

DOWNE COMMUNITY ORCHARD

Management Plan

Date:	2017	to	2027
Owner / tenant:	London Borough of Bromley		
Agent / contact:	Site manager, High Elms, BR6 7JH, 01689 862815		

1. BACKGROUND INFORMATION

1.1 Location

Nearest town, village or feature	Downe village
Grid reference	TQ 43621305
Total area (ha)	1.2

1.2 Description of the site in the landscape

Location - situated between Rookery Road and North End Lane on the edge of the centre of Downe Village, in Kent

Roads, tracks and access - a public footpath runs between Rookery Road and North End Lane – there is a circular footpath around the edge of the site. Vehicles can access the site via North End Lane only and there is limited hard standing parking in North End Lane, which would normally be for the use of residents of the cottages opposite.

Geology and Soils - K5 chalk bedrock; clay, flint, silt and sand superficial geology overlaid with nutrient rich topsoil. Soil is more neutral at site boundaries and on pathways.

Topography and viewpoints - There is a hedge bank of up to 2 metres height alongside north end lane. In the north east corner the site rises steeply from the dead hedge for 4 to 5 metres, otherwise it is relatively flat. The majority of the site is not visible from outside its boundary.

Ecological features - F09 high environmental boundary, T15 traditional orchard, one rare and 4 uncommon lichens.

Neighbouring land use - gardens to the south. Approx. an acre of woodland to the north east paddocks, meadows and arable farming in the vicinity

1.3 History of Management

Recorded history - sometime prior to 1880 what was a 2 acre meadow was granted to local farm labourers whose cottages had no gardens in order to provide allotments. Use as allotments continued until 1991. In 1992/1993 the site was scraped and seeded with wildflowers. In 1992/1993 the orchard was planted with 80 trees of 13 traditional apple cultivars – 5 of which originated in Kent. There was limited replanting in 2002. From 1993 onwards the site has received an annual hay cut and clearance. In 2014 the environmentally rich hedge in north end lane was extended alongside all of that boundary up to the entrance gate. From 2016 onwards a programme to renovate the apple trees has commenced with annual pruning – from 2017 onwards supported by the orchard project and involving the local community.

Date acquired 1992

Management history see recorded history above

Major works hedge extension, seedbank recovery, tree pruning, blackthorn coppicing.

2. SITE INFORMATION

2.1 Areas and features

2.1.1 Designated Areas	In Woodland	Adjacent to Woodland	Map
Other designations eg: National Parks (NPs), Areas of Outstanding Natural Beauty (AONBs), Local Nature Reserves (LNRs)		Yes?	
<p>Details - Downe village is near the North Downs Area of Outstanding Natural Beauty. The site is increasingly used for local events [wassail, mayday, apple days, school environmental education]. Site is located less than half a mile from Down House, the former residence of Charles Darwin. Events will be co-ordinated by the friends of the orchard group set up On 11 May 2017.</p> <p>Nb this section is subject to check on the nature of the woodland to the north east. It is clear the woodland to the north is a plantation.</p>			
2.1.2 Rare and important species	In Woodland	Adjacent to Woodland	Map
Red Data Book or BAP species		Yes?	
Rare or threatened species		Yes?	
<p>Details – Although the site does not appear to show any great rarity in terms of species there are a number of locally important species present. Species that have been previously recorded include Linnet, Song thrush, Starling, Tree sparrow and Pipistrelle bat. Flora and lichen survey results are attached as appendices 1 and 2. . Mistletoe was planted/grafted on selected trees in the 1990s and it is still present.</p>			
2.1.3 Habitats	In Woodland	Adjacent to Woodland	Map
Ancient semi-natural woodland (ASNW)	no		
Other semi-natural woodland	no		
Woodland margins and hedges	no	yes	
Veteran and other notable trees	no	no	
Breeding sites	no	Yes?	
Habitats of notable species	no	Yes?	
Unimproved grassland	no	no	
Rides and open ground	no	Yes?	
Valuable wildlife communities	no	Yes?	
Feeding areas	no	Yes?	
<p>Details Results are dependent on evaluation of adjacent woodland.</p>			

2.1.4 Water	In Woodland	Adjacent to Woodland	Map
Watercourses	no	no	
Ponds	no	no	

Details			
2.1.5 Landscape	In Woodland	Adjacent to Woodland	Map
Landscape features	no	Yes?	
Historic landscapes	no	Yes?	
Areas of the woodland prominent from roads	n/a		
Areas of the woodland prominent from settlements	n/a		
Details			
Community orchard and historic allotment site being managed to revert to a community orchard within neutral grassland and chalk wildflower meadow			
2.1.6 Cultural Features	In Woodland	Adjacent to Woodland	Map
Public rights of way	no	Yes	
Permissive footpaths	no	Yes	
Areas managed with traditional management systems	no	Yes	
Details - annual hay cut and rake, annual pruning regime, annual apple harvest – mid-August to early November.			
2.1.7 Archaeological Features	In Woodland	Adjacent to Woodland	Map
	no	no	
Details			

2.2 Site resource characteristics

There are a number of large hazel stools on site that can provide hedge laying materials. Hedgerows/boundaries provide feeding and nesting sites for birds and bats. In 2016 some 500kg of apples were harvested for juicing/cider making by the orchard project. The 5 traditional Kent cultivars are Kentish Fillbasket, Gooseberry, Colonel Vaughan, Flower of Kent, Mabbotts Permain. 6 fruit trees in the orchard are seeded with mistletoe. One boundary contains a number of damson trees. A map of the different varieties is included in Appendix 3.

2.3 Site description

Traditional apple orchard, hedged boundary of high environmental value , 1.2 hectare meadow on clay/flint, silt and sand sub-soil..

2.4 Significant hazards, constraints and threats

Mainly access to site and the need to extract uprisings. Need to cater for community access and participation on a limited number of days. Some tension between regime for orchard management and ambition to revert to species rich semi natural grassland [e.g. brush management and grazing regime]. Traditional orchard management would include metre diameter halos around each tree and annual mulching and this is not proposed.

3. LONG TERM VISION, MANAGEMENT OBJECTIVES AND STRATEGY

3.1 Long term vision

That this site is renovated and maintained to become a valued recreational, educational and environmental resource for the local community who increasingly takes responsibility for its maintenance and protection. In turn the orchard will become a site for learning and best practice that can be applied to other orchards in the London Borough of Bromley and further afield.

3.2 Management Objectives

No	Objective
1.	Manage orchard tree stock to maximise their value to wildlife and to the users of the site
2.	Manage grassland to maximise its value to wildlife
3.	Manage site boundary vegetation to stop orchard encroachment and encourage invertebrates
4.	Manage paths and site infrastructure to ensure safe access for all
5.	Encourage involvement of local community in the management and interpretation of the site
6.	Comply with all legal obligations

3.3 Strategy

Communicate management plan to local community – provide support for their engagement, including coaching alongside the orchard project, communication face to face and via Downe mailing/parish magazine, support and encourage the new friends of the orchard group..

4. MANAGEMENT PRESCRIPTIONS/OPERATIONS

4.1 Silvicultural systems

4.1.1 Harvesting

Apples harvested between mid-August and early November depending on each cultivar

4.1.2 Establishment, restocking and regeneration

Priority is to fill up to five gaps in the orchard – current preference is for conference pears on standard rootstock. Alternative is to graft 3 traditional perry varieties in the beech orchard. New planting to be delivered late autumn/winter 2017/2018. Work underway to regenerate orchard trees via pruning regime and seedbank through scrub clearance and wildflower meadow hay cut reseeded.

4.2 New planting

As 4.1.2

4.3 Other operations

Introduction of grazing being considered and will require monitoring and enabling works if progressed. Downe residents are considering pathways to enable safe pedestrian use of Rookery Road and this needs to be factored in. Otherwise the friends group support the introduction of grazing in principle.

4.4 Protection and maintenance

4.4.1 Pest and disease management

Focussed on cutting out tree dead and cankered wood.

4.4.2 Fire plan

There are several water tanks on site – fire brigade tender access is problematic. 2 fire sites exist – one adjacent to north end lane and one [removable following burning of cuttings] in the centre of the orchard.

With regard to management work there is a bonfire site near to the North End Road entrance. This will be used to dispose of arisings from tree pruning to ensure that disease spread is minimised. Depending on the amount of arisings other cuttings (hedge or blackthorn) will be tidily stacked on site as habitat piles. However, should the amount be unacceptable any excess can be burnt on the fire site. No other fire sites will be used on the site.

4.4.3 Waste disposal and pollution

Green arisings can be extracted and sent for composting at approved site. Little littering and no history of fly tipping. Pollution is largely airborne nitrogen particulates – to an unmeasured extent. Current management regime is designed to reduce nutrients in the soil to maximise the benefit to less competitive species.

4.4.4 Protection from unauthorised activities

Boundary gates control access – involvement of local community/warden to regularly check site. No events of concern to date.

4.5 Protecting and enhancing biodiversity

4.5.1 Management of designated areas

As set out in HK15 HLS regime. Idverde to consider implications of continuing to operate within this regime – frequency and timing of sward management.

4.5.2 Measures to enhance biodiversity

Extension of laid hedge boundary – regeneration of north end lane seedbank – blackthorn coppicing to encourage bird nesting. Contact has been made with Orpington branch of the British Bee Keeper Association [Helen Amos, Secretary] to explore introduction of bee pollinators. Their current view is the security and access to site is inadequate for their purposes.

4.5.3 Special measures for ASNW and SNW

n/a

4.6 Management of social and cultural values

4.6.1 Archaeology and sites of cultural interest

Community involvement in orchard management within Downe village which contains Downe House.

4.6.2 Public access

Maintenance of footpath and entry gates and brush control. A permissive path runs around the outside of the Orchard.

5. CONSULTATION

Organisation/individual	Comment	Response/action
Friends of the orchard group	Group reviewed draft plan on 11 May 2017.	Major issue is regarding access throughout the year and potential introduction of new footpath at Rookery road end. Comments incorporated into plan
BCV	Need review of rare and important species by Judy and Ishpi [section 2.1.2]	
IdVerde	Ian Wright has made a number of suggested changes	Changes incorporated into plan.
The Orchard Project	Check timing and ensure local support/consent.	Plan adjusted accordingly.
Dr Judy John	Insert north/north east ecotone management	Plan adjusted accordingly
Jim Grierson, Orpington BBKA	Site fitness to host beehives	Comment inserted into plan

6. MONITORING PLAN SUMMARY

Objective number, issue or UKWAS Requirement	Indicator	Method of assessment	Monitoring period	Responsibility	How will information will be used
Landscape feature	Prominence in landscape	Fixed point photography from prominent viewpoint	Every 10 years	Site Manager	Feedback into future management prescriptions
Structural diversity	Structure and regeneration after management prescriptions	Walkover survey and recording results	Annually in spring / summer	Site Manager With Friends group	Feedback into future management prescriptions

Populations of notable species	Presence or absence and relative amounts after management prescriptions	Walkover survey and record results using DAFOR scale	Annually in spring / summer	Site Manager with friends group	Feedback into future management prescriptions
Spread of scrub across site	Presence or absence and relative amounts after management prescriptions	Walkover survey and recording results	Annually in spring / summer	Site Manager with Friends group	Feedback into future management prescriptions
Public use	Condition of footpaths	Walk over survey and record the results	Annually	Site Manager with Friends group	Identification of problems on paths will facilitate remedial action
	Number of people attending guided walks	Visitor numbers recorded	Annually	Site Manager with Friends group	Feedback into schedule programme of events for the site
Damage / misuse	Incidences of flytipping	Numbers and locations recorded	Annually	Site Manager and Security Team	Identification of problems may facilitate remedial action (e.g. further barriers on car parks)
	Incidences of vandalism	Numbers and locations recorded	Annually	Site Manager and Security Team	Identification of problems may facilitate remedial action (e.g. increased security patrols)
Contractor	Contractors working on site	Spot checks when on site and by requesting relevant documentation e.g. risk assessments	As and when contractor is on site	Site Manager	All information obtained will be used to ensure all contractors are keeping to a standard of site health and safety, PPE and risk assessments
Pesticide use	Number of times used on site	Recording number of uses and where used on site	As necessary	Site Manager	Records will be created with the intention of looking to reduce the amount of incidences where pesticides are used each year
A summary of monitoring results will be made publicly available on request					

7. WORK PROGRAMMES

7.1 Outline long-term work programme (2017 to 2027)

Compartment	Activity	Year
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or area		17-20	21-24	25-27
Hedge boundary	extension	X		
Hedge boundary	maintenance	X	X	X
Orchard	restocking	X		
Orchard	Pruning/harvesting	X	X	X
Grassland	Hay cut/rake	X	X	X
Grassland	Grazing enabler fencing	X		
Grassland	Grazing	X	X	X
Pathways	maintenance	X	X	X
North/North East ecotone [woodland/scrub/long grass gradient]	Cut back/scallop	X	X	X

7.2 Short-term work programme (2017 to 2021)

Compartment or area		Year				
		1	2	3	4	5
Hedge boundary	Lay hedge at Rookery Road boundary	x				
Hedge boundary	Maintenance [3 year rotate]	X	X	X	X	X
Orchard	restocking	X				
Orchard	Pruning/harvesting	X	X	X	X	X
Grassland	Cut/rake	X	X	X	X	X
Grassland	Construct stock fencing	X				
Grassland	graze	X	X	X	X	X
Pathways	maintenance	X	X	X	X	X
North/North east boundary vegetation	Cut back and scallop 50% biannually	X	X	X	X	X

8. MAPS

List all maps here and append to plan.

Map No/Title	Description
1	Cultivar map – requires Orchard Project/Brogdale verification.
2	Natural England HLS map – from Ian Wright