

From: Jennifer Sneddon <jcsned@googlemail.com>
Sent: 15 July 2025 16:17
To: Wytham Woods <wytham.woods@admin.ox.ac.uk>
Subject: query assessing potential danger leaning mature tree branches

Dear Scientific users of Wytham Woods. I am aware that the woods are a well known Ecological research base of many decades standing..

We have to have a beloved old larch tree in its prime cut down on our Village Green because it was visually deemed unsafe by a local government officer.

With the wisdom of hindsight.

Are there any imaging technologies for quantifying position and volume of in vivo root structure in soil for mature trees? I know from scientific and popular press that you can quantify tree canopy volume for carbon capture purposes.

How to provide a scientific and data driven argument for or against cutting down a tree?

Root and canopy volume and...

Would engineering principles for example used to check bridge safety provide numerical data that would support a good argument for cutting down or preserving a tree?

We are all very sad to loose our tree

Jenny Sneddon
Shotwick Village

Unsafe Tree

Inbox



Jul 18, 2025, 10:15 AM
(7 days ago)

Nigel Fisher

<nigel.fisher@admin.ox.ac.uk>

Dear Jenny

Lots of questions – let`s see what we can do.

Unfortunately “unsafe”, in the main, overrides any ecological or sustainability criteria. I cannot see enough of the tree to assess its condition or safety.

To class a tree “unsafe” though one has to follow a set arboricultural methodology. There are objective criteria that need to be reviewed by a qualified arboriculturist.

There are then a variety of techniques you can use to improve the “safety” of the tree and or improve its`s long term health.

We use Nick Bolton at Tree Frontiers as our expert. His details are below.

He will charge for his services but he is extremely competent

Nick Bolton nick@treefrontiers.com

I hope this assists

Nigel

Oxford Green Estate

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Nick Bolton

Jul 22, 2025, 4:14 PM (3 days ago)

to me

Dear Jenny

Many thanks for your mail and explaining the issue.

As you might expect, there are both quick and detailed answers to your question—I'll keep it brief here, but I've attached a couple of articles and a link you might find useful.

Are there engineering techniques for assessing mature tree safety?

Yes. Several technologies exist and are used in the UK to assess tree stability:

- Microdrills and sonic/electrical impedance tomography help detect internal decay in stems and branches.
- For root systems, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) can map root presence, though they are more research-oriented and less commonly used in practice.
- More engineering-based methods include static pull tests (e.g. TreeQinetic) and dynamic monitoring systems (e.g. TreeMotion or DynaRoot), which simulate or measure wind-induced movement to assess anchorage and failure risk.

These tools are increasingly used in urban forestry and heritage tree management. A well-known example is the [Allerton Oak](#) (given you are in the Wirral I am sure you are aware of this one), where a combination of assessments and engineered supports helped preserve a historically significant tree.

I hope this is helpful and answers your question. Although too late to save your tree, this may assist you in offering guidance to others in the future to help protect other trees in similar situations.

Kind regards

Nick