



Opportunities through improved tree stock

Alice Snowden 18th October 2017

Who are Future Trees Trust?

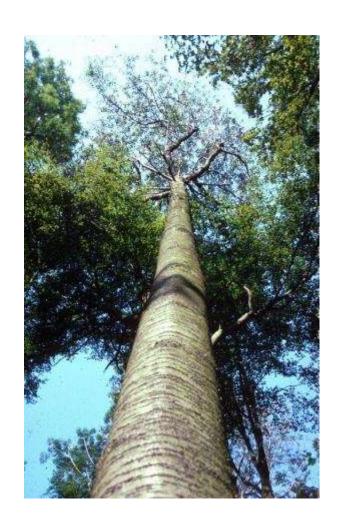


Our vision is to realise the economic, social and environmental benefits of broadleaved woodland so that by 2050, anyone planting broadleaved trees in Great Britain or Ireland primarily to produce timber can do so using the highest standard of improved material.

BREATHING NEW LIFE INTO OUR WOODLANDS

The principal aims of Future Trees Trust

- 1. To make planting broadleaved trees more economically attractive to landowners...
- 2. ...by improving the proportion of recoverable, high quality timber from broadleaved trees by selection and conventional breeding...
- ...thereby ensuring the social, environmental and economic benefits of more and better trees are shared by society.



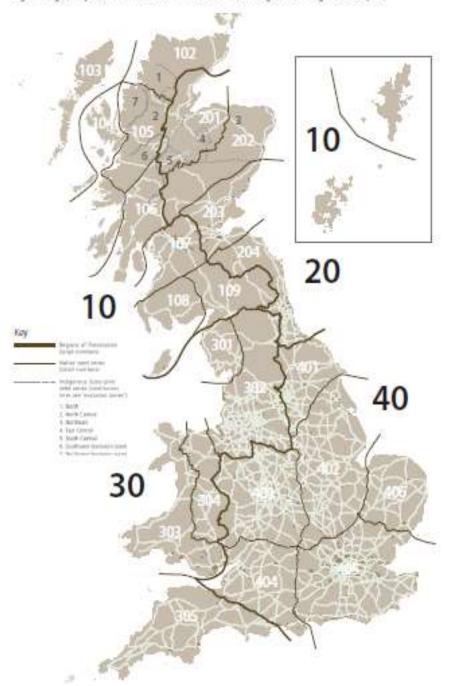
What do we mean by "improved stock"?



Forest Reproductive Material

Regulations controlling seed, cuttings and planting stock for forestry in Great Britain





What do we mean by "improved stock"?

(RP)

(ST)

(OR)

(CL)

(CM)



Seed source

Stand

Seed orchard

Clone

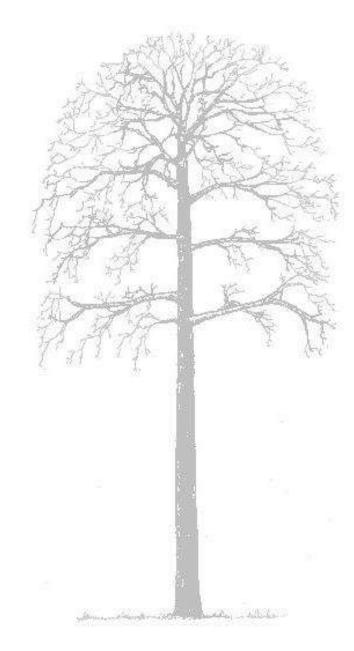
Clonal mixture

Parents of families (PF)

Category of reproductive material

Source identified	Selected	Qualified	Tested
(SI)	(SE)	(QU)	(TE)

Type of basic material



Plus tree selection

- Adapted to local climate
- Pest and disease free
- Rapid growth
- Straight, circular stem
- Fine branches
- Horizontal branches
- Desirable wood properties





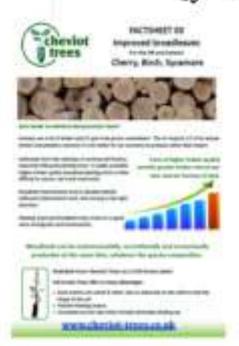


How readily available is "improved stock"?

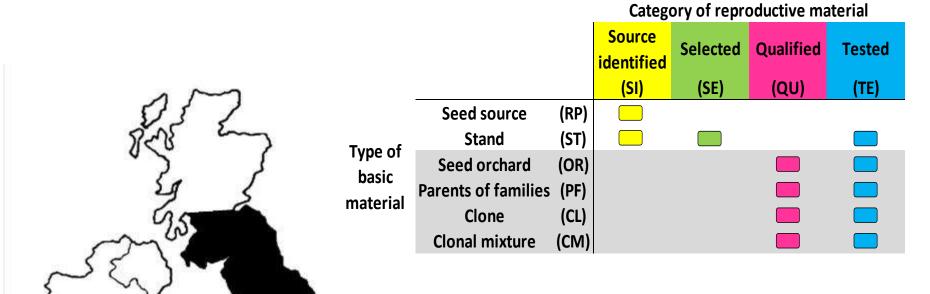
Prunus avium

National Register reference: pavOR2QU (right) pavOR5QU (below)





How can we expect "improved stock" to perform?

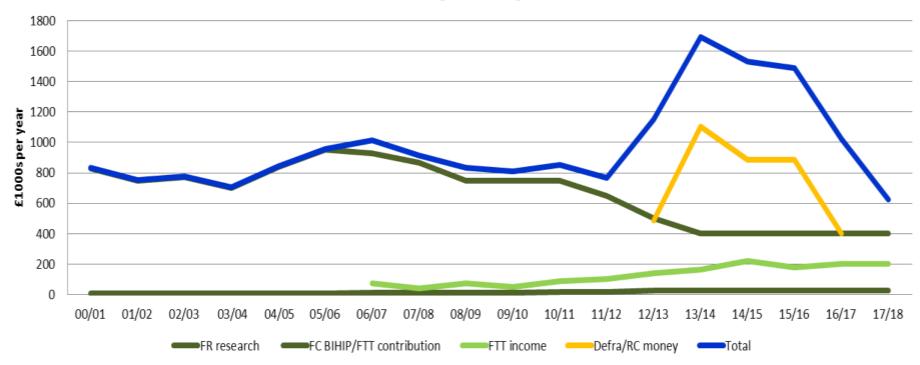


Betula pendula

National Register Reference: bpeOR14 QU

Funding for tree breeding work.

Tree breeding funding sources







Idea by Roger Coppock, Forestry Commission Bringing together all parties interested in breeding commercial tree species

- Future Trees Trust, Confor, Forest Research, Conifer Breeding Co-op
- Seed Merchants; Nursery, Growing & Processing Industries
- Countries, NGO & Academia representatives





A new model for Tree Breeding

Research: Identifying necessary areas of research required

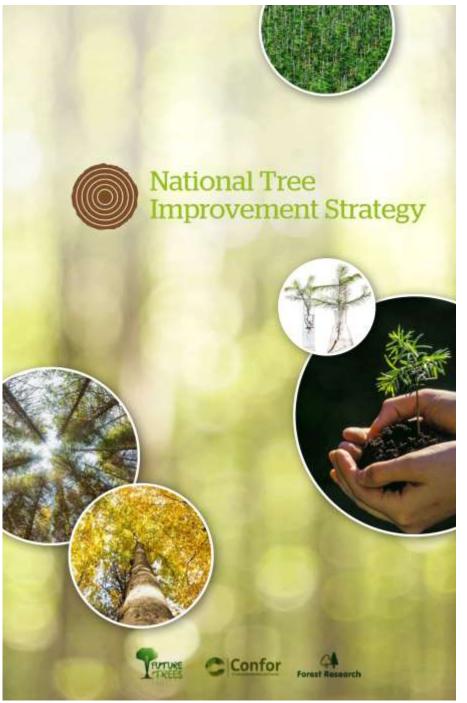
Governance: How will the work be managed and by whom?

Funding: What are the potential sources?

Intellectual Property: Making sure material and knowledge is shared equitably.

Communication: Engagement and awareness raising







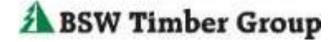
	Short term (1-2 years)	Mid-term (1-10 years)	Long term (1-25 years)
Governance	Review the governance arrangements and amend as the partnership evolves.	Regular review of the governance arrangements to ensure they remain fit for purpose, and reflect current realities.	
	Look at international examples of tree improvement and learn from them – what models of governance do they use? Can we evolve or develop those?		
	Look at governance options including (i) not-for-profit company; (ii) Community Interest Company; (iii) registered charity (iv) the current arrangement of a collection of representatives from other organisations.		
	Decide where and who should host the joint knowledge base.		
	Agree terms of reference and focus of work.		
	Short term (1-2 years)	Mid-term (1-10 years)	Long term (1-25 years)
Funding	Explore the apportunities for tax relief to support research.	Explore opportunities for combined research calls with for example NERC & BESRC (via universities), Woodland Trust, and UK Animal & Plant Health authority,	Maximise income from IP to benefit future research.
	Explore ways of extending the FTT model for funding recearch involving, private charitable trusts	Short-term research contracts – but we need a long-term platform of basic resources e.g. research fellowohips, PhD students, staff	
	Explore novel sources of research funding such as venture capitalists, corporate investors, and private investors of high net worth		
	Secure current level of public funding for the next 5-years		



National Tree Improvement Strategy







forestart























































Thank you



TRUST

