

## Forest Tree Surgeons

TREE SURVEYING\*. TREE SURGERY\*, TREE PROTECTION\* & LANDSCAPE PLANTING\*

Francesca Nowne BA (Hons)



**Tree Survey:** Trees at the Recreation Ground and to the east of the church.

**Client:** Brede Parish Council.

Date: November 2023

**Surveyors and Report Authors:** F. Nowne BA (Hons)

**DKS-FN/02F**

## **Introduction**

Forest Tree Surgeons (FTS) has been commissioned by The Parish Council to carry out a survey of trees in regularly used areas of the Broad Oak Brede Parish Council Recreation Ground and near the church, as instructed by the client and as detailed within the Visual Tree Assessment Tables. The survey scope in 2023 was to visually assess trees and update the recommendations in the 2020 and 2021 reports, to manage trees for as safe retention as is possible from the visual assessments made. It is noted that much tree work has been undertaken.

Trees were assessed from ground level with the aid of binoculars. No specialist high technology devices were utilised such as ultrasound decay mapping machines. Assessment is based upon professional qualifications and knowledge, and published professional guidance/recommendations and legislation. The survey was carried out during November 2023 the weather conditions were dry and clear presenting no impediment to the survey.

**RISK ASSESSMENT:** Although the potential risk to someone passing beneath a tree when the tree or part of it fails is relatively remote, the risk is present. This increases significantly in areas of consistent and regular usage on a year round basis, such as pedestrian and vehicular highways and amenity areas. Where static structures exist, the risks become constant and an assessment is made as to whether complete or partial failure of a tree could cause damage to such structures. Within the scope of any tree survey it is a fact that not all risks of stem or crown failure can be covered, particularly in relation to freak occurrences of weather when even trees of a sound condition can be the subject of structural failure. Trees also have the rare propensity to drop limbs that appear to be in an acceptable condition. These rare occasions have been known to occur in spring and summer on calm days. Although rare, trees shedding limbs should be acknowledged as a risk that cannot be entirely mitigated. The law requires that properties are retained safely for residents, visitors and neighbours (Occupiers Liability Act, 1984, Defective Premises Act, 1972 and as Common Law Duty of Care) this includes the reasonable care of trees.



## Limitations

The visual tree assessments (VTA) were solely visual and did not include the removal of any vegetation from or around the trees. Therefore, recommendations are based simply on indicators that could be seen. It is therefore possible that discreet defects could be missed however, regular surveying of trees and acting upon report recommendations increases the possibility that such defects will be detected.

## Terminology/Interpretation

**Epicormic:** Growth low in tree crowns or along branches, often a sign of stress.

**Pollard:** Removal of the majority of a tree's crown.

**Sphaeroblast:** Warty or tumorous growth, generally causing no harm to the tree.

**Retrenchment:** Sensitive long term pruning programme to reduce the tree to a safe structural height which provides the tree with sufficient recovery time between operations. Retrenchment pruning endeavours to ensure that the tree's physiological condition is not significantly damaged.

**Crown clean:** Making safe damaged and crossing branches.

**Veteran:** A tree beyond the mature stage; often this is the longest living phase and dependent on the species can extend for two to three hundred years and longer in exceptional circumstances.


**Aged:** Potential veteran tree.

**Height in tables:** L; large 20 metres+. M; medium 15 – 19 metres. S; small up to 14 metres.

## Survey Findings

The vast majority of the trees surveyed did not present evidence of major structural vulnerabilities that could potentially result in injury to persons or damage to property. This is not surprising given that the trees appear to have not been the subject of regular management. Perspective is important as the chance of being under a tree at the exact moment it fails is rare and failure usually occurs during inclement weather, dead wood falls from trees constantly and is only noticed when it causes injury. However, there are a few high-level risk trees and this survey recognises this by recording these trees as requiring attention. The following tables set out briefly tree condition and management recommendations.

## Visual Tree Assessment of trees at Broad Oak Brede Recreation Ground and Church

Tree	Species	Life Stage	Condition	Height & Dbh	Comments
T1	English Oak Old tag 0306	M	<p>Well balanced crown, starting to exhibit veteran features. Height to lowest part of canopy = 1.8m. Open unions, no tight forks.</p> <p>Crown spread: N 11.5 m      E 12 m S 10 m      W 8 m</p> <p>Good crown density and size of leafing. Previous management good – tree has responded well, all previous wounds have partially or totally occluded.</p> <p>Minor mechanical damage to NW side of main stem, with a cavity at ground level – localised. This is not unusual for a tree of this age. An old tear is evident in the top of the crown on ascending branch – mid crown which is only partially occluded.</p> <p>No exposed roots or signs of root plate lifting. Lateral scar on Eastern side at ground level to 2m. Deepest point on probing 200 mm – leads to a tight union – mitigated on far side with good compensatory growth. Some signs of hollowing associated with lateral cracking to Eastern buttresses but Northern and Southern buttresses are sound. Decay is therefore currently localised but needs monitoring.</p>  <p>2023 fungal activity.</p> <p>Dead wood in canopy continues and evidence of falling small stems.</p>	21 m 157 5 mm Dbh	<p>Footpath and road (4 m) to the South.</p> <p>Recommend annual inspection.</p> <p>Old fruiting bodies evident on the ground on first site inspection, but have been removed. Likely <i>Inonotus dryadeus</i>.</p> <p>Important amenity tree to the area.</p> <p>Recommend cyclical reduction plan, to maintain at current size – within five years carry out light sympathetic reduction to BS 3998. Provides good nesting and roosting habitat.</p> <p>2022 Elder has been removed allowing clear access around the base of the tree. <i>Grifola frondosa</i> observed in 2021 was not present, but could have been removed by landscapers. Ground has recovered well after demolition of the pavilion. Blackening (<i>Bulgaria inquinans</i>) (see index) within fature on eastern side of the main stem has worsened. It is and there is some new mechanical damage on the northern buttress. (see index).</p> <p>2023 The cracking and cavity on the eastern side of the main stem have widened, (cavity depth 35 cm) with hollowing sounds thereon. Fungal growth has got larger and stronger.</p> <p>Continue to monitor annually.</p>

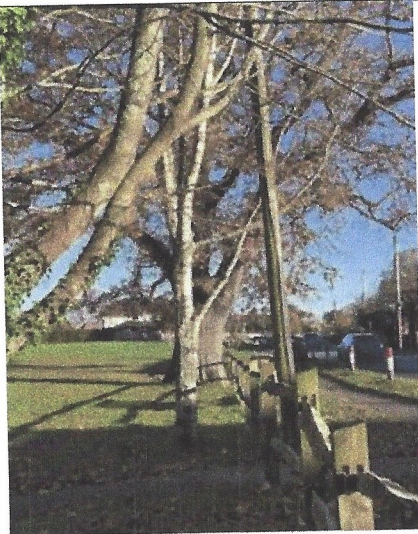


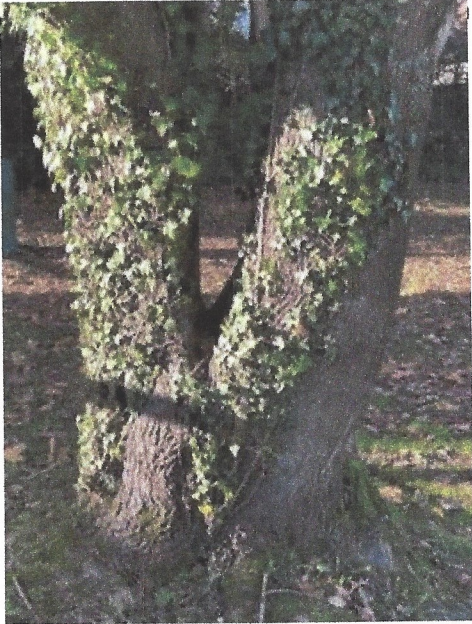



2023 Cavity on eastern side  
of the main stem.



T2	Silver Birch	EM	<p>Tree exhibits exposed roots from W to E which are damaged and compacted.</p> <p>Drooping canopy may be drought stress and compaction.</p> <p>Deadwood present within crown. Tree shows a propensity to form tight unions although none are showing signs of bark inclusion at time of inspection.</p> <p>Base appears sound no sign of hollowing.</p> <p>Yellowing of leaves and crown becoming sparse indicate tree is under cultural stress.</p> <p>Root disturbance caused by new concrete path may have contributed to sparse canopy. Little nesting or roosting habitat value.</p>	<p>13.5 m</p> <p>Dbh 310 mm</p>	<p>Recommend light forking of ground to decompact soil within root zone- to 50 mm puncture points and move slightly to allow permeability of ground, do not lift or turn soil over (2019). <u>This has not been carried out 2020.</u></p> <p>2022 Improved ground conditions have benefitted the canopy of the tree.</p> <p>Recommend removing low value <i>Amelanchier</i> at base to release T2 (2029). <u>This work has been carried out 2022.</u></p> <p>Recommend annual inspection if retained. Recommend fell in the longer term if development plans go forward for new buildings.</p> <p>Proximity to Maple leaves this tree in a long term unsustainable relationship with its surroundings.</p>
----	--------------	----	--	---------------------------------	--




			 <p>2023</p> <p>No real change - crown will rebalance itself now that the pavilion has been removed.</p>		
T3	Norway Maple	M	<p>Poorly formed tree with three major stems, all with poor unions.</p> <p>2022 Pavilion has been removed and the ground has recovered well .</p>	<p>15 m</p> <p>Dbh 305</p>	<p>This tree will eventually grow into failure. To retain the tree it is recommended that cyclical reductions are carried out.</p>



		<p>Poor unions, with bark inclusion throughout the tree.</p> <p>Secondary thickening as tree grows and increase in lever arm stress on unions will eventually result in structural failure.</p> <p>Multiple tight unions with inclusion currently showing minimal signs or subsidence and stress.</p> <p>Low amenity value tree.</p> <p>Exposed roots associated exhibiting mechanical mower damage.</p> <p>Limited root area with concrete platform within 0.5 m. Aspect ratio on lower limbs is poor. Small amount of deadwood in mid-crown. Poor occlusion of old cuts with associated cavities on</p>	<p>365</p> <p>550 mm</p>	<p>2022 – if the pavilion has been removed is going to be replaced, felling and replanting would be a more viable option, especially if any new building would have foundations and would be in the same location as the demolished one.</p> <p>Monitor annually if retained.</p> <p>2023 Root damage continues with grass cutting blades set too low.</p>
			<p>lifted in the</p>	




T4	Beech	SM	<p>2022 – now totally green foliage exhibited. Poorly situated tree, with bus stop to South, pavilion to North.</p> <p>Tree has some structural vulnerabilities with poor unions present within crown – principally Southern lateral at 4 m.</p> <p>Base sound.</p>  <p>2023</p>	<p>13 m</p> <p>Dbh 220 mm</p>	<p>Tree of poor form with low arboricultural value, consider removal and replacement. Tree has now fully reverted to green foliage</p> <p>2022 Foliage is resting on the roof of the bus stop and will damage tiles – recommend lifting canopy. Tips of canopy have died back. Root protection would be necessary in the event of a rebuild.</p> <p>Monitor annually if retained.</p> <p>2023 – The beech has benefitted from the additional light as a consequence of the removal of the pavilion and has flourished. Keep the crown lifted over the adjacent bus stop.</p>
T5	English Oak	M	<p>Tree is under stress having lost some root function. Tree assessment limited due to the Western neighbour boundary – Pea beach driveway to the west has created compaction of the roots. Heavy ivy cover has made assessment difficult in the past – now redressed to some extent.</p>  <p>2023</p>	<p>15 m Est</p> <p>Dbh 500 mm</p>	<p><b>Ownership of tree to be ascertained.</b></p> <p>Annual inspection recommended.</p> <p>2022 – some Ivy has been cut allowing retrenchment. Some lower limbs and deadwood have been lifted and removed. Root area will need protection in the event of any re-building on the same site.</p> <p>2023 – some tree canopy reduction has been carried out. No need for action.</p>


G1	<i>Prunus</i> and Damson	SM	<p>Presents as one crown. Crowns extend out (60%) to the East due to competing boundary hedge with neighbour. Good West lateral spread with no signs of root plate lifting.</p> <p>Historic level change in root growing area - ditch to West – roots well adapted.</p>  <p>2023</p>	<p>7- 8 m</p> <p>Dbh 300 mm &amp; 250 mm</p>	<p>Basketball court area to South-east within 5 m.</p> <p>Recommend annual inspection.</p> <p>2022 – area has been cut back, still retaining good wildlife areas and roosting abilities.</p> <p>2023 - this group has extended out to the east, and is in danger of encroaching over the adjacent basket ball area - recommendation to cut back before it becomes a larger job.</p>
----	--------------------------	----	--	--	---




T7	English oak	M	<p>Two bay swings and nest swing to the east. Heavy Ivy cover preventing full assessment. Co-dominant stems.</p> <p>Bifurcates at 1.5 m – union is currently sound on both sides.</p> <p>Impossible to access Western side of the main stem- panel fence to rear of main stem.</p> <p>Crown spread to east = 10m No signs of veteran features.</p> <p>Canopy touches cross bar of nest swing. No lean.</p> <p>No cracking observed.</p> <p>Small amount of compaction near base due to path.</p>	<p>19 m</p> <p>Dbh 1500 mm Est</p>	<p>Ivy has been severed</p> <p>Ascertain ownership of tree.</p> <p>Recommend annual inspection</p> <p>2022 laterals leaning towards cross bars have been lifted as suggested.</p> <p>2023</p>  <p>Low splitting point - consideration could be given to cable bracing the two main stems - photo above demonstrates the clear division of the stems which are more vulnerable to splitting away from each other in high winds.</p>
G2	<p><i>Malus</i> spp.</p> <p>Crab Apple</p> <p><i>Crataegus monogyna</i> and</p> <p>Ash</p>	SM	<p>Full visual tree assessment was impossible due to heavy Ivy cover and confusion about boundary line.</p> <p>Ash appears to be in neighbouring garden. No <i>Hymenoscyphus fraxinea</i> evident in Ash.</p> <p>Affords good nesting and roosting habitat.</p> <p>Valuable habitat area.</p>  <p>2023</p>	<p>17 m max</p>	<p>Clarify ownership of whole area.</p> <p>Access path allows better access 2022.</p> <p>2022 – grass cuttings are no longer being deposited in the area.</p> <p>2023 – new bench has been installed - lift vegetation</p>

T9	Hornbeam	M	<p>Located by rear garden gate to neighbouring property.  Root damage observed due to compaction on pathway line.  Main stem is based on bank – very active rabbit burrowing in area could weaken stability.  Ivy has been severed.  Location prohibits full assessment.  Target area would be garden to North-west.  2022 – spread of crown to the north east – imbalanced crown.</p>  <p>2023</p>	<p>15.2 m</p> <p>Dbh 500 mm</p>	<p><b>Ascertain ownership.</b>  Fencing on Southern side of main stem – chicken wire absorbing into the tree.</p> <p>Recommend re-siting the fence and removing from stem without damaging the tree. 2022 Obviously this is dependant on ownership. Ivy has died and coming away from the main stem. Pulling it away would assist in enabling a closer inspection.</p> <p>2023 - no change.</p>
----	----------	---	---	---------------------------------	---



T10	English oak				2022 – removed.
T11	English oak	V	<p>Monolith Oak Excellent habitat.</p>  <p>2023</p>		<p>Create narrow pathway to rear of stem to assess basal condition - currently inaccessible.</p> <p>2022 – access to all sides is now clear – hollowing at base on eastern side - dig out to examine depth of hollowing. Hazel stem has established itself.</p> <p>2023 – no change – no significant deterioration</p>

T12	English oak	M  Not Yet veteran	<p>Stands on Western boundary line of recreation ground.</p> <p><i>Ganoderma</i> spp. present x 2 on eastern side of main stem.</p> <p>Hollowing evident on South-eastern side – currently very localised – probe extent 200 mm + representing small narrow wedge of decay.</p> <p>Heavy Ivy cover within canopy prevents full assessment.</p> <p>Root morphology appears good despite bank and ditch.</p> <p>Deadwood in the lower canopy.</p> <p>Staining observed on major lateral to north at about 6 m.</p> <p>2022 – fungal bodies observed below:</p> <p>2023 – fungal bodies have extended on the eastern and western sides of the main stem. Ownership is still not established as far as the authors of the report area aware. There is a damaged cherry in the garden of the adjacent property which looks as though it might have been hit by a falling limb. Much deadwood in the area on the ground around play equipment. Recommend asking neighbour to share cost of removal of major deadwood.</p>	<p>22 m</p> <p>Dbh 1260 Est</p>	<p><b>Ascertain ownership</b></p> <p>2022 - Ivy has been severed and access to main stem established around base of the tree. to allow for full visual tree assessment and to allow inner crown leafing.</p> <p>Large bracket fungus on western and eastern sides of the main stem observed</p> <p>- <i>Ganoderma</i> spp - 3 now on eastern side and one on western side that appears well established and unobserved until now.</p> <p>Annual inspection.</p> <p>Limbs have been sympathetically lifted over gym equipment 2022</p> 
-----	-------------	--------------------------------	---	-------------------------------------	--






2023





2023



2022

T13	Sessile oaks x 3	M	<p>Row of three Sessile oaks on Northern side of the recreation ground. To the North there is a 2m bank of and then a drop to a pond. No recent signs of root disturbance in the area.</p> <p>Heavy Ivy cover on all three oaks.</p> <p>Oaks one and two are co-dominant. Oak 1. bifurcates at 3 m – union is tight on the Northern stem but sound and sheltered location so unlikely to snap out. Oak 2 splits at 2 m with a tight union. Oak 3. Has a partially failed lateral to the Southern side at 3m – minimal lever arm - no need for action.</p> <p>Chicken wire absorbing into Northern side of Oak 3.</p>	<p>13 m</p> <p>Dbh</p> <p>380 mm 400 mm 500 mm</p>	<p>Monitor annually</p> <p>Important to retain screen to neighbouring pond as a safety deterrent to the pond.</p> <p>2022 – no change. No action necessary. 2023 – no change – no action necessary.</p>  <p>2023</p>
T14	English oak	M	<p>Tree located on the Eastern boundary. Thick mixed hedge to rear and sides</p> <p>In conflict with chain link and wooden fence to the East.</p> <p>New row of Leylandii planting within garden on eastern boundary likely to have impacted on roots.</p>	<p>17 m</p> <p>Dbh 800 – 900 mm Est.</p>	<p>2022 – ivy growth has been severed but still well established in the crown of the tree. Laterals to north and south remain heavy – ownership appears to be with the Parish Council. Heavy acorn fall after dry summer.</p>



			<p>First significant branch 2m in Northern and Southern directions.</p> <p>Branch subsidence on Second northern lateral at 5 m observed, indicative of torsional stress. .</p> <p>Target area would be neighbour's fence – decay may be present in that lateral.</p> <p>Heavy Ivy cover prevents full inspection. Crown is sparse indicating the tree is stressed, possibly due to root disturbance.</p> <p>No exposed roots.</p> <p>Foliage is discoloured - normally associated with poor root function and nutrient deficiency..</p> <p>Small but insignificant amount of deadwood in canopy.</p>		<p>Inspect annually</p> <p>Keep a photographic record to track crown condition.</p> <p>2023 – no change</p> 
T15	English oak	SM	<p>Broad crown</p> <p>Average structural condition</p> <p>Good physiological condition</p> <p>Good rooting area.</p> <p>Slight compaction where children access the tree to climb.</p>  <p>2023</p>	<p>6 m</p> <p>Dbh 265 mm</p>	<p>Suggest soil amelioration by forking ground as with T2.</p> <p>Recommend biennial inspections.</p> <p>2022 - rebalancing of the crown observed – good crown shape. To date no adverse effects from summer drought.</p> <p>2023 – crown shape has improved – no action needed.</p>

T16	Purple crab apple.	M	<p>Situated in the South-eastern corner.</p> <p>Crown breaks at 1 m with three major stems with tight unions, all with included bark – typical of species.</p> <p>Mechanical damage on South-eastern side of stem at 0.3 m – large scar from mower damage. No compaction.</p> <p>Average physiological condition.</p>	<p>3 m</p> <p>Dbh 210 mm</p>	<p>Recommend biennial inspection.</p> <p>2022 – formative prune has taken place. No additional works needed at this time. 2023 – same.</p> <div data-bbox="1474 386 1757 678" data-label="Image"> </div> <p>2023</p>
-----	--------------------	---	---	------------------------------	--



T17	Beech				2022 – removed.
T18	Silver Birch  Oak		Queen's Green Canopy – planted		2022 - removed.
T19	Lime and Prunus spp.	SM	Good physiological condition – Small leafed lime. Prunus splits into three main stems Good leaf cover and condition. Provides excellent nesting and roosting habitat.	2 m  Dbh  290 mm 280 mm 280 mm	2022 – Lime has been coppiced and managed as one crown.  2023 - removed
T20	Plum Species	M	Multi-stemmed specimen with 17 + stems. Purple leafing at tops – reverting to green lower in the canopy. Basal cavity observed on the northern side at ground level to a depth of 500mm.	6 m  Dbh 200 mm	Monitor annually. 2022 Reduced canopy – still a bit straggly. Keep contained at 3m. 2023 – removed.

During the last year, four new plantings have been established in a row on the southern frontage of the recreation ground – one celebrating the Queen's Green Canopy. These replace T17, T18 T19 and T20 - T18 is not thriving and should be monitored in March 2024 to see if it should be replaced.



T21	English oak Tag 0392	M	<p>Mature specimen in a prominent location that has had relatively recent reduction works.</p> <p>Tree is not responding well and is dying back from reduction points.</p> <p>Structural condition: Average Physiological condition: Poor average. Rooting:</p> <p>North – relatively unrestricted</p> <p>East – 2 m to road</p> <p>South – 3 m to road West</p> <p>- 5 m to road</p> <p>Rooting area is compacted.</p> <p>Fruiting bodies found within root zone – Incipient Honey fungus.</p> <p>Ivy to 2.5 m = minor infestation Mechanical damage present on North-west</p> <p>buttress root with localised decay – minimal. Foliage density is sparse, colour and condition is normal.</p> <p>Leaf size is normal.</p> <p>Deadwood present - approximately 20% with some larger diameter over target areas.</p> <p>Targets: Road, Buildings, Footpath and Amenity area.</p> <p>Usage – constant.</p>	<p>17.7 m</p> <p>Dbh 855 mm</p>	<p>Tree is located in a high stress area, suffering from root compaction, root spread is limited on most sides.</p> <p>Previous reduction work has also caused stress to the tree, all of which is manifesting as crown dieback.</p> <p>Incipient honey fungus is now present, probably due to the tree's inhibited ability to defend itself due to the other stresses identified.</p> <p>Oak is relatively resistant to honey fungus but when under stress it can invade.</p> <p>Monitor die-back after soil amelioration every six months due to the high occupancy area and amenity value of this tree.2019</p> <p>2022 Ivy on eastern side of the main stem is keeping the bark damp and the rear of the bench seat. Ivy should be pulled away from the stem whilst it is young and relatively easy. Deadwood observed on the ground – canopy to western side of the tree shows a gap (church side). – see appendix.</p> <p>2023 Deadwood on the ground after high winds - consider dead wooding the crown.</p>
-----	-------------------------	---	---	---------------------------------	---



			Roosting habitat provided by specimen.		
--	--	--	--	--	--