338 Better landscape utilisation without more fences - can it be done?

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Introduction

Self Herding is a behaviour-based livestock management approach, which provides strategies and tools to positively influence grazing behaviour. Meat and Livestock Australia is currently supporting the first-ever trial of Rangelands Self Herding in the Northern Territory at Victoria River District Research Station (also known as Kidman Springs).

The trial aims to demonstrate that Self Herding techniques can be used to establish grazing circuits within a paddock, creating a form of rotational grazing that does not rely on expensive and fixed fencing. We selected a paddock that has large contrasts in land condition created by historical grazing patterns. By applying Self Herding techniques, specifically the use of sight, sound and smell signals linked to feed rewards, we aim to encourage cattle to use areas that have previously been under-utilised whilst reducing the usage of areas that have poorer land condition.

The project is a collaborative effort between Revell Science, Stress Free Stockmanship, NT Department of Primary Industry and Resources, Territory NRM, Rangelands NRM (WA) and Oxley Grazing.

Methods

We are using small amounts of feed attractants paired with signals to encourage cattle to make choices in response to positive behavioural and/or nutritional feedback. We use a mobile “attractant station” to achieve managed movements of cattle throughout the landscape. Many producers already move lick around their paddocks, but this method amplifies that approach by offering a variety of attractants using intermittent and unpredictable timing. This has the effect of increasing interest for a broader range of animals in a mob and rewards exploratory behaviours which then influence the dietary experimentation that the animals exhibit.

GPS tracking collars have been fitted to 10 heifers in the trial and these fix a location at hourly intervals. We use the GPS location data to create weekly “heat maps” of how cattle are using the paddock in relation to the attractant station and environmental factors (such as rainfall and fire).

At the conclusion of the trial we will be reporting on: paddock and pasture utilisation patterns, labour and vehicle costs, management experiences with the techniques and the cost of consumables (e.g. the feed rewards). We will also conduct a longer-term economic comparison of using Self Herding versus fencing or virtual fencing to improve paddock utilisation patterns.

Results

In the first weeks of the trial the cattle demonstrated a very strong attraction to the historically overgrazed areas of the paddock. The project team then implemented a range of Self Herding techniques to attract the cattle away from the overgrazed areas and into other areas of the landscape that were being under-utilised. The GPS data clearly indicate that the techniques have influenced the grazing areas of interest for cattle in the paddock.

More information about the trial and the results can be found at https://futurebeef.com.au/projects/self-herding-kidman-springs/

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