

Management Plan 2012

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2 INTRODUCTION

2.1 Purpose of the Management Plan

This plan aims to define specific objectives and priorities for the current and future management of St George's Flower bank. It builds upon the original management plan drawn up by R Buck in 2006. It takes into account the needs of the local community and the desires of the volunteers comprising the Friends of St George's Flower Bank ("the Friends"). The Friends consist of 23 active volunteers and about 33 others who have contributed in some way.

2.2 The Life of the Plan

The management plan contains a five year work plan which will be reviewed annually and the plan itself will be reviewed by the Management Committee annually to ensure that it is responsive to local needs and environmental requirements. The whole plan will be reviewed in five years time (2016).

3 SITE DESCRIPTION

3.1 Site Location and Ownership

St George's Flower bank is situated on both north and south roadsides of the A369 between Bristol and Portishead (see map in attached leaflet) on the southern edge of the villages of Easton-in-Gordano and Pill. The site runs from grid reference ST 507 754 to ST 517 751, being a distance of about 1 kilometre.

The whole of the Local Nature Reserve is within the boundary of the highway and is owned by North Somerset Council (NSC). Area F is not part of the Local Nature Reserve, but is also managed by the Friends, so is included in this management plan.

3.2 Summary Description

The site was created in c.1971 when the road (A369) was diverted to provide access to the new M5 motorway (Junction 19). The new road was constructed through a cutting, creating steep banks, small cliffs and wide verges. Evidence suggests that no topsoil was imported and no plant seeding was carried out at this time.

The verges are covered by a mosaic of open grassland and thick scrub, mostly Bramble (*Rubus*) and Hawthorn (*Crataegus*), with some larger trees.

There is one area, Pearl's Patch (E), that has a denser planting of native trees and shrubs.

Surface geology is of Mercia Mudstone (formally called Keuper Marl), River Gravels and Head (which is surface detritus from a number of sources). At the Portbury (western) end this is Mudstone and Halite, further east there is some Conglomerate. This is calcareous – giving a slightly basic soil.

Towards the Bristol (eastern) end of the site there is a thinly bedded outcrop of Sandstone, probably the Black Nore Sandstone Formation. This outcrops in the field to the south, very close to the cutting.

3.3 Previous Site Use & Management

Pre 1990:

Standard local authority maintenance, i.e. metre-wide mowing twice a year adjacent to the carriageway – more to provide “visibility splays”; occasional clearance to the boundaries.

1990 – 2011

Originally an informal arrangement focused on clearing a small area on the South verge.

This was gradually increased during successive years until 1996, when NSC funded some scrub clearance and removal of trees. The vegetation was “hay-cropped” late in the season and the “arisings” removed and stored on-site. Gradually the amount of land under management has increased to the present area indicated on the maps.

The situation was been formalized by NSC, who no longer undertake any maintenance whatsoever. Sight-lines, footpaths, bus-stops and traffic signs are kept free of obstruction.

The “*Garden Club Corner*” (H1) was, prior to 2006, managed by Pill Garden Club, who introduced various garden plants and topsoil. This area is now managed as part of the main site.

In 2005, some areas were left unmown to provide refuges to increase invertebrate diversity.

Some planting of trees, mostly native species, has been undertaken. Apart from the “*Garden Club Corner*” (H1), there has been no other introduction of plant species, thus the vast majority of plant species have appeared naturally.

3.4 Policy Context & Legislative Framework

In 2012 the formal agreement between the FSGFB and NSC under which the Flower Bank has been managed as a Local Nature reserve was updated and documented. This agreement can be found in Appendix 1.

By declaring Local Nature Reserves (LNRs), local authorities can provide many benefits for both people and wildlife to:

increase people’s awareness and enjoyment of their natural environment

provide an ideal environment for everyone to learn about and study nature

help to build relationships with national and local nature conservation organisations and local people

protect wildlife habitats and natural features

provide a great opportunity for people to become involved in managing their local environment

offer a positive use for land which they would prefer was left undeveloped

make it possible to apply bye-laws which can help in managing and protecting the site.

In addition, because Local Nature Reserve is a statutory designation (see Appendix 4), it is a very clear signal to a local community of the local authority's commitment to nature conservation.

LNRs can also help local authorities meet Local Biodiversity Action Plan (LBAP) and sustainable development targets.

Management of open spaces, including St George's Flower Bank, meets North Somerset Council's main aims of:

Enhancing health and well being.

Protecting and improving the environment.

Building safer and stronger communities

3.5 North Somerset Council and UK Biodiversity Action Plans

Biodiversity audits for both North Somerset and the wider Avon area have been produced with the assistance of many individuals and organisations. From this, species and habitat action plans have been produced to ensure species and habitats of local importance are protected. The measures suggested in the Flower Bank management plan have been informed by the targets within these actions plans to improve biodiversity not only locally but nationally. Specific measures have been incorporated in accordance with:

North Somerset Habitat Action Plans

Species-rich Grasslands: neutral meadows; calcareous grassland;

Field Boundaries & Linear Features: ancient and/or species-rich hedgerows; road verges;

Avon and National Species Action Plans

Dormouse – the reserve adjoins proven Dormouse (*Muscardinus avellanarius*) habitat for which there is a national BAP. This has been incorporated into this management plan.

Bats –the JNCC publication “Habitat Management for Bats” was used in preparing this management plan.

3.6 Detailed Site Description (see map for area divisions)

Area A

Gently sloping, south facing verge, rising to flat topped bank. Bank is 2-3 metres high at eastern end, decreasing to flat at western end. The old road (now a cycle track) runs through this area and to the north of it is a mature woodland with old coppiced hazel (*Corylus avellana*). A heavily used badger track runs across this area from the road to the woodland.

Mostly species rich grassland, characterised by Carline Thistle (*Carlina vulgaris*), Pyramidal Orchid (*Anacamptis pyramidalis*) and Bee Orchid (*Ophrys apifera*). There are some remaining areas of scrub at the back of the area.

Top of the bank dropping steeply on the north side to the old road. Thick scrub/bramble (*Rubus*) and scattered planted trees with thick, species poor grass, bordering a stone wall.

Area B

Fairly steep, north-facing slope with a Hawthorn (*Crataegus*) hedge at the top. Slope is less than 2 metres high at western end, increasing to about 4 metres at the eastern end. The western end slopes more steeply, with a vertical drop at the base of about 2 metres. Eastern end defined by farm track rising to a gate in the hedge next to a footpath stile.

Thick, species poor grass with patches of bramble and scattered, fairly mature trees including Ash (*Fraxinus*), Cherry (*I?*) and Field Maple (*Acer*).

Species rich grassland characterised by Primrose (*Primula vulgaris*), *Dactylorhiza* orchids and Pyramidal Orchid (*Anacamptis pyramidalis*). A heavily used badger track runs across this area and down the bank to the road.

Thick scrub of Bramble (*Rubus*) and Hawthorn (*Crataegus*) surrounding one patch of grassland containing *Dactylorhiza* orchids

Area C

Steep, north-facing slope with a Hawthorn (*Crataegus*) hedge at the top. Base of bank has vertical cliff of up to 1.5 metres, sometimes showing exposed bedrock.

Thick scrub of Bramble (*Rubus*) and Hawthorn (*Crataegus*) with scattered trees, including Field Maple (*Acer*) and Yew (*Taxus*). One cleared patch contains dense growth of Primrose (*Primula vulgaris*).

Fairly species rich grassland characterized by numerous Cowslips (*Primula veris*).

Area D

Narrow verge and footpath with Hawthorn (*Crataegus*) hedge. Not species rich.

Area E

“Pearl’s Patch”. Wide, flat area of verge backed by Hawthorn (*Crataegus*) hedge. Grass sward is relatively species poor. Planted with a mix of native trees and shrubs. Area is crossed by two footpaths. The eastern end is a thick mass of bramble (*Rubus*).

Area F

Triangular, gently sloping area of species poor grassland planted with a mix of relatively mature native trees.

Area G

Narrow verge at top of steep bank covered with Elm (*Ulmus*) scrub. Fairly inaccessible.

Area H

Wide flat verge of species rich grassland, backed by low cliff (<1 metre) of exposed bedrock. Above cliff, relatively flat, narrow area backed by mixed hedge.

“Garden Club Corner”. Relatively fertile grassland with some introduced bulbs and shrubs, backed by hedge of mature Hawthorn (*Crataegus*) trees.

Wide flat verge of fairly fertile, but species rich grassland. Good area for butterflies.

Top of bank, gently sloping to cliff. Dense tangle of Bramble (*Rubus*) and Hawthorn (*Crataegus*) with a number of garden escape species, e.g. *Cotoneaster*. Significant areas of scrub now cleared, with grassland developing.

3.7 Fauna and Flora

A complete list of animal, plant and fungal species that have been recorded on the reserve is given in Appendix 2.

4 CURRENT MANAGEMENT

- Late hay-cropping has remained the main management activity, with the aim of creating an old-fashioned hay-meadow community. Arisings raked off and dumped at north-western end of site.
- Brush, scrub and some trees have been removed to increase the area available for meadow species, though some of the more inaccessible areas of scrub have been left to provide a range of habitats.
- There has been some planting of native tree species, but no more is planned other than to create some diversity in the single species hawthorn hedge along the Southern boundary.
- Tree stumps have been left standing and timber stacked on-site to provide habitat for fungi and invertebrates.
- Sight lines for traffic have been established and maintained.

5 A VISION FOR ST GEORGE’S FLOWER BANK

5.1.1. Aims

To preserve and protect the varied botanical, ecological and infrastructural features of St George’s Flower Bank.

To encourage and enhance Biodiversity, especially the meadow grassland.

To improve the site as a potential habitat and corridor for Dormouse (*Muscardinus avellanarius*)

To improve the site as a habitat for bats

6. FIVE YEAR WORK PLAN

The five year work plan (Table 1) considers the needs of both wildlife and the general public and has been drawn-up in consultation with all interested parties.

The five year work plan will be subject to change from outside influences, including pressure from site users, from the results of subsequent survey or monitoring and from the availability of finance. It will therefore be reviewed annually so that it remains a work plan that best serves the needs of the local community, wildlife, the community group and North Somerset Council.

Table 2 provides a more detailed analysis of the tasks identifying the year and month of the proposed works.

6.1. Table 1

Key: # – annual task ? – as required

Location	Objective	Method	12	13	14	15	16
A1	Maintain diversity of grassland	Annual hay crop, removal of any woody suckers + saplings	#	#	#	#	#
	Expand grassland area	Cut down and remove scrub and bushes, remove any suckers + saplings	#	#	#		
A2	Improve grassland area on top of bank	Biannual mowing	#	#	#	#	#
	Maintain clear access for cyclists along cycle path	Cut back hedge and bramble	?	?	?	?	?
B	Maintain hedge	Trim back the year's growth from side of hedge.	#	#	#	#	#
	Increase diversity of hedge	Plant hedgerow species saplings into base of hedge	?	?	?	?	?
B1	Expand grassland area	Cut down and remove scrub and bushes, remove any suckers + saplings. Remove selected trees (<i>N Somerset</i>)	#	#	#	#	#
	Improve quality and species diversity of grassland	Annual hay crop, removal of any woody suckers + saplings. Additional mowing if required.	#	#	#	#	#
B2	Maintain diversity of grassland	Annual hay crop, removal of any woody suckers + saplings	#	#	#	#	#
	Control of bracken	Cut out by hand as required	?	?	?	?	?
B3	Maintain diversity of grassland	Annual hay crop, removal of any woody suckers + saplings	#	#	#	#	#
	Prevention of expansion of scrub	Cut back year's growth of bramble and hawthorn	#	#	#	#	#
	Keep footpath clear	Cut back hedge and bramble	?	?	?	?	?
B4	Keep bus-stop clear	Cut hedge and mow verge as required	?	?	?	?	?
C	Maintain hedge	Trim back the year's growth from side of hedge.	#	#	#	#	#
	Increase diversity of hedge	Plant hedgerow species saplings into base of hedge	?	?	?	?	?
C1	Maintain and expand primrose patch	Annual cut and cut back surrounding scrub growth	#	#	#	#	#
	Control of growth and spread of scrub	Cut back growth of scrub that encroaches into surrounding areas and down cliff face to road	?	?	?	?	?

		verge					
C2	Maintain diversity of grassland	Annual hay crop, removal of any woody suckers + saplings	#	#	#	#	#
D	Maintain footpath	Cut back hedge and bramble	?	?	?	?	?
E	Maintain hedge	Trim back the year's growth from side of hedge.	#	#	#	#	#
	Increase diversity of hedge	Plant hedgerow species saplings into base of hedge	?	?	?	?	?
E1	Manage grass road verge	Biannual mowing	#	#	#	#	#
	Maintain sightline along A369	Cut back hedge, bramble and low branches	?	?	?	?	?
E2	Enhance the area for dormice	Limited cutting to allow development of understory	#	#	#	#	#
		Coppice hazel in rotation					#
	Enhance bird diversity	Erect and maintain birdboxes	?	?	?	?	?
	Maintain footpaths	Mow and cut back hedge and bramble	?	?	?	?	?
	Ensure safety of road users	Cut down large Aspen (<i>N Somerset</i>)		#	#	#	#
F	Maintain sightline along A369	Cut back hedge, bramble and low branches	?	?	?	?	?
	Enhance bird diversity	Erect and maintain birdboxes	?	?	?	?	?
G	Maintain sightline along A369	Cut back hedge, bramble and low branches	?	?	?	?	?
H	Maintain hedge	Trim back the year's growth from side of hedge.	#	#	#	#	#
	Increase diversity of hedge	Plant hedgerow species saplings into base of hedge	?	?	?	?	?
H1	Maintain and improve diversity of grassland	Annual hay crop, removal of any woody suckers + saplings. Second cut.	#	#	#	#	#
H2	Maintain diversity of grassland	Annual hay crop, removal of any woody suckers + saplings	#	#	#	#	#
H3	Expand area of grassland	Cut down and remove scrub and bushes, remove any suckers + saplings	#	#	#	#	#
	Improve native integrity of flora	Removal of garden escape species from bank	#	#	#	#	#
Whole Site	Enhance the habitat for dormice	Seek advice from local experts on monitoring and habitat management	#				
		Employ monitoring methods to assess dormouse presence	#	#	#	#	#
		Modify management plan to optimise dormouse habitat in		?	?	?	?

		light of survey results					
	Enhance the habitat for bats	Seek advice from Somerset Bat group, including survey and advice on boxes	#				
		Carry out bat surveys	#	?	?	?	?
		Incorporate advice into future management practice		?	?	?	?
	Update data on small mammal population.	Live trap survey.	?	?			

7. MONITORING REVIEW

Monitoring and review of the management plan will be undertaken in several different ways:

The Flower Bank Management Committee will meet at least quarterly to review the plan and other site issues.

The management plan will be reviewed on at least a five yearly cycle.

7.1. Monitoring Protocols

Flora

Volunteers survey all areas of the reserve during the flowering season at approximately monthly intervals. The presence and abundance of each flowering species is recorded for each area separately using the DAFOR abundance scale.

Periodic surveys of non-flowering species (ferns, mosses, liverworts) is done by invited experts.

Mammals

Presence and activity of larger mammals is recorded from casual observation of signs (tracks, dung etc) and recording of road kill.

There has been one inconclusive survey of small mammal numbers using Longworth traps. It is hoped that this can be repeated and extended within the period of this management plan.

Birds

Regular casual observations are recorded by volunteers engaged in management work on the reserve.

The western end of the reserve is included in a transect of a breeding bird survey undertaken each year as part of the monitoring done by the Avon Group of the BTO. These recordings are available to the Friends.

Invertebrates

Regular casual observations are recorded by volunteers engaged in management work on the reserve.

External experts are periodically invited in to more comprehensive surveys. One of these is planned for the first year of this plan.

Fungi

Regular detailed observations are undertaken and recorded by one of the volunteers.

Photographic Surveys

A regular photographic record is taken from a series of fixed points within the reserve to record long-term habitat changes. Comparison of photographic records for any fixed point in different years give some evidence for changes in some conspicuous flowering species, e.g. Primrose.

APPENDIX 1

(Nov-2011)

DETAILS OF SPECIES RECORDED

FLOWERING PLANTS

Naturally occurring indigenous species	219
Avon Notable	3
Avon Notable and Grassland Indicators	9
Grassland Indicators	24
Introduced indigenous species	28
Garden Escapes	25
	272

TOTAL PLANTS

18

BRYOPHYTES

Mosses	16
Liverworts	2
	70

FUNGI

121

INVERTEBRATES

N.B. 1 weevil (*Rhytidosomes globules*) – first for Somerset
 1 bug (*Stictopleurus abutilon*) – first for South West

48

BIRDS

15

MAMMALS + REPTILES

Details of important plant species Avon Notable Species (AN) [x12]

Grassland Indicator Species(G) [x33]

Cochlearia danica	Danish scurvy-grass	AN
Vicia tetrasperma	Smooth tare	AN
Sagina apetala	Upright pearlwort	AN
Allium oleraceum	Field garlic	G, AN
Anacamptis pyramidalis	Pyramidal orchid	G, AN

Carlina vulgaris	Carlina thistle	G, AN
Catapodium rigidum	Fern grass	G, AN
Dactylorhiza x grandis	Hybrid orchid	G, AN
Erigeron acer	Blue fleabane	G, AN
Lithospermum officinale	Common gromwell	G, AN
Ophrys apifera	Bee orchid	G, AN
Orobanche minor	Common broomrape	G, AN
Agrimonia eupatoria	Agrimony	G
Bromopsis erecta	Upright brome	G
Carex flacca	Glaucous sedge	G
Centaurea nigra	Black knapweed	G
Centaurea scabiosa	Greater knapweed	G
Centaureum erythraea	Centaury	G
Dactylorhiza fuchsii	Common spotted orchid	G
Daucus carota	Wild carrot	G
Erophila verna	Spring whitlow-grass	G
Festuca ovina	Sheep's fescue	G
Festuca pratensis	Meadow fescue	G
Inula conyzae	Ploughman's spikenard	G
Knautia arvensis	Field scabious	G
Lathyrus pratensis	Meadow vetchling	G
Leontodon saxatile	Lesser hawkbit	G
Leucanthemum vulgare	Ox-eye daisy	G
Linum catharticum	Purging flax	G
Lotus corniculatus	Bird's-foot trefoil	G
Ononis repens	Creeping restharrow	G
Primula veris	Cowslip	G
Pulicaria dysenterica	Common fleabane	G
Rhinanthus minor	Hay rattle	G
Senecio erucifolius	Hoary ragwort	G
Trisetum flavescens	Yellow oat-grass	G

APPENDIX 2

MOWING AGREEMENT

From: [Paul Smart](#) **Date:** 06/06/2011 09:04:02

To: [Robert Buck](#) **Cc:** [Susan Stangroom](#)

Subject: RE: Flower Bank

Dear Mr Buck

Following our recent site meeting, I have, by way of this e-mail, informed our contractors of the exact extent of the no mow/spray regime we agreed on site.

No mowing, strimming or spraying will be undertaken by any of my contractors on the A369 Martcombe Road from High Street Portbury on the Southerly side (ST 5072 7537), and the, as yet unnumbered, lamp column by the bus layby on the Northerly side (ST 5079 7536). To the Rudleigh Inn on the Northerly side (ST 5176 7509) and opposite to White Lodge (ST 5176 7508) on the Southerly side. This will include the junction with St Georges Hill (ST5111 7528) to number 34 St Georges Hill (ST5121 7532) .

I trust the above meets with your approval and reflects as agreed on site.

Paul Smart

Senior Area Officer, Streets and Open Spaces, Development and Environment, North Somerset Council

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APPENDIX 3

INSURANCE

January 2011

With regard to insurance, I have checked again with one of the Council's Insurance Officers (Claire Brown) and she has confirmed that volunteers working on behalf of the local authority are treated as Council employees. The provisions are as follows:

Personal accident: up to £50,000 in the event of death or loss of limb or eye

Public liability to £50 million.

Many thanks.

Regards,

Susan Stangroom, Biodiversity Officer, Natural Environment Team, North Somerset Council

Tel: 01934 426762

Dear All,

I met with Karl Edney, the Council's insurance officer last week and thought it might be useful to pass on a few points from the notes I made during this meeting – some of this you may already know, but there are some points that you may not have been aware of, particularly in relation to age of volunteers, and damage to clothing:

Volunteers for the local authority are treated as employees in relation to the Council's insurance: one of the descriptions for employee covers volunteers as follows:

'a person volunteering to assist, co-opted, seconded or appointed to assist the public authority in their business'.

There is an upper age limit of 80 stipulated in the Council's insurance policy. However, if a volunteer is over this age, the Council's insurance officer, Karl Edney, needs to notify the Council's insurer and may need to provide some evidence that the person is capable of undertaking the work. Therefore, volunteers that are over eighty should contact Karl Edney to advise/discuss (tel 01934 6346270).

The Council's insurance for its employees (which includes volunteers working for the local authority) covers public liability (to £50 million); employer liability (employer = North Somerset Council); and personal accident (partial/total disablement/death in service). Personal accident cover includes commuting to the site of volunteering/workplace.

Use of car: if any member of the volunteer group uses their own car as part of the volunteer work, ie for taking tools to the site, they need to check with their car insurers that they will be covered to act as a volunteer for the local authority, ie that this activity can be included in the 'social, domestic and pleasure' category of car insurance. It is also essential to ensure that the car is insured, taxed, MOT'd.

Accidental damage to clothes is not covered, unless negligence on the part of a Council officer was a cause of the damage to clothing.

Risk Assessments. In the event of any claim, the insurer will ask to see risk assessments, so it is important that these are up-to-date and kept on file. The insurer will be checking that reasonable measures were in place to reduce the risk of injury.

If you have any queries on this, please advise.

APPENDIX 4

LOCAL NATURE RESERVE DESIGNATION