

'No manual for the future': Helping private woodland owners adapt to climate change





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Woodland ownership in the UK

	England	N. Ireland	Scotland	Wales	Total
Public (000 ha)	214	61	481	114	870
Private (000 ha)	1083	27	909	190	2209
% private	84%	31%	65%	63%	72%



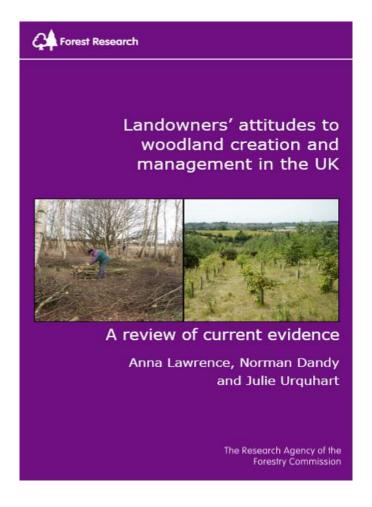
The UK and Wales







Evidence review: owners' attitudes



- 34 studies met the criteria
- Wildlife and conservation high priority
- Culture of ownership / control / responsibility
- Economics not explicitly a priority but related to low confidence in markets not lack of interest
- Widespread perception of complexity and bureaucracy
- Communication is at least as important as financial incentives
- But very little evidence from Wales

(Lawrence et al 2010)



Adaptive Forest Management

Review of international literature

Specific challenges in the UK:

- Relatively high population density, intense and multiple demands on land use
- Fragmented habitats
- Fragmented ownership (and high private ownership)
- Declining silviculture content in higher education

Potential opportunities in the UK:

Strong tradition of partnership

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Strong culture of knowledge networks



Research Report

Human dimensions of adaptive forest management and climate change:

A review of international experience

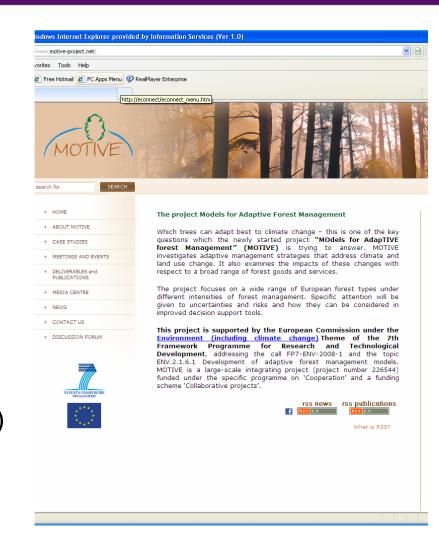


(Lawrence & Gillett 2011)

MOTIVE

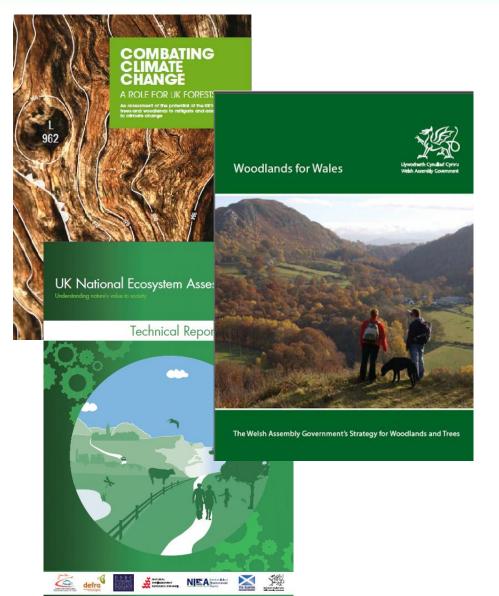


- Values and attitudes towards climate change influence responsiveness to adaptive forest management
- How forest owners, managers and industry (public and private sector) experience and respond to uncertainty and risk in the context of climate change
- Interviews with private sector owners, managers and agents (advisors) in Wales
- Questions around perceptions of climate change, current management, experimentation, information sources





Focus on Wales: Policy drivers



UK policy drivers

- Climate change and delivery of ecosystem services
- Woodland creation and management prominent

Woodland for Wales (the Welsh forest strategy)

Aim:

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'Woodlands are better adapted to ensure a range of benefits'

This means:

Clearfelling avoided where alternative management systems would make a better contribution to ecosystem services



Categories of owners

- Large woodland owner e.g. Estates
- Farmers
- Weekend woodland owners
- 'Investment' or commercial owners
- Large NGOs
- Local authorities
- Public bodies (other than Forestry Commission)

Crown copyright

Community woodland groups





Findings: local authority and small scale owners

Not convinced of need to adapt

Those who want to adapt believe it is best to rely on native

Crown copyright

species

"Some of the species they [owners] say they're choosing is because of climate change, but I'm not massively convinced. I think it's replanting the native woodland and 'I like these trees" (Public Body - grants)

"Nobody has proved to me that local biodiversity does not have sufficient adaptation...to withstand the changes that are coming"

(Community Woodlands)





Forest Research Findings: estate owners / managers

- In general tend to be older and more sceptical of climate change
- Some are key advocates of continuous cover forestry

"I think there's probably quite a lot of scepticism on behalf of landowners that there's going to be a problem, which I think is probably general public scepticism anyway" (Management Advisor)

"It seems beneficial to actually use what's there within the woodland rather than go to the costs of clearfelling a site" (Estate Manager)

 More likely to manage for overall resilience not climate change



Findings: commercial plantations

- Not widely concerned or interested
- Some willing to be innovative

"Most commercial investments in forestry tend to have a 10 to 20 year investment period...that's probably difficult to tie in with climate change which is over a longer time period" (Management Advisor)

'...what I've been proposing in some of these woodlands is start to underplant [with other species] where we can ... the reaction I get back, 'oh there's no market for Silver Fir in this country...well maybe there will have to be a market in a few years time" (Management Advisor)





Forest Research Beliefs about climate change and risk

Uncertainty is recognised but:

- Easier to discuss climate change in the context of pests and diseases - concerns about species suitability
- Uncertain commercial potential of future species choice and markets

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"I'm not sure that the connection's been made between climate change and growing trees". (Management Advisor)



"Sitka spruce can grow anywhere" (Forest manager)

"[They say] well what would you recommend?' And it's hard to say, I mean the usual recommendation is just plant a good variety because there's no way we can say" (Public body - grants)



Knowledge Exchange

"If you've got too much information, sometimes you don't do anything about it because it frightens you" (Public Body – non FC)

"The best feedback we get and the most excited people get is if they have a chance to talk...and the chance to see somebody else's woodland and to hear somebody else being passionate and explaining what they've done" (Community Woodlands)



Photo: Ted Wilson

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"We don't know...even with good advice with people who have thought about these things, the unknowns like disease...mean that advice very quickly can be discarded"

(Public body – non FC)

Conclusions



- Preliminary research
- Understand the stakeholders
 - Very different types, with different values and motivations
 - Some of their behaviours are probably helpful vis a vis climate change
 - Species choice
 - Silvicultural systems
- Work with their priorities
 - Policy drivers and owner / manager motivations are not necessarily related to climate change although the outcomes may be
- Invest in communication:
 - information / demonstration / networking and field based knowledge exchange is part of the answer