plastic finger post installed at the entrance;
- Native trees planted (rowan, apple, cherry) to attract both bird life and insect pollinators;
- A native species hedgerow planted;
- Willow dome installed for natural play.



Figure: Willow structure installed at Trelewis park

- TREHARRIS PARK

- Entrance sign installed;
- Butterfly/woodland/historic interpretation panels installed;
- An area of brambles cleared to create an area for ferns;
- Former path uncovered and reinstated;
- Extensive growing on & planting of perennials & bulbs at the main park entrance;
- Invasive Non-Native Species (INNS) - Japanese Knotweed, Himalayan Balsam, Himalayan Knotweed & montbretia have been cleared & are being controlled.
- Woodland management and habitat pile creation;
- Local volunteer support established.



Figure 1: New entrance sign at Treharris Park



Figure 2: INNS clearance work at Treharris Park

- Case study 8 some tree planting initiatives undertaken across MTCB.

Case study 8

TREE PLANTING

In 2019, Wales Council for Voluntary Action (WCVA) was successful in its LNP Cymru bid to Welsh Government. As a partner in the bid, MTCBC received a project budget of £7,000 p.a. over three years (with inflationary increases in years 2 and 3). As part of National Tree Planting Week (23rd November – 1st December 2019) and The Big Climate Fightback #EveryTreeCounts, the Countryside Team within the Planning Department committed to planting 1120 native trees on three selected Open Spaces across the County Borough. A proportion of the £7K LNP Cymru Project funding was used to purchase the trees:

- Ifor Tip/The Cwm Dowlais - the site (a former tip) contains both native and non-native species from earlier land reclamation projects attempting to create an amenity landscape. Tree planting is designed to replace existing grassland areas (no longer managed) and increase the hectares of tree cover in the Dowlais ward. Species will be a mixture of beech, elm, hazel, holly, and oak sp. The ultimate goal is to connect the Morlais Valley to the north with the Newland Park Reclamation Scheme (to the south) through inter-linked and continuous tree cover. Two blocks of trees were planted with the local school children.
- Treharris Park – beech trees planted in what was formerly beech oak woodland in order to suppress invasive species that cannot tolerate the dense and complete shade cast by the beech tree canopy.
- Nant Llwynog - former colliery site was featureless raw shale in 2000, it is now a haven for wildlife after the gradual maturation of the broadleaved deciduous woodland blocks that were planted as part of the original scheme. Connectivity of the woodland blocks on this Priority Open Space has been improved by the planting of further native broadleaved trees between the blocks to provide linked woodland cover. Planting was undertaken with local school children.

- On sites not under local authority ownership, and where development is proposed for these sites, the planning process will play a role in helping MTCBC to reverse the decline in biodiversity and increase the resilience of ecosystems.
- In general MTCBC plays, and will continue to play, a strategic role in supporting and contributing to landscape scale projects. This is essential for maximising the maintenance and enhancement of biodiversity within ecosystems across the County Borough and therefore improving ecosystem resilience. To date, progress has been made through the allocation of Rural Development Grant funds for habitat restoration and community participation projects in partnership with voluntary sector organisations (e.g., South & West Wales Wildlife Trust, Coed Lleol, Keep Wales Tidy, South East Wales Rivers Trust, Merthyr & Gelligaer Commoners Association and the British Institute for Geological Conservation).
- MTCBC is also currently overseeing the strategic management of priority public Open Spaces, via MTCBC Open Spaces Strategy, Priority Open Space Management Planning and through developing a Green Infrastructure Plan.
- Many of the above actions have been developed, promoted and encouraged through the Merthyr Tydfil Biodiversity Partnership (MTBP). The role of MTBP in continuing to bring together key organisations and provide direction for the Local Authority in delivery of the Environment (Wales) Act 2016 and Well-being of Future Generations Act 2015 will continue to be essential for successful outcomes.

Area Statements

- The Environment (Wales) Act 2016 made it a duty for Natural Resources Wales (NRW) to produce ‘Area Statements’. The statements will cover a total of seven areas in Wales:
 - Marine
 - Mid-Wales
 - North East Wales
 - North West Wales
 - South East Wales
 - **South Wales Central**
 - South West Wales
- Merthyr Tydfil, along with Rhondda Cynon Taf, Bridgend and Cardiff make up the **South Wales Central** area. This area includes:
 - The moorland fringes of the Brecon Beacons National Park
 - The South Wales valleys of the Rhondda, Cynon and Taf
 - The gentle lowlands of Bridgend and the Vale of Glamorgan
 - The cliffs of the Glamorgan Heritage Coast
 - Cardiff capital of Wales
- In April 2022, the ecosystem profiles for the **South Wales Central** area were published by NRW. The following are relevant to MTCB:

Ecosystem Profile	Summary of top priorities	Examples of actions for MTCB
Freshwater	<ol style="list-style-type: none"> 1. Building resilience throughout river catchments – restoring natural processes from the headwaters to the river mouth. 2. Focus on the urban environment, restoring physically modified watercourses, replicating natural processes and nature-based solutions for improved water quality and quantity. 3. The freshwater environment is valued and considered on a catchment scale in decision making. Impacts on water are better considered through decision making and opportunities for water to be integrated and built into design and regeneration. 4. Education and engagement with communities and individuals to better understand and value the water environment, to be preventative and restorative in their individual actions. 	<p style="text-align: center;">See Case study 6 (RESTORE THE RIVER)</p>

Grassland	<ol style="list-style-type: none"> 1. Enabling appropriate grassland management to improve condition 2. Create resilient ecological networks to extend, connect and buffer grassland sites 3. Connecting people with grasslands through those in urban areas, road verges and engagement about the benefits of grasslands. 	<p>See Case Study 1 (BIODIVERSITY SITES)</p>
Peatlands	<ol style="list-style-type: none"> 1. Peatlands in South Central and their hydrological integrity are protected and restored, to support ecosystem function, restoration success and to support wider habitat connectivity. 2. Map and prioritise peatland habitats for restoration as part of the South Central landscape. 3. Peatlands are part of a restored sustainable landscape - Restoration and management must be adequately funded and imbedded into land management planning to facilitate long term management of peatlands, to maximise the benefits possible from a resilient peatland ecosystem and to mitigate against pressures such as wildfire and nitrogen deposition. 	<p>According to the Geology of Britain map viewer, there are limited examples of peatland that occur within the south of MTCB. Further investigation is required to inform any actions that would meet the priorities of the ecosystem profiles.</p>
Urban	<p>Yet to be published</p>	<p>See Case study 5 (DOWLAIS HIGH STREET GREEN GATEWAY)</p>
Valley sides	<ol style="list-style-type: none"> 1. Maintain habitat extent through appropriate protection and reduction of pressures. 2. Create Resilient Ecological Networks to build extent and connectivity. 3. Further understand the natural processes of this ecosystem, through understanding species diversity and habitat dynamics, to maintain and improve condition. 	<p>Ffridd is a habitat type existing throughout Wales & found between the managed lowlands & the uplands (altitudes between 100m-450m). It is an extremely diverse & complex mosaic of habitats consisting of heath, bracken, acid grassland, woodland, coal spoil and rhôs pasture. Ffridd runs for mile upon mile along the main valleys of the County Borough and is therefore important for ecological connectivity. It is capable of supporting a wide range of species: birds such as tree pipits, yellowhammers & ring ouzels; butterflies such as pearl-bordered fritillary & dark green fritillary; vascular plants such as globeflower & wood bitter-vetch. Ffridd plays an important role in</p>

		<p>connecting habitats & increasing the resilience of ecosystems in terms of disturbance and change.</p> <p>Example Y Graig SINC – is one example of ffridd habitat in Merthyr, however, it has become dominated by bracken. Paths have been created through the bracken habitat using a ‘bracken bruiser’ (supplied & operated by South Wales Fire & Rescue Service) in order to open up the habitat to encourage bilberry & other heathland species.</p>
Woodlands	<ol style="list-style-type: none"> 1. Focus on enhancing and restoring our irreplaceable Ancient Semi-Natural Woodland. 2. Natural colonisation and appropriate planting in and around existing semi-natural woodlands to enhance and buffer woodland patches would enhance connectivity. 3. Preserving existing large trees and woodland, encouraging woodland regeneration and colonisation (essential for building ecosystem resilience and storing and capturing carbon). 	<p>See Case study 8 (TREE PLANTING)</p>

Green Infrastructure (GI) Assessment and Strategy

- MTCBC is still in the process of assessing the GI network within MTCB to inform the development of a GI assessment and strategy to include an interactive map of the current state of GI in MTCB. This can then be used by all relevant departments (e.g., Planning, Engineering, Highways, Parks) as a resource for advice and decision-making.
- As part of this, MTCBC has access to the National Tree Map data (2016) as an ArcGIS layer. This alone demonstrates an excellent amount of tree cover in urban areas across the County Borough.
- The GI interactive map is planned to include ArcGIS layers that align with the six Ecosystem Profiles relevant to the Natural Resources Wales Area Statement for the South Central area. Namely:
 1. Woodland
 2. Grassland
 3. Valley sides
 4. Peatland
 5. Freshwater
 6. Urban

GI and the Planning System

- The planning process, in line with Planning Policy Wales (Edition 11), has a key role to play in helping MTCBC to protect and enhance green infrastructure features and networks. The built environment

will be enhanced by embedding green infrastructure into development at an early stage. This should include, for example:

- choosing the correct site in the first instance;
 - avoidance of unnecessary habitat damage/removal;
 - careful, appropriate and creative development scheme design
 - effective mitigation, compensation and enhancement measures.
- The requirements of and opportunities presented by a particular site will dictate the specific measures used to protect and enhance GI features and networks. Examples of the types of measures that could be used include: landscaping, green roofs, tree planting, SuDS schemes.

Sustainable Drainage Systems (SuDS)

- Traditionally, drainage systems are designed to remove surface rainwater as quickly as possible. Predominantly, water is directed into public sewers placing a significant burden on wastewater treatment works and during extreme storm events water will discharge through overflows, into watercourses and may result in flooding and pollution. An increase of impermeable surfaces in urban environments increases the volume of water flowing into sewers, further increasing flood and pollution risk. MTCBC has a total area of 58km² contained within Flood Risk Areas and the financial cost associated with flooding can be substantial.
- Sustainable Drainage Systems (SuDS) are designed to mimic natural drainage by retaining and filtering surface water and preventing the public sewer from becoming overwhelmed during storm events. Examples of SuDS can include green roofs, permeable paving and rain gardens.
- Since 7th January 2019, all new developments of more than a single dwelling house or where the construction footprint is 100m² or more has required Sustainable Drainage Systems (SuDS) for surface water (according to Schedule 3 of the Flood and Water Management Act 2010).
- These systems must be approved by MTCBC acting in its role as a SuDS Approval Body (SAB) prior to the commencement of construction.
- As a result of this, new opportunities to create biologically diverse water management have arisen. Good SuDS design can create shelter, food, foraging and breeding opportunities for a range of species and contribute to an increase in biodiversity within MTCB.
- The LPA Ecologist is consulted, where SuDS schemes are able to directly improve biodiversity where planting is used. For example, wet basins/ponds, naturalised swales, rain gardens etc

Objective 4: Tackle key pressures on species and habitats

- There are numerous examples of under pressure species and habitats within the County Borough. This is predominantly due to loss of habitat / loss of habitat connectivity as a consequence of the impacts of development on greenfield sites including both local and nationally protected nature conservation sites, climate change, invasive species, the misuse of land including fly-tipping.
- In order to alleviate these pressures a suite of actions have been, or will be, implemented including the following:
 - As mentioned previously, the planning process plays a major role in helping MTCBC, reverse the decline in biodiversity, increase the resilience of ecosystems and prevent or reduce impacts of development on protected nature conservations sites within MTCBC (see further details under the Objective 2). This will also have a positive influence on climate change, for example by removing CO₂ from the atmosphere through tree planting on development sites.
 - A contribution on tackling pressures on species and habitats in MTCB has also been made through the actions as outlined in Objective 3, for example in the following case studies:
 1. BIODIVERSITY SITES
 2. NATURE'S GIFT GARDEN
 3. THE MARSH FIELD, PRINCE CHARLES HOSPITAL
 4. TRELEWIS WETLAND

Other such schemes planned for 2023 includes the information in the Objective 3 case study 5 (DOWLAIS HIGH STREET GREEN GATEWAY) for example.

- Improvements in re-use, recycling and waste management processes. Examples include recycling of in-house ICT Department equipment and a range of resident campaigns and competitions (e.g., battery recycling competition, Christmas card recycling, electrical device recycling campaign).
- Pro-active and strategic management of invasive species on MTCBC land as undertaken by the Parks department.
- The Parks department has also, where possible reduced the use of pesticides and herbicides.
- Enforcement regarding land misuse. Examples include: unauthorised development; fly-tipping.
- Increasing the use of and participation in the outdoors by local residents, for example friends of groups in local Parks set up by the Countryside Team.
- Raising awareness within the Council and with the general public, promoting and implementing actions to reduce key pressures.
- The Welsh Government have an ambition for the public sector to be Carbon Neutral by 2030 in response to climate change. MTCBC are supporting this ambition by carrying out a number of Decarbonisation initiatives and projects that reduce the Carbon Emissions of its operations and impacts on Climate Change. Examples include:
 - Installation of Energy Efficiency measures in 32 council buildings via the Welsh Government REFIT Cymru framework.
 - Front line services now have a number of electric vehicles in operation, and MTCBC's Fleet strategy aims to support a transition to an all electric fleet by 2030.
 - The Countryside Team within the Council have committed to planting 1000s of trees in open spaces throughout the County Borough. Trees as well as, e.g., shrub species, grassland, etc naturally absorb carbon dioxide during photosynthesis, hence preservation of land is vital in the decarbonisation process.

- The Property Services Team are actively investigating the feasibility of building Net Zero Primary and Secondary Schools.
- Solar PV installed in Recycling Depots to reduce energy consumption and carbon emissions.
- Changes will be made with the aim of restoring habitats to a more natural and resilient state. This will focus on, but not be limited to, the safeguarding of Section 7 species and habitats. To achieve this objective MTCBC requires a better understanding of the specific pressures and how MTCBC is able to collaborate across services to deliver multiple benefits to the habitats and / or species involved; a major contribution to this aim will be achieved by developing an MTCBC Green Infrastructure Plan (for further details see – ‘Green Infrastructure Assessment and Strategy’).

Objective 5: Improve our evidence, understanding and monitoring

- Merthyr Tydfil County Borough Council has relatively good baseline data for species and habitats. The data is subject to regular updates. Close relationships with all levels of educational institutions and voluntary sector organisations will help to maintain up to date information. The following examples of local evidence will be expanded and re-visited:

- Service Level Agreement with the South East Wales Biodiversity Records Centre (SEWBReC) provides up to date data records for protected species and protected sites in MTCBC. The information is accessed via Aderyn - a Local Environmental Records Centres (LERC) Wales system, developed and maintained by the Biodiversity Information Service (BIS). This SLA has been renewed every year since 2019 and is an essential element used on a daily basis to inform planning applications and other non-planning related projects across the Borough.

NB the percentage of planning applications with either ecological conditions or advisory notes in MTCB has been significant since 2020 – see table below for details.

Year	% applications with ecological conditions or advisory notes
2020	58.59
2021	67.74
2022	66.66

Access to biodiversity data records is a key contributory element to protecting Merthyr’s biodiversity in this way.

- Habitat surveys for MTCB’s 64 SINC (Site of Importance for Nature Conservation) sites (2007/8 & 2015/16). These surveys require an update and the cost of commissioning a specialist ecological consultancy to undertake this work is currently being explored.
- All Council-led projects across the Borough now require relevant ecological survey work to be undertaken by independent consultants. These surveys inform mitigation, compensation and enhancement measures to be undertaken.
- Merthyr Tydfil Pond Survey 1999.
- Merthyr Tydfil Hedgerow Survey 1999.
- Coed Merthyr Woodland Strategy 1998.
- Taf Fechan Local Nature Reserve: Management Plan 2004, 2012, 2018. NB the 2018 ‘Cwm Taf Fechan Nature Reserve Five-year Management Programme’ (document produced by the South and West Wales Wildlife Trust) is under review and planned to be updated by the end of the

year. The recently appointed replacement Reserves Officer will undertake the review and oversee implementation of the management programme.

- SSSI Feature Monitoring Report 2010, 2017.
- Bioblitz: Pontygraith 2014, Scwrfa/Gellideg Fields 2016.
- Cyfarthfa Park: Woodland Management Plan 2018; Meadow Management Plan 2018; APHA Plant Health Management Plan 2015; Grey Squirrel dissertation 2013.
- Ffos-y-Fran: Great Crested Newt Monitoring 2005-2015. NB in 2022: liaison facilitated between management at Ffos-y-Fran (Merthyr (South Wales) Ltd) and some licensed GCN ecologists looking to provide experience to ecologists looking to gain their own GCN licences. The ponds at Ffos y Fran including those within the central ecological area that have records of GCN are proposed to be used for the surveys/training. This will be undertaken in the 2023 season. The data has been agreed to be shared both with Merthyr (South Wales) Ltd and with MTCBC for our biodiversity records.
- Restoration & Aftercare Insect Monitoring (National Museums Wales) 2014+.
- Coal Spoil Colliery Initiative Insect Surveys 2015+.
- Nant-yr-Odin Tip Moth Survey 2018.
- River Taff Salmon monitoring 2012+.
- Improving peoples' understanding of the natural world (e.g., species, habitats, biodiversity and ecosystems) can bring about behavioural change and encourage positive actions. This can be achieved through environmental education focussing on, for example, the statutory education sector, community education, outdoor activities and leisure services. Education and training can also be provided for staff from other service functions/departments in order to help them to meet their obligations under the S6 duty.

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

- The [MERTHYR TYDFIL NATURE RECOVERY ACTION PLAN 2019-2024](#) – adopted in January 2020 includes the following MTCBC High Level Statement:
 - *‘Throughout our operations we will (where possible) seek to maintain and enhance the diversity of our natural environment to make it resilient and able to support the social, economic, health and well-being of local communities, both for enjoyment and for its own inherent value’.*
- Merthyr Tydfil has a Councillor who is the ‘Biodiversity and Open Spaces Champion’ for the Council.
- Support for the delivery of actions ensuring the S6 duty is met across all areas of the Council is provided by the LPA Ecologist and Biodiversity Officer.
- In-house ecological expertise is provided by a Specialist Advisor Ecologist in liaison with both Natural Resources Wales (NRW) and Welsh Government (WG) officers where necessary and appropriate.
- Further expertise regarding biodiversity is provided by the Council’s Biodiversity Officer.
- A work experience programme has created three placements in Neighbourhood Services e.g. cemeteries and countryside.
- Volunteer participation for the benefit of biodiversity is encouraged and supported by the Countryside Team in projects across MTCB.
- Encouraging and supporting volunteer participation in action for biodiversity by local communities through Community Regeneration Projects.

- The Merthyr Tydfil Nature Recovery Action Plan (MTNRAP) 2019-2024 document prepared by Merthyr Tydfil County Borough Council (MTCBC), replaced the previous Merthyr Tydfil Biodiversity Action Plan (MTBAP) 2014-2019, but also represented the S6 plan for MTCB, in accordance with Welsh Government Guidance: Environment (Wales) Act 2016 Part 1: Guidance for Section 6 –The Biodiversity and Resilience of Ecosystems Duty.
- The MTNRAP is reviewed and presented to Council on an annual basis and the actions planned and undertaken within the MTNRAP all contribute to the Council’s S6 duty. In effect, therefore, the S6 duty is reviewed on a yearly basis.
- This document represents a standalone report fulfilling the requirement of Welsh Government to provide an update of the Council’s S6 duty every three years. It has been produced with the support of WG and NRW.
- MTCBC has supported biodiversity action through funding and/or partnerships, for example by:
- The Merthyr Tydfil Biodiversity Partnership (MTBP) is chaired by MTCBC’s Biodiversity Officer and supported by MTCBC. The MTBP that includes a wide range of partners:
 - Natural Resources Wales (NRW)
 - Welsh Government (WG)
 - The Wildlife Trust of South and West Wales
 - South East Wales Rivers Trust (SEWRT)
 - Amphibian and Reptile Conservation (ARC)
 - Royal Society for the Protection of Birds (RSPB)
 - Other local groups, e.g.,
 - Glamorgan Bird Club
 - Merthyr Tydfil Angling Alliance (MTAA)
 - Friends of Nant Llwynog Park
- MTCBC has provided funding and other support to the following:
 - Glamorgan Bird Club/Merthyr Valley Homes – support regarding swift recovery and the erection of swift boxes around Merthyr.
 - Merthyr Valley Homes – support regarding pollinator areas
 - Merthyr Naturalists – provision of two beekeeping suits
 - South East Wales Rivers Trust – provision of bird/bat boxes
 - Wetland scrapes/hedgerow – Edward st
 - Buglife – In 2022, Buglife submitted a funding application to the Nature Networks Fund (Heritage Lottery Fund) for a colliery spoil project (‘Coalfield Connections’). The project aims include raising the profile of colliery spoil among local communities and decision makers through production of resources, engagement events (e.g. guided walks, talks) and training. This will involve awareness raising of the value of coal spoil for biodiversity, geology, industrial archaeology, cultural history, landscape, open space, education and recreation. MTCBC has supported the funding application and provided some possible suitable colliery spoil sites that could be used as part of the project.

4. Review of the S6 duty

- This document represents the first review of the duty since the 2019 report. Following the publishing of the S6 report, MTCBC will have met its duty under Section 6 of the Environment (Wales) Act 2016 for the period 2019-2022. Ongoing and further actions will be required in order to meet the duty moving forward towards the next reporting deadline in 2025. The 2022 document will contribute to the production of a simplified public summary document with the purpose of raising awareness amongst residents of the important issues regarding biodiversity within MTCB.