# QTRA Tree Safety Management

## QTRA Newsletter and Training Calendar Summer 2012

**Become Registered**

**Training Calendar**

**QTRA Training**

03 Sep Adelaide
03 Oct Exeter
10 Oct Durham
16 Oct Monmouth
17 Oct  London
29 Oct Macclesfield
13 Nov Périgueux

## The Television Oak

In May this year, a conference was held in Stockholm to focus attention on the loss of important trees in the name of safety and open a dialogue between all stakeholders and not least the public. The Television Oak - so called because it stood outside one of Sweden's main radio and television station offices - was condemned and felled amidst public outcry, and concern was expressed by a large section of the arboricultural community.

The loss of the Television Oak brought about the formation of Sveriges Arboristförbund (SAF),a new association of arboricultural professionals. Led by Cilla Lundstrum and Jon Hartill, SAF organised a two day conference 'Ancient Trees in Urban Environments' at the Swedish Natural History Museum in Stockholm.

Stockholm is home to some remarkable veteran trees of oak, ash, birch and lime in particular. These remnants of a bygone agricultural landscape that have become enclosed in the expanding city are viewed by many as immensely important landscape and ecological assets and this world class conference has opened up the debate on the management of veteran trees in Scandinavia. As is often the case with high profile events, perhaps the loss of the iconic Television Oak will bring about change for the better.

## Quantified Tree Risk Assessment, A Work in Progress

by Mike Ellison

Where it came from I'm not sure, but the idea that QTRA would evolve over time was obvious from the very early stages of development when I was looking for a way to prioritise the management of my client's trees. What I didn't realise at the time is that most of the risk control measures that I was prescribing for my clients were probably unnecessary, on safety grounds at least.

For the gradual evolution of QTRA and acceptance that the risks from trees are not quite as high as they may be perceived, it has been necessary to acknowledge that what we are doing can probably be improved upon. This acceptance of the need to change has facilitated the development of a robust approach to assessing and managing risk from falling trees. Criticism, both positive and negative, has informed the development of QTRA.

**Further training will be scheduled for Spring 2013 in Australia and New Zealand and dates will be made available shortly.**



Recently, we have reviewed and revised the method to take on board feedback and address questions raised by registered users. These changes have simplified the field assessment of trees. For a number of years we have advised that the Risk of Harm (RoH) should be expressed to no more than two significant figures. A long planned for change that has been delayed until the printing of the new manual calculators is that we have revised our RoH outputs to ONE significant figure. This is in line with mathematical convention because although inputs such as Target Values can be very accurate to a number of significant figures, the Probability of Failure (PoF) component has, since 2011, been assessed to one significant figure and in broad ranges, with the upper value of that range inputted to the calculation. The RoH output to one significant figure reflects the broad nature of risk assessment and should not significantly affect risk management decisions. Calculating RoH outputs to one significant figure also addresses the criticism of inferred precision where a RoH was perhaps expressed to a number of significant figures.

## How Likely is Tree Failure?

The modified QTRA output is accompanied by a change to the way that users should input their estimates of 'probability of failure'.

For the uninitiated, QTRA inputs are selected from ranges of value, e.g. the probability that a tree will fail within the coming year is estimated to be within the range 1 in 1 000 to 1 in 9 000 or perhaps the range 1 in 10 000 to 1 in 100 000. In the previous revision of the method, the number of ranges for probability of failure was increased from five to six. In the current revision, this has been increased to seven ranges. On the face of it, the increased number of ranges might appear to complicate the process, but the increments of probability that we use actually enable the user to take a more structured approach.

## The Cost/Benefit Assessment

Our approach to assessing the risk from falling trees is to take a reasonable and sufficient view of the tree. In some situations, due to very high levels of human access a detailed view of each tree may be appropriate and the stability of trees may be critical. In areas that evidently have low usage, tree stability is of less concern and it is usually inappropriate to allocate valuable resources to the assessment of each and every tree. Ours is a risk based approach where the presence of a defective tree alone is insufficient to trigger remedial action. Instead of focussing on the tree, our first consideration is land use. In other words, is anything of value likely to be harmed if a tree were to fail? Competently applied, the risk based approach reduces the need for remedial action, by recognising and conserving the value of the tree asset.

Using guidance developed by the UK Health and Safety regulator, the quantified risk of harm can be considered and balanced with the costs of risk reduction in terms of diminution of the tree asset, the financial cost of risk control and the risk to workers and the public from implementing the control measure.

In partnership with the QTRA assessor, the tree owner can achieve a reasonable outcome where resources are expended on safety only when significant risks are identified. The result is that the owner can usually manage the risk from falling trees within a reasonable budget, maintain greater value in the tree asset, and be more likely to direct resources into proactive tree and landscape management.

## Training Workshops

2012 sees QTRA training workshops in the UK, Sweden and Australia bringing the tools of reasonable and proportionate tree management to an ever increasing audience. Our Quantified Tree Risk Assessment User training, User Update and Visual Tree Assessment workshops are scheduled at several locations over the next few months. Discounts are available for multiple bookings and if you provide a venue, we can arrange a workshop for your employees with further cost reductions.