

Conservation grazing meets virtual fencing

John Phillips, Hertfordshire

John Phillips is the stockman for Maydencroft, a company which specialises in providing cattle for conservation grazing sites

They are currently working with Chorleywood Parish Council to graze Chorleywood Common in Hertfordshire. On the common there are three grassland habitats – acid heath, neutral grass and chalk meadow – and it has been challenging to graze them with livestock as common land law prohibits the use of permanent or temporary fences. They have previously relied on cutting hay off the land to manage it, but Natural England felt that grazing was needed to help with the restoration and preservation of grassland species. They are doing a similar, larger-scale trial at Epping Forest.

It was decided that virtual fencing should be trialed, which is when a cable is laid (either on the ground or buried) to create looped zones that emit a radio signal. The cattle wear collars that pick up the radio signal and beep when they come within two metres of the cable. If they continue to approach the cable, the frequency of the beep increases, and if they still continue they receive a mild electric shock (similar to that given by a normal electric fence). It is important that visual cues, such as hedges or some posts, are associated with the cable, as it helps the animal learn its boundaries.



John has buried the cable to around 20cm (8ins) with a modified single mole plough to prevent people interfering with it. He has also installed gateways, so if the cattle get out they can be directed through the gateway, as it is very unlikely they will cross the cable again.

They have been trialing the system this season with an early spring graze with four Longhorn bulling heifers and it worked well, except for one collar failure, but luckily the heifer didn't move very far from her herd mates. He is now grazing the site with six heifers for its late summer graze, which includes zones that were excluded in the spring graze due to orchids flowering.

In such a system it is recommended that there is a secure boundary fence, so if there is a failure the animals are contained, However, due to common land law, only one of the four sides of the common is properly fenced as it leads to a London underground station.

The collars cost around £250 each, so this system will not be suitable for everyone, but in specific situations, when other options are limited, it may be useful. It is likely that in the future the technology will improve and become cheaper, and may be combined with other innovations such as GPS. This may mean that it will one day be possible to move the cattle remotely to the next zone to be grazed.