



Norwegian land use in Scotland?

The Norwegian model of land use is being promoted for adoption in Scotland. Scott McG. Wilson teases out some of its opportunities and challenges.

I found the recent Autumn/Winter 2016 issue of *Reforesting Scotland*, 'Upstream, downstream', an excellent and thought-provoking read. It was not essential to agree with every word of every contribution to see that this volume represented Reforesting Scotland (RS) at the top of its campaigning game, taking forward pioneering and challenging work on upland land use, evident in the 1989 *Scottish Green Party Rural Manifesto for the Highlands* and the 1993 *RS Norway Study Tour Report*. This strand of thinking in upland land use ecology, which had its origins in the work of Frank Fraser Darling in the late 1940s, remains highly influential.

I am particularly interested in the ideas presented in these articles, as I am currently researching a future book, examining practical alternative approaches to economic management for rural estates in the British uplands. I intend challenging the artificial counterpoint between 'ecological rewilding' and traditional estate management for hill sheep and cattle, red deer and driven grouse. I hope to suggest 'compromise' integrated estate management approaches, and use illustrated case-studies to highlight alternatives. I am examining a spectrum of overseas land use models that might be suitable for selective adoption for Scottish upland conditions. As part of this ongoing work strand, I recently

joined an EU Erasmus+ study tour to southwest Norway, which was hosted by Dr. Duncan Halley of NINA (the author of the contribution on page 28 of the Autumn/Winter 2016 issue of *Reforesting Scotland*). During the tour we studied many aspects of upland land use in both coastal and inland montane areas of southern Norway; these areas are biophysically similar to, say, western Sutherland and upper Strathspey. We visited several locations at which the process of woodland recolonisation was occurring and there considered ecological, forestry, game and agronomic dimensions. We also received presentations by relevant Norwegian specialists.

Importance of context

It is not necessary for me to recount in detail here the elements and potential advantages of the Norwegian land-use model, as that has been ably undertaken by Dr. Duncan Halley and other contributors within the recent RS volume. It must however be acknowledged that the opportunities presented by that model in Norway have arisen as an accidental consequence of grazing release, following partial rural depopulation by voluntary emigration (both to North America and Norwegian cities), roughly between 1870 and 1970. That is not a process which many would embrace if it still lay before us - think how we view the Highland Clearances!

With that awkward Nordic skeleton safely released from its cupboard, we can see that the resulting extensive recolonisation of the Norwegian uplands by native pine-birch-juniper woodlands and montane scrub (and more coastal areas by oak-birch woodlands) confers clear advantages. These divide into those involving biotic ecosystem components (for example, structural niche diversity, species diversity, game and biomass productivity, carbon sequestration) and those involving abiotic components (such as soil conservation and flood mitigation). The latter essentially represent both 'protection forestry' and 'ecosystem services'. The rural economic implications in Norway are more difficult to analyse, as their current small mixed family farming model is heavily publicly subsidised.

When attempting to promote adoption of the Norwegian land-use model in Scotland, advocates will face strong and cogent challenges in four distinct, but inter-locking areas of analysis:

- Ecological - some will argue that replacing globally-scarce open Atlantic heather moorland and heathland habitats (even if palaeo-anthropogenic) with globally-common pine-birch woodland is suspect. Hence we will need to deliberately maintain a mosaic of these habitats to a much greater extent than has occurred 'naturally' in Norway. We also need to recognise

Above, left to right: Upland woodland recovery, Fidjadalalen; Productive forestry and farming landscape, Rogaland. Photos: Scott McG Wilson

that the actual process of woodland colonisation may be slower on many sites in Scotland due to exposure, soil infertility, deer pressure and scarce seed sources. This causes issues for grant-dependent landowners, who can face costs to remedy delayed natural regeneration.

- Economic - many argue that adoption of the Norwegian model equates to 'rewilding' or 'land abandonment', resulting in estates losing incomes from hill farming, deer stalking or grouse shooting. This may in turn reduce key opportunities for rural businesses and employment. We need to demonstrate that profitable forestry, farming, fieldsports and agriculture can prosper within the matrix of restored habitats, and that this is not contingent on unrealistic public subsidy levels post-Brexit. This may require continued land-use segregation (by deer fences, for example). We must not succumb to wishful thinking or imperil rural livelihoods.

- Social - there is a critique of the rewilding or ecological restoration paradigm that it is socially elitist, tending to displace rural employment and livelihoods accessible to 'ordinary people' (such as farm tenants and shepherds, gamekeepers and stalkers) in favour of specialist employment, only accessible to (often volunteer) incomers from urban areas, with graduate skills, who can satisfy over-complicated modern tendering and recruitment processes. Worse, remunerative upland land use can be seen as being replaced by a recreational wilderness landscape for urban visitors. There are some grains of truth here which must be addressed.

- Cultural - the issues of 'cultural landscape' and 'sense of place' came up in discussions in Norway and there is emerging concern there about submergence of traditional farmed landscapes and archaeological features in homogenous spreading woodlands - too late! Here it is not yet too late and we must recognise that people expect and deserve to retain significant areas of familiar

open upland working landscapes on amenity and cultural grounds. I am not supportive of some 'excoriating critiques' of driven grouse moor management, deer stalking or hill sheep farming (no names, no pack-drill!) - we need to take folk along with us!

My 'take' on the relevance of the Norwegian land-use model to Scotland is that it is highly relevant and capable of adoption where well-aligned with conservation land management objectives and available resources. This will concentrate its application (for the foreseeable future) on lands owned by public sector (primarily Forestry Commission and Scottish Natural Heritage) and charitable bodies (including RSPB, Woodland Trust, National Trust for Scotland, Borders Forest Trust), together with some private estates with ecological restoration objectives (for example, Alladale and Glenfeshie). I can see no case, at least for the next 20 to 30 years, in trying to compel or dictate its adoption on private farms or sporting estates where traditional management supports valuable rural employment.

I think we should also be cautious of linking selective adoption of the Norwegian land use model with radical land reform in Scotland, in an attempt to establish the small mixed family farming pattern more common in Norway. I am not saying that this is something that should be forever ruled out, but I do think we are biting off more than we can chew, both economically and politically, in trying to promote two major rural paradigm shifts at the same time. I have argued in the Spring/Summer issue 2016 issue of *Reforesting Scotland* (page 34), that the large upland estate system confers identifiable advantages, especially in the 'ecological transition phase', and perhaps beyond, not least if Brexit reduces rural subsidies.

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Top to bottom: Recovering montane birch and juniper scrub, Berdalen; Developing natural regeneration in native pinewoods, Glenfeshie; Montane birchwood regeneration, Creag Meagaidh. Photos: Scott McG Wilson.