

REPORT ON CCF SYMPOSIUM 'ECOLOGICAL RESTORATION' INTERACTIVE SESSION and PANEL SESSION, Wednesday 25th June 2014

Write-up by Helen Doran, Natural England

The purpose of the interactive session for this year's symposium was for the 70 delegates to think about from their own experiences and what they had heard in the preceding presentations:-

- what the key/critical components are of an ecological restoration strategy or project (the 'must haves')
- to identify the things we don't think work well/have seen fail
- the new (or existing untried) ideas we would like to take forward.

Through facilitated discussions each of the 8 groups were asked to capture their ideas under the 3 headings above. For the new ideas the groups were then asked to identify their top 1-2 priorities. These were discussed further in terms of what the barriers are to taking the ideas forward, how these might be overcome and opportunities for collaborative working. Each group's ideas, as captured on flipcharts and feedback sheets, are set out in Annex A.

The plenary feedback from the facilitators is captured below, which sets out the top idea for their group and key messages. After the plenary feedback we conducted a poll for all delegates to choose their top key/critical component, the top failure and the best new idea. The poll results are set out below in Annex B.

The final session of the day was a panel discussion on 'Transforming Conservation' chaired by Prof Bill Sutherland from Cambridge University. Annex C sets out the view of the 4 panellists (Andy Clements, British Trust for Ornithology, Bernard Mercer, Environmental Consultant, Janette Ward, Natural England and Mark Avery, Independent Environmental Expert) and issues raised in the Q&A session.

Plenary feedback from 'developing a robust ecological restoration strategy'

Key messages Group 1

Top idea: Community ownership. That local groups should buy/acquire/utilise already owned land and take management control. To overcome barriers to ownership local groups could partner with NGOs (although there could be legal implications). An additional point is community incentives – what would make individuals want to get involved? We may need a model/pattern or an example to act a framework to maximise success. We also need charismatic individuals to engage people and to maintain perpetual motion.

Key messages Group 2

Top idea: Community buy-in. The group considered the role of communities (including industry and businesses) and identified the idea of a 'social hub,' for example in the role of preserving a beach – where residents *want* to do something, this could help overcome short-term funding.

Depending on the location of projects there could be cultural barriers to volunteering, and a perception that western volunteers are shipped into help/lead projects. Volunteering can go wider than just helping the natural environment it gives people skills, a sense of empowerment and wellbeing.

Key messages Group 3

Top idea: 'International mentoring perspectives and approaches'. This is underpinned by the mind-set that we're generally not good at looking outside of the UK & our organisations (i.e. we have our own westernised perception of what the natural environment should look like and how it should be managed). An international mentoring group to learn from each other would help overcome this, perhaps from guidelines developed through a 'twinning' project. This could help develop nature conservation models that are flexible enough to incorporate different cultural perceptions and priorities.

Key messages Group 4

Top idea: Adaptive approach to ecological restoration that consigns ideotypes (broad habitat categories) to the bin. This is about adaptation to a new (post climate change) normal and consensus or agreement on how habitats/species can/will react and the parameters that we set to monitor this change.

A scenario based approach, with short term management plan reviews, may help to reach consensus on what we monitor and measure in the future. This approach may make it harder to meet funding requirements – perhaps we should also have a new approach to evaluating success. There could also be a cultural/capability barrier with regards to stakeholder buy-in with what we're trying to do. There can be opposition so effective engagement is essential to ensure the public understand what we're trying to achieve and are prepared for change in advance. Selling the services that the restored ecology/habitat can provide is a good tool. New techniques and tools related to social media would have an important role to play in engagement.

Key messages - Group 5

Top idea: Joined up ecosystem approach in policy and practice. Our current silo based mentality to nature conservation (as a separate issue to what is happening more widely) is unhelpful and we need to view ecosystems with reference to other sectors and view them as a whole – being clear about our objectives and trade-offs.

Barriers include the (unforeseen) dangers in dismantling existing legislation, not taking a holistic view on the consequences of our decisions, a lack of environmental champion/figurehead, poor communication and the nature conservation community being to idealistic. To get into the hearts and minds of young people there could be a 'Natural Service' – an outdoor classroom to help build an appreciation of the natural environment for young people.

Key messages - Group 6

Top idea: Take marine and intertidal restoration seriously e.g. through recreating oyster reefs, eel grass beds and active restoration around wind farms. We have a blinkered way of

looking at nature conservation at the moment – looking at what’s terrestrial. Group 6 propose we embrace the marine world.

Oysters have disappeared due to changing intertidal habitats – in the 1950s we lost seagrass beds – and we are not restoring them unlike other countries. We could restore habitats around green energy sites – we are missing opportunities. We’ve ploughed the seabed, destroyed coral reefs but are missing habitat recreation opportunities. We’re not looking at how we could do this. There is a lack of science, bias, vested interest – but increases in productivity could be a result.

Key messages Group 7

Top idea: Restoration by others, mandatory requirements. We shouldn’t have conservation agencies – get your usual suspects to do restoration using ecosystem services as a rationale e.g. binding requirements for farmers on pollution, flood alleviation and recreation. Spread the understanding of the benefits of ecosystem services such as soil protection to incentivise (payments for ecosystem services) other people to restore habitats.

There could be mandatory areas of conservation on landholdings – e.g. in Brazil, 10% of landholding need to be forested and this is legally enshrined. Barriers include public perception and a lack of political will. Short termism can be a problem leading to knee jerk reactions by politicians, lack of commitment and poor quality restoration. Education, training and site visits can help to overcome this.

Key messages Group 8

Top idea: Use natural regeneration more. With the sharing of information and data, political will and understanding we could be less precious and less prescriptive and let nature go where it wants to go. Natural regeneration is good – we should accept it more.

More land should be in public ownership - the commons. The BBC Natural History Unit should make more TV programmes on the natural environment and restoration. NGO’s could form a coalition to promote natural regeneration and we should encourage others to produce short briefing notes for their audiences like the Royal Society, and GO-Science POSTnotes to get the message out.

ANNEX A

For each group below we have set out 2 tables. The first column captures the key/critical to success components of an ecological restoration strategy or project, the next ideas we think are of limited value/have seen fail and the final column ideas (new or existing) to make more of. The priority ideas to make more of are indicated by the  icon. The second table explores these priorities in more detail – the barriers to taking them forward and how they might be overcome.

Group 1

Key/critical to success	Limited value	Ideas to make more of
Wider buy-in funding and tenure by purchase of land leading to longevity	Restoration as mitigation with no compliance/monitoring	Restoration via crowd funding – new people, greater diversity and more people
Legislative framework allowing for dynamic adaptation		Buy land with potential for conservation
Consultation/stakeholders		 Community ownership of restoration
Resilience/sustainability in the long term		Doing restoration where you can
Creativity/adaptation when creating new projects		Passive restoration
Planning for future land use at strategic level for landscape scale		Valuing existing ecosystem services, compared to restored e.g. carrots/cranes (birds)
Pragmatism/opportunism		Educating and building on cultural values
Large enough scale		Calling up images ‘remember when’ align with scientific data/analysis
Take into account cultural attitudes		
Knowing the baseline and shifting baselines – what to restore to?		

 Community ownership	
Barrier	How to overcome/collaborative first steps
Community valuing it enough to want to do it	Set up trusts, use PCC legal entity
Governance and management – who makes everyday decisions, who will ‘do’ the management and how long is it sustainable	Partnership with existing conservation NGO

for? An organisation which has staff/history of involvement, local community which might be transient	
How to manage once restoration is complete – how to reach consensus, what if land values or peoples' values change?	Community/social incentives
Individuals personal exit strategy, confidence and knowledge	Charismatic, energetic individual or group
	Covenant to perpetuate vision/purpose
	Pattern/model to follow

Group 2

Key/critical to success	Limited value	Ideas to make more of
Barrier changing social aspirations	Volunteer involvement	Land buffer systems using something that you know works
Getting a shared vision	Political short-termism	Novel, flexible, adaptable approaches
Human wellbeing increases success	Short-term funding	Be adaptive/realistic to local conditions and needs
Linking to economic benefit/growth	Insufficient data/methods for specific restoration projects	✔ Local community buy-in
Not letting big scale vision hamper first steps		
Understanding working with social dynamics		
Using data from past projects		
Building an evidence base – practical and scientific		
Passion/trust/communication		
Understanding spatial levels/themed layer mapping		
Focused habitat creation in areas with good general connectivity		
Connectivity of systems – can be good for species dispersal but can lead to spread of invasives		

✔ Community buy-in	
Barrier	How to overcome/collaborative first steps
Funding tokenistic and does not cover all costs	New Zealand example, beach NGO, social hub
Short-termism, raise the bar politically and culturally	Poland example, need western volunteers to do projects
Limited by skills of volunteers, staff etc. and by designated targets	New Zealand, connectedness to nature and earth taught at school
	Unemployed – empowered to do conservation, part of benefits system, has been done in UK, US and NZ
	Extractives – binding agreements, no net loss

Group 3

Key/critical to success	Limited value	Ideas to make more of
Go with the flow 'adaptive' targets	Creating the 'ideal' habitat	Buckets of biodiversity
Thinking at lots of different scales (inc. micro/macro specialist)	Standardised measurement approaches for success	✔ International and multi-disciplinary perspectives: Reluctance to take new ideas from overseas
Getting across a message – not just a vision	Homogeneity	✔ Cultural shift: Create positive rather than negative psychology Relevance of long term issues to current generation (i.e. climate change)

✔ International 'mentoring' perspectives and approaches	
Barrier	How to overcome/collaborative first steps
Cultural arrogance, we know best, not taking account of local differences	Be selective in what type of site/situation you are comparing
Cultural shift	Having a model, making it the norm but ensuring cultural sensitivity
Resourcing	Pilot initiative in Cambridge, guidelines for interactions, two way 'twinning' visits

Group 4

Key/critical to success	Limited value	Ideas to make more of
Understanding of context	Putting a financial value on nature	Convincing wider society e.g. of health benefits
Assessment – what have we got?	Do nothing	Social skills for environmental scientists
Stakeholders – identify how to engage with different groups (local communities, civil society, government etc.)	Being too ambitious	Focus on young people
Landowner and public engagement – get people on side	Negative messages	Citizen science – volunteer monitoring
Adaptability/flexibility of (achievable) targets and success measures	Over-complicating things	Remote sensing – publicise changing ecosystem
Policy support	Lack of flexibility/perspective/monitoring	Change the language from 'destroyed' and 'damaged' to something more positive
Enough funding		High capacity for communication (inc social networking – allows sharing of ideas and lessons)
Critical review and lessons learnt		Co-design different groups working together on the same sites to give multiple benefits
Continuous monitoring – resources required		Community based conservation (engaging and enthusing local communities)
Long-term commitment		Make more of projects that have worked
Ability to revise/update legislation		Risk management
		Ecosystem based adaptation – necessity for adaptation = opportunity for conservation
		✔ Adaptation to a new normal – changing parameters for sub/post climate change habitat
		Create something new – actual adaptation and evolution

 Adaptive approach to ecological restoration that consigns ideotypes (broad habitat categories) to the bin	
Barrier	How to overcome/collaborative first steps
Lack of focus/agreement (cultural)	Short-term planning, review and re-focus
Fit with funders requirements (resources)	Scenario setting, long-term visioning
Stakeholder/community perception (cultural/capability)	New approach to evaluating success; longer term appraisal reporting to milestones
	Effective, genuine consultation and engagement programmes; focus on restoration services, new approaches (e.g. social networks)

Group 5

Key/critical to success	Limited value	Ideas to make more of
Continuity, follow through	Community Forest example – lack of public interest	Bringing together pots of money
Long term funding	Pilots not leading anywhere – don't have clear objectives	 Joined up ecosystem approach – move away from conservative business as usual
Buy in/trust with the community	Lack of clear questions	Get ecosystem thinking into the national curriculum
Partnership	Disparity of ideas/lack of consensus	Compulsory national service for ecosystems 'natural service'
Transparency – measuring, reporting on targets		Catchment based approaches
Adaptability		Making more of good exemplars
Seizing opportunities		Community funding enterprises
Willing to take risks		Economics of ecosystem functions need to be stated
Political and corporate willpower		
Sufficient scale		
Robust science – link to practitioners		
Vision		

**Joined up ecosystem approach in policy and practice**

Barrier	How to overcome/collaborative first steps
Legislation too specific but danger of dismantling it	Accessible language (finance, ecology, social)
Separation of land owning and land managing communities	Good exemplars and better communication of these
Lack of political and public understanding	Education/experience for young people (curriculum, 'natural service', visits to the Great Fen)
Jargon hindering communication	
Need holistic view of consequences of decisions	
No heavyweight champion	
Ideological differences amongst conservation movement	
Competition for funds in voluntary sector	

Group 6

Key/critical to success	Limited value	Ideas to make more of
Partnership	Short term funding	Encouraging and funding development of large scale restoration partnerships in areas of highest biodiversity/social/economic ecosystem service benefits
Clear vision	Limited scope for expansion	Shift subsidies to benefits wanted by society
Flexible approach		Take marine and intertidal restoration seriously e.g. through recreating oyster reefs, eel grass beds and active restoration around wind farms
Social and economic opportunities		
Monitoring and lessons learnt from experience		
Suitable location and tenure		
People engagement		
Based on science and evidence		
Ensuring sustainability		

Note: no captured feedback from group 6 on barriers and how to overcome.

Group 7

Key/critical to success	Limited value	Ideas to make more of
Designated goals, frameworks and timescales	Lack of ecological understanding	✔ Get your usual conservation suspects to do restoration: ecosystem services as a rationale e.g. binding requirements for farmers on pollution, flood alleviation, recreation
Monitoring/surveillance	Lack of monitoring	Understanding different landscape restoration strategies and their resilience to climate change
Ensure sufficient resources/staffing	Unrealistic planning	Minimal on-going management – re-wilding but low intervention can lead to open-ended outcomes, a risk for biodiversity?
Ongoing management	Failure to look at root causes of habitat loss	Analysis of costs and benefits – where, how (trade-offs between area and quality)
Appropriate habitat management – best available knowledge	Constraining regulation	Need to understand drivers of habitat loss
Public engagement	Politics	Mandatory area of natural ecosystem in any land-holding (cf Brazil)
Understanding underlying processes and why habitat is lost – need to know things like hydrology		
Local stakeholder influence on success of project		
Relationship with wider strategies		

✔ Restoration by others/mandatory requirements	
Barrier	How to overcome/collaborative first steps
Public perception	'Glamorous' TV programmes
Political will	Payments for ecosystem services
Lack of understanding of ecosystem services	Training
Short-termism (e.g. political expediency vs flooding)	

Fear of commitment and lost opportunity costs	
Not doing it very well	
Ecowarriors	

Group 8

Key/critical to success	Limited value	Ideas to make more of
Long term vision – continuous management	Too much prescription	✔ Use natural regeneration more
Good data/information	Too precious	Citizen science at greater scales
Restoration of arable using model of what natural systems were like in the past	Current political cycle	Greater land acquisition for regeneration (biodiversity offsets)
Delivery of multiple benefits	Past re-introductions from man are now invasives (Victorian gardens)	✔ Restoration education
Integrated approach with all stakeholders involved		
Connectivity		
Buckets of biodiversity		
Climate resilient for the future		

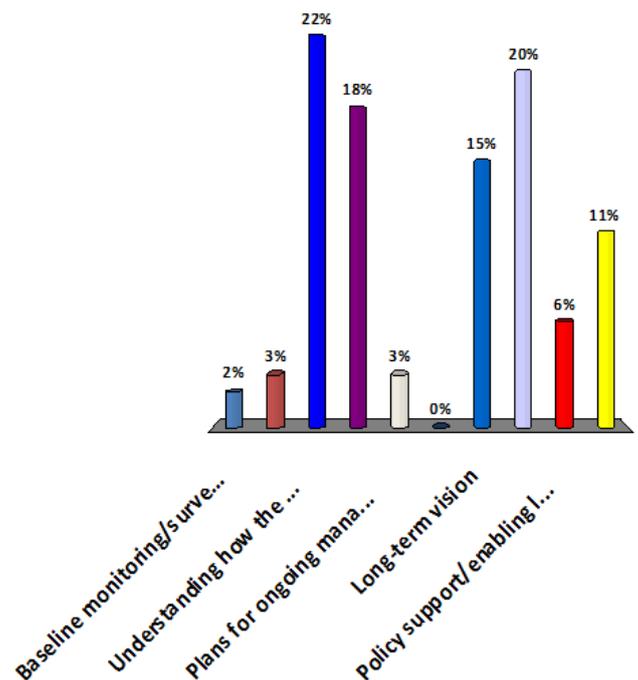
✔ Use natural regeneration more	
Barrier	How to overcome/collaborative first steps
Cultural	Putting nature at the centre
Regulatory restrictions	Economies (of scale?) to make cheaper
Lack of funding	Collect success
Invasive species	Outcome monitoring
Remediation of pollution	Public ownership of the commons
	Interdisciplinary discussion and action
	Make success more visible
✔ Restoration Education	
Barrier	How to overcome/collaborative first steps
Not in national curriculum	More sharing of data
No common approach	Political will/understanding
Cross NGO inertia	Stop being precious
Financial resources	Make a programme with BBC Natural History Unit
	Better NGO coalition for action
	Royal Society meeting
	POST Note (Government office for science)

Annex B

After the plenary feedback delegates were asked to vote in 3 polls. These were based on a summary of the 10 key/critical components from all the groups; the 10 top failures (ideas of limited value) and the top 8 'new ideas.' The results are show in the poll slides below.

What is your top Key component?

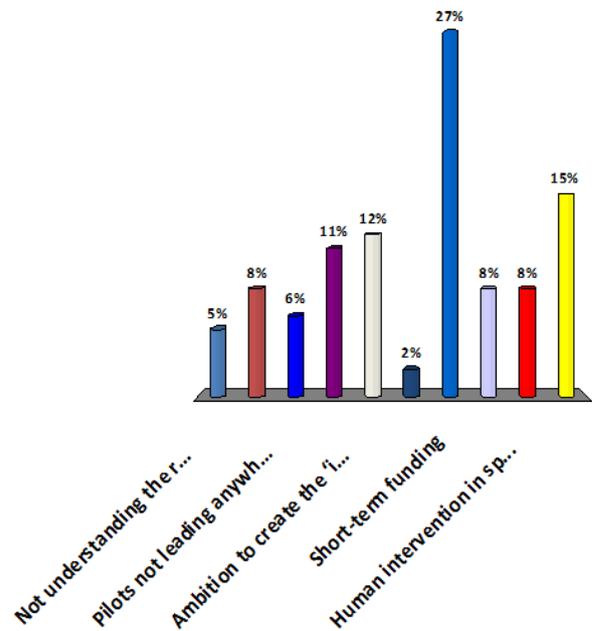
1. Baseline monitoring/surveillance
2. Sufficient staff time and money
3. Understanding how the system works/ecological processes
4. Local stakeholder/public involvement
5. Plans for ongoing management
6. Tried and tested frameworks and models (but flexible and different scales)
7. Long-term vision
8. Robust to future change (adaptive)
9. Policy support/enabling legislation
10. Provides benefits to people



The top key component is understanding how the system works/ecological processes, followed by adaptation for future change (particularly climate change) and local stakeholder/public involvement.

Identify your top failure

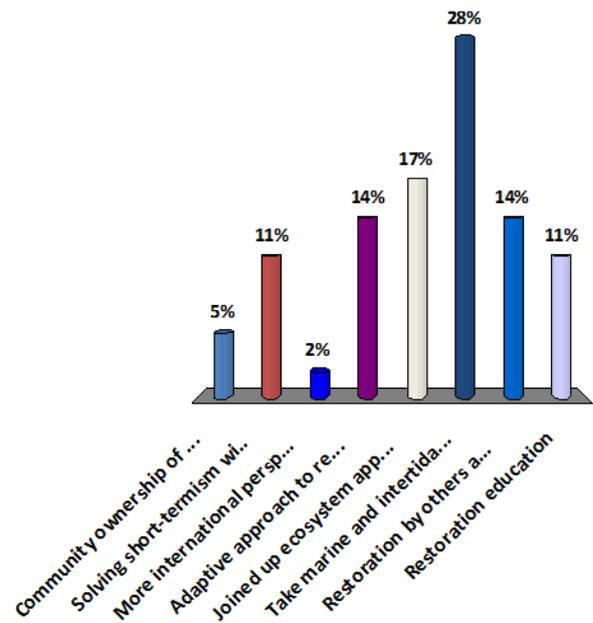
1. Not understanding the root cause of degradation
2. Insufficient evidence/science
3. Pilots not leading anywhere (bigger projects)
4. Lack of clear objectives
5. Ambition to create the 'ideal' habitat
6. No standardised approaches/success measures
7. Short-term funding
8. Trying to value nature (£)
9. Human intervention in species re-location/introductions (non native)
10. Lack of ongoing monitoring/management



For the top failures, short-term funding is seen as being the biggest failure, followed by lack of ongoing monitoring/management and the ambition to create the 'ideal' (highly prescribed) habitat.

What is your top New Idea?

1. Community ownership of site to be restored
2. Solving short-termism with community buy-in
3. More international perspectives to allow for different cultures
4. Adaptive approach to restoration that consigns fixed categories of habitat type to the bin
5. Joined up ecosystem approach – policy & practice
6. Take marine and intertidal restoration seriously e.g. round wind farms
7. Restoration by others a mandatory requirement
8. Restoration education



The top new idea is to take marine and intertidal restoration seriously, especially around wind farms, then joined up ecosystem approach of policy and practice followed by a joint third of adaptive approach to restoration that is not focused on traditional fixed categories of habitat types and restoration by others as a mandatory requirement.

Annex C

Main messages from panel session on ‘Transforming Conservation’, chaired by Prof Bill Sutherland from the Department of Zoology at Cambridge University.

Janette Ward, Director of Conservation Strategy and Innovation, Natural England

Need to put effort, time and resources into big restoration projects for the long-term (like The Great Fen Project). Projects have to be part of land use strategies and in the context of the Lawton Review (bigger, better, more joined up). We have to find ways to sustain them like conservation covenants. Restoration projects need to be more formalised as part of green infrastructure and legislation around Lawton and we should back the Lawton Review more. We need to clear about the relationship between nature and what it provides especially farming (agri-business) and food.

Mark Avery, Independent Environmental Expert

For the conservation movement to really change things we need to be much more engaged with the public and politicians. Current projects are small scale and piecemeal. We need societal change to move the politicians (later comment about the importance of taking ministers on site visits).

Bernard Mercer, Environmental Consultant

Scientists can't decide on bold positive goals for the natural environment. It's why the Millennium Development goals for biodiversity are so poor. We need to conceive something bigger and better. We must be careful not to 'Europeanise' nature conservation to detrimental effect.

Andy Clements, Chief Executive, British Trust for Ornithology

We don't embrace new approaches to nature conservation even where proven to work in other countries. Andy gave the example of a triage project in New Zealand for birds. CCF ought to be used more and more powerfully. NGOs need to set aside their brands and work together collectively, pulling together in the same direction on funding, sharing skills and expertise. We need a new legislative programme around restoration and recovery.

Messages from the panel session Q&A

- How to make land restoration pay (mixed views about biodiversity offsets but a good idea to get students on the MPhil in conservation leadership to think about this). We need use new approaches to evaluate if they work.
- Need for a new legislative framework to make this happen – space for nature esp. in land use planning (cf this to how well restoration has work in minerals/aggregates sector).
- Need for NGOs to back Natural England more, and not undermine it, as a strong statutory adviser.
- Social media, gaming and crowdfunding all mentioned again in relation to engagement especially of young people, though a pertinent point was made about engaging the voting masses of the baby boomers (and the current generation getting on with the job).

- Are there too many NGOs? They appear as Brownian movement! They need to work more efficiently together on big topics as well as their own niches (could join back office functions free up money for project work?). Might be a good test for the new Cambridge conservation campus.
- There is too much advocacy at the expense of practical conservation.
- Stop acquiring new sites for five years and put all the funds into massive advocacy campaign!
- Would there be more impact on the public's interest in, and action for, conservation if for 5 years the NGOs spent no more on land acquisition, but invested the money instead in a publicity campaign?
- Transform Hyde Park into a more natural area.
- There should be a Longitude prize (run by NESTA) for nature conservation.
- Conservation would be enhanced if business leaders focused on their supply chains.
- Biodiversity offsetting works well elsewhere, so use it more in the UK.
- Conservationists are too nice! Be not so nice and ask for more!