



Gale Tree Consultancy

Tree Condition Report

Field House, Rudgwick, RH12 3DD

July 2025

Ref: TCR/653/25

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Executive Summary

- A mature tree located within a flat area in front of a new build property, adjacent to a busy B road
- Extensive decline of the tree linked to numerous factors, including acute oak decline (AOD) and bacterial wetwood
- Various options provided for management from remedial pruning over the carriageway through to complete removal and replacement planting



1.0 Introduction

1.1 Client and Address

- Mr & Mrs Eden, Field House, Cox Green, Rudgwick, RH12 3DD

1.2 Site Address if Different from the Above

- As above

1.3 Date of Inspection

- 1st July 2025

1.4 Name of Inspector

- Andrew Gale *Dip Arb L6 (ABC) MICFor M.Arbor.A*

1.5 Our Reference

- TCR/653/25

1.6 Instructions Received

- I have been instructed by the client to undertake a ground level visual inspection on an oak tree growing within the grounds of the above property
- I am to provide my findings in the form of a report detailing any remedial work that may be necessary

2.0 Scope of the Report

- Trees are dynamic living organisms, and their health and condition can be subject to rapid changes, depending upon a number of internal and external factors
- The conclusions and recommendations contained within this report are based on information gained at the time of inspection and are subject to the limitations of the specialist nature of this survey
- Therefore, the likelihood of failure is considered for two years from the reports date based on the information gained on the day of the report and on the assumption that any recommended work will be undertaken in the time frame specified
- It should be noted that even completely sound, healthy trees, can fail given sufficiently severe weather conditions therefore this report is not valid in adverse or unpredictable weather conditions or for any failure due to Force Majeure
- The site has not been checked for any statutory constraints
- The trees were not assessed for wildlife which would include birds or bats



3.0 Results of Inspection

3.1 Tree Species and Dimensions

No.	Species	Scientific Name	Stem Dia.	H (m)	Crown Spread (m)				Age	Phys. Con.
					N	E	S	W		
//	Hybrid oak ¹	<i>Quercus x rosacea</i>	123cm	17	10.0	9.0	9.5	10.0	M	Poor

3.2 General Description

- The tree is situated in an area of ground to the southeast of the property, adjacent to the B2128 Church Street
- The tree is c.85m above sea level² with the difference in height between the tree's location and Church Street being c.1.2m
- The immediate landscape is made up of residential housing where the wider landscape is farmland with blocks of woodland of similar elevation above sea level
- The tree sits within a piece of ground that was once part of a single property, but that since had properties built within the large garden
- The tree was protected during the construction process with fencing consistent with the recommendations found in BS5837:2012 Trees in relation to design, demolition and construction - Recommendations
- A hedgerow along the frontage of the property and Church Street has been removed. Beneath the tree is a wildflower meadow, where the underlying bedrock geology is Weald clay formation³
- The main stem forks at c.5m where the crown forms
- Around much of the stem circumference, audible changes in tone were heard from ground level up to c.2.0m when was assessed using a nylon headed sounding mallet - please see appendix 1 Method of Inspection
- On the east and south side of the stem at c.5m, patches of flaking bark were noted
- Black staining was recorded on the north, south and northwest side of the tree up to a height of c.7m
- On the south, southwest and west side of the stem, exudations were recorded up to a height of c.4m; these were giving off a fermenting smell, and were attracting hornets and wasps
- At c.2.3m on the west side of the stem is a cavity, the depth and condition of which is unknown
- The cavity has formed within the central area of an occluded wound where an audible change in tone was heard when the area was assessed with the sounding mallet
- 'D' shaped exit holes were noted on the stem, consistent with those made by the *Agrilus biguttatus* beetle (Oak splendour beetle)
- On the day of the assessment, the tree had approximately 25% leaf cover with extensive dead and declining wood being noted throughout the crown, and over Church Street

¹ I believe the tree to be a cross between Pedunculate (synonym English or Common) oak and Sessile oak

² www.calcmaps.com

³ www.geologyviewer.bgs.ac.uk



4.0 Summary of Results

- For a tree to thrive, it needs a healthy soilscape which enables the rooting system to operate at full capacity; when this is compromised, the trees health will deteriorate
- From the drawings provided by the client, I would say that Tree Protection Plan TPP/05/Rev A was enforced as there were no immediate or obvious signs of ingress into the construction exclusion zone other than the small area on the northwest side of the root protection area permitted by the local planning authority
- The hedgerow along the roadside has been removed with no immediate signs of the roots. This may be due to them having been ground or grubbed out, or simply that I could not find them in the long grass of the wildflower meadow
- But if they had been ground or grubbed out, this may have affected the rooting system of the tree as most roots can be found within the upper 60cm of the soil horizon
- The black staining on the north, south and northwest side of the tree is consistent with a condition known as Acute Oak Decline (AOD)
- AOD is a complex disease, thought to be associated with a certain bacterium, which affects native oak trees over 50 years old. It manifests itself on the stem as patches of black fluid/bleeds which results in the death of the underlying tissue
- Larval galleries of the buprestid beetle *Agrilus biguttatus*, are usually found beneath the bleeds and are identifiable by a 'D' shaped exit hole; the beetle and disease often occur together on the same tree
- In severe cases the death of the underlying tissue can encircle the tree preventing water and nutrients from moving around the tree which are essential for growth
- There is no cure or treatment available, and as the tree becomes weakened it can die within 4 to 5 years of the onset of symptoms; this rapid rate of decline is why the disease is described as acute
- Please see <https://www.forestresearch.gov.uk/tools-and-resources/fthr/pest-and-disease-resources/acute-oak-decline/> for further details about the condition
- Other conditions, such as *Armillaria mellea* (Honey fungus) and *Phytophthora* spp. also produce staining but at the time of the assessment, I believe AOD to be the cause
- The exudations on the south, southwest and west side of the stem are being caused by bacterial wetwood, sometimes known as slime flux
- The bacteria is thought to enter the tree via damaged roots and is quickly taken up the stem where it grows in the spring wood. As the infection matures, some ferment and produce a gas which is expelled through cracks and fissures in the outer bark layer resulting in the exudates running down the bark
- In itself the condition is not always fatal, but if it enters the transpiration stream⁴, this can lead to wilt disease⁵; there is no cure or treatment available

⁴ The continuous water volume from root to leaf, drawn up against gravity by gradients in water potential

⁵ Diseases that infect the sapwood and reducing the water conducting capacity of the wood



- Using the historical imagery section on Google Earth, it is clear that decline was beginning to form around 2021 with the image showing a bare area in the central portion of the crown, which was before of any building work started
- This suggests that the underlying cause of the decline was becoming active four years ago

5.0 Conclusion

- Based on the above observations I am of the opinion that the decline of the tree is not down to a single pathogen
- The presence of the black staining and D shaped exit holes suggest acute oak decline is active within the tree, and that a bacterial wetwood is also present
- If roots were damaged during the hedge removal, this may have allowed the ingress of the bacteria into the transpiration stream of the tree
- Even with the tree protection fencing installed correctly to the measurements prescribed within the root protection area, the distance would not, and could not, have taken into account the extent to which the tree's mycorrhizal and fine feeder roots spread radially, and which would invariably been damaged during the construction process
- The culmination of these factors has resulted in the rapid decline of the tree which is evident by the volume of dead, declining and dysfunctional wood within the crown, some of which overhang Church Street
- I do not believe it is possible for the tree to recover from the current extent of decline, which leaves the next management option one of pruning to remove the dead and dysfunctional branches to mitigate against the risk they pose
- Pruning will be difficult as any branch removed would need to be taken back to a suitable secondary growth point but with the sheer volume of dead and dysfunctional wood, this will be almost impossible across much of the crown as there simply aren't suitable growth points
- To encourage the functioning growth already present, the soilscape could be improved by removing the wildflower meadow and replacing it with a 75mm layer of rotted woodchip⁶ mixed with biochar⁷. Ahead of this the heavy clay soil could be loosened to allow the effects of the rotted chip/biochar mix to get into the soil, but this is no guarantee that the tree would recover
- This leaves the final option of complete tree removal
- This would obviously be a very controversial approach and one that should not be undertaken lightly
- However, replacement trees could be planted to maintain the treescape, albeit to a lesser degree
- This would also allow the wildflower meadow to be retained adding greater diversity to the immediate landscape

⁶ Decomposes into the soil releasing essential nutrients and improving soil structure

⁷ A charcoal like substance with a porous structure that can hold onto nutrients preventing them from being washed away



6.0 Recommendations

- At the minimum, remove deadwood from over Church Street
- If removal of the tree is the preferred choice, undertake within six months so any replacement can be planted during the dormant period
- If the tree is located within a conservation area or subject to a tree preservation order, a formal application to the local planning authority will be required and written consent obtained prior to any work is carried out
- I would strongly recommend that a planting scheme is already in place when the application form is submitted which would include the tree species, tree size and the tree nursery of choice from where you would purchase the trees
- If the tree is retained, reassess it in two years after the report's date
- This time frame should be shortened in the event:
 - Fruiting bodies emerge from anywhere on the tree
 - After extreme weather events such as:
 - Wind gusts in excess of Force 8 on the Beaufort Scale – see Appendix 3
 - After named extreme weather events

This concludes my report.

Yours sincerely

Andrew Gale MICFor Dip Arb L6 (ABC) M.Arbor.A

 Institute of
Chartered Foresters
Registered Consultant

 Arboricultural
ASSOCIATION
Professional Member

Date: 14th July 2025



7.0 Appendix 1

Method of Inspection Visual Tree assessment - VTA

- A nylon headed mallet is used to sound the stem as an initial indication of the presence of decay
- Dull tones and changes in resonance indicate areas of lifted and moribund bark, and areas where decay is forming within the main body of the stem
- A thin steel rod is used, where necessary, to assess the depth of any decay in cavities and concavities between buttress roots
- A pair of binoculars are used to inspect features within the upper crown, such as extension growth, bud size and distribution and cracks and splits in the structural branching
- A magnifying glass can be used to assess beetle emergence holes, and other microscopic details that would otherwise be too small to assess with the naked eye



Appendix 2

Survey Key

Tree No.	Relating the tree being assessed	
Species	Common name in English	
Scientific name	The current scientific name will be used	
Stem Diameter	Measured at 1.5m on the highest side and shown in centimetres (cm)	
Height	Measured using a TruPulse digital clinometer and shown in metres (m)	
Crown Spread	Measured using a TruPulse digital clinometer and shown in metres (m)	
Age Class	Young [Y]	recently planted or established within the last 5 years
	Semi Mature [SM]	a well-established youngish tree but far from full maturity
	Early Mature [EM]	long established nearing its full size but not fully mature
	Mature [M]	fully mature tree that has met its full size
	Late Mature [LM]	a fully mature tree that has passed its peak; may exhibit areas of decline
	Veteran [V]	a tree with the physical characteristics of an Ancient tree but is not ancient in years compared to other trees of the same species
	Ancient [A]	a tree that has past full maturity and is old or aged in comparison to other trees of the same species
Physiological Condition	GOOD	No significant physiological problems
	FAIR	Some physiological problems
	POOR	Significant physiological problems
	MORIBUND	In a serious and irreversible decline
	DEAD	Not alive
Tree Structure	Main Stem	The stem, from ground level up to the point at which it bifurcates
	Primary Stem Section (PSS)	The larger stem sections that emanate from the main stem after bifurcation; form the main crown structure
	Secondary Stem Section (SSS)	The stem sections that emanate from the primary stem sections that contribute to the inner crown structure
	Tertiary Stem Section (TSS)	The stem sections that emanate from the secondary stem sections that contribute to the inner and outer crown structure
	Subordinate Branch Structure (SBS)	The smaller diameter branches that help form the inner and outer branch structure; leaf bearing twigs emanate from these to form the crown



Appendix 3

Beaufort Scale

Beaufort Number	Name	Knots	MPH	Effects Observed on Land
0	Calm	Under 1	Under 1	Calm, smoke rises vertically
1	Light Air	1-3	1-3	Direction of wind is shown by smoke drift but not by wind vanes
2	Light Breeze	4-6	4-7	Wind felt on face, leaves rustle, ordinary wind vane moved by wind
3	Gentle Breeze	7-10	8-12	Leaves and small twigs in constant motion, wind extends light flag
4	Moderate Breeze	11-16	13-18	Raises dust and loose paper, small branches are moved
5	Fresh Breeze	17-21	19-24	Small trees in leaf begin to sway, crested wavelets in inland waters
6	Strong Breeze	22-27	25-31	Large branches in motion, whistling heard in telegraph wires, umbrellas used with difficulty
7	Near Gale	28-33	32-38	Whole trees in motion, inconvenience felt in walking against the wind
8	Gale	34-40	39-46	Breaks twigs off trees, generally impedes progress
9	Strong Gale	41-47	47-54	Slight structural damage occurs – chimney pots, slates removed
10	Storm	48-55	55-63	Seldom experienced inland, trees uprooted, considerable structural damage occurs
11	Violent Storm	56-63	64-72	Very rarely experienced, accompanied by widespread damage
12	Hurricane	64 and over	73 and over	



Appendix 4

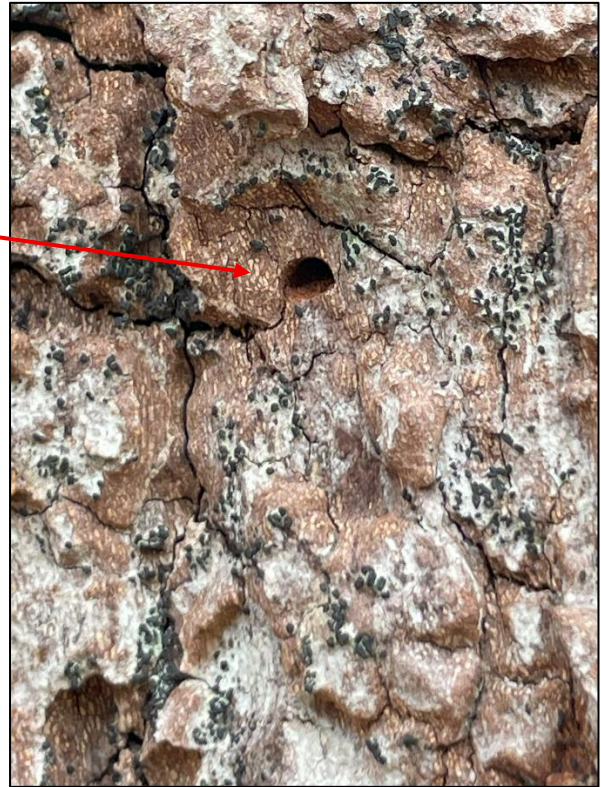
Site Photos



Hybrid oak adjacent to Church Street with the Heras fencing of the TPP clearly visible in the background



Exudations and bleeding on the lower stem. Hornets and wasps were observed feeding on the fermenting liquid



'D' shaped exit holes consistent with the *Agrilus biguttatus* and associated exudations suggest acute oak decline