

**TREE EVALUATION METHOD FOR PRESERVATION ORDERS:**

**TEMPO**

**Guidance Note for Users**

**May 2005**

## **Introduction**

### **Background**

The impetus to take a fresh look at existing TPO suitability evaluation methods grew out of the preparation for a local authority of a detailed Method Statement for reviewing Tree Preservation Orders (TPOs). The client wanted the Method Statement to include a reliable means of assessing trees for TPO suitability.

Having looked closely at what was already available, JFL decided that there was considerable room for improvement, as each of the better-known existing methods has disadvantages.

Accordingly, TEMPO has been developed by JFL whilst at CBA Trees as a direct response to the apparent continuing uncertainty about what attributes a tree should have in order to merit statutory protection by TPO.

### **Overview**

TEMPO is designed as a guide to decision-making, and is presented on a single side of A4 as an easily completed pro forma. As such, it stands as a record that a systematic assessment has been made (ref. Blue Book 2000 para. 3.3).

TEMPO considers all of the relevant factors in the TPO decision-making chain. In this connection, it is helpful to revisit the wording of the Blue Book:

‘Although a tree may merit protection on amenity grounds it may not be expedient to make it the subject of a TPO.’ (para. 3.4)

From this, it is clear that most existing methods are inadequate, seeking as they do solely to consider the tree rather than any known threats to its retention. TEMPO corrects this omission by including an expediency assessment within the framework of the method.

Excluding the first section, which is simply the survey record and is thus self-explanatory, TEMPO is a three-part system:

- Part 1 is the Amenity Assessment
- Part 2 is the Expediency Assessment
- Part 3 is the Decision Guide

These parts are set out and function as follows:

## **Part 1: Amenity Assessment**

This part of TEMPO is broken down into four sections, each of which are related to suitability for TPO:

- a) Condition
- b) Remaining longevity
- c) Relative public visibility
- d) Other factors

The first three sections form an initial assessment, with trees that 'pass' this going on to the fourth section. Looking at the sections in more detail:

### **a) Condition**

This is expressed by five terms, which are defined as follows:

- GOOD - Trees that are generally free of defects, showing good health and likely to reach normal longevity and size for species, or they may have already done so
- FAIR - Trees have defects that are likely to adversely affect their prospects; their health is satisfactory, though intervention is likely to be required. It is not expected that such trees will reach their full age and size potential, or if they already have their condition is likely to decline. However, they can be retained for the time being without disproportionate expenditure of resources
- POOR - Trees in obvious decline, or with significant structural defects requiring major intervention to allow their retention, though with the outcome of this uncertain. Health is significantly impaired, and it is likely to deteriorate. Life expectancy is curtailed and retention is difficult
- UNSAFE - Trees with severe, irremediable structural defects, including advanced decay and insecure roothold. Major collapse or toppling likely in the near term, retention therefore impossible as something worthy of protection
- DEAD - Self-explanatory!

The scores are weighted towards trees in good condition. It is accepted that trees in fair and poor condition should also get credit, though for the latter this is limited to only one point. It is the author's view that unsafe and dead trees should not be placed under a TPO, hence the zero score for these categories.

Where a group of trees is being assessed under this section, it is important to score the condition of those principle trees without which the group would lose its aerodynamic or visual cohesion. If the group cannot be 'split' in this way, then its average condition should be considered.

Against each of these terms is set an assessment of TPO suitability. These assessments are designed to reflect the fact that trees which are dead, dying or dangerous (which may be equated to the 'Dead' – obviously – 'Poor' and 'Unsafe' categories above) are effectively exempt from TPO protection.

## b) Remaining longevity

The reason that this is included as a separate category to 'condition' is chiefly to mitigate the difficulty of justifying TPO protection for veteran trees. For example, it is necessary to award a low score for trees in 'poor condition', though many veteran trees that could be so described might have several decades' remaining longevity.

Longevity has been divided into ranges, which are designed to reflect two considerations:

- It has long been established good practice that trees with less than ten years' remaining life expectancy are not worthy of a TPO (hence the zero score for this category)
- The further ahead one looks into the future, the more difficult it becomes to predict tree longevity: hence the width of the bands increases over time

Scores are weighted towards the two higher longevity ranges (40-100 and 100+), which follow the two higher ranges given by Helliwell.

The Arboricultural Association (AA) publishes a guide to the life expectancy of common trees (AA 4) as follows:

300 years or more	Yew
200-300	Common [pedunculate] oak, Sweet chestnut, London plane, Sycamore, Limes
150-200	Cedar of Lebanon, Scots pine, Hornbeam, Beech, Tulip tree, Norway maple
100-150	Common ash, Norway spruce, Walnut, Red oak, Horse chestnut, Field maple, Monkey puzzle, Mulberry, Pear
70-100	Rowan, Whitebeam, Apple, Wild cherry, Catalpa, Robinia, Tree of Heaven
50-70	Most Poplars, Willows, Cherries, Alders and Birches

The above should be considered neither prescriptive nor exclusive, and it is certainly not comprehensive. However, it should assist with determining the remaining longevity of most trees, in light of their current age, health and context.

It is important to note that this assessment should be made based on the assumption that the tree or trees concerned will be maintained in accordance with good practice, and will not, for example, be subjected to construction damage or inappropriate pruning. This is because if the subject tree is 'successful' under TEMPO, it will shortly enjoy TPO protection (assuming that it doesn't already).

If a group of trees is being assessed, then the mean age of the feature as a whole should be evaluated. It would not be acceptable, for example, to score a group of mature birches based on the longevity of the single young pedunculate oak present!

As with condition, the chosen category is related to a summary of TPO suitability.

### **c) Relative public visibility**

The first thing to note in this section is the prompt, which reminds the surveyor to consider the ‘realistic potential for future visibility with changed land use’. This is designed to address the commonplace circumstance where trees that are currently difficult to see are located on sites for future development, with this probably resulting in enhanced visibility.

The categories each contain two considerations: size of tree and degree of visibility. We have not attempted to be too prescriptive here, as TEMPO is supposed to function as a guide and not as a substitute for the surveyor’s judgement. However, we have found that reference to the square metre crown size guide within the Helliwell System can be helpful.

Reference is made to ‘young’ trees are in the lowest scoring category. This is intended to refer to juvenile trees with a stem diameter less than 150mm at 1.5m above ground level. The reasoning behind this is that such trees may be replaced by new planting, though it is accepted that replacement specimen trees towards the upper end of the given size are expensive.

In general, it is important to note that, when choosing the appropriate category, the assessment in each case should be based on the minimum criterion.

Whilst the scores are obviously weighted towards greater visibility, we take the view that it is reasonable to give some credit to trees that are not visible: it is accepted that, in exceptional circumstances, such trees may justify TPO protection (Blue Book para. 3.3.1).

Where groups of trees are being assessed, the size category chosen should be one category higher than the size of the individual trees or the degree of visibility, whichever is the lesser. Thus a group of medium trees would rate four points (rather than three for individuals) if clearly visible, or three points (rather than two) if visible with difficulty.

Once again, the categories relate to a summary of TPO suitability.

### **Sub-total 1**

At this point, there is a pause within the decision-making process: as the prompt under ‘other factors’ states, trees only qualify for consideration within that section providing that they have accrued at least seven points. Additionally, they must not have collected any zero scores.

The total of seven has been arrived at by combining various possible outcomes from sections a-c.

The scores from the first three sections should be added together, before proceeding to section d, or to part 3 as appropriate (ie depending on the accrued score). Under the latter scenario, there are two possible outcomes:

- ‘Any 0’ equating to ‘do not apply TPO’
- ‘1-6’ equating to ‘TPO indefensible’

#### **d) Other factors**

Assuming that the tree or group qualifies for consideration under this section, further points are available for four sets of criteria, however only one score can apply per tree (or group):

- ‘Principle components of arboricultural features, or veteran trees’ – The latter is hopefully self-explanatory (if not, refer to Read 2000). The former is designed to refer to trees within parklands, avenues, collections, and formal screens, and may equally apply to individuals and groups
- ‘Members of groups of trees that are important for their cohesion’ – This should also be self-explanatory, though it is stressed that ‘cohesion’ may equally refer either to visual or to aerodynamic contribution. Included within this definition are informal screens. In all relevant cases, trees may be assessed either as individuals or as groups
- ‘Trees with significant historical or commemorative importance’ – The term ‘significant’ has been added to weed out trivia, but we would stress that significance may apply to even one person’s perspective. For example, the author knows of one tree placed under a TPO for little other reason than it was planted to commemorate the life of the tree planter’s dead child (incidentally, in over 25 years it has never failed to be in flower on the child’s birthday). Thus whilst it is likely that this category will be used infrequently, its inclusion is nevertheless important. Once again, individual or group assessment may apply
- ‘Trees of particularly good form, especially if rare or unusual’ – ‘Good form’ is designed to identify trees that are fine examples of their kind and should not be used unless this description can be justified. However, trees which do not merit this description should not, by implication, be assumed to have poor form (see below). The wording of the second part of this is deliberately vague: ‘rare or unusual’ may apply equally to the form of the tree or to its species. This recognises that certain trees may merit protection precisely because they have ‘poor’ form, where this gives the tree an interesting and perhaps unique character. Clearly, rare species merit additional points, hence the inclusion of this criterion. As with the other categories in this section, either individual or group assessment may apply. With groups, however, it should be the case either that the group has a good overall form, or that the principle individuals are good examples of their species

Where none of the above apply, the tree still scores one point, in order to avoid a zero score disqualification (under part 3).

#### **Sub-total 2**

This completes the amenity assessment and, once again, there is a pause in the method: the scores should be added up to determine whether or not the tree (or group) has sufficient amenity to merit the expediency assessment.

The threshold for this is nine points, arrived at via a minimum qualification calculated simply from the seven-point threshold under sections a-c, plus at least two extra points under section d. Thus trees that only just scrape through to qualify for the ‘other factor’ score, need to genuinely improve in this section in order to rate an expediency assessment. This recognises two important functions of TPOs:

- TPOs can serve as a useful control on overall tree losses by securing and protecting replacement planting
- Where trees of minimal (though, it must be stressed, adequate) amenity are under threat, typically on development sites, it may be appropriate to protect them allowing the widest range of options for negotiated tree retention

## **Part 2: Expediency assessment**

This section is designed to award points based on three levels of identified threat to the trees concerned. Examples and notes for each category are:

- ‘Known threat to tree’ – for example, Tree Officer receives Conservation Area notification to fell
- ‘Foreseeable threat to tree’ – for example, Planning department receives application for outline planning consent on the site where the tree stands
- ‘Perceived threat to tree’ – for example, survey identifies tree standing on a potential infill plot

However, the Blue Book is clear that, even where there is no expedient reason to make a TPO, this is still an option. Accordingly, and in order to avoid a disqualifying zero score, ‘precautionary only’ still scores one point. This latter category might apply, rarely for example, to a garden tree under good management.

The fifth category within this section relates to reverse expediency: where trees are known to be an actionable nuisance, it is not possible effectively to protect them with a TPO, hence the zero score.

Clearly, other reasons apply that might prevent/usually obviate the need for the making of a TPO (eg the tree stands on Crown land). However, it is not felt necessary to incorporate such basic considerations into the method, as it is chiefly intended for field use: these other considerations are most suitably addressed as part of a desk study and could, if necessary, be factored into the scoring after the field work has been completed.

As a final note on this point, it should be stressed that the method is not prescriptive except in relation to zero scores: TEMPO merely recommends a course of action. Thus a tree scoring, say, 15, and so ‘definitely meriting’ a TPO, might not be included for protection for reasons unconnected with its attributes.

### **Part 3: Decision Guide**

This section is based on the accumulated scores derived in Parts 1 & 2, and identifies four outcomes, as follows:

- **Any 0 Do not apply TPO**  
Where a tree has attracted a zero score, there is a clearly identifiable reason not to protect it, and indeed to seek to do so is simply bad practice
- **1-6 TPO indefensible**  
This covers trees that have failed to score enough points in sections 1a-c to qualify for an 'other factors' score under 1d. Such trees have little to offer their locality and should not be protected
- **7-10 Does not merit TPO**  
This covers trees which have either qualified for a 1d score, though they may not have qualified for Part 2. However, and even if they have made it to Part 2, they have failed to pick up significant additional points. This would apply, for example, to a borderline tree in amenity terms that also lacked the protection imperative of a clear threat to its retention
- **11-14 Possibly merits TPO**  
This applies to trees that have qualified under all sections, but have failed to do so convincingly. For these trees, the issue of applying a TPO is likely to devolve to other considerations, such as public pressure, resources and 'gut feeling'
- **15+ Definitely merits TPO**  
Trees scoring 15 or more are those that have passed both the amenity and expediency assessments, where the application of a TPO is fully justified

### **Notation boxes**

Throughout the method, notation space is provided to record relevant observations under each section. For local authorities using TEMPO, it may even be helpful to include a copy of the TEMPO assessment in with the TPO decision letter to relevant parties, as this will serve to underline the transparency of the decision-making process.

## **Conclusion**

TEMPO is a quick and easy means of systematically assessing tree or group suitability for statutory protection. It may be used either for new TPOs or for TPO re-survey, especially where Area TPOs are being reviewed.

From the consultants' perspective, it is also an effective way of testing the suitability of new TPOs, to see whether they have been misapplied, or it can be used to support a request to make a TPO in respect of trees at risk, for example from adjacent development.

TEMPO does not seek to attach any monetary significance to the derived score: the author recommends the use of the Helliwell System where this is the objective.

CBA Trees owns the copyright for TEMPO, however the method is freely available, including via internet download.

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### *References*

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| AA 4           | 'Tree Management', Leaflet No. 4, Arboricultural Association 1991  |
| Blue Book 2000 | 'Tree Preservation Orders: A Guide to the Law and Good Practice', DETR 2000                                      |
| Helliwell      | 'Amenity Valuation of Trees and Woodlands', DR Helliwell, Arboricultural Association 2003 [the Helliwell System] |
| Read 2000      | 'Veteran Trees: A Guide to Good Management', Helen Read, English Nature 2000                                     |