

**LLANGOLLEN TOWN COUNCIL**

**BIODIVERSITY ACTION PLAN.**



**December 2019**

## Introduction

The publication of the Environment (Wales) Act 2016 makes biodiversity an important consideration for all local authorities. Section 40 of this act sets out the duty to conserve biodiversity: “Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity”.

Section 6 Biodiversity and Resilience of Ecosystems Duty Public authorities 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 is biodiversity?

The word biodiversity was first used at the Rio Earth Summit in 1992, it stands for biological diversity and is the term used to describe all variety of life on earth in all its forms. This includes variety or differences in genes and individuals of the same species, between different plant and animal species and within or between entire ecosystems. The term goes far beyond simply the number of species in a given environment or habitat.

Not all habitats are equal in biodiversity terms. Broad-leaved woodland and unimproved flower-rich lowland meadows are rich in biodiversity when compared to habitats such as intensive arable farmland or densely constructed urban conurbations. Even within the urban environment gardens, parks and allotments can all be relatively diverse.

Why do we need to conserve biodiversity?

By conserving biodiversity, not only does it protect the diversity of species in our habitats but also maintain a healthy and interesting environment in Llangollen for current and future generations to enjoy.

The aims of this Biodiversity action plan are:

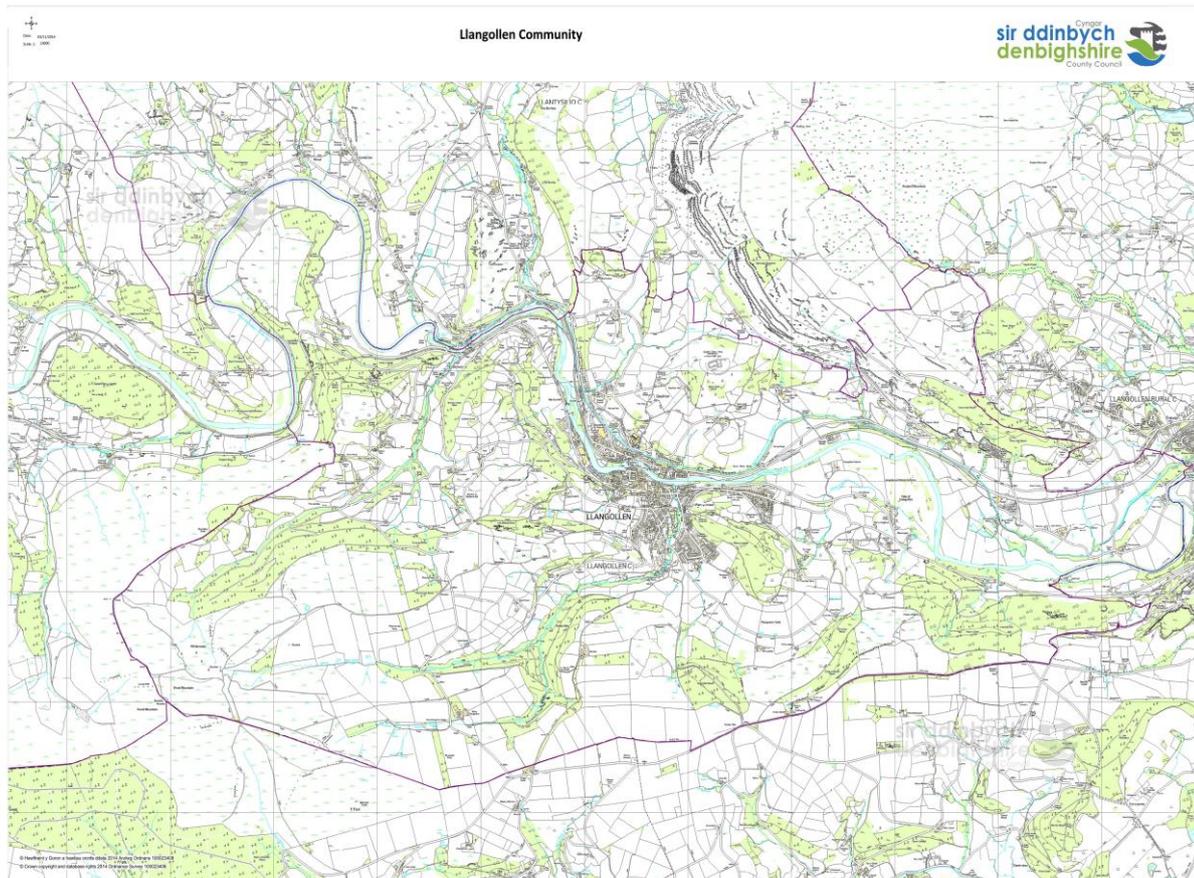
1. To engage and support participation and understanding to embed biodiversity throughout decision making at all levels.
2. Safeguard species and habitats of principal importance and improve their management
3. To Increase the resilience of our natural environment by restoring degraded habitats and habitat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

## **Location.**

Llangollen is a lively market town situated in the Dee Valley between the Berwyn and Ruabon mountains, overlooked by Castell Dinas Bran. The town has been a magnet for travellers and visitors since the early 19th century. The Clwydian Range Area of Outstanding Natural Beauty and the Pontcysyllte Aqueduct and Canal World Heritage Site both are in

The railway arrived in Llangollen in 1862 and the restored railway is now run by Llangollen Railway PLC. The rail line currently extends to Carrog but will soon run as far as Corwen. The ruins of 13th century Castell Dinas Bran are on the hillside above Llangollen; the 18th C. home of the Ladies of Llangollen, Plas Newydd, is in the town.

The population of the town of Llangollen is 4079 and the town also serves the surrounding areas of Froncysyllte and Garth, Acrefair and Llantysilio, a further population of 4,260.



## Local Biodiversity resources

### Geological Landscape influences

The most prominent influence on this area is river processes. From its outflow at Llyn Tegid, the Dee meanders along a relatively flat floodplain to Llangollen. The meanders are often small-scale in size on the valley floor, but occasionally they form significant features in the landscape such as at Rhewl, near Llangollen. Here it loops around a large meander and is a good example of an incised, ingrown meander where the river has cut vertically into the bedrock in addition to eroding horizontally as the meanders continued to develop. The result is an asymmetrical valley with a steep outer flank and a gentle inner slope, which in some areas has terraces and cliffs marking former river levels and stages in the evolution of the valley. Other examples can be seen at Pengwern, south of Llangollen.

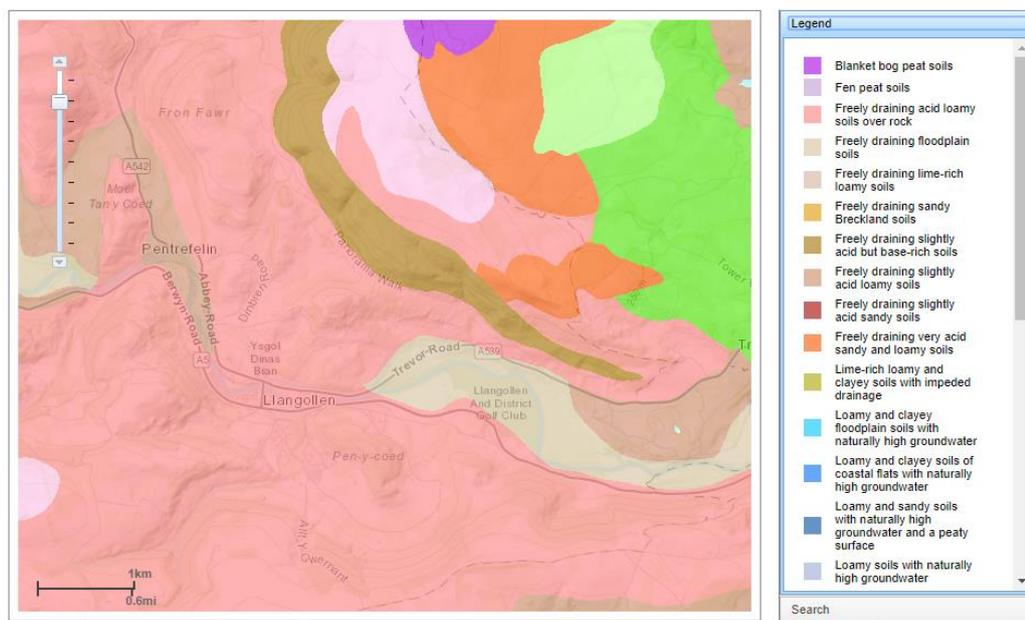
The valley floor is predominantly flat and infilled with glacial and river deposits but rises to elevations of more than 300m on the valley sides. The underlying bedrock valley consists predominantly of Silurian sedimentary rocks. Later mountain-building events have compressed these rocks, faulting and tilting them.

In some areas, such as the Horseshoe Pass, the mudstones have been compressed sufficiently to form slate, which is still quarried. Although essentially a relatively flat-bottomed valley, there are some areas where the bedrock has a prominent impact on the landscape., Llangollen and Llantysilio faults have further influenced the landscape and have been exploited by the valley of the Dee. Key sites which highlight the geological diversity of this area include Dinas Bran Geological Conservation Review Site (GCR site), Pant Glas Quarry and Hafod y Calch (GCR site).

### Soils

The UK Soil Observatory has classified the soils in the area as lime-rich loamy and clayey soils with impeded drainage freely draining acid loamy soils over freely draining floodplain soils rock.

Diagram 1. Soil types.



### Landscape Habitats influences

The area is largely agricultural in the valley floor, but with a patchwork of small fields and broadleaved woodland blocks. The valley floor forms the only flat ground in the area and is intensively used. The steep slopes of the valley sides and tops of the surrounding plateau are largely rough grazing, with bracken, scrub and hanging woodlands in particular on the valley sides, with limited grazing for upland sheep flocks. Small areas of traditional agricultural practices have remained, being hay meadow typical of many in the uplands throughout Wales many years ago, now restricted to small pockets where improvements have been limited.

### Historic Landscape influences

The past strategic importance of the Vale and as a transport and communications corridor is visible in the landscape today. Castell Dinas Brân (and the Iron Age hillfort on which it is built) occupies the elevated land above the south facing slopes overlooking the Vale. Gentry houses such as Trevor Hall and Plas yn Pentre indicate its prosperity in the early modern period. Transport developments associated with the industrial revolution have had a profound expression on the character of the landscape. Thomas Telford's London to Holyhead post Road (now the A5) follows the valley as far as Druid, and heavily influenced the location and shape of settlement.

The canal, which is carried across the Vale by the Pontcysyllte aqueduct extends to the west of Llangollen, a town which acquired a significant industrial base in the textile industry as a consequence. The valley floor railway of the 1860s, now reinstated as a heritage railway, led to the building of substantial houses for industrialists at Vivod and Llantysilio. The Pontcysyllte aqueduct and its environs were recently inscribed as a World Heritage Site, the greater part of which is included within this area.

Other ancient monuments in the eastern part of the area which have had a significant aesthetic influence on the landscape such as the compact linear, valley town of Llangollen which forms an historic crossing point, with its Medieval sandstone bridge.

### Cultural Landscape influences

This compelling 'gateway' to Wales might have been fashioned for the delectation of the many visitors which it has drawn since the 18th century. The historical and visual relationship between the enigmatic Eliseg pillar and the ruined abbey at Valle Crucis and the hill-top castle at Dinas Bran were a gift to savants, writers and painters of an antiquarian or romantic disposition – Richard Wilson's view of the castle depicts a Cambrian Mount Olympus. Rowlandson and Turner also visited the area. The arrival of the famous Anglo-Irish same-sex couple, Sarah Ponsonby and Eleanor Butler, in 1780 encouraged a taste for 'Picturesque' architecture here which was sustained well into the 19th century.

The town of Llangollen was granted its charter in 1284; its Medieval bridge is traditionally connected with Dr John Trefor, Bishop of St Asaph 1346-57. Its International Eisteddfod, launched 1947 as an annual forum for native music and dancing from many countries, represents one of the most successful and long-lasting attempts to heal the cultural divisions left by the Second World War and has made the town world-famous. It is complemented by the work of ECTARC (European Centre for Training and Regional Cooperation) at Llangollen.

The working landscape of the area has contributed to its cultural identity. The proximity of the Llangollen Canal, which extends into the area from the Deeside and Wrexham area, is a World Heritage Site, the Telford Road (one of the major works of one of Britain's greatest civil engineers), and the Llangollen railway, revived as a steam railway recreating the ambience of the 1950s, means that the area illustrates remarkably well the classic transport systems of the industrial revolution, and their revival and conservation offers the possibility of integration with each other.

### Climate and Hydrology

The climate in Llangollen is warm and temperate. Llangollen has a significant amount of rainfall during the year. Over the course of the year, the temperature typically varies from 33°F to 66°F and is rarely below 22°F or above 75°F and the average amount of annual precipitation is 31.89 inches (810.0 mm)

The River Dee is a vitally important natural resource for not only the Town but also for communities in North Wales and North West England, supporting a rich environment for wildlife, while also providing a valuable source for drinking water extraction. The river flows are controlled by Natural Resources Wales through programmed releases from the main balancing reservoirs; Lake Bala, Lake Celyn and Lake Brenig. The Dee Regulation Scheme balances the interests of abstractions, fisheries, biodiversity, recreational activities and flood risk management

Rainfall and flow regimes are important factors when considering water quality and pesticide risk, as they affect mobilisation of pollutants and dilution levels. The Dee Regulation Scheme, operated by Natural Resources Wales, ensures that water is released from reservoirs when flows fall below 8.1m<sup>3</sup>/s at Manley Hall and 4.2m<sup>3</sup>/s at Chester Weir. The Dee Regulation scheme ensures that pollutants entering the river in summer are subject to greater dilution than would be the case if there was no regulation. However, the converse is true in storm events in winter where flow regulation can reduce the flows in the river. The lowland rivers have a higher proportion of field drains and drainage ditches, resulting in potentially greater connectivity between pollutants and water courses.

### Protected landscapes

Nationally important landscapes have protection in law and there are a number of specific sites within the area. Special Areas of Conservation (SACs) are designated for their importance in a European context under the EC Habitats Directive. Article 3 of this Directive requires the establishment of a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitats and 788 species identified in Annexes I and II. They are those considered to be in the most need of conservation throughout the European Union.

Many are also designated as SSSIs (see below) but may differ regarding boundaries or the features they are designated for. The Welsh Government, through the Countryside Council for Wales (CCW), is responsible for ensuring that SACs achieve and remain in a favourable condition. One such site is the River Dee and Bala Lake.

World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention, these are sites globally important for their cultural or natural heritage interest and require appropriate management and protection measures.

The Pontcysyllte Aqueduct and Canal is designated for its civil engineering heritage, the site is within an area important for biodiversity and actions exist within its management plan to protect and enhance the wildlife found here.

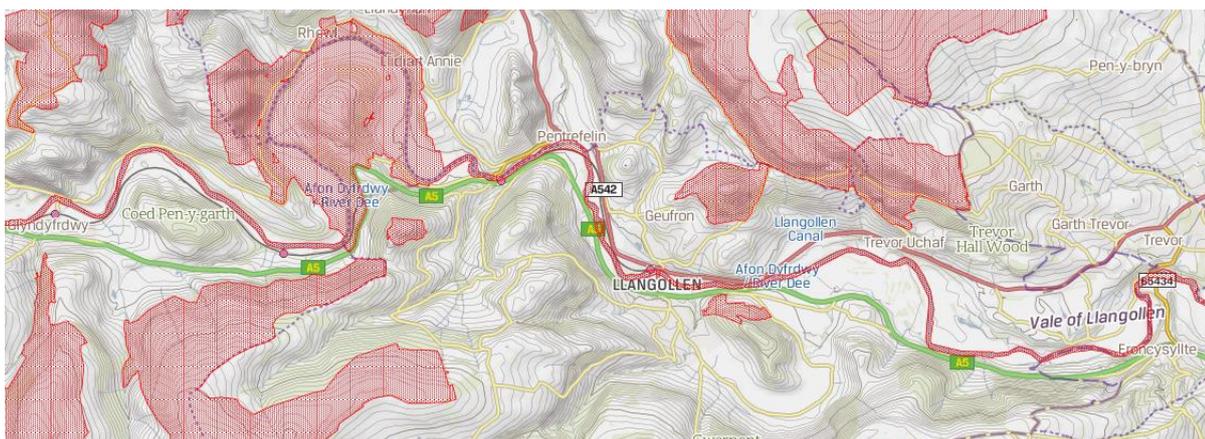
There are several Nature Conservation Sites located within the River Dee and Bala Lake Special Area of Conservation (SAC), River Dee Site of Special Scientific Interest (SSSI), and Clwydian Range and Dee Valley Area of Outstanding Natural Beauty (AONB). Sites of Special Scientific Interest (SSSIs).. These are key sites for the conservation of wildlife and geological features in the UK. They were first designated under the Wildlife and Countryside Act 1981, with amendments to their protection made through the subsequent Countryside and Rights of Way Act 2000 and Natural Environment and Rural Communities Act 2006. Biological SSSIs represent the best examples of specific habitats within an area, a key population of a rare species and / or an unusual or otherwise important area for wildlife. They can be designated for just one or a suite of features. Geological SSSIs represent either geological formations typical to the region that are exposed, or some key geological feature of interest.

In Wales, Natural Resources Wales identifies these areas and is responsible for ensuring they are in favourable condition, though SSSIs can be designated on private as well as public land. Protection of SSSIs is achieved through prohibiting damaging operations, unless permission has been granted by CCW, and through the provision of management agreements.

There SSSIs wholly or partly within the area: -

- Caeau Pen y Coed
- Dee Estuary
- Dinas Bran
- Ruabon / Llantysilio Mountains and Minera

Diagram 2 Protected sites.



Lle Geo-Portal for Wales

The river Dee SSSI has a high conservation value and is designated as a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC). The features contributing to the SSSI and SAC designations include *Ranunculus* communities, floating water plantain, Atlantic salmon, bullhead, lamprey, otter, club tailed dragonfly and fluvial geomorphology.

### Habitat Types

Ffridd (also referred to as Coedcae) is an important habitat type that occurs within marginal land between the uplands and the lowlands. It contains components of both upland and lowland habitats, is vital for a range of important species and is also an important component of the Welsh cultural and historical landscape. Ffridd can be found between enclosed lowlands and moorland, on the summits of enclosed hills and on steep valley sides.

It therefore comprises mainly marginal land which has been subject to fluctuating management intensity. Habitat and vegetation composition vary significantly between and within the areas classified as ffridd. The most common Phase 1 habitats within ffridd areas are continuous bracken, dry dwarf shrub heath (acid), unimproved acid grassland and semi-improved acid grassland.

The following Ffridd Areas have been identified as having a high degree of habitat heterogeneity and are therefore considered to be good examples:

- Velvet Hill
- Castell Dinas Bran
- Panorama Walk

Limestone Grassland are calcareous grassland habitat within the area corresponds is classes as a semi-natural dry grasslands and scrubland facies: on calcareous substrates

The hedgerow network is quite strong throughout most of the study area, but there are areas where there are significant gaps. In the northern and eastern part of the study area, this is attributable to the fact that these are in the uplands and comprise large stands of heathland and other habitats, where hedgerows would not be expected to occur. Other gaps in the hedgerow network within the area are on hills with 'ffridd' habitat and would therefore also not be expected to have good hedgerow networks. The western part of the area comprises large fields comprising improved grassland, and it is likely that in these areas' hedgerows have been removed as part of agricultural improvement works. The same applies to the south-eastern corner of the area, where there are large areas of improved grassland and conifer plantation

The River Dee has been designated as a Special Area of Conservation (SAC), the River Dee and Bala Lake SAC, due to the presence of the EU Habitats Directive Annex I habitat 'Water courses of plain to aquatic species including floating water plantain, Atlantic salmon, bullhead, river lamprey, sea lamprey, brook lamprey, club tailed dragonfly and). Some sections of the river have also been designated for geological aspects.

The Llangollen Canal is a navigable watercourse which links Llangollen with Hurleston in south Cheshire. An eleven-mile stretch of the canal between Llantysilio in the west and Gledrid Bridge in the east has been declared a UNESCO World Heritage Site montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation', and the Annex II species Atlantic salmon and floating water plantain

Heathland within the study area comprises dry dwarf shrub heath (acid). In places, this forms a mosaic with acid grassland. The dry heath consists mainly heath, with frequent crowberry and occasional cowberry.

In respect of woodland one of the most substantial sections of continuous tree cover directly adjacent to the town centre is Pen-y-Coed, a 28-hectare wood that occupies the ridge between the Dee and Pengwern valleys. The site is a mixture of Ancient planted / semi-natural Woodland and more recently planted coniferous stands and contains a wide variety of tree species along with ground flora. Several public footpaths run through the wood, providing a high level of public amenity value. The wood is owned and managed by the Woodland Trust, which has implemented a long-term management plan aimed at restoring the site to a predominantly native broadleaf wood with a focus on environmental and amenity objectives.

The area surrounding the town contains a number of substantial woods and smaller wooded areas including those shown in Table 1.

Table 1 Significant woods and wooded areas in Llangollen region

Name	Approx. Area	Type	Notes
Pen-y-coed	28 ha	Conifer & Mixed Broadleaf	Woodland Trust
Inman's Wood			
Barber's Bank			
Smith's Wood			
Bache-canol Wood			
Wern-uchaf Wood			
The Avenue	4.39 ha	Native Broadleaves	Woodland Trust
Geufron Hall			
Tyn Celyn Wood			
Craig-y-dduallt Wood			
Gwernant Wood	3.2 ha	Mixed Oak, Conifer, Larch	
Llwyn y cym			
Fedw Ddu			
Coed Pen-y-garth			
Cefncoed Plantation			
Inman's Wood			
Bryniau-mawr Bank			
Plas Newydd Dingle	1.72 ha		

Llangollen is also home to a unique and endangered species of tree, the Llangollen Whitebeam (*Sorbus cuneifolia*). Although the tree (Figure 3) was first described in Hudson's *Flora Anglica* in 1798, little is known about this tree, of which there are only around 122 mature specimens in the world; the majority of these being located on the Eglywyseg escarpment. Work is currently being undertaken at Chester Zoo to propagate additional specimens, some of which will be placed in local public gardens .

There are a number of very ancient trees in the area, including yews at Dinbren Uchaf and Tyn Dwr Hall, the latter being considered as the oldest and largest yew tree in Wales. Shows a number of the notable trees that have been identified within the area.

**Table 1** Individual trees of note.

Type	Location	Notes
Yew	SJ232413	Largest & oldest in Wales
Yew	SJ218454	
Yew	SJ20814250	3.47m Girth, Notable tree, ID 104695
Hazel	SJ20844241	1.82m Girth, Notable tree, ID 104693
Beech	SJ21034225	3.12m Girth, Notable tree, ID 104691
Birch	SJ21074214	1.41m Girth, Notable tree, ID 104690
Japanese Larch	SJ2089143276	3.50m Girth Veteran tree, ID 186088
Common Beech	SJ2376442703	5.5m Girth, Ancient Tree, ID 191437
Oak	SJ20734154	4.7m Girth, Veteran tree, ID 162384
Oak	SJ20984235	4.5m Girth Veteran tree, ID 104692
Lime	SJ2304641283	Avenue of Notable Lime trees
Sessile oak	SJ2088143316	3.50m Girth, Notable tree, ID 186089
Sessile Oak	SJ2367842639	4m Girth, Ancient Tree, ID 191460
Sessile Oak	SJ2367042651	5m Girth, Ancient Tree, ID 191461
Sessile oak	SJ2089243264	3.5m Girth, Notable tree, ID 186090

The value of trees in the Llangollen area is recognised in the high level of Tree Protection Orders (TPO's) that have been issued to protect both individual specimen trees and larger blocks that have significant historical and/or landscape value (Table 3). Whilst this provides a degree of protection, the lack of awareness on the part of landowners and the limited ability of authorities to monitor and enforce TPO's creates a significant risk that irreplaceable specimens may be removed or damaged. Although fines of up to £20,000 per tree may be imposed, an ancient tree can never be replaced.

**Table 3** Tree Preservation Orders in Llangollen area

TPO Ref	Grid Ref	Location	Notes
T1	SJ2145141763	Vicarage Road	Specimen Tree
A1	321514.27,341815.12	Vicarage Road	Area
G1	321352.64,341716.15	Vicarage Road	Group
T1	321654.16,341342.71	Grange Road	Specimen Tree
T2	321656.4,341328.28	Grange Road	Specimen Tree
T3	321657.93,341316.04	Grange Road	Specimen Tree
T4	321660.03,341305.13	Grange Road	Specimen Tree
T5	321664.89,341292.7	Grange Road	Specimen Tree
T1	321352.1,341576.36	Bache Field	Specimen Tree
T1	321601.95,341767.81	6, Vicarage Road	Specimen Tree
W1	321080,343978.4	Brynhyfryd	Woodland
W2	321648.79,343661.23		Woodland
W3	321261.77,343615.07		Woodland
W4	320144.04,343380.48		Woodland
W5	320960.63,343267.09		Woodland

W6	321333.04,343268.78		Woodland
W7	322011.76,343364.46		Woodland
W8	321162.42,343087.42		Woodland
W9	322063.08,342864.81		Woodland
W10	322835.47,342972.31		Woodland
W11	321505.41,342600.05		Woodland
W12	321731.25,342297.71		Woodland
W13	322062.96,342196.99		Woodland
W14	322815.54,342424.11		Woodland
W15	323155.87,342205.03		Woodland
W16	322576.91,341318.26		Woodland
W17	323208.47,341347.58		Woodland
W18	323805.31,341712.02		Woodland
W19	323682.73,341324.28		Woodland
W20	321585.49,340874.36		Woodland
W21	322345.85,340293.65		Woodland

Within the urban areas of the town (Figure 2), the level of tree cover is around 25% (2013 data) which is the highest in Denbighshire. However, unlike most of the other towns within the county, this figure has declined from 28.7% in 2006, a loss of over 6000 trees .

Council sites

### Urban Environment

Urban gardens help aid dispersal of biodiversity by acting as green corridors and as stepping-stones for species moving between larger green spaces. Street trees not only protect our neighbourhoods from extremes of weather they are also important for urban wildlife, home to many insects and bird species.

The verges alongside roads and railway embankments create wildlife corridors through urban areas and can support rare plant species. Larger green spaces within the urban environment are often represented by parks, playing fields, cemeteries and allotments and provide the most accessible areas for local residents to access and appreciate wildlife and nature.

### Biodiversity

The National Biodiversity Network (NBN) is a collaborative partnership created to exchange biodiversity information. The NBN Trust, the charity which oversees and facilitates the development of the Network, has a membership including many UK wildlife conservation organisations, government, country agencies, environmental agencies, local environmental records centres and many voluntary groups.

Data for a 2km radius of Llangollen is detailed below and will act as a base line for monitoring changes to the biodiversity of the area going forward.

Table 4 Biodiversity.

<b>All species</b>	<b>553</b>
Animals	261
Amphibians	0

Arthropods	138
Crustaceans	5
Insects	128
Myriapods	4
Spiders and Allies	1
Birds	86
Fishes	6
Mammals	18
Molluscs	11
Reptiles	2
Worms	0
Bacteria	0
Chromista	0
Fungi	99
Plants	193
Algae	0
Bryophytes	117
Clubmosses and Firmosses	0
Ferns and Allies	0
Flowering Plants	75
Gymnosperms and Ginkgo	0
Hornworts	0
Protozoa	0

## **Town Council assets**

### Llangollen Recreation Ground

The Recreation ground is situated on Dinbren Road and is managed by the Town Council on behalf of the Recreation Ground Trustees. The partners wish to conserve and enhance the recreational value of the Recreation Ground Llangollen whilst encouraging greater use and enjoyment by the local community and have agreed to advance policies to ensure that the Recreation Ground is managed, maintained and developed to meet the expectations of the Trustees by the Council and provides a safe, attractive and informal public open space for the use and enjoyment by the local community. The Recreation Ground will continue to be accessible to all; whilst protecting its recreational and ecological value for future generations. The boundary of the site has rich tree cover with species such as chestnut, maple, sycamore. mature lime, mature beech, ash and both sessile and mature oaks.

### Pen y Bryn Cemetery

The Town Council is responsible for the management and upkeep of Pen y Cemetery, Hill Street following its purchase from the Lancashire and Cheshire Association of Baptist Churches in 1991. Very little has been done to the site since its purchase apart from grass cutting in the summer months and some perimeter hedging work. The current maintenance programme for the site is once a month and the site is managed to maximise its biodiversity. The location and nature of the

site lends itself to more use as a public open space than has been over the past years. It is therefore proposed that a more proactive approach to the use of this site should be encouraged to create more public awareness of this tranquil area and to provide more facilities to allow for the peaceful enjoyment of the location.

### Centenary square

In 2018 the Town Council completed a project in the Town Centre the creation of a new public open space Centenary Square. , Being a Cittaslow Town, the Town Council were keen to ensure that run off water management was utilised for the irrigation of the trees on site. And therefore, during the design and construction phase attention was given to mitigating the sites effects on biodiversity and the environment. A Silva Cell system was used to crat the panting beds for four new Liquid Amber trees on the perimeter. Silva Cell is a modular building block for containing unlimited amounts of healthy soil beneath paving while supporting traffic loads and accommodating surrounding utilities. The cells are filled with high-quality, uncompacted soil to grow trees and manage the rate, quality and volume of stormwater. The system combines on-site stormwater management with expanded rooting volumes for healthy tree growth. Further planting included the retention of a Holy tree and a replacement memorial Cherry tree and the planting of a number of grasses on the northern perimeter of the site which includes Cortaderia selloana 'Sunningdale Silver', Cortaderia selloana 'Albolineata', Carex elata 'Aurea', Carex oshimensis 'Evergold', Carex comans 'Bronze', Cortaderia selloana 'Splendid Star', Carex oshimensis 'Evereste', Deschampsia cespitosa 'Goldtau'. Festuca glauca 'Elijah Blue', Hakonechloa macra ' Aureola', Helictotrichon sempervirens, Luzula nivea, Molinia caerulea arundinacea 'Karl Foerster"', Molinia caerulea arundinacea 'Poul Peterson' and Ophiopogon planiscapus ' Nigrescens'

### Planting schemes

The Town Council provides both summer and winter floral display around the town centre. The town's floral displays are cultivated at the Derwen College and planted out by students. The college is a residential and day placements to students aged 16-25 with learning difficulties and disabilities and well as providing learning offers opportunities to experience real work settings in areas such as horticulture. The quality of floral displays has been of a very high standard and have been subject to praise from residents and visitors alike. The students are gaining considerable work skills when preparing your hanging baskets but just as importantly they enjoy visiting Llangollen to display their work and the students feel part of the local community which enhances their social skills and gives them confidence when speaking to members of the public.

From May until October students plant out eleven tiered planters and six barrier baskets an additional twenty-four hanging basket are planted and installed. During the winter month's a secondary planting programme in the tiered planters and barrier baskets. As well as providing colour and brighten up the centre of town with attractive floral displays for residents and visitors to enjoy the scheme the planting is undertaken to enhance the urban habitat for insect pollinators hence the creation of eye-catching pollinator-friendly floral displays throughout the towns is beneficial for both the human and insect

## Action Plan

There are a number of key factors that could have potentially detrimental effects on the level of biodiversity in the Llangollen. These are development, climate change, recreation, pollution, changes in land use and changes or lack of management. These factors are not limited to Llangollen and represent the wider issues facing the environment in the UK as a whole.

This situation is reflected in Llangollen where partnership work between council volunteers, statutory bodies and the local business sector have all come together to deliver environmental conservation work. In the current financial climate partnership working is likely to become more important. This plan outlines a series of actions to provide a framework for the delivery of conservation and enhancement across Llangollen until 2015. The actions are intended to make a genuine positive contribution to the Llangollen's biodiversity while being realistic and achievable.

Inappropriate development can pose a threat to biodiversity through direct loss of habitats and indirectly through habitat fragmentation and the additional impacts of a development throughout its lifetime on the surrounding environment e.g. changes and demands on natural water systems and pressures from increased traffic and other related infrastructure.

There is a need for increases in future housing to meet the growing demand which can put pressure on the environment and protected sites and species and potentially lead to a loss in urban greenspace.

The increased impact on natural resources from a development are not only from the material required for the construction phase, but also their demand for energy and water once the development is active. Impacts on surrounding habitats also need to be considered as changes in light, wind, drainage and usage of these habitats can affect the type and amount of different species able to survive there. It is important that in setting out actions to improve biodiversity within the Llangollen, we are mindful to reduce our negative impact on the biodiversity of other areas.

### **Engage and support participation and understanding to embed biodiversity throughout decision making at all levels.**

Actions to include:

- Incorporating biodiversity and the s6 duty into performance by the preparation and adoption of a s6 Plan the Biodiversity Action Plan.
- Valuing biodiversity more effectively and for the longer term in decision making.
- Raising awareness across the Town Council.
- Providing staff with relevant environmental training.
- Working with the public, suppliers and contractors to improve their environmental performance.
- Using local labour and materials where available to reduce CO2 and help the community.
- Reducing the amount of energy used as much as possible, lights and electrical equipment will be switched off when not in use and heating will be adjusted with energy consumption in mind.
- Considering the energy consumption and efficiency when purchasing new products and favour 'green' machinery where possible when considering replacements.
- Using cleaning materials that are as environmentally friendly as possible
- Minimising waste by the best practicable environmental option by eliminating, reducing, reusing, composting and recycling.
- Reducing the need to travel where possible.
- Promote the use of travel alternatives such as email and phone conferencing.

### **Safeguard species and habitats of principal importance and improve their management.**

Actions to include:

- Safeguard special species and habitats listed on the section 7 biodiversity lists.
- Providing suitable and appropriately managed habitats for protected species where appropriate.
- Improving habitat management, for example, for pollinators.
- Using the planning system to maintain and enhance species and habitats.
- Contribute to the management of protected sites and species.
- Ensuring these sites are valued in decision making.
- Contributing to their management where possible.

### **Improve our evidence, understanding and monitoring.**

Actions to include:

- Using the best available evidence for decision making, for example the NBN Atlas data in the consideration of planning applications.
- Having regard to the section 7 lists of species and habitats, the State of Natural Resources Report, and Area Statements when they are available.
- Consulting relevant stakeholders/using expert input.
- Undertaking research.
- Ensuring your environmental evidence is accessible to local communities.

### **Increase the resilience of our natural environment by restoring degraded habitats and habitat creation Include actions taken to:**

Actions to include:

- Restoring and/or creating habitats.
- Improving the management and/or diversity of areas of habitat.
- Working with local environmental organisations and projects.
- Working with bodies such as NRW, the AONB and Glandŵr Cymru

### **Tackle key pressures on species and habitats**

Actions to include:

- Address key pressures, for example by reducing or where possible stopping the use of pesticides and herbicides.
- Reducing, reusing and recycling resources.
- Climate change mitigation/decarbonisation.
- Providing local green spaces for communities and visitors to improve health and well-being outcomes.

### **Improve the use of evidence understanding and monitoring.**

Actions to include:

- Using the best available evidence for decision making, for example NBN Atlas data.
- Having regard to the section 7 lists of species and habitats, the State of Natural Resources Report, and Area Statements when they are available.
- Consulting relevant stakeholders/using expert input.
- Ensuring environmental evidence is accessible to local communities.
- Considering planning applications which impacted local or national designated sites, with regard to information: such as costs, benefits, impacts and outcomes relevant to NRAP objectives.

### **Put in place a framework of governance and support for Delivery.**

Actions to include:

- Ensuring the Town Council recognises its responsible for ensuring biodiversity action is taken.
- Ensuring that where needed ecological expertise can be drawn upon, either internally or externally.
- Encouraging and supporting volunteer participation in action for biodiversity by staff or local communities.
- Support biodiversity action through funding and/or partnerships, for example through the Community Grants Scheme.
- Working with local environmental organisations and projects.

### **To monitor and review this action plan**

Actions to include:

- Ensuring the s6 duty is monitored and reviewed in accordance with the Act.
- A review of biodiversity action plan will be carried out annually.

## **Bibliography and data sources .**

Countryside Council for Wales (CCW), which was surveyed between 1979 and 1997 (Jones et al) 2003; JNCC, 2007).

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