

ASH DIEBACK HAS ARRIVED IN LOCHALSH

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Woodland near Dingwall with dead ash trees.

Chalara dieback of ash is a serious disease of ash trees caused by a fungus called *Hymenoscyphus fraxineus*.¹

The disease causes leaf loss and crown dieback and is usually fatal in younger trees whereas mortality in older trees is more often associated with the combined impact of root pathogens such as the honey fungus (*Armillaria mellea*). It has caused widespread damage to ash populations across Europe and was first discovered in the UK in a Buckinghamshire nursery in February 2012.

Ash dieback is present across Scotland. Management efforts are now focused on mitigating safety risks from diseased trees, while allowing for natural regeneration of potentially disease-tolerant or resistant trees wherever possible. – Scottish Forestry.

Although now widespread in Britain, predicted to equal Dutch elm disease in its potential impact on the landscape, ash dieback has so far been recorded in only thirty or so places in the Highlands. Public awareness is limited, so recording is probably highly unrepresentative of the actual situation.

To clarify: the two tenkilometre square localities emphasised in red represent



Forestry Commission: interactive map of ash dieback in Britain. (ref. footnote 3)

just two 2019 sightings by just two local biologists, one near Duisdale on Skye and the other in the author's garden in Auchtertyre, Lochalsh.

¹ Scottish Forestry: Ash dieback in Scotland.

https://forestry.gov.scot/sustainable-forestry/tree-health/tree-pests-and-diseases/chalara-ash-dieback

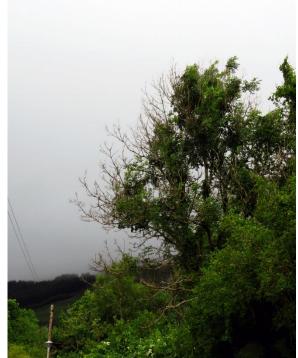
The Tree Council: Ash dieback: an action plan toolkit for Scotland.

 $[\]underline{https://treecouncil.org.uk/wp-content/uploads/2021/06/Ash-Dieback-Action-Plan-Toolkit-for-Scotland-June-2021.pdf}$

However, in early summer 2021, the author began noticing many more affected trees near his home, particularly in the village of Auchtertyre and alongside the A87 between Nostie and Avernish. There can be little doubt that, with raised awareness, ash dieback will be recognised in many other places, such as recently by Loch Ness, south of Drumnadrochit (16-07-21). In contrast, during a car window survey during the same outing, travelling the A862 from Inverness to Beauly, no obvious ash dieback was so evident as at the previously mentioned sites (though we note that it has already been recorded there).

When the author contacted the Forestry Commission in 2019 to report that ash saplings in his garden were dying of suspected dieback, he was informed that there were few records for the Highlands, a situation that looks likely to change dramatically. Samples provided were confirmed to be the suspected disease. Very soon, two of us visited a dense colony of young ashes surrounding the fallen carcass of their deceased ancestor. Many (most!) were found to be suffering from ash dieback, as were groups of saplings farther away in adjacent woodland. This was also reported to Forrest Research, hence the second red square on the map.

A recent informal survey of the ash trees in Auchtertyre showed that most, if not all, mature and sapling trees are affected, many of the latter pretty well dead, or with a final, desperate flush of vegetation emerging from the base of the trunk. The mature trees all have leafless crowns of dead sticks (right).



The first signs trees affected by ash dieback show is withering of terminal leaves (below, left). They wilt, turn brown then black, falling away leaving leafless branches (below, centre). The following year, the buds fail to open. The branches/twigs are naked, brown and brittle – dead (below, right). The bark of live young ash is green, brown when diseased (red oval).



This effect begins at tips and extends downward, hence the descriptive name, dieback. We have yet to detect dead adult trees in Lochalsh, though continued observation may soon change that.

Those we have observed are all alive, but with varying degrees of dying back, in some cases severe. The situation is very different with saplings, many of which have been seen to be stone dead, or dead except for leafy shoots optimistically growing up from the yet to be infected trunk base (away from the descending disease 'front'). Ash dieback shows a distinctive scar at the junction of healthy and affected wood (right).



Afterthought: Might perching birds – e.g. this blackbird, in the author's garden – be vectors for this highly contagious disease (far right)?



Moribund ash sapling with flush from base. (by A87 at Nostie bus stop)

Diseased adult ash by Auchtertyre Primary School.

If you spot trees with ash dieback, please report your sightings to the Forestry Commission's TreeAlert.² If you have ash dieback on your land, you'll probably want to know if you should do something about it and what to do. Such matters are quite uncertain, and thoughts change as learning progresses. For the time being, probably do nothing other than report it, unless a tree is becoming dangerous. The Forestry Commission¹ and The Woodland Trust³ provide plenty of advice on the subject.

One glimmer of hope is that, if they carry genes for resistance, some trees will be unaffected. If, as predicted, we lose most of our ash trees to dieback, survivors will become a valuable source of seed for population recovery.

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² TreeAlert: <u>https://www.forestresearch.gov.uk/tools-and-resources/fthr/tree-alert/</u>

³ The Woodland Trust: <u>https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/tree-pests-and-diseases/key-tree-pests-and-diseases/ash-dieback/?gclid=Cj0KCQjw_8mHBhClARIsABfFgpj23SeIjGIQEWPlhPyKQphRV35qDntpYhs40JbEU_sEXGS21y2x64caAjI7EALw_wc_B&gclsrc=aw.ds</u>

In Auchtertyre, another tree disease has recently been apparent (16-07-21), this time on suckers (saplings) of aspen (*Populus tremula*). Leaves and tips of many of this year's new shoots have blackened and shrivelled in a manner similar to ash dieback. The same fungus? We have yet to report this and submit samples for investigation.

And there are more observations that need explanation. For instance, drive between Duirinsh and Plockton (also elsewhere) and look at the gorse. Why has much of it turned brown, dead-looking (dead?), this summer?

