

Wildland Benefits

A brief survey of schemes on the wildland network database

Commissioned by the Wildland Network for the regional seminar on economics of wildland, held at Knepp Estate, Sussex, April 2007.

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This brief survey on socio-economic benefits has been gained largely from telephone conversations with project leaders on our data base and a perusal of some relevant publications by some of the organisations involved in the rewilding projects.

I have asked three main questions:

- what sort of jobs, services, products and marketing are currently connected to the rewilding project;
- what future plans might affect socio-economic benefits;
- what difficulties or obstacles are there to developing programmes aimed at bringing social and economic benefit to the locality

We are essentially interested in what identifiable socio-economic benefits now exist or are being developed that are of relevance to *wildland* policies, and what obstacles exist to progressing this aspect of the projects.

Ideally we want to identify those benefits of relevance to policy work for rewilding on a large scale, in particular changes from past practices and their social and economic impact. It would also be useful to discover what data is available for more detailed analysis should we be able and what surveys may already have been done.

There are about 30 schemes on the data base in England, 15 in Scotland and 5 in Wales – varying from a few hectares to several thousand, from ancient forest, small scale woodland, fen restoration, riverine grassland, and coastal wetlands. The projects are managed by a large variety of organisations from the smallest private initiatives to very large cooperative endeavours with some of the major landowners such as the National Trust, RSPB and Forestry Commission.

I short-listed the projects in terms of size and hence likelihood to have relevant impacts and data and also in terms of strategic ownership (e.g. RSPB, John Muir Trust, Forestry Commission etc.); I separated the projects into the following land-use change categories because each category has special circumstances:

Scottish Caledonian Forest (large scale)
English Woodland
English Fenland
English Coastal Retreat

The categories represent differing scale as well as socio-economic circumstances. For example, several of the Scottish woodland/forest projects are very large – with

Alladale at 25,000 ha, Abernethy at 12,000 ha and Glen Finglas at 5000 ha., whereas most English woodland projects are from a few hectares to 100 or 200ha.

English fenland projects are often large scale in their ambition – with Wicken Fen (National Trust) looking at 10,000ha as the ultimate target for land ownership, and the Great Fen (Wildlife Trusts) aiming at nearly 4000ha of land purchases.

Coastal retreat projects are relatively new and initially small in scale – with Abbots Hall the largest at nearly 300ha, and nearby Wallasea at 115ha - but with a long term vision for 3000ha in that area of the Blackwater estuary targeted for future expansion. These projects are also attracting large sums of development money.

The schemes represent a huge range of enterprises – from a small volunteer office of carbon off-setters working with local businesses and managing about five small lots totalling 20ha of planted woodland (10,000 trees/yr planted at about £6 per tree!), through Borders Forest Trust with 3 full-time employees (FTEs) looking after 650 ha at Carrifran with a turnover of £600,000 in 7 years, to the mighty RSPB at Abernethy with 87 FTEs on 13,000ha. The coastal realignment projects may have budgets running to several million in relation to engineering works.

The range of organisations involved is also great – from the relatively unknown web-based *Treesresponsibility*, to major corporate players such as the Water Utilities, Forestry Commission and the RSPB. The latter have already performed some detailed economic analyses on their sites and developed information to argue their case for conservation and land-use change – often as part of the process of raising additional funds for purchases and management. Some organisations have thus thought extensively about gathering relevant data and others not at all.

There is a very large flow of finance via the EU, the Lottery, and Landfill Tax. There may also be significant sums in relation to carbon offset companies but this is, as far as I am aware, not collated anywhere. In the case of coastal realignment and river restoration a large proportion of these sums is likely to be one-off inputs to local or national contracting firms for engineering works. This may also apply to some of the fenland restoration work. Whilst I have not attempted to delve further into this particular area, I think it relevant, especially when local expenditures are involved. The main focus has been upon the more permanent impact on the local social and economic environment – as measured in Full and Part-Time Employment, the development of local skills and other social benefits such as the maintenance of traditional crafts, provision of local food, recreational and educational opportunities.

The nature of the benefits

I decided to look mainly at a relatively narrow part of the socio-economic benefits spectrum

- the numbers of full-time or part-time jobs attached to the project,
- the kind of work and skills generated and economic gains in the local community,
- some indication of the changes from previous land-uses
- future hopes and plans and any obstacles identified

Social, as compared to economic benefits, cover a broad category and are not easy to quantify. There may be cases where more jobs are created (for example in visitor centres and cafes) but local culture and skills decline (e.g. deer stalking, keeping, shepherding, etc.), and these extra jobs may not contribute to the cultural well-being of an area; in other cases new skills may be developed – such as wood-turning, hurdles and charcoal production, or organic produce, new crops and the creation of a local identity.

In relation to the broader social benefits I have asked about access agreements, education, mental health and physical fitness – all usually less quantifiable, but in most respects identifiable and important. I have also been concerned to identify new skills as well as the impact on older trades and jobs.

In the larger projects I asked about the transition from previous land uses to wilder land in order to get an idea of whether rewilding would mean an overall loss of economic benefit or a potential gain. There are also issues of cultural values in some landscapes that may be affected – for example, in moving from a traditional shooting estate to conservation or from sheep to cattle, or from farming to wildlife reserve.

Representative survey?

I talked at length to about a dozen people from the smallest project manager to the largest and across all the variety of landscape types. It was difficult to reach some people – in particular Natural England (passed around via email and eventually reaching real people but not those heading up projects) and John Muir Trust (nobody answering the phone or returning emails); Coastal Futures looked interesting from their website (they are integrating several large projects on Humberside) but I could not make contact; and one or two key people have been away (e.g. in the Weald scheme) and some telephone contacts for smaller projects are obviously not permanently staffed.

I did not attempt to cover many of the smaller projects on the data base that appeared to involve not only small areas, but also little in the way of related management and information gathering.

However, I had particularly interesting and informative talks with the Alladale management (Hugh), Trees for Life (Alan), Ennerdale (Gareth Browning at the Forestry Commission), Chris Gerrard at Great Fen (Wildlife Trusts), Adam Wallace at Glen Finglas (Woodland Trust), Bill Kenmir at Geltsdale (RSPB), High Chalmers of Borders Forest Trust and Carrifran, Adam Griffin at Moor Trees; Andy May at Abbots Hall (Wildlife Trusts); Henry Brocklebank of Sussex Wildlife Trust; Michael Jeeves on the Soar Valley project; Keith Kirby at Natural England; and one small operation – Treesresponsibility (Barbara).

In addition, the RSPB sent me some extremely useful information; and SNH have also done their own survey (forwarded by Toby and Mark Amos). Andy May is producing an article for ECOS on the Abbot's Hall project which overviews the social and

economic issues. The Land Use Policy Group have investigated the availability of EU funds – and their report looks interesting (I have only had time for a brief read).

Given that the RSPB (and to some degree also the Wildlife Trusts, Forestry Commission and SNH) have already produced some detailed analysis – it is useful for WN to look at what additional role it can have, if any. My initial conclusion is that we can do two things:

- collate and make use of the analyses that already exist to enable us to use it in policy formulation and lobbying;
- prompt the further collecting of data or organise our own survey with a greater focus upon the distinguishable features of ‘rewilding’ – it would be of great interest to have an overview of the total funding going into this sector compared to the *general* conservation sector.

To some extent any funds going to ‘conservation’ represent money going into wilder landscapes – but a large proportion of this money goes into staffing the organisations and managing traditional conservation projects. We need to distinguish land acquisition money which involves a shift in land use from agriculture – as this is obviously rewilding even if the new land is put into traditional conservation management. Some of this new land will be part of a larger landscape plan – but it appears to me that only the Wildlife Trusts are active on these broader objectives (they have a document called *Living Landscapes* which I have not yet seen) and to some extent the RSPB but usually within its focus on birds and their required habitats (e.g. reedbeds for bitterns, heathland for Dartford Warblers, etc).

In respect of ‘zone-based’ plans there are several major initiatives under way, all of which have relevance to wildland and rewilding:

- The Great Fen

Led by the Wildlife Trusts (Peterboro, Cambridge and Huntingdon for example), this project may eventually link up with RSPB and NT sites such as Lakenheath and Wicken.

- The Weald

Various organisations such as the Woodland Trust and the Wildlife Trusts are buying land in an overall 60,000 acre planning zone for connectivity.

- The Caledonian Forest

The National Trust for Scotland and the Woodland Trust, as well as Trees for Life are involved – but also the Royal Scottish Forestry Society and BP are developing projects that are not on our database.

- Coastal Futures

This organisation is developing projects in Humberside and involved local authorities and the statutory Agencies, as well as Wildlife Trusts

The Wildland Angle

In WN we are developing a particular part of what might otherwise be called the ‘conservation’ or ‘environment’ sector – and so we need to discern what data is of use to our more specific cause.

It is important therefore for WN to appraise itself of the socio-economic dimension of shifting land-uses – and of the kind of analyses available and conclusions drawn from other organisations with more limited but still relevant agendas. Examining, for example, data gathered by the RSPB, has been very illuminating, and quite encouraging. We need to have this kind of information at our fingertips.

At the same time, the RSPB is a special case and we need to be able to discriminate regarding general conservation and its special projects and ‘rewilding’ – and that is not so easy to do. The RSPB is not simply a conservation body – it also operates almost as a tourist organisation and tour operator in its own right, with well-developed visitor centres that also sell merchandise and an extensive membership and communications network. This organisation thus channels visitors into its own reserves and these have a significant economic and perhaps also social impact.

We need therefore to look carefully at which data is most relevant to the kind of projects we have in mind – for example, Abernethy is obviously a special case, with a well developed tourist complex close-by, charismatic species, and RSPB’s concentrated expertise – it is not readily duplicated even in Scotland, let alone the North Pennines (although Alladale might successfully follow that model). The organisation does however have other sites that might be more comparable to WN projects – such as Geltsdale, and if we are going to use data on employment opportunities (and losses), then RSPB’s knowledge of this upland project would be more useful.

Wildland and large scale – are there lessons from smaller scale projects?

I don’t think that at this stage we need to restrict the analysis to large-scale pure wildland schemes – of which there are few, but we do need to know the implications of this scale and type of project and these will vary for different localities and forms of ownership. Smaller scale schemes may provide us with useful information for scaling up to landscape scale projects. It is not impossible that in some cases, a general rewilding zone might develop from many small initiatives – and I would advocate that we explore this potential with regard to ‘local identity’ and carbon offsets for local businesses – for example, within a particular water catchment, although the one project I contacted was not particularly geared up to answering the relevant questions!

Schemes that may not be entirely rewilding oriented but of great relevance

There are several ‘rewilding’ schemes that are of interest even though they might have a narrower focus than our ideal wildland – such as coastal re-alignment (small areas but with the potential to form large area schemes), or fenland extensions, which also have the possibility of larger area connectivity – as in the Great Fen project. In these situations arable farmland and intensive pasture might go to extensive grazing or reedbed or saltmarsh with management in place to prevent succession to woodland and carr, but the overall shift from previous agricultural use is certainly a form of rewilding with the prospect of true wildlands developing when larger areas are established. The Great fen project does not rule out charismatic re-introductions once the connectivity is established. The coastal realignment project also has ambitions for larger area schemes and the possible introduction of wilder grazing animals. However, the prospects for the wildest grazers, such as Aurochs, are limited because of public access agreements.

From the information now available, I believe we can derive a sense of the socio-economic benefits that we could realistically argue in support of large area wildland schemes. These vary according to region and landscape type.

Scotland

I discussed developments with three large area schemes – the Trees for Life project in Glen Affric, the Glen Finglas Woodland Trust scheme, and Paul Lister's Alladale project. Additionally, much information has been gathered by the RSPB on the Abernethy Forest in Strathspey.

Really Wildland

In the case of TfL and Abernethy there is little in the way of major land-use changes as agriculture is limited. The main shift is toward greater deer control, fencing for natural regeneration, removal of exotic conifers and some planting. Thus, wildland oriented work replaces traditional deer stalking or production oriented forestry.

Some new skills and small scale employment opportunities are generated in this shift – for example in seed collection and tree nurseries for native species; in research and monitoring; and in experimental projects such as the wild boar pens in Glen Affric; but there is a big difference between the eco-tourist oriented Abernethy reserves and those in Affric. In Abernethy there is significant employment in the tourist/visitor servicing sector, drawn both by charismatic species such as osprey, and the facilities of the RSPB.

Abernethy

The 13,000ha RSPB reserve now employs 22 people (15.5 FTE) ranging from wardening, scientific research, shop staff, a stalker, a gillie, gate attendants and forestry workers, caterers and cleaners. In addition volunteers provide significant amounts of work equal to 1 unpaid FTE and stay in the locality. RSPB has calculated a multiplier effect with respect to spending of these staff in the local economy – estimated at 1.1 and hence another 1.5 FTE for the site. Additionally the reserve spent another £229K /year in the five years to 2001, with half that sum spent on local contractors' services, and at least 90% of the total remaining in Scotland. Another 2.5 FTE are estimated to accrue from this element.

A further 3 FTE are sustained by small lots of grazing, crofting, shooting and sawmill operations.

Additionally the reserve has marketed 'forest products' (£23k/yr) and venison (£11k/yr). Forest products included in one year - 172 tonnes of pallet wood, 3172 tonnes of chipwood and 25 tonnes of other wood; and 206 red deer and 129 roe deer were sold to local game dealers.

With a total of 70,000 red deer and 25,000 roe deer processed in Scotland each year, and game dealers employing 130 FTE – with 75 attributable to venison, the impact of Abernethy is small, whereas the local timber production is estimated to contribute another 2 FTE downstream jobs.

Visitor numbers to Abernethy are high – about 70,000 per year (an average of nearly 200 per day), with an average spend in the locality of £44 per person for staying

visitors and £4 for day-trippers. The total spend for visitors in 1996 was £5.8 million, with £1.7 million attributable to the presence of the reserve itself. Smaller amounts are fed into the local economy through RSPB volunteers and staff visits and training courses. It is estimated that 1FTE is supported by every £35K of visitor spending – producing 40 FTE and £420,000 of local income directly attributable to the reserve.

This totals to 65 FTE for the 13,000 ha reserve, or 1 FTE per 200 ha. This compares with a previous history of 1 FTE gamekeeper and seasonal gillie, with some small lodge expenditure in the local economy for the shooters (cooks, cleaners etc).

Glen Affric

In contrast, the Glen Affric operation covers a similar large area, initially under Forestry Commission ownership, and then with NTS and most recently TfL purchasing contiguous estates. There is no marketing of the area, but a regular flow of visitors to the glen and walkers to the high altitude YHA hostel. The RSPB reserve at Corrimoney has not been developed as a visitor attraction. Thus, employment relates to shifts in forestry practice, reduction in deer numbers, fencing and tree planting.

The FC have undertaken removal of exotic conifers, and TfL have instigated tree nurseries and volunteer planting groups, as well as a small enclosure with a wild boar research project. Alan Featherstone estimates the annual budget of the total TfL group, which adds a dimension of outreach and education, at £150k/ year, with a high proportion of that going into the regional economy and a small proportion to the Affric locality – largely in the pubs. Tellingly, he comments that of late SNH grants have required information on economic benefits ‘with more interest on what we spend in the pubs than how many trees we plant’!

About 10 FTE are created within the TfL enterprise – I have no figures for Corrimoney and West Affric (NTS) but they will probably add 2 or 3 more. The FC will have expenditures also on deer control, and TfL have used local contractors for fencing.

There are no plans for expanding visitor facilities. One of the main obstacles to future wildland progress has been funding for land ownership such that ‘wilder’ policies than those of the FC and NTS can be followed – and recently TfL received a £1.5m donation for the purchase of the Dundreggan estate. Operations there could expand to include some wild grazers and this may attract funding and secure related employment on a small scale. The opportunity exists for small scale enterprises in eco-tourism in the overall wildland zone, but no marketing has begun.

Glen Finglas

I talked at length with Adam Wallace, the project leader, who, interestingly, has a background in agricultural science rather than forestry.

This project involves a smaller area at 5000ha and also agricultural operations mixed with woodland and forestry. Historically a farm in the glen maintained 6000 ewes and 100 cattle (1946) which declined to 4000 ewes and 100 cattle by 1996, with 4 shepherds employed. Red deer were also present in the glen. The Woodland Trust

bought the property in 1996 and reduced ewe numbers to 1200, also bringing in a hardy cattle breed (Ling Cadzow herd adapted to wet conditions). They planted 30% of the glen and reduced deer numbers to 200 (marketing 30-40 per year).

The project employs 2 administrators, a stalker and a stockman. Visitor numbers are small and no expansion is planned. There is a Single Farm Payment (SFP) and some Woodland Grant Scheme money that provides an income stream for the project and SNH have proven very flexible in the stewardship requirements, enabling an interesting mix of woodland pasture to develop. The project intends to get more cattle on the hills and would benefit from derogation from the veterinary requirements which can restrict operations (retrieval of carcasses, for example). Organic production is not feasible due to heavy tick infestation.

Thus, the operation is small-scale with little change in employment or impact on the local economy. One attempt to fund a footpath from the local village failed, and there are no plans to 'market' the project or increase the input to the local economy.

Alladale

This is a large scale project with an entirely different ethos to Finglas and Affric, but with parallels to Abernethy. It builds upon the 'safari-lodge' eco-tourist models from South Africa and is developing a high-end niche market for visitors and paying guests – in a way, a marrying of former game-lodge (but not now based on shooting) with onlooker-type day-visitor centres. The main attraction is the future presence of charismatic animals – which will initially be restricted to large pens, but eventually able to roam the full 25,000ha reserve, once fencing is established.

In just two years, the project has gone from 3 FTE to 19 – employing rangers, stalkers, shop managers, catering staff, research biologists and builders on a similar scale to Abernethy. The local economy can be expected to benefit to the same degree.

There are dreams of expansion to include neighbours in a large-area scheme. Elk and wild boar are 'on order' from the continent, and ultimately predators such as lynx, wolf and bear are under consideration. The main obstacle would appear to be objections to 'fencing the wilderness'.

I failed to ask Hugh, the project leader, what proportion of these costs were covered by income – but no grants are involved.

Carrifran

This project is much smaller – 650 ha and has involved a land-use change from sheep and rough grazing of a treeless landscape, to removal of all stock and a major planting programme. The only grazers are a small number of roe deer.

The project sustains 2-3 FTE which includes administration, a stalker to control the deer, and volunteer (400 person-days/yr) oversight. In seven years, £600K has been spent over and above the purchase, with some of that going into tree nurseries and contractors for fencing, as well as the staff spending in the local economy.

There are no plans for a visitor centre or diversifying the wild grazing at this stage, but keen interest in neighbouring land purchase and connectivity across the Southern Uplands and Tweed Valley project.

Conclusions

The Scottish forest projects are much larger scale than comparable projects in England or Wales, which tend to relate to a few hundred hectares and less of woodland and usually involve significant areas of open moor, bog and heath with a history of domestic stock (and overgrazing) and a cultural commitment not only on the part of the farming community but also the conservation community with respect to open grazed landscapes. In Scotland, the main previous land uses relate to deer and grouse shooting and forestry. The Scottish rural economy is also well developed with an international profile for wildlife tourism.

Within this overall environment, there are major differences between those projects that relate to the wildland ethos of minimal management and low-profile economics with maintenance of cultural traditions in adjacent areas where possible, and the visitor-centre eco-tourist approach that can generate a considerable multiplier over former land use employment and input to the local economy. Both approaches make use of local skills and similar contractor services at roughly the same level.

Thus, for the quieter low-impact wildland projects we can say the local economic inputs at least match former uses of 1 FTE/1000ha, and have the potential for multipliers of the order of 2 or 3 if coupled to such activities as research, education and small scale eco-tourism. For the larger and more actively marketed visitor centre approach, this multiplier rises to about 5 (including downstream inputs to the local economy). Both approaches make use of traditional skills and contractor services. The larger scale will introduce a cultural shift toward tourism, 'onlookers', day-trippers and catering for this market, which may be welcomed by some sections of the community and not others. This latter approach necessarily alters the wildland 'feel' at least close to the centres, but if the area is large enough, may not have a great impact on the wilder parts of the land.

There do not appear to be major obstacles to progress. There appear to be rising levels of land purchase and rewilding schemes. We have not looked at the National Trust Mar Lodge project, nor the more widespread 'reforesting Scotland projects' that have recently attracted corporate finance (e.g. BP). Nor have we seen much in the way of 'carbon sequestration forestry' which must also hold a greater future potential in the light of recent political shifts in the profile of carbon offsets.

I felt there was a greater need for exchange of information between projects and sharing of practices with regard to communication and marketing, and it would be good to see a larger area scheme developing in cooperative work with the NTS and RSPB in the Cairngorms, such that wilder herbivores and the eventual return of carnivores could be considered. In this respect, both organisations may be able to learn from Alladale. It would be interesting to research the social benefit dimension to predators – which may go beyond the simply commercial aspects of branding or visitor attractiveness.

England

The English projects can best be separated into landscape categories: upland moor and forest; lowland forest; river flood plains; fenland; and coastal re-alignment. Each has a different set of circumstances. The upland moor and forest zones have limitations in relation to SSSI and BAP targets which limit rewilding processes, and also tend to be remote and without charismatic animals. The lowland forest schemes involve many small scale purchases to connect reserves. River flood-plain schemes that involve significant areas of habitat are scarce. The largest developments relate to fenland, particularly reedbed and grazing marsh projects, which are ambitious and accelerating. The recent coastal re-alignment projects, though small, attract significant funds and have the potential for considerable expansion.

Upland Moor and Forest:

Geltsdale

I talked to Bill Kenmir of RSPB Cumbria office – who also had oversight of Haweswater. Geltsdale is also featured in RSPB’s analysis of economic and social aspects of conservation (see references).

The RSPB purchased the shooting rights over about 5000 ha of Geltsdale in the North Pennines over 20 years ago. The main management objective relates to the open moor and heath for the conservation of upland birds such as hen harrier, merlin, red grouse, black grouse (on the edges) and waders: drains have been blocked, stocking density reduced and small scale valley woods fenced and in some cases new areas planted up. Agricultural production is under stewardship schemes and organic with upland ‘blue-grey’ cattle, a local hardy breed. The agricultural changes have involved a cultural shift. There are limited visitor facilities and no expansion is planned.

The reserve has 4.5 FTEs and no volunteer workforce. Another 0.5 FTE relate to employee expenditures. About £42K/yr is spent by the RSPB on reserve management excluding its own staff, estimated to support 1.0 FTE in the local economy.

Geltsdale Farm is managed as an agricultural tenancy and has 2600 ewes and 40 suckler cows over 3000ha and a further 500 ha is managed by the RSPB and grazed by 400 ewes. About 90ha are in stewardship, and the farm is subject to a Wildlife Enhancement Scheme with Natural England.

The changes in land use have not occasioned any significant changes in employment as FTEs, though the skills and mindset as well as age-structure may mean the local economy is more resilient to the general decline in upland farming and ageing populations with falling recruitment.

Ennerdale

This project is slightly larger than Geltsdale and includes old forestry plantations and greater access to tourist areas in the Lake District. There are no major conservation restrictions related to species targets. However the joint project managers have a commitment to maintaining the economic culture of the valley – small scale forestry work and farming. The main ‘rewilding’ relates to lowering grazing density on the fells, replacing some sheep with cattle, and abandoning what are now questionably economic forestry enterprises.

Thus far, forestry operations have changed little – some cutting of exotics and allowing natural regeneration may reduce forestry work in the longer term. The project employs 1 FTE and some volunteer work. The farming operations are small family businesses and the grazing of woodland is bringing new opportunities for cattle farming under SFP (about £15K/yr).

The FC is engaged in a conservation project for the Arctic Char which has local cultural significance and is planting stream headwaters with high density birch seedlings to improve food sources for the species.

There is a website and a ‘logo’ relating to local identity, but no data as yet on the local employment impacts. There is a developing cultural programme with educational visits and arts projects.

This project is thus a good example of a large-area mixed rewilding scheme with useful models for core areas and buffer zones. It has the potential for expansion in relation to visitors, branding, local eco-tourism and marketing of organic products.

Lake Vyrnwy

Although not on our database, this reserve is of great interest for its data compiled by the RSPB on upland land-use changes.

The reserve covers over 9000ha of water catchment owned by Seven Trent Water and managed by the RSPB, which has control of the grazing and farming regime. RSPB’s aim is to enhance heather moorland and blanket bog habitats which have suffered from overgrazing.

There is a £39k/yr annual spend on the reserve management (excluding staff- at 9 FTE). The main expenditures are on construction, transport and retail distribution – most within the local economy, and contractors account for £40k per year for harvesting, fencing, haulage, and over-wintering of ewes. There are 7 large tenancies, mostly with sheep and some beef cattle – with 6 full time farmers and a further 7 FTE connected to the agricultural work.

Visitor numbers were about 30,000/year, with average spending of £12 per head – supporting an estimated 10 FTE in the local economy.

The total FTE count is 35 (4 per 1000 hectare). Historically, the area would have supported about 5 FTE directly in agriculture and perhaps a similar number in the downstream agricultural economy.

The main focus of RSPB is the extension and maintenance of heather moorland over rough grassland using sheep as grazers. There is unlikely to be any rewilding that would allow much increased forest cover (except for fringe areas that support black grouse, a priority species) or the use of wild grazers in the near future – but the area has obvious potential. There is a plan to market organic sheep meat.

It is clear from these figures that ‘conservation’ farming has increased the input to the local economy – although I have not looked at the actual conservation gain – this would be a useful exercise in terms of biodiversity benefits for this form of management. This would be an essential prerequisite for any wilder schemes that might create a mosaic of habitats. In such schemes, the FTE count might be cut by half, but the visitor numbers could potentially rise – unless farmers were employed as rangers and there were annual payments for wild grazing lands – this is an area I feel we need to study.

The Weald

This is an ambitious project to connect ancient woodland sites and rewild areas within an overall 60,000 ha zone with the prospect of wild grazers. It is part of the Living Landscapes initiative of the Wildlife Trusts in a move toward large scale planning and connectivity.

There are a few small scale projects under way to develop woodland pasture and to create areas of scrub and new woodland. One project in the Brede Valley has focussed upon the otter as an iconic species for restoring riparian habitats, and this received EU LIFE funding. It involved 38 landowners in a cooperative endeavour.

The Trust has marketed lamb from its grazing projects but has not developed branding and other products. Its main focus is upon acquiring land and promoting ‘ecosystem services’ from the larger scale vision of a mosaic of connected woodland habitat.

In talking with Henry Brocklebank the main issue related to funding for purchase and also the grant structures for income streams – in the form of SFP and the restrictions related to scrub (there is an EU limit of 5% scrub development that has come from the EU’s aversion to land being ‘abandoned’).

Treesresponsibility

This is a small scale project near Hebden Bridge in the Pennines with parcels of land amounting to about 20 ha in total, and is a local ‘carbon-offsets’ initiative tied to local businesses in the Calder Valley. It is entirely volunteer based and had a throughput of about £60k in the most recent year, with 10,000 trees planted under sites guaranteed by WGS.

It proved very difficult to get details of the scheme – the person I talked to was very suspicious of enquirers and appeared to have little knowledge of the outside world, or of economic perspectives.

However, with a throughput of £3k per hectare (£6 per tree), which may not be unusual for such offset schemes, there is clearly a flow into the local economy which may extend beyond fencing and maintenance costs – and if this were multiplied across the Pennines it would be significant. We should try to find out more about these small scale local initiatives.

We have a data-hole with respect to carbon-offset schemes in the UK: where are they active? do they have any wildland objectives? is there any communication between schemes? Because, clearly, in an era of expanding climate awareness and offset funds, there is a large potential here.

Conclusions

The English uplands present great difficulties for large-scale wildland schemes – they have little charismatic species appeal, strong ‘conservation’ restrictions for mostly bird species, and long farming traditions with sheep. Forestry has been largely monocultural plantation with little wildland potential.

I did not manage to explore the Kielder Forest area – which might have more potential for wild grazers in a mosaic of commercial forest and bog, and might also provide a haven for lynx, wild cattle and wild horse.

The evidence from Geltsdale and Ennerdale shows that extensification does not entail job losses, and there are potential gains in marketing local organic produce and in small scale eco-tourism. Ennerdale has demonstrated that local communities can embrace rewilding as a concept and this bodes well for future wilder initiatives. However, the limited incomes are clearly dependent upon SFP schemes, which may also be tied to biodiversity targets relating to secondary habitat.

There appear to be no barriers to these projects future plans – which are in any case relatively small scale and incremental. Wilder schemes may be prevented by a combination of restrictive interpretation of SFP and also BAP target species. DEFRA are proving relatively flexible, whereas the conservation organisations appear fixed on their BAP species targets.

In the latter case, some discussion on priorities might bring some fruit – the focus, for example, on ‘English’ hen harriers and merlin or golden plover and curlew, which are commoner in other regions in Scotland or Scandinavia – and might in any case adapt to a mosaic of habitat of benefit to other rare species, such as black grouse, goshawk and kite.

River meadows, woodland and scrub:

The Soar Valley

I spoke to Michael Jeeves, who will be coming to Knepp and able to discuss these issues in greater depth. This Leicester-Rutland Wildlife Trust project manages 150ha of land in the Soar valley and has ambitions to connect over 1500ha. It is broadly based between WT land and private farms under stewardship schemes. The WTs advise on the farms' applications in the complex bureaucracy involved.

The project would like to rewild the floodplains and is embracing the wildland ethos of process rather than species objectives. However, it is experiencing major difficulties in relation to the restrictions of income needed from SFP (tied also to BAP targets) as well as objections from CPRE on scrubbing up traditionally open water meadows. Currently, the SFP scheme allows only 5% scrub and is geared to maintenance of wet grassland. The WTs would like to see more land go to scrub and woodland – currently some land in set-aside is moving that way, but obviously is not safeguarded. The WTs rely upon farming agreements, but would allow their own land to scrub up with willow – and land purchase is their main option – however, they are also heedful of the 'income stream' from SFP even on their own land and currently, removal of stock would not generate income for the WTs. They have bought pedigree Shetland cattle for their own land and will consider Exmoor ponies. They have yet to explore woodland creation but the WGS is not favourable to riparian woodland, and the EA is also wary of seeing floodplains afforested.

The WTs have the ambition and potential to raise land purchase funds – and the main obstacle would appear to be 'income stream' requirements. This could be eased by a better WGS or SFP that would allow wild grazers and a more relaxed attitude to flood defences by the EA. The FC has no riparian woodland scheme.

Natural England

It proved difficult to make contact with 'project leaders' – in particular to find anyone to talk to about the Royalty woodland in Cumbria which is on the database. I talked to a few people who did not really know who was the relevant person, and it was admitted that the whole organisation was in a state of flux.

I talked therefore with Keith Kirby with whom we have regular contact within WN about the current overall grant situation and prospects for large area schemes. He was optimistic about the general trend in thinking, particular with regard to 'ecosystem services' – and is sending me an NE publication on this subject.

He was surprised to hear that FC grant schemes were not sympathetic to riparian woodland (Soar Valley experience), and felt that HLS might prove useful for such projects – but of course, these were tied into domestic stock. He referred to the EU sensitivity with regard to scrub and 'land abandonment' as a barrier to wild grazing grants schemes.

I asked about the Savenake Forest wild cattle – but this was now a low profile experiment that was somewhat embroiled in leasing agreements with no plans to market produce.

Conclusions

The Soar project, if enlarged, would enable a branding scheme to develop for organic beef under SFP and perhaps even some eco-tourism if wild horses were present. The availability of riparian WGS would be beneficial to the income stream.

This project could act as pilot for other riparian schemes and potential corridors and thus these obstacles have significance for wildland policy, particularly in the English lowlands. We could usefully ask for an overview from the WTs of their landscape scale projects across the UK and any lobbying they may be doing in relation to grant structures.

I think this is particularly relevant area for the WN to become involved – we could usefully develop the corridor ideas and look at socio-economic impacts – data is scarce. This project employs 1 FTE directly – but obviously larger scale expansion would affect agricultural employment – though not necessarily in a negative way if SFP were operating to support riparian wildland that was not grazed by domestic stock – the WTs might, for example manage linear corridors grazed by roe deer and horses, with some wilder domestic cattle breeds.

Coastal Rewilding:

Abbot's Hall Farm

I was not able to talk with Andy May, the project officer, directly – but he sent me much useful material. The Essex Wildlife Trust purchased the farm and received grant support for the removal of the sea defences (2002) and construction of a new jetty and footpaths. About 80 ha of new tidal marsh were created from the 280 ha farm with the remaining farm shifted from conventional arable to organic production.

The social and economic benefits have been researched in several publications – and range from employment on the farm, new crops (samphire, asparagus and sea spinach) and organic meat for local restaurants, enhanced recreational facilities and a visitor centre. The breaching of the sea wall was the subject of a BBC TV programme and in the first year the site received 8000 visitors.

The development has at the very least maintained a similar level of employment and the visitor flow can be expected to have enhanced the local economy. Social benefits have accrued through increased leisure opportunities on the waterways.

There is some reflection on the environmental services element of sea defences – saltings reduce the cost of sea-wall construction, and the tidal habitats provide spawning grounds for fisheries.

There is, however, a quite substantial reduction in maintenance costs – estimated at a saving of £500,000 over 20 years. This presumably detracts from monies entering the local economy through contracting work.

The Abbot's Hall project is a pilot scheme and has attracted significant funds from the EA, the HLF and the WWF. There is an ambition to extend and link up with other projects in the estuary (see below) – the estuarine complex covers 4395 ha with Ramsar, SPA and SSSI status (there are 32,000 ha of such habitat in total in England after a 50% loss in 30 years). If linked to Wallasea (115 ha further along the estuary), a 3000 ha + project could be developed. Thus far staff at Natural England have not responded to email enquiries trying to trace project officers for this site.

At this stage the WT is focussed upon organic farming or arable crops, enhanced farmland bird species, new hedgerows, ponds, and some tree planting – with no plans for wilder land. However, if a large area scheme developed, consideration could be given to wilder grazing regimes. The WT would be interested in developing larger area schemes – but failed in a tender to manage the Wallasea site (which RSPB won), and the main obstacle is funding for land purchase.

Humberside

There are 480h of rewilding on Humberside through coastal realignments on our database but it has not been possible to contact relevant project officers. The Coastal Futures organisation looks interesting and there is relevant information on the website – including numbers of FTE (4 on a 92ha site) and inflow of money to the local economy (157K to the village of Freiston) which looks very favourable compared to other rewilding projects.

The DEFRA/EA and HLF/WTs site at Alkborough has attracted very large sums of money – over £10 million, and deserves a closer investigation. Presumably a great deal of this sum is to be spent on engineering works. Again, time constraints have operated in the frustrating business of tracking down contacts and project officers.

Conclusions

These coastal realignment projects are attracting large funding and have great potential for economic development in agricultural areas – ranging from recreational facilities, sailing and bird watching, walking, education and interpretation. Thus far, they are small and piecemeal but have the potential to connect over larger areas and to consider wilder policies of land management. The Wildlife Trusts are the chief developers and they have a preference for BAP targets and traditional farming, rather than letting areas go wild. Much of the social and economic implications when visitor centres are involved are covered in the RSPB material. This is clearly a growth area.

Fenland:

Great Fen

This project is led by the Wildlife Trusts (I talked to Chris Gerrard) and supported by natural England. It is centred upon Woodwalton Fen and involves the purchase of adjacent arable land. A further 1500 acres have been bought and another 1300 are in the process of being purchased – which will lead to a reserve of 3700ha. The area is bisected by a B-road. The hydrology is not ‘natural’ in that the drainage dykes are well above the level of the shrunken peat soils and therefore permanent engineered pipes and pumps are required.

Although the project is motivated by BAP targets for reedbeds and wetland habitat, ‘The Great Fen’ project is widely publicised and marketed as a ‘brand’ with local famous personalities involved as a means of enhancing ‘Living Landscapes’. There are plans for extensive grazed meadows, reedbeds and reed cutting, marketing of local products from reeds, such as pet litter, biofuel pellets, and thatch.

There is a net gain in local employment despite the extensification of grazing and conversion of arable land. Local employment in arable farming had already dropped 50% in 12 years. 20 FTEs are associated with the project – with a developing visitor centre, farm tenancies and conservation staff.

Local attitudes are positive and more land could be readily bought from farmers if funds were available. There are no obvious barriers to development of large area schemes and the management are open to all ideas for wilder grazing – including Exmoor ponies and hardy cattle breeds (the importation of Aurochsen is problematic because of the B road restrictions).

There is a long term aim to link up with RSPB initiatives at Lakenheath and the NT project at Wicken.

RSPB projects at Minsmere, West Sedgemoor and Otmoor

These projects are highlighted in the RSPB report *RSPB Reserves and Local Economies* which has a wealth of useful data.

The Minsmere reserve covers nearly 1000h – and is a Ramsar site, SPA, candidate SAC and SSSI. Tourism is an important industry in the area (21%) compared to agriculture (5%) with 6 million visitors a year to the Suffolk Coastal District.

Eleven permanent staff are employed on the reserve – from site manager, livestock, heathland and wetland warden, catering and visitor centre staff – plus 12 part time staff (17 FTE in total with another 1.7 knock-on jobs in the local economy). The RSPB has spent £3m in the past 5 years on managing Minsmere – with over £800,000 on direct costs excluding staff – with 50% estimated to have been spent locally, and 70% in the east of England. The majority of these costs were construction work, catering and retail distribution along with ‘general business costs’ – and estimated to support 4.3 FTE in the local economy.

There are 5 grazing licenses let supporting a further 1.5 FTE in farming and 1.8 FTE in the local economy.

Visitor numbers at 84,000 in 1998, contributed significantly to the local economy, with visitors spending on average 4.6 nights in the local area – with 50% of non-local visitors coming specifically to visit the reserve. Holidaymakers spent on average £128 in the area over the course of their trip. Over £1m of expenditure could be attributed to the presence of the reserve, supporting 32 FTEs. The reserve is thus a significant presence in the local economy – with 58 FTE linked to the 1000 ha reserve (compared to an average of 7 per 1000 for all their reserves).

The RSPB has maintained former stocking levels on the farmed land of the reserve and employs a shepherd. Formerly the reserve employed two keepers and was part of a large arable farming enterprise.

Other wetland sites have less diverse habitats than Minsmere which has heathland, scrub and woodland, reedbed, ‘scrapes’ and open water, as well as a major visitor centre. On Otmoor – a quiet area of wet grassland in Oxfordshire, land purchases have totalled about 240 ha of a 1400 ha former wetland area. Restoration work relates to water levels and extensification of grazing. The Society has logged employment implications of these changes – directly, 2 FTE and a further 3 from reserve expenditure and agricultural lets – there are few visitors.

On West Sedgemoor the RSPB has just over 1000ha of herb-rich meadow managed for waterfowl – about 355 ha are managed hydrologically to produce wetland and there are some scarp woodlands.

Despite the rural nature of Somerset, only 2% of employment is in agriculture – with tourism, hotels and restaurants providing 27% in a predominantly small business economy. Over half the reserve is subject to agricultural tenancies, supporting an estimated 5 direct and 6 indirect FTEs locally.

About 11,000 visitors came to the reserve with an average spend of £11, supporting an estimated 3.5 FTE in the local economy.

The total FTE for the 1000ha is estimated at 20 (just over half from agriculture).

These examples show the great range of potential for wetland reserves – with even small visitor numbers making significant contributions. The high level of FTE supported by agricultural lets is important to note with regard to rewilding as we could expect these to fall, whereas visitor numbers might rise.

The RSPB has ambitions for further extension in the Somerset levels – which have been widely degraded by draining and lower rainfall over the past three decades. However, local farming attitudes are not favourable. The main focus of late has been in the restoration of peat workings in the Avalon marshes, mainly for reedbed habitat.

Conclusions

Wetland and fenland restoration can clearly have significant impacts on local employment even at low levels of visitor access and facility. A range of products and services can be developed from mature and extensive reeds. There is a potential for biofuel crops such as SRC willow to add to wetland zones. The possibilities for large area schemes in the Dutch model exist – particularly in the Great Fen – and in that special case, only extra money would be the obstacle.

The widespread use of agricultural lets for grassland management and the general aversion to scrub is a problem for rewilding schemes. The SFP schemes provide income streams for the projects as well as maintaining local employment – and clearly some form of support for wild grazing and scrub cover would be essential for wilder schemes.

An Overview

We are primarily interested in showing the relative impact of rewilding schemes on previous land uses and also perhaps compared to conventional conservation schemes that use domestic stock.

The data that I have seen are very encouraging – there is a wealth of evidence from large and small sites that land-use changes aimed at benefiting wildlife bring additional economic benefits, do not necessarily detract from rural livelihoods and maintenance of skills and often add to this dimension. There is not much data specifically on products from wildland – such as wildfoods, other than venison.

Much of the available data deals with the general shift to ‘nature conservation’ or ‘habitat creation’ – with most of those habitats being managed, often grazed by stock, attracting significant funding either due to BAP targets or from Agri-environment schemes.

Although we can gather useful data from these shifts – particular with regard to habitat creation on formerly intensive arable or grassland, we need to be able to discern that element which is particular to wildland – and most particularly, wild grazed land, and this is not quite so apparent.

The shift from farming

Rewilding entails the removal of domestic grazing and agricultural subsidy not just from intensively farmed land but also from land already under conservation schemes – especially if it developed from a change in emphasis of a major landowner such as the National Trust, RSPB or the Water Companies. Thus we need to have a clear picture of the role of subsidies – particular those that provide an income stream (something often of as much concern to conservation organisations as to farmers).

However, from the range of data I have seen the basic land management employment levels of the wilder land schemes compare favourably with extensive farming – although there is a shift from farm employment to ‘ranger’ type staffing requiring some cultural change. When significant visitor enhancement takes place, then the overall economic benefits look to surpass previous land uses in the extensively farmed uplands, and even match or surpass those in more intensive farming.

The visitor economy

A great many of the recent broadly defined rewilding schemes, such as coastal realignment, attract and manage visitors, and as the RSPB reports show very clearly, these can be a major source of income to local economies, as well as jobs on the projects. Much depends upon the proximity to tourist areas and the general ethos, as well as the attracting power of the wildlife features (e.g. charismatic animals such as eagles, osprey, kites, peregrines and otters).

Wildland projects, by their nature, are not likely to feature major visitor centres, nor encourage large numbers of people at concentrated points where services can be provided. Alladale is probably the exception rather than the rule. They are more likely to provide a more diffuse input to an area in terms of walkers and naturalists, with small scale B&B, educational visits and perhaps services to the mental health sectors. There may be less role for volunteer inputs than in more traditional conservation work directed at suppressing natural tendencies within the landscape.

That said – large relatively quiet areas such as Geltsdale, Glen Finglas, the Great Fen, Ennerdale and Glen Affric all demonstrate that in the more remote upland regions and even in major agricultural areas in the lowlands, projects that do not rely upon large numbers of ‘onlookers’ (as one project manager described the visitor experience), can at the very least hold their own in terms of Full Time Employment opportunities, with the skills and traditions not differing markedly from those found in traditional agriculture and forestry.

There is clear evidence of the flow into the local economy from fencing, building work, tree planting and nurseries, wardening, interpretation, deer control, marketing of forest and fen products, and scientific research, as well as knock-on effects in the local economy of staff spending.

However, there is also clear evidence that a great deal more socio-economic benefits accrue from domestic grazing that accesses the current grant structure, as well as from the branding and marketing of meat products. Further, secondary maintained habitat supports more of the charismatic and easy to see species, particular upland, wetland a coastal birds – and that visitor centres can provide very significant inputs to the local economy (The RSPB has shown contributions of several £million to the rural economy from osprey, sea eagle, and kite watching – with one small site in North Wales for osprey bringing in over £700,000/annum to the local village economy).

Large scale financial flows

It was evident to me that very large sums of money are flowing into the ‘conservation’ sector at the current time:

- For example, since its inception the HLF has contributed £126m to biodiversity projects on land totalling nearly 50,000ha and £73m to land acquisitions on 365 projects totalling over 66,137 ha.;
- The RSPB estimates that the conservation sector in the UK employs 18,000 people and has an annual spend of £500 million in England and Wales alone (27K per job);
- Nature conservation supports a significant proportion of the rural tourism market – worth £12 billion per year. In most case studies, even in traditional agricultural areas such as Somerset and Norfolk, the farm sector accounts for less than 5% of the rural economy – in the more remote hills of England and Wales this might rise to 25-30%, but is usually matched by the rural tourist sector at the same level in most areas – for example, 27% in Somerset, and higher in parts of Scotland;
- DEFRA has just announced an increase in modulated funds from £1billion per year on agri-environment schemes rising to £3 billion;
- there are significant EU LIFE and LEADER funds flowing in, especially in coastal re-alignment projects (£10m to Humberside);
- there are large corporate initiatives – such as BP’s £10m pledge to the Royal Scottish Forestry Society to restore Caledonian Forest.

It is hard to get a sense of how much of this money is going to increasing areas of protection, on BAP targets or simply maintaining the status quo., but the HLF figure on land acquisitions is a good guide (the HLF material I have does not say over how many years their £73m was spent). Some land purchases have been for large areas that were not necessarily degraded or impoverished but nevertheless benefited from rewilding – such as Mar Lodge (£10m from HLF to the NTS).

There is, however, a strongly continuing trend in land purchase, with a lot of it coming from agriculture – e.g. the Great Fen and Abbot’s Hall. The future looks bright for large-area schemes.

The question is emerging – not how can wildland compete with agriculture? But how can wildland compete with conservation? Agriculture is in decline – by 9% since 1998 – from 608,000 to 550,000 people, whereas the conservation sector is growing.

The decline in agricultural incomes and employment may be halted by EU funding for agri-environment schemes, but this funding is clearly biasing wildlife organisations toward secondary habitat schemes which generate an income stream for the Trusts (through letting or SFP for their own properties) and this may be branded as the marketing of ‘conservation’ friendly produce.

The other major influence upon the direction of management is the BAP targets for species and secondary habitats – which is a major consideration for funding bodies. Further, conservation organisations can receive significant ‘income streams’ from the subsidy of such secondary habitats such as wet grassland or heath by grazing domestic animals. Whilst there is some evidence that the stewardship higher level schemes can be flexible enough to support ‘wild’ grazers such as ponies in maintaining optimum habitat conditions, there is an obvious need for a category of ‘wildland’ support.

I would conclude from this brief survey that three things are needed to remove obstacles for large-area wildland schemes:

- a reform of the agri-environment schemes such that landowners and tenants can gain annual payments along SFP lines for wild grazers on heathland and grassland, for scrub and for naturally regenerating woodland (for example agricultural land that is naturally seeded on the fringes of woodland);
- a landbank fund that organisations could draw upon when extending their reserves or creating corridors;
- the availability of expertise on eco-tourist developments, capital grants for low-impact accommodation, the marketing of products and identification of buffer zones that are wildlife friendly (e.g. organic meat, wood fuel, charcoal, SRC chips, pet litter, hurdles etc).

In the latter category, there is a clear need to provide the farming communities, particularly in the uplands, with advice and finance for diversification into ranger duties, tree nurseries, educational visits, visitor accommodation for core area projects, in hardy breeds and marketing of organic products, and such operations as small scale timber operations and reed cutting in buffer zones.

The HLF has been acquiring land at roughly £1.1 m per 1000 ha (some extra money will have come from the organisations supported). The RSPB figures show an average of 7FTE (including downstream agricultural) per 1000ha of conservation oriented land –which equals 1 job created for £142,000 of investment – compared to the usual figure of 1 job for £35,000 in the rural economy generally. Perhaps this indicates the draw down of the corporate overheads for the organisations.

I think we have a strong case for a wildland fund – and should aim to support and stimulate an overall spend of £10m/year – a small proportion at 2% of the overall conservation spend and to draw funding from the HLF. In some cases we could take the lead, in others invite bids to the fund on specific rewilding initiatives from the Wildlife Trusts, National Trust and others where we know the managerial expertise exists. We could also consider instigating research into the potential of the current (and future) EU grant system to support wild grazers and natural processes.

Further Reading

Wild life Heritage Lottery Fund

Summary of Heritage Lottery Fund grants to biodiversity projects and land acquisition
7, Holbein Place, London SW1W 8NR

RSPB Watched like never before

review of the local economic benefits of spectacular bird species

RSPB Reserves and Local Economies

An in-depth assessment of the economic impact of RSPB reserves

Conservation Works...for local economies in the UK

Review of employment in nature conservation sector

Wellbeing through wildlife

Brochure on social aspects of conservation

Enriching our landscape – an Essex success story

Andrew May and David Smart

Managed Retreat in Essex: rewilding the coastline at Abbots Hall Farm

Andrew May, John Hall & Jules Pretty

Essex WT project at Abbots Hall, includes section on social and economic benefits

A review of the benefits and opportunities attributed to Scotland's landscapes of wild character.

McMorran, R., Price, M.F. and McVittie, A. (2006).

Scottish Natural Heritage

Commissioned Report No. 194 (ROAME No. F04NC18).

Land Use Policy Group

Securing the Requirements of the Habitats, Birds and Water Framework Directives through Existing European Funding Measures

Matt Rayment and Vanessa Foo; GHK Consulting Ltd.

June 2006