Technical Note: Managing risk with heritage trees

Many heritage trees present a range of risks for owners and managers when growing either in private property or in public parks, streets overhanging public space, e.g. to nearby footpaths or nature strips. Such risks might include the dropping of large or dead limbs, the dropping of large cones, slips and trip hazards due to surface roots interfering with paving below.

Some trees present such risks on a seasonal or occasional basis. Bunya pine trees (*Araucaria bidwillii*) for example have large 'cannonball' sized cones which can cause damage to persons and property. This risk is occasional as Bunya pines only 'cone' every 2-3 years normally. Also their cones only fall for a defined short period in late spring and summer.

Other trees such as mature Moreton Bay fig trees (*Ficus macrophylla*) can drop large branches on still summer days without prior warning. This phenomenon has been called 'Summer Branch Drop Syndrome'. Given the size and weight of branches possible on such figs, managing risk is an issue needing careful attention.

Options to manage risks of falling Bunya cones include temporarily fencing off the root or 'fall' zone under the trees for that period of time (2-3 months), along with notices to the public explaining the reason and duration of the fencing. Public advertisements or neighbour notification are also advisable. If the area below the tree cannot be fenced off, because for example, it is a public roadway, it may be advisable to remove cones using a cherry picker.

Similarly, temporary fencing off of root zones of large Moreton Bay figs in public parks or overhanging public space may be a feasible option for the season of risk, namely summer. Managers such as the Royal Botanic Gardens, Sydney & Domain Trust have used this tactic successfully for some years with some of their large figs. While the public may object to loss of shady picnic spots, they will understand the need to manage risk if this is pointed out to them.

Temporary fencing also allows an owner or manager an opportunity to fertilise and mulch and irrigate the root system of a significant tree to improve its overall health and condition, and undertake dead-wooding, free of the risk to visitors.

Where there has been an accident or a claim of an imminent risk concerning a heritage tree and there has been an initial arborist's assessment recommending demolition or heavy pruning, an independent opinion should first be sought from an arborist with experience working on heritage trees. Many local councils have tree protection officers who may also be able to offer assistance and advice.

If, as may happen in regional areas, an arborist with heritage experience is not available, the local Council tree protection officer or an officer of Forests NSW may be able to assist.
Any assessment should be informed by the heritage significance of the tree, which may be for historic, aesthetic, social or technical/scientific values - e.g. rarity, age, size, beauty, associations with an era, a person or group.

Any assessment should also be informed by conservation policies, such as, if a tree has to be removed, should it be replaced and with what species (the same / similar?); in the same location or nearby?; further away from an existing footpath / area of risk (childrens' play area; street; significant built structure)?

Further information on the history and heritage values of street trees in NSW can be found in the publication: [http://www.heritage.nsw.gov.au/03_index.htm#streettrees](http://www.heritage.nsw.gov.au/03_index.htm#streettrees)

and further information on significant landscapes, parks, gardens and trees including a bibliography is at: [http://www.heritage.nsw.gov.au/06_subnav_06.htm](http://www.heritage.nsw.gov.au/06_subnav_06.htm)

Council officers are advised to take into account any possible pecuniary interests of parties when considering consultancy on removal.

![Mature Bunya Pine, Prince Alfred Park Parramatta.](image)

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