



Forestry Commission

Your Biosecurity Toolkit – Public Engagement in Tree Health

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Biosecurity team

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Forest Services – Plant Health Forestry

Biosecurity team

- Internal and stakeholder engagement – Defra Group Personal Biosecurity Minimum Standard, train the trainers, FC Tree Health Champions, tree health days
- Public engagement – Public Awareness in Plant Health Accord – Keep it Clean campaign, events
- Resources – UK Plant Health Information Portal, Defra Biosecurity Hub, Gov.UK downloads
- Projects + research - large machinery, disinfectants, biosecurity awareness, behaviour change

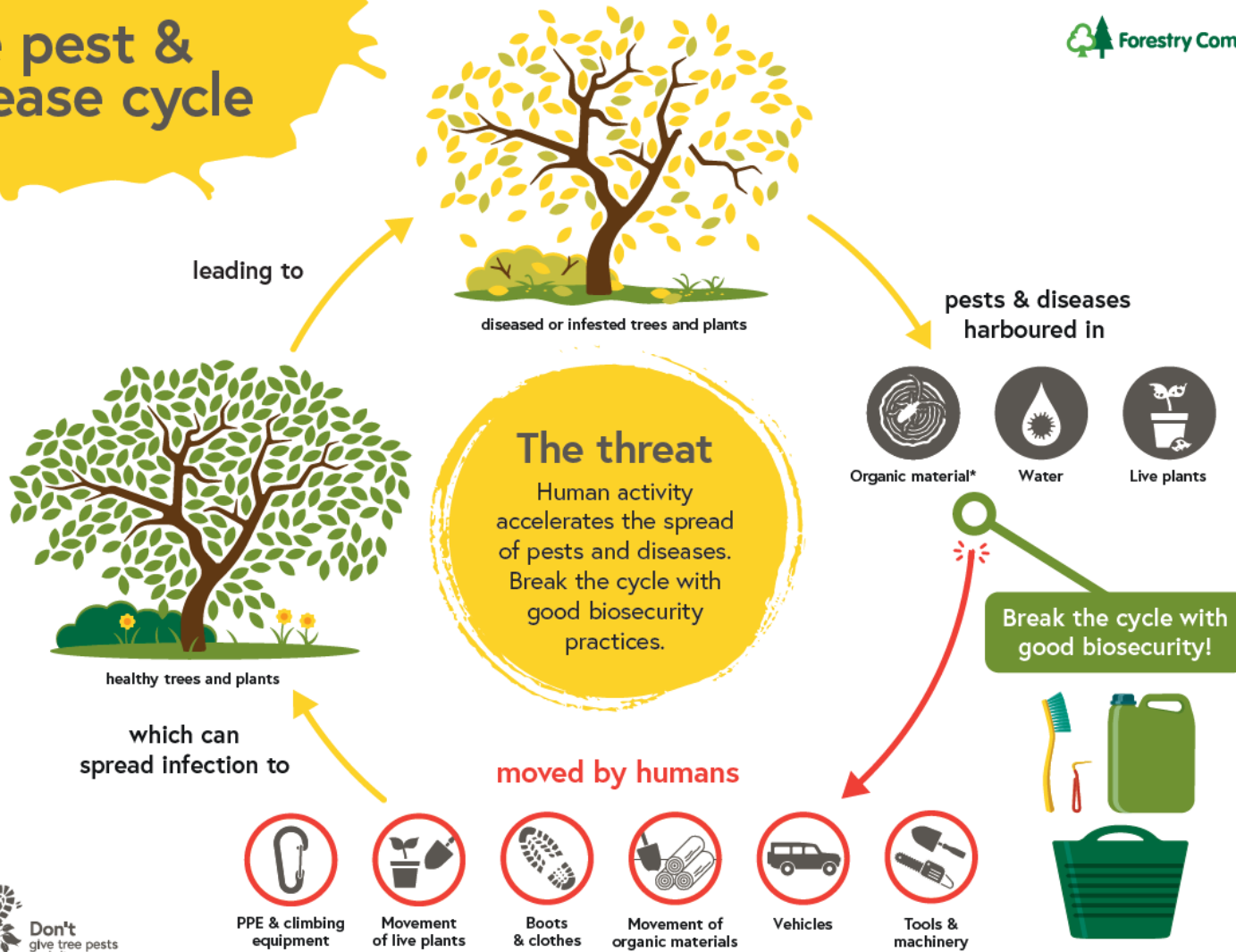


Keep It Clean

Emma Aspin



The pest & disease cycle



*Organic materials include plant material, timber, woodchip and firewood.

Arrive Clean
Keep it Clean
Leave Clean



What have we been up to?



Don't
give tree pests
and diseases
an easy ride



Biosecurity video filming





Public shows

KEEP IT CLEAN Don't give tree pests and diseases an easy ride

Forest Research Forestry Commission

Personal Biosecurity: a minimum standard for all

14

Site A signage: Natural England biosecurity sign.

Site B signage: Re-design incorporating behaviour centred design (BCD) principles.

Is Biosecurity messaging communicated effectively?

Interception surveys were conducted at two sites containing different biosecurity awareness signage.

- Were the signs effective at conveying biosecurity messaging?
- Did visitors then comply with an immediate boot cleaning request?

Results: A significantly higher proportion of respondents reported seeing Site B signage relative to Site A signage ($P = 0.005$). However, no significant difference was observed in the proportion of people who remembered the tree health

Issue the signs attempted to communicate ($P = 0.898$), nor the action being called for ($P = 1$). Proportion of people cleaning their footwear at Site B relative to Site A (81% vs 50%) was not statistically significant ($P = 0.625$).

Conclusions: Although Site B signage was more readily noticed by visitors, it proved no more effective in conveying information or encouraging boot cleaning.

Personal Biosecurity Guidance

£25 Basic Biosecurity Kit (long handle brush, boot wash, water container, flexible bucket)

For best results include Cleankill Sanitising Spray – an effective disinfectant against Phytophthora species and other harmful pathogens

- Clean away mud and debris
- Pick large stones out
- Spray clean items with disinfectant (optional)
- Pour dirty water on hard standing surface at the site, NOT into a watercourse

We're all responsible for the nation's Biosecurity.

Remember to #KeepItClean.

Think kit Think transport Think trees



Conferences
& talks

Supporting
social
research



Don't give tree pests and diseases an easy ride

Before you leave a forest or green space today remember to...



Think kit

- Always make a clean start before you visit woodlands, and remove soil and debris from boots and clothing when you've finished your outdoor activity.
- Give all boots, clothing and other outdoor equipment, such as walking poles, a thorough clean before making longer journeys for holidays or sporting events.



Think transport

- Car:** Avoid driving vehicles off-road and park in designated carparks or on hard standing. Remove any soil and plant debris from your car before leaving, including in footwells and the boot.
- Bicycle:** After cycling through our green spaces please wash off any mud or plant debris from your bicycle to help limit the spread of pests and diseases between areas.
- Buggies** can pick up lots of mud and plant debris when pushed around our greenspaces and forests. Remove any build up of soil and debris before leaving site.



Think trees

- Don't risk it!** Never travel back with plants, trees, or other organic material from your holidays abroad. Live plants, trees and organic material pose a huge risk to our biosecurity as they may harbour quarantine pests and diseases not established in the UK.
- Keep an eye out** for signs of tree pests and diseases and report them to the Forestry Commission through TreeAlert.

Find out more about biosecurity:

www.gov.uk/forestrycommission



Tell us if you see any signs of ill health in trees: treealert.forestryresearch.gov.uk

We're all responsible for the nation's biosecurity
Remember to #KeepItClean



Don't give tree pests and diseases an easy ride

Before you start work today remember to...



Think kit

- Always make a clean start each day by removing soil and debris from boots and clothing before leaving sites.
- Clean and disinfect chainsaws and other cutting tools regularly and always when moving between sites.
- Clean and dry climbing ropes and PPE to remove any build up of saw dust and other organic debris. Always do this after working on a diseased or infested tree.



Think transport

- Avoid driving vehicles off-road and remove any build-up of soil and debris, including in cabs, footwells and the boot, when leaving site. Park vehicles on hardstanding where possible.
- Inspect plant or machinery entering sites for soil and debris build-up before allowing access. Where possible, clean plant and machinery when entering and leaving sites.



Think trees

- Importing new planting stock onto land you manage or work on poses the biggest biosecurity risk. Choose planting stock from reputable nurseries with robust biosecurity measures, including by way of example, those with Plant Healthy Certification (or similar) where possible.
- Keep records of all purchases and suppliers to help with tracing exercises in the event of a tree pest or disease.
- Monitor new stock for signs of ill health on a regular basis and report any suspected sightings of pest and disease to the Forestry Commission through TreeAlert.

Find out more about biosecurity:

www.gov.uk/forestrycommission



Tell us if you see any signs of ill health in trees: treealert.forestryresearch.gov.uk

We're all responsible for the nation's biosecurity
Remember to #KeepItClean



Keep It Clean resources:

[Google 'Biosecurity Gov'](#)



Contents

- [What you can do](#)
- [Biosecurity kit](#)
- [E-learning](#)
- [Resources](#)
- [Contacts](#)

Guidance

How biosecurity can prevent the introduction and spread of tree pests and diseases

Find out what you can do to prevent tree pests and diseases from establishing and spreading.

From: [Forestry Commission](#) and [Animal and Plant Health Agency](#)

Published 26 September 2018

Last updated 23 August 2023 — [See all updates](#)





Don't
give tree pests
and diseases
an easy ride



Forestry England

Clean bikes, healthy trails

Protect the trails by washing your bike between rides to limit the spread of damaging pests and diseases and help keep forests healthy

forestryengland.uk/biosecurity



Asian longhorn beetle

Asian longhorn beetle is a destructive insect pest, native to China and neighbouring countries. If introduced into the UK, the beetle could threaten a wide range of broadleaved trees. We all have a part to play in preventing the introduction and spread of tree pests and diseases. Visit www.gov.uk/forestrycommission to find out more.





Think kit

Think transport

Think trees



Forestry Commission



We want the public to feel:

- Empowered
- Motivated
- Prepared to take action



Keep in touch!



Knowing our audience

Katharine Farrell



The public, visits to the countryside, and biosecurity

Questionnaire results

January 2024

Clare Hall, Elliot Colley, Toni Clarke, Sophie
Zawadzki, with edits by Ella Furness.

Forest Research

Forest Research - survey

- How to help the public 'play a part in protecting plants and trees from the threat of pests and diseases'
- January 2023 – online questionnaire
- 2,000 members of public in England
- Biosecurity awareness, perception of tree and plant P&D, threats to countryside
- Use of and trust in media, information sources
- Membership of organisations



KEY FINDINGS

Understanding Biosecurity.

'The Public, visits to the Countryside and Biosecurity Survey', conducted with 2000 participants, provides information on the public's experience of the countryside and green spaces in England.

Key findings are presented, including insights into the public's general understanding of Biosecurity.



WE ASKED: What do you think are the greatest threats to the countryside in England? [Select up to three options]

- Climate change perceived to be biggest threat – selected by 49% of respondents
- Pests & diseases in the environment selected by 17% of respondents
- Non-native / invasive species selected least frequently (13% of respondents selected this as one of the greatest threats)



	Total %	Total n
Climate Change	49%	970
Development (E.g., construction of buildings, roads)	40%	809
Loss of biodiversity (Plants, insects, birds, wildlife)	39%	784
Water pollution	28%	568
Visitor impact (E.g., erosion, litter, noise)	21%	418
Extreme weather events	20%	396
Pests and diseases in the environment	17%	330
Forestry activities (e.g., felling)	16%	315
Agricultural practices	14%	283
Non-native / Invasive species	13%	253
Other (please specify)	0%	6
N/A; no threats in particular / I don't know	5%	100

Next steps

- Promote behaviour change – using simple personal biosecurity measures
- Communicate to stakeholders – Keep it Clean – key messages and resources
- Encourage further involvement – Tree Alert, Observatree, citizen science



Events & social media

- National Plant Health Week – 6th – 12th May
- Arb Show 16th – 18th May – Westonbirt Arboretum
- APF Show 19th-21st Sept – Warwickshire
- X – @ForestryComm
- LinkedIn – Forestry Commission

Biosecurity@forestrycommission.gov.uk



Thanks

- Observatree – Peter Crow, Matt Parratt
- Forest Research – Clare Hall
- APSE – Wayne Priestley, Iqra Ali
- APHA – Lucy Carson-Taylor





Forestry Commission

- UK Plant Health Information Portal:
<https://planthealthportal.defra.gov.uk>
- Forest Research – short video on using TreeAlert:
<https://bit.ly/3TF3kTj>
- Defra Biosecurity Hub – NNS:
<https://bit.ly/3Pm5MeH>
- Biosecurity guidance on Gov.UK:
<https://bit.ly/4chCLuB>
- Forestry Commission e-learning portal:
<https://bit.ly/3TInyQv>
- Observatree – priority pests and diseases:
<https://bit.ly/3VmZzm0>



TreeAlert & Observatree

Lydia Haydon





TreeAlert and Observatree

Tree A!ert
Tree Pest & Disease sighting reporter





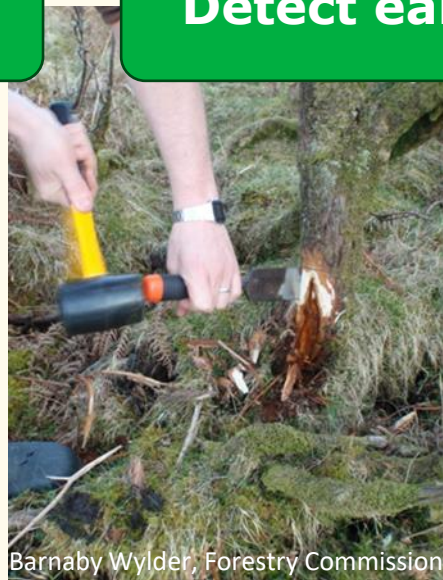
Prevent entry



Detect early



Brontë Thomas, Forestry Commission



Barnaby Wylder, Forestry Commission



Brontë Thomas, Forestry Commission

Minimise impact



Welcome to TreeAlert

Report suspected tree pests and diseases found anywhere in the UK



What is TreeAlert?

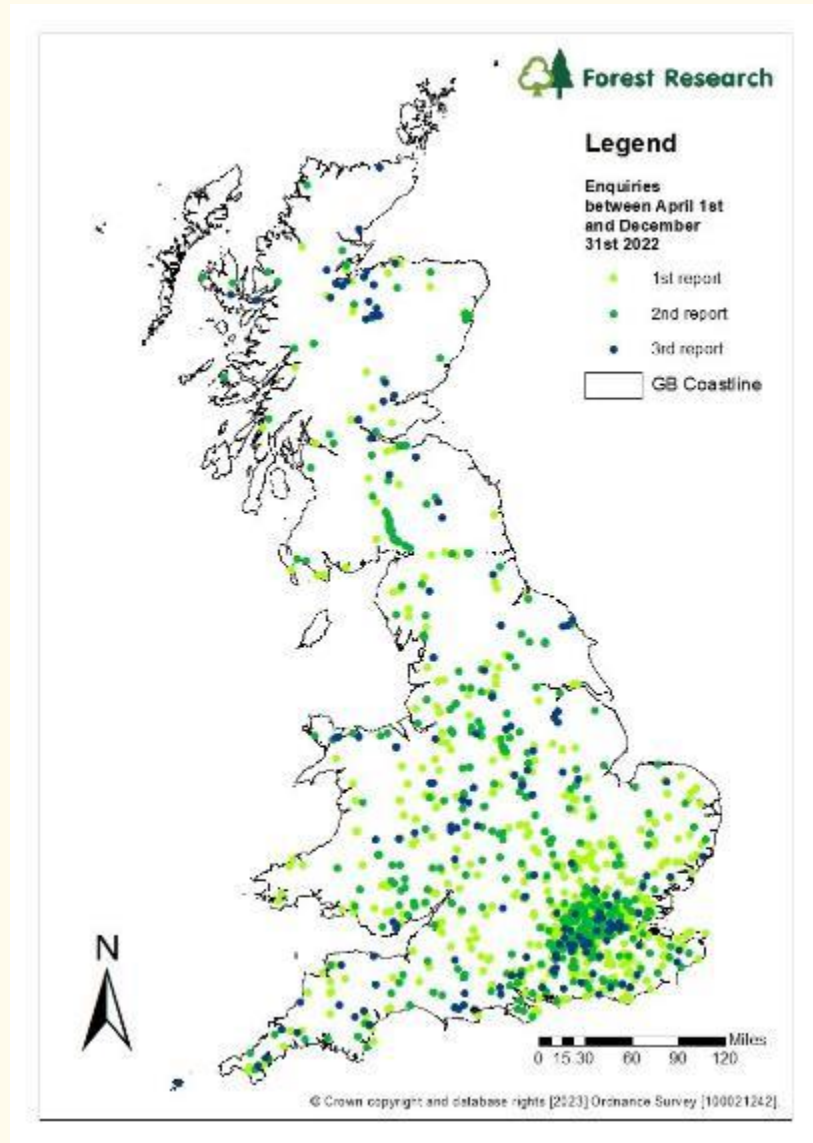
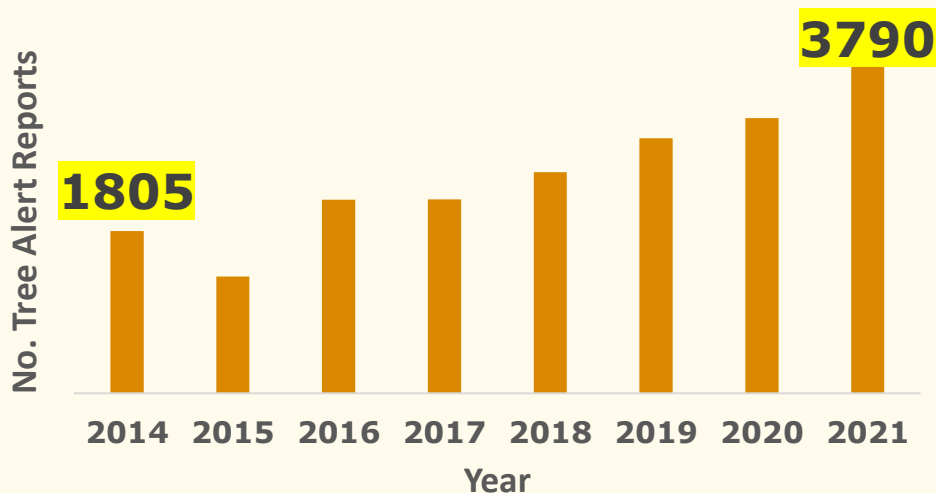
Online reporting tool for pests & diseases developed by Forest Research

Funding from DEFRA, Forestry Commission, Scottish Forestry & Welsh Government

Created following the arrival of Chalara (ash dieback) – easy method, rapid reporting

Early warning system for flagging potentially new tree pests & diseases

- The official tool for reporting tree pests and diseases in GB
- Reports of suspected pests or diseases are diagnosed by tree health scientists
- Close collaboration with tree & plant health inspectors facilitate follow-up investigations
- Used by Observatree volunteers to report tree pests and diseases

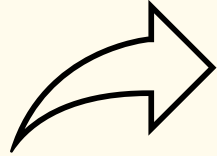


Priority pest and diseases



Priority pest and diseases



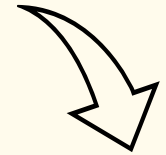


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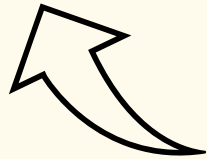


The entire tree & surroundings

Symptoms(s) in relation to location on the tree



Some further info...
e.g. what3words location





1

Entire tree and surroundings

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Dothistroma needle blight (DNB)

Broadleaf Root disease

Pine species displaying severe defoliation



Situated in what appears to be a stand of the same tree species (monoculture)



A large beech tree, displaying a thin crown which is prematurely turning yellow.

Situated adjacent to a road – This could be a danger to public safety if it falls.



2

Symptoms – Location on tree

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Broadleaf Root disease

Dothistroma needle blight (DNB)



Reddening of needles amongst dead/ necrotic needles and needles displaying dead tips with green bases



Around 5 large clumps of fungal fruiting bodies growing from the roots and base of the tree. Distributed around approx. half of the circumference of the stem.

3 Symptoms – up close



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Broadleaf Root disease

Dothistroma needle blight (DNB)



Green bases with red/brown lesions and banding can be seen on the tips of affected needles. Alongside this, small clusters of single fruit bodies are present.



Large fruiting bodies (pound coin for size comparison). They are tiered with a darker brown top and lighter underside. No gills are displayed on the undersurface, but minute pores are present.



TreeAlert Report

General rule:

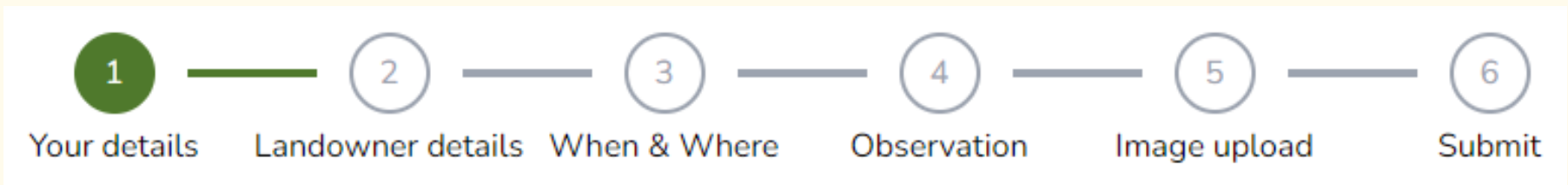
The **more information** you supply, the **more useful** the report

Date of observation. Type of location (e.g. hedgerow, woodland).

Location (grid ref > postcode)

Number of trees affected. Approximate age. Trunk or stem diameter. Type of tree (conifer/broadleaf). Common name or species. Symptoms, location of them on the tree. 3x PHOTOS!

Account optional but here you can keep track of previous reports



User friendly reporting method

Welcome to TreeAlert
Report suspected tree pests and diseases found anywhere in the UK

Forest Research

TreeAlert
Tree Pest & Disease Reporting

HOME DASHBOARD USEFUL LINKS

Peter

Dashboard

Submit a Report Available to all users

- General Report**
Submit a report of a problem affecting the health of a tree. If you suspect or know the cause then please use the Disease specific report, otherwise use this General report.
- Disease Specific Reports**
Submit a report of a specific tree pest or disease that you have seen.
- Diagnosis Service**
If you own or manage trees you can request a diagnosis of a pest or disease problem. This may be a chargeable service.
- Healthy Trees**
Send a healthy tree report and view your reports.

Submissions Available to registered users

- Your Previous Submissions**
List, search, and view your previous Tree Alert submissions.

TreeAlert is managed by Forest Research, with funding from partner organisations

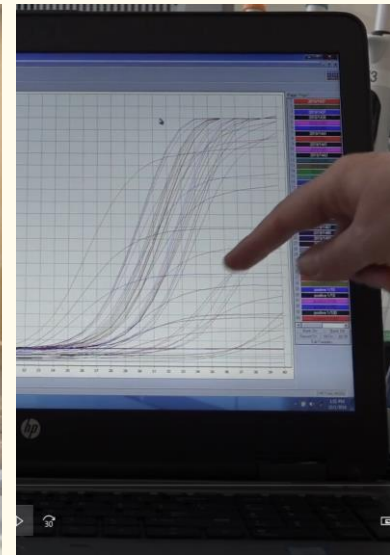
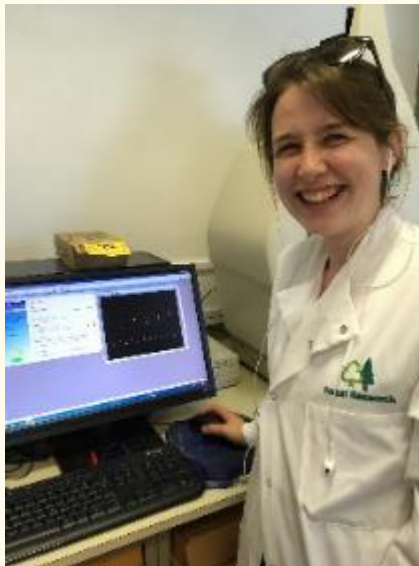
Forest Research Forestry Commission Scottish Forestry Department for Environment, Food & Rural Affairs Llywodraeth Cymru Welsh Government

Contact Us
Freedom of Information
Privacy Policy
Accessibility

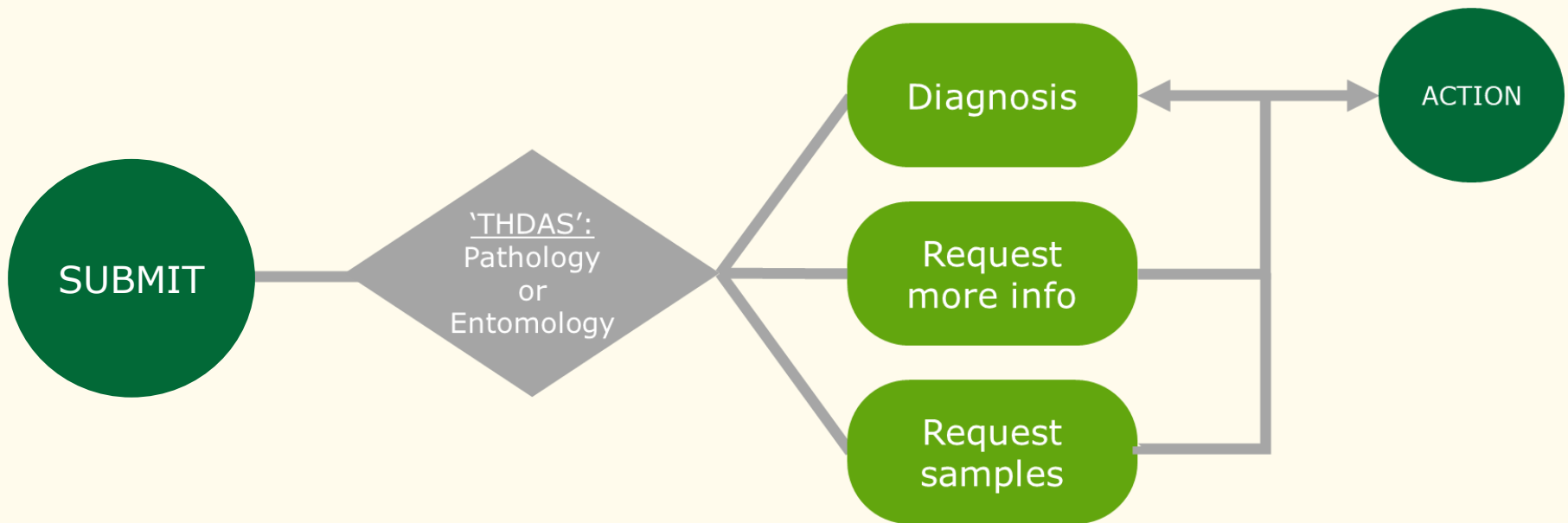
Cookie Settings
Cookie Policy
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The tree health,
diagnostic and advisory
team!



The TreeAlert reporting process



Key messages to take away



Forestry Commission

- TreeAlert is for **everyone**
- Anyone can and is encouraged to report suspected cases of unhealthy-looking trees
- Users are guided through reporting – you do not need to be an expert



Observatree partners



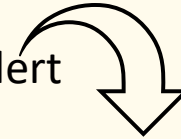
Oct 2013 – Sept 2017
50% funded by EU LIFE+ Programme



Associates

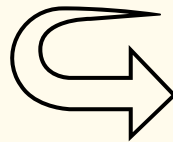


- A link to a short demonstrative video of how to use TreeAlert



Forest Research on X: " 🌿 👁️ Visit #Observatree to learn how to identify priority tree pests and diseases: <https://t.co/D1pnRvzgLh> To submit a report, visit the #TreeAlert page: <https://t.co/44oLohnKjr> In collaboration with @WoodlandTrust and partners. #TreeHealth #WoodlandManager #UKLandOwner <https://t.co/QhvkElmtp9>" / X (twitter.com)

- TreeAlert
[Tree Alert \(forestryresearch.gov.uk\)](https://www.forestryresearch.gov.uk)



- Observatree
[An early warning system for tree health and tree disease – Observatree](#)



