VALUING AND MANAGING VETERAN TREES

‘Death with dignity’ can be avoided by learning to manage the once-beautiful veteran trees.

Trees that have stood the test of time and show some battle scars, dead branches, and other signs of aging are often referred to as veterans. On a once-beautiful tree, these signs might suggest a ‘mortality spiral’ to tree owners, and to arborists. ‘Death with dignity’ may seem simpler than dealing with maintenance and liability concerns, but with proper standards to follow, veteran tree care methods are straightforward and defendable. The British have been at this for a long time.

The leading US tree care textbooks and current research confirm this approach. ‘Old trees that are of low vigor and have failing branches can often be made healthy and attractive by removing the weak-growing and dying limbs in their extremities, particularly their tops.’ The objective is to make reduction cuts so that branch tips are left intact on the outer edge of a new, smaller canopy... Reduction pruning anticipates the natural process of “growing downward”...” A 15 per cent reduction can increase the stability of a branch or a tree by 50 per cent.

The 2012 ISA Best Management Practices for Tree Risk Assessment echoes the UK guidance on retrenchment: “Tree risk assessors should resist the temptation to assess tree integrity, to prune branches, and to recommend root pruners. The tree is a living system and over-pruning can have disastrous effects on the tree.”

The US standard advises that the “objectives... be established, the method, area, depth, and limitations of inspection, as well as the tools and equipment needed. Mulch, soil, and other materials should be removed as needed to allow for the inspection. Inspection should include the conditions in the crown that may reflect root conditions:...”

The table below outlines the differences between crown reduction and lopping:

<table>
<thead>
<tr>
<th>RETRENCHMENT BY CROWN REDUCTION</th>
<th>LOPPING</th>
</tr>
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<tbody>
<tr>
<td>Retains enough foliage to maintain tree health</td>
<td>Removes too much foliage, starving the tree</td>
</tr>
<tr>
<td>Releases gradual sprouting from interior nodes</td>
<td>Forces panic sprouting internodally or near wounds</td>
</tr>
<tr>
<td>Epicormic growth from adventitious (newly formed) buds is weakly attached, with no buttressing</td>
<td></td>
</tr>
<tr>
<td>Smaller wounds that tree can compartmentalise</td>
<td>Large wounds at poor locations, causing rapid decay</td>
</tr>
</tbody>
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The flare is the transition zone, where the stem broadens and roots extend into the earth. The flare should always be visible, but all too often we see that it’s obscured by fill contacting the trunk. If the flare of your veteran tree is concealed, gently and gradually remove the material, and keep the buttress roots or stems by roots or other materials, and the tree’s response.

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the trunk tissue dry. If a shovel or trowel is used, press the blade against the trunk, moving the blade away from the trunk. This is a delicate operation, and encountering roots that squeeze the stem is not uncommon. You can remove any of these smaller girdling roots as needed, but larger girdling roots are best managed from experience. Root collar examination (RCX) may reveal softness, oozing, insects, or holes in that sensitive area. Clean out any dead material to diagnose and treat these conditions, then examine the soil. If probing shows that soil is hard or compacted, these areas might be treated as number four under 'Specifications.' Fertile material removed from the flare can be spread on the outer root zone, and future management should keep the flare visible.

Prescribing this work might follow a simple template. Determine what the scope of the work will be and what objective(s) are to be achieved. Then list the specific steps that will be needed in order to meet the defined objectives. As an example, to the right are the before and after photos of a Quercus stellata and the scope, objectives, and specifications for its retrenchment.

**SCOPE:**

Quercus stellata with extensive root loss.
Six feet wide at the base; over five feet of that is hollow.

**OBJECTIVE:**

Reduce the load and the risk, with low maintenance needs.

**SPECIFICATIONS:**

1. Reduce downward and horizontal segments of overextended branches, clearing the branches below by two to four feet. Cuts less than three inches, to upright laterals, less than eight per cent total foliage
2. Remove or reduce crowded branches, less than four per cent total foliage, vigorous growth or buds
3. Reduce declining leaders three to six feet. Smallest cut possible, near vigorous growth or buds
4. In an area between three and 20 feet from the trunk, use an air/water tool to make holes 18 inches apart, greater than two inches wide and greater than 12 inches deep. Force 50 per cent compost/50 per cent soil conditioner into the holes. Mulch with two inches of woodchips

**Vocational Education and Training** on Veteran Trees, or 'VETre,' started as a European network exchanging knowledge on veteran tree management. Seasoned veteran tree managers from England, Sweden, Spain, Romania, and Belgium have delivered advanced training to future trainers, who will be able to use case studies with specifications, and ‘ready-to-use’ course material adaptable to any site. Available in late 2014, this training will be supported through HistoricTreeCare.com with e-learning tools and video. Exemplary work done by Veteran Tree Group Australia is similarly shared in other regions. Landscapes are healthier and more ecologically sound with a diversity of plant species, and ages. Veteran trees can add a timeless quality to a garden, providing opportunities for biological, cultural, and historical interpretation. By sustaining these titans of ecology, and training a new generation of veterans, we can bring beauty and environmental health to our gardens for centuries to come.

**References**

1. BS 3998: 2010 Tree Work – Recommendations British Standards Institute Page 57
2. Best Management Practices on Tree Risk Assessment International Society of Arboriculture Pages 41-42
8. ANSI A300 Tree Care Standards: (Part 8) Root Management 2012, Tree Care Industry Association Page 12
10. Veteran Tree Care, 2013, Roddick, Christopher, Ecological Landscaping Alliance

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