

TreeAZ/03/2001





Purpose of this paper

This paper has been prepared to supplement my presentation on assessing trees on development sites using SULE (Safe Useful Life Expectancy) at the 2001 Arboricultural Conference in Sydney on 20th April. I intend it to provide full background information on what SULE is and include the two following published papers as Appendices:

- Appendix 1: Pre-planning tree surveys: Safe Useful Life Expectancy (SULE) is the natural progression; Arboricultural Journal, 1993 Volume 17 pages 33–46.
- Appendix 2: *Pre-development tree assessment*; Proceedings of an International Conference on Trees on Building Sites in Chicago, 1995 pages 143–155.

These papers provide useful background information of what SULE is, how it evolved and how it should be used. In this paper, I summarise some important points from these previous papers but concentrate on more recent developments and the practicalities of SULE assessment. I use this paper to introduce the latest minor amendments based on the field-testing that has occurred since these papers were written.

Scope and limitations of SULE

SULE is a method of assessing the relative importance of individual trees within an identified group (normally a development site with finite boundaries). It is based on subjective assessment and cannot be considered an absolute judgement. Realistically, the best that can be achieved is a broad categorisation of good, medium and bad. Identifying the extremes of good and bad is not usually contentious; the medium category is normally the most difficult. SULE helps the making of informed judgements on which trees are the most important in planning decisions. The nature of trees and opinions on trees is extremely variable; this means that there are always exceptions to the rules and common sense is an important aspect of applying the method. Only a person experienced and knowledgeable in the management of trees can carry out a competent SULE assessment. SULE is a means of presenting complex tree information in a simplified form that professionals with no tree expertise can understand and use to make judgements in the wider context. These professionals are normally layout designers who have to decide which trees to keep and lose in planning new developments close to trees.

Background on the development of SULE

I originally devised SULE in the early 1980s as the emphasis in the UK drifted from building new houses in open countryside to filling in unused spaces within existing urban areas. Inevitably, this brought trees and people closer together and a method of deciding the value of existing trees was needed. Throughout the 1980s, I developed the method as a practising contractor and consultant, publishing it in the Arboricultural Journal in 1993 (Appendix 1). This was updated with further explanation in 1995 in a paper presented in Chicago (Appendix 2) followed later that year by a presentation at the ISA Conference in South Carolina. Since then, I have presented various updating presentations in the UK on the latest developments but this paper is the first published international update. Throughout its history, SULE has been subjected to extensive field-testing and is widely acknowledged as the cutting edge in tree assessment on development sites.





SETTING THE SCENE

Taking trees seriously

If existing trees are to be effectively incorporated into new developments, there has to be:

- 1. a widely accepted and powerful planning strategy in place that acknowledges the importance of trees, i.e. legislation;
- tree experts, arboriculturists, as equal status members of a planning team of architects, surveyors, designers and lawyers;
- 3. arboriculturists playing a full role throughout the planning process; and
- 4. significant penalties for failure to comply with agreed tree protective measures.

If any of these elements are missing, existing trees will not be given sufficient priority to reliably secure their retention.

Pre-design tree assessment on development sites

In order to plan the best use of a site, the designers need to know which of the trees are good and should be retained. They can then design the new development around the best trees and discount those that are less important. Designers are not tree experts and so the guidance they are given should be simple and easy to interpret. The dilemma for the arboriculturist is that tree assessment involves many complex issues and somehow this has to be simplified. Communicating complex site information in a simple form to the designers in the office is the task of the arboriculturist (See section 3 of Appendix 2).

Principles behind SULE

Planning has a very strong element of designing for the future and the role of trees is to provide visual amenity. In this context, I believe that the most relevant aspect in establishing the importance trees is their potential to usefully provide visual amenity in the future. However, whilst providing amenity is their main function, they must do this in a way that does not lead to damage to property or injury to people who are close by. An additional constraint in the urban environment is the need to keep management costs to a minimum. The SULE methodology is based on providing future amenity in a safe and cost effective way. Further explanation of these principles is in section 4.4 of Appendix 2.

Benefits of SULE

Other methods of tree appraisal include the US Guide for Plant Appraisal published by the Council of Tree & Landscape Appraisers and the UK Helliwell Amenity Valuation System published by the Arboricultural Association. SULE is more appropriate for development site assessments for the following reasons:-

- 1. Quick: There are often many trees on development sites and time consuming methods are not cost effective. Experienced users can assess a tree in a matter of minutes, sometimes less, using SULE.
- 2. **Easy to understand:** A categorisation of good, medium and bad is easy for non-tree experts to understand and use.
- 3. **Traceable:** The systematic nature of the methodology makes it easy to trace the reasoning behind an assessment, focusing the areas of disagreement between opposing experts.

PRACTICAL ASSESSMENT OF SULE

The assessment scenario

To explain the steps that need to be considered, I am taking the scenario of a site that is allocated for development with a number of existing trees of variable condition. There is a legal requirement for trees of importance to be a material consideration in designing the new layout. An arboriculturist has been asked to inspect the trees and provide guidance to the layout designers on which trees are worthy of retention. This involves visiting the site, inspecting each tree, recording appropriate data and presenting it in a way that helps the design process. Part of that data collection is an assessment of the SULE of each tree.

Explanation of each step in a SULE assessment

As summarised in 4.6 of Appendix 2, the SULE assessment for each tree involves 12 separate steps that appear long-winded in explanation but in practice can be carried out very quickly. The disadvantage with explanations is their need to cover the wide range of eventualities that may arise whereas in practice, the issues are often limited and it is unusual for all the steps to apply to each tree. However, for the purposes of explanation, it is necessary to be aware of the reasoning behind each step to understand the systematic nature of the assessment and be able to competently use the method. Further explanation of each step follows:



The 'Life Expectancy' part of SULE

Tree life expectancy is an estimate of the number of years a tree is expected to stay alive. It is the basic starting point in all SULE assessments and is estimated based on the conditions that prevail at the time of assessment. To arrive at a figure, it is necessary to consider the present age of the tree, the average life span of the species and any local environmental modifying factors that may influence that potential. Life expectancy is this modified life span minus the age of the tree. These figures can be arrived at by either experience or reference, but more usually by a combination of both.

Step 1 - Estimate the age of the tree: Probably the most accurate way to establish tree age is to count the annual rings from a cross section or an increment core. However, both these methods are potentially destructive and probably not appropriate for most situations. In some cases, it may be possible to count the rings on a dead lower branch to get some idea of minimum age. In conifers especially, it may be possible to estimate by counting annual shoot increments, but this very much depends on the species. In some instances it is possible to know the age of growing trees through records or by reference to published species data in relation to the particular tree. In the UK, the Tree Register of the British Isles (TROBI) has data stored on over 94,000 trees and can be particularly useful for the more unusual or extreme individuals. There are various methods based on measurements of tree dimensions that may be useful in estimating tree age. The most relevant UK references are found in Forestry Commission Research Information Note 250 'Estimating the age of large trees in Britain' by John White and 'The Trees of Britain and Northern Europe' by Alan Mitchell. However, in most situations the best estimate that can be achieved will be based on the assessor's experience with that particular species. That experience is gained by day-to-day dealing with trees and in particular, counting the annual rings at every opportunity on felled trees. There is no substitute for practical experience.

Step 2 - Establish the average life span of the species: This will not be a precise figure and with most species, the best that can be hoped for is an indication within 25–50 years. In all populations, there will be extremes; individuals that live well past what would normally be expected, and trees are no exception. It is the average life span that we should be interested in and not the extremes. UK guidance is available from references such as MITCHEL and TROBI but once again, in most situations practical experience with that particular species will form the main basis for the assessment.

Step 3 - Establish if average life span needs to be modified because of local environmental circumstances: In some locations a tree may be subject to local environmental circumstances that will significantly affect its average life span. It may be a particularly exposed site with a species that does not tolerate exposure well; it may be a species that has difficulty tolerating the soil type it is growing in; or it may simply be an exotic species that is right on the edge of its tolerable range. These situations could all effectively reduce the average potential life span. In some cases, the reverse may apply and it is increased, e.g. trees growing in particularly sheltered positions on rich soils. In the majority of situations, there will be no significant environmental modifying factors, but they should always be considered if a realistic assessment is to be achieved.

Step 4 - Estimate life expectancy: Life expectancy is the modified life span minus the age of the tree.

Life expectancy = (modified life span) - (age of the tree)

The 'Safe' part of SULE

Where trees and people come into contact, safety becomes the priority consideration. At these interfaces, the length of time that a tree can be expected to live with an acceptable level of safety is of far greater relevance than its simple life expectancy. Tree health, structure and location are the three main elements affecting safety that may modify simple life expectancy to safe life expectancy. These elements should be considered separately in turn, and their cumulative effect will produce a final safe life expectancy figure.

Step 5 - Consider how health will affect safety: Any agent that interferes with a tree's ability to capture and process energy will have an adverse effect on health. Diseases and damage to tree structure decrease tree health. Poor tree health reduces the effectiveness of their defences against pathogens that either kill them or reduces their structural integrity. Indicators of poor health include small leaves, discoloured leaves, reduced foliage density, twig dieback, reduced basal area increments and reduced shoot extension. In general terms, poor health increases the risk of failure and reduces the length of time that trees can



be retained safely. Trees in poor health should have their life expectancy figure reduced according to the severity of the problem. From experience, the assessor should try and estimate how long it would be before the health problem would require the removal of the tree on safety grounds. This would then give a modified life expectancy, or safe life expectancy. If the problem could be permanently rectified by an appropriate tree care technique, then there should be no modification of the life expectancy figure.

Step 6 - Consider how tree structure and size will affect safety: Tree safety is closely related to structural integrity and size. Weaknesses may be a result of defects like included bark or cracks. Invading organisms such as insects or fungi may weaken the structure making it more prone to failure. Damage to the roots or crown is also a common cause of weakness. Small trees have small parts and in most circumstances, defects will not have a material effect on safety. However, as size increases so do the pressures on these weak points, which may result in reduced safety. All these aspects should be considered when inspecting the tree. If such factors are significant, the assessor should try and estimate how long it will be before the structural problem would require the removal of the tree on safety grounds. For example, a small tree in a group leaning over a road may not be a problem now. However, as it grows larger and more unbalanced, at some time in the future the size, the structure and the targets (the hazard potential) will reach levels that effectively make it unacceptable to retain. Such considerations would then further modify the life expectancy figure. If the problem could be permanently rectified by an appropriate tree care technique, then there should be no modification of the life expectancy figure.

Step 7 - Consider how location will affect safety: As the number and value of the targets a tree could damage increases, so does the potential hazard of the situation. More tolerance could be given to a suspect tree in the middle of a field with no significant targets than to an identical tree close to an occupied building or a busy road junction. In the latter, the potential for damage is much greater and so a higher degree of security is required. This increased level of vigilance and low tolerance of hazard often results in trees being removed well before they have attained their life expectancy. For these reasons, location may well contribute to further reducing life expectancy in addition to the health and structural considerations.

Step 8 - Estimate safe life expectancy: Safe life Expectancy is the simple life expectancy modified by health, structure and location considerations.

Safe life expectancy = Life expectancy modified by health, structure and location

The 'Useful' part of SULE

The final consideration in assessing SULE relates to the usefulness of the tree and should take into account the future management of not only the tree in question but also others close to it. There are three measures of usefulness that should be systematically considered; the economics of management; any adverse effects on better trees; and the principle of sustaining amenity. If a tree stands alone, then the considerations of adverse effects on better trees and sustaining amenity do If the tree is part of a group, no not apply. adjustments to safe life expectancy can be made if all the trees are mutually dependent and cannot realistically be retained without each other. However, if a tree is suppressed and could be removed without prejudicing the retention of the others, then there may be a benefit in terms of reduced interference or increased planting space. These steps are illustrated on the flow chart included as Figure 1.

Step 9 - Consider economics of management: Trees that require constant maintenance to keep safe may impose such a high cost burden that they cease to be useful and it may become beneficial to remove them before their safe life expectancy. An example of this would be a large tree very close to a building that had been topped in the past and the vigorous re-growth had to be regularly pruned to prevent a hazard developing. It may be more cost effective to remove the tree and replace it with a more appropriate tree that would not incur the high regular maintenance costs. If it is cost effective to remove a tree before it dies or becomes a high hazard, the safe life expectancy figure should be reduced as appropriate.

Step 10 - Consider disruptive interference with better trees: In group situations, individual trees may need to be removed well before their safe life expectancy to prevent them destructively interfering with the development of better adjacent trees. It is common for branches of closely spaced trees to rub and cause damage or prevent balanced growth by heavy shading. It is not useful, i.e. in the best interests of good management, to allow inferior trees to damage better trees and prejudice their





long term retention. If this is an issue, the assessor should estimate how long it will be before removal would be warranted and reduce the safe life expectancy to that figure.

Step 11 - Consider sustaining amenity: This does not apply to isolated trees. In a group of trees, the backbone of sustaining amenity is to diversify its age class structure, i.e. have a range of tree ages within the group so that as individuals need to be removed, younger trees are developing nearby to buffer the impact of the loss. It is a defensible management action to remove a tree if it diversifies the age class structure by making space for new trees without prejudicing the integrity of the group. The assessor should estimate the best time for this removal and reduce the safe life expectancy accordingly.

Step 12 - Assess safe useful life expectancy: Safe useful life expectancy is the safe life expectancy modified by the economics of management, adverse effects on better trees and sustaining amenity.

SULE = Safe life expectancy modified by economics, effects on better trees and sustaining amenity

Practical shortcuts

Steps 1-12 explain the logical sequence of considerations that should be carried out to ensure that no element is missed out. However, in practice it is very unusual for a tree to have no features that reduce its life expectancy; the reality is that it is unusual for a tree to be able to be retained for its full life expectancy. There is usually some feature that will reduce the length of time it can be retained safely and usefully; perhaps a defect or a limited amount of space or it may begin to interfere with other better trees. If a tree has a severe defect that means it can only be retained safely for another 10 years, then its SULE is 10 years so its life expectancy does not need to be considered because it is irrelevant. Similarly, if a tree is safe but it will begin to disruptively interfere with a better tree in 15 years, its SULE will be 15 years and again, life expectancy is irrelevant. Experience allows the assessor to quickly identify the limiting factor that will determine the SULE. You need to be aware of the other issues but they will not come into play in many cases. The shortcut is you consider safety first, then usefulness and only if these are not limiting do you need to consider life expectancy in detail.

Category allocation

Once the SULE in years has been assessed, it is a simple matter to place the tree into the appropriate SULE category and record it on the tree schedule. Each SULE category has a number of sub-divisions, which help to clarify the reasoning behind that particular assessment. It is important to record the relevant sub-division to aid future interpretation of the information. The most recent categorisations and sub-divisions that I advise are included as Appendix 3. I have recently added the following categories for this presentation based on the latest field-use feedback:

- 4(h) Trees in categories (a) to (g) that have a high wildlife habitat value, and with appropriate treatment, could be retained subject to regular review.
- 5(c) Formal trees and hedges intended for regular pruning to artificially control growth.

I stress that the category SULE ranges in years are not rigid and should be reviewed for each new site. The chosen ranges should allow a realistic and useful assessment of the best, medium and worst trees on the site. See section 4.7 of Appendix 2 for further clarification on these points.

The role of field forms

The value of memory aides in the field is discussed in section 4.8 of Appendix 2. The SULE Categories sheet in Appendix 3 is essential during all assessments. It is also useful to carry the Guidance Notes on SULE Data Collection included as Appendix 4. These two sheets can be laminated in plastic to make them durable and weatherproof. Inexperienced SULE assessors should use the SULE Assessment Form included as Appendix 5. This cross-references to the 12 steps discussed in 3.2 above and provides a systematic record of the reasoning behind each assessment. All these forms are the latest versions based on recent field-use feedback.

Presentation of information

It is often the case that the way information is presented is more important than the content. Presentation is critically important and will ultimately dictate how seriously the data is taken and the professional credibility afforded to the assessor. I explain this further in section 3 of Appendix 2 and stress that it should be given a very high priority.





THE FUTURE

SULE discussion group

I am aware that some unscrupulous assessors are trying to justify tree removals that increase the value of development sites by using the SULE methodology incorrectly. I am concerned that this abuse is identified and prevented from becoming widespread. As the designer of the SULE methodology, I am uniquely placed to comment on how the system is being used and whether that use is in line with what I had intended. For this reason, I am currently developing a web SULE discussion group on my website at www.barrelltreecare.co.uk. Anybody wishing to get clarification on any aspect of SULE can post a question and I will respond with an appropriate answer. I will be able to make definitive judgements on alleged misuse of the system, which can then be downloaded and used to provide appropriate clarification.

Technical paper

This paper is a sneak preview of a full technical paper that I have prepared for submission later this year. I am holding back on the final text because I want to incorporate any feedback that occurs resulting from the seminars and workshops that I present in the next six months to ensure the information is as current as possible.

Jeremy Barrell April 2001





Appendix 1 Copy of paper published in the Arboricultural Journal 1993 Volume 17 pages 33–46 titled *Pre-planning tree surveys: Safe Useful Life Expectancy (SULE) is the natural progression*

Full paper not included in this document

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Appendix 2 Modified copy of a paper published in the Proceedings of an International Conference on Trees on Building Sites in Chicago, 1995 pages 143–155 titled *SULE: the cutting edge in Pre-development tree assessment methodology*

Explanatory note

This paper has been slightly modified from a paper given at the *Trees & Building Sites* International Conference in Chicago in 1995. It is specifically orientated towards an American audience although all the principles apply equally internationally. It is useful for its explanation of the SULE methodology and is an important reference for any professional dealing with trees on development sites.

Full paper not included in this document

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Appendix 3

Safe Useful Life Expectancy Categories (Updated 04/01)

This reference sheet should be included as supplementary information with all reports where a SULE assessment is an element. Additionally, it can be copied and covered with a laminated plastic protective sheet and used as a field sheet to help with data collection.

Safe Useful Life Expectancy Categories (Updated 01/04/01)

- 1: Long SULE: Trees that appeared to be retainable at the time of assessment for more than 40 years with an acceptable level of risk.
 - (a) Structurally sound trees located in positions that can accommodate future growth.
 - (b) Trees that could be made suitable for retention in the long term by remedial tree care.
 - (c) Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long term retention.
- **2:** Medium SULE: Trees that appeared to be retainable at the time of assessment for 15–40 years with an acceptable level of risk.
 - (a) Trees that may only live between 15 and 40 more years.
 - (b) Trees that could live for more than 40 years but may be removed for safety or nuisance reasons.
 - (c) Trees that could live for more than 40 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
 - (d) Trees that could be made suitable for retention in the medium term by remedial tree care.
- **3: Short SULE:** Trees that appeared to be retainable at the time of assessment for 5–15 years with an acceptable level of risk.
 - (a) Trees that may only live between 5 and 15 more years.
 - (b) Trees that could live for more than 15 years but may be removed for safety or nuisance reasons.
 - (c) Trees that could live for more than 15 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
 - (d) Trees that require substantial remedial tree care and are only suitable for retention in the short term.
- 4: **Remove:** Trees that should be removed within the next 5 years.
 - (a) Dead, dying, suppressed or declining trees because of disease or inhospitable conditions.
 - (b) Dangerous trees because of instability or recent loss of adjacent trees.
 - (c) Dangerous trees because of structural defects including cavities, decay, included bark, wounds or poor form.
 - (d) Damaged trees that are clearly not safe to retain.
 - (e) Trees that could live for more than 5 years but may be removed to prevent interference with more suitable individuals or to provide space for new planting.
 - (f) Trees that are damaging or may cause damage to existing structures within 5 years.
 - (g) Trees that will become dangerous after removal of other trees for the reasons given in (a) to (f).
 - (h) Trees in categories (a) to (g) that have a high wildlife habitat value and, with appropriate treatment, could be retained subject to regular review.
- 5: Small, young or regularly pruned: Trees that can be reliably moved or replaced.
 - (a) Small trees less than 5m in height.
 - (b) Young trees less than 15 years old but over 5m in height.
 - (c) Formal hedges and trees intended for regular pruning to artificially control growth.





Appendix 4

Brief Guidance Notes on SULE Data Collection (Updated 04/01)

- 1. **General:** A competent SULE assessment can only be carried out by an arboriculturist with extensive practical experience and a high level of technical knowledge. The objective of a SULE assessment is to clarify the relative values of individual trees where there is a need to assess the future impact of different management options.
- 2. **Preparation:** Before undertaking any field work, the following requirements should be clearly established by the arboriculturist:-
 - (i) What objective information is required, i.e. height, crown spread, trunk diameter, etc.
 - (ii) What subjective information is required, i.e. the most appropriate range for the SULE categories.

3. SULE Assessment:

- (i) What is SULE: SULE is the length of time that the arboriculturist assesses an individual tree can be retained with an acceptable level of risk based on the information available at the time of inspection. It is a snapshot in time of the potential an individual tree has for survival in the eyes of the assessor. SULE is not static; it is closely related to tree condition and the surrounding environment. Alterations in these variables may result in changes to the SULE assessment. Consequently, the reliability all SULE assessments will decrease as time passes from the initial assessment because the potential for change in these variables increases.
- (ii) How to assess SULE: The SULE assessment can be broken down into 12 separate stages that can each be recorded on a field assessment form. These are summarised below but require further reference for more detailed explanation.
 - 1. Estimate the age of the tree.
 - 2. Establish the average life span of the species.
 - 3. Consider how local environmental circumstances may modify average life span.
 - 4. Estimate life expectancy (Subtract 1 from 3).
 - 5. Consider how health will affect safety.
 - 6. Consider how tree structure and size will affect safety.
 - 7. Consider how location will affect safety.
 - 8. Estimate safe life expectancy (4 modified by 5, 6 & 7).
 - 9. Consider economics of management costs must be reasonable.
 - 10. Consider adverse effects on better trees.
 - 11. Consider sustaining amenity making space for new trees.
 - 12. Estimate SAFE USEFUL LIFE EXPECTANCY (8 modified by 9, 10 & 11).

WARNING: Making these assessments requires extensive practical experience with trees and a high level of technical knowledge.

4. **SULE Recording:** Each category has a number of sub-categories. These sub-categories should always be recorded to help future users of the information appreciate the reason for each allocation decision. It is normal to have instances where trees will not fit neatly into a single SULE category. In such cases, the arboriculturist should record the preferred category first and include the possible category in brackets, mentioning the allocation problem in the notes. This assessment information should be recorded in a tree schedule along with any objective data that is collected.

5. **SULE Category Ranges:** The selection of age categories will depend on the tree population of the site. It needs to be flexible so that adjustments can be made to meet particular circumstances. For example, if the trees on a site had a SULE well in excess of the upper limit of 40 years, then it may be more appropriate for the categories to be redefined as follows: Short SULE = 5-40 years; Medium SULE = 40-80 years; and Long SULE = 80 years and longer. The Young and Remove categories would remain the same.

Appendix 5 Field Data Recording Sheet Explanatory note

the final SULE categorisation would normally be included in the tree schedule but these data field forms would be retained on file. These would be useful references in situations of disputed information such as planning inquires where it may be necessary to explain the categorisation in detail. Only . This reference sheet is useful to record all the steps in the SULE assessment.

SULE Data Collection Form (Updated 01/04/01)

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| Dectancy (SLE) | LE modified by structure |
| Safe Life Exp | LE modified by health |
| | Life expectancy |
| (i) | Lifespan modified by local factors |
| pectancy (L1 | Average lifespan |
| Life ext | Age of tree |
| | |

- The form is designed to help If you are unsure about using SULE, it will be useful to copy this form and use it to guide you through the method to arrive at the SULE category. unfamiliar users step through the method and once it becomes more familiar, there will be no need to record each step. _
 - For each tree number, you should progress through each column 1-12 writing a number in each box based on the assessment you have made. If there is no need to modify the previous number then the figure will be the same as the last box. It is very unusual for all the elements listed to be influencing factors and so it is normal for numbers to remain unchanged for many of the steps d
- reduce or extend this average life span and write the modified figure in column 3. The life expectancy recorded in column 4 is the age of the tree subtracted from this modified life More specifically, you assess the age of the tree and write it in box column 1. You assess the average life span of the species and write it is column 2. You consider if the location will This is repeated for all the other If there is no effect then the figure stays the same as the column before. span. Will health reduce the life expectancy? If so, then record the modified figure in column 5. If not then the figure in column 4 is repeated. elements from columns 6-11. If an element has an effect then the modified figure goes in the column. Column 7 will always be the same as column 8 and column 11 will always be the same as column 12. eri -
 - Once you have the final SULE, you can then allocate it to the appropriate category and select the most appropriate subcategory. The subcategory should reflect the main limiting factor on SULE.
- Remember, this form is to help unfamiliar assessors step through the method. Once an assessor becomes used to the principles behind the assessment, it is often obvious at a glance what the limiting factor is on the length of time the tree can be retained. Safety is the prime consideration and if a tree has a severe defect that means it will have to be removed within a few years for safety gagoogy, you will have identified the SULE almost instantly without the need to go through all the previous steps. ŝ



