



Forestry Commission

Responding to tree pests and diseases in urban green spaces

Barnaby Wylder – Forestry Commission Plant Health Forestry team

Presentation content



- **The urban tree/pest and disease interface**
- **Reporting tree pest and disease symptoms**
- **Mitigating measures**

The urban tree / pest & disease interface

- Lots of potential pathways to introduce pests and diseases



The urban tree / pest & disease interface

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B Wylder Forestry Commission



B Wylder Forestry Commission



M Wylder

The urban tree / pest & disease interface

- Lots of potential pathways to introduce pests and diseases
- Trees frequently under additional stress



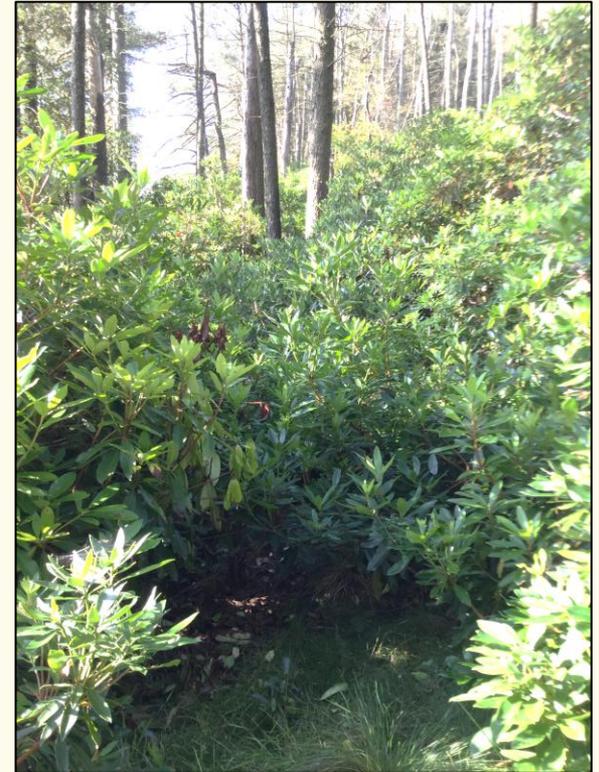
The urban tree / pest & disease interface

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The urban tree / pest & disease interface

- Lots of potential pathways to introduce pests and diseases
- Trees frequently under additional stress
- Presence of Invasive Non-Native Species



The urban tree / pest & disease interface

- Lots of potential pathways to introduce pests and diseases
- Trees frequently under additional stress.
- Presence of Invasive Non-Native Species
- Unfortunately, a perfect mixing pot!

Search the GB Non-native Species Information Portal

Use the Portal to find distribution data and other useful information for all non-native species in GB.

Simple Search

Enter species name (scientific or common)

Search

The Portal provides access to distribution data for over 3000 non-native species in GB

Popular portal searches

1. American Bullfrog, *Lithobates catesbeianus*
2. American Lobster, *Homarus americanus*
3. Asian Hornet, *Vespa velutina*
4. Black Bullhead, *Ameiurus nebulosus*

About the Portal

The Portal provides access to distribution data for over 3000 non-native species in GB as well as additional information such as place or origin, date of introduction and methods of introduction. For 300 species much more detailed information is provided, including information on identification, impacts and control methods.

UK Plant Health Risk Register

Department for Environment, Food & Rural Affairs

1,414 pests in the Risk Register

Search for a Pest or Organism

e.g. Asian longhorn beetle

Search

Preferred Name Synonym Common Name Host

Advanced Search Download Entire Risk Register

Example urban fungal issue



Example urban fungal threats



Example urban fungal threats



Responding to pests and diseases in urban green spaces

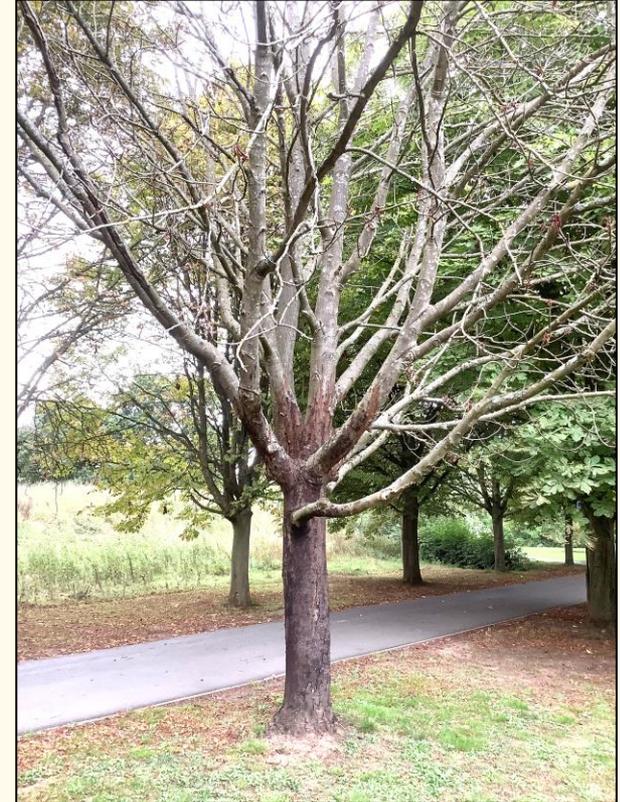
Example urban *Phytophthora* threats



Example urban *Phytophthora* threats



Example urban bacterial threats



Example urban bacterial threats



Example urban invertebrate threats



Example urban invertebrate threats



Some nearby threats...



Tree Alert

Tree Pest & Disease sighting reporter



Tree Alert

Britain's trees are under unprecedented threat from new pests and diseases. We are particularly interested in identifying problems with ash, oak, horse chestnut, pine and sitka spruce trees. You can help by being aware of the symptoms of serious threats and reporting them for further investigation.

Typical symptoms

Report a Sighting

More info (website)

<https://treealert.forestresearch.gov.uk>

Info required:

- **About you**
- **About your observation** (incl. grid reference and at least 3 good quality photos)



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Mitigation – Awareness / preparedness

 **GOV.UK**

Policy paper

Plant biosecurity strategy for Great Britain (2023 to 2028)

Published 9 January 2023

 Department for Environment Food & Rural Affairs

UK Plant Health Information Portal

An online hub for plant health information, data and resources

Enter the name of a pest or plant you are interested in



European and Mediterranean Plant Protection Organization
Organisation Européenne et Méditerranéenne pour la Protection des Plantes



HOME ABOUT Eppo MEETINGS ACTIVITIES RESOURCES MEMBERS ONLY



The Great Britain Invasive Non-Native Species Strategy

2023 to 2030

Date: February 2023

 Department for Environment Food & Rural Affairs

 Llywodraeth Cymru Welsh Government

 The Scottish Government



Mitigation – Planning vs reacting



Mitigation – Resilient species choice



Mitigation – Threat reduction

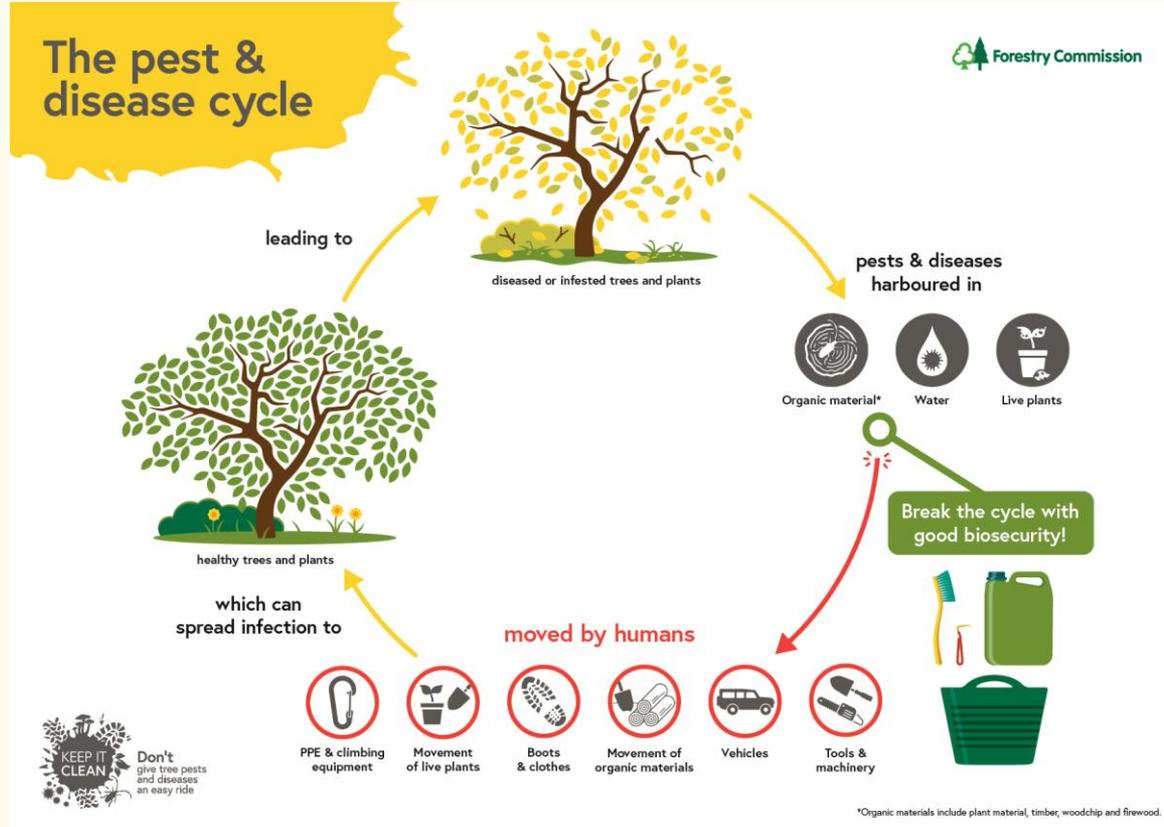


A collage of three images related to ash tree management. The top image is a screenshot of the GOV.UK website showing a guidance page titled 'Managing ash dieback in England'. The middle image is the cover of a report titled 'Conserving our ash trees and mitigating the impacts of pests and diseases of ash: A vision and high-level strategy for ash research' published by the Department for Environment, Food & Rural Affairs in June 2019. The bottom image is a banner for the 'Report a Tree' website, featuring a close-up of a tree trunk and the text 'Report a Tree' overlaid on a background of green foliage.

Mitigation – Threat reduction



Mitigation – Biosecurity



apse online seminars

APSE Plant Biosecurity:
Understanding and recognising the need to implement plant biosecurity measures in order to meet the threats to the UK's plants and trees

* Cover image sources:
 Fern
 Paul Peckley and David Cooney

Mitigation – Biosecurity

Help us by keeping a look out for these species...

Which Species?

Himalayan Balsam	Japanese Knotweed	Giant Hogweed
 Leaves are scarlet (up to 15cm long)	 Purple speckled stems, regular nodes (like bamboo)	 Shield shaped leaves
 Pink with spots and variegated inside	 Shield shaped leaves	 Stems usually with sharp bristles
		 Grow up to 5m tall with umbrella shaped flower

Why? These species are not native, we need to help our natural plants re-establish

- Balsam competes for habitat and weakens river banks
- Affects surrounding buildings
- Dangerous**
It can burn your body

What shall I do?

- Pull it up! Stamp on it!**
Or why not join our volunteer balsam bashes?
- Report it to us so that we can arrange for it to be sprayed**
Spraying or injecting are the only effective way to destroy knotweed.
- DO NOT TOUCH**
Report it ASAP

For more information: visit www.luneriverstrust.org.uk or call 015242 22174

 **LUNE RIVERS TRUST**



Mitigation – Biosecurity



 **APPLICATION OF BIOSECURITY
IN ARBORICULTURE**

GUIDANCE NOTE 2



Principal Authors:
Simon Cox and **James Roberts**

 **Plant Healthy**

 **Plant Health Centre**
Scotland's Centre of Expertise

 **Scottish Government**
Pàrlachd na h-Alba
gov.scot



Biosecurity best practice for safe disposal of plant waste and spent growing media

Research has shown that plant waste and spent growing media can harbour pests and pathogens, including quarantine-regulated species such as *Phytophthora ramorum*. These organisms have the potential to spread from untreated waste piles to cultivated plants and the wider environment. This guidance aims to help the horticultural sector understand and mitigate these risks by providing some practical advice on waste management.

Minimise waste and risk of infected waste material by growing clean plants

The best way to limit waste volumes and to minimise the risk of pests and pathogens proliferating in waste is to ensure that plant stock is sourced and grown to high standards of biosecurity and is monitored frequently to ensure that plants remain visibly healthy/symptom-free. Various types of growing media ingredients and mulches (e.g. pet tops) can also harbour and be sources of pests/pathogens.

*Waste and environmental legislation is a devolved issue so please note that if you are using this guidance outside Scotland, the relevant national licencing authorities will need to be contacted.**





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Summary:

Prepare for threats

Report symptoms - TreeAlert

Plan/undertake biosecurity