

Gale Tree Consultancy

Tree Condition Report

11 The Plantation, Worthing, BN13 2AA

September 2024

Ref: TCR/572/24

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Executive Summary

- A mature tree in the rear garden of a residential property
- Extensive staining and exudations on lower stem consistent with *Armillaria mellea* (Honey fungus)
- White mycelium and wetness noted beneath the bark also consistent with the above fungus
- Extensive areas showing audible change in tone indicating dead and moribund bark
- Extensive loss of leaf material
- Previous detailed decay evaluation shows an area of decay is forming within the central part of the stem
- Removal recommended within six months of reports date



1.0 Introduction

1.1 Client and Address

- Mr & Mrs Henderson, 11 The Plantation, Worthing, BN13 2AA

1.2 Site Address if Different from the Above

- As above

1.3 Date of Inspection

- 19th September 2024

1.4 Name of Inspector

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

1.5 Our Reference

- TCR/572/24

1.6 Instructions Received

- I have been instructed by Mr & Mrs Henderson to perform a ground level visual assessment on T1 Common Walnut
- 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 six months 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
- The site has not been checked for any statutory constraints
- The trees were not assessed for wildlife which would include birds or bats



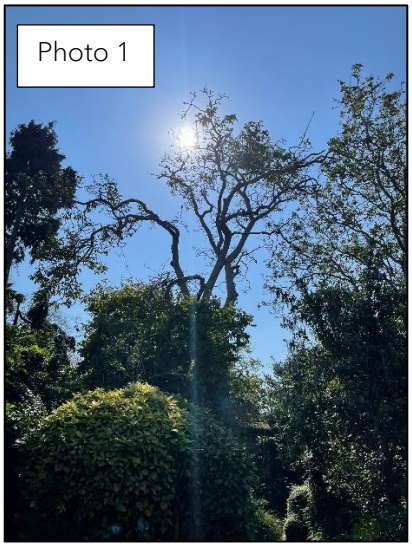
3.0 Results of Inspection

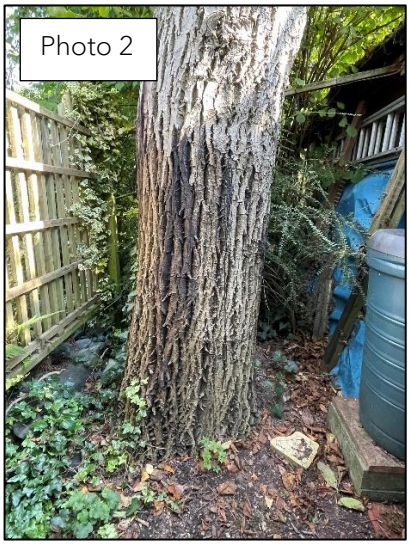
3.1 Tree Species and Dimensions

No.	Species	Scientific Name	H (m)	Crown Spread (m)				Age	Phys. Con.
				N	E	S	W		
T1	Common walnut	*Juglans regia*	9.5	60.	8.0	7.0	4.0 est.	M	MOR.

3.2 General Description

- The tree is located in the rear garden, adjacent to an outbuilding
- Extensive areas of staining and exudations around much of the lower stem accompanied by dead and moribund bark
- White fungal mycelium noted beneath the dead and moribund bark; the associated bark layer is wet
- Lower stem exhibits extensive changes in tone when assessed with a nylon headed mallet
- Leaf bearing material at c.25% of the crown's full potential
- The tree was subject to a detailed decay evaluation in 2022 which showed an area of low sonic velocity, and as such decay, was forming within the central area of the stem





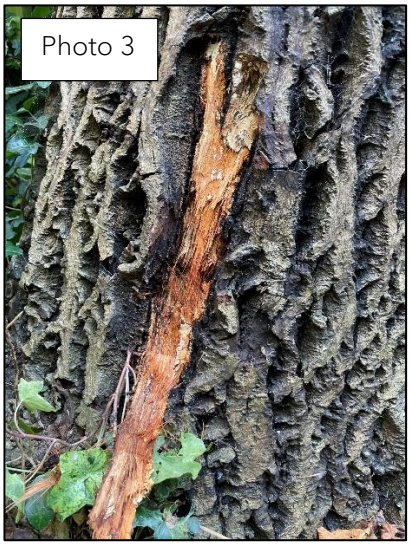
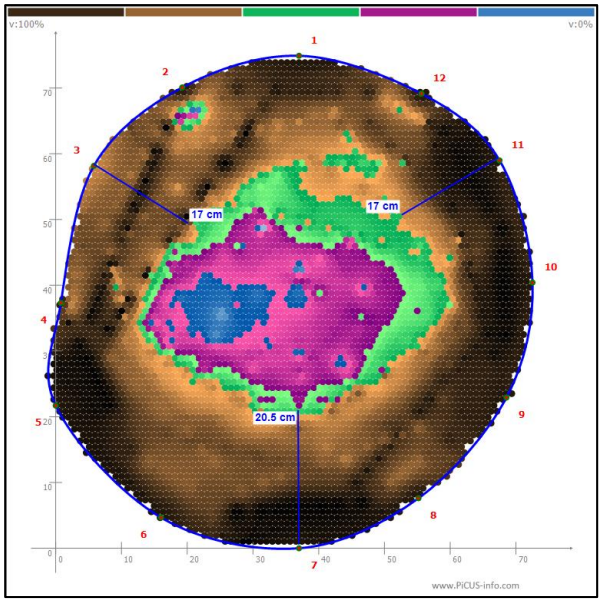


Photo 1 showing the lack of leaves within the crown of the tree
Photo 2 showing the extensive staining and exudations around much of the lower stem
Photo 3 showing the necrotic nature of the bark and white fungal mycelium



4.0 Summary of Results

- The staining and exudations on the lower stem along with the necrotic bark and white mycelium are consistent with the decay fungus *Armillaria mellea* (Honey fungus), which is a pathogenic form of the fungi
- Attributed mainly to broadleaved trees, it colonises healthy trees with an early indicator being a stain/exudation
- As the decay advances cambium tissue and function is lost resulting in crown decline; Common walnut are highly susceptible to *Armillaria mellea*
- At the time of the inspection, no fungal fruiting bodies were noted around the basal area
- The PiCUS assessment performed in 2022 showed an area of low sonic velocity, and as such decay, was forming within the central region of the stem – see below
- The three drill traces performed at MP3, 7 and 11 all confirm the depth of sound wood before the needle drill entered the cavity – the drill trace depths have been overlaid onto the tomogram below



Low sonic velocity in the central area of the stem indicates decay and dysfunction is present

- At the time of the decay evaluation in 2022, the crown condition was considered poor, however, since then it has deteriorated considerably
- This decline has, in my opinion, been expedited by the actions of the fungus, and which will invariably also impact on the tree's ability to compartmentalise the decay
- I therefore believe that the tree needs to be removed before the upper crown begins to collapse
- This should be performed within six months of the reports date
- If the tree is subject to a tree preservation order or located within a conservation area, the necessary permissions will be needed before any work can commence



5.0 Recommendations

- Implement the tree's removal as soon as possible
- 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

This concludes my report.

Signed:

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

Date: 30th September 2024

Arboricultural ASSOCIATION Professional Member



6.0 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 man 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	
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