



Scottish
Forestry / Coilltearachd
na h-Alba

Ash dieback in Scotland: How big is the issue?

APSE seminar

September 2022

Clari Burrell

Tree Health Policy Advisor

Scottish Forestry

forestry.gov.scot

Phytophthora ramorum disease:

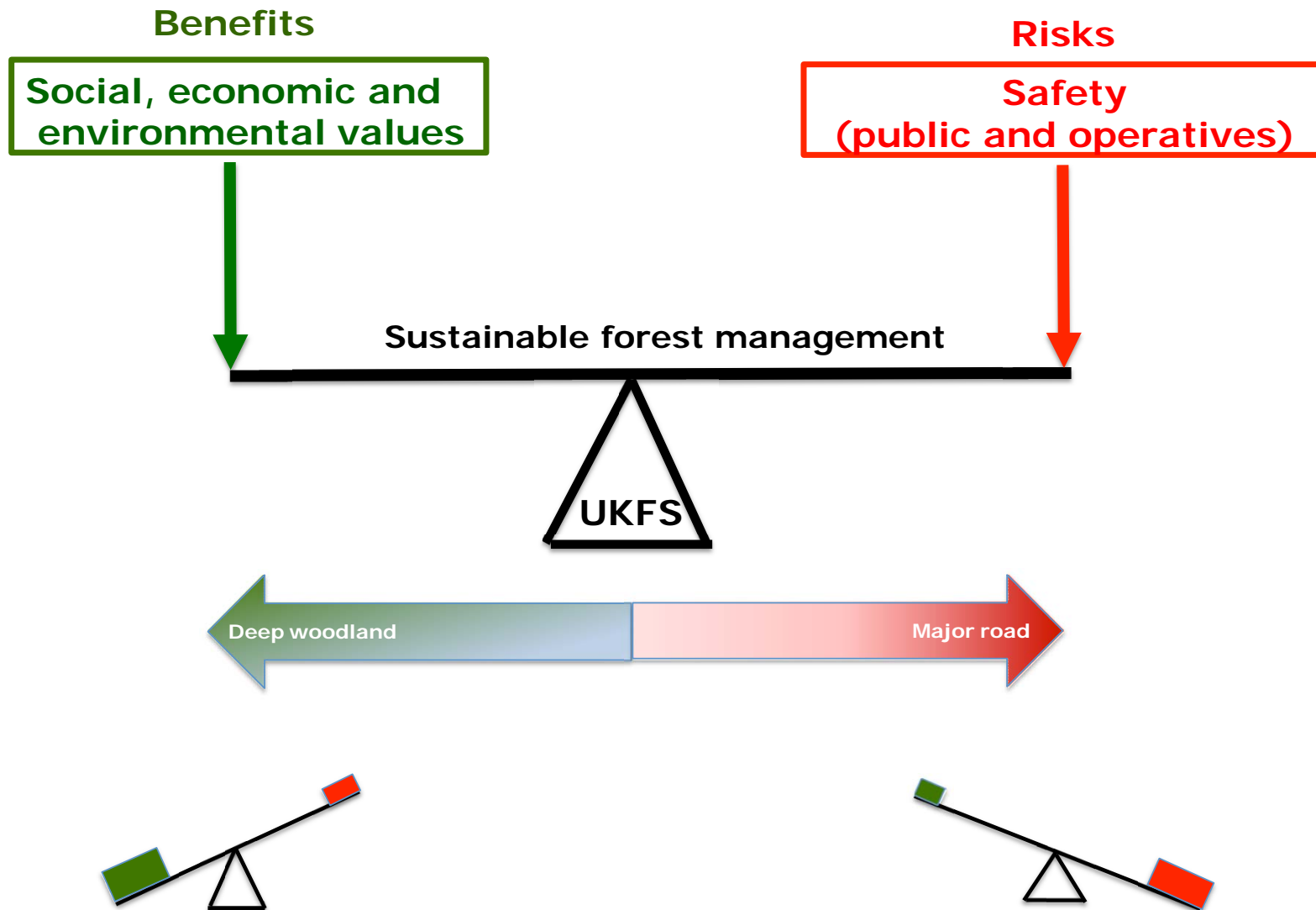


(Above images taken one year apart)

Scotland's trees face many threats, from pests and diseases and other natural disasters, compounded by the climate emergency.

Storm Arwen:

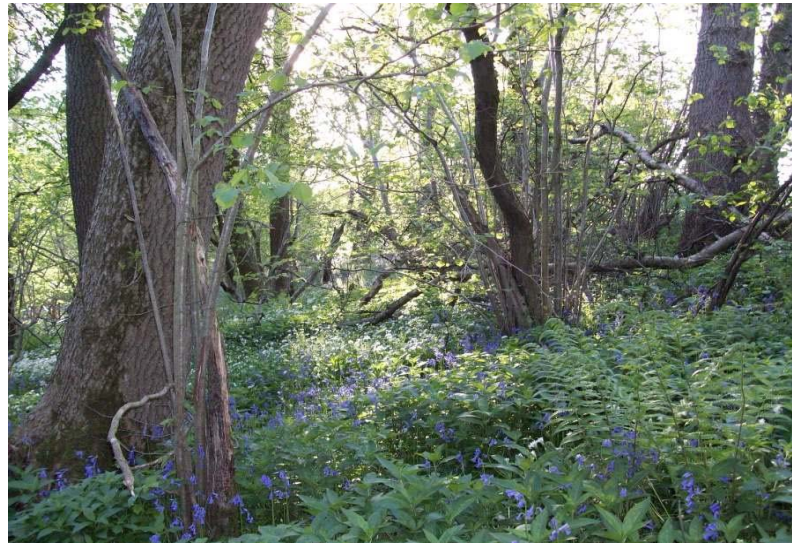




Ash in Scotland



- ~ 1% of total forest/woodland area
- ~ 5% of broadleaved woodland area
- ~ 11 million mature ash trees
- ~ 1 million mature ash trees outside woodland



Forecasts of ash mortality

Ash dieback in Europe:

Surveys meta-analysis and modelling – Coker *et al.* 2018

- 50 – 75% ash tree mortality in natural woodlands 30 years post-arrival
- 100% ash tree mortality in plantations 30 years post-arrival

Crown condition monitoring (ICP Forests Level I) and modelling - George *et al.* 2022

- Overall survival probability of ash trees 30 years post-arrival approximately 50%, but with large differences among regions

Influencing factors:

Environmental conditions, climate, tree-context, pathogen prevalence, other stressors, genetics, 'unknown unknowns'

Common trend:

Increase in symptom severity and tree mortality from approximately 10 years post-arrival

Progression of ash dieback in Scotland

2012



2022

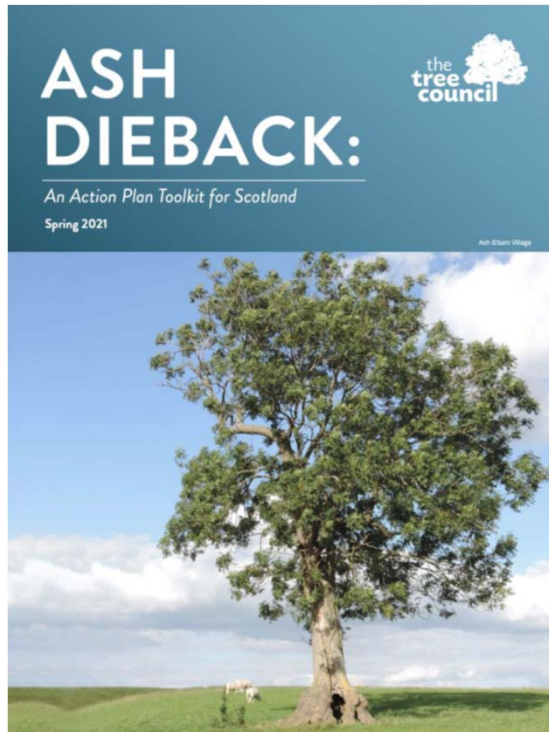
The Ash Dieback Risk Group

- Representatives from government agencies, local authorities, industry, infrastructure, transport and NGOs
- Discuss the challenges ash dieback creates, share information and expertise, and help advise the Scottish Government
- Working with The Tree Council

Key issues

- Understanding how ash dieback may progress in Scotland
- Understanding issues around responsibility and liability for ash trees affected by ash dieback
- Balancing the risks posed to people, property and infrastructure from dying ash trees with minimising harm to the environment
- Developing methods for monitoring the location and condition of ash trees and planning for remedial action and recovery
- Developing policy framework and guidance

Ash Dieback: An Action Plan Toolkit for Scotland



<https://treecouncil.org.uk/science-and-research/ash-dieback/ash-dieback-toolkit-for-scotland/>

- The Tree Council, supported by Scottish Forestry, has worked with a number of organisations at the forefront of dealing with ash dieback in Scotland
- The Toolkit provides a step by step guide to preparing a local Ash Dieback Action Plan
- It includes case studies and examples from local authorities and other organisations

Ash Dieback: A Guide for Tree owners in Scotland



- This Guide for Tree Owners in Scotland provides helpful information for anyone responsible for ash trees and highlights specific policy and resources relevant to Scotland
- From identifying ash trees and assessing their health, to deciding what steps may be needed, the guide is an excellent starting point

<https://treecouncil.org.uk/what-we-do/science-and-research/ash-dieback/ash-dieback-a-guide-for-tree-owners-in-scotland/>

Summary

- *Hymenoscyphus fraxineus* has been present in Scotland for at least 10 years.
- Ash dieback is widespread across the country.
- At least 50 – 75% of ash trees in Scotland are likely to die over the next 10 – 20 years.
- Predicting localised rates of decline is extremely difficult.
- As more organisations map and monitor the location and condition of ash trees they're responsible for over time, our understanding of localised rates of decline will improve.
- Guidance has been published to support local authorities in Scotland.
- It's important to have a plan. More on that from Jon coming up now.....