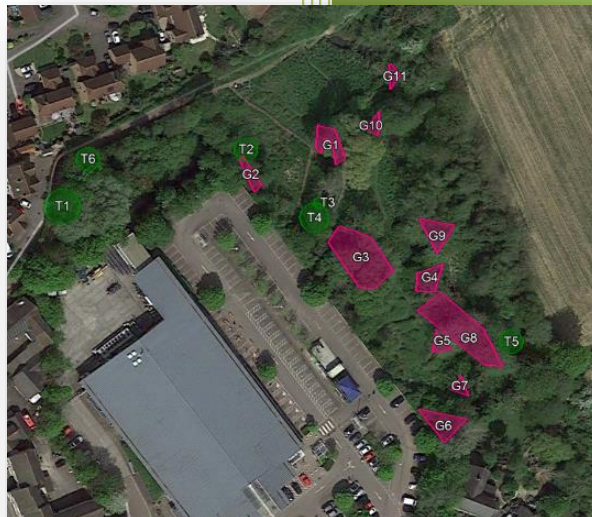




2.2021

Defective tree list and management recommendations



Site Address:

Rackleaze Nature Reserve
Cam
GL11 5LE

Re survey date: 2024

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Document summary

The document you are reading is to be used by landowners or site managers to help inform themselves and specialist contractors as to what outline management work is to be carried out following a general walkover tree survey of a given site/stand of trees. The aim of this survey is to identify trees or tree features which pose a threat or significant nuisance at the time of the on-site survey.

This document is part of an ongoing inspection regime (as a guide three yearly) and not a one off assessment. Subsequent visits at predetermined intervals are required to fully manage a tree stock. Each visit will address the next level of concern, subsequent documents created by Treecare Consulting will follow in survey order to ensure appropriate management occurs following one methodology. Further detailed inspection reports may be required where specific defects or situations and recommendations have been commented upon within this documents tree work schedules in the findings section.

It is a legal duty of care for a landowner to have trees inspected for safety at a reasonable frequency. The Occupiers Liability Act 1957 and 1984 ask that any foreseeable harm originating from a foreseeable hazard or risk from trees is to be minimised. This applies to invited guests and uninvited guests to your land and also neighbouring land. It is also advisable to carry out periodic inspections to ensure that pathways, lighting poles, services and doorways and so forth are not obstructed by nuisance vegetation. This document has been created following an on-site pedestrian inspection by a suitably trained, experienced and qualified arboricultural professional. The document should be made accessible in the site or landowners office and be kept as a record of the last inspection date and the findings of that inspection in order to comply with current legislation. Once superseded by a newer document the older document should be kept for a period of up to seven years.

The nominated manager/owner will implement the use competent arborist's and ground staff that have appropriate training, qualifications and experience for the tasks they are undertaking. It will be these contractors responsibility to check for tree preservation orders, conservation areas and any wildlife concerns which may affect how the required tree work takes place. In certain circumstances discussion with a neighbouring land owner may be required to carry out effective risk management. The nominated contractor should be able to offer this discussion process but should this not be possible please contact Treecare Consulting if you have any questions or concerns.

All tree work recommended by Treecare Consulting should be carried out by professional tree contractors and they should follow the recommendations of BS 3998 2010 and industry best practice for green infra-structure.

Where information contained within this document is not clear or understood contact with Treecare Consulting must take place to resolve any confusion.

Report Limitations

- Visual inspections (VTA) from ground level only using resonance mallet and stiff steel wire probe unless otherwise indicated around a three year interval.
- No invasive inspection techniques used unless indicated. No underground excavations will have been performed unless otherwise indicated.
- No climbing or inspection at height will have been involved unless indicated.
- Report information expires after twelve calendar months from report issue date unless part of an active progressive survey/work period. All comments relating to tree management are for wind speeds less than 40mph. Should winds in excess of 40mph be applied it is likely tree component parts may fail from fairly common and minor defects such as non-tensile forks that would not normally fail in lesser wind speeds.
- Reports and information relating to them are the property of Treecare until paid for in full. Information within reports is retained at Treecare's discretion until paid for in full. Treecare will retract reports and comments from any due process if not paid for in full.
- Treecare will not create access through dense vegetation to trees but will undertake the accessing work if contracted to do so.
- Where access to a tree is not possible, best judgement will be used. Accurate information will therefore be minimal and a re-survey may be required at the earliest opportunity if estimations on defective trees are concerned.
- Treecare only use suitably trained and knowledgeable persons for inspections holding the relevant qualifications for their purpose.
- Treecare has the right to remove employees from danger on site as they see fit.
- Verbal comments on buildings structural integrity are an opinion not fact (a structural engineer will be required for a detailed analysis).
- The diagrams and drawings provided by Treecare are not exact and should not be used for design purposes unless directed otherwise. They are however correct as a representation of site features and tree locations.
- Treecare will try their very best for the client. However, conflict of interest or professional judgement and character clashes must be accepted and resolved.
- Treecare's information and advice will only last as long as current legislation and current knowledge is up to date. Should new developments supersede previous comments then a new report must be issued.
- This is a preliminary report and further more detailed aspects may be required by the LPA or client at a later stage to define exact processes.

Schedule explanations & descriptions

Within the following survey schedule various information, has been provided to help inform the site manager of the defect or a concern. These headings have been explained in brief below. Should any heading or content not be understood please contact Treecare Consulting.

Item number – this is shown as T or G depending on if it is a singular tree or a group.

Tag No- this represents the small colored plastic tag which has been fitted to trees if required. The tag is unique to the tree and corresponds with the schedule and the site plan for identification purposes.

Species- unless otherwise indicated the species will be recorded as the most common uniformly understood name.

Age/class- helps in the identification process as descriptive information.

Use zone- how frequently the area is used or occupied by pedestrians, traffic or structures.

Spread M- this measurement is the average radius of the trees crown in meters. For irregular crowns this measurement is still used to indicate the tree on a site plan.

Physiological condition- this is a record of how the tree is performing as a plant. Leaf size, colour, density, buds and shape all help to indicate physiological health.

Structural condition- the trees structure is looked at to see if it has been significantly affected by obvious decay, splits, structural weakness and damage.

Consideration- a consideration can be what the surveyor sees as a potential concern. This can be people, services or users of a road or path.

Defects- obvious defects are recorded here such as dead wood, broken limbs, weak forks and basal decay.

Specific recommendation- this is to highlight what work is required to reduce the hazard where possible. This may include tree felling. Felled trees should be replaced if space allows as this is good practice but more suitable species should be used.

Further Inspection – This is used to assess internal decay or underlying defects to give accurate advice where required and assess defect a best possible where required. **Note: JPTC perform all advanced testing in house. Please ask for prices for Picus and PD500 tests.**

Priority- Should trees require urgent work, the site manager will be notified during the survey or soon after. High priority trees should be dealt with in six months and need to be addressed as soon as reasonably practicable once the survey has been received and the work arranged with a suitable contractor. Trees noted as low require 12 months for defective sections to be removed or reduced by the next scheduled survey and can be seen as a low priority level. Trees with best practice should be carried out when funding or timing allows as very low concern categories. This is to reduce the likelihood of a greater concern developing.

Notes- should the surveyor have additional comments regarding the tree you will find them here.

Glossary

Words and phrases used in tree surveys by JPTC.

At suitable lateral branches (ASLB)

A pruning point near a node that has suitable even reducing branch diameter at which to make a pruning cut, may also be seen as “strong lateral growth points”.

Basal

Soil to 1m height approximately.

Branch

A main limb of the tree.

Branches

A group of limbs, often described as low crown skirt or particular area of tree.

Branching

General group, side/area of branches on the tree crown.

BS 5837 2012

Recommendations for demolition and construction near trees.

BS 3998 2010

British Standard for tree work.

NJUG Vol 10

Simple advice for working near trees with trenching or utility operations.

Buttress

The root collar ridges flaring at the bottom of the trees stem.

Cavity

A hole/hollowing in the trees stem, scaffold limbs or basal region.

Chlorotic

Pale foliage from nitrogen deficiency, physiological decline. Lack of chlorophyll in leaves.

Cladogenesis

Natural loss of redundant twigs, leaves and branch wood.

Crack

Longitudinal or transverse in the stem or scaffold limbs. A split in wood tissues.

Crown

The outer foliage region of the tree.

Crown lift

Raising of branches at the main stem.

Decay

Usually associated with fungal presence or historical wound/damage. Can be internal wood, external sap wood or both. If tree stability is concerned further detailed analysis is wise.

Dead wood

Major in excess of 50mm, minor less than 50mm diameter. Stable and unstable dead woods.

Die-back

Foliage crown tip die back, often from physiological decline.

Drop crotch pruning

Particular pruning selection and removal of vertical stem leading tips – helps reduce mass not but foliage/photosynthetic area.

Epicormic shoot

A shoot formed by adventitious buds in under tree bark. Often found near a previous wound or stress region.

Foliage tip

Growing tip of a branch/leader. Contain DNA information for the tree on growth regulation and control.

Foliage tip lift

Pruning of outer foliage tips only, usually to raise above or back from an object without the need for limb removal.

Fungal fruit body (FFB)

The flower of a fungus. Often the fungus species is given where ID possible.

Hazard beam

Separation failure of tension and compression wood, usually in a weak limb.

In-Leaf

Tree seen in leaf, good for physiological health assessments but some upper crown scaffold defects can be obscured.

Out-of-Leaf

Tree seen out of leaf, good for structural assessment and quite often fungal presence. Physiological health harder to determine out of leaf.

Leader

Upper stem vertical section – not a side limb/branch.

Natural Target Pruning (NTP)

Pruning as defined by Dr Alex Shigo – minimal cut diameter made at the branch collar.

Non-tensile fork

A fork with an angle tighter than 25 degrees. Often a weak point in the structure and prone to decay.

Nuisance

In the legal sense – foliage touching an object/limb contact with structures.

Rooting area (RPA)

12 x stem diameter measured at 1.5m above soil height provides rooting area radius as per BS5837 2012.

Scaffold limb

Main structural branch that supports the lateral foliage bearing branches.

Self-set

A tree/sapling, often grown from wind/animal dispersed seed.

Stem

Main limb free section of the tree/trunk. Can be twin and multiple stemmed also.

T/R Ratio

The ratio of stem diameter to the remaining stem wall thickness. Roughly up to 1/3rd of overall diameter is acceptable as stem wall thickness as long as no opening is present greater than 120 degrees.

To simplify records made during the defect tree survey, the survey records “actionable” defects. These are defects that require a specific work prescription or test process and within a certain time period. The surveyor will also be making visual notes of tree “features”. A tree feature is something that is not ideal but also not something that requires an immediate action to resolve it within current budget or work period, separate advice formed from a list of features may however be given to help educate and inform managers and operatives working on trees to reduce on going own goals in tree damage/decline. Tree features would be:

- Very minor die-back in small areas of crown, possibly insect activity and non-persistent.
- Recent poor pruning practice that doesn't render the tree dangerous. We expect all work to comply with BS3998 2010 – rips, tears and stubs should not happen and flush cutting is to be avoided.
- Observations that do not have a bearing on the trees safety factor between expected three yearly periods.
- Foliage on phone lines – BT have their own process for this issue as it is a dynamic not static issue. Only if we are briefed on exact need to record this will we record it.
- Signs and fences nailed to trees unless it is causing a direct hazard.
- Ecological features that have no bearing on tree safety levels.

Ash Die Back – *Hymenoscyphus fraxineus* information

Hymenoscyphus fraxineus may be noted in this survey. It is intentional that not all infected single trees or groups of infected trees are recorded or marked within the survey or around the land ownership. Only trees in the higher category HF3 & HF4 are likely to be recorded.

The intention is to highlight the fraxinus species trees which have been infected with *Hymenoschyphus fraxineus* (Ash Die back) and pose the greatest threat to users of the location at this time only, and not all infected trees on the land ownership. New unaffected species introduction may also have been recommended. Tree surveys are an ongoing task recommended at 3 yearly intervals unless otherwise directed. It is the client responsibility to ensure three yearly visits occur.

Infected trees in high use public areas, above roads/houses and paths should be made safe before they reach 50-75% foliage loss. Stage 3-4 (75% to 100% foliage loss trees may be highly susceptible to larger limb sections tearing out the crown whilst being worked upon. Secondary infection of armillaria species is also a concern for trees stressed by infection. Whilst contractors have the final say on what is safe or not safe to work on, the client/land owner does have a duty of care to these contractors and early intervention when trees are safe to work on is always advised.

Trees can be graded into the following categories:

- Ash Health Class 1 – canopy with a 25% loss of foliage. Low.
- Ash Health Class 2 – canopy with a 25-50% loss of foliage. Low.
- Ash Health Class 3 – canopy with a 50-75% loss of foliage. Medium
- Ash Health Class 4 – canopy with a 75-100% loss of foliage. High

Trees falling into class three are a significant concern (medium risk) if they can affect members of the public or structures in the event of failure. Trees in class four (high risk) should be removed unless safe retention is possible due to being a remote location or complete lack of access.

The survey also records trees on adjacent land also if deemed to be a significant threat. This is to ensure the client is aware of potential hazards that are nearby and require action to make safe. Large scale panic felling of infected ash trees is not advised and should be avoided. A systematic approach should be used and only when intervention is required, trees should be made safe if required. Trees in woodlands, dense shelter belts and are not in 1.5 tree lengths of targets should be left as long as it is safe and practical to do so before management. A tree does not need felling if die back is only confined to foliage tips/class 1. It is important to try and retain trees in class 2-3 (only where safe to do so) to see what or if any trees show a resistance to the disease.

In my own assessments of declining trees I have noticed that coppice stools or 5-7 year old pollard trees seem to show significant signs of longevity against infection. Some re growth shoots die off but adjacent and newly forming regrowth seems to develop well again before infection. This process can persist for some time where an unpruned tree with full crown becomes infected and simply declines in a shorter space of time.

Winter assessment of foliage decline is difficult for obvious reasons, I therefore advise in leaf/summer on-going and spot/tree marking for ash die back decline each year in July/August. Early stage trees are likely to be missed in winter surveys. It is also possible that infected mature trees can also be missed if weather is wet and overcast during visual assessment as certain HF identification features are not visible.

Findings & work schedules

Note: All pruning work to use natural target pruning at suitable sound living lateral branches – no stubs, tears or poor reducing limb diameters and within species tolerance as per BS3998 2010. All pruning to be minimal to achieve the aim. Foliage lifts of tips to be to 2.5m over paths, 5.5m over roads (to allow for wet leaf droop) – crown lift of limbs should be specified – ask JPTC if unclear. Dead wood removals (unless stated) are down to 15-20mm diameter. De-suckering should be undertaken with neat pruning cuts. Ivy banding/severance should leave a min 30cm gap between cut ivy stems, full removal from tree is preferred – ivy band 360 1m means removal of a 1m band of ivy from around 360 degrees of low stem. *Hymenoscyphus fraxineus* crown condition scores 1-4 (HF1, HF2 etc).

Tree No	Date	Spread M - stem to drip line	Height (M)	Area usage	Tag No	Species	Age/Class	Physiological condition	Structural condition	Consideration	Defects	Work recommendation	Priority	Further Investigation	Further Investigation type
T1	20210209	6	14	Variable	None	Ash - check ownership	Mature	Dying	Characteristic defects present for species	Public safety; Damage to tree health; Road or path threatened by trees; Nuisance - legal; Damage to structures/object from trees	HF2+ ash by access road and gardens	Check ownership. Fell within 18 months	1=High	Not required	None
T2	20210209	4	8	Low use	None	Ash	Semi mature	Early decline	Characteristic defects present for species	Damage to tree health	HF1	Fell within 5 years	3= Best practice	Not required	None
T3	20210209	2	6	Variable	Paint	Willow	Semi mature	Dying	Characteristic defects present for species	Public safety; Damage to structures/object from trees	Dying stem	Coppice tree	2= Low	Not required	None
T4	20210209	5	14	Variable	7722	Alder	Mature	Normal for species	Normal for species	Non specific	Multi stem tree, no significant defects	None	3= Best practice	Not required	None
T5	20210209	4	14	Low use	None	Willow off-site	Mature	Normal for species	Hazardous defects present	Public safety	Hung up split tree	Contact owner to pollard tree at 3m height to remove hazard sections	2= Low	Not required	None
T6	20210209	4	8	Variable	None	Ash - check ownership	Semi mature	Early decline	Characteristic defects present for species	Public safety; Damage to tree health; Nuisance - legal	HF1 by access road	Check ownership. Fell within 18 months	3= Best practice	Not required	None

Rackleaze Nature Reserve

Group No	Date	Species type	Area usage	Age/Class	Physiological condition	Structural condition	Consideration	Defects	Work recommendation	Priority	Further Investigation	Further Investigation Type
G1	20210209	Willows	Low	Mature	Normal for species	Characteristic defects present	Public safety; Damage to structures/object from trees	Broken branches, dead wood	Remove noted defects from above board walk only	2= Low	Not required	None
G2	20210209	Alder x3	Low	Mature	Normal for species	Normal for species	Damage to group health	Ivy and brambles	Sever ivy on tree stems	3= Best practice	Not required	None
G3	20210209	Willows	Variable	Mature	Normal for species	Characteristic defects present	Public safety	Tag 581 by bench forms from a non-tensile union. Crown is false supported in adjacent tree.	Periodic review required to assess for structural support loss in low basal fork	3= Best practice	Not required	None
G4	20210209	Goat willow	Low	Mature	Localised decline	Damaged	Nuisance - general	Failed stems, decay in stems, stem bridging watercourse	Coppice trees marked in pink paint. Remove stem bridging watercourse. Stack wood on site as habitat	3= Best practice	Not required	None
G5	20210209	Poplar x2	Low	Mature	Normal for species	Normal for species	Non specific	No significant defect in relation to area	None	3= Best practice	Not required	None
G6	20210209	Mixed species	Low	Mature	Normal for species	Normal for species	Non specific	No significant defect in relation to area	None	3= Best practice	Not required	None
G7	20210209	Willows	Low	Mature	Dead	Hazardous defects present	Public safety	Standing dead trees near paths and private house	Fell dead stems, stack wood on site	1=High	Not required	None
G8	20210209	Mixed species	Low	Mature	Localised decline	Characteristic defects present	Non specific	No significant defect in relation to area	None	3= Best practice	Not required	None
G9	20210209	Willows off-site	Low	Mature	Localised decline	Characteristic defects present	Public safety	Trees blocking watercourse. Broken sections. Ivy.	Check tree owner has inspection and tree management in place	2= Low	Not required	None
G10	20210209	Alders	Low	Mature	Normal for species	Normal for species	Non specific	No significant defect in relation to area	None	3= Best practice	Not required	None
G11	20210209	Willows off-site	Low	Mature	Dying	Damaged	Public safety; Nuisance - legal	Trees blocking watercourse. Broken sections. Ivy.	Check tree owner has inspection and tree management in place	2= Low	Not required	None

Plan

