

**Comments by *Bristol Street Trees* on the Bristol City Council Arboricultural Surveys for Redland Green Park and the Mall Gardens.
22nd September 2008**

A. Introduction and Background comments

We note that following Bristol City Council's initial decision to remove the trees, time has been given to allow alternative reports to be prepared and the various options to be fully explored. We feel that this is an important step forwards. The comments that follow are submitted in the spirit of trying to make sure that all the information is available to allow a revised decision to be made on the two locations. Our comments are intended to be constructive and we look forward to receiving feedback on our comments if any are felt to be wrong. The comments below on the BCC reports refer to copies of the reports as downloaded from the BCC web site on 17 September 2008. For ease of response, our paragraphs are numbered.

1. Bristol City Council has taken the decision to use the trees in Redland Green and the Mall Gardens as case studies. For this reason, and because we have spent some considerable time and resources ourselves, we have decided to comment in some detail on the BCC reports.
2. To put the present discussion regarding the fate of trees in these two locations into context, we quote from the summary of the 29th May 2008 *Conference on Trees and Risk*, which was held in the Royal Geographical Society in London. The summary was prepared by Sir Harry Studholme, Forestry Commissioner and Chair of the National Tree Safety Group.

“Risks cannot be analysed without taking into account the substantial heritage value of trees and the benefits they provide. Society should consider the risks created by inappropriate removal of trees.” “Because of the apparent success of existing approaches and concerns over excessive levels of intervention a relatively ‘light touch’ approach is appropriate”.

3. We question the need to prepare Quantified Tree Risk Assessments (QTRAs) for the trees in The Mall Gardens and Redland Green and whether this was an appropriate use of resources. The Health and Safety Executive (HSE 2007) takes into account that the risk of death from falling trees is extremely low with around 3 deaths per annum for trees on public land and warns against over-reaction to this tiny overall risk. It states (10vi) what should be done if it is decided to retain trees that have serious structural defects as follows, “Where such a condition is suspected and the tree also poses a potentially serious management risk because, for example its proximity to an area of high public use, a specific assessment for that tree and specific management measures are likely to be appropriate”. In the case of The Mall gardens we believe that this requirement was accomplished with the survey conducted by Wessex Tree Consultancy and simply by taking the advice in that report, the trees could then be retained. In the case of Redland Green we had hoped to produce a jointly-funded survey with Bristol City Council by a mutually agreed expert on trees and risk to determine options. We still believe that this would have been a much better way to

proceed, to benefit from the considerable expertise from specialists in the arboricultural industry and input from the local community. If we had proceeded in this direction we would now have one agreed report on Redland Green and we could discuss which of the options in such a report would be the best way forward: BCC did not agree to our proposal.

4. Therefore, following the BCC decision to conduct in-house QTRAs on the trees in the two locations, *Bristol Street Trees* commissioned an independent report into the trees on Redland Green which contains a comparative QTRA (with very different results).
5. The BCC reports contain Community Asset Valuations of Amenity Trees (CAVAT Values). We question the rationale behind CAVAT valuations in these instances. Whilst we support the CAVAT methodology, it should not be seen as a mechanism for valuing veteran, candidate veteran and ancient trees. CAVAT does not take into account biodiversity value and the CAVAT valuations for such trees can as a result be very low. Yet, one of the main reasons for retaining such trees is because of the biodiversity value.
6. On 2nd June 2008 we met with BCC regarding the Redland Green Trees and the Mall Gardens trees, in the hope that we might agree a collaborative way forward on the issues concerning the trees on these two sites. However, this turned out not to be possible. It is unfortunate that we have ended up with a situation where we have two different arboricultural reports for each of these two locations. In each case, there is an expert report prepared by arboricultural experts on trees and risk (sponsored by members of the local community) versus a report prepared by Bristol City Council (BCC) staff.
7. Instead of working with the local communities over these trees, BCC has told us that by obtaining advice from an agreed external expert it would effectively be funding an appeal against itself. We don't understand this view as no formal complaint had been made at that stage, so there was no appeal underway. However, in the preceding controversy regarding the proposed felling of a line of black poplars, on the former Imperial Sports Ground in Knowle, Bristol, the council took the opposite point-of-view and to defuse the controversy regarding the felling, commissioned an independent report and press released the outcome.
<http://www.bristol.gov.uk/ccm/content/press-releases/2007/aug/dangerous-poplars.en;jsessionid=808CFA96FCEA8D349EB71A03D73F6B32.tcwwwaplaws2>
8. A failure to consult, in any genuine sense of the word, results in key information being left out. We believe that BCC cannot be in possession of all the answers on its own and the only sensible approach is to take all information into consideration. It appears that BCC has resisted considering, evaluating or even mentioning any additional information provided by either external experts or members of the public. Thus, information provided by highly-experienced external consultants and local people is missing from the BCC reports. For example, this includes the usage survey provided by ourselves for Redland Green Park, the bat survey for Redland Green and other wildlife information provided to BCC. Important information also missing was any evaluation of the survey by Wessex Tree Consultancy for the Mall Gardens which is not even mentioned.
9. We do not believe that it would be reasonable to expect the BCC arboricultural team to have all the answers to every issue. In every profession, experts specialise in particular areas and the wide range of skills required to be a good council tree officer mean that the role of a tree officer is comparable to that of GP in the medical profession. GPs call on a range of specialist expertise when needed, such as consultant surgeons and

physicians. In some areas of the medical profession there are only one or two experts in the country who can deal with particular matters. In the arboricultural world there are likewise experts on dealing with the risks posed by veteran or otherwise older trees. BCC should welcome the involvement of such outside expertise as it will bring benefits all around.

10. We believe that BCC has now put itself in the unfortunate position of attempting to argue against the position of recognised experts in the field of trees and risk. The consultant chosen by residents in The Mall Gardens (whose report is not even mentioned in the BCC report) has over 30 years experience in managing trees. The company commissioned by ourselves for a survey in Redland Green Park is a recognised leader in the field internationally and is playing an important part in the debate on trees and risk.
11. We had hoped that the BCC would have welcomed interest from members of the public in retaining trees in these two locations and would have been prepared to work together with us in order to see if a way could be found to save the trees in these two locations for a reasonable cost (if necessary with sponsorship from the local community) and within appropriate levels of risk.
12. It is not possible to make any decisions on the trees in these two locations without a guiding policy. We would argue that the overall aim should be to maintain or increase canopy cover and that substantial efforts should be made to maintain large trees for their amenity, health, historical, landscape and wildlife contributions. However, it appears that BCC's policy is to maintain costs per tree at a very low level for budgetary reasons, focusing on overall numbers of trees. The result is that Bristol's trees are seen as a crop where fell and replace is usually the best option. Figures are provided by BCC for numbers of trees removed each year versus the number replaced, and a description of Bristol's tree population as "overmature" is often used.

B. Summary Comments which apply to both BCC Reports

13. The BCC reports refer to a Risk of harm of 1:10,000 or lower being classed as an unacceptable risk. This is wrong. The lower the risk, the more acceptable it becomes.
14. The reports on trees in both locations refer to "advice from the British Medical Institute (perhaps it should be Institution) regarding risk". This organisation which appears to have existed in some form at the beginning of the last century has provided no such advice.
15. Later in this report we identify problems with the QTRA calculations as they relate to individual trees. A few general points are mentioned below.
16. The QTRA for the Mall Gardens and Redland Green rely on some inputs that are not defensible. We have back-calculated to determine the target values that have been used. Thus, the target value of T4 on Redland Green that means that on average ten persons per hour, 24 hours a day, 365 days a year walk past this tree, despite the fact that it is on the edge of the park in an area that is little used. T1 in the Mall Gardens has a target of constant occupation.
17. The reports represent the conflation of a number of extreme scenarios which taken together produce results that are not credible. One example of this is T1 in the Mall Gardens, where the probability of a death in the target area under the tree in any one year is 0.1. We asked Professor David Ball who is an expert on risk for his view which

was that this figure made this a place of such extreme danger of death that the area should be immediately evacuated.

18. Another extreme scenario is the BCC statement regarding The Mall Gardens trees, “the potential impact area of this tree could include anything up to five high value, parked cars totalling an estimated £250,000 replacement cost”. Yet the mean value of cars in this location is £4,899 (21).
19. Both reports contain management options. We question the usefulness of presenting options that are clearly unrealistic. Two examples are constructing a fence using scaffolding poles around T4 in Redland Green and closing the Mall Gardens park to all access and close the highway around the park. Regarding T4, Redland Green, it is known that changes in the mowing regime (as used in Ashton Court) dramatically change the usage. In addition, on The Downs a small woven fence made from sticks 0.8 metres high has changed the usage of the area by runners, to allow regeneration of meadow. Thus, the “options” are not presented as genuine options.
20. Bracing is dismissed as an option, “*invasive bracing method compromises trees internal structures. Bracing points prone to more serious decay*”. If this were the case, why does Bath City Council brace trees and why is this technique used elsewhere and included within the present British Standard and the forthcoming BSI consultation draft?

C. Comments on the BCC Mall Gardens QTRA and Report

21. In order to test the validity of the statement that five cars could be worth £250,000, we conducted a survey of the makes and models of all vehicles in the Mall Gardens on 5th September 2008. We recorded the makes, models and number plates of all the cars parked in the area. Most of the cars were identified to the precise model using the number plates and their value was determined using the on-line Parkers Guide web site. For the remainder of the cars, where the model details were less clear, we chose the most expensive model of the range. The mean value of the 118 cars surveyed was £4,899. The BCC estimate of £250,000 for the expected value of five cars is wrong by an order of magnitude.
22. In addition, we question whether, in the case of some of the trees it would be physically possible for them to hit five cars. In the case of T4, which has been partially felled, and exists as a “9 metre trunk”, it is most likely that it would only hit one car but conceivably possible that it could fall between two cars. It would not be long enough to hit cars parked on the far side of the road.
23. We have conducted usage surveys for The Mall Gardens which we are currently analysing in order to test the BCC assumption of constant occupation for this site (i.e. a target value of 1).

D. Comments on the BCC Redland Green Report and QTRA

24. The bat survey for Redland Green commissioned by BCC was a climbing bat survey undertaken in February when bats are hibernating. As one bat expert put it to us, “finding evidence of bats in situation like this is like looking for a needle in a haystack”. Doing a bat survey in February is akin to conducting a tourism survey in a seaside resort in winter. Absence of evidence is not evidence of absence. These points

were raised in the meeting with BCC on 2nd June. However, the shortcomings of such a survey are not mentioned in the BCC report.

25. Part of the climbing bat survey report has been cut and pasted from another survey in a different location (Blaise Castle woodland works 20007/08 Bat Assessment) so it isn't possible to determine which parts refer to Redland Green.
26. The bat survey does refer to "anecdotal reports of woodpeckers nesting within tree 2". This part of the survey is correct and results from the surveyor reading a notice we had put on site.
27. If BCC had consulted locally, it would have quickly found that Redland Green Park is frequented by large numbers of bats. Dusk bat surveys to look for bats emerging from their roosts and focused on the trees in question should have been conducted. We commissioned one such dusk survey and informed BCC via email on 7th June of the main result which was the presence of Leisler's Bat, *Nyctalus leisler*), and Soprano Pipistrelle, *Pipistrellus pygmaeus*). We told BCC that the "Pipistrelle is almost certainly roosting in one of the trees and the Leisler's appears to be foraging in the area". Other larger species of bats are seen regularly but have yet to be formally identified. However, this information is not mentioned in the BCC report.
28. BCC states it conducted usage surveys "from 6am to 11pm" in Redland Green Park. It would have been very difficult not see bats during the period up to 11pm.
29. The BCC report does not mention the presence of a Great spotted woodpecker in one of the trees. The woodpeckers drumming were a real crowd-stopper in Spring. Nor does the BCC report mention the presence of Goldilocks buttercups (which are extremely rare and an ancient woodland indicator species and known only from a few sites around Bristol). We had provided BCC with information on both these matters.
30. The BCC notice on site on 14 December 2007 states that T4 in Redland Green was to be removed because it was shedding branches. However, the "branch" visible nearby was actually the remains of a tree of a different species (possibly sweet chestnut). It also had roots at one end. We note that the observation that T4 was "shedding branches" is absent from the much longer full report prepared by BCC.
31. For one of the trees in Redland Green (T4), which is at the boundary of the park and rarely visited, the BCC has stated a level of usage 47 times higher than ours. In practice the figure entered by BCC into the QTRA is for a level of usage where 10 people per hour, 24 hours a day and 365 days a year walk past this tree. We asked BCC for the Target value for this tree but have yet to receive a reply. By back calculating we have worked out the target value to be .013 which equates to 10 pedestrians per hour as stated above. It is a straight probability and not a range.
32. There is an error in the QTRA calculations for T4. The probability of failure for T4 is listed as "2 (High)" but this is incompatible with the figures listed "1/10 – 1/100" which would be for a "3 (moderate)" probability of failure.
33. The figures in this brief example represent the difference between the tree "passing" and "failing" its QTRA. By this we mean whether the risk is greater or less than the BCC threshold of 1:10,000.
34. We question the statement that Trees 3 and 4 overhang two distinct desire lines which appear to be used by both runners and walkers". We have never seen a runner in this area which is steep and hard to negotiate. There is no desire line next to T4

E. Conclusions and Further Considerations.

35. The comments listed above question the validity of the conclusions in the two BCC Reports. The professional current debate regarding the risk from removing trees needs to be taken into consideration by Bristol City Council.
36. We find it hard to understand how the removal of living trees is such a high priority to the council, when it fails to remove dead trees in more public locations: The photo below is of a lime tree in Speedwell that has been dead for at least this year, with no attempt to remove it, despite its high target value.



37. In addition we are seriously concerned regarding the apparent abandonment of the excellent biodiversity Action Plan for Ancient Trees Wood Pasture and Parkland (Bristol, 2001). Following the highlighting of its existence, it was removed from the BCC web site sometime in June 2008.
38. We would hope that in future cases, the offer to bring in external experts on trees and risk (in order to benefit from their knowledge and retain trees in a safe fashion) will be seen in a positive way.
39. We are also concerned that overall policy needs to be changed towards preserving and increasing canopy cover. The apparent present policy of measuring purely the number of trees cut down and those replaced will not preserve the existing amenity of Bristol's trees and fails to take account of the amenity and wildlife value of Bristol's existing trees.
40. Bristol City Council's apparent reluctance to apply bracing to mature trees, as opposed to their removal or substantial reduction, needs to be either professionally justified, or reversed.
41. Finally, a proper management plan needs to be put together for each of the parks, with succession planting occurring some thirty years prior to the removal of any potentially ailing trees. These replacements and future removals need to be publicly discussed, agreed and recorded for future generations.

F References

Bristol City Council. 2001. Bristol; action for biodiversity. Ancient trees, wood pasture and parkland biodiversity Action plan. Unpublished Report 17pp

HSE 2007. Management of the risk from Falling trees. Health and Safety Executive. SIM 01/2007/05