

Summary

I was asked by Lostwithiel Town Council (LTC) to look at a Beech Tree on 'The Parade' which had a significant fungal growth at the base (T1096). [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

The tree numbers relate to a tree survey carried out by Land & Heritage in 2018.

This report recommends the removal of the Beech tree on The Parade as soon as possible, a [REDACTED]

Location

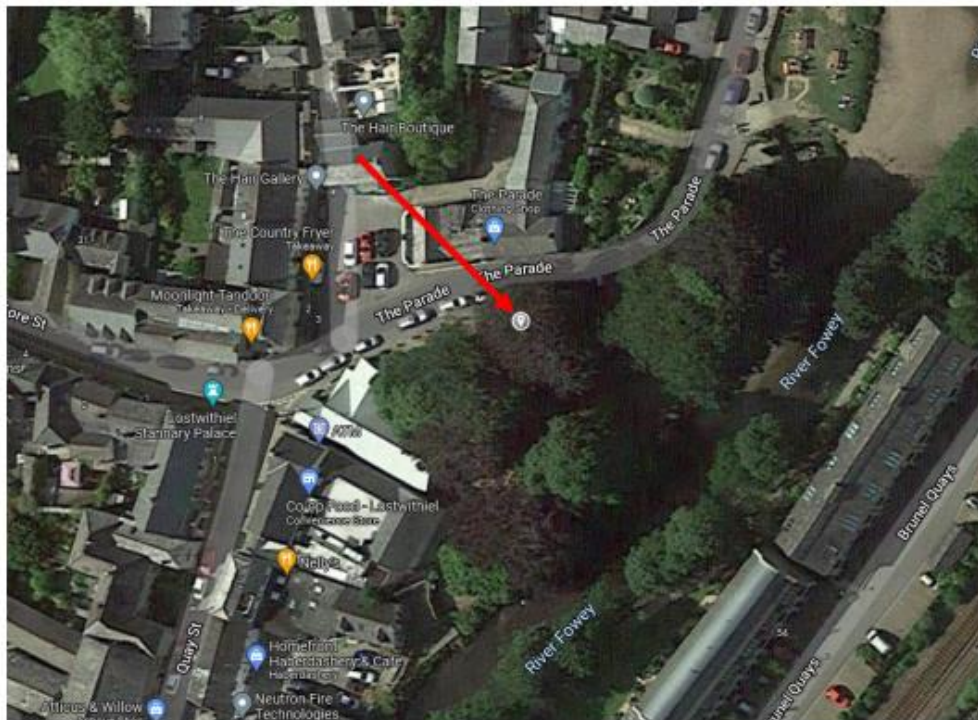


Fig 1: location map of The Parade with the Beech tree marked



Survey Details

The survey was undertaken by [REDACTED] MCIHort on the 10th September 2021.

The survey was a visual inspection of specific trees highlighted/requested by Lostwithiel Town Council to look at some particular issues reported.

The weather was overcast, dry and with good visibility.

Observations

T1096: Beech *Fagus sylvatica*

This tree has a significant fungal fruiting body at its base on the south west side, identified as *Meripilus giganteus*.

The images below show the fungal growth, which as a group measures approximately 1m across. *Meripilus giganteus* is an annual fruiting body commonly associated with Beech trees, and found living with the roots and the base. Historically it was thought that this was an aggressive fungus that attacked the roots and caused instability, however little is actually known about the lifecycle. It is now thought that the fungus lives on dead material within the root system and base of the tree, and it may colonise weak and decaying root systems. In the publication 'Fungi on Trees' the impact is described as "infrequently associated with failure of trees at the root-plate" (Fungi on Trees: Humphries and Wright, Arboricultural Association 2021).

The buttresses were checked with a sharp steel probe to see if decay was present. All buttresses were sound, and there is no visible evidence of decay at the base. The mainstem of the tree appears to be in good health, along with the branches within the canopy.

Leaf cover within the crown is healthy, however it may be possible that the leaf density is slightly less on the southwest side. This may be associated with fungal presence on the southwest side, or it may be associated with the prevailing winds or competing tree canopies.

A further fungal presence was noted approximately 2m southwest of the base of the tree, but it was too early to identify it. It has similarities to the early stages of *Meripilus giganteus*, and is highly likely to be it.

The rotting remains of a fungal fruiting body was also found on the stump of removed Beech tree T1103. This is likely to be the same fungus, and potentially part of the same local colony.



Fig 2: The main fruiting body (left) Fig 3: additional fungal presence showing near probe (right)



Fig 4: slightly thinner crown on southwest side of the tree

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Recommendations

T1096 Beech

In many circumstances a Beech tree with *Meripilus giganteus* will remain standing for a long time, either without structural problems or by adapting and responding to the fungus. At times they do collapse however, and it may be due to the presence of the fungus. What is certain is that the fungus is surviving on dead or decaying material within the root systems of tree on The Parade, and that it is likely to be established within the southwest root system of T1096.

It may be possible to gain a clearer picture by excavating the buttress and roots with an air spade and undertaking an ultrasound scan of the timber. These can prove inconclusive, and usually confirm what is suspected, however at times they indicate that the wood/roots are sound.

The decision must be made by the Town Council. If it were my responsibility, I would reluctantly opt for removing the tree. My reason for this is that failure in an area that is very high risk could cause considerable damage or even death.

Removal should be undertaken as soon as possible. The tree officer will need to be notified that emergency removal is required, and this report will help with the process.