



EIPWALES

Cydweithio er ffyniant gwledig
Collaborating for rural success



Trialling the use of tracking technology in extensive grazing systems

Grazing livestock on large extensive grassland areas can pose many problems such as difficulties in gathering, grazing management and an increased chance of theft. Livestock tracking technology is a new concept to extensive grazing animal systems in the UK and this project is the first of its kind in Wales.

Project outline

To investigate how using tracking technology can help prevent theft, improve gathering, and grassland management. A single emitting device plus a battery is housed in a collar that will be around the animal's neck. The tracker relies on LoRaWAN radio frequency which enables very long range transmissions, more than six miles in rural areas, with low power consumption. The collars are programmed to send GPS data as regular as 10 minutes.

The farmers will be able to access the following information via an app on their smartphones:

- GPS location (latitude, longitude)
- Activity flags alerting the farmer to a level of movement by the animal (possible theft)
- Behaviour indicators (grazing, low intensity grazing, lying down)
- Social interactions i.e. contact with other animals, which may be useful when considering parent to off-spring interactions and assessing mothering abilities



ADAS expertise

ADAS is the project facilitator providing help and advice to project participants by:

- preparing application forms
- procurement
- overseeing delivery to time and budget
- report writing
- providing technical advice through its experienced consultants





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Treiali'r defnydd o dechnoleg tracio mewn systemau pori estynedig

Gall pori stoc ar system estynedig beri problemau megis anhawsterau crynhoi, rheolaeth pori, a risg cynyddol o ladrad. Mae technoleg tracio stoc yn gysyniad newydd i systemau pori estynedig yn y DU a'r project yma yw'r un cyntaf o'i fath yng Nghymru.

Amlinelliad o'r prosiect

Ymchwilio i sut gath defnyddio technoleg tracio helpu i leihau'r problemau uchod. Mae teclyn allyrru sengl ynghyd a batri yn cael ei lleoli mewn coler a fydd o amgylch gwddw'r anifail. Mae'r teclynnau yn galluogi trosglwyddiadau dros bellter hir iawn, mwy na chwech milltir mewn ardaloedd gwledig, gan ddefnyddio bach iawn o bŵer. Mae'r coleri wedi eu rhaglenni i ddanfon data GPS mor aml a phob 10 munud.

Fe fydd y ffermwyr yn medru cael mynediad i'r wybodaeth ganlynol:

- Lleoliad GPS
- Fflag gweithgaredd- rhybuddio ffermwyr am unrhyw gynnydd yn lefelau symud yr anifeiliaid (lladrad posib)
- Arwyddion ymddygiad (pori, pori dwysedd isel, gorwedd)
- Rhyngweithio cymdeithasol- Cyswllt ag anifeiliaid eraill, gall fod o ddefnydd wrth asesu gallu mamol, cyswllt rhwng mam ac epil.



Arbenigedd ADAS

ADAS yw hwylusydd y prosiect yn darparu cymorth a chynghor i gyfranogwyr y prosiect drwy:

- baratoi ffurflenni
- caffael
- oruchwylio cyllideb a threfn amser
- ysgrifennu adroddiadau
- ddarparu cyngor technegol trwy ei hymgyngorwyr profiadol

