

# Hazeley Heath Management Plan Consultation Process

## Development of Management Objectives – Working Draft

JOB NUMBER: 5042325			DOCUMENT REF: Document4			
1	Working draft for meeting	KO	KO/EN	AS		02/11/06
		Originated	Checked	Reviewed	Authorised	Date
Revision	Purpose Description	<b>ATKINS</b>				



## CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
Why a management plan is needed	1
The process so far	1
The Main Management Options	3
<b>1. INTRODUCTION</b>	<b>6</b>
Background	6
Approach	6
<b>2. OPTIONS</b>	<b>9</b>
A Management Organisation	9
Grazing	10
Heathland Vegetation Cutting	12
Controlled Burning	12
Bare Ground Management	13
Grassland Management	14
Scrub Management	14
Tree Management	16
Management for Selected Species of Importance	17
Management of Visitor Activities and Conflict between Users	19
Landfill Site Remediation	23
Unauthorised Access Prevention	23
Action to Minimise Encroachment	23
maintain status of site	24
how the options meet the identified aims	24
<b>3. MANAGEMENT STRATEGIES</b>	<b>28</b>
Management Strategy B	30
Management Strategy C	31
Management strategy D	32
Composition of the Grazing Management Strategies	33
<b>4. CONCLUSIONS</b>	<b>35</b>

## **List of Tables**

Table 2.1 – How management options meet identified management aims	27
Table 4.1 – Composition of the Grazing Management Strategies	33

## **List of Figures**

Figure 1	Extent of woodland encroachment based on 1972 aerial photograph
Figure 2	Broad habitat types based on 2002 survey data
Figure 3	Principal expectations for heathland enhancement

## **Appendices**

Appendix A	Desk Study of Other Commons with similar Issues
------------	---

## **EXECUTIVE SUMMARY**

### **WHY A MANAGEMENT PLAN IS NEEDED**

A number of unique species and valued habitats are at risk because there are now so few areas of lowland heath left in northern Europe. Since 1800 in the UK alone, 84% of heathland has disappeared. For this reason the survival of heathland at Hazeley Heath is important.

Heathland is essentially a product of human activity and cannot survive without continuation of this control in some form; if left unmanaged heathland gradually becomes woodland. Traditionally, the exercise of commoners' rights, such as grazing, collection of firewood and bracken cutting, provided the management necessary, but today a more proactive approach is needed, often implemented through management plans.

Woodland has encroached over about half of Hazeley Heath since the middle of the 20<sup>th</sup> century. Planned management can halt or reverse that encroachment and protect and improve Hazeley Heath in the years to come, both from a nature conservation perspective and for all the different groups and individuals who use and enjoy it.

### **THE PROCESS SO FAR**

After an earlier draft Management Plan for Hazeley Heath was put aside in 2004 amid concerns that it was focused almost entirely on nature conservation and took little account of the views and needs of other stakeholders groups, it was agreed that a clean slate approach should be taken to developing an alternative plan.

Consultation at that point had already included visits to Parish Councils and key local residents, heathland talks and walks, exhibitions and eight issues of a newsletter over two years. Responses were also received to the publication of the 2004 draft Management Plan and its accompanying Grazing Feasibility Study.

The Hazeley Heath management committee, however, felt that more consultation was needed and decided to follow the procedure outlined in 'A Common Purpose: a guide to agreeing management on common land' produced for English Nature, The Department of the Environment, Food and Rural Affairs, the Open Spaces Society,

the Countryside Agency and the National Trust. In 2005, through a questionnaire and meetings, stakeholders were asked what they thought were the features of the Heath that they valued most and the issues of most concern.

All these responses were then used to develop the Management Aims Discussion Paper circulated in July this year, together with a further questionnaire, asking stakeholders to identify the aims they felt were most important to tackle in the Management Plan.

The responses confirmed the key issues and concerns that had emerged in earlier stages in the consultation process and the need to find management solutions for Hazeley Heath that will accommodate a range of uses and respond to a number of very different priorities. Full details of the questionnaire responses can be found in the Addendum to Outcome B circulated with this report, but are summarised below.

There are a number of local issues that the majority of those returning the questionnaire identified as key:

- Minimise adverse effects of rubbish from landfill and other former uses on appearance and safety.
- Minimise litter, dog mess, old cars etc
- Minimise access for unauthorised vehicles
- Minimise conflict between vehicles and other users especially along the B3011
- Minimise susceptibility to reduction in status and protection of the site
- Minimise encroachment on the common by neighbours

Despite the differing views of the wide range of groups who value and enjoy the heath, including those with a particular interest in flora and fauna, dog walkers and horse riders, four key conservation aims were supported by the majority:

- Maximise nature conservation value over substantial defined areas
- Maximise nature conservation value for species of special status
- Maximise diversity for nature conservation, landscape and access
- Maximise openness of the site in defined areas by woodland removal

There were also a number of specific management aims which were generally supported:

- Prevent loss of lowland heath
- Reduce scrub
- Remove invasive alien species

- Minimise bracken
- Maintain mature woodland
- Reduce tree cover by selective removal of species or sizes
- Improve visitor behaviour and respect for site

Establishing a community steering group to lead in the implementation of the Management Plan did not emerge as a priority – although very few respondents were actually opposed to the suggestion, a significant minority felt impartial. However around half expressed positive support for the idea.

There are several groups of potential management options which would support these aims. These are outlined very briefly below. Their various purposes, benefits and drawbacks are explained in greater detail in the rest of this document.

The next step in developing the Management Plan is to identify – in consultation with key stakeholders – the best of the options to take forward. It will also be important to reach consensus on some more divisive issues such as the management of dogs and horses. Financial considerations may ultimately govern the practicality of implementing various options, but at this stage all the options should be considered.

## **THE MAIN MANAGEMENT OPTIONS**

### **A Management Organisation**

Given the level of local interest and the range of positions expressed on some issues through the consultation, it appears important to decide on how the Hazeley Heath Management Plan is going to be implemented. This is essential to ensure that the progress of management works is supported and understood by the local community and that the more specific aims, such as reducing litter and preventing unauthorised vehicles, are achieved.

Responsibility could be left entirely with the landowners – Hart District Council, the Timpany Trust and various other private owners of small parcels of land.

However, given the range of the stakeholders with an interest in Hazeley Heath - including landowners and commoners and many groups and individuals - and also the great wealth of detailed knowledge of the area so many of them possess, setting up a statutory commons council to share responsibility for the implementation of the Hazeley Heath Management Plan would be a better option.

## **Grazing or no Grazing**

A key decision is whether the management of Hazeley Heath is going to include grazing, or whether it will rely entirely on other means.

If the idea of including grazing within the Management Plan is acceptable in principle, there are then three main approaches that could be taken –

- Fencing the entire heath and allowing animals to roam freely
- Fencing sections and allowing selected grazing within those sections
- Using temporary fencing or tethering to allow grazing on specific areas of heath in rotation

In each case grazing would need to be supported by a limited number of other options such as scrub clearance and tree management.

If the decision is taken that there will be no grazing, then a different package of management options will need to be considered which will deliver the same aims, including:

- Heathland vegetation cutting
- Controlled burning
- Bare ground management
- Grassland management
- Scrub management
- Tree management

It is also necessary to agree specific ways of ensuring:

- Management for selected species of importance
- Management to reduce the impact of inappropriate human-related activity
- Prevention of access to unauthorised users
- Management techniques to reduce conflict between different user groups
- Management to reduce encroachment
- Management to maintain status of site

Any remediation identified for the landfill site needs to be a longer-term aspiration as further study would be required and the landowners Hart District Council are not currently in a position to make a commitment on the issue.

What we would now ask is that stakeholders consider the detail of the various management options for Hazeley Heath set out in the rest of this document, in the light of the discussions at the consultation meeting on November 9, 2006 and – bearing in mind the need to reconcile the disparate special interest priorities – to express a view on the management options which should be included in the final management plan.

Responses need to be sent by 11<sup>th</sup> December 2006 to:

Kim Olliver  
Atkins  
Woodcote Grove  
Ashley Road  
Epsom  
Surrey  
KT18 5JD

## 1. INTRODUCTION

### BACKGROUND

- 1.1 There has been a rapid loss of lowland heath since 1800. There now exists only 16% of the original amount of lowland heath in the UK. Heathland is known to be highly important for the diversity of a number of species and habitats and a lack of appropriate management is the main threat to the remaining lowland heath. If left unmanaged, invasive species will overtake and oust typical lowland species, eventually developing into woodland. Heathland is essentially a product of human activity and cannot survive without active management; hence to leave heathland without any form of management is not an option.
- 1.2 Figure 1 shows how the pattern of woodland has changed at Hazeley over the second half of the 20<sup>th</sup> Century. Figure 2 shows the disposition of the main habitat types across the common.
- 1.3 A number of local sites similar to Hazeley have been reviewed where similar issues to those at Hazeley Heath have arisen. These sites have highlighted where useful lessons have been learned and which strategies have been successful or problematic. A summary of these management plans is provided in Appendix A. Some management plans have been written as a basis for future management and do not yet identify successful or unsuccessful management options and tools. Some have been written following years of management and thus do identify certain management aspects that have been successful on that particular site and could be management options for Hazeley Heath.

### APPROACH

- 1.4 This paper will firstly look at the range of management options available in order to tackle the key aims outlined in Outcome B and from the results of the questionnaire submitted to all stakeholders in August 2006. Secondly, management strategies will look at incorporating these options in various ways. It is important to note that financial considerations may govern the practicality of or timescale for implementing various options, but at this stage all options will be considered.

- 1.5 It is also important to note that support or at least consent will be required from the landowners for various activities. Attempts have been made to ensure all are informed about the process, but not all have responded as yet. Any legal constraints will also be discussed to ensure that these are appropriately adhered to.
- 1.6 The following generic aims were most strongly agreed on by those that responded to the questionnaire sent out with the Outcome B report.
- Minimise adverse effects of rubbish from landfill and other former uses on appearance and safety
  - Minimise litter, dog mess, old cars etc...
  - Minimise access for unauthorised vehicles
  - Minimise conflict between vehicles and other users esp along B3011
  - Minimise susceptibility to reduction in status and protection of site
  - Minimise encroachment on common by neighbours
- 1.7 The following generic aims were also generally favoured.
- Maximise nature conservation value over substantial defined areas
  - Maximise nature conservation value for species of special status
  - Maximise diversity for nature conservation, landscape and access
  - Maximise openness of the site in defined areas by woodland removal
- 1.8 The following specific aims had the highest levels of agreement from the questionnaire results:
- Prevent loss of lowland heath
  - Reduce scrub
  - Remove invasive alien species
  - Minimise bracken
  - Maintain mature woodland
  - Reduce tree cover by selective removal of species or sizes
  - Improve visitor behaviour and respect for site
- 1.9 There were some issues, where there appeared to be a divergence of opinion:
- Increase the educational and interpretive facilities on the site
  - Provide bridle paths to separate pedestrians and horses

- Reduce number of horses due to safety; dung and damage
- Provide unrestricted access for dogs
- Keep dogs on leads during bird nesting season

1.10 It is important that management options are also discussed for these aims even though there was no general consensus of agreement, because they are of obvious importance to those that actively use the heath.

1.11 An outline of potential management options is discussed to achieve the above aims, followed by different management strategies which incorporate these options to be discussed with local stakeholders at the consultation meeting and in order to form a platform for the basis of the management plan.

## 2. OPTIONS

- 2.1 The following sections outline the range of options that could be used to implement management that would achieve the aims identified and favoured in Outcome B of the study. At this stage nothing has been ruled out or in; information on potential benefits and drawbacks is provided as a basis for discussion, consideration and response.

### A MANAGEMENT ORGANISATION

- 2.2 It needs to be decided who will be implementing the Hazeley Heath management plan. Responsibility could be left entirely with the landowners – Hart District Council, the Timpany Trust and the other private owners of smaller parcels of land, but experience from management of other commons indicates that this is not the best approach. It is usually best to draw members from the landowners, commoners and interested groups and individuals to form a management organisation. The key factors in ensuring the success of such bodies are the calibre of the people involved and the standing the organisation has within the local community. Involvement of the landowners and the commoners is also very beneficial.
- 2.3 The Commons Act 2006 provides for the establishment of statutory commons councils, with powers to manage the various issues that have arisen through this consultation process. By establishing a commons council, commoners, owners of common land and other interests will be able to work together in a clear and defined structure to manage the various demands on Hazeley Heath.
- 2.4 The Secretary of State can only establish a commons council where there is substantial support to do so, having particular regard to the views of those with a legal interest in the common - commoners and landowners.
- 2.5 The commons council would be comprised of individuals representing all levels of interest brought together to aid in the management of Hazeley Heath. Each individual would have certain responsibilities to aid in the management of the heath which reflects the interests not only of the group but of all stakeholders as a whole. It is vital that this group of people keep the local community informed and involved regarding the management of the common.

- 2.6 There is the potential for such an organisation to draw membership from a wider base and cover the management of a group of commons, which would help spread the administration workload and could assist in attracting funding for coordinated management regimes.

## **GRAZING**

- 2.7 Historically, livestock grazing has been essential in the formation and perpetuation of lowland heath environments. The re-introduction of grazing as a management technique could ensure the lowland heath at Hazeley is not only maintained, but enhanced. Grazing restricts scrub invasion and increases the biodiversity of the heathlands by creating a variety of habitat types within the heath.
- 2.8 Grazing could control the invasive species on Hazeley Heath including:
- Woody weeds
  - Scrub and regenerating trees
  - Bracken
  - Purple moor grass
  - Rank grasses
  - Other invasive species
- 2.9 It is necessary to maintain an acidic soil for lowland heath plant species to thrive. Grazing can help maintain this by reducing the levels of nitrogen, potassium and phosphorus.
- 2.10 It is important to note that any fencing needed on the common - temporary or permanent - requires consent from the Secretary of State under the Law of Property Act 1925. Public consultation on such an application would be required if this management option is chosen. Provisions would need to be made for access through the fencing by means of stiles and gates.
- 2.11 The Commons Act 2006 will streamline the consents system for works and fencing on commons as well as ensuring that existing statutory protections are applied consistently, once the supporting legislation is put in place during 2007.
- 2.12 Traditional and hardy breeds are the best to maintain lowland heath. Suitable species include cattle, ponies, sheep and goats.
- 2.13 Cattle tear at grass and trample more than other species. They create a diverse habitat structure. There are Dexter's cattle in the locality of Hartley

Wintney. Angus cattle are used to rough grazing for which Hazeley Heath would be suitable for. It is known that a commoner has a small pedigree herd of Aberdeen Angus cattle, which have been used in the past for a number of conservation projects. They are docile and hornless, small and used to people, dogs and horses. It is important that any livestock have somewhere local to be kept, which is essential under adverse weather conditions.

- 2.14 Ponies graze close to the ground and if they are in too dense a population will create uniform lawns which are not necessarily beneficial for the maintenance of lowland heath. Sheep will selectively remove certain rank grass species and certain breeds will remove woody weeds and purple moor grass (*Molinia*). Goats will eat anything and everything, especially woody weed species.
- 2.15 Using a mixture of all these species can be particularly beneficial for maintaining a diverse heathland structure as the different animals affect different aspects of the habitat.
- 2.16 To obtain best results, grazing should be undertaken in the spring, summer and autumn seasons. Grazing should be avoided in winter, because this can cause damage to heather and can jeopardize the health of the livestock used. In the areas of dry heath in Hazeley, grazing periods should last from 4 to 8 weeks. This is in order to prevent too much damage and erosion occurring to these sensitive areas.
- 2.17 The stocking rate is the number of grazing animals allowed to graze within any given unit of heathland and is expressed in Livestock Units (LSUs)/hectare. In general, one adult cow per two to eight hectares of heathland is an estimate. The variation is accounted for by the productivity of the heathland. Ponies should be stocked at a ratio of one per 5 to 12 hectares. Sheep can be stocked more intensively varying from 1 sheep for 0.2 to 2 hectares. The lower proportion would be used in areas that are more sensitive ie contain more heather. It is essential to obtain the correct balance as too high a stocking density can reduce heather and encourage rank grasses whereas too little will promote scrub and woody species. The most appropriate course of action here would be to introduce a low stocking density and increase if necessary.
- 2.18 Most ways of controlling grazing animals rely on fencing in one form or another. Options for and against fencing the whole of the heath or parts will be discussed in how these are utilised in management strategies in Section 3.
- 2.19 It will be vital to monitor the effects of the grazing in order for the correct regime to be arrived at and continued.

## **HEATHLAND VEGETATION CUTTING**

- 2.20 Cutting vegetation is an important conservation measure for heathland and is a potential alternative/addition to grazing. If done correctly, it aids in the increase of structural and species diversity. It is beneficial for the regeneration of young heather and to support silver-studded blue butterflies.
- 2.21 However, cutting needs to be undertaken in conjunction with removal of the litter to be most effective, as this avoids nutrient accumulation and the consequent invasion of undesirable species.
- 2.22 It is important that all four stages of heather are represented at Hazeley Heath in order to increase habitat diversity - pioneer heather, building heather, mature heather and degenerate heather. This is because different plant and animal species are associated with particular growth stages of heather. Turf cutting can aid heather regeneration from seedlings.
- 2.23 On a twenty year rotation, defined areas should be cut or burned each year. It should be ensure that mature and degenerate heather are maintained at a reasonable proportion of approximately half of the heathland. Mechanical cutting is found to be most effective when undertaken in long narrow strips approximately 10 metres wide with margins to encourage colonisation by animals and plants. Each plot should be managed in succession to encourage re-colonisation from uncut areas. The arrangement of mechanically managed plots needs to be considered in order to avoid an unnatural appearance to the heathland.
- 2.24 Rotovation can be used to regenerate old stands of heather. Rotovation breaks up the litter layer and also allows heather to regenerate from seedlings. It does not however, remove as many nutrients as turf cutting with litter removal.
- 2.25 There are alternative methods to remove the invasive grass species amongst the heath. These include turf stripping or grazing. Turf stripping can be used to remove areas of grassland that are dense in these invasive grass species. However, this is of less value where it takes away areas containing other species of value to the lowland heath, or indeed soil-inhabiting invertebrates.

## **CONTROLLED BURNING**

- 2.26 Controlled burning has been used in heathland management for years. The principal heathland species are adapted to recovery after fires. Burning has various advantages in that it is cheap and quick compared with other heathland management options. It is efficient at removing most of the

vegetation and accumulated litter and it is effective in enabling regeneration of the heath species. However, there is the risk that the fire can escape control if not appropriately tended; wildlife such as reptiles, small mammals and invertebrates could potentially be harmed and it could be viewed as encouraging acts of arson. Burning may not be considered a favourable option by neighbouring or nearby residents.

- 2.27 Fire encourages seed germination and particular plant species benefit as it reduces the competition from more vigorous plants. Certain species, such as the woodlark, also use the bare ground created from fire.
- 2.28 It is important that any planned burns must be carefully considered to avoid harming any scarce plants or animals. They must be undertaken in appropriate weather conditions and with firebreaks. Controlling burns requires sufficient people on site throughout the process and may require fire brigade attendance.
- 2.29 Burning is only allowed between 1<sup>st</sup> November and 31<sup>st</sup> March by law. The Heather and Grass Burning Code should be followed. Heather and grass swards are suitable for burning, but bracken is not. Old gorse will regenerate rapidly after burning, so this is not the best choice if gorse scrub needs to be cleared.

### **BARE GROUND MANAGEMENT**

- 2.30 Bare ground is an important feature of lowland heath and needs to be maintained. Bare ground areas are important for invertebrate and reptile species. They are also important for seedling plants which are outcompeted by larger plants in surrounding areas. It is best that areas of bare ground are created at the same time as older clearings become vegetated in order to maintain a balance.
- 2.31 There are various options to enhance areas of bare ground. Grazing animals can create these areas through the trails they make and through the removal of plant foliage as they graze and scrape the turf. Mechanical scraping can be useful as it removes excess nutrient accumulation.
- 2.32 New areas can be created through the temporary establishment of new pathways. Older pathways can be left to re-vegetate before recommencement of use. This is a good way of maintaining balance again. It is important to create a number of smaller areas rather than one large one.

## **GRASSLAND MANAGEMENT**

- 2.33 Non-invasive communities of grassland can be diverse and support uncommon plants and are also important for bird and invertebrates. Dry acid grassland is also a valued and uncommon habitat. However, certain grass species if not managed correctly can become a problem including wavy hair-grass, bristle bent grass, heath grass and purple moor-grass and may eventually out-compete the heath species.
- 2.34 Grassland can be managed in different ways. Options include grazing, cutting, scraping and turf burying to encourage structural and species diversity.
- 2.35 Scraping removes the grass, roots and nutrients from the soil and exposes heath seeds. Grazing maintains a diverse sward and checks the spread of more vigorous species. Turf burying involves inverting the upper soil horizons to a depth of approximately 15-20cm. This may temporarily generate young heath growth, but will not reduce the nutrient problem. It also damages the soil profile.
- 2.36 Cutting is another option. At least 50% of grassland should be left uncut each year to accommodate hibernacula for the Marbled White butterfly. This should be cut in the latter half of late July when it is not a caterpillar or chrysalis. Timing and frequency of the cutting regimes influences the composition and appearance of the grassland, as well as the cost of the work.

## **SCRUB MANAGEMENT**

- 2.37 All cutting or felling of woody vegetation should be undertaken outside the bird breeding season which is usually taken as running from February until early August.

### **Young and regrowth Birch**

- 2.38 Birch should be managed by cutting on a rotational basis (one fifth every five years) to provide a diverse age range. Light grazing by sheep or cattle can remove birch of less than 1m high. If grazing is not used, herbicides are effective in containing the spread of seedlings.
- 2.39 Larger trees should be cut down as close to the ground as possible with a saw and the stumps treated with herbicide. Birch litter should be removed off site to avoid the build up of nutrients; some logs could be left for dead-wood habitat.

### **Young and regrowth Pine**

- 2.40 Some pine removal is required. Smaller pines can be removed with loppers or by hand pulling and larger pines should be cut parallel and as close to the ground as possible.

### **Rhododendron**

- 2.41 This is not abundant on Hazeley Heath, but should be removed where it occurs. This can be done by cutting bushes to ground level. Smaller stumps can be treated with herbicides. If resources are available, total eradication can be achieved through pulling out stumps and roots.

### **Gorse**

- 2.42 Gorse can be managed by cutting or burning. It can be cut in winter by hand, or with a chainsaw, tractor-mounted swipe, or scrub cutter. This can be followed by the treatment of the stump using glyphosate or triclopyr. Gorse can also be grazed.

### **Bracken**

- 2.43 It is important to control bracken because it is toxic and kills off heathland fauna. Its control is also important from a health and safety perspective, because of its carcinogenic properties and it also harbours ticks which may cause Lyme disease.
- 2.44 There are various management options to control bracken including cutting, rolling and crushing, herbicides or a combination of methods.
- 2.45 Mechanical cutting should be undertaken in areas of the heathland which are relatively flat with no tree stumps and by cutting as low as possible, ideally the first time in mid-June, a second session in late July and a third session in August. The cut material should then be removed from the site. The cut material can be sold as a mulch or compost and could therefore be removed by horticultural contractors. If there is a surplus amount, the bracken litter can be disposed by controlled burning following the Heather and Grass Burning Code between November and March. It is essential that prior to any cutting taking place, the area is initially searched for ground nesting birds. In areas of dense bracken, rotovation can take place.
- 2.46 The herbicide asulam (brand name Asulox) can be used where the ground is not suitable for cutting. This is generally applied in July as long as it has not been raining for a minimum of 12 hours prior to application and there is little

or no wind. A wetting agent can be applied to the fronds of the bracken, such as Agral, which improves the uptake of the herbicide in to the plant.

- 2.47 The herbicide can be applied using either knapsack sprayers or controlled droplet applicators for smaller areas. It is important to note that this herbicide should not be used alongside areas containing other sensitive species.

### **Japanese knotweed**

- 2.48 There are patches of this invasive alien plant on site which need to be dealt with to avoid its spread. It should be treated by applying glyphosate outside the main flowering season to protect bees and other pollinating insects. This treatment should be repeated each year for three years to stop it growing back. As glyphosate is a non-selective herbicide and kills most plants, it should be applied with great care. The dead material should be disposed of off site. Some sources advocate summer treatment, others advocate treating the young growth and the growth just prior to die-back so that the chemicals are transported into the rhizomes.
- 2.49 There is also an option for combined digging and spraying treatment, which can be more effective in reducing the time required for chemical control. However, great care needs to be taken when undertaking this to avoid spreading plant material. This breaks up the rhizome, which stimulates leaf production and therefore makes the plant more susceptible to herbicide treatment. It is an offence to knowingly spread parts of the plant including soil containing rhizomes. Live plant material has to be disposed of at an appropriate licensed tip or buried at least 5m deep.

### **TREE MANAGEMENT**

- 2.50 All cutting or felling of woody vegetation should be undertaken outside the bird breeding season which is usually taken as running from February until early August.
- 2.51 Mature native woodland supports a wide range of wildlife, including plants, lichens, invertebrates, nesting and feeding birds and reptiles. It also adds to the landscape value of Hazeley, where the mature boundary trees have long marked the extent of the common and where tree groups on higher ground accentuate the varied terrain. It is important that an appropriate and acceptable balance of woodland to heathland is maintained to ensure that the heathland remains a predominantly open habitat, but nonetheless sections of mature woodland add to the diversity of the site.

- 2.52 Hazeley is designated as SSSI and substantial areas of heathland are currently in ‘unfavourable recovering’ condition. Tree cover is one of the criteria used for assessing the status of heathland and there needs to be less than 10% cover to achieve ‘favourable condition’. Options include removing anything from scattered light scrub to recently established, closed-canopy woodland.
- 2.53 As tree removal can be a contentious topic, it could potentially have adverse effects on people’s views into and over commons. It may also have adverse effects on biodiversity. Tree clearance can potentially change the character of the landscape. It is therefore important that any programme for tree clearance works is consulted with local stakeholders to ensure that their opinions can be fed into the process. It is essential that they are kept informed as to why the removal needs to take place and where and when the works will occur. Felling licences may also be required.
- 2.54 In order to establish which trees to remove and which to leave, various factors need to be taken in to consideration including species, distribution, density and age. The vegetation pattern resulting from the clearance will influence the appropriateness of the habitat for different species of interest as well as the appearance and character of the landscape. For instance, creating a clean woodland edge as distinct from a ‘scalloped’ edge with many indentations or a gradual fraying out of the woodland into heathland.
- 2.55 Scattered young trees up to two metres tall can be managed on a 5-yearly clearing cycle to leave about 10 per hectare. Scattered developing trees of up to 25 years and between 2-6 metres in height should be removed to leave about 3-4 trees per hectare. This will provide song posts and vantage points as well as landscape features.
- 2.56 For scattered mature trees of greater than 25 years old there are various options including:
- a) Retain all or a high proportion and continuously weed new seedlings
  - b) Remove approximately 50%, retaining features of high ecological or landscape value; moderately high weeding of seedlings
  - c) Clear most trees to reduce seeding and extend areas of open heath

## **MANAGEMENT FOR SELECTED SPECIES OF IMPORTANCE**

### **Invertebrates**

- 2.57 Various invertebrates require a range of habitats. Heather habitats can be managed to create the diverse range of growth stages. There is also a

requirement for areas of bare ground, scrub, patches of moss and lichens. Bare areas of south facing slopes should be created, particularly for solitary bee species. The ponds in the heathland can provide valuable invertebrate habitat. Care should be taken not to deepen existing pools.

### **Silver-studded blue butterfly**

- 2.58 The silver studded blue butterfly is classified as a high priority species in the south-central England Regional Action plan. It is a UK BAP priority species. It requires short heather turf and warm ground conditions. They die out when the heathland becomes too mature.
- 2.59 Management options involve providing a continuity of sufficient pioneer heath within the colony area and to provide opportunities for the colony to expand.
- 2.60 Occupied areas should be regularly mown to prevent the heathland vegetation from developing into the mature phases. Small patches or strips should also be cut on rotation to within 50 metres of the colony area. Colonies in poor condition should be restored with care. Where possible, colonies should be linked together by creating stepping stones of suitable habitat. Grazing may also help maintain the pioneer phase of heather.

### **Rare bird management**

- 2.61 Hazeley Heath SSSI has been included in the Thames Basin Heaths SPA because of the quality of habitat for the three Red Data Book bird species: Dartford warbler, nightjar and woodlark. Hence it is considered necessary and important by nature conservation bodies and others to enhance the quantity and suitable habitats.

#### *Dartford warbler*

- 2.62 This species requires dense bushes of common gorse amongst mature heather. Gorse bushes older than 12 years should be managed by cutting with a saw or a swipe on a ten to twelve year rotation. Pine species should be removed once their height exceeds about two metres. However, young pines, with branches in contact with the heather canopy can provide important habitat for Dartford Warblers.

#### *Nightjar*

- 2.63 Nightjars require dry heathland for nesting and to a certain extent feeding. Tree lines can be pushed back to encourage more open heath. Selective felling can create a deeply indented edge to woodland, which can provide

suitable nest sites. Indentations need to be 20-100 metres wide and deep with a scattering of bushy trees within heather-dominated vegetation.

- 2.64 Nightjars also use gaps in the heathland canopy to nest or roost. These can be created by uprooting mature stands of heather. For feeding, nightjars require a diverse array of habitat types to provide a range of different moth and night flying insect species. Therefore from a management point of view, a mosaic of woodland edges, areas of woodland, grassland and mires should be maintained. Nightjars also favour grazed to un-grazed heathland.

#### *Woodlark*

- 2.65 Woodlarks require sparsely vegetated areas for feeding and grassy tussocks or open-structured heather for nesting. Short vegetation can be created and maintained by use of grazing, burning or mowing or a combination of these. Grazing is generally the favoured option. If grazing is not the favoured option, then mowing on a 20 to 30 year rotation across the whole heath will maintain a short balance across the site. Woodlarks also require some trees for lookouts and singing, therefore these should be maintained.

## **MANAGEMENT OF VISITOR ACTIVITIES AND CONFLICT BETWEEN USERS**

### **Management of visitor activities**

- 2.66 It is important to educate people regarding common and heathland management and heathland composition, not only so they can make the best of their visit, but to ensure the heathland is not used in an ecologically damaging way and to encourage an interest in heathland conservation.
- 2.67 Signs are an important educational tool which could be used to achieve the following:
- To dissuade people using paths in to sensitive areas and marking routes away from these vulnerable habitats in order to avoid disturbance to wildlife.
  - To discourage people from walking on badly eroded pathways to encourage regrowth.
  - To outline the nature conservation value of the various species to remind people why they need to respect the value of the site whilst using it for various activities.
  - To state when dogs are to be kept under close control, or on leads during bird nesting season and to be cleaned up after.

- If livestock are to be grazed and where and when they will be grazing.
  - To remind people of the dangers of starting fires; leaving glass or other litter behind after a picnic; taking home rubbish.
- 2.68 A management organisation or Statutory Commons Council as discussed in sections 2.2 to 2.6 comprised of individuals representing all levels of interest could be brought together to aid in the management of Hazeley Heath. Indeed, the Commons Act 2006 intends commons to be managed more sustainably by commoners and landowners working together through common councils, with powers to regulate various management activities. This group of people should keep the local community informed and involved regarding the management of the common in the form of newsletters, exhibitions, open days, talks, slideshows and guided walks. A guide could be provided to help children and other interested parties learn about the various wildlife on the site.
- 2.69 Dog excrement can cause nutrient enrichment and alter the heathland composition, as well as being a health hazard. Owners may be unclear as to when they are expected to pick up after their dogs and when it is acceptable to leave a mess. Generally people are likely to pick up and bag their dog's mess if they see a bin present, however if there are no bins present, then it may be seen to be not their responsibility to deal with the waste. There may be less support for the owners to take their waste home and dispose of it there. Therefore, dog walkers need clear messages to state what is expected.
- 2.70 There will be cost implications for the provision of bins as these will need to be installed and then emptied and maintained on a regular basis. The quantity of bins would relate to the routes of entry for the majority of dog walkers. It must be assumed that use would be voluntary, as the option of fining if dog mess is not cleared would be impractical to manage. The provision of bins could also be viewed as unaesthetically pleasing and detract from the natural beauty of the heathland.
- 2.71 Where the heathland has been detrimentally affected by dog faeces, scraping to remove altered vegetation communities and to expose the heather seedbank can take place.
- 2.72 Litter is visually intrusive and of detrimental impact to the heathland. Local people can aid in this by reporting any incidents via a scheme. For example, the 'Heathwatch' scheme, which is part of the Urban Heaths LIFE Project in Dorset, involves monitoring the heaths for unwanted activities. People can tell the warden or the police about any unwanted activities they see.

- 2.73 Litter is potentially hard to discourage but by-laws could always be enforced if people are caught in order to prevent littering. Another option would be to regularly patrol the site, perhaps with the use of volunteers in order to clear dumped material promptly, which should reduce the incentive to dump more. There may also be the requirement to liaise with the police.
- 2.74 Education can in an ideal world be utilised as a management tool to aid in this. If the community is kept involved then people may learn to appreciate the value of the heath and may therefore be less likely to leave litter. The present visibility of the litter arising from the former landfill may undermine any message intended to discourage casual litter or further dumping.

### **Management to reduce Conflict between different User Groups**

#### *Cyclists*

- 2.75 Mountain biking is a popular pastime at Hazeley Heath, despite the fact that there is no right of cycle access to any part of the common. In order to reduce any conflicts between cyclists and other users of the heath, there are a few options that could be considered.
- 2.76 There could be liaisons with local cycling clubs to establish codes of conduct and for the site manager or a warden to provide them with talks about the value of the site for wildlife and the potential impact that they can have as well as the conflicts between other users of the heath. If mountain bikers are felt included in discussions, they may wish to become volunteers at Hazeley.
- 2.77 Another option is to liaise with the police to address any activity which detrimentally affects the heath or conflicts with other users. Signs could be erected to inform cyclists of the permissive nature of access and of the impact that they have and how they can ride sympathetically. It may also be possible to introduce a permit system, which will help fund path maintenance.
- 2.78 An area could be designated and designed for recreational biking, so that this activity is kept away from the higher value habitats.

#### *Dog walkers*

- 2.79 Dogs are allowed to access all areas of the common. Dog walking is a popular activity and it has been reported that approximately one third of all visitors to the countryside are accompanied by a dog. Dog walking encourages people to exercise and walking can lead to physical, social and psychological benefits. However, there are negative issues that have arisen,

including, disruption to people walking without dogs, dogs out of control, fouling and disturbing other wildlife and horse riders.

- 2.80 In order to improve the management of dog walking at Hazeley Heath, there are two main methods which can be employed. These include changing people's behaviour to improve relations with dog walkers and other users and methods used by site managers to improve communications with dog walkers.
- 2.81 Ultimately a dog's behaviour is the owner's responsibility. Any antagonism towards the dogs is perceived by the owner to be for behaviour that is considered inappropriate, such as jumping up at people, chasing wildlife, or fouling. It is up to the owner to control their dogs. It is therefore essential to set up or maintain any existing dog walkers groups so that dog walkers can communicate about these issues and advise each other on how best to control their dogs. They could also become more actively involved, for example, in maintaining facilities, noticeboards and litter clear ups. These groups could enforce stickers, badgers etc to show that they belong to these groups and are keen to ensure correct codes of behaviour whilst walking their dogs. The dog walking groups should also liaise regularly with other user groups to help lessen any conflicts.
- 2.82 Site managers should get involved for example in helping to form the group, provide facilities for meetings and also liaise on a regular basis with the dog walkers to voice any concerns from either party. Leaflets, maps, notice boards and websites can be introduced to discuss the various management options. These could explain why it is necessary to restrict dog walkers from certain areas in order for example to protect ground nesting birds. More facilities could be provided for dog walkers, for example, dog poo bins.

#### *Horse riders*

- 2.83 There is an aim to provide bridle paths to distinguish between pedestrians and horseriders, which has had mixed reactions from consultation. However, uncontrolled horse riding can cause conflict and there is a need to develop an acceptable system which accommodates horse riders alongside other users. A possibility is to have paths intended for horse use, with riding on other parts of the common done off-path, to reduce conflicts and erosion. A recent comment from Defra is that the right to ride on commons does not allow regular riding along public footpaths that cross the common.
- 2.84 It may be necessary to establish routes which avoid vulnerable areas. A permit system could be implemented with a small charge for path maintenance to ensure paths do not become too boggy or overly eroded. Temporary winter closures of paths that are liable to flood should prevent

poaching and vegetation damage. Temporary summer closures to paths with notable invertebrate species will prevent damage to nest sites.

- 2.85 Local horse riding interest groups and riding schools should have close liaison with other interested parties as well as the site manager so that they are fully informed of any changes to routes and have their say as to what they feel constitutes appropriate management from a horse riders perspective. It is likely to be necessary for both horse and dog groups to meet and liaise together to air any concerns and to come to an understanding over any contentious issues.

### **LANDFILL SITE REMEDIATION**

- 2.86 Detailed proposals for intervention on the landfill site will not form part of the overall management plan, particularly as trial pits would need to be undertaken in order to establish the depth and contents should any works be considered beneficial. The plan will cover general management of this area.
- 2.87 The former landfill area and the south east section of the site generally has the poorest species diversity, not simply in terms of heathland plant species, but also in terms of ground nesting birds. As the majority of people tend to use this area for walking, it would seem more appropriate to improve the landfill section principally for recreational usage. This would protect more sensitive areas.

### **UNAUTHORISED ACCESS PREVENTION**

- 2.88 The use of motorbikes, cars and other unauthorised vehicles on site can seriously damage the site and cause disturbance to wildlife as well as well as distress and nuisance to authorised users.
- 2.89 Options to exclude these could include physical means such as bollards or enhancement or construction of a ditches or banks alongside areas where people park their cars and along edges of unfenced roads; the installation of robust metal gates at access points; or could include regular patrols and direct liaison with the police. The current lack of roadside parking is helpful in dissuading casual access.

### **ACTION TO MINIMISE ENCROACHMENT**

- 2.90 Encroachment is the loss of land area from the common or the extension of other uses onto the common with adverse effects on public access and wildlife habitats. This has occurred through the extension of garden boundaries and uses and other internal fencing over the common. The

Commons Act 2006 will reinforce existing protection against abuse, encroachment and unauthorised development, not least by allowing anyone to bring a case against encroachment.

- 2.91 However, use of legal proceedings should be regarded as the last resort, as this is unlikely to contribute to the development of the consensus needed for successful management of the common. A co-operative approach to understanding and resolving the issues from both sides of the fence would be a much better result.

### **MAINTAIN STATUS OF SITE**

- 2.92 All the above options should aid to maintain the status of the site and ensure the SPA designation is protected. Under the EU Birds Directive, the Thames Basin Heaths are designated as a Special Protection Area to protect the three rare species, the woodlark, nightjar and Dartford warbler. These ground nesting birds are particularly vulnerable to disturbance from people and their dogs and to increased predation on their young by domestic pets. Natural England (previously English Nature) has evidence that residential development within 5 kilometres of the SPA has a significant adverse impact on these bird species. If houses are developed within this area, the number of woodlark and nightjar goes down and the breeding success of the Dartford warbler declines.

- 2.93 The legal status of the SPA provides strong legal protection for the site and has an influence on planning decisions. Nearby housing developments need to provide alternative green spaces or improvements to existing open spaces to reduce the number of people using the SPA for recreation and disturbing the protected bird species which are key to maintaining the status of the site. Natural England are currently advising to refuse all development within 400 metres of any Thames basin heath, including Hazeley.

- 2.94 Local authorities could get involved in order to identify alternative natural greenspaces. Habitat management using various management options described in previous sections will all help to enhance the quality and status of the site and hence lessen the capacity for a reduction in status.

- 2.95 Management to enhance and maintain the condition and extent of the valued habitats will also contribute to the preservation of the status of the site.

### **HOW THE OPTIONS MEET THE IDENTIFIED AIMS**

- 2.96 Table 2.1 shows how the management options meet the identified management aims. The following symbols have been used in the table:

- $\sqrt{\sqrt{}}$  = management option will have high success in implementing aim
- $\sqrt{}$  = management option has moderate success in implementing aim
- - = management option has no relevance to aim
- X = management option may have negative impact on aim

2.97 The management for selected species of importance has not been shown as a separate option in this table, because this involves a combination of management options already described, such as grazing, vegetation cutting and bare ground management. The management aims in this table are those that gained most agreement by those that responded to the Outcome B questionnaire.

2.98 The table highlights that mostly the typical management tools used for conservation (the first 7 options) will have a moderate to high success level at implementing many of the aims, including the following:

- Minimise susceptibility to reduction in status and protection of site
- Maximise nature conservation value over substantial defined areas
- Maximise nature conservation value for species of special status
- Maximise diversity for nature conservation, landscape and access
- Maximise openness of the site in defined areas by woodland removal
- Prevent loss of lowland heath
- Reduce scrub

2.99 The latter four options which are orientated towards management of people and their activities generally have less relevance towards meeting the traditional management aims, but do have a moderate to high success rate in implementing the following aims:

- Minimise adverse effects of rubbish from landfill and other former uses on appearance and safety
- Minimise litter, dog mess, old cars etc...
- Minimise access for unauthorised vehicles
- Minimise conflict between vehicles and other users esp along B3011

2.100 There are a number of management options that have no relevance to certain aims, but this is due to the wide range of both options and aims that have developed from the consultation procedure.

2.101 There are only a few options that may have a negative impact on some of the aims. Grazing may have a negative impact on maintaining mature woodland as it could potentially cause damage to mature trees. Grazing may cause

conflict with visitors to the site and may cause conflict with users along the B3011 if stock are allowed to roam freely. Controlled burning may have a negative impact as it could be seen as actively encouraging acts of arson.

	Management Aims (those with strongest agreement from stakeholder responses)																
Potential management options to tackle identified management aims	Minimise adverse effects of rubbish from landfill and other former uses on appearance and safety	Minimise litter, dog mess, old cars etc...	Minimise access for unauthorised vehicles	Minimise conflict between vehicles and other users esp along B3011	Minimise susceptibility to reduction in status and protection of site	Minimise encroachment on common by neighbours	Maximise nature conservation value over substantial defined areas	Maximise nature conservation value for species of special status	Maximise diversity for nature conservation, landscape and access	Maximise openness of the site in defined areas by woodland removal	Prevent loss of lowland heath	Reduce scrub	Remove invasive alien species	Minimise bracken	Maintain mature woodland	Reduce tree cover by selective removal of species or sizes	Improve visitor behaviour and respect for site
Grazing	-	-		X	√√	√	√√	√√	√√	√√	√√	√	-	-	X	-	X
Heathland vegetation cutting	-	-	-	-	√	-	√√	√√	√√	√	√√	√√	√	√	√	-	-
Controlled burning	-	-	-	-	√	-	√√	√	√√	-	√√	√	√	-	-	-	X
Bare ground management	-	-	-	-	√	-	√	√√	√	-	√	-	-	-	-	-	-
Grassland management	-	-	-	-	√	-	√	√	√	-	√√	-	-	-	-	-	-
Scrub management	-	-	-	-	√	-	√√	√	√√	√	√	√√	√√	√√	-	-	-
Tree management	-	-	-	-	√√	-	√√	√	√	√√	√√	-	-	-	-	√	-
Managing visitor activities/conflict avoidance	-	√√	√	√	√	-	√	√	-	-	√	-	-	-	-	-	√√
Landfill site remediation	√√	√	-	-	√	-	-	-	-	-	-	√	-	-	-	-	-
Unauthorised access prevention	-	-	√√	√	√	-	-	-	-	-	-	-	-	-	-	-	√
Action to reduce encroachment	-	√	√	-	√	√√	-	-	-	-	√	-	√	-	-	-	√

Table 2.1 – How management options meet identified management aims

### 3. MANAGEMENT STRATEGIES

3.1 There are four management strategies suggested that incorporate some or all of these options. Grazing would have a substantial influence on the package of management tools needed to maintain lowland heath status. Therefore the proposed management strategies are distinguished by whether grazing takes place on the whole site or within certain areas or not at all. For each strategy the following management options would need to be incorporated to similar degrees:

- Managing visitor activities/conflict avoidance
- Landfill site remediation
- Unauthorised access prevention
- Action to reduce encroachment

#### MANAGEMENT STRATEGY A

3.2 This would entail the erection or maintenance of a fence around the entire perimeter of the common and would allow the animals to roam freely within the heath. This would follow existing boundaries and so lessen the visual impact as much as possible. It would also maintain the apparent and actual openness of the heath for recreational access.

3.3 There may be the following concerns:

- Damage to footpaths
- Safety of visitors
- Uncontrolled dogs attacking/frightening livestock
- Damage to areas that should not be grazed and species of nature conservation importance
- Potential for adverse effects on people's views into and over common land
- Effects on the landscape character
- Restriction of free access on to commons (even if numerous gates are provided along a fenceline)

- Impedance to movement of other animals, such as badgers
  - Grazing animal movement across the roads.
- 3.4 The traditional approach would avoid the need for an application to the Secretary of State as the fencing would be just outside the common (ie fencing against the common), which would require cooperation from all the adjacent landowners. This may help to spread the cost of implementation and may give access to other funding sources, but could extend the period needed to achieve effective containment.
- 3.5 A mixed approach may be more pragmatic, with some sections of fencing just within the common where agreement cannot be reached to fence against. However, this can lead to narrow strips of ungrazed land that can be difficult to manage. This approach would also require an application to Defra.
- 3.6 It is relevant to note that any fencing application at the moment is determined on the basis of the 'benefit to the neighbourhood' and the 'advantage of the persons interested in the common' which does not overtly encompass the nature conservation interests and expectations that underpin this management approach.
- 3.7 If this strategy is adopted, stiles/gates must be provided all around the perimeter of the fence. If possible, these should be sited in areas of scrub/woodland and thus reducing the impact on the landscape.
- 3.8 Fencing around the common perimeter would effectively put an end to encroachment, but this aspect could raise issues that delay implementation.
- 3.9 Cattle grids would need to be implemented at all road accesses. There may be the following concerns:
- The cost can be substantial - between £30,000 and £40,000 per road cattle grid is likely. For Hazeley Heath, 7 would be required, which would therefore cost in the region of £200,000 to £300,000 to construct, for which funding would need to be identified.
  - On tracks/pathways they can cost between £1500 to £2000
  - Traffic calming measures and/or speed limits would need to be considered and agreed with the police and highway authorities
  - Grids near residential homes may create or be perceived to create unwelcome noise
  - The B3011 is a busy road with limited sightlines in places.

- Cattle grids on the B3011 would need to be approved by the local Highway Authority.
  - Grazing over the whole common could discourage the regeneration of native tree species in areas where woodland is preferred.
  - Other controls may be needed to achieve the appropriate levels of grazing in different habitat areas and to avoid over-grazed areas.
- 3.10 Although cattle grids and boundary fences are initially expensive to implement, they could potentially become more cost beneficial as once installed they need little or no maintenance.
- 3.11 Other management tools needed to support this strategy would include an element of scrub clearance, some tree management and management for species of importance.
- 3.12 Some tree and scrub clearance would be still be necessary as grazing can only remove young regrowth such as birch and pine. A front-mounted, tractor powered forest grinder and flex-wing rotary mower could be used to restore sections of the secondary woodland and swards of bracken to heathland. The clearance works should include removing the arisings so as to avoid the effects of nutrient enrichment.
- 3.13 Grazing has a beneficial impact for selected species of importance. However, there may also need to be cutting, mowing and the creation of scalloped edges particularly for the three rare bird species.
- 3.14 Heathland vegetation cutting, burning, bare ground management and grassland management would not usually be required.

### **MANAGEMENT STRATEGY B**

- 3.15 This would entail erecting smaller compartmentalised areas of permanent fencing within the heath, focusing grazing on particular areas. This would have similar issues as Management Strategy A. However, it would have more detrimental effects on the landscape character and would further reduce apparent and actual freedom of access onto the commons as some fencing would be close to or alongside roads and across the common in places. The perception may be that the common would become a succession of paddocks.
- 3.16 Other management tools needed to support this strategy would include an element of scrub clearance; some tree management and management for species of importance.

- 3.17 Heathland vegetation cutting, burning, bare ground management and grassland management would not usually be required.

### **MANAGEMENT STRATEGY C**

- 3.18 This strategy would be based on temporary fencing and grazing, which could be removed when animals are not present or when the grazing pattern needs to be changed. The type of fencing would need to be considered and could include chestnut pale, wire and electric. There may be the following concerns:
- Health and safety issues regarding electric fencing
  - Provision of access through the fences, whilst maintaining control of the stock
  - damage to the fences from people or deer
  - It may make the parts of the common seem like a succession of paddocks on the open heath
  - Element of visual intrusiveness/artificial appearance on the heathland.
- 3.19 A key factor in ensuring the success of such an approach would be the local availability of suitable stock that does not necessarily need to be on the common all the time. Working with the existing commoners would be the most suitable means of achieving this.
- 3.20 As temporary fencing can be moved around the site, grazing activity can be focused on targeted areas, which should provide the best conditions for the heathland habitats. There will still remain similar issues concerning effects on views, landscape character and access, although as these are not permanent, it is assumed this strategy would potentially be of less concern than Management Strategies A and B.
- 3.21 Tethering of cattle or ponies could also focus grazing on smaller areas. There could be a concern that the tethering could be controversial for health reasons and may raise objections.
- 3.22 Other management tools needed to support this strategy would include cutting, burning, bare ground and grassland management but not to the same extent as if no grazing were applied.
- 3.23 Cutting vegetation can be done in addition to grazing. On a twenty year rotation, areas which are not grazed, perhaps as they contain habitat which could cause damage to species of nature conservation importance should be cut or burned each year. It should be ensured that mature and degenerate

heather are covered at a reasonable proportion, for example, approximately half of the heath.

- 3.24 Controlled burning can also be implemented in ungrazed areas. It is particularly beneficial for heather and grass, but should not realistically be undertaken for bracken or gorse.
- 3.25 Grazing can create some areas of bare ground through the removal of plant foliage as they graze and scrape the turf. Limited grazing may not be sufficient to remove extensive areas of invasive grass species. Other options include cutting, burning, scraping and turf burying.
- 3.26 There could be a greater requirement than for Management Strategies A and B to clear areas of scrub via means other than grazing.

#### **MANAGEMENT STRATEGY D**

- 3.27 In recognition of the problems associated with grazing and fencing, this management strategy would involve no grazing, but comprise other management tools to maintain the lowland heath. The components would comprise a mixture of the following:
- heathland vegetation cutting
  - burning
  - bare ground management
  - grassland management
  - tree management
  - and scrub clearance
  - management for species of importance
- 3.28 This strategy would be the cheapest to establish initially, but may become the most expensive when considered over a set period of say 20 years. The use of mechanical means to effect some of the results would also make this strategy the most energy intensive over time. Groups of volunteers could take the place of some of the mechanical work, but this may not always be feasible.

## COMPOSITION OF THE GRAZING MANAGEMENT STRATEGIES

3.29 Table 3.1 shows the extent to which the management options are a necessary part of the four management strategies.

**Table 3.1 – Composition of the Grazing Management Strategies**

Management option	Management strategy			
	A	B	C	D
Heathland vegetation cutting	0	0	1	3
Burning	0	0	1	2
Bare ground management	0	0	1	3
Grassland management	0	0	1	3
Scrub clearance	1	1	2	3
Tree management	2	2	2	3
Management for species of importance	2	2	3	3
Managing visitor activities/conflict avoidance	N/A	N/A	N/A	N/A
Landfill site remediation	N/A	N/A	N/A	N/A
Unauthorised access prevention	N/A	N/A	N/A	N/A
Action to reduce encroachment	N/A	N/A	N/A	N/A

**Key:**

0 = management option not required

1 = low level of this management option required

2 = moderate level of this management option required

3 = high level of this management option required

N/A = does not have a bearing on whether these management options are included or not

3.30 With regard to management strategies A and B, there would not be a requirement for heathland vegetation cutting, burning, bare ground management or grassland management. There would still be a requirement for some scrub clearance as livestock will not necessarily eat certain scrub species. Tree management will also be necessary as only small species could be removed such as birch less than a metre in height.

- 3.31 With regard to management strategy C, there may still need to be some heathland vegetation cutting, burning, bare ground and grassland management as not all areas could potentially be covered. There would need to be more active scrub clearance than for management strategies A and B.
- 3.32 If no grazing takes place, there would need to be active heathland management in the form of all the above mentioned techniques.
- 3.33 The four latter options can be employed regardless of which management strategy is utilised and the level to which these are included can therefore be determined individually. However, if grazing is to become part of the management of Hazeley, then careful implementation is required to ensure this does not conflict with any of these latter options.

## **4. CONCLUSIONS**

4.1 This paper has looked at a range of management options available in order to tackle the aims raised and favoured by stakeholders. The following management options have included:

- Grazing
- Heathland vegetation cutting
- Controlled burning
- Bare ground management
- Grassland management
- Scrub clearance
- Tree management
- Management for selected species of importance
- Managing visitor activities/conflict avoidance
- Landfill site remediation
- Unauthorised access prevention
- Action to reduce encroachment

4.2 Grazing has been used as a tool to distinguish four separate management strategies involving the grazing of the whole of the site; sections within the site; within certain areas, or not at all. Which strategy is utilised has implications for the extent to which the other main heathland management options are employed.

4.3 The four latter options are equally as important, but can be incorporated in to any strategy in order to attempt to address the issues raised by the stakeholders.

4.4 These management options and strategies will be discussed with all stakeholders at a consultation in order to form the basis of a management plan for Hazeley Heath. Stakeholders have a number of concerns that urgently need addressing in order to ensure that Hazeley Heath can be

managed not only to benefit the conservation requirements but to ensure the heath can be enhanced for the enjoyment of all.

- 4.5 A range of options have been discussed in this draft options paper, to ensure that the most appropriate strategy is taken forward. It is important that this chosen strategy meets the requirements of both the stakeholders and the nature conservation interests and compromises may need to be taken.
- 4.6 The management plan will need to consider the ecology of the site with the range of other considerations; the need to preserve archaeological, historical or landscape features, the need to respect commoner's rights and rights of access by the public, as well as catering for all the various needs of the community.