



Saving ‘Cinderella’

The Mountain Woodland Action Group celebrates its 30th anniversary this year. Diana Gilbert looks at what has been achieved and what lies ahead

Natural treelines, the altitudinal gradation of treed landscapes from high forest through climatically challenged stunted trees, giving way to mosaics of tall shrubs and more open vegetation, are a feature of the majority of high land across the globe. They are certainly a feature of those European countries that reach high enough altitudes. They certainly were, and could again, be a feature of British landscapes, and particularly of Scotland’s mountains.

The absence of any obvious treeline ecotone above the very few native woodland remnants reaching into Scotland’s sub-alpine zone piqued my interest in the 1980s and triggered my curiosity. At the time, although employed by the Nature Conservancy Council (NCC), and subsequently Scottish Natural Heritage (SNH), I saw little to no mention, at area level, of altitudinal successions and the focus, understandably, was very much on

Members of the current MWAG on the 25th anniversary field meeting, exploring and discussing the montane scrub on crags at Corrour, in light of the estate’s radically increased deer cull. Photo: MWAG.

documenting and designating the best existing remnants of all semi-natural vegetation and threatened animal communities following the recent review of protected sites under the 1981 Wild Life and Countryside (Scotland) Act.

My appointment to Highland Birchwoods, at its creation in 1992, gave me the opportunity to focus on woodlands across their range in the Highlands. In 1994 the new SNH commissioned a review of the current knowledge of scrub communities, at all altitudes, in Scotland.¹ Its conclusion was that there was too little information available on which to base any recommendations for management, confirming my perception that ‘treelines’ needed more attention. In the same year, the specific woodland-focused Millennium Forest for Scotland (MFS) was launched to disburse Millennium Commission funds, creating an opportunity for innovative, forward-looking projects.

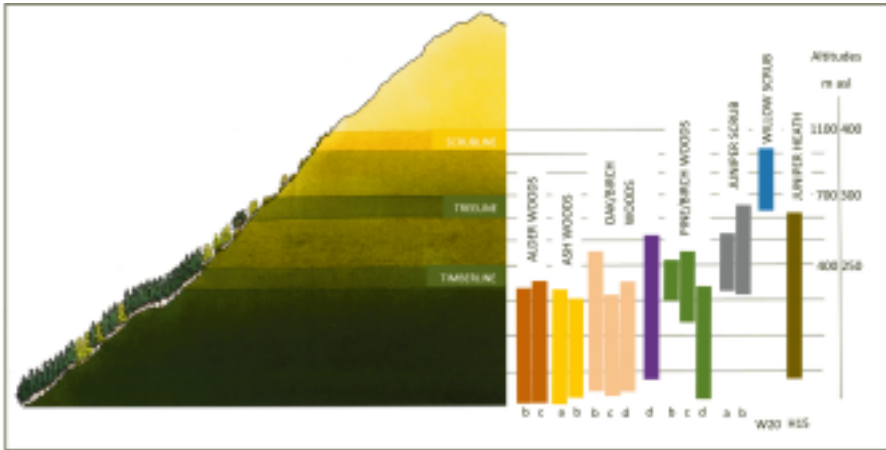
As reported in a 25-year overview,² the opportunity presented by MFS was grabbed and a project for a closer look at, specifically, montane scrub

was developed and was the first project to receive approval. Launched in 1996 this project undertook to carry out a review of existing knowledge, through data searches, seminars and practical trials.

Michael Scott, our first chair, recalls: “The meeting at Battleby, in March 1996, that launched the Montane Scrub Action Group (MSAG) must have been one of the most revelatory I ever attended... I knew a little about montane scrub because I had wandered among low-growing willows in the mountains of Arctic Sweden and among open patches of *Pinus mugo* in what was still then Czechoslovakia, but it had never really occurred to me that this was a Cinderella habitat almost completely absent from Scotland. I had even wandered past the waist-high, scrubby *Pinus sylvestris* trees beside the access path to the Northern Corries on Cairn Gorm and admired their resilience, without recognising the message that those wee trees should have conveyed to me. By the end of the meeting the quality of the presentations had turned me into a disciple of the montane scrub habitat.”

This action group is an unconstituted, self-appointed body. Initially a relatively small number of individuals who had particular knowledge or experience valuable to the overall remit of the project, either in relation to the ecotone or wider issues, were invited to join. The formation of MSAG (later MWAG) was in response to this ‘Cinderella’ nature of montane scrub, a distinct ecotone community which, until 1994, had been almost entirely neglected by the conservation movement in terms of action or support schemes.

Unlike the neighbouring sub-montane woodland and montane heath communities, on which some conservation effort has concentrated, there was/is almost nothing left. This resulted in difficulties in defining the vegetation using British vegetation classification systems. Even now “the lack of extensive examples of this vegetation means that the full range of variation within the ecotone is not fully described in the National Vegetation Classification (NVC) system”.³



At its first meeting in November 1996, the principal objectives agreed by the group were to develop action towards:

- A vision for restoration of montane scrub.
- Promotion of that vision.
- Production of guidance notes for restoration.
- An inventory of site-based information.

Our initial task was to provide a more specific description of the habitat (or ecotone) we were focusing on. This was published in the first issue of the *Scrubber's Bulletin* (SB), the establishment of which was another initial undertaking. The aim for the bulletin was that we highlight recent research and practical experience that would help promote and encourage others to think about natural treelines and their potential place in the Scottish landscape. To date we have produced 16 issues, all available on the MSAG website, and they describe the group's activities in detail. In 2015 a suite of five guidance notes for practical restoration was published, also available on our website.

To promote the vision, SNH agreed to publish a booklet, *Montane Scrub*, in their Natural Heritage Series in 2000.

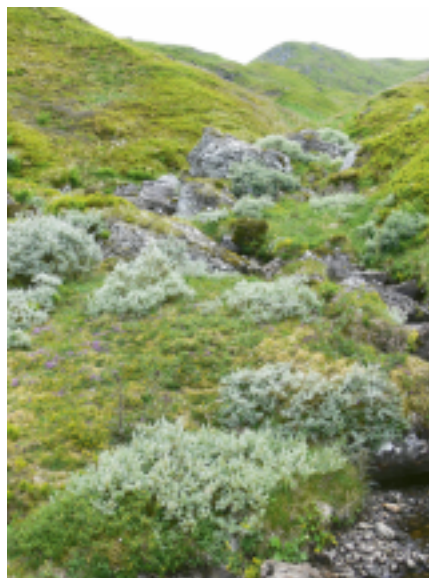
Above: Indicative altitudinal zonation of forest and scrub vegetation with relevant National Vegetation Classification (NVC) communities.

Right: Mountain woodland at Ben Lawers. Photo: MWAG.

On the next page: A typical annual field meeting. Current members of MWAG visiting an area of montane willow scrub at the request of the land owner to discuss and provide advice on future management to facilitate the development of the population. Photo: Sarah Watts.

Michael Scott agreed to edit the text contributed by MSAG members, in particular David Mardon and Rob Soutar. We felt that we were making progress when the Forestry Commission Scotland Chair, Sir Peter Hutchison, wrote in the foreword: "We enthusiastically support the current interest in treeline woodlands; they are an important element of the Forest Habitat Network approach which is a priority action in the Scottish Forestry Strategy..."

At the same time Forestry Authority Scotland issued a guidance note setting out how the Woodland Grant Scheme could accommodate planting or natural regeneration schemes above the timberline. This has now been replaced by a 'native low-density broadleaves' option in the Woodland Creation grant. The aim of this option is to create specific native woodland or scrub habitats, including ecotones for black grouse, treeline woodlands, juniper and other forms of scrub woodland, which are



usually associated with other woodland habitats in a transitional situation, e.g. transition onto open hill or montane scrub.

Neil Mackenzie completed the compilation of all existing records for all the species included within the description of montane scrub, i.e. reaching into and above the low/sub-alpine zone (as defined by climatic factors including exposure), including all tall-shrub willows; dwarf birch, juniper (both sub-species), rock whitebeam and any other trees and shrubs (collectively listed as coastal, treeline and other wind-pruned scrub).⁴ This proved an excellent baseline and has subsequently been added to and absorbed into the SNH initiated habitat mapping exercise (HabMos vegetation database NatureScot). Adding to our knowledge of the oceanic habitats involved, Graham Sullivan completed his PhD thesis on the taxonomy, ecology and history of prostrate juniper.⁵

Very quickly MSAG identified that, as well as promoting the ecotone to the environmental sector generally, it was imperative to develop a case for creating an incentive to at least protect existing remnants, either through the Forestry Commission or Department of Agriculture. Consequently, the conclusion of the MFS project conference in April 2001 focused on presentations related to addressing blockages to action in the treeline ecotone, e.g. on policy context and practical considerations.⁴

A group of key policy developers from the Scottish Office were invited on a study tour of two iconic treeline areas, Ben Lawers NNR where David Mardon of National Trust for Scotland (NTS) had already undertaken active management to regenerate and re-establish willow scrub; and Craig Fhiachlach, on the western fringe of the Cairngorms. During the two-day tour senior staff from the Agricultural Department, Forestry Commission, Forest Enterprise, Deer Commission and Scottish Natural Heritage explored with MSAG committee members the key benefits that an expansion of these habitats would provide to the Scottish uplands. Early committee member Sandy Payne said: "The change achieved by David Mardon/



dropped reference to the upwards expansion of woodland but does not exclude such activity and there may be a cause for optimism in the priority: “Maintaining and enhancing biodiversity, in particular by using the recruitment of natural regeneration and improving mitigation of the risks posed by invasive non-native species, deer and other herbivores.” The Nature Restoration Fund has also been a valuable tool, filling a gap within standard incentive schemes.

Unfortunately, as a society we have separated the joint issues of climate change and biodiversity. This allows actions specifically for the first which do not take due account of the second. Incentive schemes do not require activity based on the most ecologically sound practice. Specifically, the dilemma this raises is how to decide when, where and with what it is appropriate to plant. This is an old, unresolved question and to take this debate forward we are hosting a 30th anniversary conference this autumn (see page 4 for details).

References

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Richard Marriott, at Ben Lawers NTS NNR, from very sorry looking willow remnants to the lushly developing scrub at Edramucky Burn now is truly inspiring.”

Following the close of the MFST project Highland Birchwoods applied to the Heritage Lottery Fund (HLF) for two subsequent HLF-funded projects: the Mountain Woodland Project (2003–10) and the Action for Mountain Woodlands project (2011–17). Both, steered by MSAG, focused very much on promotion and generating action on the ground through training, school engagement, practical restoration schemes and a conference in 2010.

The research community had also grasped the opportunity and a series of projects provided very valuable baseline data, fundamental to our development of guidance for restoration projects. In 2005 the Willow research group, a partnership between Royal Botanic Garden Edinburgh and the Macaulay Institute published a report detailing evidence related to genetic issues in existing populations that was valuable to restoration. In addition, the research provided further detail on the other organisms contained in the remnants, stressing the need for safeguarding their futures.⁶

In 2006, Ros Shaw finalised her PhD thesis examining interactions between montane willow plants and herbivores, including implications for successful pollination.⁷ Since then, there have been a growing number of research projects investigating aspects of the biodiversity, biology and ecology of predominantly tall shrubs, and now some interest in the

paleoecology of past treelines and tall shrub communities, including my own.⁸ Many of these researchers make contact with MWAG and their findings are reported in the SB and, where appropriate, translated into practical advice.

As current chair Sarah Watts shared: “In 2015, after a summer as NTS seasonal ecologist at Ben Lawers, I was keen to use the expertise on the MSAG to develop useful research questions for a PhD. Later on, in 2021, I joined the group representing Corroul as an estate embarking on our own restoration projects, including supplementary planting of montane willows and natural tree regeneration facilitated by deer management. I find the group, with its wide range of folk, new and original, is a fantastic vehicle for sharing knowledge and experience of practical restoration, and for discussing monitoring and research results. Keeping in touch with others engaged in similar work is particularly valuable since high altitude requires a lot of time, patience, motivation and dedication!”

So is the work of the MWAG done after 30 years? The answer has to be a resounding NO. New challenges arise continuously. While there is a mention of ‘Upland woodland and Scrub’ in 2022’s *Building a Plant Strategy for Scotland*,⁹ the published *Scottish Biodiversity Strategy* of 2024, into which it fed, is silent on the habitat.¹⁰

The 2000 Scottish Forestry Strategy included: “There is also an important role for treeline or montane woodland providing a link between forest and mountain habitats”, the current strategy (2019–29) has