Beyond conservation: shifting the paradigm of upland land use

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Summary

There is a slowly shifting paradigm for conservation in the British uplands that has moved on from essentially protectionist policies toward landscape scale habitat restoration and 'rewilding'. A 'wildland' ethic is developing that sees large tracts of land becoming subject to essentially natural processes and achieved either through purchase or management agreements of contiguous estates. A range of initiatives have recently come together in a Wildland Network that aims to create core areas, buffer zones and corridors – with varying degrees of involvement with farming, sporting and forestry interests in a new model for the uplands.

The political and economic context: farming, forestry and the business realm

All major changes of land use have political and economic dimensions, but the cultural context is seldom highlighted – of the three major uses of farming, forestry and nature conservation, the first two are set firmly in the context of business and industry, whereas at its outset, nature conservation stemmed from a moral sense of protectionism and the safeguarding of natural systems for scientific study with 'nature reserves' usually small areas set aside from the dominant land use – that of productive agriculture and forestry. Reservation-nature was then left as a matter for contemplation, recreation, or even, 'for its own sake', whilst the rest of the landscape was classified as a 'resource'.

Of course, nature was never confined to the reservations: secondary habitats, such as grazed heaths, saltmarshes, dunes, moor and meadow were all important for nature conservation, and increasingly, as agriculture intensified conservationists have worked to influence practices in order to safeguard populations of rare plants and animals, and more recently, even once common species associated with farmland.

One result of this interplay has been the gradual evolution of the old paradigm of protection by reservation – and hence effective removal from the economic sphere,

toward nature as a business providing services for the economy. A linguistic overlook of terms and policies over the past 50 years would show the uptake of customer, niche-marketing and service-provider mentality. Agri-environment subsidy is now couched in these terms, with farmers being paid for services provided to a broader economy, especially tourism, and the larger wildlife organisations are increasingly run as business models with advertising, sponsorship, merchandising, investments, research and targets for their chief executive officers.

It has been a two way interaction: the farming business model has been forced to adapt and include nature as part of its niche marketing in order to justify subsidies. This is perhaps a demonstration of the power of public valuation of nature as expressed through organised political lobbying – for example, the combined weight of the National Trust, RSPB, Wildlife Trusts, and the WWF has been focussed upon all stages of agricultural reform in the EU.

Yet most informed conservationists would agree that the past two decades have seen accelerated losses of wildlife due to continued intensification – insects have declined markedly, as have amphibians and many common bird species, with declines of the latter in excess of 80% and this has also applied to upland habitats. Although further decline may now be halted by new agri-environment regimes, the countryside faces enormous changes with the switch to renewable energy supplies such as biofuel crops, woodchip, wind, tidal and hydro-power schemes.

However, recent liberalisation of world trade in agricultural products has brought pressure for the removal of subsidies and the uplands of Britain stand now on the brink of major change. Much of the 'nature conservation resource' is maintained by domestic grazing regimes – and their maintenance may become increasingly difficult to finance. In addition, some energy developments are inimical to wildland values (wind turbines, for example) and others will impact upon secondary habitats (woodchip plantations and other biofuels).

The wildland movement aims to acquire land to revert to natural processes, and at first this might be expected to add another competing pressure for farmers to face, but there is some potential for creative solutions whereby traditional farming techniques can be employed and the diversity of upland community life maintained.

Rewilding: current projects

There is a wide range of wildland initiatives already under way and involving a variety of organisations with varying relationships to farming, forestry and the tourist economy in their management strategies. In size, these intiatives range from large areas of several tens of thousands of hectares in the Scottish glens, through smaller whole valley initiatives such as Ennerdale in the Lake District, connectivity programmes using riverine habitats such as on the Tweed, and a host of smaller scale 'forest habitat network' approaches in the Southern Uplands, Northern Pennines, and North Wales (Taylor, 2005).

These initiatives involve various levels of cooperation between landowners and managers to achieve landscape scale change – in Ennerdale, for example with the National Trust in partnership with the Forestry Commission and United Utilities, the

water company, and in Affric, the Forestry Commission cooperates with the National Trust for Scotland and the award-winning Findhorn ecological restoration group, Trees for Life. In the Tweed Valley, a local Forum operates with fisheries, forestry and wildlife organisations and has won significant EU-LIFE funding to create habitat corridors.

There are several pioneering programmes in Continental Europe and British conservationists are aiming to follow these examples. The Dutch government is furthering a programme of 'connectivity' between wildland cores, buffer zones and corridors of compatible land use (Hootsmans & Kampf, 2004). In Britain, such an approach offers opportunities for integration of wildlife with multiuse forestry and some traditional farming practices, as well as the development of new economic approaches to wilder land.

Landscape scale cooperation

The landscape-scale changes that are under way have necessitated cooperation between organisation from the public and private sector. Each local initiative has interpreted rewilding in its own way. In Ennerdale, for example, the intention is to maintain economic activity in the valley through appropriate use of domestic stock and timber operations in the lower parts, but reduced stocking and the introduction of Highland cattle on higher ground where habitat will be restored through natural regeneration. In Affric, where there is no history of stock rearing, the main management objectives have been to extensify native woodland cover, remove exotic conifers and reduce deer numbers. Trees for Life envision a large forest core that could accommodate wolf, lynx, bear, boar, elk and beaver. Wild boar are already present in experimental pens to evaluate their ecological role in forest regeneration.

In May 2005, these many disparate initiatives came together in a meeting at Leeds University to form the Wildland Network which aims to foster information exchange and promote the concepts of wildland and landscape-scale management (www.wildland-network.org.uk). At present these varying initiatives represent pilot projects. Some areas have the potential to be self-sustaining, such as the large contiguous holdings of the National Trust for Scotland and the RSPB around Cairngorm, where forest regeneration is a priority, but not much thought has yet been given to wild herbivores or carnivores. This area is probably large and wild enough to undertake some release programmes without undue impact upon adjacent economic activity. Areas further north may be more suitable for full-spectrum programmes, and one private landowner in Allerdale is contemplating ring-fencing 10,000 ha and introducing wolf, lynx and bear, as well as elk, bison, beaver and boar. The large expanse of ancient Caledonian forest west of the Great Glen – almost 2000 square kilometres in extent, would be an ideal 'core' area for an unfenced project, provided adjacent landowners were sympathetic.

Further south, the land-use issues become more problematic. In the Southern Uplands, the Pennines, Lakes and upland Wales, sheep, grouse-shooting and commercial coniferous forests dominate. This limits the potential for large herbivores and carnivores. However, some 'forest habitat networks' have been started (in Geltsdale, for example) with the aim of diversifying the landscape and increasing biodiversity among birds and smaller mammals.

These programmes have several motivations. Conservationists are aware that most nature reserves are small and vulnerable to climatic changes – and that 'connectivity' as pioneered in Holland is a priority. Restoration of riparian habitats (protected from over-grazing) has significant benefits for game fisheries (Comins, 2004).

Thus, there is a basic philosophy of 'duty of care' for nature, as well as a moral sense of restoring what has been needlessly destroyed. In most cases, the extinction of Britain's larger mammals was the result of persecution and prejudice – there are many examples from other European countries where large wild herbivores and carnivores are tolerated, particularly in well-forested areas, for example in Poland and Romania. There have also been re-introduction programmes for bear and lynx in France and Switzerland, and tolerance of wolf expansion in Scandinavia, France, Germany, and Italy (Rauer, 2004; Von Arx & Breitenmoser, 2004; Reinhardt & Kluth, 2004). The EU Habitats Directive urges states to restore missing species that have suffered through persecution and where sufficient habitat remains.

With regard to habitat requirements, some species will need large truly wild zones – the 'core areas' where there is little disturbance and no competition with domestic animals. Such areas may only be feasible in Scotland where the Glen Affric core area could support the full spectrum of species, provided there were zones of tolerance extending westward and northward (Watson-Featherstone, 2004). However, buffer zones around such core areas could support economic forestry and sporting interests, but not livestock grazing.

In England and Wales, there are sufficient forest cores – though not truly wildland, such as Kielder, that would support boar and lynx, as well as forest cattle and 'tarpan' ponies. These charismatic animals have obvious eco-tourist value – as the Dutch have found.

Farming and wildland

The 'wildland' concept of land subject to natural processes does not embrace farming. However, it is not proposed that all of the British uplands should revert to wildland – although that might become a consequence of the removal of agricultural support, as happened in parts of New Zealand. A series of core areas would require buffer zones and corridors – and concepts of wood-pasture are being developed using suitable breeds of cattle. A mixture of small scale livestock and timber operations could be underpinned by a broader support mechanism for a mosaic of land-uses.

Whether support programmes will be sufficient for such a mosaic is in question (see reports of the Land Use Policy Group, 2002 and Natural Capital Management, 2003). Currently, if land is left wild, with no management and no special 'scientific interest' it qualifies for no subsidies.

However, farm incomes are already low and contributing to a steady drift of young people out of upland farming. The Wildland Network sees a potential for a more coordinated 'managed retreat' from upland farming generally with a shift toward forestry, carbon sequestration, non-food crops, renewable energy supplies, and recreational use – with the latter taking a broader definition that includes educational,

physical and mental health programmes for urban populations. It is likely that these non-agricultural elements already contribute significantly to rural incomes. A mosaic of wildland with charismatic large mammals could better integrate with these new trends. The question is whether such a co-ordinated approach can be developed within the present cultural context of farming. It would require a large programme of retraining, capacity-building and a subsidy system that supported integrated landscape scale change where some land would be left wild.

Shifting the paradigm a little further

We have already seen a paradigm shift in one major area of land-use – in forestry the old plantation philosophy gave way to multi-purpose forests that embraced biodiversity, landscape and recreational values, as well as a move toward community management. Wildlife conservation is also now moving forward from a nature 'reserve' mentality toward landscape-scale management with the active creation of new habitat and restoration of natural processes. Perhaps a similar shift will take place in farming, which is still seen very much as a business and an industry with most farmers valuing their status as independent operators within a business environment.

As the international economic landscape changes, upland farming cannot so readily maintain itself within the business paradigm. As subsidies shift from production to landscape maintenance – largely with the aim of maintaining rural community structure, the business paradigm fades. Indeed, subsidised farming now elicits greater interest from urban commentators, few of whom understand rural issues and who cannot see why a business sector should be preferentially treated, when other sectors have had to face large scale contraction. It may seem like a giant step, but if upland farming shifted into a different cultural mindset – more related to healing the scars of industrialisation, restoring a natural balance, especially related to carbon and water cycles, and providing for spiritual, educational and recreational values, it might have more acceptance in the modern world and a brighter future for its communities. For example, there is a potential for managing large tracts of land for carbon sequestration supported by new forms of taxation related to carbon use and ecological restoration, as recently recommended by a Royal Society working group for the safeguarding and restoration of tropical forest zones – and there is no reason why this approach could be pioneered in the UK (Royal Society, 2001; Kayes et al (1990) Swingland (2003).

A 21st Century vision

In *Beyond Conservation*, I have argued for a radical shift in funding and land use change that would provide a lead for a global rethink in attitudes to land and the relationship to the natural world. One thing is certain, this century is going to need a shift from business as usual, and even near-usual, if ecological catastrophe is to be avoided – in that, Britain has the making of a new way forward.

References

Comins L (2004) Rewilding the Tweed (2004) ECOS 25 (3/4) p24-28.

Hootsmanns M.and Kampf H. (2004) *Ecological Networks: experiences in the Netherlands*. A working paper of the Ministry of Agriculture, Nature and Food Quality (h.kampf@minlnv.nl)

Kayes R. et al (1990) An assessment of the feasibility of large scale afforestation in Britain to offset carbon dioxide emissions. Report RR-19 Political Ecology Research Group, Oxford.

Land Use Policy Group (2002) The New Wildwoods Project: developing the role of large scale new native woodlands, JNCC, Peterborough.

Natural Capital Management (2003) *The social and economic effects of developing new wild land in Northumberland*, report for the Countryside Agency, Cheltenham.

Rauer G. Re-introduced bears in Austria. ECOS 25 (3/4) p69-72

Reinhardt I. & Kluth G. (2004) Wolf territory in Germany. ECOS 25 (3/4) p73-77.

Swingland I.R. ed. (2003) *Capturing carbon and conserving biodiversity*. Earthscan, London.

Taylor P. (2005) Beyond Conservation: a wildland strategy. Earthscan, London.

Von Arx M & Breintenmoser U. (2004) *Re-introduced lynx in Europe: their distribution and problems.* ECOS 25 (3/4) p64-68

Watson-Featherstone (2004) Rewilding in the north-central Highlands. ECOS 25 (3/4) p4-10.