

## SUPPORTING LAND MANAGERS FOR RESILIENT TREESCAPES RESEARCH SUMMARY 2018-19

### Introduction

Research between August 2018 and March 2019 was undertaken to help develop policy options relating to:

1. Supply and demand for improved trees
2. Implementing treatment and/or felling in response to pests & diseases (P&Ds)
3. Restocking for resilient treescapes
4. Networks and governance mechanisms supporting actions for tree health

The research involved 11 workshops or extended focus groups held across the southwest, southeast and northwest of England. This included 174 land managers, and organisers or members of resilience networks. An additional set of semi-structured interviews with 16 supply chain actors, 10 interviews with land managers and another 18 interviews with network members extended the sample where it was felt there was under representation or to explore issues in greater detail. The results provide the following key messages relating to each policy question area.

### Supply and demand for quality planting stock

- i. There are three main motivators behind tree restocking decisions: commercial, conservation, and amenity.
- ii. Generally, there was a low level of awareness about tree improvement, and very limited stock availability of trees with pest and disease related improvements.
- iii. There is a lack of communication and knowledge sharing along the improved tree supply chain. An appetite exists for an authoritative figure/plant health professional to manage conflicting evidence around the development of improved trees, and to improve communication and collaboration between Research and Development (R&D) and industry stakeholders.
- iv. We need to understand better: the trade-offs being made by R&D and how these relate to the needs and demands of different end users; how improvements for pest and disease tolerance interacts with alternative risk management practices and implications for the wider environment; and, the long-term benefits and costs of improved stock.
- v. Given the limited supply of improved stock and the low awareness among stakeholders, there may be a role for government in supporting: i) research aimed at exploring improvements that deliver public benefits; ii) outreach and education campaigns directed at end users; iii) demand for stock by stipulating conditions about the type of trees to be used for replanting under grants available to land managers; iv) partnerships between R&D, industry, and users for the development of an integrated tree improvement programme.

### Treatment and felling for P&D management

- vi. There is high heterogeneity of land managers involved in forestry, woodland management, and the care of urban trees. Policy should be clear which land managers are the target audiences and understand the needs, values and attitudes of those land managers in policy option design.
- vii. In responding to tree pests and diseases, felling was more common than treatment. Felling may be pre-emptive - designed to maximise potential revenue from a crop, in response to SPHNs, or be undertaken to mitigate against health and safety risks, and public liability.
- viii. It is unclear whether P&D grants influence the behaviours of all eligible land managers. Those who traditionally utilise grants, *e.g.* productive managers and farmers, are more responsive to them. However, grants do not change the behaviour of 'non-commercial' owners, but rather support actions they would have taken anyway. Alternative grant scheme designs could influence responses to P&D, by expanding eligibility to a wider set of stakeholders, by considering a wider basket of pests and diseases, and by providing additional support along with financial incentives. Scheme design should also work to overcome

some of the barriers to grant application and uptake attributable to current processes and materials. Overall, the conclusion is that, *outside of the commercial sector, grants alone are unlikely to change land manager behaviour in the context of treatment/felling (or restocking) as a result of tree P&D.*

- ix. In the urban context, there is a need for financial resources to help with P&D issues specific to that context, particularly as Local Government is currently experiencing resource scarcity. Local Authorities and large conservation organisations were particularly concerned about the costs of managing ash dieback. Even with increased resources for treatment and felling there may not be capacity to implement actions.
- x. Knowledge, information, advice and guidance emerged as significant needs. Needs differ according to land manager type. Some land managers had poor awareness and lacked basic knowledge. Those land managers with awareness and understanding of P&Ds were able to articulate knowledge, could identify some P&Ds, and had some technical understanding of their effects. Generally, there is a gap in the knowledge required and how it might be applied using guidance and scientific information to particular circumstances, and how best to act. Other evidence suggests that advice and information provided through professional networks are significant in decisions to take up grants and in bringing about attitudinal and behaviour change.

### Restocking

- xi. The majority restock after felling trees with P&D. A minority of land managers are not restocking after felling trees with P&D. In the urban context this is often attributable to a lack of funds amongst Local Government. However, it is unclear why this happens in other cases. There were some examples where managers used the opportunity to extend other habitats of conservation value. Restocking by planting and natural regeneration are methods used by all land managers, while productive managers favour restocking, and conservation and amenity managers favour natural regeneration.
- xii. Species choice, provenance choice, and native/non-native species choice present a degree of confusion in decision making about how best to plan for a resilient treescape. Much of this is related to knowledge and what information or guidance land managers need to make informed choices and build confidence to act.
- xiii. It is unclear whether financial incentives would persuade a variety of land managers to restock for resilience. Some land managers suggested that regulation, *i.e.* a duty to restock after dealing with P&D might be a better option to influence behaviours.
- xiv. Replanting trees in an urban context presents particular and additional challenges in terms of species selection, and the costs of using mature planting stock. Urban managers suggested that a mix of regulation, improved financial incentives designed for the urban environment (e.g. including watering schemes in the first years after replanting), and increased diversity in species available would help increase the diversity and resilience of the urban treescape.

### Tree health information networks

- xv. There are few networks focused solely on tree P&Ds, however those that exist are open to focusing on multiple rather than a single P&Ds.
- xvi. Critical actions of networks are knowledge sharing, awareness raising and the translation of official guidance into shorter practical information with a local or regional context. Existing and new tree health networks need to be guided and directed towards the latest guidance and recommendations from Government and research. They could also support knowledge dissemination and confidence building.
- xvii. Networks that take the most action in relation to outbreak management and support for knowledge sharing tend to be those that are facing the greatest tree health risks at a local level.
- xviii. Mechanisms at a national level could initiate/support networks. Ideas include a dedicated national website, seed-corn funding, support group function, and access to expertise.
- xix. A co-design process could identify a new scheme or measures to identify how networks could be supported, particularly in terms of knowledge exchange and governance, and in identifying when local action is needed.