



Creating Value from Woodlands

17 April 2018, Oxford

Welcome and Introductions

John Lockhart FRICS FBIAC CEnv

Chairman, Lockhart Garratt Ltd



Pledge 150 and LandAid

RICS is committed in the South East to raise £345,000 which will provide 23 bed spaces for young people at risk of homelessness. More details can be found at www.landaid.org

You can donate to Pledge 150 by texting RICS12 followed by the amount you wish to donate, to 70070 – you can donate £3, £5 or £10 or to donate online please Google

RICS Pledge 150 LandAid



Shireen Chambers

Executive Director

Institute of Chartered Foresters



Opportunities for Woodland Creation

- a changing political landscape

Shireen Chambers
Executive Director
Institute of chartered Foresters

17 April 2018



Department
for Environment
Food & Rural Affairs

Health and Harmony: the future for food, farming and the environment in a Green Brexit

February 2018

Cm 9577



HM Government

A Green Future: Our 25 Year Plan to
Improve the Environment



“The environmental damage we have suffered while inside the CAP has been significant. Soil health has deteriorated. Farmland bird numbers have dropped. Precious habitats have been eroded.”

The Rt Hon Michael Gove MP

“By using our land more sustainably and creating new habitats for wildlife, including by planting more trees, we can arrest the decline in native species and improve our biodiversity.”

The Prime Minister

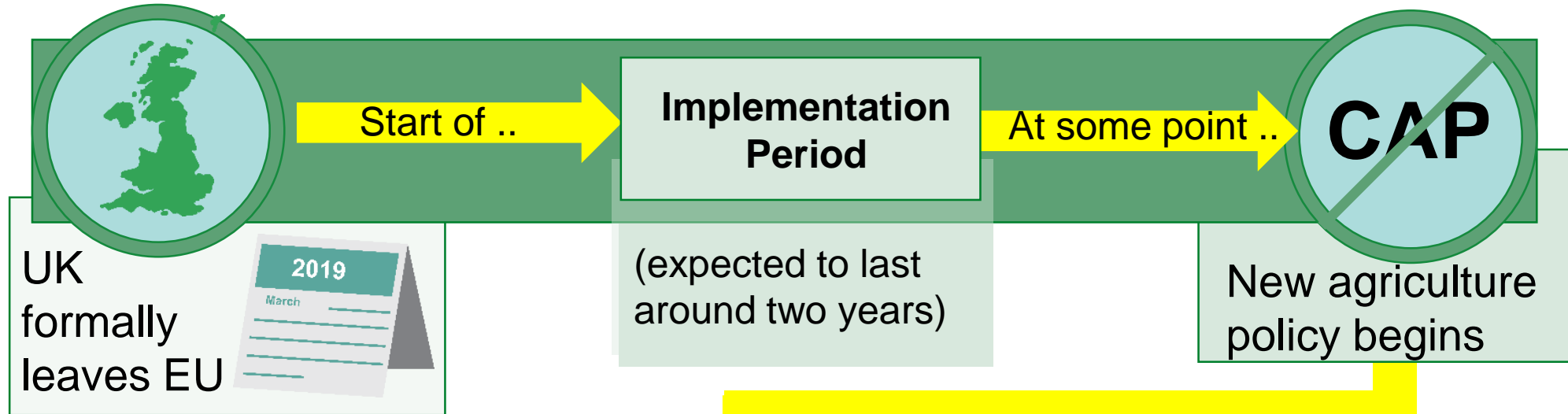
Leaving the Common Agricultural Policy provides an opportunity to improve how we produce food and use our land.

At the heart of this will be the principle that public money should be spent on public goods.

Our proposals are the beginning of a conversation.



Moving away from the Common Agricultural Policy

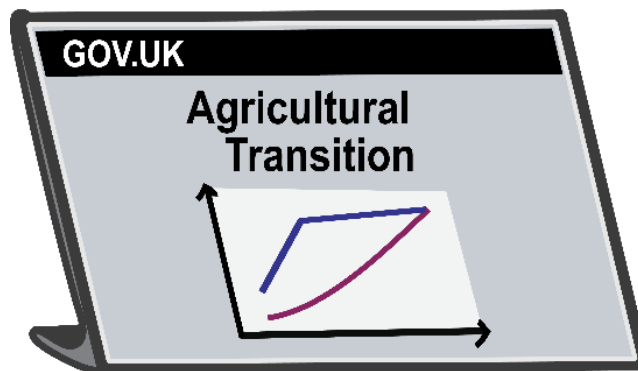


Direct Payments will be phased down

Productivity measures will be funded

New environmental land management and animal welfare schemes will be introduced

Leading to the.....



Designed to help farmers prepare for change

Will last several years, and likely start between 2020 and 2022

Devolved administrations will have flexibility to target own support

What do we mean by 'public money for public goods'?

Public Goods are things that benefit more than just the recipient and cannot be rewarded by the market alone.

Our new agricultural policy in England should be underpinned by the principle that public money buys public goods.

What are your priorities for public money:

- during 'agricultural transition' away from CAP support?
- in the future-state policy?

Some examples of public goods provided by the farmed landscape:

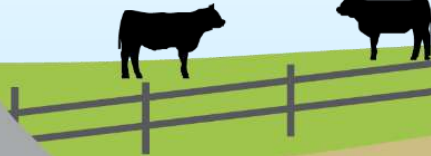
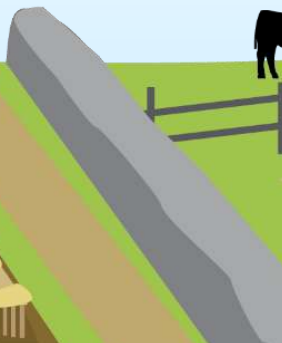
Around £4bn* worth of environmental benefits from farmland, forestry, woodland and trees per year in the UK, including:

£182m* of air filtration benefits from farmland in the UK .

More than 116 thousand miles of rights of way in England, as footpaths, bridleways and byways.

Land management contributes to the protection of iconic landscape features, such as dry stone walls.

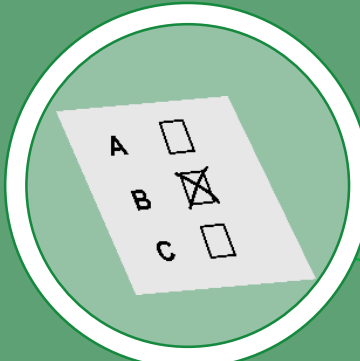
The value of educational visits to farmland (UK) is estimated at £1.86m*





Farming Excellence,
Profitability and
Resilience

Countryside
Stewardship
simplification



A new Environmental
Land Management
(ELM) scheme

Elements of
new policy

Tree
Health

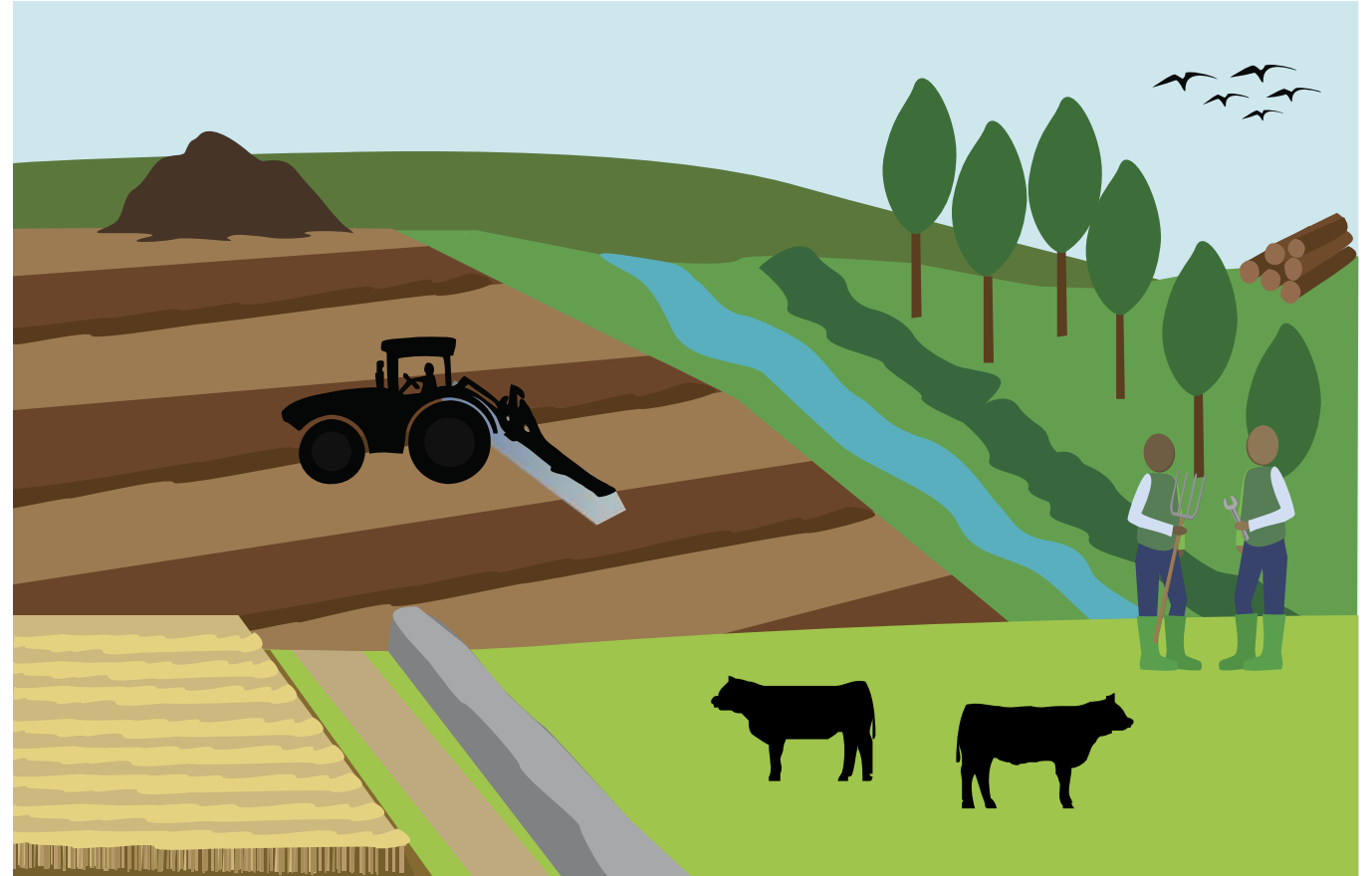


Reducing Direct
Payments in an
'agricultural
transition'

Environmental Land Management (ELM) – the options

A new ELM scheme could include some or all of the following:

- Multi-annual agreements
- User-friendly focus
- Innovative mechanisms
- Capital grants
- Funding for collaborative projects







Dr Jason Beedell

Rural Research Partner

Strutt & Parker



Creating Value from Woodlands

The (positive) value of woodlands

Dr Jason Beedell, Rural Research Partner

Thank you for information and advice to:

John Lockhart
Lockhart Garratt

Pat Snowdon
Forestry
Commission

Darren Moorcroft
Woodland Trust

Mike Tustin
John Clegg & Co

Michael Fiddes
Strutt & Parker



Baythorne Park Estate, Essex

Woodland
£4,000 – 5,500
Per acre

1. Amenity / privacy
2. Shooting value
3. Timber value

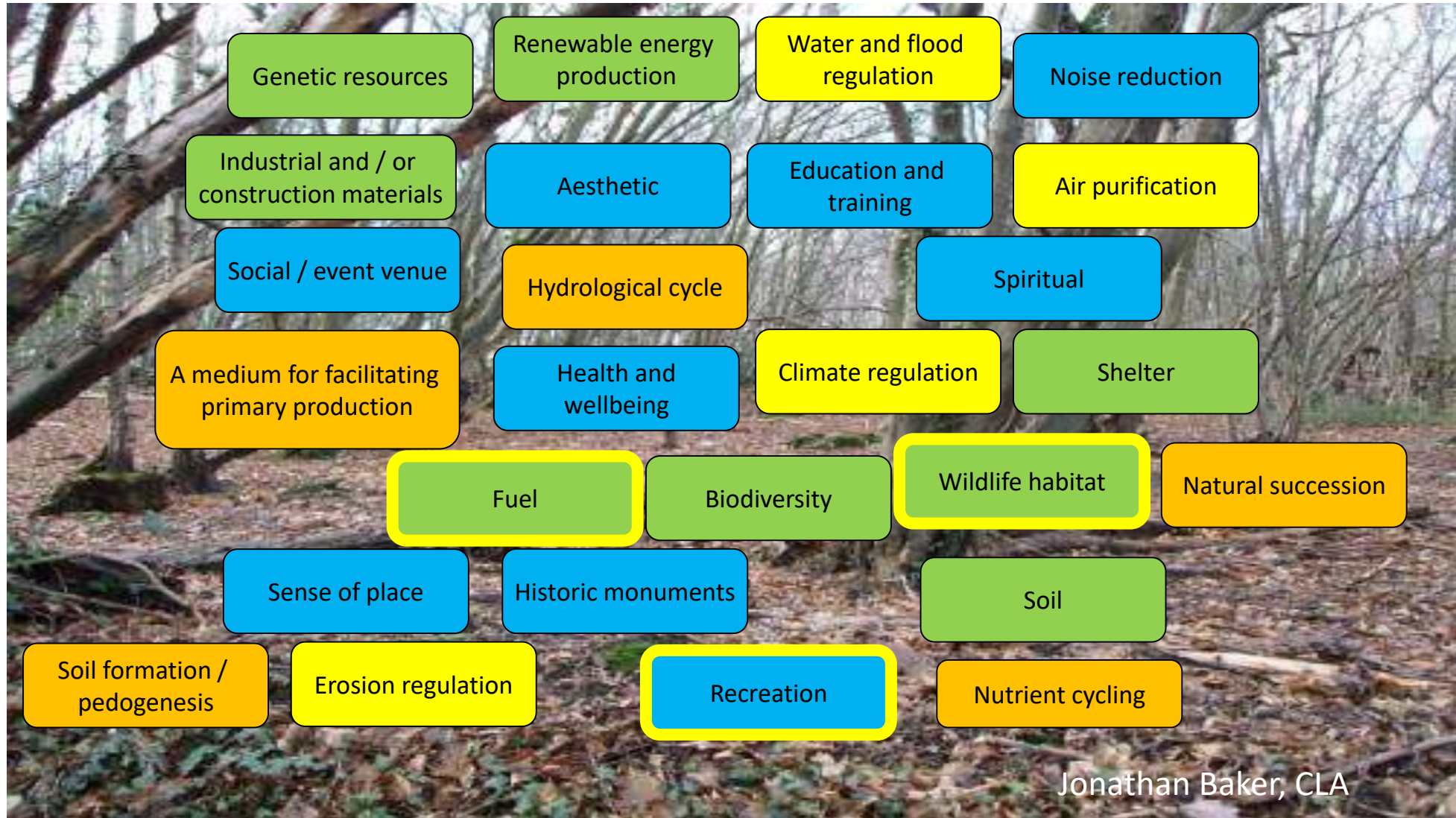
Marriage value
£???

Per acre

Farmland
£8,000 – 10,000
Per acre

But is it really that simple?

No ... probably



Woods value to farming



Apple tree & wildflower
strips
Whitehall Farm,
Near Peterborough



Woodland pork,
Riverwood Farm

The introduction of
trees and woodlands
on a farm in Cumbria
had reduced lamb
mortality by 50%

Soil Association
Agroforestry conference

Woods value to farming

Does / should woodland help entry into an environmental scheme?

Could / should woodland be linked to future cross-compliance?

Woods value to environment

Slowing the
flow

Delaying peak
flows

Habitat for
crayfish



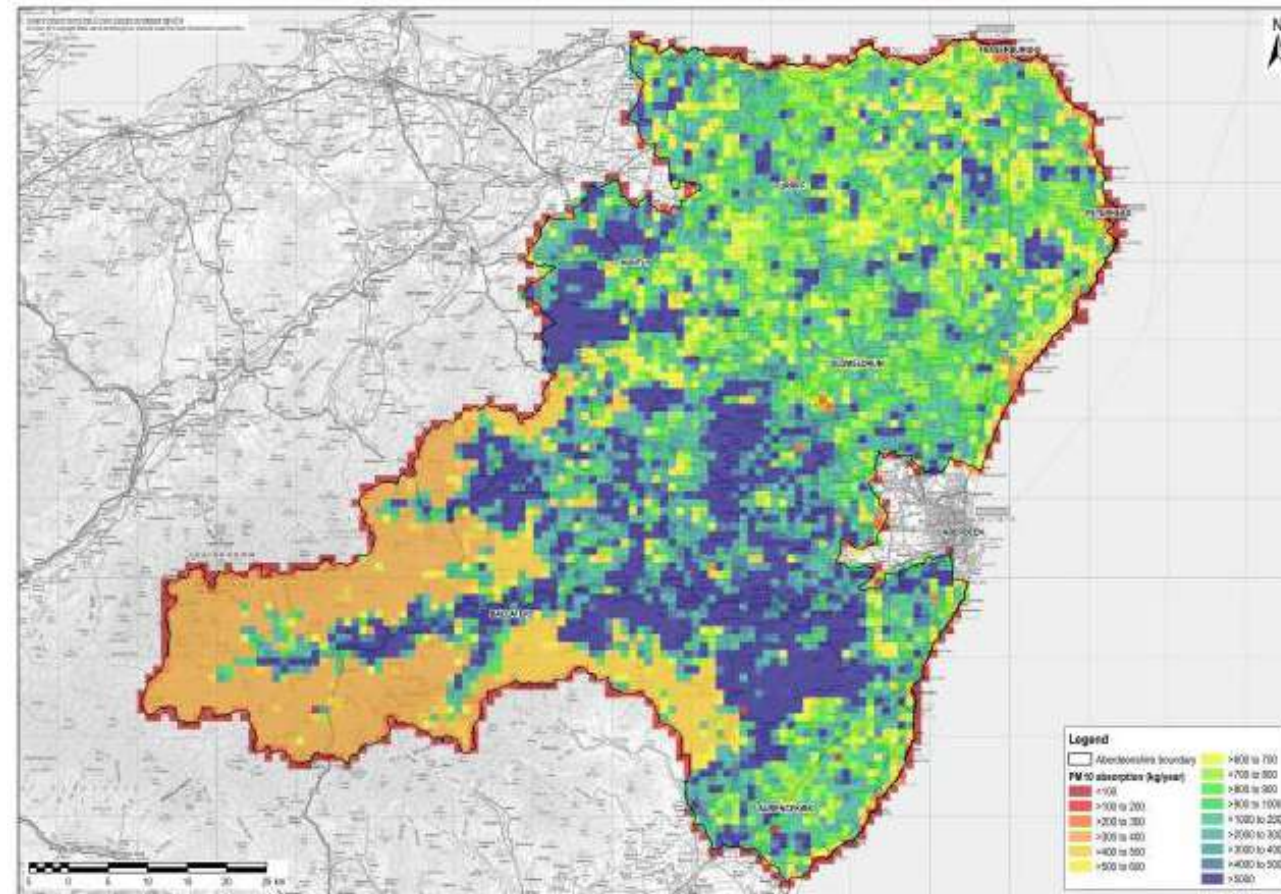
Miserden Estate, near Stroud, Gloucestershire

Woods value to environment

Regulation of
air quality in
Aberdeenshire

Blue = high
Red = low

(kg of PM10
absorbed, 2013)



Woods value to society



Woods value to society

“Everyone has access to local greenspace and recreation

...the physical and mental health benefits it provides.

Specific targets should be set, for example, one hectare of local nature reserve per 1000 people

Increase woodland by at least 250,000 ha by 2040”

National Capital Committee Advice to Government on the 25 Year Environment Plan

Woods value for development

Ancient woodland

Screening

Betts Factory, Colchester



But how much is this all worth?

More than £4,000 – 5,500 / acre

Varies by place and service provided

And depends on whether there is a functioning market for the service

Market it to see what value is placed on it?



John Lockhart FRICS FBIAC CEnv

Chairman

Lockhart Garratt Ltd



Natural Capital

“Opportunities for Woodlands”

Creating Value from Woodlands

Tuesday 17th April 2018

John Lockhart FRICS FBIAC CEnv
Chairman

 **LOCKHART
GARRATT**
CELEBRATING 20 YEARS
1998 - 2018

 **INVESTORS
IN PEOPLE** | Bronze

Presentation Structure

- What is **Natural Capital**?
- Why is it **Important**?
- What it is **Worth**?
- **Knowledge** and Understanding
- Existing and Emerging **Opportunities**
- Case Study
- Next Steps and Summary

What is Natural Capital?

Natural capital is our **'stock'** of **waters, land, air, species, minerals and oceans.**

Natural capital underpins all other types of capital – manufactured, human and social – and is **the foundation on which our economy, society and prosperity is built.**



Natural Capital Committee

<http://www.naturalcapitalcommittee.org/>

Natural Capital & Ecosystem Services

Natural Capital is the stock of natural assets, for example, habitats, soils, water and biodiversity

The benefits that people derive from the natural environment (from Natural Capital) are known as **Ecosystem Services**

Provisioning

Products obtained from ecosystems
e.g. food, timber, water



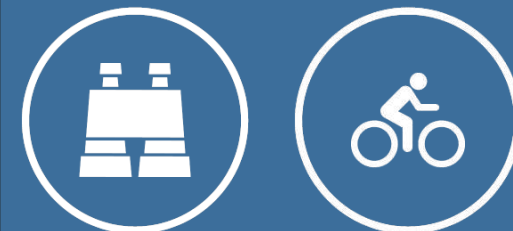
Regulating

Benefits obtained from environmental processes that regulate the environment
e.g. air quality, climate regulation, pollination



Cultural

Non-material benefits people obtain from ecosystems
e.g. recreation, aesthetic experiences, health and wellbeing





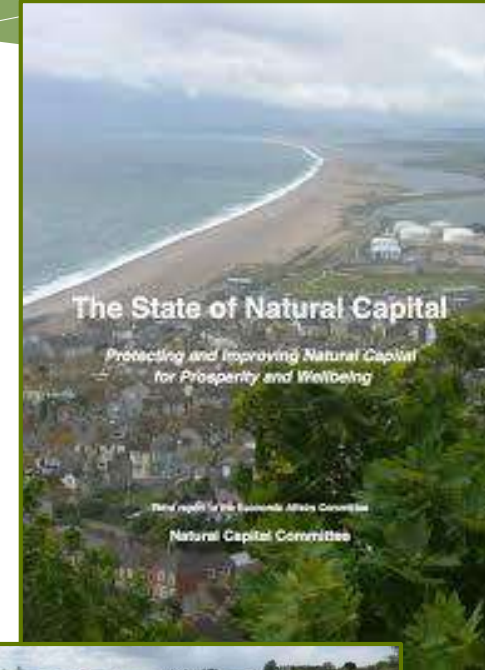
Why is it important?

State of Natural Capital Report 2017

Natural Capital Committee

- England's Natural Capital - **in long term decline**
- Costly to our wellbeing and the economy

Safeguarding of Natural Capital essential to maintain **Economic Growth**



Why is it important?

“Farmers may not like it but there is now overwhelming evidence that the way we farm is not sustainable environmentally”

James Farrall (Head of Rural Consultancy at Strutt and Parker)

Natural Capital Committee Advice to Government on the 25 Year Environment Plan

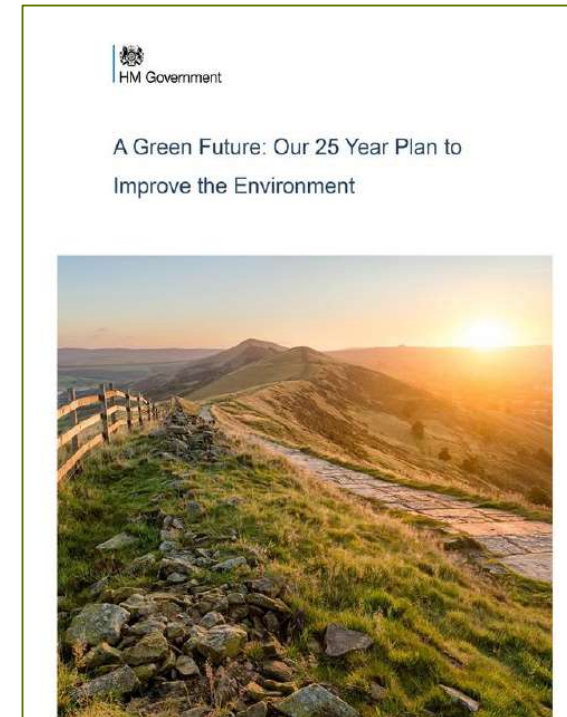
1. Protection against 0.5% annual probability **flood event**
2. **Waters** at least meet good status requirements
3. Meet or exceed **greenhouse gas emission** targets
4. Everyone has easy access to local **greenspace** and **recreation**
5. Wild species and **habitats are enhanced** to sustainable levels
6. **Soils** are healthy, productive & managed sustainably
7. UK makes a **net positive contribution** to world environment
8. Pollution levels prevented or managed so as to avoid harming people, wildlife or habitats
9. Overall **net increase** in Natural Capital



UK 25 Year Environment Plan

“So the imperative to husband, indeed wherever possible, **enhance our natural capital** - safeguarding our oceans, cleaning our rivers, keeping our soils fertile, protecting biodiversity - has to be **at the heart of any plan for our country** and our world.”

Michael Gove, Oxford Farming Conference 2018



A Green Future: Our 25 year plan to improve the environment

Chapter 1: Using and Managing Land Sustainably

1. Environmental Nett Gain
2. Improving management of land and incentives
 - **New environmental land management system**
 - New farming rules for water
 - Working with farmers to use fertilisers efficiently
 - Reducing environmental impacts of pesticides
3. Improving Soils Health and Peatlands
 - **Better information on soil health**
 - Protection of peatlands
4. **Focus on Woodlands**
 - **New Northern Forest**
 - **Large scale woodland creation**
 - **National Tree Champion**
5. Reducing Risks from Flooding and Coastal Erosion
 - **Expand use of Natural flood management solutions**
 - SUDs
 - Property resilience



Chapter 2: Recovering Nature and Enhancing the Beauty of Landscapes

Chapter 3: Connecting People with the Environment to Improve Health and Wellbeing

Farming Policy

- **Health and Harmony:** the future for food, farming and the environment in a Green Brexit
 - Life after CAP: transition – removal of Direct Payments
 - **New Environmental Land Management Scheme**

“Public Payments for Public Goods”

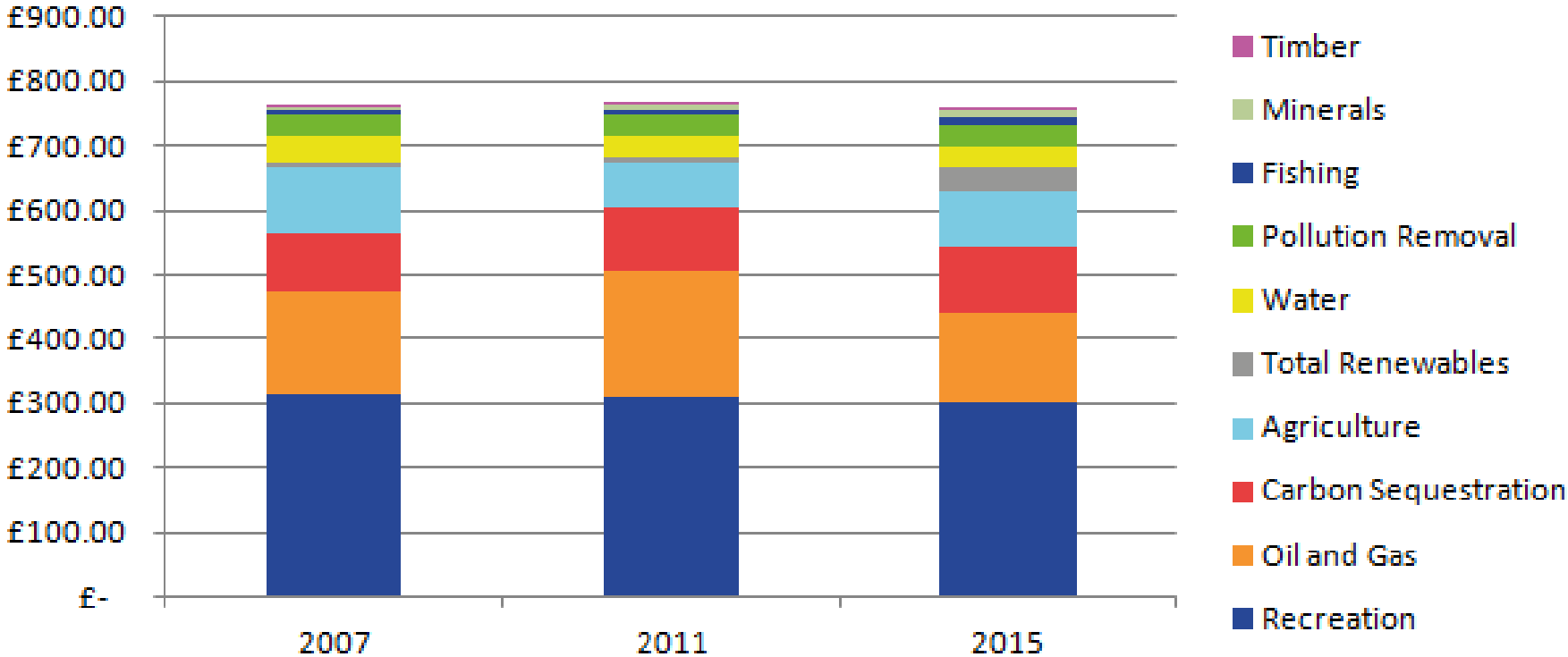
Public Goods: *“benefits that serve more than one party and cannot be delivered by the market alone”*

New opportunity for Woodland?



What is it Worth?

Value of UK Natural Capital £ Billion; 2015 prices



Source ONS 2018

Knowledge is Key

Emerging Tools and Methodologies

UK and internationally

- **Natural Capital Committee**

- How to do it – a Natural Capital workbook

<http://www.naturalcapitalcommittee.org>

- **Ecosystem Knowledge Network**

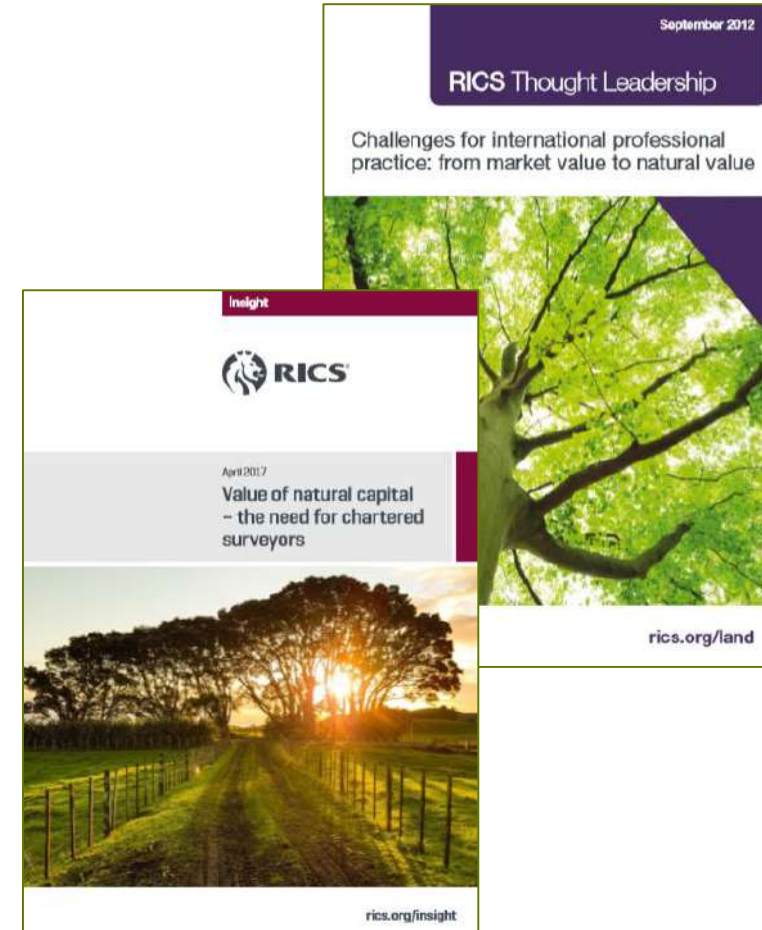
- Toolkit assessor

<https://ecosystemsknowledge.net/>

- **RICS**

- Challenges for international professional practice: from market value to natural value
- Value of natural capital – the need for chartered surveyors

http://www.rics.org/uk/about-rics/professional-groups/rics-rural-professional-group_91/



Land Evaluation

- Arable
- Grassland
- Woodlands
- Ditches
- Streams
- Ponds
- Hedgerows
- Orchards
- Trees
- Wetland
- Rights of Way



Land Evaluation

Profitability mapping -
understanding real
performance of land

Profitable



Unprofitable

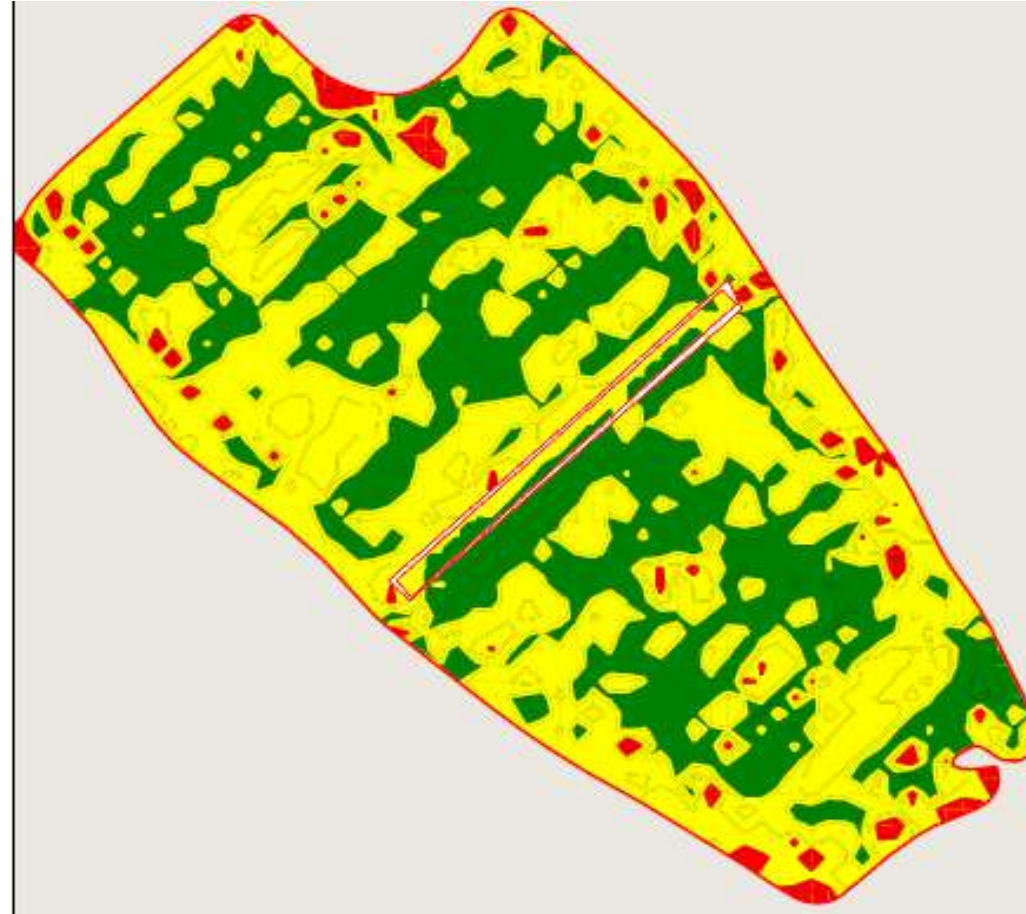


Image courtesy of Strutt & Parker

Ecosystem Services: Opportunities

Opportunities

- Carbon storage
- Carbon sequestration
- Air purification
- Noise regulation
- Water flow
- Water quality
- Pollination
- Agricultural production
- Timber production
- Accessible nature
- Biodiversity



Critical Issues

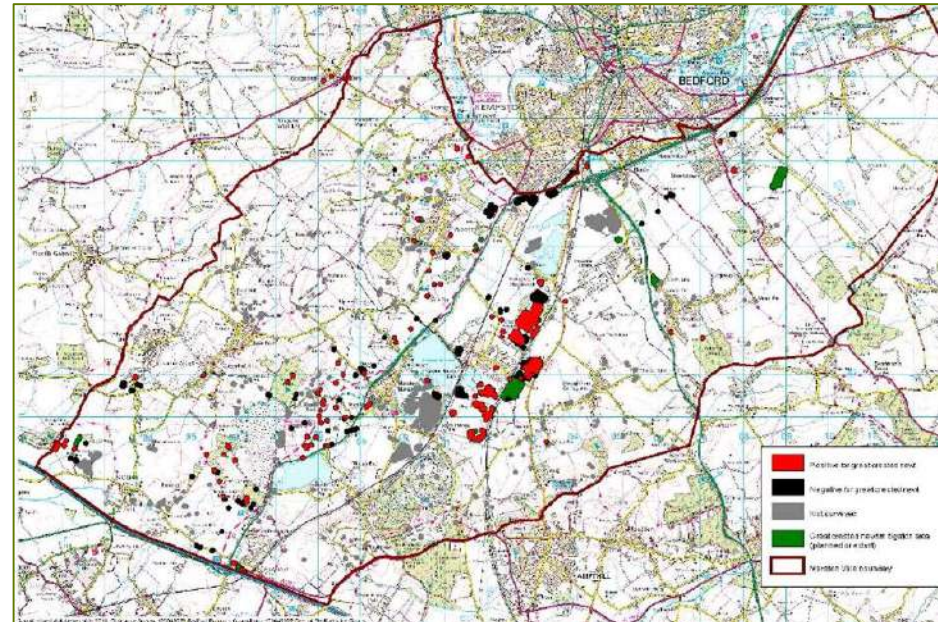
- What can we deliver?
- Who wants it?
- What does the market look like?
 - Capital
 - Revenue
- Government or Private Sector?
- Monitoring
- Security and Certainty



Emerging Opportunities

Biodiversity Offsetting

- Defra Pilot
- Relationship with mitigation hierarchy (para 118 NPPF)
 - Avoid
 - Mitigate
 - **Compensate (last resort)**
- Cost vs Viability
- Providers
 - Assess baseline
 - Market opportunities
 - Engagement and opportunity mapping
 - Alternative approaches; Protected species licencing



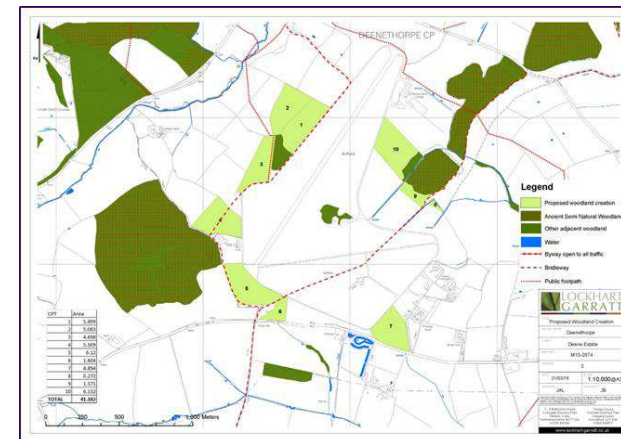


- **Cultural Change:** Unique opportunities on the back of Brexit and 25yr Plan
- Issues around **scalability** and **certainty**
- **Project development:** some 18mths to two years of main stream investment opportunities
- **Government Commitment:** Carbon Markets, Woodland Creation

Case Study: Tresham Garden Village

Woodland Creation Design Plan

- 41ha gross area
- 33ha net planting area
- Structural open ground and associated habitats
- Access linkage and enhancement
- Run off mitigation and watercourse protection
- Design informed by detailed baseline assessment: landscape, biodiversity, heritage and land quality



Case Study: Tresham Garden Village

Key Messages

- Woodland Creation proposals funded under Countryside Stewardship Scheme – **circa £7,000/ha**
- Planting phased 2017/18 and 2018/19
- Scheme amended to accommodate access revisions
- Areas excluded from red line; ES assessments with existing woodland in place
- Positive response from, stakeholders including OPUN Design review panel and local residents
- Maturity of setting ahead of development – micro-climate
- Carbon sequestration



Next Steps

- **Positive Action** vs Passive acceptance
- Understand what you have got and what it is **“worth”**
- Proactive development of **Market Opportunities**
- **Collaboration:** Public and Private sectors

Summary

Natural Capital :

- Here to stay and at the *Heart* of Government thinking

Healthy Environment

- Essential for *Economic Growth*

Woodlands

- Critical role and opportunities for both existing and new woodland

Unique Opportunity to Innovate and Deliver Real Value form Woodland

Questions

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 **INVESTORS
IN PEOPLE** | Bronze

Tea and coffee break



Patrick Begg

Outdoors and Natural Resources Director
National Trust





National
Trust

“green
alliance...”

New markets for land and nature

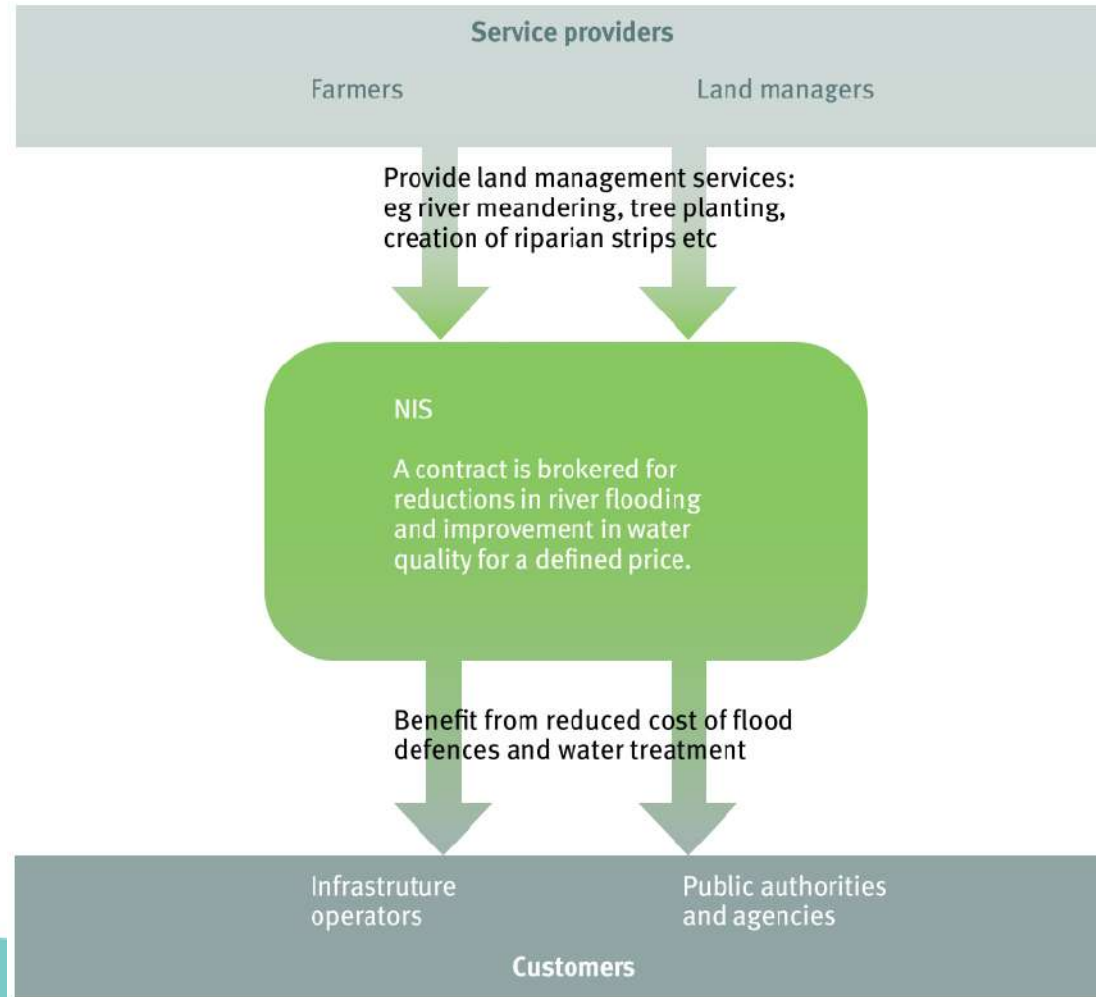
How Natural Infrastructure Schemes could support investment into forestry

17 April 2018

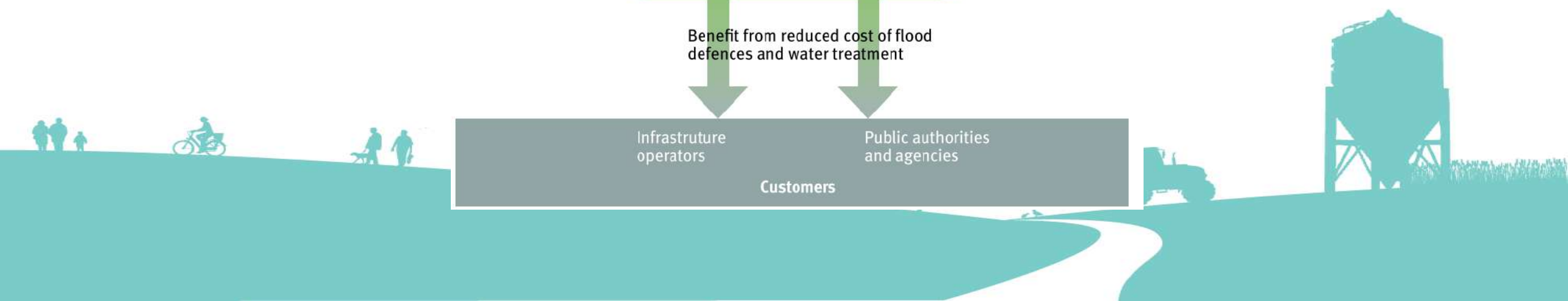
Patrick Begg
Outdoors and Natural Resources Director
National Trust



Natural Infrastructure Schemes: a market in “slow clean water”



“green alliance...”



Cost of water quality and flood

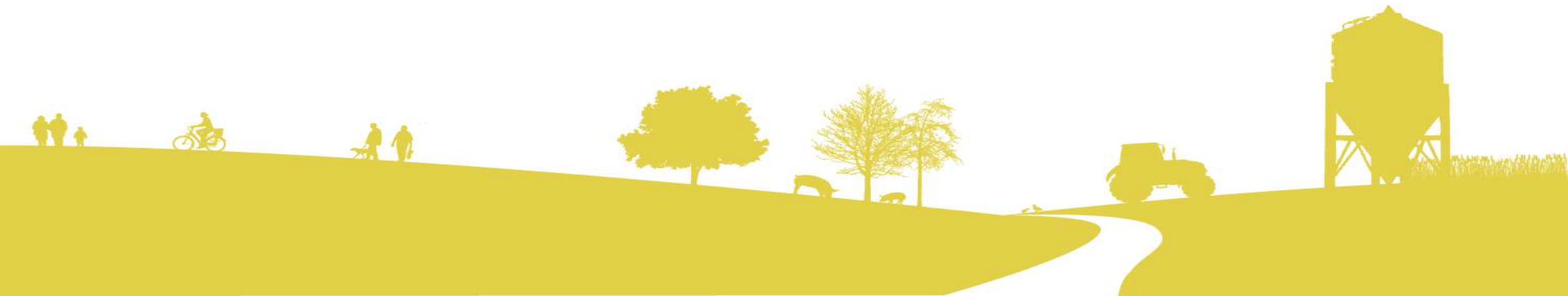
In England we spend,
£1.2bn per year on water quality
£1.2bn per year on flooding

£2.4bn is cost of not having slow clean water

Avoiding a quarter of their costs would release £575m, equivalent to £6m a year or £120m for a 20-year scheme in every catchment in England



green
alliance...



Three conditions to deliver a NIS



Costs incurred by sellers

- One-off cost of designing and delivering the scheme
- Interest or other financing costs
- Ongoing scheme maintenance costs including monitoring, evaluation and compliance
- Agricultural or other income foregone

Costs avoided by buyers

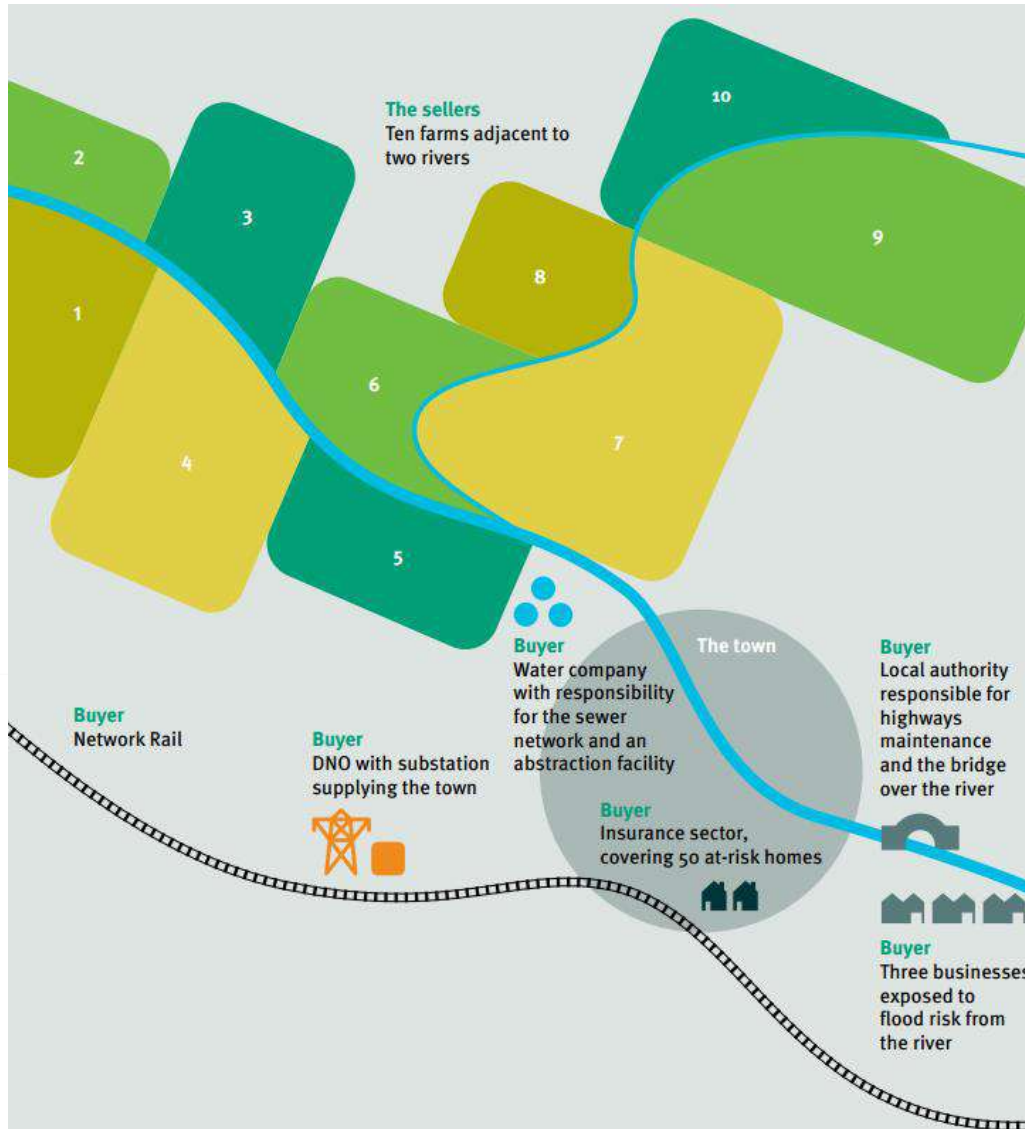
- Spending avoided or deferred as a result of the scheme, eg infrastructure upgrades, creation of new infrastructure, other spending to avoid disruption to business critical services
- Spending on restoring infrastructure or services after major events such as flooding

“green alliance...”



How would it work?

Imagine a town in North West England...



“green alliance...”

The NIS

1. Bunds and attenuation ponds increase water storage and reduce nutrient run-off
2. A defined level of engineering: 200,000 m³ of storage capacity, across 100 hectares, to protect against 1:75 year event
3. Maintenance at the required level guaranteed for 15 years

The market works where difference in costs creates space to trade

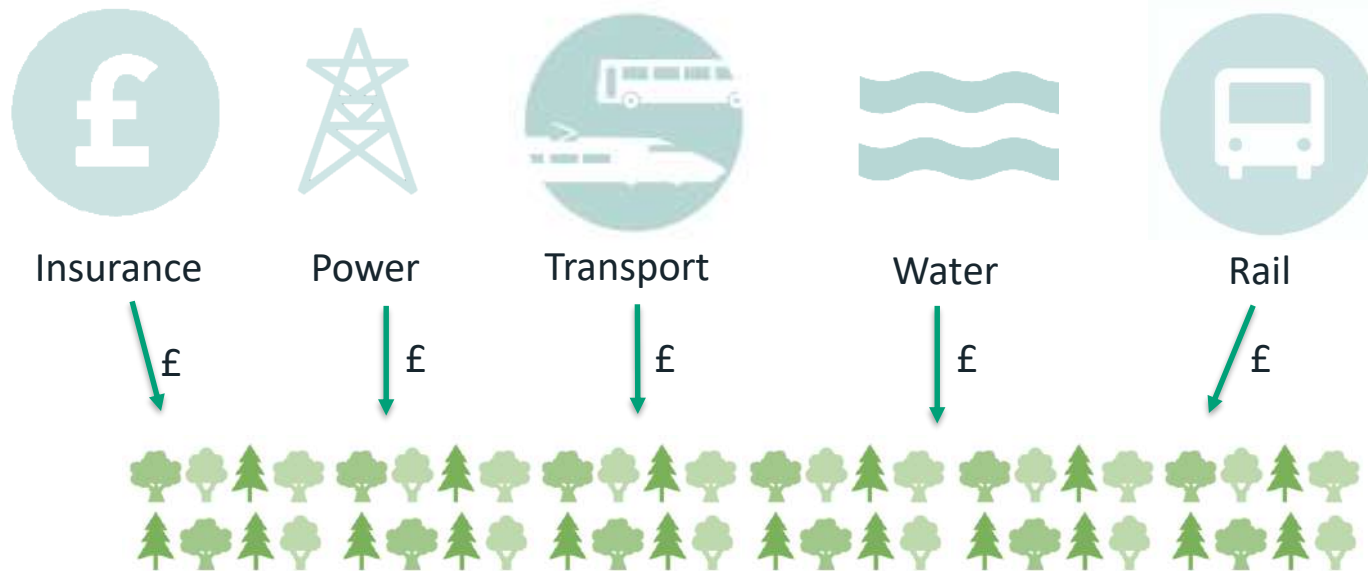


green alliance...

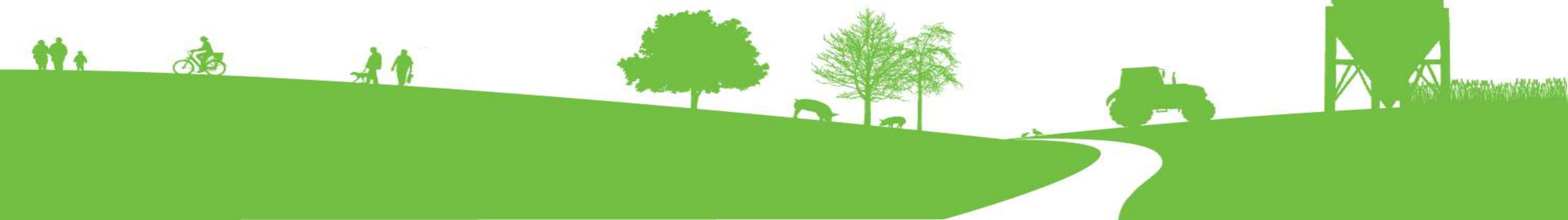


What could the NIS mean for forestry investment?

1. Mobilise a new group of funders motivated by protecting assets against flood risk.

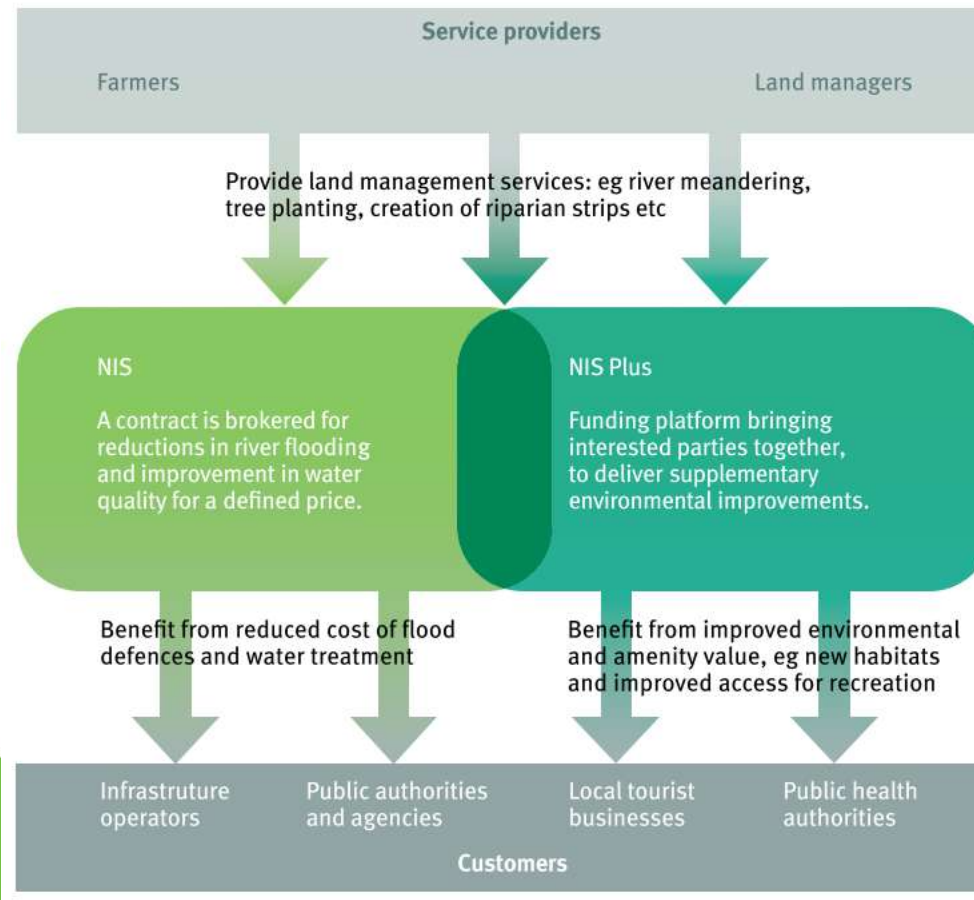


“green alliance...”



What could the NIS mean for forestry investment?

2. Provide a mechanism to support co-investment by multiple purchasers into multiple environmental services.

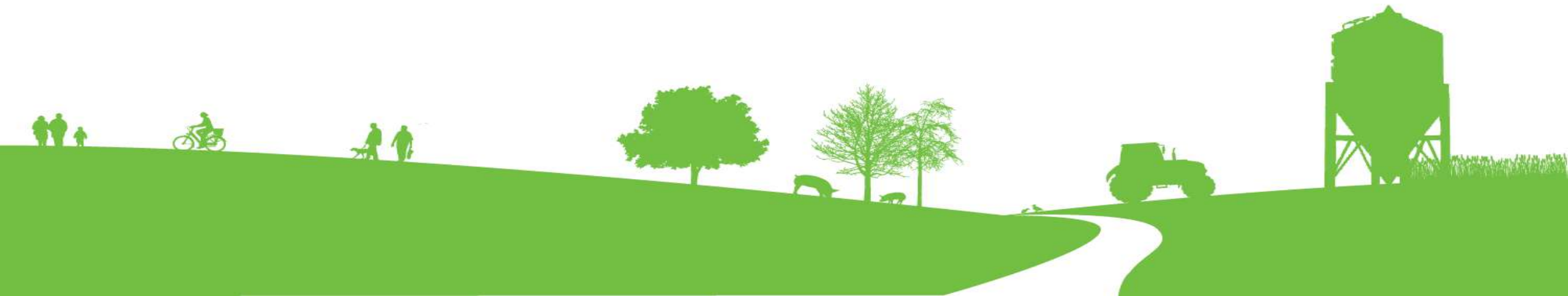


“green alliance...”



Capturing the opportunity: what we will do

- **Deliver proof of concept** through a demonstration project on National Trust land, likely to be in Cumbria
- **Build a network of prospective buyers and sellers** to scale-up action and impact
- **Work with government and partners** to identify how public and private funding can work together



Stuart Pearson MICFor

District Manager – North & Central England

Tilhill Forestry Ltd



Woodland Creation 2018

Stuart Pearson MICFor - Tilhill Forestry



My Background

- ▶ **Stuart Pearson**
- ▶ **Tilhill Forestry > 15 Years**
- ▶ **North and Central England District Manager**



This Presentation

- ▶ Woodland Creation
- ▶ Benefits
- ▶ Historical Grant Schemes
- ▶ Current Grant Schemes
- ▶ Case Studies
- ▶ Summary



Benefits of Woodland Creation

- ▶ Flood Mitigation
- ▶ Carbon Sequestration
- ▶ Economic Benefits
- ▶ Soil Structure
- ▶ Biodiversity
- ▶ Rural Employment



Historical Woodland Creation Schemes

- ▶ Tax Benefits
- ▶ FGS - Forestry Grant Scheme
- ▶ WGS I, II & III
- ▶ EWGS - Included FWPS



Current Woodland Creation Schemes



- ▶ Countryside Stewardship summary:
 - £1.28 per tree
 - £1.60 per unit of tree protection
 - Fencing up to £7.40 per meter
 - £390 per gate
 - Maintenance grant of £200 per ha for 10 years
 - Cap of £6,800 per hectare for planting and protection

- ▶ Annual applications, currently closed
- ▶ Minimum Area - 3 ha
- ▶ Doesn't promote productive commercial forestry



Current Woodland Creation Schemes - Continued...

- ▶ HS2
 - Priority target area - within 25 miles of HS2 route
 - 100% of planting costs
 - Capped at £8,500 per ha

- ▶ Woodland Carbon Fund
 - Intended for large schemes of a productive capability
 - Minimum area - 10ha (July 2018 increasing to 30ha)

The logo for HS2, featuring the letters 'hs' in a blue, lowercase, sans-serif font, with a large, stylized '2' below them.

Case Study 1 - Firs Farm

- ▶ Site in Nottinghamshire
- ▶ 11.29 ha of new planting
- ▶ Poor quality arable land prone to flooding
- ▶ Mixture of productive broadleaves and conifers
- ▶ Total value of grants:
£59,000 + £25,000 of maintenance grants

Case Study 1 - Firs Farm



Case Study 1 - Firs Farm



Case Study 1 - Firs Farm



Case Study 1 - Firs Farm



Case Study 2 - Summerstones

- ▶ Site in Nidderdale AONB
- ▶ Existing woodland area - 23 ha
- ▶ 50 ha of new planting
- ▶ Productive native species
- ▶ Total value of grants:
£250,000 + £100,000 of maintenance grants

Case Study 2 - Summerstones



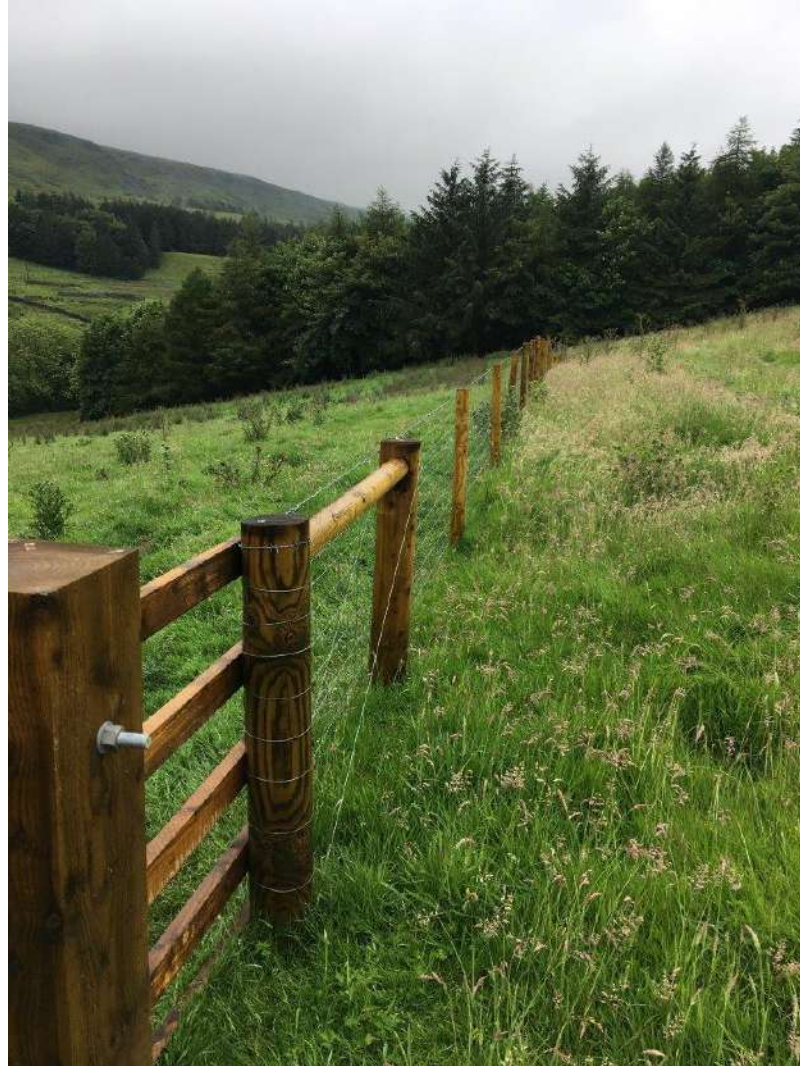
Case Study 2 - Summerstones



Case Study 2 - Summerstones



Case Study 2 - Summerstones



Case Study 3 - Jerah

- ▶ Site in Western Ochil Hills, Scotland
- ▶ 1,000 ha site, 583 ha of new planting
- ▶ 69% productive conifers, 21% native broadleaves
- ▶ One of the largest productive conifer woodland planted in the UK in the last 25 years

Case Study 3 - Jerah



Case Study 3 - Jerah



Case Study 3 - Jerah



Summary

- ▶ Current grants quite complex, but good value
- ▶ Timber market strong
- ▶ Uncertainties -
Brexit, CAP
- ▶ Commercial
viability



Questions?



Graham Taylor MBE MICFor
Director
Pryor & Rickett Silviculture Ltd





Creating Value from Woodlands

Graham Taylor MBE MICFor

Pryor and Rickett Silviculture







Traditional Sources of 'Value'

Capital

- Lowland
- Upland Commercial

Income

- Standing Timber
- Grants (Environmental)
- Value Added Timber / Energy

Non Timber Income

- Sporting (Pheasants / stalking)
- Other recreation



Other Established Sources of 'Value'

- Asset Strip / Split
 - Woodlands.co.uk
- New Recreation
 - Concerts / Events
 - Pods / Yurts
 - Mountain Biking
 - Café (Walk , Tea & Pee)
- Hosting Utilities
 - Phone Masts
 - Water supplies

(RE-) Emergent Sources of 'Value'

- Woods for
- Carbon stores
 - Climate change mitigation
 - Habitat protection
 - Positive alternative to Agriculture
 - Carbon friendly building products
 - Bioenergy



Woodlands: Capital v Income

P&L	1995	2005	2015
Income	35000	28000	57000
Expenditure	30000	42000	55000
Net Income	5000	-17000	2000
Capital Value	420000	750000	1200000



Lowland Woodland Owner – 260ha

	1995-1999	2000-2004	2005-2009	2010-2014	2015 (20 Yr)
5 Year 'Net' Profit Exc Sport Income	£189k	£28k	£83k	£66k	£366k
Woodland Asset Value (million)	£1.28	£1.82	£2.05	£2.47	£3.17
Actual Tax free Total Return IRR (5yr Period)	6.95	3.03	4.97	7.16	5.12
Comparative Taxed equivalent	11.58	5.05	8.28	11.93	8.5
Value / Share 100000 shares	£12.8	£18.2	£20.5	£24.7	£31.7





Features of Economically Resilient Woodlands

- Diverse age class structure (ideally close to ‘Normal’)
- Species diverse – eg 5-20 species in lowlands depending upon scale , 3-7 in the uplands
- Some – but **not all** CCF
- Market orientated management i.e. fell trees at market maturity, when markets are strong.
- Flexible / open regarding other non timber income activities
- Invest in standing crops and woodland infrastructure when necessary
- Owner / manager understands the Silviculture of each species and manages them accordingly
- Protects against mammal / pest damage & view Deer as a liability and not an asset
- Attempts zero tolerance with Grey Squirrels
- Utilises grant support appropriately but **ignores** fashions / current vogue
- Works with and supplies niche – high value markets
- Responds to external economic / disease pressures in a timely way



Forestry Yield & Value						
Timber	Species	Yield Class	£ / m3 at Maturity	Value/ ha	Rotation Length (Years)	Value (£) / annum / ha
High Quality Hardwood	OK (SC)	4-6	£100-220	£30 -40k/ha	120-150	£200-333
Low Quality Hardwood	ASH / SYC BEECH	4-8	£70-90	£ 10 -15k / ha	80-180	£125-187
High Quality Conifer	DF SS NS (CP)	12-24	£40-60	£25k /ha +	40-60 +	£416-625
Medium Quality Conifer	JL EL SP RC	10-24	£30-45	£15 - 20k/ha	50-80 +	£187-400
Low Quality Conifer	WH NF (PO)	12-24	£	£8-15k/ha	25-50 +	£160-320

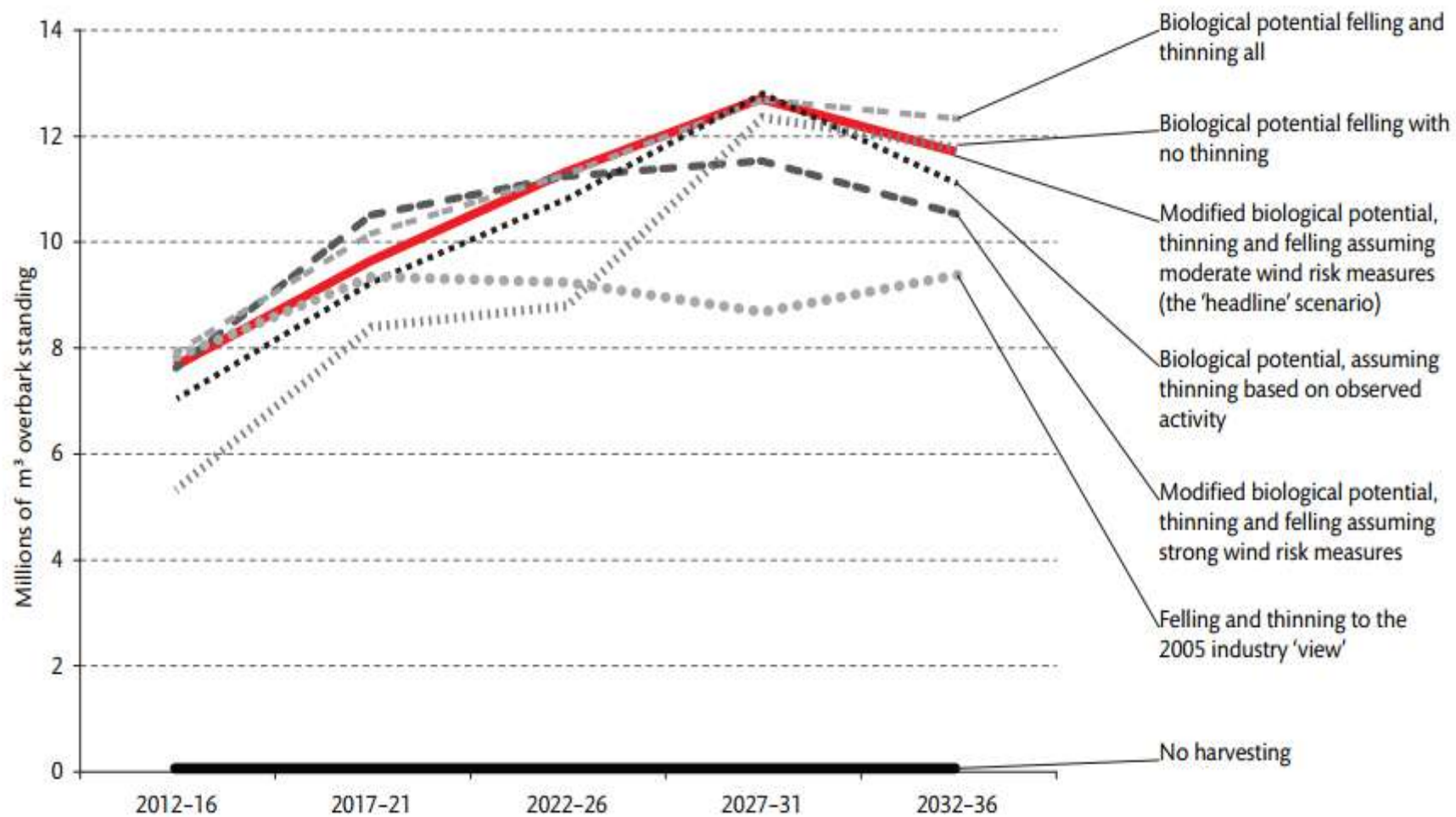
Softwood grower's margin

Crop type	1995	2004	2007	2014	2018
40-50 yr SS/DF	£30/t	£13-15/t	£25-30/t	£30-45/t	£45-65/t
30 yr mid-thin	£10-15/t	£0-5/t	£10-14/t	£18-27/t	£24-33/t
Ave Clearfell Value (£/ha)	£8-10k	£4-6k	£8-12k	£15-22k	£18-26k
Max Clearfell Value (£/ha)	£12000	£7500	£15000	£24500	£30000 +
House Price Index Ha / Ave House	4.3	20.4	11.8	7.3	7.5





Figure 2 The impact of different harvesting scenarios upon 25-year timber potential for the Private sector (GB).



UK Homegrown Hardwood Sawlog / Pulpwood Consumption

Sector Trends

	1980	1990	2000	2003	2005	2014
Hardwood Sawlog (1000 M3)	910	520	170	119	72	75
Pulp/ Fire wood (1000 M3)	540	480	365	365	300	455
Hardwood Only Sawmills	<i>100</i>	<i>52</i>	<i>25</i>	20	16	11
Dual Hard / Softwood mills	<i>200</i>	<i>130</i>	<i>80</i>	66	55	52





UK Hardwood Prices - Trends

Ave Butt Size	1995	2000	2005	2017
Oak 100 hft	£4.50	£4.75	£5.50	£8.50
Oak 50 hft	£3.00	£3.50	£4.00	£5.00
Ash 60 hft	£2.75	£2.50	£2.50	£2.75
Ash 30 hft	£2.00	£1.70	£1.30	£1.70
Beech 80 hft	£3.00	£2.50	£2.25	£2.50
Beech 40 hft	£1.70	£1.70	£1.30	£1.70

NB £/ hft roadside prices

UK Forestry - Production Trends

Year	Softwood			Hardwood		
	FC	PS	Total	FC	PS	Total
2005	4579	3499	8077	101	492	593
2006	4582	3661	8243	45	392	438
2007	4653	4083	8736	40	400	440
2008	4415	3823	8238	43	388	431
2009	5126	3266	8392	87	449	536
2010	4625	4633	9258	70	465	535
2011	4870	5186	10056	75	465	541
2012	4836	5259	10095	55	478	532
2013	5084	5852	10936	78	451	529
2014	4900	6531	11431	71	461	532

UK Forestry Production 1000m3





Woodland Liabilities

- Grey Squirrels
- Deer
- Diseased stands
- Poorly performing stands
- Unthinned stands
- Unsafe / dangerous trees & road edges
- Poor roading / fencing infrastructure
- Uncontrolled public access



Unit Costs of Broadleaved Planting

Density / Hectare	Spacing	Cost of Tree / planting (no protection)	Hectare Cost £ / ha	Cost of Tree / Planting Spiral & Cane	Hectare Cost	Cost of Tree / 1.5m Shelter / Planting	Hectare Cost
1100	3m	£0.60	660	£1.20	1320	£3.60	3960
1600	2.4m	£0.60	960	£1.20	1920	£3.60	5760
2250	2.1m	£0.60	1350	£1.20	2700	£3.60	8100
2700	1.9m	£0.60	1620	£1.20	3240	£3.60	9720













Grey Squirrels – A Missed Opportunity

	Silviculture £/ha	Amenity £/ha
30 year old MB / Oak	£1590	£1060
60 year old MB / Oak	£5100	£3740
90 year old MB / Oak	£10000	£6750
120 year old MB / Oak	£26500	£7350
150 year old MB / Oak	£44800	£7950

NB Assume YC 6 Oak / MB

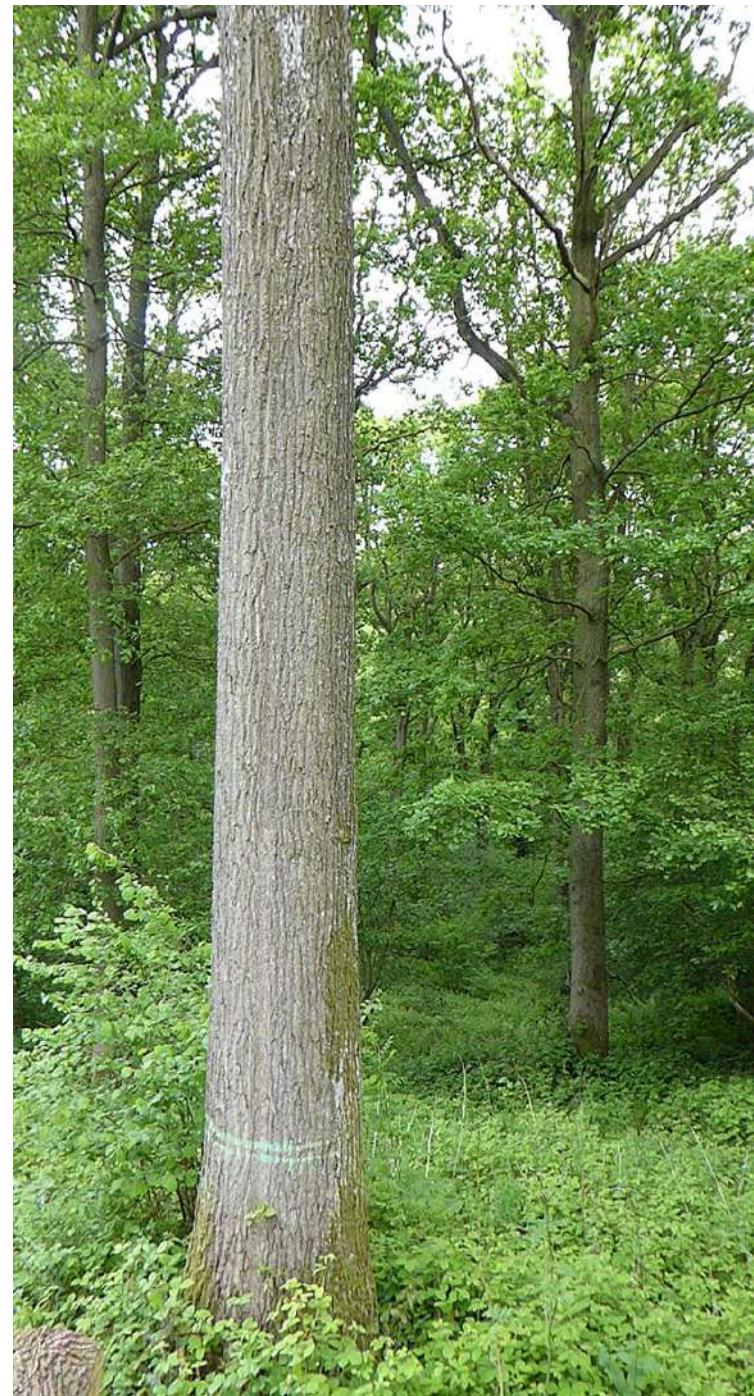














Creating Value from Woodland

1. Understand the Silvicultural fundamentals
2. Create a Diverse range of species / age structures
3. Understand Market trends and act accordingly
4. Balance Capital growth & Income generation
5. Understand the value added opportunities
6. Invest in standing crops and woodland infrastructure when necessary
7. Deal with liabilities
8. Beware of grant led silvicultural fads
9. Get the basics right and then look at other income sources
10. Get some advice

International Comparison

	Land Area Mill ha	Pop'n (Mill)	Broadleaf Forest Area Million Ha	Ratio	Hardwood Sawlog Production Million m3	Ratio	Hardwood Sawlog / Broadleaf ha M3 / annum	Efficiency Ratio
France	54.7	66.6	13.55	9.1	4.1	54.6	0.3	6
Germany	34.8	80.6	4.7	3.1	3.5	46.6	0.74	14.8
UK	24.1	64.2	1.5	1.0	0.075	1	0.05	1





Close and Thank You

John Lockhart and Shireen Chambers





Goodbye &
safe journey



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