

Marden Quarry LNR Management Plan 2015

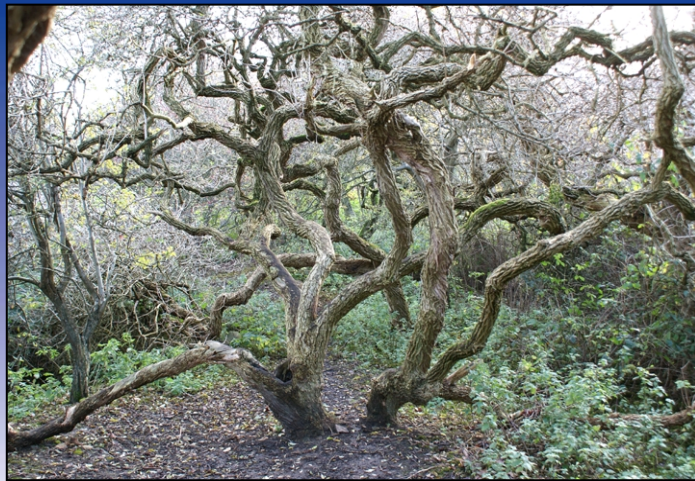


Table of Contents

1.0 Where Are We Now?	3
2.0 Where Do We Want To Get To?	15
3.0 How Will We Get There?	277
4.0 How will we know when we have arrived?	396
Appendices	41

Introduction

As a result of advice given in previous years feedback from the Green Flag judges and after working closely with the Marden Quarry Park Warden, representatives from the Marden Quarry Friends group, key volunteers and other regular visitors to the nature reserve, this plan has developed into a more user friendly document. Our hope is it now gives a clear guide through the aims and objectives for Marden Quarry, the methods of achieving those objectives and how success is measured.

Where Are We Now?

Marden Quarry, Local Nature Reserve.



1.1 Site Description and History

Located near the centre of Whitley Bay, Marden Quarry represents virtually the only exposure of magnesium limestone north of the River Tyne. The site was formed due to previous limestone quarrying activity dating back to the late 1600's, and as early as 1880 the quarry was mentioned as a well valued site for recreation. Henry Hudson, a local landowner, leased Maudlin Pitts in 1684, to quarry magnesium limestone. Over the next two hundred years the quarry extended westwards almost as far as Hill Heads Farm. In the early years of the last century a waggonway was built from the pit, across the present golf course, to terminate in a staith at the Low Light in North Shields.

The North Shields Water Company, established in 1786, used part of the quarry as a reservoir. This quarry is mentioned in Tomlinson's 1880 book and is a historically well valued site for recreation. Many years later the land was converted to an informal park and opened in 1977 by Princess Margaret as Marden Park. After a period where the park had fallen into neglect action was taken by concerned local residents who formed a group called Friends of Marden Quarry. Not only did they successfully achieved a grant from English Nature in 2003 to improve the site for the benefit of the flora and wildlife they organised and led the huge clean up operation. As a result of this hard work and dedication Marden Quarry was awarded Local Nature Reserve Status in the summer of 2005. A decade later the site is still managed as a haven for wildlife within North Tyneside Council's Parks Team.

The reserve provides a range of habitats including a large wildfowl lake, small pockets of limestone grassland, senescent elder scrub and a small area of mature woodland. Many migrating bird species use the quarry as a 'fall' site. The elder scrub provides an important food source for birds, in particular several species of migrating thrush.

The lake is known locally for its wildfowl and wintering populations can reach impressive numbers. Breeding birds on the site include mute swan, mallard, moorhen, coot and tufted duck. The lake is used by Big Waters Angling Club whose members work closely with the Parks Team to ensure the balance is preserved between the needs of the wildlife and that of the fishermen.

Our aims are:

- To preserve and enhance the conservation and wildlife value of the site.
- To manage and enhance the habitat for wildfowl.
- To facilitate public access for the enjoyment of nature, non-detrimental to wildlife interests.
- To develop and maintain the site for educational use.
- To increase the public's understanding and appreciation of the site.

1.2 Site Location

Marden Quarry LNR,
Whitley Bay,
North Tyneside NE25 8PN

Grid Reference NZ 35619 71413
 X 435619 Y 571413
 Latitude 55.035963 Longitude -1.4442354

The main entrance to Marden Quarry is located on Marden Road South just off the A193.

Transport

The main access to the park is via The Broadway (A193), and is within walking distance of Whitley Bay and Cullercoats Metro stations. There are two pedestrian entrances to the park along Studley Gardens.

Marden Quarry is well served by local buses with the X9 stopping outside the entrance to the park on Marden Road South. Also several buses run along Hillheads Road near the rear boundary of the park. Up to date timetables can be found at <http://www.nexus.org.uk/>

There is a car park, which has no formal bays but will hold approximately 25 vehicles at no charge for parking. The style is in keeping with that of a country park.



Site Map



1.3 Area Ward and Elected Members

Marden Quarry LNR falls within the ward of Whitley Bay in the north east of the borough, its boundary lies next to both Cullercoats ward and Monkseaton South Ward.

Councillors are elected 'by thirds' for a period of four years. This means that a third of the councillors get elected each year (one per ward), with the fourth year having no Local Government elections.

Currently the three councillors representing the Whitley Bay Ward are:

Councillor John O'Shea (Labour)

Re-Election Date: Thursday, 7 May, 2015

Email: john.o'shea@northtyneside.gov.uk

Mobile: 07581 491727

Councillor Sandra Graham (Labour)

Re-Election Date: Thursday, 5 May, 2016

Email: sandra.graham@northtyneside.gov.uk

Mobile: 07581 394951

Councillor Margaret Hall (Labour)

Re-Election Date: Thursday, 3 May, 2018

Email: margaret.hall@northtyneside.gov.uk



1.4 Legal Context

Ownership and Conveyances

The entire site is owned by North Tyneside Council as a freehold.

Designations

Natural England declared Marden Quarry a Local Nature Reserve 21st of June 2005 this gives statutory protection to the whole site.

Leases and Licences

Big Waters Angling Club is licensed annually to fish on this site and they are required to regulate themselves with the provision of water bailiffs. The Scouting Association hold a lease on the building which operates as the Whitley Bay and District Scout Head Quarters.

Other Agreements

The entire park is an alcohol exclusion zone.

Byelaws

There are no extraordinary bylaws currently governing the site of Marden Quarry. Users are bound by the same bylaws governing any public space in the borough.

Rights of Way

There are no rights of way within Marden Quarry.

1.5 Site Surveys and Assessments

Ecological Surveys

Historic data is held going back to 1977 surveying the wildlife in the quarry. An updated report would be beneficial and is an aspiration of the parks team.

Tree Surveys

As Marden Quarry is maintained by North Tyneside Council, information is held centrally as a tree survey has been undertaken on all authority owned trees. Data collected has been transferred onto a computerised system, which links to a digital mapping facility. Each tree is numbered and plotted on a map for ease of reference, with a corresponding number fixed to each tree. The database allows programming of work on a cyclical basis for pruning and highlights and prioritises tree works.

Accessibility Surveys

An informal assessment has been completed and appropriate action taken for example the resurfacing of certain paths to improve access and also resolve drainage issues.

Archaeological Surveys

To date there has been no archaeological survey carried out. Due to the site being a former quarry, it is expected that anything of archaeological significance has been lost and therefore it is unlikely an archaeological survey would be considered.

1.6 Community Context

The Surrounding Community

According to the Mid-2012 population estimates the population of Whitley Bay ward is **9,389**. The population of North Tyneside is **201,446**.

The area of Whitley Bay ward covers an area of **156** hectares. The **population density** of Whitley Bay ward is **60.2** (number of people per unit of area). The population density of North Tyneside as a whole is 24.5.

It is estimated that the **average weekly household income** in this area is between £580 and £860 depending on location in the ward (based on Middle Super Output Area estimated data by ONS in 2007/08) (See appendix A).

There are **3,999** households in Whitley Bay ward with an average household size of **2.3** persons.

Current Users

Visitor surveys are conducted by the Park Warden, data was last collected for Marden Quarry in 2011 and is a priority for 2015 to conduct more surveys and compare the results. Extra comments that were submitted along with the surveys can be found included in the appendices.

Educational Visits – participation

	Target	Actual
Apr-14	21	0
May-14	21	0
Jun-14	21	0
Jul-14	21	0
Aug-14	21	0
Sep-14	21	0
Oct-14	21	26
Nov-14	21	
Dec-14	21	
Jan-15	21	
Feb-15	20	
Mar-15	20	
Total to date	189	26
TOTAL	250	26

**Event
Attendance**

	Target	Actual
Apr-14	5	0
May-14	5	12
Jun-14	5	0
Jul-14	5	0
Aug-14	5	0
Sep-14	5	0
Oct-14	5	68
Nov-14	5	
Dec-14	5	
Jan-15	5	
Feb-15		
Mar-15		
Total to date	45	80
TOTAL	50	80

Volunteer Hours

	Target	Actual
Q1 (Apr-Jun)	140	327
Q2 (Jul-Sept)	236	290
Q3 (Oct-Dec)	61	
Q4 (Jan-Mar)	73	
Total to date	437	617
TOTAL	510	617



The site is used by a wide range of people, and there are clearly defined ‘groups’ within the users. These groups include:

Dog Walkers/ Passive Users

This group forms a large proportion of visitors at certain times of the day especially early in the morning and early evening after work.

Sporting Users

The Lake is a popular fishing venue regulated by the Big Waters Angling Club. They have a licence with the local authority for this purpose and a code of conduct must be adhered to by all those fishing on the lake.

Families

This major user group encompasses the whole range of families from parents with young children through to parents and grandparents visiting the park to feed the birds, for picnics

or simply for relaxation.

The list above is by no means the extent of users on site. Others visits include educational visits organised by the local schools and nurseries in conjunction with the Park Warden, and special events led by the Park Staff.

Community Involvement

Since starting in 2008 the present Park Warden has built up excellent relations with those that use this site and has also encouraged higher visitor numbers through the events and activities that are provided both for the public and educational groups.

The site is well used by the local community both as individuals who visit the site as well as groups and local schools. More emphasis has been placed on engaging with the local park users and neighbouring communities through the development of the council’s parks department.

Currently the Park Warden engages with a number of park user groups including a very proactive Friends of Marden Quarry Group which has been established for a number of years.

Community Safety

The site is well used throughout the year however historically it has suffered from anti-social behaviour in the form of youth disorder. The results of these incidents led to a very close working relationship with the local police. This still continues with seasonal community forums held in partnership between the parks team and the neighbourhood policing team.

Feedback from some of the local residents and park users indicate there are sometimes still concerns. These mainly relate to teenagers on site drinking, some taking drugs and a general fear of anti-social behaviour, mainly occurring on a seasonal pattern, during the warmer – summer-months from May to September and usually between 7-9pm. The Park Warden continues to work closely with the neighbourhood policing team to improve the safety of all park users and any issues raised are shared with the local beat officers.

Other concerns mainly relate to issues around dog control. In response extra patrol are organised by the parks team and they will issue fixed penalty notices for failure to clear up after a dog and litter dropping when required to do so.



1.7 Summary of Recent Improvements

Date	Improvements
2011	Path resurfacing and drainage issues address on main path round lake
2012	New path top dressed with dust
2012	Park information boards resurfaced to replace vandalised perspex
2012	Green Flag Award Achieved
2013	Flood damage repaired
2013	Gabions constructed to stabilise cliff faces in Quarry
2013	Entrance sign relocated for greater visibility
2013	Flag Pole Erected
2013	Footpaths reinstated after flooding
2013	Kissing gate repaired and rehung
2013	Understory bulb planting increased in woodland area
2013	Self-seeded ash trees are cleared in zones opening up rear of park
2013	Calendar produced by Friends of Marden Quarry
2014	Lake edging – gaps filled and height raised by one layer
2014	Path installed to the rear of flood plain to enable circulation when water level high
2014	Stone slabs replaced on seats in lake edge grassed area
2014	Installation of new notice board
2014	Gabions are planted to soften appearance and deter climbing
2014	July meeting held for community – police and parks team

Where Do We Want To Get To?

Analysis and Evaluation

Site Vision

To further develop the already unique nature of this park as a space for both wildlife and the local community, to safely enjoy a well maintained venue for cultural, educational and local activities and events.

Site Aims

- Preserve and enhance the site as a haven for wildfowl. Wildlife and Biodiversity.
- Preserve and enhance wildflower meadow areas within the wooded area to the west of the site, including those sections of magnesium limestone grassland.
- Carry out management of the woodland and elder scrub, allowing for natural regeneration and development of ground flora.
- Maintain public access and the Quarry's amenity value.
- Maintain a clean and pleasant environment, and increase the public's appreciation and understanding of the site.



A Welcoming Place

Welcoming

The main entrance into Marden Quarry LNR is from the Broadway (A193) and is surrounded by an attractive stone wall which shields from view the green cabins of both the scout hut and park warden base. A lovely feature of this particular park is the iron work barrier gates, the first of which can be seen at the end of the entrance lane. It states the name of the site Marden Quarry Nature Reserve and has other attractive features such as a Heron.

Turning into the car park, the view from here is spectacular looking out across the lake. The car park itself is of a good size and the surface, though not ideal at present, is one of the ongoing projects for 2011 / early 2012 along with the footpath repairs and resurfacing.

The car park has trees running along one side and there is an area of grass which leads to a stone wall, over this is a fabulous view across the lake which is clearly visible due to the elevated height of the car park. This is a popular spot for sitting, relaxing and enjoying the sights below and makes it a good location for seating. There are plenty of bins in this area as it is frequently used as a favourite destination for people to drive into and eat their fish and chips while watching the wildlife across the water.

The Park Warden works between two sites in the Whitley Bay area and adds a uniformed presence which makes visitors not only feel safe and secure but provides a point of contact for any enquiry about the park. The Park Warden contact details are displayed in the noticeboard.

Good and Safe Access

The main entrance and vehicular access into the park is from the Broadway (A193). There are two pedestrian access points one on the corner of Lovaine Avenue and Studley Gardens, the other opposite number 2 Studley Gardens. A community wildflower meadow welcomes visitors to the Lovaine Avenue / Studley Gardens entrance while a wooden kissing gate marks the entrance to the other pedestrian access point.

Signage

There is a small white directional road sign for Marden Park, from the Broadway (A193) when approaching the park, although it is an aspiration to have a larger more prominent sign put in place in the future.

Once into the main entrance of the park there is a large North Tyneside Council sign in corporate colours stating the name of the site and also displaying the councils website address. Behind this there is a large park notice board which is used by the Park Warden to advertise events, wildlife and conservation information.

Located in the car park there is a sign which gives a brief history of Marden Quarry



along with a map of the area plus information about some of the wildlife you may encounter on the lake. There is an information section detailing the park regulations including information about fishing on the lake. This sign was installed by the friends of Marden Quarry as part of the restoration of the area in 2002 and is still in a reasonable state of repair although the cover is to be replaced. A similar sign is located at the Studley Gardens entrance to Marden Quarry LNR, again the plastic cover will be replaced but the information, quality and style of the signs are good.

A rustic wooden sign has recently been added to clearly identify the wildflower area next to Studley Gardens. This project is managed and maintained by the Park Warden who actively encourages involvement from the local school and community groups to promote environmental and conservation subjects.

Being a small site there is less of a need for directional signage although there is an opportunity to install wildlife information boards and produce a site specific information panel / web based leaflet. The Park Warden working alongside Big Waters Angling Club is looking at ways to provide information to anglers and it may mean that extra signs are installed round the lakeside in the future if this is deemed the most appropriate solution, however the durability of such signage needs to be addressed so they will blend in with the surroundings and withstand any potential vandalism.

Equal Access for all



The main circulatory path round the lake is constructed of whinstone dust to fit in with the natural environment of the quarry. Path improvements are ongoing, they are top dressed as required and new construction is installed if desire lines are to be formalised. The paths through the elder woodland are formed with chipped bark and the programme for keeping these in a useable condition is part of the Park Warden role within the Quarry with the additional assistance from volunteers.

A number of bins both for dog waste and general rubbish have been placed in a manner that they can be used by anyone using a wheelchair comfortably. There are benches and other seating arrangements placed round the park providing plenty of spots for quiet rest and relaxation for anyone of any fitness level.

Healthy Safe and Secure

Safe Equipment and Facilities

The Park Warden undertakes a monthly check list that is completed and signed off. This includes visual checks to the trees, paths signs and park furniture. All faults / repairs are reported into the appropriate team and progress monitored.

In addition to the site specific risk assessments there are comprehensive risk assessment carried out for any specific event that take place on the site, this is the responsibility of the lead person on the event. As part of the safety checks all the life buoys are inspected and spare are always available from the warden's cabin. The local authority is planning a publicity campaign promoting the legal implications of using rope from any water safety equipment for any purpose other than emergency rescue. The parks team will be involved in this using Marden Quarry LNR as the main target to get the message across to the public.

Personal Security

The Park Warden team provide extra reassurance to the public through their uniformed presence and the fact their contact details are available to all. They also work a shift pattern that enables some form of coverage seven days a week. There are very good links between the park staff and the local neighbourhood policing teams and the fire service.

Dog Fouling

Dogs are allowed off the lead throughout Marden Quarry providing they are kept under control. As the site is an important area for wildfowl it is important that dog owners are extra vigilant and responsible while exercising their dogs. The Park Wardens educate dog owners who do not act responsibly. The site is very well used by local dog walkers they are an important and valued user group, however, there are incidents where dog owners have failed to pick up their dogs' mess.

Appropriate Provision of Facilities

Marden Quarry LNR is classed as a Local Nature Reserve but this doesn't mean it is



only significant as an area of biodiversity, it is an important amenity for the local community. While it is a sanctuary for wild life it provides accessible green space for recreation and educational activities. To enhance the use of Marden Quarry as a place for people to have access to nature on their doorstep and to provide the opportunities for study, it is important to continue working with the local scout group for park events and educational activities.

Quality of Facilities

The overall quality of the maintenance and management of the site is a good standard due to the presence of the Park Warden. Regular patrols identify any areas that need attention and also the fact a uniformed member of staff is in attendance can lead to reduction in damage to equipment and facilities.



Clean and Well Maintained

Litter and Waste Management

There is an adequate provision of litter bins which are frequently emptied and a litter pick conducted by the Park Warden to maintain the park in a litter free condition. There is an arrangement with the environmental team to remove the refuse bags which are collected next to the warden hut and are removed from the site. Current policy is to uplift any fly tip that may be left within twenty four hours of being reported after making an investigation for evidence of its source so that legal action can be pursued.

Grounds Maintenance and Horticulture

Due to the nature of Marden Quarry LNR much of the grounds maintenance and horticulture tasks are taken care by the Park Warden team. Environmental services tree squad are responsible for any issues of health and safety relating to the trees on site as and when required. They provide another service by leaving a constant supply of chipped bark which is used to replenish the paths through the elder woodland.

Building and Infrastructure Maintenance

All the building and facilities in the council are maintained by the Valuation and Asset Management Team. The services that are normally requested in Marden Quarry LNR relate to items such as the boundary fences and walls.

Under the current structure this section controls all budgets relating to the parks infrastructure - footpaths, railings, buildings etc. In the absence of any repairs and maintenance plan or formal inspection programme other than the monthly health and safety checks conducted by the Park Warden, all requests for work are passed to this officer, from the warden, grounds maintenance staff, or Quarry users direct.

There is currently no dedicated budget for repairs and maintenance to the infrastructure within Marden Quarry LNR rather a Borough wide budget where priorities are made based on health and safety considerations. For this reason a lot of the basic repair work needed on the wardens cabin has been carried out by the parks team themselves however a larger amount of investment is needed to keep the building and toilet facility in a good state of repair.

Equipment Maintenance

The maintenance of park equipment is undertaken centrally by the horticultural workshop based at the Killingworth depot. Basic maintenance is carried out by the Park Warden and Waggonway Warden team.

As Marden Quarry LNR contains a large body of water it is part of the Park Wardens duties to inspect the life buoys, and take any appropriate action if the equipment is missing or not up to standard.

Sustainability

North Tyneside Council is committed to the ideals of sustainability through its strategies, primarily the Biodiversity action plan. The aim of the Council is to maintain the Park in a sustainable way, to encourage wildlife and bio-diversity. In Marden Quarry LNR the Park Warden is specifically responsible for sustainable actions through this composting of the autumn leaves and other horticultural waste through to the management of the wild flower areas.

Environmental sustainability- energy and natural resource conservation and pollution

There is a general environmental policy which has recently been adopted by parks. Actions to comply with the policy have been agreed and scheduled e.g. recycling. Green waste created on site is recycled within the woodland plantations rather than being removed.



Pesticides

North Tyneside Council's policy on Pesticide and Herbicide use is to demonstrate good practice to all users of the service to reduce pesticides/herbicides application to a minimum and is restricted where possible to the control of invasive species such as Japanese Knotweed. North Tyneside Council makes every effort to maintain its open space network without the use of pesticides/herbicides.

Peat Use

North Tyneside Council's policy is to demonstrate good practice to all users of the service, to phase out the use of peat and make use of sustainable growing media that is

not harmful to the environment.

As there is no formal bedding or formal shrub planting programmes for Marden Quarry LNR the only planting likely to take place is the planting of native shrubs and trees which will be bare root and therefore will not use peat.

Arboriculture and Woodland Management

Management of trees in parks:

- To maintain existing trees in a safe, healthy condition diversifying age class structure and species spread.
- To increase the native tree stock where appropriate.
- Retain standing dead wood where this does not conflict with public safety considerations.
- To maximise the potential for tree planting and tree management in parks and open spaces within the boroughs wildlife corridors.

- To ensure that parks and open spaces are used to maintain our large tree population where possible.
- Liaise with all interested outside bodies and partners such as “Friends of” groups on enhancing our parks and open spaces.
 - To follow National guidelines for Ash Die back disease

In Marden Quarry the Park Warden carries out tree planting activities with volunteers and local schools, this replenishes the trees stock in the case of those that have come to the end of their life cycle or need to be removed for reasons of health and safety or damage.

Tree Safety

The authority needs to ensure that acceptable standards of safety are maintained for the users of parks and open spaces and still observe wildlife conservation principles. Use of locally produced native species provide an immediate biodiversity gain and will be encouraged, whilst taking into account their suitability to environmental conditions in the urban environment. Trees that are within Marden Quarry LNR are regularly monitored by the Park . North Tyneside Council’s tree squad are the primary contact for any tree works required on site, they are arboriculturally trained and perform a massive range of maintenance. In certain cases basic work can be carried out by the Park Warden team.



Public safety is of the utmost importance when decisions are made about trees in the borough.

Conservation and Heritage

Marden Quarry was designated a Local Nature Reserve in 2005 by the Local Authority in consultation with English Nature whose duty it is to promote conservation of England’s wildlife and natural resources. Local Nature Reserve is a statutory declaration and allows a site to be protected for the benefit of its biodiversity and future generations. By North Tyneside Council declaring the site a LNR it demonstrates its commitment to preserving the features the features of special interest found there.



Conservation of Natural Features, Fauna, and Flora

The Park Warden is key to the development of the natural flora and fauna on this site. Working alongside the biodiversity officer, the Friends of Marden Quarry and getting local schools and community groups involved there has been ongoing projects to introduce and manage wildflower areas throughout the park. There is also a woodland planting programme to improve the ground-flora which again the Park Warden is heavily involved with. Marden Quarry LNR links into the biodiversity targets relating to priority species and habitats contained in North Tyneside Council's Biodiversity Action Plan.

The creation of wildlife habitats and bird feeding areas is something that the local schools and community groups again like to get involved with. Sometimes this means just retaining any standing deadwood, where it is safe to do so, other times it is through warden led activities of making bird feeders and food for over the winter months.

Another popular activity which takes place in Marden Quarry LNR is the annual bee surveys and bee educational walks that are led by the wardens. The results are sent on to Stirling University where the Bees Conservation Trust is based as part of their larger bee surveys.

Community Involvement

Community Involvement and Outreach

There is a dedicated group of park users who undertake such activities as litterpicking, reporting anti-social behaviour and generally assisting as and when they can with the upkeep of the area working closely with the Park Warden

Appropriate provision for the community

Marden Quarry LNR is classified as a Local Nature Reserve and plays host to a number of events and activities throughout the year which are appropriate to its size and on site





January / February	Making Bird Feeder Activities
March	Wildflower Meadow Sowing
April	Easter / Spring Nature Activities
May	Wildlife / Nature Walks
May – August	Bee Conservation Walks & Surveys
July	Summer Holiday Nature Events
August	Mini-Beast Hunt Children's Activities
September	Moth and Bat Walks
December	Christmas Crafts and Bird Feeder Education

Marketing and Promotion

Marden Quarry LNR is promoted through the generic park events brochures, 3 of which are published each year. Events and activities are also publicised in several other ways to try and maximise the number of people who know about the parks in the region

To catch those that regularly use the park posters are displayed in the park notice board and in local community facilities.

The Parks Team is always striving to make best use of the council's website and not only promote the park events but the parks themselves, this is subject to corporate guidelines but work is in progress to make all the parks available on this facility.

Other ways the parks are marketed and promoted are through using local media, producing press releases and working closely with the Councils communications team. Flyers are distributed promoting special activities and events and when working with local businesses we ask them to promote us through their advertising etc.

In 2012 Marden Quarry LNR has been added to Google Maps to increase the range of people we can reach with information about this site

Provision of Appropriate Education Interpretation/information

Park Wardens are actively engaged with local schools and the wider community. They host a number of educational activities and provide site information and literature.

As Marden Quarry LNR offers a natural setting in an urban environment it is an aspiration to install wildlife information boards round the park to give visitors a taste of what may be present right in the middle of their neighbourhood. This could just take the form of a site specific information panel which would be supported by a downloadable web based leaflet for Marden Quarry.

Implementation of Management Plan

It is essential that the management of the park is joined up across all directorates and stakeholders. The excellent parks group brings together all council stakeholders. This has led to a major improvement in the overall service and has streamlined planning, operations and developments. Make sure Marden Quarry management plan fits with the North Tyneside Council's Park Strategy.



Parks Strategy

“Healthy Parks, Healthy People, Healthy Communities: A Parks Strategy for North Tyneside 2011-2021” sets out the long-term vision for green spaces within the borough. The aim of this strategy is to 'provide green spaces that are attractive, safe, accessible and well managed'.

As part of this process the Planning Department have undertaken an audit of every single green space in the borough to find out the quality and value of these spaces. Staff have checked all of our beaches, cemeteries, allotments, outdoor sports facilities, children's' play areas, public footpaths and cycle ways. Natural spaces such as woodlands and smaller areas of land have also been included.

The 2010 Mori Residents' Survey showed that 83% of users of Parks and Open Spaces/Countryside were satisfied with services, which is an 11% rise since the survey taken in 2007.

Despite their importance and value by the local community there has been a marked decline and under-investment in North Tyneside's parks and green spaces over the past 2 decades – a decline that has been reflected nationally.

The parks of North Tyneside have a rich and varied history, reflecting the social and economic changes, which have influenced the Borough over the past 100 years. Most of the significant park areas have been created, in the great Victorian tradition, through land donation by high profile local benefactors. More recently their creation has been the result of New Town developments of the 1960's and reclamation of industrial land.

3.0 How Will We Get There?

Action Plan



Introduction

The action plan below has been based around the green flag criteria to ensure ease of reading an application. Actions will include existing projects planned for the site along with action to try and alleviate the issues raised from feedback.

Green Theme	Flag	Action and Location	Performance Measure	Who involved
1. Welcoming Place	A	Improve Site Interpretation	Improve the park notice board Install wildlife information boards and produce a site specific information panel / web based leaflet.	Parks Team Friends of Marden Quarry Community group / School.
		Improve car parking facilities	Car park pot holes filled with road plainings and the surfaces top dressed with dust.	Parks Team
		Review and improve site accessibility and circulation.	Conduct accessibility audit Improvements made to existing footpath network Improve drainage adjacent to footpaths	PDO Park Warden
		Create a storage bay for full rubbish bags waiting collection from cleansing team	A smart screened area is created in the car park near wardens cabin	Parks Team



2 Healthy, Safe and Secure	Park furniture and infrastructure maintained in safe condition	Monthly recorded inspections action repairs as necessary	Parks Team Relevant department
	Improve visibility within woodland path network and keep growth around the edges maintained to a good standard.	Woodland area of park divided into zones and the trees are thinned accordingly.	Parks Team Grounds Maintenance Waggonway Team
	Look at ways to promote responsible feeding of wildlife in Marden Quarry	Install a coin operated bird seed dispenser to ensure suitable food is available so as not to discourage interaction.	Parks Team PDO

3. Well Maintained and Clean	Retain and improve upon standards of grounds maintenance and cleansing	Review environmental services input to the site regularly with relevant area officers	PDO Area Officers
	Address any dog fouling issues effectively	Continue partnership working with Council Dog Wardens, Neighbourhood Wardens and issue fixed penalty notices if required.	Park Warden Dog Warden

4. Sustainability	Recycle as much waste as possible on site as per Council Environmental Policy	The majority of green waste produced by the site is re-used on site.	Park Warden Grounds Maintenance Tree Squad
	Continue working with the tree squad to use chipped disease trees as woodland path surface	Paths are maintained to a good standard throughout the elder woodland area of the park	Tree Squad/ Park Warden



5. Conservation and Heritage	Review and improve bio-diversity offer within the site.	Update the detailed ecological survey for Marden Quarry. Creation of new habitat areas for insects / small mammals / ground nesting birds Wildflower meadow maintained and expanded.	Bio-Diversity Officer Park Warden Schools / Community Groups / Friends of Marden Quarry
	Area Forum Bee Conservation Project Rolled Out	Wildflowers planted and conservation area established and enhanced year on year. Educational activities organised with interested parties.	Park Warden / Bio Diversity Officer / Friends of Marden Quarry / Schools
	Link with the Targets Set Out in the Biodiversity Action Plan	Data collected through events such as bat, bee and butterfly walks is used to populate BAP	Biodiversity Officer, Parks Team, Friends of Marden Quarry
	Improve education offer by installing wildlife identification boards	Boards are well designed and installed	Parks Team Biodiversity Officer Friends of Marden Quarry

6. Community Involvement	Widen community use, participation and interaction with site	Design and deliver a range of quality events for the local and wider community.	Park Warden PDO Friends of Marden Quarry
	Increase a sense of community ownership for the park.	The Friends Group is supported & open volunteer days are scheduled on a seasonal basis. Closer working relationship with the neighbouring scout group established.	Park Warden PDO

7. Marketing	Improve online information for the park.	Specific page improved on Council website for the Marden Quarry.	PDO Dave Lattimer
	Undertake annual visitor / non visitor surveys and review findings.	10 visitor surveys are completed each month. Detailed surveys are also carried out annually with both visitors and non users.	Park Warden PDO
	Improve conservation and environmental education projects within the site linked to external groups such as the Bee Conservation Trust	2 Environmental Events delivered	Park Warden PDO Community / School Group

8. Management	Deliver the park management plan objectives for Marden Quarry LNR	Achieve and retain a Green Flag Award for the park. Annual review of management plan	Parks Team
	Ensure an efficient and cohesive approach to site management and development	Continue co-ordinating role between all stakeholders	Parks Team

Daily / Weekly / Monthly / Seasonal Checklists

Daily Check First Priority

Visual patrol for rubbish / fouling / anti-social behaviour

- Check for tree swings & remove if found
- Check Life buoys & replace if missing
- Litter pick the whole site
- Check for tree damage and report if necessary for safety
- Bin check – empty where appropriate
- Den check – clear when necessary (see the monthly Health and Safety sheet for awareness of locations & check daily)

Patrol offers the opportunity to talk to park users and gauge opinion on how the Quarry is perceived by the visitors

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
January																															
February																															
March																															
April																															
May																															
June																															
July																															
August																															

May					
June					
July					
August					
September					
October					
November					
December					

Warden to initial the relevant date box once all weekly checks are completed with the further necessary action taken

Monthly Checks

- Monthly Health and Safety Check recorded and scanned to file
- Outside bed weed and mulch
- Car park bed weed
- Pumping station bed weed
- Gabion bed weed
- Grass cutting area in front of car park – wall (weather dependant)
- Grass cutting central picnic area – (weather dependant)
- Tool store clean / tool inventory & maintenance
- Supplies to be ordered through email to line manager
- Path edges including car park, scrapped, weeded and blown off for clear paths

	Health & Outside	Car park	Pumping	Gabion	Front	Central	Tools	Order	Path
--	------------------	----------	---------	--------	-------	---------	-------	-------	------

	Safety Check	bed weeding	bed weeding	Station Weed	Weeding	Grass Cut	Grass Cut	Store Clean	Supplies	Edging
January										
February										
March										
April										
May										
June										
July										
August										
September										
October										
November										
December										

Spring Tasks

Task	Date Complete
Studley Wild Flower Meadow Strim and Rake off (check if needed due to weather conditions)	
Studley Wild Flower Meadow Add seeds to enhance colour and diversity of plants	
Bark Chipped Paths to relay through out the woodland area	
Moderate Bind-weed control	
Paint benches and park furniture	
Clean notice boards & Interpretation boards	

Summer Tasks

Task	April	April	May	May	June	June	July	July	August	August	September	September
Grass Cuts												
Strimming Woodland Paths												
Add Shrubs to car park bed				Add Shrubs to Outside Bed			Add Plants to Gabions					

Autumn Tasks

Task	Date Complete
Cutting back overhang and shrubs	
Strim and rake off wildflower meadows (Sept – Nov)	
Central Woodland Area cut down to ground level	
Tree Replanting as per project direction	

Cut back front bed (Sept – Feb)	
Plant up outside bed with bulbs	
Pull thistles growing in the incorrect places	
Prune all the way around hedge surrounding warden cabin	
Trim Budliea Car park and elsewhere in the park	
Car Park bed maintenance – edge the car park, remove detritus, blow leaves and debris off area	
Bark Chipped Paths to relay through out the woodland area	

Winter Tasks

Task	Date Complete
Create zoned map for rolling programme of woodland maintenance	
Hard cut back of Budliea (Feb)	
Perimeter repairs fences / gates / bins etc	
Cutting back – woodland maintenance	
Project work – increase and enhance the educational offer – go into local schools	
Prepare tools for winter storage – check operators manual for exact protocols	
Reinstate bat & bird boxes – clean and maintain	
Reseed flood plain after scarifying – install temporary fence to keep birds away from area (Feb – March)	
Scrub the mossy green debris from the cascade & remove brash, debris, cut back over hang	

Financial Plan

Expenditure	2012/13	2013/14	2014/15
General Maintenance	£500	£500	£500
Additional non Programmed Maintenance	£12,000	£500	£500
Development	£1,700	£1,000	£4,500
Building Maintenance and Other	£0	£0	£0
Staffing	£12,000	£12,000	£12,000
Total£	£26,200		£

4.0 How will we know when we have arrived?

Measures of Success

A Welcoming Place

Green Flag Award achieved in 2012 and retained every year after, the quality standards that are obtained in this process are constantly reviewed to check they remain at that level or above.

Healthy Safe and Secure

An overall visitor impression is collected annually using in house visitor comments forms and recording park users views given informally to staff during regular patrols. Continue close working with the Neighbourhood Police team and continue to strive for the reduction in anti-social behaviour incidents in the park.

Clean and Well Maintained

Feed back obtained from visitor surveys show public satisfaction with this aspect of the park. A reduction in “members enquiries” and calls going through the council switchboard regarding issues with the parks maintenance and cleanliness.

Sustainability

All green waste is recycled on site, bottles and cans are recycled and there is increased awareness and participation for park users with information included in introductions by park warden during relevant park events.

Conservation and Heritage

Detailed ecological survey completed as part of the Local Wildlife Site review, habitats are conserved and developed, biodiversity increases. Projects linking into wider conservation organisations, such as the Bee Conservation Trust, are encouraged and developed.

Community Involvement

Minimum 10 North Tyneside Parks Survey responses achieved for Marden Quarry LNR monthly and reviewed annually. Development of the

positive and sustainable community group attached to the site, with a plan of projects, activities and events they can achieve with the support of the Parks Team.

Marketing and Promotion

Increase visitor numbers each year, increase number of events and activities that are led by other bodies, such as relevant environmental groups, on this site to encourage new users and advertised to a different audience, improved parks specific section on website which is more easily accessible.

Management

Successfully deliver the management plan.

Appendices

Number	Item	Page Number
1	Contacts	42
2	Risk Assessment	43
3	Additional Visitor Survey Comments	48
4	Establishing Native Wild Flower Bulbs information sheets	50
5	Historical species surveys	55
6	Nettles, Brambles and other useful facts for Nature Reserves	66
7	Wild flower meadow information	72
8	Planting list for 2014 additions for colour and wildlife interest	75
9	Building Report Marden Quarry Porto-cabin	77

Supporting Information

Number		
1	Wild Space Project management Plan	Office
2	Marden Quarry Nature Trail	Office

Appendix 1

Contacts

Name	Organisation	Contact Number or Email
Jerry Dronsfield	Horticulture and Parks Manager, North Tyneside Council	0191 6437432 Jerry.dronsfield@northtyneside.gov.uk
Pixie Phelan	Parks Development Officer, North Tyneside Council	07855439773 Pixie.phelan@northtyneside.gov.uk
Carole Maddison	Marden Quarry Park Warden, North Tyneside Council	07866596663 Carole.maddison@northtyneside.gov.uk
Inspector Jim Gray (7753)	Neighbourhood Inspector, Whitley Bay	0345 043 043 ext 69191
Sergeant Dave Foy (684)	Neighbourhood Sergeant, Whitley Bay	
Jackie Hunter	Bio diversity Officer, North Tyneside Council	0191 6437280 Jackie.hunter@northtyneside.gov.uk
William Taylor	Tree Officer, North Tyneside Council	0191 6437301 william.taylor@northtyneside.gov.uk
John Rogan	Area Officer North East, North Tyneside Council	01916437305 neil.hodgson@northtyneside.gov.uk
Mark Blacklock	Area Officer North East, North Tyneside Council	0191 6437847 mark.blacklock@northtyneside.gov.uk
Marcus Jackson	Area Officer Enforcement, North Tyneside Council	0845 2000103 Marcus.jackson@northtyneside.gov.uk

Appendix 2

Directorate: Office of the deputy Chief Executive	Service area: Environment and Leisure	Section: Outdoor Parks	Work Activity / Task / Site / Equipment: General Park Risk Assessment Working With Groups	
Date of assessment: 24 February 2014	Date of previous:	Review date: 24 February 2015	Number of pages: 5	Persons involved in assessment: Park Development Officer, Park Wardens

Hazard Identification	People at risk	Significant risks to health and safety	Existing control measures	Future improvements and actions	Timescale / lead officer	Result*
General safety in parks	Employees, public	Slips, trips and falls	Identify and remove hazards prior to commencing site visit. Advise the use of caution in slippery and steep areas during briefing, prior to commencing visit. Use of safety boots. Keep site, tools and materials tidy.			A
General safety in parks	Employees	Personal injury	Access to first aid kit at all times. First aid kits must be clearly marked, stocked appropriately and checked regularly. First aid training for wardens. Mobile phone on site to ring 999 in emergency.			A

Hazard Identification	People at risk	Significant risks to health and safety	Existing control measures	Future improvements and actions	Timescale / lead officer	Result*
General safety in parks	Employees, public	Dog faeces	<i>Be aware of risk of contact; warden to inspect area intended for the group visit prior to leading any activities. Wash hands if contact suspected. Use safety gloves and litter picks for collecting rubbish.</i>			A
	Employees, public	Cuts from sharp objects e.g. needles, broken glass, thorns, barbed wire etc.	<i>Check area and be aware of dangers (particularly with respect to needles), prior to commencing work. Point out danger of infection. Any needles or sharps found to be reported to Envirolink (0845 2000 103) immediately, NOT to be tackled by employees unless they have received appropriate training and have correct PPE and equipment with them. Any wounds to be encouraged to bleed, washed thoroughly and bandaged, before casualty is taken to A&E. All incidents to be reported to line manager immediately.</i>			A

Hazard Identification	People at risk	Significant risks to health and safety	Existing control measures	Future improvements and actions	Timescale / lead officer	Result*
	Employees, public	Tetanus, Leptospirosis and other infections from plants/ animal handling / water	<p><i>Reduce risk of contact by using PPE supplied (employees only supplied). Always provide gloves to groups when tackling any kind of work within a park plus a health and safety speech about appropriate actions. Cover all cuts and broken skin with waterproof plasters before and during the task. Wash and dress wounds properly. Employees should consult their GP about tetanus vaccination. Identify hazardous plants, e.g. hogweed, and look for signs of rats.</i></p> <p><i>Plan work to avoid contact with hazardous plants and contaminated areas. Wear long sleeves and trousers when working close to hazards. Always wash hands before eating, drinking or smoking. Wash hands and all equipment thoroughly before leaving a contaminated site. Report any subsequent illness to a doctor immediately.</i></p>			A

Hazard Identification	People at risk	Significant risks to health and safety	Existing control measures	Future improvements and actions	Timescale / lead officer	Result*
	Employees, public	Drowning	<i>Raise awareness of dangers during pre visit talk and point out lifebuoys if available. Avoid letting groups go too close to lake/ponds/ streams and under on circumstances is anyone to enter any inland waterways.</i>			A
	Employees, public	Inclement weather	<i>Ensure appropriate clothing is worn for the weather conditions. Provide sun block and water (employees only supplied), and take other appropriate steps to avoid heat stroke / exhaustion. Stop work promptly if people are clearly ill attired for conditions, in discomfort, or the work is increasing in risk. PPE to be worn at all times.</i>			A
	Employees, public	Welfare/personal hygiene	<i>Washing facilities and toilets provided at some parks and those that do not have public access facilities groups to be made aware of this fact prior to site visit. Hand wipes to be available to groups if working in a park.</i>			A

Hazard Identification	People at risk	Significant risks to health and safety	Existing control measures	Future improvements and actions	Timescale / lead officer	Result*
	Public	Lost individual	Stay together in a group with group leaders park staff if appropriate. Park is open to all members of the public during the time the visit takes place so even with prior site checks preformed by the warden areas can change making it more important for no one to leave the group without permission.			A
	Public / Group visitors	Unknown Special Need of Group	All outside groups to conduct their own risk assessment in addition to this general one prior to visit.			A

Appendix 3

Marden Quarry

Visitor Comments Evaluation Oct 2010 – 2011

“The Park warden was very friendly and helpful when I asked about the toilet facilities for my 4 year old. The park was spotless but could be developed further to improve it.”

“Its great to see that nature can reclaim land and make its mark. As a nature reserve this place seems to be improving year on year, been coming for 12 years and it just gets better.”

“Lovely day, fab park, thanks.”

“an undiscovered (by us!) treasure, thanks.”

“Activities were lovely for the children. When we took our picnic down to the lake it was difficult to find somewhere suitable to sit and play as there was an awful lot of dog foul on grass.”

“Beautiful spot”

“Had chat with park keeper about history and wildlife of area. First time I’ve visited. Lots of good info. Will bring camera next visit.”

“I think the warden does a wonderful job”

“The warden works hard to keep the area clean and tidy, sometimes against the odds when bottles etc are discarded thrown around.”

“A highly valued resource both for fishing and for walking. NTC should be proud of the warden and other staff involved.”

“I visit the quarry at least once a week to feed ducks, swans etc. This is a wonderful place to bring children, it is a peaceful place.”

“Dog poo all over the place, litter all over the place. Warden was shouting at some lady. Kids drinking. Paths muddy.”

“Beautiful park, wonderful walks in the wooded area.”

“Very pleasant and helpful park warden.”

“Clamp down on jobs!”

“The park is the jewel in the crown of an otherwise densely populated area.”

“needs toilet and café!”

Appendix 4

Establishing native wild flower bulbs

Hyacinthoides non-scripta (bluebell)

Bluebells, almost half the global population of which is found in the UK, can create a stunning carpet of woodland colour during the spring.

Hyacinthoides non-scripta

Species information

Scientific name: *Hyacinthoides non-scripta* (L.)

Common name(s): bluebell, wild hyacinth, wood bell, fairy flower, bell bottle

Synonym(s): *Endymion non-scriptus*, *Scilla non-scripta*, *Scilla nutans*

Conservation status: Widespread, protected by legislation and not considered to be under immediate threat (although concerns exist regarding cross-breeding and climate change).

Habitat: Woodland, hedgerows, shady banks, under bracken on coastal cliffs and uplands.

Key uses: Ornamental, indicator of ancient woodland, medicinal.

Known hazards: All plant parts contain glycosides and are poisonous. The sap can cause contact dermatitis.

Taxonomy

Class: Equisetopsida

Subclass: Magnoliidae

Superorder: Liliales

Order: Asparagales



Family: Asparagaceae

Genus: *Hyacinthoides*

About this species

Hyacinthoides non-scripta has a bulb and nodding heads of blue flowers; it is native to western Europe, where it is found in deciduous woodlands, flowering in late April or early May. A woodland floor covered with flowering bluebells is a stunning sight, and often forms a popular, seasonal tourist attraction. *H. non-scripta* was for a long time known as *Scilla nutans* and then *Endymion non-scriptus*, and may well be encountered in earlier literature under these names. Bluebells grow best in undisturbed soil and need plenty of light in early spring. Their rich nectar provides food for many butterflies and other insects. Bluebells contain toxic glycosides and humans can be poisoned if the bulbs are mistaken for spring onions and eaten. Cattle, horses and dogs have been reported to suffer digestive problems after eating bluebell leaves.

Geography & Distribution

Hyacinthoides non-scripta grows wild in the UK, Ireland, Belgium, The Netherlands, France, Portugal and Spain, and has become naturalised elsewhere in Europe.

Description

Hyacinthoides non-scripta

A bulb with flower stalks up to 50 cm tall and 3-6 linear leaves up to 50 cm long and 25 mm wide. Each flowering stem bends downwards towards the tip and bears 4-16 flowers along one side. The pendent, strongly sweetly scented flowers are violet-blue, or rarely pink or white. The perianth (petals and sepals) is tubular-bell-shaped, 14-20 mm long, with the free lobes curling up at the tips. The outer three stamens are fused to the perianth for over three quarters of their length. The anthers are cream-coloured.

Threats & Conservation

Hyacinthoides non-scripta

In the UK, *Hyacinthoides non-scripta* is protected by the Wildlife and Countryside Act (1981) which prohibits landowners from removing bluebells from their land for sale, and prohibits anyone from digging up bulbs from the countryside. Its listing on Schedule 8 of the Act in 1998 made trade in wild bluebell bulbs or seeds an offence (unless special licenses are issued by the UK Government or devolved administrations permitting

sustainable collection of seeds). Current threats to bluebells include the loss of ancient woodland habitat, the illegal collection of bulbs and cross-breeding with non-native bluebells.

Uses

Bluebells make an attractive ornamental addition to woodland gardens or sites in semi-shade. They are commonly found in British woodlands which have been in existence since at least 1600 AD, and are therefore considered to be environmental indicators of ancient woodland. A glue obtained from bluebells was traditionally used as a means of sticking flights to arrow shafts and in book-binding. The bulb is reported to have diuretic and stypitic properties. Bluebells have been used in traditional medicine to treat leucorrhoea (discharge of mucus from the vagina). Starch derived from the bulb has been used in laundering.

At the beginning of the 20th century special “Bluebell Trains” took tourists on excursions to see the spectacular bluebell displays in the deciduous woodlands of the Chiltern Hills in southeast England. Although the special train services no longer run, the bluebells can still be seen in what has since been designated an Area of Outstanding Natural Beauty (AONB).

There is yet another link between bluebells, tourism and railways – the flower lends its name to the famous “Bluebell Railway” in East Sussex, not far from Wakehurst Place. With its steam locomotives, the railway has the distinction of being the world’s first preserved standard gauge passenger line. It is a popular tourist attraction running through attractive wooded countryside where, at the right time of year, you can see bluebells.

Cultivation

Hyacinthoides non-scripta

Bluebells require plenty of moisture during the winter and spring (when they are in growth), but cool shade in the summer, and soil that is not waterlogged. In Britain, it is important to plant the true native bluebell (*Hyacinthoides non-scripta*) and not the Spanish bluebell (*H. hispanica*), as this is often more vigorous and can take over the garden, out-competing native bluebell populations. It can also hybridise with the native bluebell, and could ultimately destroy the pure species. The bluebell is really a plant best enjoyed in its natural setting; large populations can be seen at both Kew and Wakehurst Place

***Anemone nemorosa* AGM**

Anemone nemorosa AGM

Wood anemone should be treated differently. Ideally they should be soaked in water for a couple of hours before planting. They should be then planted horizontally at about 1 to 2 inches depth and covered in soil or leaf mould.

Characteristics

Plant type

Bulb

Habit

Columnar/Upright

Toxicity

Ingestion may cause mild stomach upset; contact may irritate skin

Resilience

Hardiness

H5 (hardy - cold winter)

Colour

Flower

Pink and White in Spring

Foliage

Green in Spring and Summer

Size

Ultimate height

0.1-0.5 metres

Ultimate spread

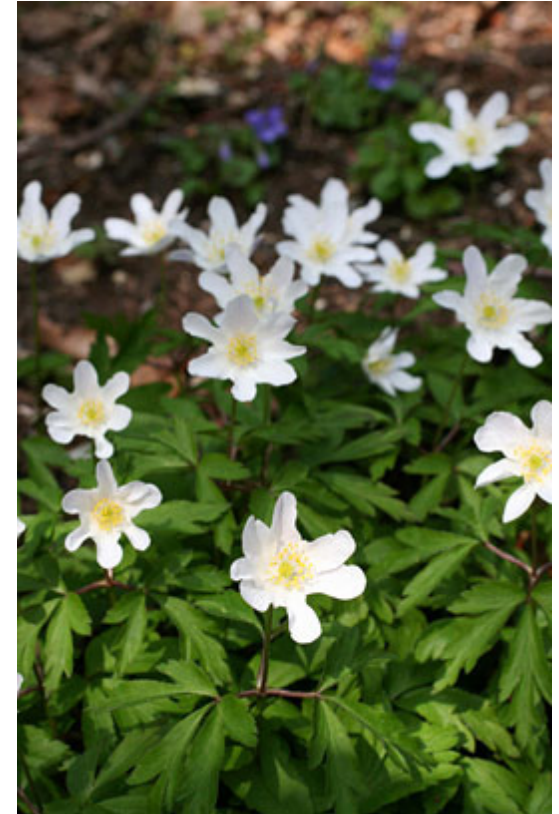
0.1-0.5 metres

Time to ultimate height

2-5 years

Preferred common name

wood anemone



Family

Ranunculaceae

Anemone are herbaceous perennials with fibrous, rhizomatous or tuberous rootstocks, palmately lobed leaves and saucer-shaped, usually 5-petalled flowers

A. nemorosa is a dwarf herbaceous perennial to 20cm in height, with a slender rhizome and deeply cut leaves. Solitary flowers with about 7 white petals, sometimes flushed pink on reverse

How to grow

Sunlight

Part shade

Aspect

South-facing, North-facing, West-facing or East-facing

Exposed or Sheltered

Cultivation

Grow in moist but well-drained humus-rich soil. Drier conditions may be tolerated when dormant

Soil

Moist but well-drained

Acid, Alkaline or Neutral

Loam, Chalk or Clay

Propagation

Propagate by seed sowing them in containers in a cold frame when ripe or separate the rhizomes in spring when the foliage has died back

Suggested planting locations and garden types

Cottage/Informal Garden, Flower borders and beds, Underplanting of Roses and Shrubs, Wildflower meadow or Rock Garden

How to care

Pruning

No pruning required

Pests

Susceptible to leaf eelworms and damage from caterpillars and slugs

Diseases

May be infected by powdery mildews

Appendix 5
Ecological Surveys

Species List 1977 – 1983				
Alexanders	Cocksfoot	Cowbane	Field Bindweed	Hemlock
American Bellbine	Common Birdsfoot Trefoil	Cowslip	Field Scabious	Herb Bennet, Wood Avens
Annual Meadow grass	Common Catsear	Crab apple	Fool`s Parsley	Herb Robert
Annual Wall Rocket	Common Chickweed	Crack Willow	Foxglove	Hoary Ragwort
Ash	Common Comfrey	Creeping Bent, Fiorin	Garlic Mustard	Hogweed, Cow Parsnip
Bay Willow	Common Couch	Creeping Buttercup	Germander Speedwell	Holly
Bittersweet,	Common Forget me not	Creeping Thistle	Goatsbeard	Honeysuckle
Black Horehound	Common Fumitory	Cuckoo Flower, Wild Arum	Goosegrass, Cleavers	Italian Rye grass
Black Knapweed, Hardhead	Common Mallow	Curled Dock	Gorse, Furze	Ivy
Black Medick	Common Mouse ear	Cut leaved Cranesbill	Great Bindweed [agg.]	Ivy leaved Toadflax
Black Mustard	Common Mullein	Daisy	Great Reedmace	Japanese Knotweed
Bladder Campion	Common Orache	Dandelion	Great Willow herb	Jointed Rush
Bluebell, Wild Hyacinth	Common Ragwort	dog roses	Greater Spearwort	Kidney Vetch
Bramble, Blackberry	Common Sorrel	Dog Violet	Greater Stitchwort	Knot grass [agg.]
Branched Bur reed	Common Spotted Orchid	Dogwood	Groundsel	Lady's Bedstraw
Broad leaved Dock	Common Storksbill	Elder	Harebell	Lesser Celandine
Broad leaved Pondweed	Common Water plantain	English Elm	Hawthorn	Marsh Woundwort
Broad leaved Willow herb	Common Winter cress	Eyebright	Heath Bedstraw	Meadow Buttercup
Burdock	Corn Chamomile	Fat Hen	Hedge Mustard	Meadow Fescue
Burnet Saxifrage	Cow Parsley, Keck	Feverfew	Hedge parsley	Meadow Vetchling

Species List 1977 – 1983

Meadowsweet	Smooth Hawksbeard	Yorkshire Fog		
Michaelmas Daisy	Spear Thistle			
Mugwort	Spiked Water milfoil			
Musk Thistle	Square St. John`s Wort			
Northern Marsh Orchid	Stinging Nettle			
Ox eye Daisy	Sweet Woodruff			
Pineapple Weed	Sycamore			
poppy sp.	Timothy			
Prickly Sow thistle	Traveller`s Joy			
Quaking Grass	Tufted Vetch			
Raspberry	Turnip			
Red Clover	Wall Barley			
Red Dead nettle	Wallflower			
Rest harrow	Weld			
Ribwort Plantain	Weld			
Rosebay Willow herb	White Clover			
Salad Burnet	White Dead nettle			
Scots Pine	Wild Cabbage			
Self heal	Wild Daffodil			
Sheep's Fescue [agg.]	Wild Mignonette			
Shepherd`s Purse	Wild Parsnip			
Silver Birch	Wood Sage			
Silverweed	Yarrow			
Small Bur reed	Yellow Flag			
Small Scabious	Yellow Rattle			

SPECIES (M P Carruthers 1996)

Arctic Warbler	Coot	Grey Partridge	Merlin
Barnacle Goose	Cormorant	Grey Wagtail	Mistle Thrush
Black Tern	Crossbill	Greylag Goose	Moorhen
Black-headed Gull	Cuckoo	Hen Harrier	Mute Swan
Black-throated Diver	Dunnock	Herring Gull	Northern Wheatear
Blackbird	Feral Pigeon	Hobby	Oystercatcher
Blackcap	Fieldfare	House Martin	Peregrine Falcon
Blue Tit	Firecrest	House Sparrow	Pheasant
Bluethroat	Gadwall	Icterine Warbler	Pied Flycatcher
Brambling	Garden Warbler	Jackdaw	Pied Wagtail
Brent Goose	Goldcrest	Kestrel	Pochard
Bullfinch	Goldfinch	Kingfisher	Red-breasted Flycatcher
Canada Goose	Goosander	Lesser Black-backed Gull	Redpoll
Carrion Crow	Goshawk	Lesser Whitethroat	Redshank
Chaffinch	Goshawk	Linnet	Redstart
Chiffchaff	Grasshopper Warbler	Little Auk	Redwing
Coal Tit	Great Black-backed Gull	Little Grebe	Reed Bunting
Collared Dove	Great Crested Grebe	Long-eared Owl	Reed Warbler
Common Gull	Great Spotted Woodpecker	Long-tailed Skua	Ring Ouzel
Common Rosefinch	Great Tit	Long-tailed Tit	Ring-necked Duck
Common Sandpiper	Green Sandpiper	Magpie	Robin
Common Tern	Greenfinch	Mallard	Rook
Common Whitethroat	Grey Heron	Meadow Pipit	Ruddy Duck

SPECIES (M P Carruthers 1996)

Sand Martin	Willow Tit		
Sedge Warbler	Willow Warbler	<u>Fish 1977-83</u>	<u>Birds 1977 -91</u>
Short-eared Owl	Wood Pigeon	Bream,	Teal
Shoveler	Wood Sandpiper	Eel	Wigeon
Siskin	Wood Warbler	goldfish	Mallard
Skylark	Woodcock	carp	Gadwall
Snipe	Wren	Bronze bream	Pochard
Song Thrush	Yellow Wagtail	Three spined stickleback	Tufted Duck
Sparrowhawk	Yellow-browed Warbler	Perch	Goldeneye
Spotted Flycatcher		Minnow	Goldfinch
Starling		Roach	Mute Swan
Stock Dove		Rudd	Kestrel
Swallow		Tench	Moorhen
Swift			Lesser Black backed Gull
Tawny Owl		<u>Butterflies (H.A. Ellis, 1992-96)</u>	Great Black headed Gull
Teal		Meadow Brown	Grey Wagtail
Tree Pipit		Large Skipper	Little Grebe
Tree Sparrow		Large White	Redshank
Treecreeper		Small White	Redwing
Tufted Duck		Common Blue	
Water Rail		Small Tortoiseshell	
Waxwing			
Whinchat			
White-fronted Goose			
Whooper Swan			

Appendix 6

What have stinging nettles ever done for us?

It's difficult to show a nettle much love. You can't touch it, for one thing.

For many children the stinging pain of their first nettle rash is also a gentle first lesson about the darker side of nature. *We told* you not to go charging into the bushes after that football.

But the treacherous weed can be tamed and put to good use - so here are 10 reasons why nettles are worth nurturing.

1. Butterflies can't get enough of it. Nettles are butterfly food for at least two common British species - the Red Admiral and Painted Lady. Without these ruthlessly efficient plant pollinators all sorts of crops would suffer and that in turn could affect the human food chain. It's not just the disappearance of the bees we need to worry about.

2. They're medicinal. Nutritional therapist Jenny Logan claims that nettles can be used to ease the symptoms of gout, among other ailments. "They help to clear excess uric acid out of the joint - and it is the uric acid which causes the pain and inflammation associated with gout."

3. They are survivors. The sting on the underside of the nettle leaf is designed to protect it. Tiny hairs laced with formic acid sink into the skin leaving raised bumps.

4. They tend to come with their own first aid kit. Dock leaves are commonly believed to soothe the symptoms of a nettle sting, and they often grow close by. But their proximity is pure coincidence says Phil Griffiths, conservatories manager at Kew Gardens. "They're just both very quick to adapt to neglected areas."

5. Nettles are chic. The fibre inside the plants can be spun into string and used to make fabric for clothing, cushion covers, and even paper. "A mature nettle is incredibly fibrous, like flaxen," says Guy Barter from the Royal Horticultural Society.

6. The German army used nettle fabric to make army uniforms during World War I.

7. It's low-maintenance. Nettles love wasteland. They will flourish wherever the soil is rich in phosphate and are common throughout Northern Europe. They can grow to be 4ft tall.

8. The plants are packed with magnesium, iron and calcium - all essential minerals for healthy humans, says trainee nutritional therapist Lucy Tones.

9. They're tasty too, although nettle nutrition is a dish best served hot. The sting disappears when the leaves are boiled which is probably why they

are most commonly consumed in the form of tea. If that's not your cuppa, nettle soup is also "earthy, slightly tangy, outrageously healthy," according to Good Food magazine blogger Toby Travis. The basic ingredients are nettles, onions, potato, stock and seasoning.

10. And finally, they can raise your spirits... literally. Nettle wine is a traditional country wine that's enjoying a bit of a resurgence. It is a very dry, crisp wine that "retains a bit of a prickle" according to Lyme Bay Winery manager James Lambert. The winery recently made 3,000 litres of its unusual tippie using 40kg of nettles.

Nettle patch

Habitat

The stinging nettle is one of the UK's most important native plants for wildlife. It supports more than 40 species of insect including some of our most colourful butterflies. It is a perennial with a square stem and pointed, toothed leaves covered in stinging hairs.

The long, whitish catkins of male and female flowers are born on separate plants from June until September. It can grow up to two metres high and flourishes on most soils, although it does particularly well on rich soil. Nettles spread rapidly via seeds or creeping underground roots.

A nettle patch harbours plenty of insects and invertebrates and is a magnet for birds and other insect-eaters. In late summer the huge quantity of seeds produced are food for many seed-eating birds.

Make the most of your garden

Cultivate a nettle patch.

Don't relegate it to a distant, shady corner. Ensure some nettles grow in full sun to attract the most insects.

Cut some nettles in the summer to encourage a late flush of leaves.

If you are stung, a natural remedy is normally close by. Dock leaves contain chemicals that neutralise the sting and cool the skin.

Bramble

Plant *Rubus fruticosus*

Also known as: Blackberry

This scrambling shrub is a real must in a wildlife garden. Its flowers provide nectar and pollen for many insects, it bears fruit in late summer and autumn, and offers good cover all year round.

It has arching stems armed with hooked thorns that help it to scramble over anything. When the tip of a stem droops to the ground, it takes root, sending up a new plant. Brambles thrive in most soils and seem happy to grow in the sun or in partial or full shade.

They can be extremely invasive (and rockhard), so need regular pruning to keep them in check.

Where will I see it?

Most woodlands, hedgerows, scrubby areas and on wasteground.

When will I see it?

Flowers from May to September, fruits from August to October.

Animals that benefit

Hundreds of creatures use brambles at different times of the year.

Insects visit the flowers for pollen and nectar, including bumblebees, honey bees, hoverflies, wasps, butterflies, moths, flies and lacewings.

Spiders spin webs to catch the bounty of visiting insects.

Moths such as buff arches, peach blossom and fox moths lay their eggs on bramble as it is their larval foodplant.

Blackbirds, thrushes, chaffinches, starlings, robins, pheasants, foxes, mice and other small mammals eat the fruits.

Robins, wrens, thrushes, blackbirds, warblers and finches will nest in bramble and small mammals use it for protection from predators.

Ecology and other notes

<http://www.woodlands.co.uk/blog/wp-content/uploads/butterfly-on-bramble1.jpg> The bramble is a [common native species](#). It is found in many different types of plant communities from woodlands, to hedgerows, heaths and dunes. It is not found in native pine woodland, and is generally more common in lowland than upland woods.

[Blackberries](#) have formed part of the human diet in Western Europe for thousands of years. Examination of '[Haraldskaer woman](#)' indicated the blackberries formed part of her diet. Apart from us as a species, the bramble is a significant source of food for many insects and mites, with some [species feeding](#) exclusively on bramble. It is also important to dormice, who eat their flowers and fruit. They, and other animals / birds, seek refuge in bramble thickets. The leaves also represent a food source for [deer](#), whose browsing may affect the development of bramble thicket

<http://www.woodlands.co.uk/blog/wp-content/uploads/bramble-3.jpg> High numbers of deer can result in a reduction in the amount of bramble and consequently, the amount of wildlife in a given area. Large amounts of bramble can affect the microclimate of the ground / herb layer; influencing the growth and development of other plants. On one hand, it can offer protection from grazing / browsing to young tree seedlings but equally it can suppress the development of light loving species.

Bindweed

Hedge bindweed or bellbind (*Calystegia sepium*) with its pure white trumpet flowers is a familiar sight, choking plants in borders and twining around any plant shoot or cane. The smaller field bindweed (*Convolvulus arvensis*) with white or pink flowers is problematic in long grass and bare soil.

Quick facts

Common and botanical names Hedge bindweed, bellbind (*Calystegia sepium*) and field bindweed (*Convolvulus arvensis*)

Areas affected Uncultivated ground, beds, borders, paths, drives and lawns

Main causes Twining weed with creeping underground stems (rhizomes)

Timing Seen spring to autumn; treat from summer to autumn

What is bindweed?

Bindweed refers to two similar trumpet-flowered weeds, both of which twine around other plant stems, smothering them in the process. They are not easy to remove as they persist from a perennial root system. The roots are usually white and brittle and, if broken, are able to regenerate from the smallest sections.

Appearance

***Calystegia sepium* (bellbind or hedge bindweed)** climbs with strong twining stems, has large heart-shaped leaves and large white trumpet flowers. It is most often seen as a hedgerow plant or weed, scrambling over and often smothering hedges and shrubs of all sizes and even smaller ornamental trees.

***Convolvulus arvensis* (field bindweed)** is a weaker-stemmed plant, with smaller white or pink trumpet-shaped flowers, but otherwise similar in appearance to bellbind.

The problem

Bindweeds are a problematic for a number of reasons;

Bellbind spreads mainly from sections of underground stem (rhizome) or root. The roots of bellbind may penetrate up to 5m (16ft) deep or more and spread rapidly, but most growth is from white, shallow, fleshy underground stems. Established colonies can spread outwards by 2m (6ft) or more in



a single season

Even very small sections are capable of producing shoot growth and can unwittingly be brought into gardens hidden among plant roots and in soils or manures

Bellbind produces seeds infrequently, but they can reportedly remain viable in the soil for many years

The roots of field bindweed are similarly deep-rooting to those of bellbind, with underground stems and shoots arising directly from the roots.

Established colonies may extend outwards by 2m (6½ft) or more in a season

Field bindweed produces seeds freely and they can remain viable in the soil for several years

Control

Non-chemical controls

These weeds are difficult to eradicate by [cultural methods](#) as their roots can extend deep into the soil

Physical barrier: By persistent digging and hoeing it is possible to eradicate these weeds in a couple of years, although new colonies can establish from seed or from roots on neighbouring land. Because of this, and wherever feasible, it can pay to insert vertical, solid barriers (45cm/18in deep) into the soil along fences and other boundaries

Digging: Fork out to remove as much of the roots when carrying out any routine autumn and winter digging. In spring as new growth appears, dig out new shoots

Hoeing: In areas where it is not possible to dig without disturbing plant roots, sever the weed at ground level with a hoe. This will need to be repeated throughout the growing season as new growth reappears

Chemical controls

Systemic control

Glyphosate is a non-selective weedkiller applied to the foliage, where it is translocated throughout the weed. Tougher formulations are worth trying (e.g. Scotts Roundup Ultra 3000, Scotts Tumbleweed, Bayer Tough Rootkill, Bayer Garden Super Strength Weedkiller or Doff Maxi Strength Glyphosate Weedkiller)

Being non-selective, it is essential to avoid spray drift onto neighbouring plants. It is important to have good leaf coverage so that as much chemical is absorbed as possible

It is usually more effective when the weed has reached the flowering stage, but can be effective well into the autumn. Early spring applications are

generally less successful

Spraying in the early evening is more effective than spraying during the day

Where the weed has started to twine into plants it is possible to carefully untwine the stems and lay them on bare ground before spraying the foliage

Alternatively, in spring, insert vertical bamboo canes close to the weed to encourage it to grow up the canes rather than smother plants. The stems can then either be left on the cane and carefully spot-treated with glyphosate (Scotts Roundup Gel) or untwined and laid on the bare soil or an adjacent pathway before being sprayed

Residual control

Bayer Ground Clear Weedkiller containing glyphosate/flufenacet/metosulam comes in a soluble sachet. It can be applied once a season to natural surfaces where no plants are to be grown, and can also be applied under and around established woody trees and shrubs, including roses. This product kills off existing small green growth and prevents or checks developing growth. Check manufacturer's recommendations before use to avoid damaging sensitive plants

Lawn weedkillers

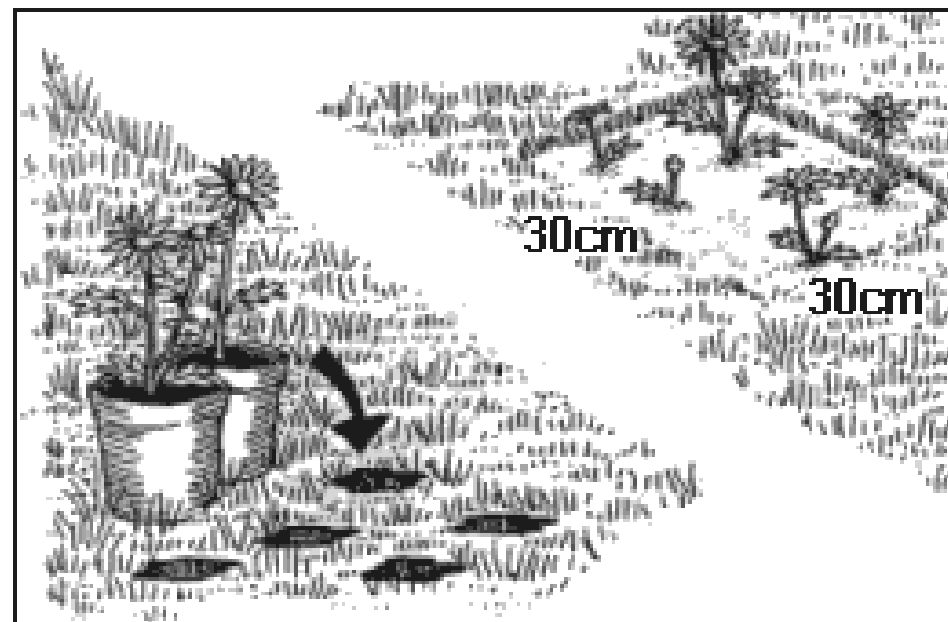
Both weeds can be persistent when growing in the lawn. Regular mowing, and the use of lawn weedkillers, will help keep them under control and eventually eliminate the plants

Appendix 7

Wildflower	Soil type	Wildflower	Soil type
Ox-eye daisy	A	Field scabious	D
Yarrow	A	Cowslip	B
Bugle	A	Wild carrot	B
Selfheal	A	Yellow rattle	A
Salad burnet	B	Meadow buttercup	A
Meadow cranesbill	B	Black knapweed	D
Goat's beard	A	Agrimony	A
Lady's bedstraw	D	Betony	A
Cuckooflower	A	Birds-foot trefoil	A
Devil's bit scabious	C	Perforate St Johns wort	A

KEY

A – does well on most soils
 B – prefers limey less fertile soils
 C – tolerates both acid and limey soils
 D – prefers well drained soils



Converting an existing grassy area into a meadow

If you want to turn a grassy area into a wildflower meadow you need to know what is already growing there. Let it grow during the summer to see what turns up. The results can be spectacular; even rare orchids have been known to appear.

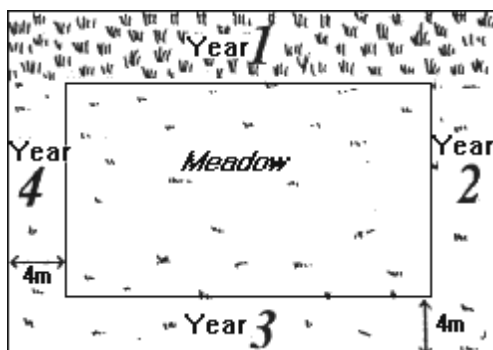
You will often find that only a few flowers appear, such as buttercups or daisies. So you may have to introduce some yourself. This can be through 'over-seeding', but is best done by planting.

Over-seeding

Scattering wildflower seed over your grassy area will not be successful. You will have to make gaps to give the flowers chance to grow. The best way to do this is to remove whole squares of turf and topsoil (30cm x 30cm) and seed with one or two carefully chosen types of wildflower in the autumn.

Planting pot grown wildflowers

Wildflowers can be introduced into grassy areas as pot grown plants. Local stock can often be bought from nurseries or grown from seed. Plant them in groups into the turf. Plant in autumn to allow the roots to become established before competition from other plants builds up in the spring. To help reduce this, spread a mulch around your new plantings or replace the turf upside down. You must care for your meadow – see "**Looking after a Wildflower Meadow**".



Cutting \ Mowing

If you are going to cut your meadow, it is best done twice a year at the following times:

- Once in autumn (late August to September)
- Once in early spring (late March to early April)

The cuttings must be removed. This will make sure that the wildflowers can grow. It will also prevent thistles, docks, brambles and scrub from taking over.

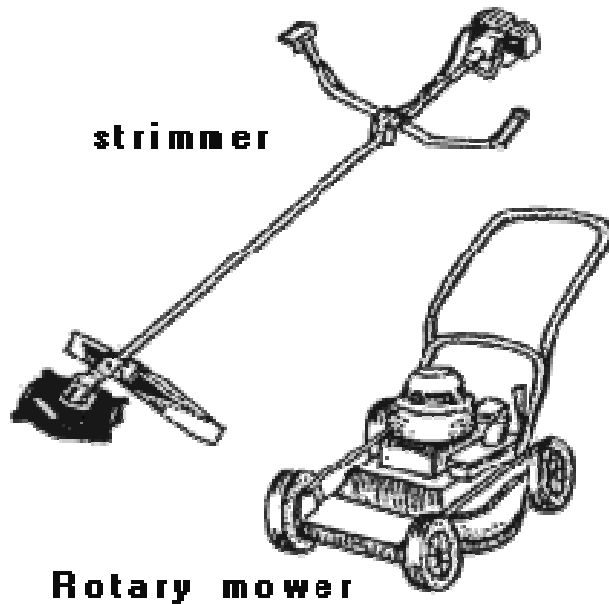
Watch Out !!

When using a strimmer, please make sure that you are not injuring or killing small animals such as hedgehogs and frogs.

The autumn cut gives the meadow plants the best chance to flower and set seed. However, traditional hay meadows can be cut in late July. Farmers may also want to cut at this time to provide hay for farm animals. The spring cut knocks back thistles and vigorous grasses that may have taken hold over the winter.

Cutting is flexible, allowing a great deal of control over the timing, area and height of the cut. However, cutting a whole meadow in one go can take away all the food needed by insects. So leave some areas uncut for them. The best way to do this is to cut the edges of your grassland in rotation. Leave a different side uncut each year. A four metre margin is ideal.

Cutting can be carried out with a variety of tools. This will depend on the size of your meadow and what is available to you. On a small meadow, in medium to long grass, hand sythes or a power strimmer can be used. On a larger area long grass can be cut for hay using a power sythe or a tractor drawn grass cutter.



Appendix 8

Planting list for 2014 additions for colour and wildlife interest

Type	Size / Weight	Quantity	Name	Latin	Procure From
Seeds	250g		Brick Rubble Mix		Pictorial Meadow
Seeds	500g		Flanders Poppies		Pictorial Meadow
Seeds	500g		Least We Forget		Pictorial Meadow
Seeds	100g		Treasure Chest		Pictorial Meadow
Seeds	50g		Cosmos		
Seeds	100g		Forget-me-nots	Mysotis	
Seeds	50g		Blue Dawn Flower	Ipomoea	
Seeds	100g		Nasturtiums (trailing)		
Tree	Selected standard	1		Prunus subhirtella 'Autumnalis' Rosaea	
Shrub	10 ltr pot	3		Viburnum opulus	
Shrub	10 ltr pot	3		Berberis darwinni	
Shrub	10 ltr pot	3		Ribes (flowering)	
Shrub	10 ltr pot	3	Holly		

Climbers	10 ltr pot	5	Honeysuckle	Lonicera periclymenum (Graham Thomas)	
Climbers	10 ltr pot	5	Honeysuckle	Lonicera periclymenum (caprifoliaceae)	
Climbers	10 ltr pot	5		Clematis Montana rubens	
Climbers	10 ltr pot	3		Clematis Jackmanii Superba	
Climbers	10 ltr pot	3		Clematis armandii	
Roses	10 ltr pot	3	Sweet Briar	R Rubiginosa (eglantine)	
Roses	10 ltr pots	3	Sweet Briar	Amy Robsarr	
Plant	9cm	25	Thyme	Thymus	
Plant			Sedum lydium		
			Sedum sempervium tectorum		
			Sedum, acre		
			Saxifrga		
Bulbs	Sack	1	Wild Garlic		
Shrub	10 ltr pots	9		Hazel hedge	

Local Environmental Services
Health & Safety Site Inspection Checklist
Marden Quarry Porto-Cabin

Welfare Facilities:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Further action:
Are there adequate and clean sanitary provisions?		x	Toilet provided however to prevent leaks the water supply is turned off at the stop-cock. There is no hot water supply
Is drinking water readily available?		x	As above
Are there provisions for employees to make a hot drink?		x	A kettle and basic facilities are provided but due to issues with cleanliness staff are requested to take refreshment breaks elsewhere.
Are there adequate facilities for staff to take breaks and eat meals?		x	As above
First Aid:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Further action:
Do you have a current First Aider(s?)	☺	☐	Park wardens all trained in First Aid at work
Do you have an Appointed Person(s?)	☺	☐	As above
Do you have a properly stocked First Aid Box?	☺	☐	Park wardens responsibility
Do you have someone who ensures the First Aid Box is kept to minimum levels for agreed contents?	☺	☐	As above
Fire Safety Measures:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Further action:
Are there clear instructions for fire and emergency actions?		x	Fire extinguisher is located in office. Chemical safe is located in the toilet full instructions are displayed above with what to do in the event of a spillage.
Do you have a robust and effective written fire emergency evacuation plan?		x	Due to the nature of the building there is only one point of entry/exit so any evacuation would be through this door.

			No written plan has been deemed necessary although emergency exit stickers will be displayed in future.
Has this plan been reviewed and where necessary updated within the last 12 months?		x	As above
Environment:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Further action:
Is workplace sufficiently well ventilated?	☺		
Is workplace temperature reasonably comfortable?		x	No heating system other than portable devices used.
Is lighting adequate?	☺		
Is inhalable dust and noise below work exposure levels.	☺		
Floors, Walkways & Stairs:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Further action:
Are all floors and walkways clear and in good condition and free of slip/trip hazards?	☺		
Are steps and stairways safe and in good condition?	☺		
Fitted with adequate handrails?	☺		
Are external walkways/routes free of potholes/trip hazards?	☺		
Access and Egress:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Further action:
Are all access routes kept clear of combustible materials?	☺		
Are all exit routes unlocked and clear of any obstructions?	☺		Cabin always unlocked when staff occupy the room.
Are external access and exit routes clear, in good order and free from trip and slip hazards?	☺		
Hazardous substances:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Further action:
Are all hazardous substances (cleaning chemicals etc.) correctly stored?	☺		(see fire safety section)

Unauthorised persons cannot gain access to hazardous substances?	☺		
Are plant rooms, cleaner's cupboards, stores kept locked?	☺		
External Areas:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Further action:
Are structures i.e. shed in good repair and secure?	☺		
Are fragile roofs adequately safeguarded and signed?			Unsure of roof state of repair
All walls and fences and gates in good condition?	☺		
<p>Comments/observations:</p> <p>Capita have carried out a separate structural survey on the building during autumn 2014.</p> <p>Leaking pipes have been reported to building repairs by the Park Warden and plumbers have attended in the past but no follow-up action recorded.</p> <p>Recommended action(s):</p> <p>Emergency Exit stickers to be displayed</p> <p>Inspection carried out by:</p> <p>Pixie Phelan (Parks Development Officer)</p> <p>Date: 25/11/2014</p>			

