Forestry Commission

Horizon scanning and our response to it

Anna Brown

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Purpose:

- Describe why Forestry England undertook this work
- Highlight the 15 issues identified in the Cambridge University/Forestry England horizon scanning exercise.
- Suggest top 4 issues that Forestry Commission should take further action on.
- Illustrate uncertainties and dependencies that will need to be accommodated in our response to the horizon scan.
- Gain your support for focusing on the 4 issues identified.
- Make a decision on next steps

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Why, what, how?

- **Why?** Time of great change…
  Forestry England carrying out 'due diligence' to be forward-thinking and evidence-based in our strategic planning

- **What?** Horizon scanning highlights new and emerging issues, so that we can respond to them now

- **How?** Collaboration with Cambridge University (Prof Bill Sutherland) – track record of successful horizon scans
  - 180 issues longlisted
  - 42 representatives on Expert Panel

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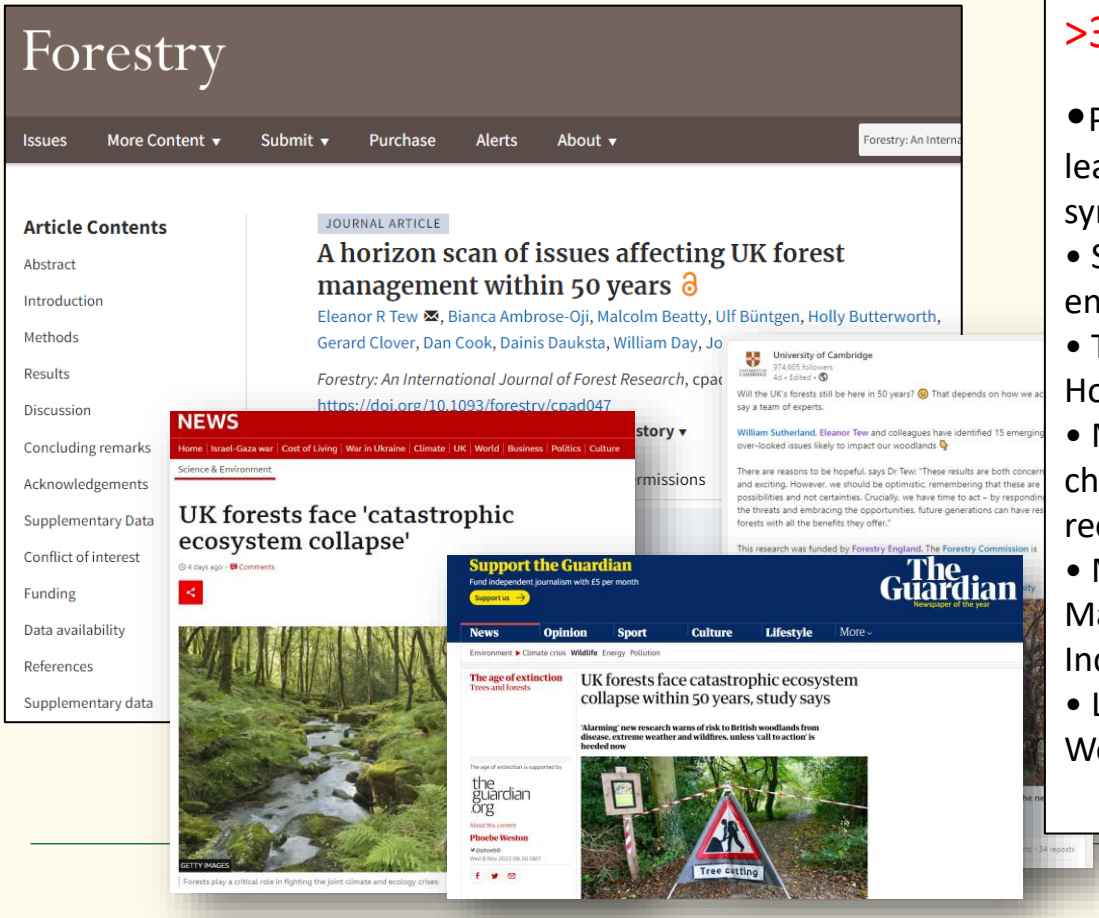
Tew *et al.* (2023)



Fantastic media coverage!

>350 articles

- Press Association Science correspondent leading to national coverage and local syndication.
- Science/specialist: BBC science and environment online, The Ecologist
- Trade: Forestry Journal (2 articles) and Horticulture Week.
- Mainstream broadcast: BBC TV News channel (live interview), local ITV (pre-recorded), local BBC Radio (live).
- Mainstream print/online: Guardian, Daily Mail, Evening Standard, Daily Express, Independent.
- Likely influential outlets: Carbon Brief and World Economic Forum news round-ups.

Forestry England's next steps

- Careful assessment of which issues are most relevant to Forestry England and the nation's forests
- Internal staff engagement
- Integration into the next strategies beyond 'Growing the Future'

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The top 15 issues & opportunities

1. Catastrophic forest ecosystem collapse
2. Increased drought and flooding change the social costs and benefits of trees
3. Forest management becomes more challenging due to changing seasonal working windows
4. Protecting and enhancing soil microbial ecology becomes a higher priority
5. Viruses and viroids emerge as pathogens of increasing importance for trees
6. eDNA revolutionizes our understanding of forest ecosystems
7. Trees are at the heart of future urban planning
8. The Taskforce on Nature-related Financial Disclosures (TNFD) drives transparency and investment in nature-positive management
9. Natural capital funding streams are greatly upscaled
10. New technologies facilitate widespread adoption of smart silviculture
11. New technologies improve worker health and safety
12. New wood product markets stimulate more active forest management
13. UK commercial forest resources may not match future value chains
14. Unpredictable supply and demand dynamics in global wood product markets
15. International commitments will spotlight ecosystem integrity and drive monitoring efforts

Colours indicate Forestry Commission priorities

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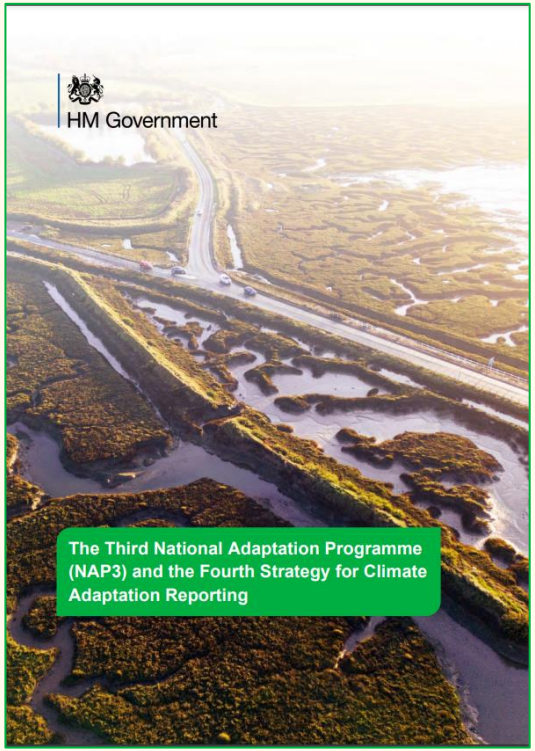
High level policy in place – e.g. National Adaptation Programme (2023)



Wildfire, pests, pathogens and INNS [invasive non native species] are a significant source of risk to forests, woodlands and peatlands, and could affect their ability to capture and store carbon and increase vulnerability to climate change (source: CCC, 2021). To mitigate this, Defra will:

- *develop a framework to regulate the planting of 'emerging forestry species' from 2023*
- *introduce a bio-secure procurement requirement from 2025 on all government funded tree planting*
- *publish the Deer Management Strategy to reduce grazing pressures, promoting regeneration of existing woodlands and evolutionary adaptation (due in 2023)*
- *run a wildfire risk programme (2023-2027) so that land management is adapted for this risk*

…….ensuring woodland creation and management plans consider climate projections by 2028 based on recommended actions from Forest Research's Climate Change Hub

- *using climate risk forecasts to inform tree planting policies and develop post England Tree Action Plan policies*
- *work with the Forestry Climate Change Partnership to increase the forestry sector's wildfire knowledge and skills through accredited training and improve understanding of the impacts of climate change and how to mitigate or limit them*

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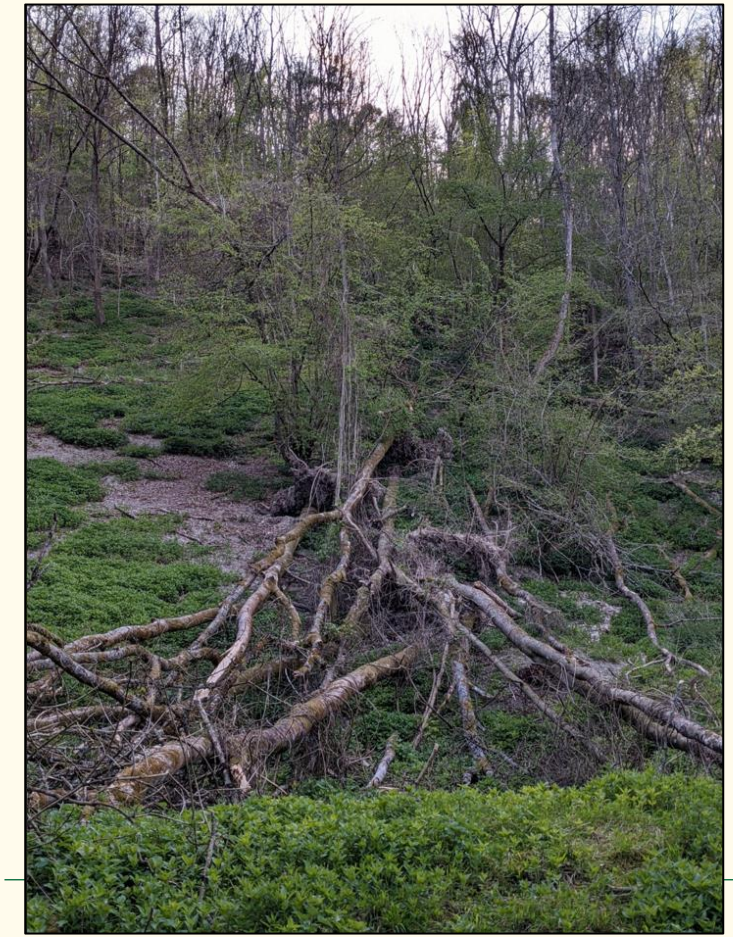
Woodland collapse happening now?



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Accelerate land use change to and from forestry, manage what we have, better.

- **Make it easy to plant trees**! Set out what is lawful, what is good practice & what the policy aspirations and grant conditions are.
- We need to **move woodland types around the landscape** to accommodate nature recovery and ensure carbon stocks and timber supplies expand
- **Non-permanent woodland** focused on timber and biomass (accepting that parts of the country suitable for agricultural production will change over next 50 years)
- **Reverse decline in area of softwood** woodland (need to do this to meet policy anyway)
- **Accelerate climate change adaptation** in existing woodlands
- Do more to **encourage natural regen** (manage deer) and enable enrichment planting for diversity
- Clear guidance on **what to restock** with (building on ESC, encouraging site specific soil and climate analysis)
- **Make it easy to thin and fell** – move to 'notification to thin'?
- **Ensure regulations** designed to protect soil, water and biodiversity **are fit for purpose**. Some compromise needed e.g. bird nesting season v working on waterlogged soil (see issues 3 & 4)
- **Economics need to stack up** for the owner (see issues 2, 8, 9, 12)
- **Hearts and minds** – need to get beyond "what's in it for me?"

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Uncertainties and dependencies

- **Climate change scenarios – hotter, drier or colder.** Emerging research indicates 50% chance of gulf stream 'switch off' in 2030's. This would give us a more continental climate as seen in Canada or North East Europe. **A 'portfolio approach' to adaptation** helps mitigate.
- Quantity and location of land that is economically attractive for tree planting will be influenced by **changes in land suitability** for economically viable cereal, horticulture and meat and milk production. Allowance of **non-permanent woodland** for some purposes could accommodate and exploit changes over time.
- **Investor confidence** in Nature Based Solutions. Some signs the market is beginning to question economics of carbon in forests. Wildfire released 2,000 Mt tonnes of CO_2 from Canadian forests this year, 4x total UK emissions (417.1 Mt GHG emissions in 2022). Ensuring UK woodlands are resilient is essential to keep some investment routes open.
- **Global timber demand and supply likely to remain volatile**. Increasing our understanding of this is something that will start in 2024.
- Many of the issues are linked or dependant on each other addressing our top four will help mitigate/benefit from some other issues identified.

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Suggested next steps

- **Complete stocktake and gap analysis** of the work going on across FC that will help us mitigate the 3 threats and one opportunity identified here (by end of January).
- **Set out further actions/projects** that need to be taken over the next SR period and estimate costs for inclusion in SR25 bid (by end of January).
- **Develop detail of actions and projects across FC** with view to starting some additional work from April 2024.
- Work with paper co-authors to **catalyse more action across the sector**
- Look to host a **joint conference with ICF in 2024**

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