## SATELLITE TECHNOLOGY DEMONSTRATES ROUGH GRAZING VALUE OF RUMEVITE

Lower stocking rate requirements for sheep farmed in Environmentally Sensitive

Areas (ESA) are aimed at evening out grazing, as well as enhancing and improving the diversity of plant species on open hill land. However, reducing stocking rates alone does not prevent over-grazing of favoured areas and sometimes even causes virtual abandonment of the less attractive vegetation.

But now, new technology is supporting visual observations and helping scientists understand better sheep grazing behaviour, as well as demonstrating the value of feed supplements in attracting sheep to poorer quality forage areas.

For example, satellite-tracking of sheep ranging has demonstrated the cost-effective value of Rumevite feed blocks in drawing upland ewes to less attractive vegetation in environmentally-sensitive areas.

A four-year MAFF-funded study at ADAS Pwllpeiran in Wales has examined sheep ranging behaviour after Rumevite feed blocks were strategically placed in under-utilised areas of a heather-dominant mountain pasture. The area examined covered 140 hectares at 550 metres above sea level. The site was chosen because the proportion of heather present had been under utilised in recent years.

Visual observations of grazing behaviour were supported by data from satellite global positioning technology (GPS). A GPS receiver unit was fitted to individual sheep using purpose-built harnesses. Over the two year study a total of 57 individual sheep were recorded representing over 600,000 individual GPS records.

According to ADAS researcher Owen Davies, grazing time spent in heather- dominant areas was increased by I4% when feed blocks were present and there was a significant rise in sheep density within 25 metres of a feed block site. As a result, heather utilisation was increased significantly. "In the first year, grazing of the surrounding heather increased by I5% when feed blocks were sited in an area, but interestingly feed block consumption was relatively small (I40g-200g per ewe per day)," he points out.

"This increase in heather grazing will not only prevent heather becoming rank and unpalatable, but will also help prevent over-grazing of the preferred grassy banks."

Owen Davies says the study has demonstrated a relatively inexpensive but effective, practical alternative to traditional shepherding of semi-natural rough grazing.

"Even the lower stocking rates associated with environmental prescriptions for semi-natural rough grazing are not enough to prevent over-grazing of favoured areas," he stresses. "With no supplementary feeding, ewes will range in search of palatable grasses at the expense of less attractive heather. But by using self-help blocks — even at low stocking rates — flock managers can achieve a significant increase in rough grazing utilisation within a 25 metre radius of the blocks."

However, Owen Davies does stress that to prevent long-term damage of semi-natural rough grazing, shepherds should move the blocks frequently.