

The Future of UK Treescapes

AHRC Webinar - Perspectives from Defra Tree Health

Jake Morris - Plant Health Evidence & Analysis







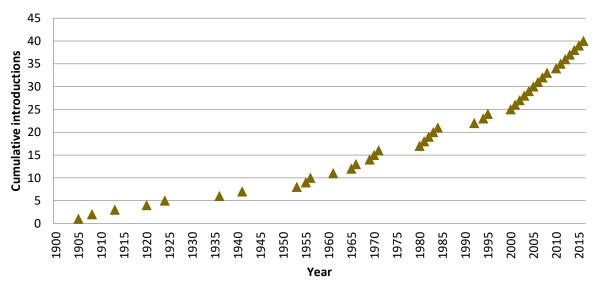
Threats to tree health

Pathogen pressure and risks to tree health have increased due to range of factors e.g. globalisation of trade and travel; airborne threats; pests and pathogens evolving/cross-breeding. There is likely to be no reduction in this pressure.

Trade in commodities of interest to plant health

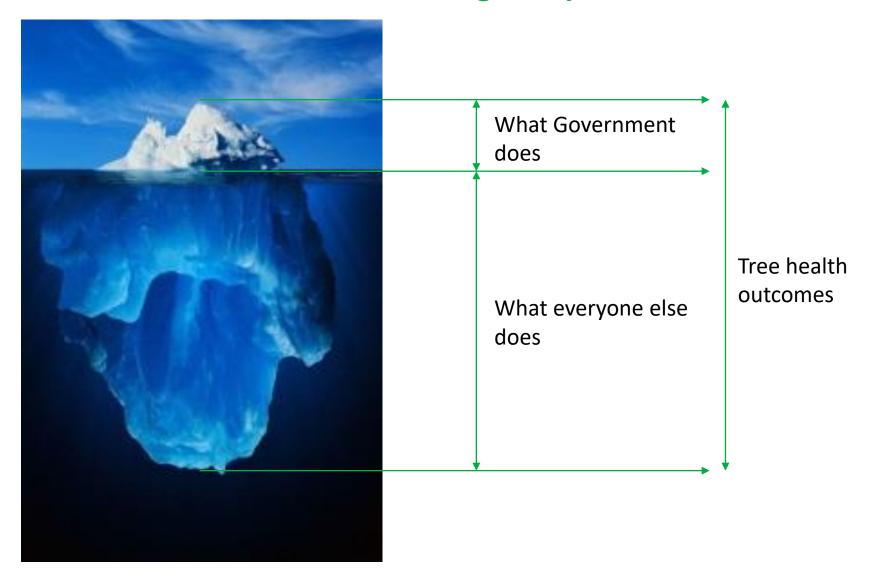


UK major tree pest introductions 1900-2015



All these factors have contributed to a significant upward trend in pest introductions in recent years.

Tree health – who has agency?



Tree Health Resilience Strategy

"To build the resilience of England's trees, woods and forests. To enhance the benefits trees provide, by mitigating and minimising the impact of pests and diseases and improving the capacity of our trees to adapt to changing pressures."

Environmental Goals

Extent

Woodland and Tree

Management Plans

More trees, woods

and forests

Grant

Species & Pest Specific

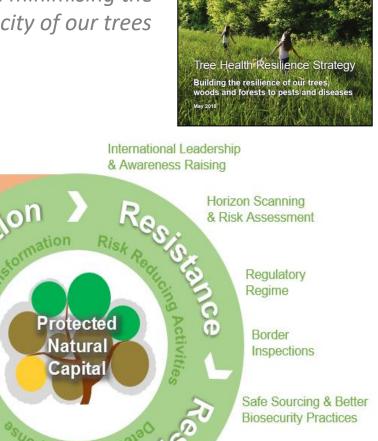
Management Plans

Schemes

Environmental Goals: Extent,
Connectivity, Diversity, Condition

Behavioural Goals:

- work together to protect and value our trees as important natural capital
- biosecurity at the heart of everything we do
- Developing and <u>applying</u> the latest science and evidence to inform our risk-based approach
- Apply the environmental goals to the management of our trees, woods and forests
- Build the knowledge and capability to apply the concepts of resilience at all levels

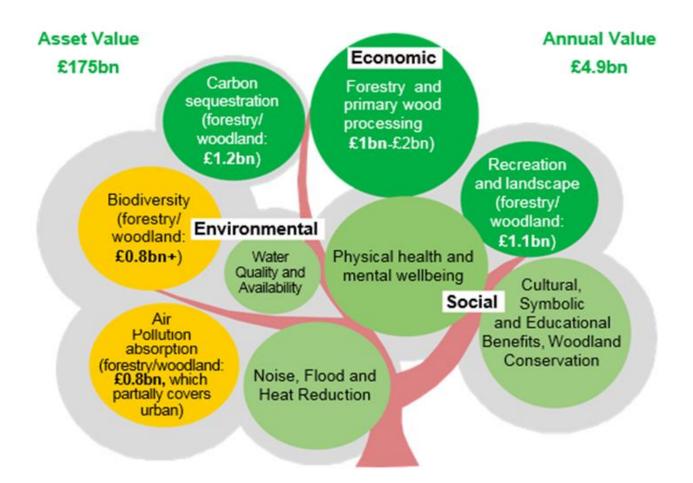


Contingency

Plans

Targeted Surveillance

Understanding values – esp. cultural



Key: Value extensively/partially monetised; Elements of value partly monetised; value understood in quantified or qualitative terms only. Circle size indicates a judgement of the relative importance of each benefit. Estimates of uncertainty (for social and environmental values) is denoted by the outer grey circles – where the larger the uncertainty, the larger the outer circle.

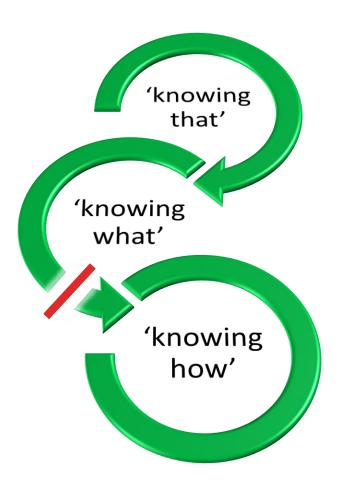
Understanding values as drivers of behaviours

Landowners / managers
Traders / retailers
Visiting public
Buying public
Travelling public
Planners
'Specifiers' (e.g.
landscape architects)
Local Government
Central Government
Researchers / scientists
Citizen scientists

Need for research that informs a 'national conversation' to build a cultural response to the threats faced by trees

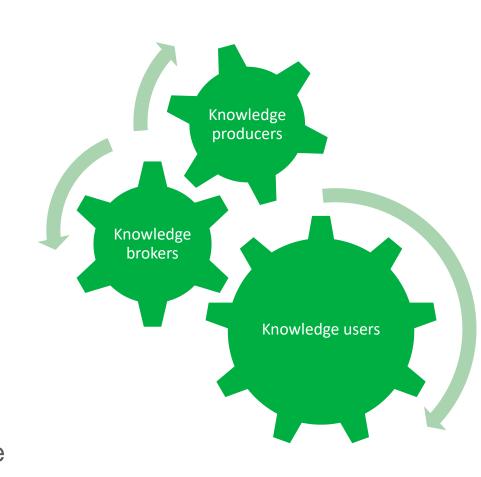


Applying knowledge / knowledge into action



Applying knowledge / knowledge into action

- Tree health / resilience requires an interventionist approach
- Lack of (right kind) of knowledge is key barrier to action
- Systems of <u>knowledge production</u>, <u>communication</u> and <u>use</u> need to be researched and improved
- RQ: what knowledge is needed by whom?
- RQ: how should knowledge be communicated and by whom?
- RQ: how should science change to facilitate application and better serve end-users?



In summary:

- Trees, woods and forests are facing unprecedented levels of threat
- Addressing these threats requires an interventionist approach
- We need to build resilience by delivering the environmental and behavioural goals of the THRS
- Research can inform a 'national conversation' around our collective responsibility for future treescapes
- We need a better understanding of social and cultural 'values at risk' to build support and allocate appropriate resources
- We need a better understanding of values, how they drive behaviours, and how we can encourage positive behaviour change
- Systems of knowledge production, communication and use need to improve. Research can help here!

Thank you!

Email: jake.morris@defra.gov.uk