

**St Catherine's Parish Church,
Bearwood Road, Sindlesham, RG41 5BN**

Arboricultural report

**Inspection carried out on 3rd August 2024
by David White**

**LANTRA-approved Professional Tree Inspector
White Knight Tree Care & Consultancy**

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1. Instruction

This arboricultural survey and report have been commissioned by Mrs Rendle, on behalf of the Parish Church Council. The site in question is located at St Catherine's Parish Church, Bearwood Road, Sindlesham, RG41 5BN and consists of a church with attached grounds/cemetery.

The aim was to identify any health and safety-related risks and to recommend remedial work where necessary. The tree was inspected using VTA (visual tree assessment), the industry standard, non-invasive technique for assessing the health and condition of trees. The tree was inspected from ground level only.

The inspection was carried out on 3rd August 2024 by David White, ABC Level 4 Diploma in Arboriculture, LANTRA approved professional tree inspector, of White Knight Services Ltd (company number 12694619, registered address 5 Cressingham Road, Reading RG2 7RS, trading as White Knight Tree Care & Consultancy).

2. Site and survey conditions

The weather conditions were sunny with good visibility.

The recommendations contained in this report are based on the findings on the days of the survey. If the site usage changes, this site may need to be reassessed.

3. Tree Preservation Orders (TPOs)

A check for protected trees has identified that at the time of writing, this tree is located within the Sindlesham Conservation Area. Trees covered by TPOs and/or located in a Conservation Areas require permission from the Local Planning Authority before any work is carried out, as such a Section 211 notice would need to be submitted to the Council prior to carrying out any remedial work recommended in this survey.

4. Limitations

Although every effort has been made to accurately assess and predict the risks posed, trees are living, dynamic systems that can be influenced by many biotic or abiotic factors. As such, events such as extreme or unpredictable weather conditions, vandalism, accidents, chemical or fire damage render the findings of this report unreliable and reinspection will be required. Even the healthiest tree in ideal conditions is not risk-free as there are always complex forces and stresses at play. Ivy, although it has significant ecological value, severely hinders the effectiveness of VTA and makes accurate assessment of the entire tree impossible as the areas beneath the ivy cannot be seen. Where necessary, it is advised that the ivy should be severed to make a fuller reinspection possible; the severance of ivy should be conducted using hand tools only (NEVER using a chainsaw), paying careful attention

not to cut into or damage the tree's bark. The ivy should be severed at ground level and again higher up at approximately 1.5m to allow the base of the stem to be cleared once the ivy has died off.

5. Recommended works

Any of the remedial works carried out should be done so in accordance with BS:3998 wherever possible. Adding organic mulch to a thickness of 100mm, making sure not to pile it up around the stem as this can cause rot, and up to the drip line of trees, is considered good practice and is always recommended where practicable as it helps slowly releasing nutrients into the soil whilst improving water retention into the soil and reducing evaporation.

The recommended work should be carried out within the time frame specified in order for the findings to remain valid.

6. Ecological considerations

There are many species of invertebrates that live, breed or grow exclusively in deadwood making it of critical importance in the ecosystem as many of these species are predated on by birds and animals. This means that various forms of deadwood, including a range of vertical and horizontal, high and low level, standing and fallen deadwood needs to be retained in order to support biodiversity (not just a pile of logs on the ground). The aim should never be to totally sterilise the environment by removing the deadwood. With this in mind, if the site conditions and occupancy allow for it, wherever possible deadwood should be retained. This is reflected in the survey report.

Trees, both living and dead, are extremely important keystone species in the environment/ecosystem. They provide innumerable benefits such as carbon sequestration, reducing urban heat island effect, reducing stress and improving people's mental health, reducing soil erosion, adding aesthetic interest and amenity in the landscape, reducing flooding through transpiration and precipitation interception, providing food and shelter for many species of birds, mammals, insects and invertebrates. Whenever possible, I have recommended remedial work that would allow for the retention of trees.

7. Insurance

Works covered by White Knight Services Ltd Public Liability Insurance to the value of £15,000,000.00

Professional indemnity insurance to the value of £2,000,000.00

8. Survey findings, conclusions and recommendations

Tree reference: T1

Species: Cedar of Lebanon (*Cedrus libani*)

Location: South side of driveway into the church grounds from Bearwood Road.
Pavement and road 1m to West;
Church grounds to the South;
Church carpark to the East;
Driveway 3m to the North

What 3 words location: ///crouch.offices.acclaimed

Life stage: Over-mature/veteran

Measurements:

- Diameter at breast height (at 1.5m above ground level):
 - Multi stemmed
 - 103cm, 47cm, 154cm, 67cm & 121cm giving a single stem diameter equivalent of 236cm
 - Diameter at ground level: 271cm
- Approximate height: 23m
- Crown spread:
 - East 16m
 - North 15m
 - West 12m
 - North West 17m
 - South 10m
 - South East 8m

Survey findings:

1. Potential audible defect at ground level on North side, 300mm wide, tapering to 400mm above ground level, no penetration with probe, slightly crumbling bark (see Figure 4).
2. Similar on North -North West side, 300x400mm. Both either side of very large historic wound (see Figure 4).
3. South-South West side, crumbling bark at ground level, no penetration.
4. Vertical rub of expansion growth on North side (larger stem) of union (see Figure 9).
5. No significant audible defects at base.

6. 'Cup' Union between main stems on North East side filled with soil approximately 400mm deep, well-defined boundary (see Figure 10).
7. Fully occluded wound North-North East side 300mm wide x 400mm tall, 200mm above ground level
8. North-North West side, starting 600mm above ground level, enormous historic wound approximately 600mm wide by 900mm tall, exposed wood solid/sound, partially occluded, exposed area 350mm x 700mm (see Figure 4).
9. Relatively tight union on South West side rib mentioned in point 4, not significant
10. Main unions from South side around head height are tension forks (see Figure 5).
11. East side: Tight union between 2 main stems, not significant (see Figure 7).
12. Main stem on East-North East side extends over carpark.
 - 12.1 Fibre buckling at base (see Figure 11).
 - 12.2 Possibly fibre buckling at bend approximately 3.5m above ground level (see Figure 12).
 - 12.3 Approximately 16m long lever arm (see Figure 12).
 - 12.4 Good vitality, therefore significant amount of weight acting on stem (see Figure 12).
 - 12.5 Stem sweeps upwards towards North East (see Figure 13).
 - 12.6 Upswept stem, odd-looking branch union, with horizontal fissure (similar to branch bark ridge) very evident (see Figure 13).
 - 12.7 Large historic wound on South side of limb, approximately 6m from the base of tree, looks solid, partially occluded.
13. Relatively minor stem on North side (see Figure 14)
 - 13.1 Historic snap out to top of stem approximately 6m above ground level
 - 13.2 Two long limbs extend North with relatively little holding wood
 - 13.3 Potential bird nest in wound, partially occluded.
14. Very large, major stem extends North at approximately 45° from very wide tension fork
 - 14.1 Fibre buckling on underside of union (see Figure 15).
 - 14.2 Main unions are tension forks
 - 14.3 Unusually pronounced branch collar around 2nd major limb above ground level.
 - 14.4 Historic tear out and pruning wound at top of main stem, appears sound, little/no occlusion visible
 - 14.5 New leading stem, potential fibre buckling
 - 14.6 Good vitality
15. Main stem on South West side
 - 15.1 First major limb on South West side, decay in historic pruning wound, frass present.
 - 15.2 3rd major limb, end of limb snapped off relatively recently, still some photosynthetic material (see Figure 16)
 - 15.3 4th major limb extending over road, historically heavily pruned back to primary limb, no leaf present.
 - 15.4 Potential bird nest in top, North West.
 - 15.5 Acute angle unions near top of main stem
16. Minor stem South West side
 - 16.1 Historic pruning shortening lever arm

16.2 Dead detached limb above carriage way, unlikely to fall.

17. South side of main union of stem 14

17.1 Recent major stem failure (see Figure 16)

17.2 Remaining 2 limbs acceptable

18. Main/major stem South East side

18.1 Potentially fused limb connecting base of 14

18.2 Historic snap outs on lower limbs (see Figure 16)

18.3 Major historic head/stem failure South West side of main union (tension fork), approximately 1/2 of the main stem (see Figure 16)

18.3.1 Remaining side of stem, extending North East

18.3.2 Fibre buckling on first major limb above union, North side

18.3.3 Extensive major deadwood (see Figure 17)

18.3.4 Long lever arm extending East (see Figure 17)

19. Extensive major deadwood throughout crown

20. Good vitality throughout remaining canopy, with very dense, deep green foliage.

Conclusions

A wonderful example of a veteran tree with a very striking form & character. Despite numerous, very large historic pruning wounds, no evidence of significant decay was found. The tree appears to have been a victim of its own success, in that it has such exceptional vitality for a tree of this age/size/life stage that it appears that one of the main stems failed under its own weight, snapping multiple other large limbs on the way down on the South side. The snapped ends of the limbs should be retained for habitat purposes.

The remaining limbs are at risk of similar failures. Fibre buckling is present on several stems, indicating that the sheer weight of the foliage combined with the very wide spread of the crown is producing a very significant force on the limbs. Given T1's location over a main road and well frequented church carpark, sympathetic remedial work is required to mitigate the risk and retain the tree.

Recommendations:

- Crown reduction, removing approx. 2m in branch length, to lessen end weight and shorten lever arm to prevent premature failure of buckling limbs as well as reducing the sail area
- Remove/shorten major deadwood to retain veteran features and valuable habitat
- Remove snapped/hanging limbs
- Clear majority of minor deadwood to lessen literal dead weight acting on limbs

Above work to be completed within 2 months (by 9th October 2024).

A reinspection should be carried out within 2 years due to target rich surroundings.

9. Photographs



Figure 1: Photo showing T1 from East side



Figure 2: Photo showing T1 from south side



Figure 3: Photo showing T1 from West side



Figure 4: photo relating point 1, 2 & 8 in Findings



Figure 5: South side of base, point 10 in findings



Figure 6: North side of base



Figure 7: East side of base, point 11 in findings



Figure 8: West side of base



Figure 9: rib mentioned in point 4 of Findings



Figure 10: 'Cup' union, point 6 in Findings



Figure 11: Fibre buckling, 12.1 in findings



Figure 12: points 12.2-12.4 in Findings



Figure 13: point 12.5 & 12.6 in Findings



Figure 14: snapped stem, point 13 in Findings



Figure 15: Fibre buckling, point 14.1 in findings

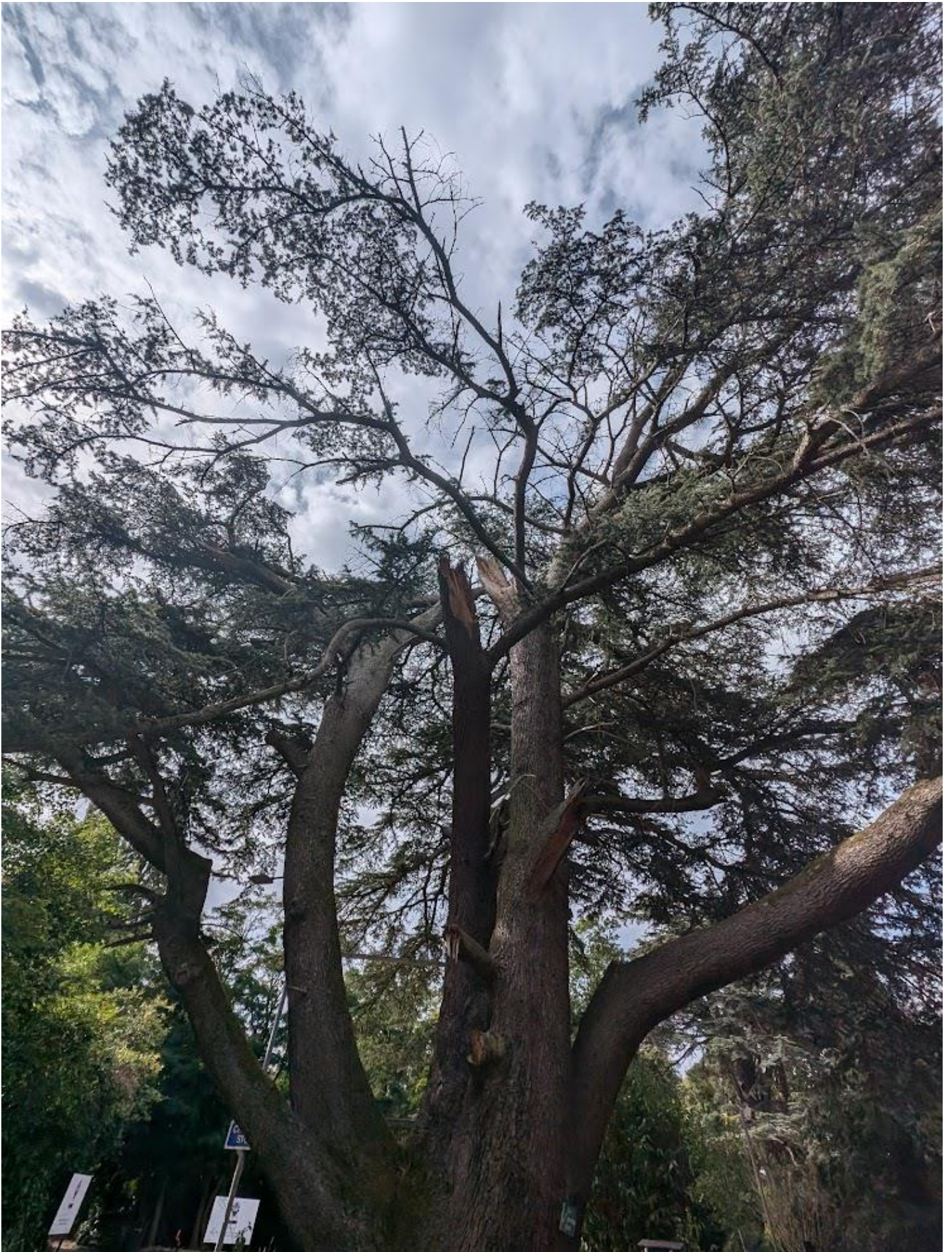


Figure 16: Multiple major limb failures, points 15.2, 17.1, 18.2 & 18.3 in Findings



Figure 17: points 18.3.3 & 18.3.4 in Findings

10. Map

