

# MANAGING ELDERLY TREES

*Mature large trees add significance to our landscapes but they require care and monitoring to maintain in a healthy and structurally sound state.*



Trees are an investment of our money and our time. A healthy tree increases in value with age and pays us back with increased property values, beautifying our surroundings, purifying our air, and saving energy by providing cooling shade, just to name a few. Regular preventative maintenance, designed to promote tree health and structural integrity, ensures a tree's value will continue to grow and prevents the development of costly problems in the future.

## RELATED RESOURCES

[Management of Elderly Trees](#)

[Veteran Trees: A Guide to Good Management](#)

[Conservation Arboriculture Guiding Principles](#)

Trees can weather many storms as they progress from seedlings through maturity and old age, some more successfully than others due to species, location, care, or type of damage. Eventually trees become over-mature and decline, if not due to age, then because of the damage and stress they have encountered over the years. Every tree goes through the same stages, some more rapidly than others, but in nature they follow the same sequence:



Seedling Sapling Young

Mature

Over-mature

Senescent

Dead

Source: [Veteran Trees: a guide to good management](#), Ch 3, 1999

In nature, the full life cycle of a tree can occur uninterrupted, aside from fire or other catastrophic events, but in a developed landscape or urban environment, such elderly trees require active management decisions. Managing mature and declining trees, particularly when the goal is to keep them on-site, can be challenging as many factors contribute to the management decisions:

1. Use of the site & targets: frequency of people, vehicles, events and maintenance staff.
2. Site maintenance: turf management, equipment use and damage caused to trees.
3. History of damage: weather events, construction, utility installation, digging.
4. History of management: training, structural and cleaning pruning, mulch, fertilization.
5. Pests and diseases: severity and outcomes of infestation or infection, treatability.
6. Decay: lower tree root and butt rots, cavities in the trunk and scaffold limbs, dead wood

## **WHAT ARE SENESCENT, TREES?**

A senescent tree is one that is clearly “over the hill.” It is on the downward slope of maturity and probably has significant amounts of decay and/or structural defects as its health declines. Senescent trees decline in a slow spiral. Fewer leaves are produced so that less food is available. With less food produced, less is stored and these lower energy reserves mean less energy is available for growth. Thus, resulting in even fewer leaves being produced.

## **WHY MANAGE VETERAN TREES?**

These veterans are a link to our past, a part of the local landscape and history. In our urban society, most veteran trees are no longer retained and managed. Some old trees may garner interest because of their existence during historical events, but most old trees are neglected at best, or removed for development, agriculture, risk reduction, or just because they are old and defective.

But these old trees still provide environmental benefits, as well as their historic presence. And managing those trees; developing strategies for their preservation; and avoiding unnecessary removal is important. An entire management strategy that addresses a tree's biology, life stage, and risk, for the purpose of a tree's preservation is called Conservation Arboriculture, based on the recognition that:

1. Trees provide a wide range of benefits to society
2. Trees are living organisms which naturally lose branches or fall
3. The risk to human safety from trees is very low
4. Tree owners have a duty of care for their trees
5. Approach to tree management must be balanced and proportionate.