

ABN: 80 049 249 291

On Monday the 7th May 2018 I attended a site to inspect 2 trees with a "Tree House" between them adjoining private property 77 Massinger Street Byron Bay. Both trees were located and inspected and their current condition documented. Both trees are located on council land, the first (tree 1) was identified as being a Forest Red gum (*Eucalyptus tereticornis*) with a diameter at breast height (d.b.h) of 400mm, estimated height of approx. 16m and would be classed as semi mature. The second was a Grey Ironbark (Eucalyptus siderophloia Benth.) d.b.h 370mm estimated height of 13-14m.

Tree 1 Forest red gum, is located North of the concrete driveway between the property boundary and the road. It consists of one primary apical dominant stem growing in the Southern sector, this stem is healthy, growing vigorously. Its growth is a direct response to the removal of the original central apical trunk, estimated to have occurred approx 10-15 years ago. The central "lopped" trunk is dead at approx 1.8m above ground level and is now in a state of decay, with wounding from approx 300mm from ground level to the top. Wound wood development is fair to average for a tree of this age and its given environment. There is a small stem growing to the north which has recently died.

The dead wood was sounded using a plastic hammer and resonance indicates the trunk is not sound wood.

Roots are girdling around the base of the tree in the Southern sector and are now occluding the concrete driveway. Attachment of the tree house is by way of a prop attached to the dead tissue of the trunk with roofing screws, and a chain (since been removed) was wrapped around the apical stem.



Pic 1 showing bracing/ propping of the tree house and attachment points



Pic 2 showing Decaying central stem and marks left by chain(recently removed).



Pic 3 showing branch rubbing on the floor of the tree house. Pannel has

been removed to allow for growth.

Tree 2 Grey Iron Bark, is a single trunked tree to approx14m where branching occurs above the tree house. the tree is locate North of tree 1 and appears to be healthy displaying good vitality. Attachment of the tree house is by way of a prop attached to the trunk with a chain wrapped around the apical stem as well as joists being pulled together by means of threaded rod either side of the trunk with Nuts attached. - see pics below.

the prop attachment would have caused minor wounding during installation but impact would be very minor. The chain around the trunk is the greatest concern. During secondary wall expansion in the tree the chain if not loosened will be included into the tree.



Pic 4 attachment of Prop to trunk.



Pics 5 and 6 above indicate expansion of the trunk since installation of the tree house and subsequent movement of the joists and threaded rod effectively sandwiching the tree house to the tree.



Pic 7 shaving of the bark to allow for floor

The Ironbark truck grows through the floor and the roof of the house and it was noted that there was rubbing from the floor and in 1 section the bark had been shaved to alow for the joist below.



Pic 8 above shows roof sheeting rubbing on the bark.

Both trees appear to be healthy at time of inspection, with minimal detrimental impact from the tree house construction on both trees.

For the ongoing health and vitality of both trees the author strongly recommends mulching around the base of the trees with an organic mulch such leaf and chipped wood material from a tree contractor.

- 1. Chains wrapped around the trees should be loosened to allow for trunk expansion.
- 2. Nuts attached to the threaded rod should be loosened and joists will need to be moved away from the trunk to allow for trunk expansion. If these joists are not moved the tree will eventually push them apart and snap them.
- 3. Floor boards and roof should be cut to allow a gap of approx 25mm or more again to allow for trunk expansion.

Ongoing inspection of the trees is recommended every 12- 24 months by a qualified cert V arborist. Further detailed Inspection of the dead section of tree1 in 24 months is strongly recommended as this would appear to be one of the major loading points of the structure.

I believe the recommendations made will be acted upon within the next month on the return of the builder, and am satisfied that once corrected the tree house will have little to no detrimental impact upon both trees.

Should anyone wish to discuss this matter further I can be contacted on the details below.

Sincerely,

Alex Nowell Dip. Hort. Arb. QTRA Licence 2360, ISA Tree Risk Assesment qualified. Director, Byron Bay Tree Services P/L

