Wildland Research Institute (WRi)
Wildland Research: setting the agenda 2010-2020

Wednesday 21st October 2009
Charles Thackrah Building, Clarendon Road, University of Leeds

Summary

To launch the new Willdand Research Institute at Leeds University Oct '09 over 45 people representing interests in wildland worked through a process to come up with key research questions. The process included:

- Sketching out trends and drivers for wildland
- 3 presentations about national and European context & agendas
- detailin wildland issues
- imagining good (heaven) and bad (hell) futures for wildland 50 years on
- backcasting what could, should happen to get us from here to 50 years on
- and then thinking of what we want and need to know

The resulting research questions included:

What is the cost benefit analysis to society for wildland?
- How do we deal with the switch from human control to natural process?
- What does this cost – in economic and cultural terms? Currently any cost benefit analysis is skewed by what we do not know.
- Would we loose our competitive edge by doing this? And how?
- What is the cost benefit of ecosystems?
- Need to look at the climate change effects on ecosystem delivery.

An alternative approach is a ways and means analysis ie. **What do we need to know to, for instance, achieve 10,000 sq kms of wildland in England, in Wales and in Scotland?**
- This would involve weighing costs against benefits to arrive at cost efficiencies
- Current experience is too short a time to evaluate eg. 6 years of Wild Ennerdale cannot tell us enough, yet, about benefits.
- So how do we value? How do we use numbers to value?

But a ways and means approach could also be complimentary to a cost benefits approach.

What areas do we have now that could be wildland ?
- What are the priority areas (could use a traffic light style grading)

What can we learn from schemes to date?
- Identify gaps
- Assess transferability of overseas examples

What is determining how rewilding is taking place in different countries across Europe? How is this happening? Who is making this happen?

Monitoring – what are the successes and failures?
- What data do we need? There is little data about protected landscapes and reserves efficiency.

What are the best tools, strategies, methodologies to influence and campaign for more wildland?
- This is about communication
- It is also about getting more political support

How can we achieve core wildland areas in England, Wales and Scotland?
- How big is big enough?
- Where is best?
- What would need to happen to achieve them, ie. on the ground eg. eco-bridges; and in society?

Identify goals and objectives to achieve 30% wildland by 2060.
- Also identify what is and could prevent this ie. talk to all stakeholders (social science research) to identify potential conflicts along any route we take to achieve this goal

Welcome WRi

Over 45 people representing agencies such as Natural England & IUCN, the Wildland Network, several different academic interests and decades of practice gathered to launch WRi , the first research institute dedicated to wildland in Europe. Click here to see the participants list.   This is a summary of the day and output.

Dr Steve Carver, Director of WRi, introduced the purpose of this first WRi seminar:

- To launch WRi by exploring wide ranging potential for wildland, such as ecosystem services, recreational opportunity, natural and cultural heritage; and
- To better understand what we need to know and how to begin realizing that potential.

and introduced Bob Aitken of Landscape Research as Chair for the day and Prof Michael Arthur, Vice Chancellor of Leeds University to welcome WRi.

Trends & drivers
What are the key medium-long term trends & drivers affecting wildlland in Britain?

Participants suggested:

Competition for land
- Ownership of land/profit from land
- High economic value of land
- Fuelled by myths & concerns eg. food security, renewables?

- Nonetheless, there is a perceived need for food, energy, fibre security of supply (therefore no space for wildland)
- But also value of wildland as carbon store; regulating water supply etc
- Biased / subsidised land markets eg. sporting purchases

Windfarms & energy production

Global & local food security
- Intensification of food production (inc biotech issues)

Ecosystem services thinking

Resilience esp of the uplands

Agricultural policy – national and EU
- How this affects land prices and funding
- CAP policy and changes in agricultural subsidies
- Or CAP collapse and abandonment of land creating wildland by default

Conflicting conservation & land management strategies

Climate change
- Climate adaptation could produce more wildland

Population growth

Unknown levels of public support

Public perception
- Fear of change
- Engagement / disengagement with nature
- Public desire for the natural environment
- Education

Valuing nature esp wildland
- Availability of wild areas will depend on how we value them

Lack of understanding about landscape dynamics
- Eg. while Andy Neale of Natural England explained that the Landscape Characterisation process (in England) should not lead to a lack of acceptance of and working with the inevitable dynamics of landscape change … nonetheless, other participants suggested that the way Landscape Characterisation is interpreted by some practitioners does result in a lack of acceptance of change

Funding
- Bureaucratic grant systems
- Conflicting funding priorities
- Where will funding come from?

- Future stability of funding streams?

Greater human use of wildland
- Esp access & transport issues
- Concerns over loss of access
- Potential tourism gains

It is local champions who create and deliver wildland projects

Complex development of terms/definitions
- What do we mean by **RE**wilding? – the 're' word
- What is wilder?
- Do we begin to see that we mean ecological restoration?

Current state of play – an overview
Three presentations created a background for the work of the day.

Working towards better protection of Europe's wilderness.
Zoltan Kun, Executive Director Pan Parks Foundation, gave a briefing about wilderness/wildland in Europe, eg. the European resolution and the Wilderness Think Tank and Pan Parks network. Click here to see presentation.

Wild Europe, Turning Ideas into Policy.
 Toby Ackroyd, Wild Europe Initiative, sketched the formative steps and detailed an action plan for Wild Europe as well as finishing with next steps for more wildland in the UK. Click here to see presentation.

Current projects, Intent and Implication.
Keith Kirby, Chief Woodland Conservation Officer for Natural England, talked about wildland as a continum and what it might look like before offering a framework which allows us to see notions about wildland past and present and postion current projects, eg. Knepp or species reintroductions, eg. Red Kite, in relation to each other considering degrees of wildness and scale. Click here to see presentation.

Wildland issues
After lunch in the Parkinson Court where the Tooth and Claw exhibition www.toothandclaw.org.uk   was displayed, participants chose one of these three issues to work on:

Ecosystem services
Biodiversity
People, change and decisions

These are notes of the discussions.

Ecosystem services:
1. **Pick one ecosystem service and describe how it would benefit from wilder land.**
2. **Can we do better than wild nature? Give examples**
3. **Which ecosystem services are better provided in the public or private domain?**

1. Carbon:
   - Benefit of taking out marginal farmland
   - Undrained peat
   - More older growth higher standing forest as a 'carbon crop'

2.
- What is the added value of wildness?
- Wildland – a mix of habitats and large scale allows multiple service delivery.
- Ecosystem service delivery may <u>not</u> justify wildland.
- Do we need an EIA for wildland? (Need to allow for future generations internal rate of return. Net discounted revenue)
- Wildland can be good for delivering some services, in some systems. Need to research which and their respective values.
- Some services are better delivered in other ways, eg. food, timber, but need to be aware that this does not devalue wilding objectives
- Need to consider future as well as present value of wildland (not closing off options) eg. long term productive capacity
- Beware risk of focussing on single rather than multiple service delivery eg. carbon + flood control + water quality
- Also look at land/areas where other uses are not good (risk of ending up with marginal land)

3. It all depends on location.

Private domain issues:	Public domain issues:
- Market - Incentivised (public funds) - Brings in private funds and initiative	- Non market services - General goods - Those benefits thought of as free - Delivering societal goods 'uncontrollable'

Bioversity:
1. **What species gains, losses and widespread redistributions will wilder landscapes deliver?**
2. **What are the trade-offs between wilder landscapes and biodiversity targets?**
3. **Is wildland mutually exclusive with BAP/SSSI approach to nature conservation? Explain and give examples.**

1. Depends on the baseline.
Gains inc :
- species that require big landscapes eg. crane, owls, sea eagles, red deer
- bigger areas for life cycle and for low disturbance
- better population health eg. opportunities to move around
- wider ranges of species at lower population densities
- gains from knackered habitats?

Loses inc:
- depends on where?
- Species dependent on more intense management esp rare species
- Losses from rich habitats?

2.
- Comes down to where and having dynamic active landscapes. Don't believe there is necessarily any trade off. Targets need to be more flexible and refer to natural processes and allow succession. Tension exists with targets.
- Unpredictability of wild habitats is a potential trade off eg. Golden Plover of knackered blanket bog – do we miss SPA target for wider habitat gains?
- Example of hay meadows which are completely man-made but rich in species.

3.
- Need to be site specific. Examples are in early development. Very fluid. We don't live long enough, yet, to know!
- BAP/SSSI not incompatible with wilding – we can have managed areas and wildness.
- SSSIs can be the nuclei for re-colonisation.
- Need dynamic boundaries.
- Need a more flexible approach to deal with potential conflicts.
- There are already conflicts within BAP.
- Corridors may spread invasives.
- There are questions of scale & management requirements.

People, change and decisions:
We know that different levels/types of knowledge/understanding affect our view of nature. Bearing this in mind,
1. **Does fear of change and sense of place limit the scope for rewilding? How?**
2. **How can we reconcile human vs natural control over landscape change & development? Give 3 examples.**

1.
- There maybe more fear of development than fear of re-wilding
- 'Sense of place' and love of place in 'wild' areas can act as an obstacle to change eg. re-wilding

- The general perception of landscape amongst the public is " static"
- There are practical concerns (not fear) about change eg. dog walkers do not want wild boar around
- Often longer term locals are more tolerant of change than visitors or 'newer' residents
- Education is an important part of influencing attitudes – and adaptability to accommodate different needs must be part of the message

Limits include:
- Effect of status quo eg. 'I like this place as it is'
- Fears of species losses and Agency remit clashes
- Fear of the endpoint ie. can we utilize wildland eg. recreation issues?
- Ownership & self-interest issues eg. sporting interests; legacies
- Don't forget urban planning possibilities

2.
- We need to set timescales for <u>natural</u> landscape development
- Need to acknowledge that management of these areas may be necessary even in the longer term
- Consensus among stakeholders is key to a vision of re-wilding
- High biodiversity does not necessarily equal high wildness
- What about invasive species?
- Scale is critical to linking human and natural control of and interaction with landscape eg. white tailed sea eagle re-introduction; flood regimes
- Need new economic and geographic models for forestry and food

For wildland in Britain in 50 yrs time, what is your vision for heaven and for hell?

Heaven
- Pan Park Network
- Networked wildland areas.
- Ecological networks / spatial coexistence
- Historic barriers removed to create appropriate policy and legal framework
- Large wild areas on the ground (20,000 ha +)
- No recent human artifacts to be seen
- And natural processes and large animals re-introduced
- All catchments sustainably managed & re-naturalised
- Clean rivers and seas and woodlands you get lost in
- Willdand as a <u>norm</u> – so productive land is the alternative
- Reformalisation of economic thinking
- Cap reform – favouring wildland. EU level support systems for wildland
- A shift to more environmentally sustainable farming (delivers high quality food and farmland)
- England 40,000 ha, Scotland 1660 sq km,   Wales 40,000 ha core areas
- linked with corridors and mosaic of linked habitats across UK
- Gradation of land use from farmland > buffer/transition land > wildland
- Clear wildland goals

- Wildland delivers to the markets for ecosystem services and social services
- Free access to all wildland inc. rivers and coasts. Public adopt associated responsibilities.
- Population of 4 million – same levels of wealth
- And only 10% of current resource use
- Public ownership & limits to private ownership
- More community owned land / rights + community production of own needs
- More localized sustainable communities
- Cross political party agreement about values of wildland
- Greater public awareness. Wildland appreciated and loved by the public.
- Social acceptance of importance of wildlife / wildland. People put their resources into wildland.
- Willdand agenda generally accepted – integrated into education from Primary up
- Government driven incentives to invest in wildland
- Wildlands are rural and urban
- Huge increases in woodland / wetland / wet woodland
- Large free-living herbivores. Less sheep.
- Red squirrels and other flagship species (and habitats) doing well
- Robust and expansive habitats – natural and semi-natural
- Re-introductions - wolves, lynx & bears in the UK, beavers in lowlands, truly wild cattle
- More charismatic species
- More ecoliteracy
- Farming community welcomes predators
- Better use of agricultural land and urban land
- No net import of food or energy
- Wise energy use eg. global carbon accounting ; dark skies
- Wildland is accessible to people
- Urban children appreciate nature and experience wildland including spiritual aspects (summer camps; wild camping)
- No midges

Hell
- No change, business as usual
- Fragmentation of vision & WRi
- Poor inefficient CAP review
- Agricultural intensification
- Sheep still in the uplands
- Econometric thinking takes over
- Continued human population growth – 75 million +
- Coastal flooding – relocation of urban population
- Food and energy security becomes critical
- Windmills on every hill, hydro schemes in every river
- No human artifacts at all – landscape ruled by energy and food production
- Polarised landscapes where intensive farmland is next to wildland
- Widespread poverty & lack of wealth
- Shrinking land area – natural disasters.
- Global warming & flooding
- Colder, darker, wetter climate
- 100% urban living – no green space. Urbanisation & suburbanisation.

- Shift to virtual wildland
- Wildland is a party political football
- Health & Safety excesses limit access to wildland/outdoors, esp schools
- Children regard farm animals as wildlife
- Continued biodiversity and habitat loss. Daily loss of species globally.
- Total habitat fragmentation
- No bees, No birdsong
- Biotic homogenization through invasives
- Pollution
- War

Backcasting key steps from 'heaven' 50 years on

Five participant groups used their 'visions' (above) of heaven and hell 50 years on and a timeline 2010 – 2060 to backcast and plot key events, drivers, policies that would get us from here, now, to 'heaven' or 'hell'.

These five timeline maps explored a great deal of detail, showed links and flows, ranging across social, economic, political triggers and as well as environmental. Click here to see timelines. The many ideas, prophesies, aspirations included these few examples broadly attached to these decades:

Moving towards Heaven	Moving towards Hell
2010 - 2020	
Setting clear wildland goals & core areas established	Incentives & CAP reform remain focused on production
WRi appointed as Govt advisor	A major disaster environmental & economic
Ecosystems services arguments accepted and developed	Water shortage > more dams and pipes
All party acceptance of need for land use strategy. A Willdand Act passed.	
Tax/incentives regime changes to enable support for rewilding	
Forest School education mainstream	
Beavers introduced in all appropriate England catchments	
2020 - 2030	
Global carbon accounting, a carbon economy	Running out of energy
Re-introduction large mammals	Biodiversity loss continues
Tourist Boards accept value of re-introductions	
New media inspires diverse publics	

Flagship report proposes PAN Park network & identifies sites	Drive for renewable energy > all landscapes open to windmills & hydropower
Change to common land legislation frees up large upland areas	
2030 - 2040	
First public 'National Park' IUCN 11/IC	Wildland dismissed as uneconomic
Long term perspective appreciated by politicians	Grades 1 – 3 land prioritized for food production/energy & productive forestry
Culture of 'wild nature' as normal is universally accepted	Virtual nature rules
Net increases in biodiversity (less loss, more restoration)	
Individual landowners cooperate & create core areas	
Changes of attitude after official reintroductions of species & Lynx everywhere	
2040 - 2050	
Population peaks (subsequently falls	Food and energy security critical
Network of IUCN II sites designated	Continued loss of habitats and species
Political and Agency support for wild areas	Continued industrialization of agriculture
Large scale Gov. buy out of non viable farms to allow landscape scale wildland project	
Wildland seens as essential for human existence	
Education provides courses for 'new' land stewards	
2050 - 2060	
National wildland network completed (uplands and lowlands, urban and rural)	Government collapses, failed state, local communities take over
Green space in every neighbourhood, wildand in every region	
30% land near natural	

What are 2 or 3 top research questions that would help us get from here to achieving your Heaven 2060?

The key research questions chosen after discussion are those listed in the Summary.

The discussions which supported and led to those choices included:

- Need a wildland vision, a concept.
- And then need conflict resolution work with all stakeholders.
- Identification of goals and objectives to meet 30% wildland target.
- Identify and map (GIS) priority areas that fit with wildland targets.
- What is the cost of having 30% wildland?
- Look at costs and benefits, PAN Park style, for wildland and compare with existing approaches.
- Need a cost benefit analysis for society of wildland.
- Do we understand the ecological function of wildland and how it will change in the future?
- How do we do ecological restoration? What is best practice?
- What do existing projects tell us? What data do we have?
- 'Joe Bloggs' what do people want/accept/support – what they vote for?
- What are the most effective communication tools / strategies to reach different stakeholders / audiences?
- Research how to get wilding ideas accepted (social science questions)
- Esp. how to gain acceptance for return of lynx, wolves etc.   Inc. exchange visits to Europe.
- Review the success of existing schemes/projects to learn from mistakes and how translatable are mainland Europe & USA projects.
- How to support existing wilding projects to achieve and demonstrate success?
- What is determining how rewilding is taking place in different countries across Europe?
- Need to know the ecological needs of species ie. how big is big enough for sustainable populations?
- Research eco-viability of re-introducing lynx etc.
- Demonstrate the benefits of ecosystem services from wildland.
- What ecosystems services are delivered by wildland?
- What is the evidence for the level of ecosystem service? What is the value? What is the cost? Look at this for the UK and for elsewhere.
- Zoning – mapping and demonstrating the continuum.
- How to achieve three core areas of wildland (England, Wales & Scotland)?
- Research needed about legislative changes (local to European).
- What are the outcomes and benefits of nature based experience?