

2018

Biodiversity Statement and Action Plan 2018- 2023



CarlDallison

Dorchester Town Council

2/1/2018

1:0 Introduction

The Rio Earth Summit in 1992 saw the signing of the Convention on Biodiversity where 168 signatories agreed to:-

- The conservation of biological diversity
- The sustainable use of its components
- The fair and equitable sharing of benefits arising from genetic resources.

Since then the conservation of Biodiversity has become the subject of numerous strategic initiatives from the international community, nation states, governments, large non-governmental organisations and increasingly, business.

In 1992 the UK Government was the first globally to produce a national Biodiversity Action Plan and since then provided several legislative frameworks that include Biodiversity which place duties upon organisations to undertake surveys and produce action plans to further promote the conservation of and increase in biodiversity. This has subsequently been reviewed which produced the 2012 UK Post-2010 biodiversity framework.

“The 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.”

Natural Environment and Rural Communities Act 2006 c16. s 40 (1)

Various bodies have produced strategies which consider the subject, these start at a National level then a regional level e.g. South West England and then scale down to a county level. In addition several non-governmental organisations, usually conservation charities or organisations such as the Dorset Wildlife Trust have produced their own plans, these usually look at specific sites, vulnerable habitat typology or endangered species.

The following report outlines how Dorchester Town Council shares and delivers this responsibility and details actions to further advance biodiversity.



2.0 Background

2:1 What is Biodiversity

Biodiversity is the variety of life. It concerns the whole range of living things, from flowering plants to birds, from butterflies to mosses and lichens and even bacteria. Biodiversity also refers to the wide range of habitats which plants and animals depend upon. It is not just about rare or threatened species, it embraces all life, from the commonplace to the greatly endangered.

“The natural world, its biodiversity and its ecosystems are critically important to our well-being and economic prosperity, but are consistently undervalued in conventional economic analyses and decision making”

UK National Ecosystem Assessment, 2011

It is the case that, as a species, Humans are completely reliant on the exploitation of naturally occurring resources, facilitated by biodiversity, to physically survive and furthermore they are mentally and intellectually reliant on those resources too.

Biodiversity, life in all its forms, provides the framework in which all life can exist. Plants and animals and the ecosystems which they both create and exist within play a vital role in many ways:

- Purification of water
- Creation and enrichment of soils
- Climate control
- Atmospheric control
- Temperature regulation
- Pollution breakdown
- Nutrient provision and storage
- Food production
- Building materials
- Fuel
- Pharmaceutical compounds and derivatives
- Genetic material
- Pollination

By considering the potential loss of even one of these roles the importance of Biodiversity becomes immediately apparent.

2:3 Threats to Biodiversity

Globally the presence of and negative influence of human activity is the greatest threat to Biodiversity. There are now considered to be no species that are not dependent upon the actions of man to secure their future.

The problems caused on a planetary scale now include:-

- Climate change
- Extreme weather events
- Ocean warming
- Ocean pH lowering
- Loss of habitat
- Pollution both air and water borne
- Breakdown of eco systems and natural cycles e.g. Carbon cycle
- Drinking water contamination

2:4 National Biodiversity Policies

Nationally the UK Biodiversity Action Plan (UK BAP) 1992, identified habitats and species that are of principal importance in the UK. In 2002 these were reviewed and affirmed by the Countryside and Rights of Way Act and then again section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. It is important to note that although these species and habitats are prescribed, all biodiversity should be considered.

2:4:1 Habitats of Principal Importance

Fifty-six habitats of principal importance are included on the S41 list. These are all the habitats in England that have been identified as requiring action in the UK Biodiversity Action Plan (UK BAP). They range from habitats such as upland hay meadows to lowland mixed deciduous woodland and from freshwater habitats such as ponds to marine habitats such as subtidal sands and gravels.

2:4:2 Species of Principal Importance

There are 943 species of principal importance included on the S41 list. These are the species found in England which have been identified as requiring action under the UK BAP. In addition, the Hen Harrier has also been included on the List because without continued conservation action it is unlikely that the Hen Harrier population will increase from its current very low levels in England.

(The BAP was reviewed in 2007 and the species increased to 1150.)

Devolution resulted in the production of the UK Post 2010 Biodiversity Framework which saw the four separate countries working together to strategically link up the individual countries work. The background to the development of the species and habitats list drawn up in the original BAP still remain and those lists still underpin Biodiversity work in all 4 countries.

2:5 Section 40 Duties placed on Regional and Local Government.

“There is a general biodiversity duty in the NERC Act (Section 40) which requires every public body in the exercising of its functions to ‘have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity’.”

Defra explanatory note Section 41 Natural Environment and Rural Communities Act 2006

This sector includes the work undertaken by local and regional government in all its forms, such as forward/spatial planning at regional, sub-regional and local level. It includes coastal management planning, transport and minerals planning and strategic planning for economic development and climate change.

It also covers the services provided by local and regional government such as sports and recreation provision and education, and the management of the associated estate, including open spaces, landscaping and the built infrastructure itself. It also includes all the estate managed by social housing providers. This duty applies to Dorchester Town Council and the Council should be mindful of the NERC species and habitats lists mentioned in the previous section.

2:6 Dorset Biodiversity Partnership

Within Dorset, the Dorset Biodiversity Partnership exists to

“Reverse the decline in biodiversity in the county”

The Partnership is made up of approx. 30 organisations and has a management group made up of 11 of them including Local Councils, Non-Governmental organisations e.g. Dorset Wildlife Trust, RSPB, Wessex water, Natural England.

A mainstay of the Partnerships work is the Dorset Biodiversity Strategy which was created in 2003.

The document outlines the strategy the partnership are following to both protect and enhance biodiversity within Dorset. In keeping with the UK BAP it identifies species and habitats of

importance within Dorset. It is important to note that wider biodiversity preservation work on a landscape scale is undertaken by a number of agencies both national and regional, these have an impact within Dorset. The BDP Strategy aimed to focus attention on a concise number of Key actions to maintain momentum and be realistic in what could be achieved.

2:7 Dorchester Town Council Area

Dorchester Town Council has a duty under section 40 (see 1:5 previous), this extends to the geographical/ political boundary of the Town in terms of inputting into decisions on planning for example but also responding to wider consultation within the Dorset area e.g. Consultation on the Dorset AONB or from other organisations e.g. Wessex Water , Natural England.

The Council owns, leases and maintains significant land and buildings within the town and section 40 duties are placed here too.



3:0 Strategy

Biodiversity will be considered in its wider context and embedded into how the council, plans, manages and operates. The following section details the various strands within the strategy. Wherever possible the strands will reflect the aspirations of the UK BAP and the local Dorset Biodiversity Strategy and integrate these with opportunities offered within Dorchester.

3:1 Habitats

The DPB strategy identifies numerous habitats across the county that are of importance. Due to the limited size and urban nature of Dorchester very few of these exist within the political boundary of the town.

Table 1

Habitat	Dorchester Political Boundary	
	Council owned	Other owner
Lowland mixed deciduous woodland		
Wood pasture & parkland (Veteran Trees)		
Species-rich hedgerows		✓
Cereal field margins		
Coastal & floodplain, grazing marsh		✓
Lowland meadows		✓
Calcareous grassland	✓ ?	✓
Heathland		
Fens		
Reed beds		
Chalk streams (Rivers and streams)		✓
Urban watercourses (Ponds)	✓ ?	

Several coastal and marine habitats are also cited but are not currently relevant to Dorchester.

One significant habitat not covered in the original Dorset wide strategy are Ponds, the Town council has management responsibility for two ponds adjacent to the river Frome. For the purposes of this document these have been included in the final section Urban Watercourses.

It can be seen from Table 1 that it is indeed the case that few habitats of Dorset wide significance exist within the political boundary of Dorchester and fewer still are owned and or managed by the Town Council. This does not mean however that the opportunity does not exist to conserve and improve or indeed create local scale habitats for the overall benefit of biodiversity. These opportunities will be fully considered within the action plan.

3:2 Species

Conservation action for most priority species can be dealt with through action at a habitat level. The majority of species will benefit from positive habitat management and will be well catered for by this approach. It is the case that in some situations such action alone will be inadequate however within the land owned by Dorchester Town Council there are no known species present that would fall into this category.

It is recognised that other environments exist within the control of the town council (that do not fall into specific habitat definitions) that could be of significance or have an impact upon species e.g. Cemeteries and The Borough Gardens. These environments can partially be managed in a way so as to meet the needs of Biodiversity. Further changes or ameliorations to management can be effected and these are detailed in the action plan.

3.3 Wider activities

When Biodiversity is considered in its fullest meaning the operational activities of the council will have an impact and the Council recognises that, examples of this being:-

- The use of water
- Pesticides and fertilisers
- Waste management
- Energy Efficiency

These matters will be addressed within this document and any subsequent actions shown in the action plan.

4:0 Subject Areas and Management Arrangements

In the following sections the habitats and subject areas referred to in section 3 are considered in more detail.

4:1 Calcareous Grassland

Description

Calcareous Grassland occurs on chalk substrates, Dorset supports important areas of this type mainly in the steeply sloping South, the Ridgeway and Purbeck Ridge. They are present on relatively thin, higher pH soils which tend to be dry in the summer. A wide range of wildflower species and associated fauna can be present in good examples.

Current Occurrence

Within Dorchester there is no recognised Calcareous Grassland, however, Maumbury Rings Scheduled ancient Monument has grassland that is over chalk and contains some Chalk grassland species. The soil is relatively fertile which is supporting lush grass growth which is inhibiting the growth of more desirable plant species and limiting the Fauna associated with them.

Current Management Arrangements

1. Maumbury Rings

The embanked areas of the earthworks are the subject of an ongoing project to re-instate the wildflower content of the sward much of which was lost or significantly degraded when grazing by sheep of the site stopped. The work is a joint project between the council and Miles King CEO of People Need Nature.

Management regime includes for the cutting of grass twice yearly and raking / removal from site to reduce the fertility of the soil and so favour existing grassland species and associated fauna.

The work so far has proved successful in reducing soil fertility and species present are increasing. The Town Council invested in special machinery to facilitate the cutting of the embankments which has made this work possible in terms of both practicality and efficiency of operation. The partnership working with Miles King and the local community has been

successful in that they carry out raking operations to remove the cut grass from the slopes which is an essential requirement.

2. Poundbury Cemetery

The open Grass area to the South of the Cemetery site has been over seeded with Wildflowers working on advice from DWT. Whilst some species common on Calcareous Grassland are present and the site is indeed chalk overlain by two horizons of soil it is the case that the topsoil on the site is too thick and fertile to enable proper development of true Calcareous grassland. The future for the grassed area is to be that of a cemetery which means that much of the grass area will be lost to grave spaces that are hard surfaced or covered by inert material so reducing the total area of grassland and potential grassland habitat on site. The future maintenance regime of these areas once used for graves will not be complimentary to grassland species. The current intended maintenance regime will be grass cut monthly to achieve a reasonably tidy appearance in what is the current and main cemetery within Dorchester. No raking /collection takes place which means the soil on site will maintain and potentially increase in fertility which will not allow for the development and ongoing growth of wild flowers which in turn will affect the Fauna that may make use of the site.

Challenges

Evidence from the UK Climate Impacts Programme (2002) shows that the climate in the Dorset Downs and Cranborne Chase over the coming century is likely to become warmer and wetter in winter, and hotter and drier in summer. In addition, rainfall intensity will probably increase. Extreme events such as heat waves and storms are predicted to increase in frequency and severity. Whilst not within that geographical area, Dorchester is likely to experience very similar impacts. As a result the composition of the natural communities that are characteristic of chalk Downland will change.



4:2 Ponds

Description

Ponds provide valuable refuges in the wider countryside for many forms of wildlife, particularly amphibians and aquatic invertebrates. Ephemeral ponds (ponds which dry out for part of the summer) can support specialised flora and fauna, but are under threat because their special value can be overlooked or destroyed by deepening them to form permanent ponds.

Current Occurrence

Within Dorchester there are two Ponds that are under the management of Dorchester Town Council. These are linked to the river Frome as part of the old Mill leet and irrigation water management system. Whilst being separated from the main river by sluice gates the two ponds do have a freshwater connection between them. Both Ponds have limited potential to be significant in a wider strategy to maintain ponds within Dorset. They are located on the wider Frome flood plain north of Dorchester and are subject to both seasonal flooding and drying as the seasons vary and the water table and river levels change but neither is an Ephemeral pond. Nationally 50% of ponds have been lost since the 1950's. Neither pond are considered to be of National importance.

Current Management Arrangements

1. Riverside Reserve Pond

Riverside Reserve Pond is situated adjacent to the main river Frome on the section between Frome Terrace and Swan Bridge and is part of the wider Reserve area which is a designated Local Nature Reserve (LNR). The reserve is managed by the friends group with assistance from the Town Council. The pond itself is a typical example of a pond that would naturally dry out were it not for the occasional deepening to ensure it retains sufficient water. The pond benefits from ingress of very clean water (via Johns Pond) that originates from the River Frome. This pond has not been formally surveyed, anecdotal evidence shows presence of routinely occurring aquatic plants. No recording of Fauna has taken place. Management is restricted to trimming of surrounding vegetation, management of water ingress/egress, a clearance of litter and debris.

2. Johns Pond

John's Pond is an old irrigation well along the Mill Stream behind the old prison and is reputedly named after a prisoner who escaped from HMP Dorchester via a well and then fell into the pond and drowned. The Pond was formerly more or less derelict but was cleaned out, renovated and the sluices improved, walls were pointed and damaging tree roots removed as a result of funding from the Town Council. The water level can be managed by sluice gates. The pond has to be managed to prevent re-occurrence of previous incidents of flooding further downstream to the allotments etc. This, to a certain extent, precludes the effective management of the pond for wildlife to its fullest, however the pond still has an important very local role to play especially for animals, fish insects and reptiles who will take advantage of its presence locally for refuge from predation, feeding, resting, reproduction and to a lesser degree permanent habitation.

Challenges

Changing river water levels as a result of a general drying trend will have an impact on water flow through the ponds and the nature reserve pond is indeed at risk of more or less drying out in the future if predictions are accurate. Additionally increased heavy rainfall occurrences present a different challenge where large amounts of rain in short periods of time cause the river to flood over the existing floodplain bringing associated problems with silting, deposition of vegetation and species population variance.

Such ponds are vulnerable to root ingress and silting, both ponds will similarly be affected and steps will have to be taken to ensure this is managed but managed sympathetically to try to safeguard existing flora and fauna as much as is possible.

The local stretch of the River Frome suffers from infestations of two invasive species:

Impatiens grandulifera, commonly known as Himalayan Balsam. Originally introduced as a garden plant it has become a major problem along many watercourses in the UK. Large amounts now affect the Dorchester part of the Frome and this includes the area of the nature reserve. Mechanical control is the only acceptable method in this area and is currently carried out by "pulling" of the annually developing plants. This work however is significantly undermined by the ingress of seed from further upstream where control is not carried out.

Heracleum mantegazzianum, commonly known as Giant Hogweed is present in limited numbers on the section of the mill stream below Johns Pond and above the Nature Reserve. Again originally introduced as a garden plant this species infests river banks. The Town Council is currently removing any plants it finds on its own land by mechanical methods only. It is hoped this will contain occurrences of the plant but specimens do exist and are producing seed annually on private land adjacent to the mill stream.

4:3 Gardens and Open Spaces

Description

Parks, gardens and open spaces provide a valuable opportunity to provide micro habitats that various species of both flora and fauna can take advantage of. There are limitations to the degree of variety and quality a major one being conflicting demand and use. In the urban environment Open space is scarce in terms of a percentage of overall land use. This makes "Open Space" important to both wildlife and people who frequently have conflicting needs.

The scale of sites and the uses to which they are put will also greatly influence quality.

Current Occurrence

Dorchester Town council has management responsibility for a range of Public Gardens, Open Spaces and Play Areas. The major ornamental Park within Dorchester is Borough Gardens , it contains a mix of mature trees shrub beds, formal grass areas hard landscaping features, building , play area, tennis courts, greenhouses and annual borders.

Other Major open spaces are present at:

- Kings Road
- Salisbury Fields
- Maumbury Rings
- Sandringham playing fields
- Great field
- Weymouth avenue

These open spaces are in the main a mix of recreational grass with trees and hard surfaces, some play equipment bins, benches etc.

Current Management Arrangements

Borough gardens

The gardens are managed as formal open space with the amenities mentioned above. Grass cutting is approx. every two weeks and shrub maintenance is approx. monthly. Annual borders are replanted twice yearly. In terms of biodiversity several initiatives have been incorporated into the gardens to help boost their quality such as hedgehog boxes, bird and bat boxes, replacement of annual plantings with perennial plantings, scented borders to attract pollinators and other work detailed in the other sections, water, energy, integrated pest management, waste and trees. Use by people is particularly heavy as it is the only formal garden available in

Dorchester, uses include passive and active recreation, play, events and concerts, playing of sport, organised and informal play, undertaking passive and active hobbies and social activity. Peat use has now stopped being replaced by peat free alternative for nursery use. Onsite composting processes all green waste arising from the maintenance of the site.

Other open spaces

The majority of the remaining open spaces are managed on a rotational grass cutting basis with ad-hoc maintenance to any shrub beds, hard and soft landscaping features and trees. Bat Boxes are used where the tree stock is appropriate and hedgehog boxes are also placed in certain sites where disturbance is low and badgers are not present. Other work detailed in other sections, water, energy, integrated pest management, waste and trees detail wider strategic works that help to boost biodiversity.

Use by people is variable and uses include passive and active recreation, play, events and concerts, playing of sport, organised and informal play, undertaking passive and active hobbies and social activity. Local open space is valued by the local community and it is often quite limited in size so pressure on it increases at certain times of year and in certain weather conditions.

Challenges

Borough Gardens

It can be seen that the gardens have a particular character and use that is valued by the wider community and this can lead to conflict with wildlife however by adopting the management changes detailed above and elsewhere in this document, the gardens can, where possible, provide a valuable oasis for many forms of wildlife.

Other Open Spaces

It is the case that the open spaces have various characters depending on their location and what is contained within them and they are valued by the wider community. Again this can lead to conflict with wildlife however by adopting the management changes detailed above and elsewhere in this document, the open spaces can, where possible, provide a valuable oasis for many forms of wildlife.

The largest challenge all of the above sites face is one of size and number, substantial greenspace is limited within Dorchester with high pressure and human expectation placed upon it. Equally, wildlife in terms of both flora and fauna has a need to utilize these spaces but also has the alternative to exploit the wider countryside which is relatively close to the centre of Dorchester. This leads to a situation where the sites are of reasonable wildlife value and in many cases they are used as a stepping stone to more extensive and suitable habitats. This is particularly the case for fauna and these stepping stones when combined with the environments provided by railway lines and private gardens do provide corridors for wildlife to move within the Town.

4:4 Cemeteries

Description

Cemeteries can provide a refuge for wildlife in certain circumstances, both flora and fauna. They tend to be a mix of hard structures and grass areas, some larger, some very fragmented. The current use and management arrangement for cemeteries has a significant bearing on both their value and quality from a biodiversity point of view.

Current Occurrence

There are three Cemeteries within Dorchester that the Town Council has management responsibility for.

- Fordington Cemetery
- Poundbury Cemetery
- Weymouth Avenue cemetery

All are located within the Town of Dorchester and are open to the public.

Current Management Arrangements

Poundbury cemetery

The most recent cemetery it is open for all types of burial and comprises grass areas, paths, buildings and grave spaces. The site has several already filled sections comprising grave memorials and grass and a larger open grass area where new burials are being placed. This area also contains a wildflower section developed approx. 5 years ago. The wildflowers are non-significant in terms of varieties present being of national importance, but they do provide a valuable resource both in terms of flora and also the fauna that can exploit or utilise them. The grass cutting regime in this area is modified to suit the growth of wildflowers. The rest of the site is more formal with grass between memorials being cut monthly to keep the Cemetery tidy and in line with public expectation. Memorials are new and regulated in form and as a result offer little in the form of habitat to both flora and fauna.

Weymouth Avenue Cemetery

This cemetery is now closed to new full burial as there is no longer any space available, Burial of ashes continues in one small section. The site is comprised of several sections divided by paths.

Each section comprises high numbers of memorials with grass in-between. Grass is cut on a monthly basis the tight positioning of stones preventing any economic form of clippings collection. The memorials are dated from 1850 onwards and as such can be quite intricate and extensive. This type of memorial is useful for providing habitat mainly for fauna especially reptiles and insects and the current management regime does not limit that.

Fordington Cemetery

This was the first cemetery Dorchester to be closed to all but burials in purchased plots and ashes. The site is divided into sections which contain varying numbers of memorials dating from circa 1860 these are in varying conditions and certain stones are valuable in terms of hosting Lichens which also providing habitat for various forms of fauna.

Due to the age of the cemetery in several areas memorials have been removed over time and some wider grass areas are present (below 20 m²) these are managed where possible to encourage wildflowers although this is not as extensive or formalised as at Poundbury Cemetery. Grass cutting is monthly and this is varied where wildflower species are present, these are mainly confined to spring flowering species.

Challenges

Cemeteries are areas of provision where sensitivity and expectation is varied. People who are bereaved are going through a very challenging time in their lives and as a result are very sensitive to what they perceive as respectful practices. This has resulted in a standard of provision associated with cemeteries (that are still active) being established, briefly that they will be clean and tidy, easily accessible and well maintained. It is to be remembered that grave plots are purchased and become the property of the rights holder and as such are private property, people will tend to these plots in various ways and it is not the role of the Town Council to do so unless specifically agreed. This arrangement leads to several challenges, in the main these revolve around expectations of access, quality of maintenance and visual impact affecting other users. It is the case that generally the more recent the burial the higher the expectation is of a more formal type maintenance arrangement unless areas are specifically designated otherwise e.g. Wildflower areas. It should be noted that in recent time there is a wider acceptance and in some cases desire to have burials associated with wildflowers and meadow type environments and a cemetery exists locally to meet this slowly increasing need. As memorials age over time expectation fades somewhat so a less formal maintenance style can be adopted with less adverse reaction. This can enable colonization by wildlife to commence reaching a peak when cemeteries close and in effect fall into dis-use with no or little maintenance. There are no examples of this within Dorchester Town Councils management. In summary cemeteries offer some biodiversity value but this is often in conflict with user's expectations and it is difficult to manage that without causing upset to member of the community.

4:5 Trees

Description

Trees are an important link in the chain of biodiversity providing habitat for flora and fauna, creating other habitats, and combating the effects of environmental pollution and CO2 production. Trees regulate temperature and humidity, provide the building blocks of soil, host many species, slow rainwater transit through the soil, help prevent surface runoff and also make Humans feel good.

Current Occurrence

Dorchester is noted for its main system of tree lined walks but also benefits from open spaces and a gardens with mature tree stock. Species present are those that will tolerate the local weather, soil and climate. All trees within the Town Councils Ownership are managed and the majority are planted species of a non-native origin. A limited number of indigenous tree species exist in the UK and several of these species occur within Dorchester. Trees are present in the vast majority of Town Council managed open spaces, gardens and cemeteries.

The Borough Gardens host the widest variety of tree species as well as the highest number in a single location. All the trees there have been deliberately planted and tend to be non-native species which reduces their biodiversity value in term of habitat and food but their contribution is still large. There is a healthy mix of ages of tree and planting density.

Open space and cemeteries tend to contain a narrower range of species with a higher number of native species but these are still not that significant or numerous. The majority of these trees have been deliberately planted and were placed to add variety and interest within the open spaces. Again, whilst biodiversity value could be higher the trees are still of significance.

Current Management Arrangements

The Councils tree stock is identified and surveyed as necessary. Trees provide important opportunities for birds, bats, insects, fungi and many other organisms and it is this that informs how the tree stock is managed. To enable as natural and flourishing habitat as possible trees are not actively interfered with unless absolutely necessary, and a minimum intervention management regime is in place.

With the exception of some specimens of pleached Lime in Borough gardens, maintenance in the form of cutting and pruning is very much limited to remedial work to dead, diseased, dying or mechanically problematic material. This management policy allows trees to develop in their

natural form and to grow as they naturally would offering the maximum potential for use by wildlife and flora.

Works to allow clearance in terms of headroom /encroachment onto paths and removal of trespass nuisance is carried out but only on an individual need basis. With the exception of the aforementioned Limes, pollarding is only carried out where the only other alternative would be the removal of the tree. All works are carried out by fully trained arboricultural staff.

Challenges

Re-planting is on the basis of one for one replacement, species being selected bearing in mind the need to maintain the range of tree species within Dorchester, the character of the site where planting will take place and the suitability of the species for the location.

Evidence from the UK Climate Impacts Programme (2002) shows that the climate in the Dorset Downs and Cranborne Chase over the coming century is likely to become warmer and wetter in winter, and hotter and drier in summer. In addition, rainfall intensity will probably increase. Extreme events such as heat waves and storms are predicted to increase in frequency and severity. Whilst not within that geographical area, Dorchester is likely to experience very similar impacts. This influences tree selection now for future years, it is expected for example that Beech (*Fagus sylvatica*) will start to struggle to grow in this area if the above trend is proved to be correct.



4:6 Fauna

Description

For the purposes of this report the term Fauna is meant to encompass all living animal life which is not plant based, commonly , Mammals, birds, reptiles, insects, fish, butterflies moths molluscs soil borne organisms, fungi etc. This does not include Humans.

Current Occurrence

No formal surveys have been undertaken to establish the types and number of animals that utilise the Land managed by Dorchester Town council and as a result it is difficult to define what currently resides, visits or travels through DTC sites. Anecdotally many species are sighted or evidence of them has been found. Species of Principal Importance listed in the NERC Act 2006 known to be present include:-

Common Toad	Hedgehog
Pool frog	Otter
Linnet	Bats
Yellow hammer	Slow worm
House sparrow	Common Lizard
Starling	

It is the case that some of these are actually resident e.g Common Toad and House sparrow, whereas other species are seasonally present e.g. Starling. Some travel through DTC managed sites detailed in this report such as Otters.

Current Management Arrangements

As stated previously in this report the preservation of habitat is key to facilitating the presence of associated fauna. It is also clear from this report that these habitats in their truest sense do not exist within sites managed by DTC. There are however a number of actions that have been taken to encourage some of species on the above list to utilise the land and property managed by the Town Council.

(Several of these are detailed in other sections e.g. Pesticides and trees) examples of wildlife focused work include:

- Bat Boxes
- Bird Boxes

- Routine maintenance of pond areas
- Hedgehog friendly operations, staff awareness and provision of boxes
- Provision of wildflowers and nectar producing species
- Avoiding nesting bird times for pruning operations

All the aforementioned when combined with management practices detailed elsewhere help to allow animals to exist alongside humans as much as is possible and also to enable animals to move through or rest within, Dorchester.

Challenges

The biggest single challenge faced is one of space and pressure as previously discussed in this report. Animals having the (limited) ability to think and be mobile have the opportunity to move out of unsuitable environments quickly and not re-colonise. In contrast to say trees for example, this can occur quickly. Human pressure will drive animals away for a variety of reasons, the food chains that exist may then break down resulting in a wide range of species not being present because of the loss of only one species be it animal or plant. The extent of these links is only just becoming apparent in wider consciousness and further research work is required to understand the wider implication of the loss or significant reduction in population of a single species.

The desire of people to have outdoor facilities they can enjoy and use for their recreation in terms of need is wide ranging. Balancing that need with the needs of animals is difficult. Globally, climate change and the resulting habitat change and or loss is a great threat. Locally the effects are estimated to be a drying with increased high wind high rainfall events, this will inevitably effect habitats and the animal species found within them. It is difficult to predict how this will impact on Dorchester's fauna.

4:7 Water

Description

Water supplies are used in numerous buildings and outdoor facilities (mainly Parks, open spaces and gardens) managed by the Town Council. The majority of this water is treated mains supply potable water supplied through the existing mains water supply from Wessex Water. The production, treatment and supply of water is a significant consumer of energy and also places demand upon clean water supplies which are increasingly under demand pressure.

Current Situation

Mains water supplies are used to provide water to all Town Council Buildings/facilities where water is required.

- Municipal Buildings
- Corn Exchange
- Louds Mill Depot
- Sandringham Changing Rooms
- Poundbury Cemetery
- Borough Gardens Kiosk and toilets, Borough Gardens House
- Maumbury Rings Pavilion

Outdoor facilities

- All Allotments except Frome Terrace (Red Cow Farm site if progressed will not have mains water)
- Poundbury Cemetery, Weymouth Avenue Cemetery, Fordington Cemetery
- Princes street Fountain, Chasebough Square fountain
- Sandringham football field

Borehole water is used in the following ways

- Water standpipes and Nursery in Borough Gardens
- Children's Play Park Borough Gardens
- Fountain and mess facility Borough Gardens
- To fill bowser for watering other sites and hanging baskets or where non potable water is needed e.g. Pressure washing operations.

Current Management Arrangements

Work over the last three years has seen a review of water use undertaken and has resulted in a significant reduction in the amount of Treated Mains water used by the Town Council. Following assessment/Audit of all water accounts, the main threads of this work have been based on the following methodology:

1. Necessity of Potable supply
2. Availability of alternative
3. Reduction in consumption/ control measures
4. Cessation of use

By applying these methods changes in management have occurred, the main element being the provision of a borehole water supply to the Borough Gardens and for use (via bowser) in other areas and in other functions that do not need a potable source. This enabled the closure of several mains water supplies to the borough gardens and their replacement with borehole supply. Additional activities have included the reduction in annual bedding placed in beds and border within the Town Centre (these have been replaced by more permanent planting), the complete use of dip tanks rather than stand pipes on allotment sites, the stopping of field supply at Sandringham, press taps and shower supplies (auto close off) and closed/ cistern type systems on fountains. The above measures have seen consumption reduce across the council from circa 4500 units in 2014/15 to circa 2500 units in 2017/18. (note:- A unit is equivalent to 1M3)

This a reduction of roughly 45%

Challenges

Extensive work has resulted in significant reductions however continued work could see more reduction. Investment in Rainwater capture for any new building or redevelopment should be considered as will use of waterless urinals and water saving devices in toilets and washrooms.

4:8 Energy

Description

Energy supplies are used in numerous buildings and outdoor facilities (mainly Parks, open spaces and gardens) managed by the Town Council. The use of Energy in the form of Gas and Electricity is widespread. Both these energy sources are relevant to biodiversity as the production of either, unless by renewable means in the case of electricity or Bio-gas, result in emissions of CO2. Neither gas nor electricity used is from a renewable source, both being provided by national energy supply networks.

Current Situation

Energy is supplied to all Town Council Buildings/facilities where it is required.

- Municipal Buildings
- Corn Exchange
- Louds Mill Depot
- Sandringham Changing Rooms
- Poundbury Cemetery, Weymouth Avenue Cemetery
- Borough Gardens Kiosk and toilets, Borough Gardens House, Nursery and mess facility
- Maumbury Rings Pavilion

Outdoor facilities

- Princes street Fountain, Chasebough Square fountain
- Fountain, Event power points, clock and bandstand at Borough Gardens
- Skatepark

Current Management Arrangements

Work over the last three years has seen a review of Energy use undertaken and has resulted in a significant reduction in the amount of both Electricity and Gas used by the Town Council.

Following assessment/Audit of all Energy accounts, the main threads of this work have been based on the following methodology

1. Necessity of supply
2. Availability of alternative
3. Reduction in consumption/ control measures
4. Cessation of use

By applying these methods changes in management have occurred.

Electricity.

The use of electricity can be most effectively controlled in buildings that the council manages. The outdoor sites, once the test of “need” has been applied, tend to be locations where supply is for a specific purpose e.g. running a fountain or for use by others for one off events e.g. Maumbury rings. There is little can be gained in terms of reductions in use in these areas. The buildings where electricity is supplied have been focussed on with a view to reducing consumption. The buildings are of very mixed ages from the Corn Exchange/ Town Hall circa 1847 to Louds mill depot circa 2006. This in itself makes applying across the board processes difficult so work has tended to be on a building by building basis. The one common element has been lighting which was reviewed and low consumption lighting elements are now used wherever possible. In addition changes in heating methods and use of buildings has contributed to an overall reduction from circa 163,000 units in 2014/15 to circa 144,000 units in 2017/18.

Gas

Gas is used In four buildings to provide heating and hot water. This is reduced from the previous five. The reduction was a result in the change in working practices and subsequently facilities provided at Sandringham Changing rooms.

It is difficult to reduce gas consumption for heating, as a result focus has been on the better management of heating by use of thermometers and timers to prevent consuming gas when heating is not required. These measures have resulted in gas consumption being reduced from circa 235,500 units in 2014/15 to circa 229,000 units in 2017/18.

Challenges

Ongoing work has resulted in reductions and continued work could see more reduction. It is necessary however to consider the wide age range of buildings and in some cases restrictions placed by others upon changes to the buildings. A further factor will be cost of change, it will require significant capital investment in facilities such as the Corn Exchange to secure significant additional reductions in energy use and the Council has to balance the environmental impact its use has with the financial requirement to use money appropriately. Investment in Efficient heating and lighting schemes for any new building or redevelopment should be considered as part of the building project and where financially viable, implemented but gains will be challenging.

4:9 Waste

Description

Waste can be simply described as any material that is no longer required that is to be disposed of by the user.

Waste can take many forms e.g. Green waste, office waste, electronic equipment, metals, water/effluent, process residues and hazardous materials

Current Situation

Waste produced by the town council is currently streamed as follows

- Green waste
- Tree Prunings
- Litter/office waste
- Bulk items
- Sanitary Material and sharps.
- Grave digging spoil
- Septic Tank Arisings
- Electronic Equipment
- Hazardous Materials

Current Management Arrangements

The councils "Waste Management Overview and Action Plan 2016" details all current and forthcoming arrangements for waste. In summary the plan ensures that the council employs the waste hierarchy principles to all its waste products. This Hierarchy ensures that,

"When waste is created, it gives priority to preparing it for re-use, then recycling, then recovery, and last of all disposal (e.g. landfill). "

In summary very direct effects of this plan mean that all green waste is composted by the Town Council, as much material as possible from waste streams is recycled or re-used and the minimum is deposited in landfill. Amounts of waste to Landfill have reduced from 30 tons in 2016 to 6 tons in 2017/18. Of this 6 tons approx. 50 % is then recycled at the point of processing by the waste receiver.

Challenges

Currently waste is managed effectively but costs are rising for recycling services and processing for re-use. Dorchester Town Council is aware of this and is currently able to respond.

4:10 Pesticides

Description

A pesticide can be defined as :-

“A substance used for destroying insects or other organisms harmful to cultivated plants or to animals”

Such substances can take many forms and have many purposes and do impact on the biodiversity of an area where they are used be it by, directly killing either flora or fauna, by accidentally killing non pest species or by the active ingredient entering the food chain and adversely affecting non pest species.

Current Situation

Dorchester Town Council does not use Pesticides unless as a matter of last resort and usually where the opportunities afforded by integrated pest management either can't be applied or have failed. It is the case that significant reductions in applications of herbicide and fungicide have already been achieved.

Pesticide application is now limited to the following:

- Weed control where cultural methods have failed or are un-economic
- Applications of fungicide and insecticide in closed (greenhouse) conditions only as part of growing nursery plants
- Occasional application of bait to control rats on allotment sites (this was formerly routine)
- Use of Algaecide on tennis court surfaces.
- Use of herbicide sticks to kill felled tree stumps.
- Use of Molluscicides

Current Management Arrangements

It is the case that COSHH principles are applied to all processes where pesticides may be needed and this has resulted in a drop in use by promoting other methodologies e.g. trapping rather than poisoning of moles where population become too large and cause safety issues.

The process also has reduced the use of “Hazard rated” products, only insecticides used within greenhouses are from higher classifications such as toxic.

The introduction of biological control will commence in 2018, this should see a significant reduction in use of both insecticides and molluscicides.

Wherever possible application of chemical is via C.D.A method reducing the amount of herbicide applied and potential run off.

Challenges

The reduced use of annual bedding displays within areas managed by Dorchester Town council has achieved a similar reduction in applications of pesticides to support the growth of the plants and quality of display. It is the case that annuals are now in the main limited to the Borough Gardens where they are in keeping with the site and indeed are a specific feature associated with the Heritage Listing Status of the gardens. Public expectation is to see quality bedding displays in the middle portion of the gardens and as a result crop protection chemicals are required. The use of control to kill slugs is necessary to limit damage to a single crop of plants that cannot be easily or economically replaced if it is seriously impacted by slugs or snails. Slug pellets are currently used which are alleged to cause death in hedgehogs. Although this has not been in any way scientifically proven it is an emotive area and one in which is difficult to achieve a balance as other chemical treatments are less effective and risk losing the display which will result in a lower quality of experience for many visitors.

5:0 Summary

5:1 Current Position

- Dorchester town Council provides a range of Open Spaces and Gardens. Due to the way those sites originated, evolved and have been managed over many decades they do not include any specific habitats contained within the Dorset Wide Biodiversity Action Plan. This is not surprising given the size of those areas and the profile of land uses.
- The creation of “wildflower” meadows currently at both Maumbury Rings and Poundbury Cemetery meet a wider biodiversity goal but will not sufficiently re-create Calcareous Grass land, furthermore, over time, Poundbury Cemetery area will be reduced as burials continue. This will be more than offset by the creation of a large meadowland area at The Great Field.
- DTC land does provide a valuable opportunity for some of the species listed on the NERC list, not directly dependant on the wider Dorset Biodiversity Plan habitats, to either exist or temporarily take advantage of.
- DTC land provides important links for wildlife to move through the urban area of Dorchester.
- There is significant pressure to meet public expectation of facilities and balance that with the needs of “nature”.
- The nature reserve provides a good habitat in an environment where nature is clearly the main element of the site. Further developmental work to increase habitat range and quality could occur.
- Good work has been carried out to meet the wider strategic nationwide needs of Water, Energy and Waste reduction.
- Tree management will support biodiversity in Dorchester.
- Pesticide use still occurs and will into the future but there is the potential for replacement with Biological control.

5:2 Further Action

If the action plan at 6:0 is delivered then the situation is improved further especially in the areas of Pesticides, Trees and Fauna.

6:0 Action Plan

The following action plan follows the subject headings detailed in section 4 previous.

Subject Heading	Action	Owner	Target Date
Calcareous Grassland	1. To continue to support and extend the grassland development work at Maumbury Rings	OSM	Life of Plan
	2. To support and adopt meadow land area being developed at great field.	OSM	Life of plan
	3. To investigate creation of trial wildflower section within Weymouth Avenue Cemetery and to produce report to Management Cttee	OSM	Aug 2018
	4. If above is practicable and agreed create wildflower area and then manage to encourage species.	OSM	Feb 2019
Ponds	5. Provide ongoing management to both pond sites including continued removal of invasive species and silt when necessary	OSM	Life of plan
Gardens and Open Spaces	6. Continue to provide opportunities for placement of hedgehog, bat and bird boxes.	OSM	Life of plan
	7. Investigate and if appropriate provide owl boxes	OSM	Jan 2019
Cemeteries	8. Continue to maintain and seek new opportunities to extend existing wildflower area at Poundbury Cemetery	OSM	Life of plan
Trees	9. To increase replacement ratio of trees that have been felled or died for like for like to 2 for every one lost.	OSM	Aug 2018
	10. Implement a biosecurity procedure ensuring tree stock is UK grown and wherever possible uses seed or propagation material from UK.	OSM	June 2018
	11. When replanting utilise UK native trees where appropriate given existing site characters.	OSM	June 2018
Fauna	12. Continue policy of Hedgehog Friendly Dorchester	OSM	Life of plan
Fauna (Cont.)	13. Carryout management works to trees and scrub within Nature reserve to	OSM	Feb 2019

Dorchester Town council Biodiversity and Action Plan 2018-2023

	encourage Fauna and to provide both habitat and protective cover to amphibians using pond. 14. Undertake Bat survey in Borough Gardens	OSM	March 2019
Water	14. Investigate and where possible implement rainwater capture in any re-building or new building work	OSM	Life of plan
	15. Cease outfield fertilising of sport pitches as routine and feed only when absolutely necessary to sustain grass growth	OSM	Life of plan
Energy	16. Review lighting on a building by building basis ensuring most efficient lighting is in use where appropriate	OSM	Life of plan
	17. Ensure efficient heating system is used when re-modelling Corn exchange building	TC, OSM	Jan 2020
	18. Utilise Solar power for ancillary electrical equipment where practicable	OSM	Life of plan
	19. Continue to closely monitor Energy consumption, annually review.	TC	Life of plan
Waste	No current action		
Pesticides	20. No use of nicotinoid insecticides outside of closed environments	OSM	July 2018
	21. Cessation of Nicotenoid use	OSM	Jan 2020
	21. Introduce biochemical control alternative (predators) to insect pests in greenhouses e.g. Scarid fly, whitefly.	OSM	Life of plan
	22. Trial use of biological control (nematodes) for use on molluscs and if successful adopt no slug pellet practice	OSM	June 2018

TC – Town Clerk

OSM – Outdoor Services Manager