

## Biodiversity Review for Oxford City Council Parks and Nature Areas 2020

A review of biodiversity and habitat management in Oxford City Council's Green Spaces, and a proposal of actions for further improvements





## Biodiversity Review for Oxford City Council Parks and Nature Areas 2020

Maximising the potential of vital urban habitats and working towards more sustainable grounds maintenance practices

### Contents

Preface by Councillor Linda Smith 3 Foreword by Councillor Tom Hayes 4

- 1 Introduction 5
- 2 The Green Resource 6
- 3 Current initiatives to support biodiversity and increase sustainability 7
- 4 Public involvement 8
- 5 Benefits of further increasing public involvement and awareness of wildlife 9
- 6 Further potential to enhance and increase habitats to support biodiversity 10
- 7 Aims and benefits of increasing and diversifying habitat 11
- 8 Constraints and considerations of increasing and enhancing habitat 12
- 9 Conclusions 15Updated overarching priority initiatives to support biodiversity 15
- **10** Site specific Five-Year Action Plan **17**

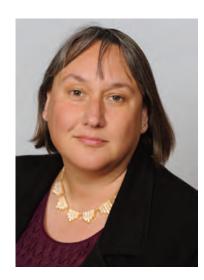
Top 12 priority projects 17

Smaller urban park projects 19

- 11 Related documents 21
- APPENDIX 1 Site-specific habitat enhancement projects 22
- APPENDIX 2 Detailed strategies regarding sustainable planting and maintenance of habitats 24
- APPENDIX 3 Feedback from Natural England following their inspection of Shotover Country Park in March 2019 29







## Preface by Councillor Linda Smith

Cabinet member for Leisure and Parks

We are immensely proud of our beautiful parks and nature areas here Oxford, and the Council, along with our partners and volunteers, works very hard to ensure that the sites continue to be spaces of beauty, relaxation and biodiversity. Many of our parks and green spaces across the city have received national recognition over the years, and we are very proud of these spaces. The Council has a long and successful history of maintaining and managing our green spaces in the city, and this biodiversity review outlines the work that we have done so far, and the projects and initiatives that we will continue to explore in the future.

As the report highlights, alongside maintaining biodiversity, we should balance improving wildlife habitats with maintaining opportunities for recreational opportunities. Our green spaces are places that we want both our wildlife and our residents to enjoy.

Whether you visit our parks and green spaces, alone or with family and friends there is something at our parks and green spaces for everyone. From the people who come to our tennis courts to practice their technique every day, to those who'd rather sit and enjoy the sun with a book and take in the sunshine.

Many of us are well aware of the benefits that visiting and enjoying parks and green spaces can have on our physical and mental health. Remembering to take a few moments to stop, breathe in the fresh air, and listen to the sounds of nature can help us to reset own minds and bodies.

Our parks and nature areas are a vital part of our city. I would like to thank the hard work of everyone who is involved in maintaining and volunteering at these spaces to ensure that they continue to be high quality and diverse habitats for everyone to enjoy.





### Foreword from Councillor Tom Hayes

Deputy Leader and Cabinet Member for Green Transport and Zero Carbon Oxford

The public's understanding around the urgency to tackle the climate breakdown has increased over the past few years. This builds on the increasing calls from climate scientists over the past few decades around the need for strong leadership in order to tackle the climate emergency. The Council has listened to the advice of climate scientists, many of whom are based right here in Oxford, and has taken the steps to lead the way both locally, and nationally around climate action.

When this Council declared a climate emergency in January 2019, we did so because efforts to tackle climate breakdown needed to be increased to measure up against what the science says is needed. When this City Council hosted a Citizens' Assembly on Climate Change in the summer of 2019, we did so because we wanted to know what people really think and want given the opportunity and responsibility to design our climate future.

The Citizens' Assembly was clear that enhanced biodiversity was central to the overall 'net zero' vision of Oxford and recognised that tackling climate change and ecological breakdown together was important. Assembly Members of all viewpoints and backgrounds were positive about creating more biodiversity and green space around Oxford. We are continuing to manage and maintain our 600 hectares of land including our 12 Sites of Special Scientific Interest, increasing biodiversity across Oxford, and better coordinating our work with people and groups.

As I know from personal experience in East Oxford in the last year, tree planting in urban green spaces with Oxford Direct Services (ODS) and our Landscape apprentice can be hugely rewarding. Effective and meaningful climate action will require the Council and Oxford citizens to work differently and closer together. Individual and community action is part of the response to climate breakdown and this Council wants to encourage all citizens to become stewards of our green spaces, our wildlife, and ultimately our planet.

This Biodiversity Review for Oxford City Council Parks and Nature Areas sets out initiatives to further protect and increase biodiversity in City Council-managed green spaces. It also sets out opportunities to further encourage public awareness and involvement with green spaces and wildlife. I hope this Review goes a long way to inspiring more of Oxford's citizens to unite and engage in our collective response to climate breakdown.







### 1 Introduction

Oxford City Council (OCC) declared a climate emergency in January 2019 recognising the impact climate change is having on our natural environment. In September and October 2019 the Council held a Citizens Assembly on Climate Change and assembly members felt that enhanced biodiversity was central to the overall 'net zero' vision of Oxford with increased flora and fauna across the city. The City Council has a long history of successful management of green spaces for biodiversity.

This review sets out the initiatives that have been put in place to further protect and increase biodiversity in OCC managed green spaces, and identifies what additional steps can be taken to ensure these vital urban habitats are achieving their full potential. In combination, opportunities are identified to introduce more sustainable grounds maintenance practices and to further encourage public awareness and involvement with wildlife. In 2015 Oxford City Council (OCC) produced a *Biodiversity Action Plan (2015–20*) to provide an overview of polices and initiatives to support biodiversity across the council and to act as a point of reference to deliver more detailed schemes.

This review does not seek to repeat the overview of information relating to biodiversity in the city and its regional and national context provided in the Biodiversity Action Plan, and should be read in conjunction with that document (a link to this report and all other documents referenced in this review is provided in section 11). However, it is merely worth reiterating that supporting biodiversity meets a number of the Council's core aims, including those identified in its Green Spaces Strategy, and has become a more pressing priority at a time of intensification of development in the city, combined with increased impacts on wildlife from climate change and habitat fragmentation.

Along with supporting physical and mental health, ensuring provision of high quality green spaces and increased tree cover also greatly benefits the city's residents and visitors by improving air quality, reducing urban summer temperatures and capturing carbon.

Although some of the projects and initiatives identified in this review to further support biodiversity can be achieved through increased volunteering and changes to grounds maintenance practices, it needs to be acknowledged that others will only be possible as and when funding becomes available. There is also a finite limit on resources to manage specialised habitats. However, there is good potential to obtain additional funding through various sources, including from planning gain (offset) resulting the various housing developments planned for the city over the next five to ten years.

This review therefore sets out an ambitious range of projects and initiatives which can be achieved to maximise the potential of OCC's green spaces to provide high quality, diverse habitats, as and when resources allow.







### 2 The Green Resource

The Council owns and manages just over 600 hectares of publically accessible green space in the city and surrounding area. This includes a countryside park, 33 countryside sites/nature areas (two managed externally under lease agreements), a wide variety of urban parks and public gardens (62 in total), 29 allotments (though all leased by individual associations) and four cemeteries.

It is also the largest riparian land owner in the city, owning around 25% of the Thames riverbank through Oxford, along with sites bordered by the River Cherwell, and Castle Mill, Bullstake and Weirs Mill Streams. Four of its larger green spaces, Iffley Meadows (managed under agreement by BBOWT), Shotover Country Park, Port Meadow, and Lye Valley are designated as Sites of Special Scientific Interest (SSSI's), and Port Meadow is also a Scheduled Ancient Monument and Special Area of Conservation.

Five of its largest urban parks and a cemetery have green flag status, awarded partly in relation to their management for biodiversity.







**3** Current initiatives to support biodiversity and increase sustainability

Below is a list of principle projects and initiatives undertaken to support biodiversity and improve sustainability in the last five years. A full list of site specific habitat improvement/creation projects is provided as Appendix 1, and strategies on sustainable planting and maintenance of habitats is provided as Appendix 2.

- 7000 new trees planted at various sites across the city.
- Introduction of a biosecurity policy, including sourcing only UK grown trees from vetted suppliers wherever possible to reduce the risk of disease and transport impacts.

- Work with Treeconomics to prepared a tree 'Canopy Cover Assessment' and undertaken an i-Tree Eco Phase 2 Field Survey to establish the structure and composition of the urban forest and quantify the benefits, incl. carbon capture.
- 90% reduction in water consumption for flower beds in parks achieved by replacing ornamental bedding with wild flowers and shrubs.
- All remaining seasonal bedding in parks is bee friendly and sustainable.
- Better management of green waste, with on-site storage and recycling wherever possible.
- Greatly increased partnership working with other organisations/landowners (most notably through the Green and Blue Spaces Network and Wild Oxford project) to ensure the management of green spaces forms part of a coherent city-wide approach to protecting and encouraging biodiversity.
- Individual projects undertaken as part of the Wild Oxford Project to enhance the quality of the habitat at Raleigh Park, Rivermead Nature Reserve, Chilswell Valley and Lye Valley (SSSI).
- Creation of biodiversity action plans (within the Green Flag Management Plans) for Cutteslowe and Florence Parks, including a specific hedgehog protection plan for Florence Park.
- Supporting the Friends of South Park to create a Management Plan, which has led to greater ownership and of the park and conservation of its habitats by local people.
- 5,000 hours of conservation volunteering facilitated in the council's green spaces.







### 4 Public involvement

Many of the site specific habitat improvement projects listed in Appendix 1 were only achieved with the ongoing involvement and dedication of regular volunteers.

Their work is facilitated through the Oxford Direct Services (ODS) Park's Countryside Service, Wildlife Trust, Wild Oxford Project, Low Carbon Oxford, wildlife groups, Friends groups, and the weekly conservation volunteer sessions managed by the Green Space Volunteer Coordinator. This weekly group carry out projects across the city as and where needed. They are made up of a core of individuals joined by occasional volunteers from whichever locality they are working in, including people with various support needs.

The Volunteer coordinator also arranges corporate away days which provide additional resources for conservation work.

The Council's Active Communities Team has been very successful in working with schools in recent years to develop a thriving Forest School scheme which now sees over a hundred outdoor classes each year at an increasing number of venues. These classes introduce children to outdoor play and nature at a key stage in their development to encourage a lifelong interest.







# 5 Benefits of further increasing public involvement and awareness of wildlife

Achieving greater public awareness and involvement with wildlife and habitat conservation can have a number of benefits:

- Increase understanding of the threats to wildlife and habitats and how everyone can contribute to supporting biodiversity and protecting the wider environment
- Deliver financially sustainable ongoing maintenance and enhancement of habitats through increased volunteering
- Conservation volunteering provides a range of benefits to the volunteers themselves, such as exposure to nature, increased physical activity and opportunities for social interaction; all of which contribute to wellbeing
- Reconnecting children with nature encourages active outdoor play and exploration.

Involving local communities in habitat enhancement or creation projects also creates a greater sense of ownership and helps avoid any potential adverse reaction to the way parks are managed and maintained to increase biodiversity.

This approach has already been successfully achieved in a number of the Council's parks, where Friends and other community groups now take an active involvement in both management and maintenance under the guidance of the ODS Parks and OCC's Green Space teams.

Projects identified in this review can be used as a platform for even greater public involvement and some examples are provided as part of the Action Plan.







# 6 Further potential to enhance and increase habitats to support biodiversity

A systematic review of all the parks and nature areas was undertaken to identify further potential to increase habitat or enhance existing ones, and partners including BBOWT were consulted to add independent assessment. There was also a review of policies and initiatives related to biodiversity and a consideration of the priorities. An updated list of overarching priority initiatives and a Site Specific Action Plan based on this review are provided below; however, it is important to first identify the aims of providing more varied habitat, but equally important to understand and acknowledge the constraints.







### 7 Aims and benefits of increasing and diversifying habitat

In addition to supporting food chains and increasing diversity of species through creation of additional and more varied habitat in parks, changes to planting and maintenance practices, such as expanding areas of longer grass and shrub, replacing seasonal bedding with wild flowers, and planting more trees increases sustainability by:

 Enhancing green corridors and wildlife connectivity between sites by increasing wider availability and range of habitat to address fragmentation

- Reducing fuel use and carbon emissions by reducing areas maintained as short grass through ten day cyclical seasonal mowing (and staff resources)
- Reducing moisture loss of the ground during the increasingly hot, dry summers resulting from climate change by maintaining more areas of longer grass and other vegetational cover
- Reduce the need for regular watering of seasonal bedding plants during propagation and once planted by replacing them with more sustainable forms of planting
- Increasing the number and range of plants for pollinating insects
- Improving air quality by increasing vegetation and tree cover in the city.

There is the additional benefit of increasing visual interest in urban parks by creating more variety of vegetation and planting. However, some education may be required to explain changes to planting and rewilding of some areas.

There is growing concern about the impact of the invasive species Himalayan Balsam on the waterways through Oxford. The dominance of this plant may be leading to a loss of biodiversity and capacity of wetland areas. There is a need to undertake a detailed survey of its spread to inform mitigation strategies, and this is already planned as part of a joint venture between the council and a Brookes University student.

The spread of Japanese Knotweed is also a cause for concern but less of a threat at present due to ongoing work already underway by ODS Parks to tackle it. Nevertheless, there is need to continue to monitor this carefully.







# 8 Constraints and considerations of increasing and enhancing habitat

The potential to increase and improve wildlife habitat in parks must of course be balanced against the desire to maintain recreational opportunities for all, particularly at a time when there is a pressing need to encourage healthier lifestyles.

Other constraints include the need to manage vegetation to maintain sightlines to provide natural supervision in parks where there is an ongoing risk of antisocial behaviour, and the desire to avoid creating litter traps in areas of intense usage.

There is also a need to ensure any changes to green spaces are future-proofed in the light of proposed housing and population growth, and particular consideration is required for those areas of the city where expansion is already planned.

For example, additional sports pitches may be required to meet future population growth, so areas in parks where there is potential to create additional pitches may be given over to create longer grass or shrub habitat in the short term, but not tree planting or pond creation.

Although it is desirable to develop 'high status' or rare habitats, there is a need to address the assumption that areas of short grass in themselves have little or no value to biodiversity. Short grass is not a modern phenomenon created by mowers, but has traditionally been provided by grazing animals, and is particularly important for the many birds and small mammals that feed on soil invertebrates.

As a result of current trends, the availability of this habitat and food source is now also under threat, both within larger green spaces and through the increasing loss of residential front lawns or their replacement with artificial turf.

Many urban parks and nature areas provide a haven for wildlife specifically because they provide a mosaic of habitats, including areas of short grass.





There are other important reasons for ensuring a diversity of habitats, for example, grasslands lock up a fifth of all soil carbon in the UK and is as important as woodland in this respect. In the first comprehensive report on the state of England's meadows, the Grasslands Trust reports that the majority of the ancient hay meadows left are in poor condition and it encourages people to manage them as 'carbon stores' and 'wildlife parks' rather than rye grass monoculture.

Various meadow enhancement and creation projects are identified in the Action Plan below, including a project already planned at Cutteslowe Park to develop a meadow using funding provided through planning offset from the Northern Gateway development.

Additionally, the character of the underlying geology at any one location (and the geology in Oxford is particularly varied), and the subsequent soil type this creates, along with the topography and localised ground water conditions, would naturally create a variety of different habitats, each supporting its own specific fauna and flora.

To a large extent, this natural balance is lost in many urban green spaces by imposed land use, desired or convenient planting and generic maintenance practices. The current understandable but sometimes uninformed rush to plant trees, shrubs and other plants at random in the name of sustainability is actually exacerbating this problem, and if unchecked will contribute to the decline in many species.

There are numerous currently generic green spaces in the city which lay adjacent to important natural habitats such as marshes, fens and high value meadows. With informed restoration and appropriate ongoing maintenance these sites can regain their original character, and the specifically attracted fauna and flora from the adjacent, undisturbed local habitats will migrate and recolonise them.

ODS Parks and the various volunteer groups have already achieved great success with this approach, most notably at sites such as Lye Valley Fen, Trap Grounds wetlands and Raleigh Park. Many similar projects and initiatives are identified in the Action Plan below, and there is good potential to fund them through offset as developers are often seeking opportunities to replace specific types of habitat.

Recent changes to legislation means there is now a requirement for developers to not only replace habitat lost as a result of housing and other development, but to fund an overall 10% net gain. In order to maximise the opportunities this is likely to create, a database is being compiled to identify a full range of potential sites owned by OCC which can be offered up to developers for specific habitat offset requirements.

In addition to parks and nature reserves, the council owns other plots of land scattered across the city and surrounding area which are mainly leased out under agricultural tenancy. There may be opportunities to regain direct management of some of these sites to develop them for woodland, meadow or other habitats. However, this change of land use would have implications, including loss of income, loss of opportunity to produce food locally, and increased resources required to develop and maintain new habitats.

Consideration for such projects therefore needs to be limited to those sites which have a significant potential to provide high quality or rare habitats, or which could provide an important link to strengthen a green corridor.

More generally, a most sustainable approach will be to support tenants to better manage sites themselves to encourage biodiversity rather than changing land use away from local food production.

There are opportunities to change the way some grass verges in the city are managed to increase their potential to support biodiversity, including creating wildflower areas. However, this would have various resource and visual impact implications which need careful consideration:

 Unmown verges will have an unkempt appearance for much of the year and many residents would object to the detrimental impact on the wider setting of their property and neighbourhood. This would be a particular problem in some areas of the city







where it could create or contribute to a 'broken window effect'.

- Long grass verges will act as a dog mess and litter trap in some areas, and make the clearance of litter more difficult and time consuming. This could also have safety implications in hotspots where drugs paraphernalia regularly occurs.
- The maintenance of grass verges across the city is a large scale, ongoing operation, requiring considerable staffing and machinery resources. Any changes to the way they are managed must be practical and financially sustainable. It would not be viable to create the requirement for different maintenance regimes for different verges

within each area as the need to drive or transport different machinery to each area previously managed by a single mower will greatly increase staff time, fuel costs and carbon emissions.

- In order to be maintained by cut and collect and flail machinery, verges chosen would need to be free from obstacles such as lamp posts, trees and bollards etc.
- Verges near major roads would not be suitable where traffic control is required during their maintenance.
- As discussed above, short grass verges themselves provide an important food resource for the many birds and small mammals that feed on invertebrates, so have their own important value in supporting biodiversity.

Despite the above constraints, selected larger verges and some roundabouts, even in some of the more urban areas of the city, can still be identified for development as longer grass or meadow habitat.

A project is already underway to establish what is achievable, but a phased approach will be required to assess both positive and negative impacts at different locations, and there will undoubtedly be a period of trial and error before the full potential of this project can be realised. A provisional specification is provided as part of Appendix 2. The verges along the main roads in the city are the responsibility of the County Council, but some of these are maintained on their behalf by ODS. The two organisations will work together regarding desired changes to their maintenance.







### 9 Conclusions

Much great work is already being done to support biodiversity and introduce more sustainable grounds maintenance practices in the Council's parks and nature areas, but it is vital this process continues and there is clear potential to further enhance or create new habitats across the city. It will be equally important that close collaboration between partner organisations and landowners continues to coordinate initiatives to strengthen green corridors and connectivity between sites.

It has taken the council's Parks Service, its partners and regular volunteers, many years to improve or newly create the range of diverse, high-quality habitats it now manages. Similarly, many of the projects identified in the Action Plan below will be long-term projects, requiring ongoing commitment and resources (e.g. a diverse wild flower meadow generally takes around five years to establish and many more to mature depending on local growing conditions).

There needs to be some management of expectation to reflect this. However, as highlighted above, the biggest challenge to enhancing, creating and maintaining specialised habitats is ensuring they are well managed, which with the ongoing financial restrains requires effective coordination by a range of partners and increased involvement from residents.

The increasing level of public interest around biodiversity and sustainability should be utilised to develop closer involvement with conservation, including directly through volunteering. There is also good potential to attract external funding and a range of opportunities can be exploited, including planning offset.

If genuine sustainability is to be achieved, there is a need to adopt a more sophisticated approach than the current narrow focus on tree planting and longer grass which threatens to merely substitute one form of generic habitat with another, and to avoid imposed overplanting of localised natural habitats.

The council's green spaces need to be maintained with the aim of providing a complete range of habitats and food sources for wildlife to restore the natural balance vital to sustain biodiversity and halt the decline in many species.



#### OXFORD CITY COUNCIL

#### Updated overarching priority initiatives to support biodiversity

- Further increase the range, scale and quality of habitats in OCC's parks, nature areas and other green space through the projects identified in the Site Specific Action Plan provided below, along with other such initiatives.
- Continue the programme of succession planting of trees in parks and other green spaces, and further increase the overall number of trees, including utilising opportunities of free whips (tree saplings) provided by the Woodlands Trust and carbon offset initiatives. Also investigate opportunities for natural regeneration.
- Work with partners to mitigate habitat fragmentation by improving viability of green corridors.
- Work with the Freshwater Habitat Trust to improve and increase the number of ponds, scraps and other wetland habitats, included those specifically aimed at protecting endangered species such as Great Crested Newts.
- Work with partners and stakeholders to maximise opportunities and benefits of conservation grazing, including linking up with FAI farms and BBOWT.
- Devise strategies to educate dog owners to prevent detrimental effects of dog walking on sensitive habitats.
- Work with other organisations and landowners to restore/enhance waterway habitats, including management for endangered species such as water voles.
- Collaborate with the University of Oxford's Oxford Plan Bee project, aimed to gather data, undertake research, and develop evidence based interventions to help protect and enhance wild bee populations.

- Project with Brookes University Student to undertake a detailed survey of the spread of the invasive species Himalayan Balsam along Oxford's Waterways to inform mitigation strategies to tackle it.
- Undertake a review of the management of grass verges maintained by ODS with the aim of increasing their biodiversity potential.
- Work with allotment associations to ensure the potential of OCC owned allotments is being maximised for habitat and pollinators.
- Develop projects to encourage greater public awareness and involvement with wildlife, including further expansion of the countryside classroom initiative and link in to Earthwatch's Naturehood project in Cowley and Marston.
- Work with BBOWT on 'OurPlace' project, which aims to support GPs to refer patients with mental health to undertake practical work in the city's green spaces.
- Improve marketing to increase conservation volunteering by giving greater focus to the benefits to wildlife and the environment.
- Work with partners to create more Local Wildlife Sites in the city, linking with BBOWT's Local Wildlife Sites Project.
- Work with stakeholders to finalise the Management Plan for Port Meadow.
- Support the community lease holders and BBOWT to create a Management Plan for Boundary Brook Nature Area.
- Maximise any opportunities to develop changing/new habitats created by the proposed Oxford Flood Alleviation Scheme where it impacts OCC owned sites.
- Maximise any opportunities to restore or develop new habitats through offset provided as part of the numerous housing developments planned for the city.





### **10** Site-specific Five-Year Action Plan

The first table of the Five Year Action Plan below lists the top 12 site-specific habitat enhancement and creation projects identified as the priorities for the larger parks and nature areas. The second table lists a wider range of schemes for the small sites. All the projects have been identified based on their potential to provide high quality or rare habitats, strengthen green corridors and create opportunities for community involvement.

#### Top 12 priority projects

FOG

FHT

Friends of Group

Freshwater Habitats Trust

Site	Action		Resources*	Timescale	
Blackbird Leys Park	<ul> <li>Use ecological consultant to investigate potential to wet meadow areas</li> </ul>	PODS	2020–25		
	<ul> <li>Create longer grass areas within silver birch copse ac bowls green</li> </ul>	jacent to	PODS	Ongoing	
Botley Park and Tumbling Bay	<ul> <li>Work with EA to install a fish pass around the Tumblir weirs to aid spawning and create a slow flowing streat</li> </ul>		PODS, EA,	Complete by spring 2020	
(West Oxford)	<ul> <li>Develop high value meadow either side of the fish paper plant a new hedgerow along the adjacent boundary farmland</li> </ul>		PODS and EA	Ongoing	
	<ul> <li>Continue work on meadow establishment in main pa using wild flower plugs and further improve Kingfishe wildlife area</li> </ul>		LCO, PODS, FOG and WCVG	Ongoing	
	• Increase the width of the vegetation margin along th	PODS	2020		
Burgess Field (adjacent to Port Meadow)	• Continue to work with FOG to manage the scrub to r open sward to increase the range of species attracte site and check vegetation that may supress the finer lay additional hedgerows along the boundaries	FOG, WCVG, PODS	Ongoing		
Cowley Marsh Park (East Oxford)	<ul> <li>Strengthen the green corridor along the Barracks Lat the park by increasing the meadow area and coppici mature scrub to rejuvenate the existing planting/rein with a native hedge mix</li> </ul>	PODS, WCVG.	2020–21		
Cutteslowe Park (North Oxford)	<ul> <li>Work with BSG ecology on the establishment of a wil meadow in the lower field and initiate twice yearly cu collects regime (April / May - dependant on growing This project will be funded through offset from the N Gateway development</li> </ul>	PODS and BSGe	Based on timing of funding from northern gateway project		
	* Key to resource teams, organisations and groups	DODG	Parks Oxford Direct Serv		
	BSGe BSG ecology consultants EA Environment Agency	BSG ecology consultants PODS		ICes	
	NFASC Northway Flood Alleviation Scheme Contractor	LCO LCG	Low Carbon Oxford Local Community Group		
			Local Community Group		

WCVG Weekly Conservation Volunteer Group

Woodlands Trust

WT





	Top 12 priority projects (cont.)		
Site	Action	Resources*	Timescale
Fettiplace Rec (Barton)	• Fill in gaps to create a longer grass margin along the whole of the Bayswater Brook through the park (where there is room between the brook and the footpath) to increase habitat and deter the regular fly-tipping in the stream	PODS	2020–21
	<ul> <li>Investigate option to create longer grass area at the Hubble Close end of the site and to plant a hedgerow along the boundary of the houses</li> </ul>	PODS and WCVG	2020–21
Foxwell Drive Open Space (Northway)	• Plant whips, and creates longer grass areas along the eastern and western thirds of this linear green space to increase and diversify habitat, with the added benefit to adjacent residents of reducing road noise from the bypass (the central third needs to remain short grass to provide kick-about area adjacent to the playground). This will also greatly reduce the area requiring ten day cyclical mowing	PODS and WCVG	2020–21
Hinksey Park (South Oxford)	<ul> <li>Work with EA to further improve the habitat of the lake margin, including restoration of the floating reed platforms</li> </ul>	PODS, EA, WCVG	2020–21
(,	<ul> <li>Add high quality meadow turf on Hinksey Step (in front of the car parking)</li> </ul>	PODS	
King George's Field (Osney)	<ul> <li>Develop this field as a wild flower meadow and encourage community involvement/ownership through a project getting local people to grow wildflowers at home and then have a planting day on site</li> </ul>	PODS, LCO and community input	2020–21 plus five years of enhanced management
	<ul> <li>Review tree management and planting to maximise habitat value</li> </ul>	PODS	2019–20
Shotover Country	Restore heath and acid grassland	PODS	Ongoing
Park (Horspath)	<ul> <li>Bracken rolling/spraying over a 5 year programme</li> </ul>	PODS	Ongoing
Showman's Field (Marston)	• Develop ponds and surrounding habitat in the wetter, lower- lying tongue of land at the northern end of the site to attract Great Crested Newts (previously recorded habitat)	PODS and FHT	2020–25
Sunnymead Park and Meadow	<ul> <li>Review planting to increase wildflowers, native shrubs and pollinating plants</li> </ul>	PODS, FHT, WCVG	2020–21
(Cutteslowe/North	<ul> <li>Increase the margins around the areas of semi-woodland/copse</li> </ul>	PODS	Ongoing
Oxford)	<ul> <li>Work with FHT to develop ponds and scrapes</li> </ul>	PODS and FHT	2020–21
	<ul> <li>Manage the site to encourage and protect the known hedgehog and bat populations which rely on the diversity of this extensive habitat</li> </ul>	PODS	Ongoing
	<ul> <li>Improve management of Sunnymead Meadow to overcome dominance by Meadowsweet</li> </ul>	PODS	2020 onwards

* Key t	* Key to resource teams, organisations and groups					
BSGe	BSG ecology consultants	PODS	Parks Oxford Direct Services			
EA	Environment Agency	LCO	Low Carbon Oxford			
NFASC	Northway Flood Alleviation Scheme Contractor	LCG	Local Community Group			
FOG	Friends of Group	WCVG	Weekly Conservation Volunteer Group			
FHT	Freshwater Habitats Trust	WT	Woodlands Trust			





### Smaller urban park projects

Site	Action	Resources*	Timescale
Alexandra Park (Summertown)	<ul> <li>Plant avenues of small trees (including blossom/flowering species) along the western and northern edges of the open green space recently created by reducing the number of grass tennis courts</li> </ul>	FOG seeking funding	Based on funding
	<ul> <li>Trial climbing plants (such as honey suckle) against walls regularly subject to graffiti to deter this activity and provide nectar producing flowers</li> </ul>	As above	As above
Aristotle Lane Rec Walton Manor)	<ul> <li>Improve the ditch along the southern boundary to improve its habitat value (scalloping etc) and setting</li> </ul>	PODS, FOG	2020–21
	<ul> <li>Improve the tree/scrub margins around the edge of the site through pollarding and under planting</li> </ul>	PODS, FOG	
Barracks Lane Meadow East Oxford)	<ul> <li>Continue to manage this specialised habitat to protect and encourage endangered butterfly species (including hairstreak)</li> </ul>	PODS, WCVG	Ongoing
Bernwood Rd Park Barton)	<ul> <li>Review planting to improve connectivity with surrounding area and green corridors and consider creating longer grass area in former play area plot adjacent to Sherwood Close</li> </ul>	PODS	2020–21
Bury Knowle Park (Headington)	<ul> <li>Work with the Friends group to build and install bird and bat boxes (the many large, mature trees in the park make it a suitable venue for both)</li> </ul>	FOG, WCVG	2020–21
Court Place Farm Sports Site and	<ul> <li>Discuss pond water level issues with NFASC to resolve the issue and restore pond margin planting</li> </ul>	PODS, NFASC	Ongoing
Open Space (Marston)	<ul> <li>Develop longer grass/meadow areas using funding provided by Flood Alleviation Scheme contractor</li> </ul>	PODS	Ongoing
Croft Rd Rec (New Marston)	<ul> <li>Work with local group to create and manage a community orchard/wildlife area at the Farmer Place end of the site</li> </ul>	PODS, LCG	2019–20
	<ul> <li>Increase vegetation margin along the whole length of the stream</li> </ul>	PODS	2020–21
Dunstan Park	Continue to enhance/expand balancing pond habitats	PODS, WCVG	Ongoing
(Old Headington)	• Remove the unsightly, dilapidated park railings and create a boundary security scheme just by improving and filling in the existing internal hedge which will increase habitat and improve the park setting. A chestnut paling fence would need to be put in place until the hedge matures. There would be a significant cost involved in this project but this would be considerably less than the financial and environmental costs of replacing the iron railings like for like	Significant funding required	Based on funding
Five Mile Drive Rec (North Oxford)	<ul> <li>Introduce under-planting along tree-line boundary with cemetery</li> </ul>	PODS	Tree work may require funding
	<ul> <li>Consider additional tree and hedge planting</li> </ul>	Funding required	Based on funding

* Key t	* Key to resource teams, organisations and groups						
BSGe	BSG ecology consultants	PODS	Parks Oxford Direct Services				
EA	Environment Agency	LCO	Low Carbon Oxford				
NFASC	Northway Flood Alleviation Scheme Contractor	LCG	Local Community Group				
FOG	Friends of Group	WCVG	Weekly Conservation Volunteer Group				
FHT	Freshwater Habitats Trust	WT	Woodlands Trust				





### Smaller urban park projects (cont.)

Site	Action	Resources*	Timescale	
Florence Park (Cowley)	<ul> <li>Improve the pond to increase its habitat value</li> </ul>		PODS, FHT Funding required	Based on funding
	<ul> <li>Consider option to extend the wide shrubbery/vegetati- bund which runs along the inside of the railings parallel Boundary Brook down to Campbell Rd entrance to prov additional habitat adjacent to the brook (with the addec of screen the unsightly old railings)</li> </ul>	Funding required Based on funding		
Fry's Hill Park (Greater Leys)	<ul> <li>Consider creating meadow/longer grass area at the Win School end of the site</li> </ul>	dale	Funding required	Based on funding
Gillian's Park (Greater Leys)	<ul> <li>Consider planting additional trees and development we meadow areas using wild flower plugs/turf</li> </ul>	t	Funding required	Based on funding
Headington Hill Park (St Clement's)	• Continue to work with the Friends Group to manage and further improve the important tree collection (many surv from the original Headington Hall arboretum), increase flowers and install bird boxes	vivors	PODS, FOG	Ongoing
Horspath Road/Hollow Way Rec (Cowley)	<ul> <li>Hedgerow planting to fill in missing areas of the bounda hedge to increase habitat and tackle ongoing graffiti on exposed walls has been unsuccessful – trial climbing plan an alternative</li> </ul>	the	PODS	2020–21
Long Bridges Nature Area (New Hinksey)	• Work with FHT to create two ponds. There is an existing flora and fauna profile within this area and would be furt enhanced by the creation of ponds	PODS, FHT	2021–22	
Manzil Way/Cowley Road Gardens (East Oxford)	<ul> <li>Plant a hedge along the back of the health centre side or gardens and plant additional trees (to be undertaken as the planned, funded improvement works for this site)</li> </ul>		PODS	2020–21
Margaret Road Rec (Quarry Hollow)	<ul> <li>Investigate option to create a 5m wide longer grass strip the Ramsey Rd boundary (up to the treeline) to increase and add visual interest to this otherwise featureless spor</li> </ul>	habitat	PODS	2020–21
Meadow Lane Rec (East Oxford)	<ul> <li>Create a longer grass buffer zone along the scrapyard, to lined boundary and continue to manage the trees to dev under planting</li> </ul>		PODS, FOG, WCVG	2020-21
Milham Ford Park (New Marston)	<ul> <li>Further improve planting along the Jack Straws Lane bo and continue work to enhance the pond and meadow ar</li> </ul>		PODS, FOG, WCVG	Ongoing
Northway Rec	• Continue to develop the planting following the re-lands of the site in connection with the local flood alleviation s including laying wild flower meadow turf and gapping u hedges – funded by the FASC	PODS, NFASC	Ongoing	
Oatlands Rec (Osney)			PODS, WCVG	2020–21
	* Key to resource teams, organisations and groups			
	BSGe BSG ecology consultants	PODS	Parks Oxford Direct Serv	ices
	EA Environment Agency NFASC Northway Flood Alleviation Scheme Contractor	LCO LCG	Low Carbon Oxford Local Community Group	
	FOG Friends of Group	WCVG	Weekly Conservation Vol	lunteer Group
	FHT Freshwater Habitats Trust	WT	Woodlands Trust	





#### Smaller urban park projects (cont.)

Site	Action	Resources*	Timescale
Oxpens Meadow (City centre)	<ul> <li>Develop under-planting around the edges of the site (including introduction of species which provide nectar and year-round colour) through pollarding /coppicing</li> </ul>	PODS: partial funding required	Based on funding
Peasemoor Piece (Northway)	<ul> <li>Improve the wetland/pond area (discussions already underway with FHT)</li> </ul>	PODS, FHT	2020–21
Rose Hill Rec	<ul> <li>Plant additional trees, particularly in the Spencer Crescent Field – funded through Low Carbon Oxford/Woodland Trust. This will require ongoing community involvement to establish the trees through watering and mulching</li> </ul>	PODS, LCO, WT	2020–21
South Park (St Clemet's/East Oxford)	<ul> <li>Continue active management of veteran oaks to allow them to decline naturally (providing habitat for a wide range of species) without endangering park users in this busy public space.</li> <li>Consideration to be made for further improvements, such as replacement of fencing around veteran trees with dead hedging, to improve invertebrate habitat</li> </ul>	PODS	Ongoing
Twenty Pound Meadow (fragment only, Botley Rd)	<ul> <li>Introduce high quality meadow turf and improve planting to provide more pollinator friendly and attractive planting in this highly visible roadside location</li> </ul>	PODS	2020–21

* Key t	o resource teams, organisations and groups		
BSGe	BSG ecology consultants	PODS	Parks Oxford Direct Services
EA	Environment Agency	LCO	Low Carbon Oxford
NFASC	Northway Flood Alleviation Scheme Contractor	LCG	Local Community Group
FOG	Friends of Group	WCVG	Weekly Conservation Volunteer Group
FHT	Freshwater Habitats Trust	WT	Woodlands Trust



#### **Oxford City Council documents**

Overarching Biodiversity Report (2015–20)

**Green Spaces Strategy** 

**Tree Policy** 

#### **Green Flag Management Plans**

Cutteslowe & Sunnymead Park

Cutteslowe & Sunnymead Biodiversity Plan

Florence Park

Hinksey Park

Bury Knowle Park

Blackbird Leys Park

St. Sepulchres Cemetery

#### **Multi-Partner forums**

Green and Blue Spaces Mission Statement

Wild Oxford Project Mission Statement





### **APPENDIX 1** Site-specific habitat enhancement projects

The following site specific habitat enhancement projects undertaken in last five years with extensive community/volunteer input, supported by ODS Parks, City Council Green Space Volunteer Coordinator and BBOWT

Site	Area (Ha)	Habitat enhancement work undertaken *
Barracks Lane Meadow	0.64	WCVG FS: Wild flower Meadow creation study of Brown Hairstreak butterfly (nationally rare)
Barton Village Nature Park	0.87	WCVG: General habitat maintenance
Bayswater Brook through Fettiplace Rec	1	WCVG: Clearance of polluting fly-tip in stream to enable cleaner water through the site to provide a suitable habitat for water voles (previously a site for them)
Boundary Brook Nature Area	1.2	WCVG, WO, FOG, FS: Re-establishment of a neglected site with varied habitat potential
Burgess Field Nature Park	35.81	WCVG, FOG: 3000 whips planted, Grassland management
Chilswell Valley	6.31	WCVG and WO: Fen Work Woodland Planting, Grassland management
Court Place Farm Nature Park	1.93	WCVG, FAS: Pond management, Woodland development
Cowley Marsh Nature Reserve	0.75	WCVG: Wild Flower Meadow
Cutteslowe Park	10ac	LCO, FOG, Quaker Sustainability Group and Cutteslowe School: Creation of the largest community woodland in the city
Cutteslowe Ponds	3.9	WCVG: Management of newly created ponds and using them to help grow and save three Red Data Book wetland plants
Dean's Ham Meadow	0.25	WCVG: Flood plain meadow management
Dunstan Park	2.25	WCVG: Significant project to re-create old balancing ponds and develop fen area, also removal of invasive species and reintroduction of native flora
Florence Park	0.30	Local community group: creation of an Edible Forest Garden and Community Orchard
Iffley Meadow Nature reserve	42.03	BBOWT: Site managed for Fritillaries (89000 in 2018)
Kidneys nature area	3.44	WCVG and FOG: Creation of flower meadow
Longbridges Nature Park	5.09	WCVG: Himalayan Balsam clearance with FOG, tree management

* Key	* Key to resources					
FAS	Flood Alleviation Scheme	LCO	Low carbon Oxford			
FHT	Freshwater Habitat Trust	TVP	Thames Valley Police			
FOG	Friends of Group	WCVG	Weekly Conservation Volunteer Group			
FS	Forest School	WO	Wild Oxford			





glade creationMeadow Lane Nature Park1.77WCVG, FOG: Glade and meadow creation and hedge plantingMilham Ford Nature Park3.77WCVG, FOG: Creation of a pond and rare plant nurseryPeasmore Piece Nature Park1.20WCVG: Pond management for Great Crested Newt, Blackthorn management for Black and Brown Hairstreak butterfliesPerils Copse3.6Port Meadow (SSSI, SAC, SAM, Registered Common)136.88Port Meadow (SSSI, SAC, SAM, Port Aleadow (SSSI, SAC, SAM, Park136.88Port Meadow (SSSI, SAC, SAM, Park9.63WCVG, FOG, WO: Hedge laying, fen creation, pond improvement and planting of small leaved LimesRivermead Nature Park2.97WCVG, FOG, WO, FOG: Fen management, pond improvement with creation of two tier dipping platform and boardwalkRock Edge Nature Reserve (SSSI but in relation to Geological)1.74WCVG, FOG: Rock face management with OGT, wildflower meadow creation, Two forest school classes per weekSeacourt Nature Park2.47WCVG a	Enha	ncement pr	r <b>ojects</b> (cont.)
(SSS)       transformation of site (wetland habitat)         Magdalen Quarry (SSS) but in relation to Geological)       0.38       WCVG, OGT: Rock face work, hedge planting and meadow creation glade creation         Magdalen Wood       10.24       WCVG and FS: Living wood dragon sculpture created with Oxford Play, and glade creation         Meadow Lane Nature Park       1.77       WCVG, FOG: Glade and meadow creation and hedge planting         Milham Ford Nature Park       3.77       WCVG: Pond management for Great Created Newt, Blackthorn management for Black and Brown Hairstreak butterflies         Perils Copse       3.6       WCVG: Creation of a site to train staff and the public in woodland skills         Port Meadow (SSSI, SAC, SAM, Rejeisterd Common)       186.88       Ditch clearance to increase water flow and therefore increase flora and faun registered Common)         Releigh Park       9.63       WCVG, FOG, WO, FOG: Fen management, pond improvement and planting of small leaved Limes         Rivermead Nature Park       2.97       WCVG, FOG: Rock face management with OGT, wildflower meadow creation, Two forest school classes per week         Geological)       1.74       WCVG, FOG: Rock face management of heathland, grassland and wetland management         Shotover Country Park (SSSI)       115.35       SW: Extensive surveys, management of heathland, grassland and wetland management         Spindleberry Nature Park       2.96       WCVG: General habitat maintenance	Site	Area (Ha)	Habitat enhancement work undertaken*
relation to Geological)       Magdalen Wood       10.24       WCVG and FS: Living wood dragon sculpture created with Oxford Play, and glade creation         Meadow Lane Nature Park       1.77       WCVG, FOG: Glade and meadow creation and hedge planting         Milham Ford Nature Park       3.77       WCVG, FOG: Creation of a pond and rare plant nursery         Peasmore Piece Nature Park       1.20       WCVG: Pond management for Great Crested Newt, Blackthorn management for Black and Brown Hairstreak butterfiles         Perils Copse       3.6       WCVG - Creation of a site to train staff and the public in woodland skills         Port Meadow (SSSI, SAC, SAM, 136.88       Ditch clearance to increase water flow and therefore increase flora and faun Registered Common)         Raleigh Park       9.63       WCVG, FOG, WO: Hedge laying, fen creation, pond improvement and planting of small leaved Limes         Rivermead Nature Park       2.97       WCVG, FOG, WO, FOG: Fen management, pond improvement with creation of two tier dipping platform and boardwalk         Rock Edge Nature Reserve (SSSI)       1.74       WCVG, FOG: Rock face management with OGT, wildflower meadow creation, Two forest school classes per week         Geological)       Seacourt Nature Park       2.47       WCVG and FAS - General habitat maintenance         Shotover Country Park (SSSI)       115.35       SW: Extensive surveys, management of heathland, grassland and wetland management         Spindleberry Nature Park       2		4.48	
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Tumbling Bay     1.6     WCVG: Himalayan Balsam removal       Upper Fisher Row     1     WCVG: Worked with TVP to clear tow path to allow sightlines and create a safer route for users of canal	Tews Ground	0.40	WCVG: General habitat maintenance
Upper Fisher Row 1 WCVG: Worked with TVP to clear tow path to allow sightlines and create a safer route for users of canal	Trap Grounds (Town Green)	3.83	FOG: Massive transformation of former brown field site in to a wetland/semi woodland habitat
safer route for users of canal	Tumbling Bay	1.6	WCVG: Himalayan Balsam removal
Walton Well Open Space     0.06     WCVG: Clearance to enable use as a forest school site	Upper Fisher Row	1	
	Walton Well Open Space	0.06	WCVG: Clearance to enable use as a forest school site

* Key to resources					
FAS	Flood Alleviation Scheme	LCO	Low carbon Oxford		
FHT	Freshwater Habitat Trust	TVP	Thames Valley Police		
FOG	Friends of Group	WCVG	Weekly Conservation Volunteer Group		
FS	Forest School	WO	Wild Oxford		







# **APPENDIX 2** Detailed strategies regarding sustainable planting and maintenance of habitats

#### **Flower beds**

Seasonal bedding is now restricted to the Green Flag parks, cemeteries and war memorials, and all remaining bedding is bee friendly and sustainable as the local growing conditions allow.

We use plants such as Salvia, Calendula, Osteospermum, Rudbeckia amongst others in these schemes. They are placed in beds containing a mixture of perennial plants including Gazinia, Buxus, multi-stemmed himalayan birch and a variety of herbaceous plants including Achiliea, Campanula and Aster. This bedding is renewed once a year in May to provide summer interest. Planting is assessed each year for its success, such as viability, impact of maintenance and aesthetics and is designed to minimise the use of irrigation.

A large herbaceous bed in Cutteslowe Park was replanted in spring 2019 using plants which provide visual interest in keeping with this kind of semi-formal planting as well as being bee friendly. Specimens were planted in blocks across a border measuring approximately 400m2 with Teucrium, Artemisia, Sedum, Helianthus, Rudbekia included in a mix of thirty five species. These projects are expensive to both plant and maintain but will provide donor plants in the future once established.

#### **Shrubs**

The shrub stock in the parks has been established to provide seasonal interest including leaf colour, flowers and fruit. They are often used to act as a screen or demarcation for paths, buildings or other infrastructure, and in some cases are planted defensively to deter anti-social behaviour or vandalism.

Most of the plants used have some wildlife value whether as cover or as a food source. Berberis vulgaris, Euonymus europaea, Pyracantha coccinea, Viburnum opulus, Symphoricarpus





albus all feature heavily in existing planting and offer good habitat for birds, bees/moths/insects and mammals. A lot of the shrubs are of considerable age and although they have become less vigorous, this does provide other benefits with crowded growth offering enhanced cover and leaf litter.

#### Meadows and areas of long grass

ODS Parks are presently working with BSG ecology on the establishment of a meadow on former sports pitches in the lower field at Cutteslowe Park.

This sees two cut and collects one in April / May (dependant on growing season) and one in late August. This is aimed at removing nutrients from the soil and combined with scarifying opens up the sward to allow meadow seed to be introduced. This also allows use of seed from the already high quality meadow that has been established at Cutteslowe.

If the above project proves to be a successful and cost effective method for larger areas, it could be mirrored at a range of sites such as Croft Road and King Georges Field.

Establishment of smaller scale meadow areas within all the parks could be achievable with different methods, including turf stripping of smaller areas and the introduction of a flower rich turf. However, there would be significant costs and staffing resources involved in the establishment and ongoing maintenance of additional meadows, and the ODS Parks team are already at capacity in relation to managing existing areas of meadow and long grass requiring cut and collect.

In addition to formal meadows there are many areas of long grass within the parks which provide the following benefits:

- Provide somewhere for wildlife to forage, feed, and thrive.
- Many species of invertebrates over-winter on grass as eggs, pupae or larvae before completing their life cycles. Grass is also food for the larvae of some invertebrates including types of butterflies and moths.

- Keeping grass a little longer helps retain moisture which benefits many invertebrates such as worms, beetles, grasshoppers and spiders, living at or just below the soil surface.
- Longer grass also allows plants to grow and flower and this provides nectar for insects such as bees, butterflies and hoverflies, and seeds for mammals and birds
- House sparrows and finches prefer areas with longer grass where there are more invertebrates and seeds.
- Small mammals such as voles forage in longer grass for seeds and use it as shelter and cover. In turn these attract birds of prey and owls.

### Management of grass verges for longer grass and wildflowers

The city has many kilometres of grass verges. In most of the residential areas these are cut regularly throughout the summer. Along extensive areas of Grenoble and Marston Ferry roads, the grass is left long with just one late cut. All cuttings are left on site.

Many of the verges require regular cuts to maintain visibility, but scope does exist for the reseeding to increase their biodiversity value. As with all desired changes to maintenance practices, due consideration must be given to the available resources. Seed, labour, machinery and disposal all have a cost attached. Creating wildflower verges is more expensive then the routine maintenance we currently provide. To establish a wildflower verge the following is required:

- Ground preparation
- Purchasing and sowing of seed
- Maintenance of headland
- Cut and collect
- Disposal costs.

Specification:

- Minimum area required for wildflower/ long grass area is 200m<sup>2</sup>
- Headland of 1.9 metres of short grass needs to be maintained to prevent longer growth falling on to the paths and roadways





- All sites would need to be accessible for a large tractor and a flail with a cut and collect attachment
- When seeded, the areas would need to be treated as meadow areas with cut and collect in late summer
- Sites need to be free from obstacles such as trees and lamp posts
- Types and varieties of seed to be sown should similar to the following which is a classic seed mix that many local authorities use : https:// www.meadowmania.co.uk/ wild-flowermeadow/urban-pollinator-seed-mixes.htm

#### **Grazing of Conservation Sites**

There is currently conservation grazing on multiple OCC sites. This provides various benefits including: reducing scrub encroachment, keeping and open sward, and poaching created by hoofs which allows for new plants to germinate in the disturbed ground.

The correct stock also adds to the diversity of the sites invertebrates, with organic livestock having the best dung and associated invertebrates. However, we rely on external graziers which has two main drawbacks: loss of control over the best time for grazing (this will vary from site to site) and the type of stock grazed will not always be most suitable. The majority of modern livestock have a softer pallet that has evolved to eat finer grasses. This sees them focus on the already open sward.

The temperament of modern livestock is not overly suitable for conservation grazing in an urban environment. The older breeds tend to have a less fussy pallet and fewer welfare issues. They also have the advantage of being easier to handle.

Discussions are ongoing with the Wildlife Trust about setting up a herd within the city. This will require funding and overwintering sites to be established.

#### Woodland

The woodland managed by the Countryside team consists of three main sites: Shotover, Brasenose and Magdalen Woods. Shotover and Brasenose are managed in cooperation with Shotover Wildlife. This sees access to a highly knowledgeable and passionate group of volunteers who advise and take an active role in site management. The key focus for these sites is biodiversity and public amenity.

Feedback from Natural England on the management of Shotover following their inspection of the site in March 2019 is provided as Appendix 3.

A number of the larger urban parks also have smaller areas of woodland. Over the past three years the Parks Tree Team has been working on new planting schemes for the formal areas; pollen rich and disease resistance properties being one of the key influences in the decision of species. Many sites can provide the opportunity to increase tree cover, but great care is needed to ensure the right trees are planted in the right location. Tree planting can be a biodiversity gain, but if not enough thought is given to species and location it can have a negative impact on biodiversity.

The focus is on sustainable planting which mimics natural woodland edge; as a rule this is the most diverse part of woodland.

Some sites have mature tree cover with little shrub layer. Consideration will be given to thinning and under planting with shrub species such as Wayfaring, Guelder, Spindle and Field Maple, all of which have value for pollinators and provide good cover. They are also visually attractive throughout the seasons.

Some areas that have been historically managed as long grass may be suitable for conversion to tree planting. This would remove the need for long grass management which is reliant on mechanical management, with the associated costs and environmental impacts.

If the site is of sufficient size, a range of habitats can be included in the design such as meadows and ponds (the community woodland at Cutteslowe and Boundary Brook are prime examples of what can be achieved). This would be most valuable on sites with the potential of community involvement. Rose Hill and Fettiplace (Barton) Recreation Grounds and Botley Park, have been identified as having potential.

There is a need to work with partners to ensure





consistent methods around restoration of Coppice and establish best practice through training of staff and volunteers.

Fungi play a valuable role in the ecology of woodlands, and in recent years we have left more dead wood and leaf litter on site to encourage and maintain a diverse fungal community. In areas of high fungal value we work with specialists in mycology to ensure we are following best practice and records are submitted to TVERC.

#### **Choice of tree species**

In addition to choosing trees based on their suitability for the ground conditions, their wildlife and landscape value, there is an increasing need to consider disease resistance. We aim to procure plants from as close to local provenance as is possible, provide opportunities for seed collection from sites, and work with schools and local groups to establish tree nurseries within the community.

Favoured tree species based on the above considerations include, but is not limited to, the following:

- Beech Common (Fagus sylvatica)
- Birch (Betula pendula)

- Black Poplar (Populus nigra)
- Blackthorn (Prunus spinosa)
- Cherry Wild (Prunus avium)
- Field Maple (Acer campestre)
- Hawthorn (Crataegus monogyna)
- Limes Small (Tillia cordata) Large (T.playtyphyllos)
- Oak (Quercus robur)
- Rowan (Sorbus aucuparia)
- Scots pine (Pinus sylvestris)
- Wild Service tree (Sorbus torminalis)
- Willow Crack (Salix fragilis) and White (Salix alba)

Where there are non-native variations of a chosen tree, a review will be carried out to determine whether these are appropriate for the planting area and the choice of tree will always be species-specific. Although native species would be favoured over non-native species, in the right locations, consideration would be given to some non-natives as they have qualities beneficial for biodiversity.

Special consideration should be given to areas which might be suitable for Black Poplar planting. This tree is an iconic species, with the Binsey Poplars being highly valued within the landscape and culture of Oxford. Nationally, the Black Poplar has seen a massive decline and many trees that are assumed to be Black Poplars are in fact hybrids. New sites for the planting of pure Black Poplars should be identified along the waterways of Oxford, and at existing sites such as Binsey succession planting should be planned, as and when existing examples of the tree fall into decline.

The city currently has around 20,000 Ash trees and the potential impact of Ash dieback is being pre-empted through the thinning of existing areas of planting, as at Burgess Field and Cutteslowe Community woodland, for example. The areas which have been thinned have been re-planted with a range of native diseaseresistant species.

The Council will be developing a tree policy over the next 12 months which will be used to inform



all tree works moving forward. The policy will also look at carbon offsetting, in view of the Council's declaration of a climate emergency.

#### Hedges

Much of the perimeter of a majority of OCC parks and recreation grounds incorporate well established mixed native hedging which is generally manged with just an annual cut to maintain vehicle and pedestrian access.

At Cutteslowe Park we operate a three year cutting schedule to increase fruiting as a food source, and one side of hedges (often the inside) at some sites (such as Milham Ford Park) are left to grow to their natural width/depth to increase habitat while the border onto the highway is cut annually. Hedges and trees maintained in this way are better than those that are regularly clipped; for instance, hawthorn, holly and privet will produce few or no flowers and berries if kept trim.

The park hedge-line boundaries provide valuable nesting habitat and rich source of nectar for pollinating species outside of the normal window. They also offer food in the form of leaves, nectar-rich flowers, berries, fruits, seeds and nuts, and are good hunting grounds for predators seeking insects and other invertebrates. They make natural windbreaks, creating sheltered areas in the parks, which is particularly important for butterflies.

#### Choice of hedge species:

Native shrubs and trees like hawthorn, field maple, blackthorn, beech, hornbeam and holly are the preferred species for the parks and are used in combination to create mixed hedging. We will be increasing use of rambling plants, such as wild rose, bramble and honeysuckle, through hedges to provide even more shelter and food for wildlife. This will also include ivy which is particularly beneficial for nesting birds as it flowers in the autumn when few other nectar sources are available to insects and provides year round habitat for spiders.

#### Ponds and water features

We are working with the Freshwater Habitat Trust in the creation of conservation ponds in North Oxford. These have now been used by the Botanic Gardens and the Oxfordshire Flora Group of the ANHSO to undertake conservation work on Greater Water Parsnip (Sium latifolium) and Creeping Marshwort (Apium Repens). This is in addition to their wider conservation value.

Work is also planned to create ponds at a site in Marston where Great Crested Newts have previously been recorded. There are currently funding opportunities provided by Natural England for ponds which will be investigated.

Many of the countryside sites already have ponds with a high ecological value; this includes Raleigh Park, Lye Valley, Brasenose and Rivermead. The ponds at Lye Valley link directly to the fenland habitat and play a vital role in rewetting the fen. Working with colleagues we have helped design the Northway flood alleviation scheme. This has included the realignment of Peasmore Brook with extensive marginal planting and rewilding its new line.

### Green waste and management of dead wood

Wherever possible all materials cut on site are left on site. This includes chipping materials directly on beds to supress weed growth and maintain moisture. If it does not impact negatively on the amenity value of the site, dead wood from tree safety works is left in situ. This includes habitat piles and standing dead wood to maximise the available habitat for a range of species.

If this is not possible due to the nature of the debris, the material is bought back to Cutteslowe Park yard where it is shredded and turned into compost which is distributed to the allotments. Some material due to size or quantity is sent to Cassington as green waste where it is recycled into commercial compost product for resale.

The parks department is ISO14001accredited, which is the internationally recognised standard for the environmental management of businesses. It prescribes controls for those activities that have an effect on the environment. These include the use of natural resources, handling and treatment of waste and energy consumption.







### **APPENDIX 3** Feedback from Natural England following their inspection of Shotover Country Park in March 2019

- The grassland is cut for haylage yearly. No after grazing is carried out which is understandable considering the type of site. 10% of the grassland is left uncut with the area left being rotated around the field. This is good for overwintering invertebrates and blackthorn is cut in rotation for the hairstreak butterflies.
- The heathland is been actively managed with gorse being cut and pulled in stages, creating open spaces for heather. This cutting in stages will help create heather age diversity. There is some nice sheltered scalloped gorse edges which will be good for reptiles and invertebrates. There are plans to create pathways through the gorse to link up the open spaces which will benefit translocation of species.

- The bracken is being effectively dealt with and is within acceptable levels.
- The site contains many veteran trees and there is a plan to collect acorns from these trees for future planting.
- There are numerous habitat piles around the site providing useful deadwood habitat and hibernacula's for reptiles.
- The site is very well monitored by Shotover Wildlife and they undertake a lot of practical work. The Butterfly Conservation Trust also carry out management work for butterflies.
- Shotover is a popular country park with a wide range of users. There is good integration of public access and conservation.









Thank you to Chris Bell for providing the photos used in this report.





Biodiversity Review for Oxford City Council Parks and Nature Areas 2020

