

Tree Hazard and Risk Assessment Report

Harbottle, Northumberland
Grid ref: NT936046



Produced for Mr G O'kane

By

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Arboricultural
ASSOCIATION
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Details and Location

Location:	Harbottle, Northumberland
Client:	Mr G O'Kane
Grid ref:	NT936046
Survey dates:	05/09/19, 06/09/19
Consultant:	Shaun Scott FdSc, BSc Arb, MArborA

Scope of survey

Northumberland Tree Surveys (NTS) has been instructed by the client to survey and inspect trees for risk and hazard. To produce a report in support of an application for work on protected trees within the survey area. The location is a mature woodland, located at Harbottle village, Northumberland. The site comprises of a variety of deciduous and coniferous trees, with a large proportion consisting of mature hardwoods. There is also a notable population of conifers located to the north east corner of the woodland.

The purpose of this survey is to:-

- Survey and report on the trees that are in close proximity and influence of the road, buildings, people and property.
- Record on the tree condition and defects that pose risk and hazard to people and property.
- Identify targets.
- Report findings within a formal document and make recommendations to limit risk.
- Submit findings to the local authority, in support of a planning application for tree works on protected trees and woodland.
- Provide a tree location plan.
- Produce a recommended tree safety regime and a future inspection programme.

Methodology

The inspection of trees is by the use of a Visual Tree Assessment (VTA) involving a methodical and systematic gathering of data, from observations conducted at ground level. Information is gathered from the tree vitality, physiological condition, location, site, history and evaluated in accordance with industry best practice. The list is not exhaustive and each site is approached on an individual basis.

Tree data to be reviewed

- Species
- Age category
- Physiological condition – e.g. good, fair, poor, very poor, dead
- Significant defects
- Protected species habitat suitability rating
- Work recommendations
- Work priority – e.g. urgent, high, medium and low, etc.
- Suggested re-survey interval

Tree Identification, numbering and mapping

All trees are identified with an individual reference number. Northumberland Tree Surveys Ltd (NTS) have produced a plan highlighting all trees requiring work marked within a green or red circle. Trees not under the control of the client are identified are highlighted with a purple circle. (See attached plan)

All efforts have been made to ensure tree location is correct. To assist all trees requiring works, are marked with a non-permanent fluorescent marker. “X” denoting full removal or coppicing. A single fluorescent yellow “dot” indicates works such as deadwood within the crown, or hanging branch removal.

Structural defects

Defects considered to be significant risk will be recorded within the individual tree record.

Recommendations

Recommendations are made in several instances:-

- To reduce risk and hazard to people and property in accordance with Health and Safety in the work place act 1974, The Occupiers Act 1957 and 1984.
- Trees restricting the movement of people, vehicular access and the blocking of roadside furniture e.g. road and traffic signage.

- Good arboricultural and woodland management.
- Wildlife habitat management
- Assist with the allocation of works.

Prioritised work

Prescribed work is categorised within the work summary as follows:-

- Urgent: - essential work following the identification of an immediate and imminent danger to people and property
- A:- High priority essential to limit risk (e.g. 3-6 months)
- B: - Medium. Works to promote healthy trees and safe condition in the short to medium term (e.g. 6-12 months)
- C: - Low. Work for long term tree health and good formative shape (e.g. 12months plus, as and when budgets allow)

A long term tree management strategy is more cost effective when medium and low prioritised work is carried out.

Tree protection

Trees are subject to statutory law and protected in English law. Tree protection can include Tree Preservation Orders, (TPO) and Conservation Areas. The felling of large volumes of trees can also require a felling licence.

Protected wildlife and habitat

Trees form important habitat for many forms of wildlife. The survey will assess and report evidence of all protected species such as badgers and bats.

Suspected bat occupation will be reported as follows.

- Very high - Obvious signs of occupancy, such as dry cavities with signs of bat faeces and urine staining.
- High - Trees with suitable habitat. (large dry cavities and a significant presence of Ivy/climbing plants within the tree)
- Medium - A lower level of suitable habitat to High
- Low - Limited habitat areas
- Very low - No obvious habitat

Survey Frequency

The frequency of inspection is determined by the level of risk presented by individual trees and groups. Risk is heightened within areas of high footfall, and increased target values.

Re-inspection may vary between 3 months and 5 years. The timings of which depend on a scale evaluated from high to low risk.

Tree Report

Introduction and Overview

The woodland predominantly consists of the mature broadleaf species; *Quercus robur* (Common Oak), *Fraxinus excelsior* (Ash), *Ulmus* spp (Elm), *Acer pseudoplatanus* (Sycamore), *Taxus baccata* (Yew), *Tilia X europaea* (Common Lime), *Fagus sylvatica* (Beech). The larger and more dominant tree population is of Oak, Lime and Beech trees.

Some trees are in excess of 18 metres tall and with full crowns that restrict light to the woodland floor. These woodland conditions have influence on smaller trees and produce an overly slender form.

To the western boundary of the site there is a public road that leads to the south entrance of Harbottle village. The road is a busy public highway and services the National Park and upper Coquetdale. Within the village the road separates into a minor road and continues in a northerly direction along the western boundary. The northern aspect of the woodland boundary is positioned adjacent to another minor road.

The west and north boundary are formed by a stone wall owned and maintained by the client. To the eastern boundary there is a private dwelling with a garage, garden, parking area. The area is accessed from the minor road to the north and gives access to a private woodland track. The track runs north to south, to the east side of the woodland and services private fields and an agricultural shed owned by the client.

Located towards the mid southern portion of the woodland, adjacent to the western boundary there is a development of subterranean water storage tanks. The tanks are fenced, owned and maintained by the utilities company Northumbrian Water.

The public roads adjacent to the woodland are accessed by various users; pedestrians, horse riders, cyclists, motor vehicles, agricultural tractors and heavy goods vehicles.

There are no signs of protected wildlife within the trees surveyed.

Site Constraints

The survey has been conducted visually at ground level. All trees within falling distance or that have influence of the public road, woodland track, dwellings, sheds, and property and grass verge, have been inspected by NTS.

Site visit

The site was inspected on the 5th and 6th September 2019. Weather conditions were fine and visibility good at the time of the survey.

Site Appraisal

Targets

The site has a wide range of potential targets including people, vehicles and property.

Discussion

The woodland is mostly unmanaged and there is a need to carry out maintenance. The removal of some trees is essential to ensure safety and limit risk. Many of the trees surveyed are significantly decayed and present a hazard.

Removal of trees listed (see attached table1) will also increase woodland diversity and habitat. At present, the larger and more dominant trees reduce daylight from reaching the woodland floor and inhibit developing ground cover. Observed in areas of recent windblown trees and the growth of smaller woodland plants.

The woodland to the north, east and south are surrounded by a boundary wall, and many small “self-set” trees are in close proximity. Concern exists with regard to the structure and it is recommended some of the trees should be removed to prevent damage occurring on a medium term basis.

All road side trees adjacent to the public highway and roadside verge are recommended to be raised above ground level and to a height of 6 m. In order to allow safe passage of vehicles, riders and pedestrians. All major deadwood over hanging the road side is to be removed.

There is a significant population of Lime trees within this woodland. These trees are typical of the estate woodland planting of the time. They are now very large and dominating, it is recommended they are reduced in size by the traditional method of pollarding or large crown reductions. The practice will assist in preserving the tree population and promote new growth.

To the east side of the woodland many of the trees overhang agricultural fields, sheep pens and a shed. It is recommended the raising of these tree crowns to a height of 5 m above ground level. In order to allow agricultural machinery access and reduce interference with property.

Recommendations

- All trees and shrubs branches or canopies overhanging roadside and grass verges, of the woodland. To be raised and pruned from the roadside and roadside verge, to a minimum of 6 metres above ground level
- All trees and shrubs branches or canopies overhanging agricultural land, buildings, gateways, driveway and private access points. To be raised and pruned to a minimum of 5 metres above ground level
- Carry out specified individual tree works and removal, as itemised within tree works recommendations table 1 and plan (see attached table)
- Future re-inspection be carried out on an 18 month cycle (or where specified as per individual tree recommendations). It is recommended a general inspection for the woodland and roadside to be carried out March 2021. To ensure trees are observed within the alternating seasons of life
- Remove all epicormic growth from all large mature Lime tree to a height of 2m above ground level prior to next inspection.
- Consider, pollarding or large scale crown reductions for large Lime Trees, followed by a course of periodic cutting.
- A 15 % reduction in the he *Pseudotsuga menziesii* (Douglas fir) population located at the northern portion of woodland. In accordance with good Sylva-culture practice and woodland habitat management.
- All tree pruning and removal works should conform strictly to BS3998
- Trees to be inspected following adverse weather condition and defects reported to a qualified person for the purpose of risk assessment, as soon as practicable

Summary of recommendations

- **All roadside and boundary overhanging branches to be raised and cleared to the specified height.**
- **Carry out individual tree recommendations as per table 1**
- **Re-inspect March 2021 (and as per table1)**
- **Remove epicormic growth from Lime trees (up to 2m above ground level)**
- **Consider or carry out a cycle of pollard/ crown reduction of large Lime trees**
- **15% woodland thinning of Douglas fir population**
- **All tree works to be carried out in accordance with BS3998**
- **Inspect following adverse weather conditions for hazard and risk**

Tree Preservation Orders and Restraints

Authority to conduct work on all trees, mentioned within this report must be made to the owner of the trees and to the council prior to any tree works.

This report is limited to a ground level, walking and visual inspection from within the grounds of the site and public highway. The purpose of which is to assess trees, risk and hazard.

Soil conditions, samples and inspection pits have not been conducted during this survey and therefore form no risk assessment in respect to subsidence.

Northumberland Tree Surveys Ltd (NTS Ltd), reserve all rights to this report. The client and any associates have full use of the contents.

The recommendations of this report relate to the site usage on the inspection dates stated. Risk and hazard can alter following a change of land use, climate and extreme weather conditions. Trees should be inspected at regular intervals and especially following such changes.

The council should be consulted prior to any intended tree works, to consider restrictions such as; Tree Preservation Orders (TPO), Conservation area restrictions, planning obligations and laws covering the Wildlife and Countryside Act. The felling of standing timber in large volumes may require a felling licence from the Forestry Commission.

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Northumberland Tree Surveys Ltd

Appendix

Tree plan and map

Tree plan attached to email in A4 PDF format.

Tree recommendations and data

Data sheet with individual tree recommendations and comments attached to email to client.

Key to data:-

Age class

NE Newly established

YT Young tree < 1/3 girth of mature tree of same species

EM Early mature < 2/3 girth of mature tree of same species

M Mature tree

LM Senior tree and full size

OM Over mature subject to re-trenchment / major branch loss

VT Veteran tree loss of crown etc.

D Dead

Overall physiological condition

Good = healthy tree excellent vitality and vigour no signs of stress or strain

Fair = slightly impaired in general appearance some areas of dead wood, leaf/ bud formation

Poor = Tree with significant reduced vitality, leaf crown die back etc.

Overall structural condition

Good no observable structural defects

Fair = minor defects

Poor compromised structural integrity

Dangerous Compromised structural integrity with potential for immediate failure



Misc.

E = estimated

	Work priority	
U	Urgent	Immediate
A	High	Very high
B	Moderate	High
C	Low	Moderate
D	Very low	Very low
E	None	None

Inspection frequency
Immediate
3 month
6 month
12 -18 month
5yr.
No target exists or is excluded