

BRISTOL CITY COUNCIL

**DOWNS COMMITTEE
9th September 2013**

Report of: Service Director, Environment and Leisure

Title: Downs Rangers Report

Ward: N/A

Officer Presenting Report: Robert Westlake, Downs Ranger

Contact Telephone Number: 0117 9736210

RECOMMENDATION:

That the Committee consider the recommendation detailed in the tree officers report. (appendix 1)

Summary

This report reflects the objectives of the Downs Management Plan and to inform members of progress since the last meeting.

The significant issues in the report are:

- Enjoyment
- Access
- Working Groups
- Landscape
- Wildlife
- Management and Resources.

1. Policy

Not Applicable

2. Consultation

a) Internal

Richard Bevan, Manager, Parks Estates, Play, Cemeteries & Crematoria.

John Williams, Estates Manager.

Andrew Gordon Estates Management team leader

Tony Whitlock, Principal Accountant.

Becky Coffin Conservation Officer

Richard Ennion, Horticultural Service Manager.
Peter Malarby, Senior Solicitor.
Phil Lloyd, Bridges and Structures Engineer.
Terry Hannan, Head Gardener, Downs and Blaise

b) External

Mandy Leivers, Avon Gorge and Downs Biodiversity Education Officer.
Jack Penrose FOD+AG

3. Context

a) Enjoyment:

In July the Downs team attended a presentation at Blaise Castle to receive the Green Flag award. The award was presented to Downs team by Mayor Ferguson.

The Downs has retained this prestigious accreditation for a further year and is a testament to the high standards and commitment of all those involved in the management and maintenance of the Downs.

Also in July the Education Officer Mandy Leivers and myself escorted Britain in Bloom judges around the Downs. The judges were impressed with conservation work in the Gorge and on the Downs and expressed enthusiastic support for the work to recover the ramparts at Clifton Camp.

The work carried out by our many partners and volunteers also won generous praise from the judges. We await the final judges decision and are optimistic of a positive outcome.

Again in July the Downs hosted and supported several charitable events including Race for life, and The Midnight Walk. Members may have been aware of some adverse press coverage following the Race for Life. This referred to litter left post event. I have spoken to the organisers who had retained an external recycling company to manage litter clearance. I have indicated that this can not happen again. The site was eventually cleared by the Downs team.

Recent spells of unusually hot weather brought many thousands of visitors to the Downs. This led to a significant increase in anti-social behaviour, particularly extra litter, illegal parking, small fires and barbecue use. Downs and Security staff redoubled their efforts to stay on top of the situation.

Following road traffic incidents at Sea Walls repairs to the masonry have now been completed.

The Community pay back team continue with internal improvements to the dressing rooms.

Additional payback teams provide regular litter patrols at various locations around the Downs and have recently been involved with the repainting of park seating in the Clifton Green area.

Outdoor Training System (OTIS). Members were circulated information on the outdoor training system in August. The proposal was agreed in principle by Committee at the July meeting for a one year trial period subject to satisfactory risk assessments, confirmation of public liability and agreeing a suitable location.

The risk assessment has been received and is satisfactory. Insurance Services have confirmed that public liability is covered provided the equipment is ours and is maintained by us.

The preferred site identified is a third of the way along Ladies Mile set back from the road and partially obscured by tree cover.

b) Access:

Bristol Water update:

The complex scheme to install a new water supply across the Downs is now complete. Work to return the Downs to its previous condition are under-way. The pipe line has been reseeded and a good sward has been established. The protective fences will shortly be removed and final reinstatement undertaken.

Following Councillor representation on behalf of residents along Westbury Park I have arranged with the contractors for this section to be completed first. The work is scheduled to start next week.

Some further works to reinstate the compound are on-going but progressing well.

Negotiations with Bristol Water were successfully concluded regarding the prominence of the concrete bases. The bases which housed valve covers along the Westbury road were considered unacceptable for the location. Bristol Water agreed to modify the design.

The in-house security team continue with patrols across the Downs. Since the last meeting Officers and Downs staff have ticketed or removed from the Downs 71 illegally parked cars.

BAS Parking Services continue to manage the clamping scheme. The trial BBQ area off Circular Road is proving popular and is well used. However Security and the Downs team still deal with portable barbecues

in unauthorised areas whenever the weather is fine.

Following Councillor and public inquiries vigilance was increased to combat a spate of metal detecting. This has led to two previously identified individuals being warned that they were in breach of the bye laws and that any further activity of this nature could involve a Police prosecution.

c) Working Groups

1 Traffic Management Group:

In June the working group tasked to consider all aspects of the impact of traffic on the Downs met with with senior traffic planning officers and a Neighbourhood Partnership traffic coordinator.

The purpose of the meeting was to seek advice from experts on the report and how best to get the actions detailed in the report to the next stage.

Traffic managers will report back to the working group.

2 Rock fall group:

At the last meeting I updated Committee on a serious rock fall at Seawalls that had occurred in January, this followed a smaller rock fall incident at Suspension Bridge Road.

a) Bridge Road: Undertake an assessment of the rock face and prepare an options report and to undertake a laser scanning of the rock face at Bridge Road.

The budget estimate for this is £4500.

b) Sea Walls: Undertake a detailed design of the rock nail/tension option at Seawalls and obtain budget estimates for this work, assess the technical aspects of the tender returns and to supervise the project.

The budget estimate for this is £9400.

The current financial advice is that the sum can be met from the Downs reserve.

Currently we are awaiting a detailed response from Parsons Brinkerhoff for both locations.

Since the last meeting of this Committee the City Councils Bridges and Structures Engineer Phil Lloyd has received a letter from the owner of the property below the rock fall.

The representative of this property has requested details of how we intend to proceed with the removal of the fallen rock from the property.

Members have been circulated this communication previously along with the response from Phil Lloyd.

Negotiations are likely to be protracted and may well be a further strain on the reserve.

Some members have asked to visit the site to get the scale of the problem into context and I have asked Phil Lloyd if this is feasible. It may also be prudent for the working group to meet again and request a briefing from Phil Lloyd.

I seek guidance from the Committee on how best to proceed.

3 Widening the Audience:

A small group composed of myself, Mandy Leivers and representatives from FODAG have had several meetings to discuss how best to promote the Downs to a more diverse range of visitors.

This is an aspiration of the Management Plan and seeks to encourage people from all backgrounds and abilities from right across the City. Good progress has been made and further details will be brought to Committee as the initiative develops.

d) Landscape:

The Flower beds at the Urijah Thomas memorial were planted with a summer bedding scheme in time for Britain in Bloom. However the Blackboy Hill roundabout was not planted this year. This is because the bed was in the process of being redesigned by colleagues at Blaise Nursery. The work could not be completed because of operational difficulties and problems associated with the heat wave which we experienced at that time.

Members may have noticed a temporary protective barrier around a large veteran Ash tree along Ladies Mile. The tree has been identified as in a dangerous condition and felling was originally recommended by BCC tree experts. (Budget estimate £600) However following further consultation it has been decided that alternatives to felling should be considered as ecologically this is an important tree.

Essentially the alternative to felling is to remove most of the upper canopy and leave the stem upright to degenerate naturally. This will protect and provide a valuable wild life resource for a number of identified mammals, birds and invertebrates.

A detailed report and recommendation has been prepared by my colleague Matt Bennett (BCC tree section) (appendix 1)

Members should note that the alternative to felling will be a more costly option as fencing and protective planting will be required. (Budget estimate £4000)

There is also an increased risk of public injury as the fence can not be guaranteed to provide total exclusion.

At the end of July myself, the head gardener and an Officer from the tree section carried out the six monthly tree health check. Works in several areas have been identified with an estimated budget requirement of £5000

In addition colleagues from the tree section have independently identified trees that are considered a threat to the highway and as such there is a statutory obligation to carry out remedial action. The estimated budget requirement is £7000. Estates Managers have raised concerns with colleagues in the tree section that the inspections have not been done for some years leading to an unexpected and additional budget commitment. Estates managers are currently in discussions with tree officers to consider phasing some of this work and assessing if some of the work could be done in-house rather than using contractors.

To take advantage of a bridge closure at Suspension Bridge Road I took the opportunity to arrange the removal of a large Sycamore tree growing from the rock face. The tree had been identified as a possible contributing factor to the instability of the rock face. Estimated budget requirement £1000

Committee should be aware that these additional works will have an impact on the operational budget which may need to met from the reserve.

e) Wildlife:

The goats have been enjoying the recent fine weather with no adverse effect. Additional monitoring to ensure no animals were stressed by the heat wave was introduced as a precaution.

The general health of the goats remains good, but to ensure this is maintained I intend to seek veterinary advice from Bristol Zoo. Due to the animals apparent robust health it is likely that only a visual inspection with field glasses will be required. This will avoid any risk to the animals and staff associated with rounding up and containing.

FODAG members continue with Butterfly monitoring in the Gully and the Downs. Monitors report that in one week on the Downs and three weeks in the Gully a record 100+ butterflies were recorded.

f) Management and Resources:

The Downs team continue with the Summer programme of works, carrying out day to day response maintenance in line with the Downs Management Plan, the annual plan and the Avon Gorge Management Plan and in line with the Parks and Open Spaces Grounds Maintenance Specification.

As in previous years conservation areas of the Downs have been hay cut and baled. Several loads have been delivered to all the City Farms and the surplus will be sold to support Downs Budgets.

In August in preparation for the forthcoming football season the Downs team completed initial making of the pitches, prepared dressing rooms and installed four new sets of aluminium goal posts.

The refurbishment of the Downs bespoke trailer used for the transportation of football posts is complete and ready for the new season

Ongoing general maintenance which includes:

Maintaining summer bedding. Managing the goats. Hay cutting. Inspection and maintenance of play equipment. Preparing football pitches. Clearing litter and emptying litter and dog bins. Grass cutting. Cleaning signs and shelters, graffiti removal, and retaining scrub areas previously cleared.

Other Options Considered

No other options considered

5. Risk Assessment:

No Risk Assessment has been carried out

6. Public Sector Equality Duties

6a) Before making a decision, section 149 Equality Act 2010 requires that each decision-maker considers the need to promote equality for persons with the following “protected characteristics”: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation. Each decision-maker must, therefore, have due regard to the need to:

- i) Eliminate discrimination, harassment, victimisation and any other conduct prohibited under the Equality Act 2010.
- ii) Advance equality of opportunity between persons who share a relevant protected characteristic and those who do not share it. This involves having due regard, in particular, to the need to --
 - remove or minimise disadvantage suffered by persons who share a relevant protected characteristic;
 - take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of people who do not share it (in relation to disabled people, this includes, in particular, steps to take account of disabled persons' disabilities);

- encourage persons who share a protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.

- iii) Foster good relations between persons who share a relevant protected characteristic and those who do not share it. This involves having due regard, in particular, to the need to –
 - tackle prejudice; and
 - promote understanding.

6b) Not Applicable.

7. Legal and Resource Implications

Legal

The Clifton and Durdham Downs (Bristol) Act 1861 provides that the Downs should remain as a place for the resort and recreation of the citizens of Bristol, and that a committee should be appointed to manage them. The recommendations of this report are within the powers conferred by this statute.

Financial

(a) Revenue:

Figure to deal with rockfall etc. yet to be fully quantified

(b) Capital

None

Financial advice provided by Tony Whitlock, Principal Accountant

8. Land

The land is under the control of the Downs Committee.

9. Personnel

Not applicable

Appendix 1 – Tree Officer's report

LOCAL GOVERNMENT (ACCESS TO INFORMATION) ACT 1985

Background Papers: None

Durdham Downs

Ash tree adjacent to ladies mile



1. Introduction

Following a recent inspection, a large mature ash tree adjacent to Ladies Mile on Durdham Downs has been identified as posing a high risk of failure, and therefore potential risk to the health and safety of individuals using the area. A temporary barrier has been erected to prevent public access while appropriate management options for the tree are being considered. This report sets out the factors considered in identifying appropriate management options, and the cost versus benefits of each.

2. Limitations

The inspection was carried out using visual observation methods aided by the use of binoculars, a sound mallet and metal probe.

The findings of this report are valid for one year. Should any changes to the condition of the tree or within the trees environment occur that significantly alter its growing conditions, the period of validity of this report may however be reduced.

Trees are living organisms whose condition can change rapidly. In order to ensure the continued health and safety of the tree and its environment it is therefore desirable that the tree be inspected on a regular basis and any necessary works be carried out.

3. Relevant Legislation

Occupiers Liability Act 1957 & 1984

Health and Safety at Work Act 1974

4. Location

Grid Reference: ST356644 1742876

The ash tree is plot number 101652 (Clifton and Durdham Downs) within Bristol City Council's tree management database.

[Insert survey details]

5. Historical significance

The age of this ash has been estimated using the Alan Mitchell methodology of 1 inch of girth equals 1 year of life. This value is approximate due to the variation of growth between differing species of tree and environmental conditions to which the tree is subjected.

Tree girth 360cm / 2.54 = 141 years estimated.

Ash trees of a girth exceeding 3m are of potential interest ecologically and those exceeding 4m are valuable in terms of conservation, (Woodland Trust, Ancient tree hunt).

Trees first appear, at this location, on Bristol City's Historical Maps between 1874 and 1900. Many of the originally planted trees on Durdham Downs would have been locally available species such as Alder, Elm, Lime and Beech. This could be one of the first landscape trees to have been planted on Durdham Downs, but there is no conclusive evidence that this is the case. Ash is a pioneer species and could have self-set naturally. Despite this, the two referenced dates do provide a good estimate of age.

6. Veteran Status

The mature status of the ash tree is obvious upon initial inspection. It is classified as a veteran due to the presence of several veteran characteristics: a hollow stem, cavities in the branches, rot holes, delaminated bark and partially decayed wood. Management of this tree should therefore consider its current and potential habitat value. The Ash tree has become prematurely aged in advance of the other specimen in close proximity due to the loss of a large limb on the east side at 4 metres this has a direct correlation to the main column of

decay in the main stem. Whilst viewing the cavity caused by the historic limb failure light can be seen through to the main stem cavity. The tree is not categorised as ancient. This designation is reserved for trees that have passed beyond maturity and is old, or aged, in comparison with other trees of the same species. As ash trees can potentially reach ages of 200 years and beyond, this tree, at 141 years, has not yet reached such an age. There are several other ash trees within close proximity that are a similar size but do not have the same quantity of veteran characteristics.

7. Designations

The ash is located within a Site of Nature Conservation Interest (SNCI), but is not a component of the features that warranted the designation, and thus proposed work will not have a detrimental impact on the SNCI. The Avon Gorge is close by, which is designated a Site of Special Scientific Interest (SSSI) and a Special Area of Conservation (SAC), but again the proposed work will not have a detrimental impact on these designations. Nevertheless, the proposed management of the tree should consider the close proximity of these designations and seek to improve the wildlife value of the area.

8. Past Management

The tree does not show any obvious signs of historical management such as pollarding or laying as part of a historic hedge line. Its canopy has been reduced within the last 10 years due to the presence of the wood decaying fungus *Inonotus hispidus* within the second- and third-order crown limbs (see section 10). At the time of inspection, *Inonotus* brackets and canker were observed in all four second-order stems.

9. Habitat Value

Veteran trees provide a wealth of habitat for birds, mammals and invertebrates of varying degrees of importance environmentally. Initial inspection of this tree identified several species that are protected by legislation, although many more may be present. The findings within this report are limited to those that are prevalent in legislative guidance and should be considered with arboricultural best practice. If required, a protected species survey should be completed by an ecologist to establish the precise ecological constraints to any work that might be carried out.

During inspection of the large main stem cavity two adult lesser stag beetles (*Dorcus parallelipedus*) were observed within the dry deadwood. This species is a Species of Principle Importance in section 41 of the Nature, Environment and Rural Communities (NERC) Act 2006. This act sets out that Bristol City Council as a public body must consider the conservation of this species whilst performing its functions.

Due to the number of cavities, crevices and dysfunctional bark throughout the tree, an ecologist has been employed to survey the tree for bats and their potential roosts. The entrance to all potential roost sites in the tree have been blocked, under licence from Natural England, to enable this veteran to be managed without adversely affecting the local bat population.

Most bracket fungi have associations with specialist invertebrates. *Inonotus hispidus* is a habitat for several beetles that develop within the bracket tissue. *Inonotus hispidus* is a common species of fungi and present in nearby trees of a similar age.

10. Assessment of the Condition of the Tree

The tree has an open column of decay on the south west side from ground level to 4.6 m, and further cavities associated with historic branch removal join this column to over 6 m. At ground

level, the cavity extends to at least two thirds of the stem diameter and tapers as it rises into the main stem. At the junction of the main stem to the second order crown limbs there appears to be an area of limited decay. The second and third order crown limbs show significant colonisation by *Inonotus hispidus*. Old brackets were observed on the ground, the main stems, and *Inonotus* bark canker is present at old bracket locations. *I. hispidus* is a wood decaying fungus that causes a white rot in the upper portions of the trunk and main structural limbs. The fungus simultaneously degrades lignin and cellulose, causing a loss of strength and branch failure.

11. Significance of the Defects Observed

Although it could cause the failure of the large structural branches, *Inonotus hispidus* is a secondary consideration due to the extent of decay within the main stem.

The two most likely causes of whole tree failure are:

- **Stem shearing.**

This is most likely to occur during periods of higher than average winds where a twisting motion is applied to the main stem as the crown rotates with the wind. The proposed point of failure would be between ground level and 6m.

- **Ductile fracture-** Wood becomes soft during the process of decay. Failure is caused when the tree is loaded normally by wind, causing a deformation of the stem tissue prior to failure.

Without intervention, this will certainly happen within the foreseeable future as the main stem continues to decay and the crown continues to grow. The failure point would be between ground level and 4m.

It is impossible to predict the likely extent of failure. However the considered direction of failure would be to the North or north west. When the tree fails, the habitat value of the main stem is likely to be significantly changed from standing semi dry deadwood to laying wet deadwood. Standing deadwood is of greater ecological value than fallen deadwood due to the number of species that utilise this type of deadwood during the reproductive cycle.

12. Management options

Fell

- Felling this tree would remove the risk completely. It would also significantly change the habitat value of the tree. Bat roosts potential or otherwise would be lost. The large mass of dry deadwood will change from standing to lying deadwood. Standing deadwood has a higher ecological value than lying. However, the timber from the main stem and crown could be stacked as close to the original stem base as possible to provide a continued but altered habitat for invertebrates.
- Felling would incur a one-off cost however have potential negative impacts upon habitat value.

Retention - Non intervention

- The current potential for tree failure and potential harm to people and property is too high for the tree to remain without intervention. Durdham Downs is a well used site with runners, dog walkers using the grass verges adjacent to the road throughout the day. Bristol City Council has a statutory duty to protect property and individuals safety, under 'The Occupiers Liability Act' (1957, amended 1984) and therefore cannot leave the tree in its current condition without intervention.

- Non intervention would initially be the cheapest form of management, however continued cyclic inspection at regular intervals (6 monthly intervals) and after periods of high winds to ensure the tree's safety would carry a cost in officer time.
- The tree has a progressive decay fungus. If left and subject to reinspection, the involved process of decision making about its future would also need to be repeated at regular intervals as the tree's structural integrity continues to worsen.
- Retaining the tree is therefore not a viable option for management.

Retention - Fencing

- Fencing the tree would allow it to be retained with minimal intervention. The tree is currently 17.5m in height. Industry best practise guidance (AFAG 302) states that the minimum safety zone to be established when felling is twice the height of the tree to avoid operatives from being injured by falling parts. If this guidance were followed, a 35m radius fence would need to be erected. The highway is 30m from the tree, so as a minimum the tree would have to be reduced to 15m to enable the erection of a safety fence at the appropriate distance to keep the public away from the potential impact zone were the tree to fail. Erecting fencing at a radius of the current height of the tree would not remove the risk of pedestrians being struck by rebounding falling parts.
- In the longer term fencing the tree would not prevent whole tree failure or reduction in habitat value and therefore would incur costs of management at point of failure, as described above.
- Fencing with minimal intervention would also incur considerable cost from having to prune the tree to 15 m and maintain it at that height. The cost of the purchase, installation and maintenance of a large diameter fence and sufficient safety signs would be considerably higher than the other options. Although it would signal to the public the elevated risk from the tree, it would not prevent trespass. This option would also restrict access to a small area of the Downs.

Removing the Upper Crown - Winching

- Winching off the upper crown limbs to create natural failure points close to the main stem would reduce the weight of the crown and also the lever arm acting on the compromised stem. This would therefore reduce the risk of falling parts from the upper crown and whole stem failure. In theory it would retain stem habitat. Several experiments have been documented using this technique, but variable results have been presented.
- The possibility of root plate failure and potential injury to contractors completing these works, means that this is not a viable option in this situation.

Pruning

- Reducing the canopy by removal of the upper crown limbs, carving close to the main stem, in order to simulate natural failure points. This would reduce the weight of the crown and also the lever arm acting on the compromised stem, and therefore reduce the risk of falling parts from the upper crown and whole stem failure. In theory it would retain the stem habitat. Access to the tree to complete these actions can only be achieved by use of a mobile elevated work platform (MEWP) due to the condition of the main stem. In this manner risks to contractors completing the operations are minimised (to be recorded on a site specific risk assessment).
- To make this option viable it must be considered as a one off operation and therefore any pruning conducted must be sufficient until the tree either fails or needs to be removed for safety reasons.

Natural Barrier

- Allowing all vegetation within the designated safety zone to grow without management creates a natural barrier that discourages public access due to the additional effort required. This barrier can be improved by planting vigorous and or spikey native plants around the periphery of the safety zone.
- The costs associated with this form of management are minimal compared to the other options described.

Table 1 - Summary of Viable Management Options

Option	Impact on Risk	Effect on Habitat	Cost of Initial Operations
Felling	Complete removal of risk to public	Reduced habitat value – loss of bat roosting sites - Change in deadwood habitat for invertebrates - Loss of Veteran Tree	£600
Fencing	Reduction of risk for 'adhering' public No change in risk for trespassers	No immediate impact; potential change in characteristics if tree fails.	£2,000
Pruning	Reduction in risk for public Slightly elevated risk for contractors	Partial loss of crown habitat, including bat roosts.	£1,500
Natural Barriers	Reduction in risk for public	Partial loss of crown habitat, including bat roosts. Increase in eco tone between parkland and tree habitat.	£500

13. Recommendations

- Due to the complex nature of this tree and location no one option can be employed to make the tree safe whilst retaining the habitat value. The most appropriate form of management would be to prune the tree within acceptable limits of safety and establish a more compact safety zone so as not to occupy a large area of the Downs.
- The recommended option is to prune the tree via MEWP to reduce the main second order limbs to within a metre of the main stem. The final cuts can be carved to create pseudo-natural failure points.
- Natural barrier planting to a radius of 15m surrounding the tree, will dissuade the public from entering the zone. This area will require fencing in the short term in order to allow the planting to establish.