Black Sheep Go Green!

by David Braithwaite and Eric Medway

This article combines a summary of the survey of member flocks about environmental management and extracts from the paper presented by David Braithwaite at the 4th World Congress on Coloured Sheep.

In the early days of colonisation of the islands around the coast of Scotland the "men from the north" brought with them a type of sheep that was hardy enough to withstand the harsh environments that they encountered. These were short-tailed, small, horned and, above all, thrifty and adaptable animals. They would not have conformed to a breed as we think of today but rather they would have been a type with much variation. This variation was perhaps the key to their success on the islands around our northern coasts. The pressure on genetic development in the various island populations meant that many forms evolved with traits that would help them survive the conditions particular to the island group they found themselves on. Perhaps the main criterion for selecting breeding stock by the people who farmed them would have been thriftiness. In the making were sheep that would meet the needs of the Twentieth Century conservationist.

Early Trials

Hebridean sheep were first used as conservation tools by the Nature Conservancy Council (now English Nature) on their chalk grassland National Nature Reserve (NNR) at Aston Rowant, Bucks. as early as 1972 and were later supplied to the county's naturalists' trust to graze similar areas that were becoming badly scrubbed over with hawthorn. They were chosen because of their minimal requirement for management and their known browsing habits. They were first used on lowland heath in 1986 by the Yorkshire Naturalists' Trust (now Yorkshire Wildlife Trust) on part of the Skipwith Common nature reserve. (Braithwaite, 1990).

Critical Lowland Heath

Britain has some 13% of the World's lowland heath - a habitat that is disappearing rapidly. Without continual management the heath is soon taken over by secondary woodland, usually birch at first. It can take as little as 25 years for open heath to be transformed into dense birch woodland. At Skipwith (a 350 acre site) this has happened on all but some 50 acres and the seeds blown in from the surrounding woodland pose a constant threat to the remainder. After trying many different breeds it was soon found that Hebrideans did the best job and were best able to cope with the conditions and poor grazing while raising good twin lambs (Braithwaite, 1990). Established birch growth is coppiced to less than 1 metre and the sheep then deal effectively with the regrowth and with any seedlings. Within one or two grazing seasons the older birch has been killed and all that remains to be done is maintenance grazing to prevent re-establishment.

At Skipwith, research by York University has indicated that larger numbers of coleoptera exist within the managed areas than outside. This may, in turn, be important

in the breeding cycle of the Curlew. Since the introduction of the grazing scheme, Curlews have returned to the common and bred successfully on the grazing plots. Green Woodpeckers have also returned since 1986 and are recorded regularly from the grazed areas; the number of breeding Nightjars has at least doubled since the arrival of the sheep.

Operational Guidelines

Experience at Skipwith Common has been used as an operational basis for many other similar exercises with Hebridean sheep on lowland heaths. The five chief points are:

1. Hebridean sheep have proved to be the most effective breed for this type of management.
2. It is a mistake to attempt to over-winter sheep on lowland heath; the vegetation does not successfully support them and supplementary feed has to be imported onto the site causing enrichment, poaching and the seeding of undesirable plant species. Alternative winter quarters must be available.
3. Lambing on heathland is to be avoided for the reasons stated in 2.
4. Sheep, with or without lambs at foot, are best turned onto the heath in May and removed at the end of September / early October.
5. Once established, sheep grazing is an efficient and effective way of maintaining open heathland. This effect may be enhanced by heather burning or cutting.

Hebrideans are used at other types of site by YWT including Spurn Peninsula (Braithwaite 1992a, 1992b), where they control Sea Buckthorn invasion and maintain the typical sand dune sward. They do a similar job for English Nature on Holy Island (Wilson, 1993).

Unique Ability

Another aspect of heathland management by Hebrideans is their seemingly unique ability to control purple moor grass (Molinia caerulea) which tends to become a severe problem when the heath has been overgrazed by other breeds of sheep. Unless managed, the Molinia will gradually expand at the expense of the heather, turning the heath into an acid grassland. David Newborn in his research for the Game Conservancy Council in Swaledale has shown that Hebrideans have the ability to graze Molinia sufficiently hard to reduce its dominance, whereas grazing by Swaledale sheep only serves to encourage further growth (Newborn, Wakenham & Booth, 1993). In only two grazing seasons Hebrideans break up the Molinia tussocks, allowing heather regeneration. It appears that 33% of leaf length needs to be removed in order to do the purple moor grass permanent damage (Tubbs, 1992); when stocked at similar densities, Hebrideans do this, Swaledales don't.

Even more important for heathland maintenance, whether upland or lowland, David Newborn has demonstrated that Hebrideans show a preference for Molinia over heather, whereas Swaledales show the converse. Precisely why this should be is still to be

determined. Whatever the case, this remarkable and perhaps unique quality of the Hebridean makes it an invaluable tool in the conservation of heathland where the invasion of Molinia caerulea is a problem.

Many Varied Sites

The conservation work of Hebrideans has now spread far and wide. A recent survey among Society members reveals that at least 534 Hebridean sheep, including wethers, are being used as management tools on more than 40 sites spread from the Orkneys to Cornwall. Usually the area grazed is a Site of Special Scientific Interest (SSSI) and often a National Nature Reserve. Often the site is managed by one of the main national bodies (for example English Nature, The National Trust) or by one of the County Wildlife Trusts, with the sheep being supplied and removed according to an overall management plan and the degree of grazing pressure needed. The types of site include lowland and upland heaths, coastal sites, mires and chalk grassland and the site areas grazed range in size from 0.5 ha up to 24 ha. In total, 266 ha is being managed.

Commitment Needed

Conservation grazing is a job at which Hebrideans excel and, as the word passes from site manager to site manager and via newsletters from bodies such as English Nature, the demand will continue to grow. The flock owner also needs to be conservation minded. This isn't some easy way of getting extra grazing. In many situations the sheep require more care and attention (for example in dipping or pour-on insecticides) than normal. Then there's the task of transporting sheep to and from the site - not easy when ewes and lambs have to be matched up. On the larger sites, simply gathering the sheep from among dense heather and scrub trees, which they know well and you don't, is a major task, even with the aid of a dog. There is, though, real satisfaction from knowing that your sheep are doing an important job, and there can be no doubt that they seem to enjoy such environments.

References

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