

Grazing Regime Evaluation Case Study:

Site 9 - Ffridd, ADAS Pwllpeiran, Dyfed

- 72 ha grass-dominated former dry dwarf-shrub heath
- System scale study comparing two sheep stocking levels and the effect of cattle grazing



Background

Before 1989 the unit had been deteriorating due to heavy stocking and land improvement. The pasture was predominately *Nardus stricta*. In 1989, the site was divided into two similar experimental sub-units, which were grazed according to either the ESA prescribed stocking rate or 30% below. In 1995, the two units were stocked at 0.22 lu ha⁻¹ (ESA Tier 1A unit) for the sub-unit previously stocked at the former ESA prescriptions, and 0.15 lu ha⁻¹ during the summer, decreasing to 0.1 lu ha⁻¹ during the winter (ESA Tier 2A unit) for the sub-unit previously stocked at 30% below. This brought the two units in line with the re-designated Cambrian Mountain ESA Tier 1A and Tier 2A blanket prescriptions. Since 1995, with stocking rates of either 1.5 or 1 sheep ha⁻¹, the vegetation biomass has increased and there are more areas supporting mire species. The site has been split into 12 paddocks with four grazing regimes, being two sheep only stocking rates (1 & 1.5 sheep ha⁻¹), one cattle only regime for 2 months in summer and a mixed cattle and sheep regime.

The site has been the subject of Defra funded research into moorland management since 1990 and is part of a 1346 ha ADAS research centre.

Habitat condition assessment

There is currently little variation in habitat condition in the four grazing regimes. All show some evidence of degradation. Cover of indicator species is low at 10% of sample points under 1.5 sheep ha⁻¹, 33% under 1 sheep ha⁻¹, 13% under mixed grazing, and 17% under cattle only. Similarly, 73% of sample points did not have at least 2 indicator species under mixed or cattle only, 67% under 1.5 sheep ha⁻¹, and 57% under 1 sheep ha⁻¹. There

is insufficient pioneer regrowth, especially where cattle graze and there is also some indication of heavy browsing of dwarf shrubs under cattle only, at 37% of sample points.

The sites are in favourable condition with respect to burning, erosion, physical disturbance and other invasive species, although there is occasional *Juncus effusus* around flushed areas.

Farm business and livestock

The current grazing regime is Welsh mountain ewes at 1 & 1.5 sheep ha⁻¹, 0.5 cattle ha⁻¹, and a combination of 1 ewe ha⁻¹ and 0.5 cattle ha⁻¹. All ewes are taken off for 2 months before lambing. Cattle are only on the sites for 2 months in summer (July & August). Twin-bearing ewes are housed in January after scanning. Supplementary feeding of silage and feedblocks begin in January. The ewes lamb during April with singles being moved back on as weather conditions allow. Lambs are weaned in mid-August when all male and any surplus female lambs are removed for finishing. Ewe lambs identified as flock replacements are away-wintered. Lamb weaning rates are around 100%. Gross margins were about £10 ewe⁻¹ more and £10 ha⁻¹ more for Tier 2A than Tier 1A.

Current area based payments are ESA management agreement and Hill Livestock Compensatory Allowance. Eligible headage payments to January 2005 are Sheep annual premium scheme.

Shooting, recreation and landscape

There is no shooting or associated management carried out and there is no public access. Landscape is heterogeneous in appearance and fences are intact. Flowering *Calluna* is scarce, and flowering grasses tend to be grazed.