CASE STUDY - ALLERON STATION Using cattle GPS data and satellite forage maps to fine-tune decision making

Who: Craig and Sarah Cook, Aileron Pastoral Holdings

Aileron facts: 4,116km², mix of country types: watercourses, mulga plains, hills, calcareous plains, desert sandplains

Craig and Sarah started putting heifers into Pridemores Paddock in May 2021 and continued to add small groups of heifers through to early August until there was a total of 360 head. Some of these heifers had been tagged with Ceres Tag GPS ear tags. These tags transmit the location of the animals several times a day and their locations can be observed on a dedicated on-line portal.

In September, Craig noticed that the growth of the heifers appeared to have plateaued, so they progressively began destocking the area. In late October Craig concluded they probably should have intervened earlier than they did. To truth check this assumption by using animal behaviour (Ceres Tag) and satellite imagery (Cibo Labs), the Cooks ran their Ceres Tag data and Cibo Labs satellite forage maps together, to see if they could identify the optimum

time to move the heifers.

The Ceres Tag data showed a noticeable change in paddock usage patterns towards the end of August, where the heifers started to walk further away from water each day to graze, and this pattern intensified throughout September/October.











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Aileron

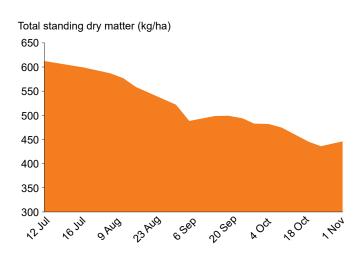


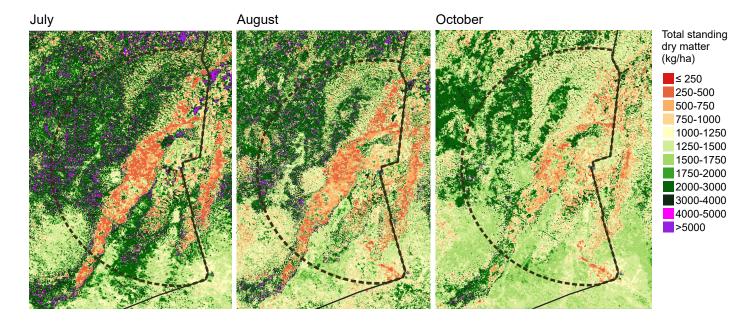




CASE STUDY - AILERON STATION

The Cibo Labs satellite forage images showed indicators in advance of the animal behaviour, registering a decline in forage within 3km of water between July and August, which accelerated through August. The decline slowed during September in response to some small pasture growth events but accelerated again throughout late September and into October. You can see in the three satellite images, that by October the total standing dry matter (kg/ha) had dropped significantly within a 3km grazing zone. In northern Australia, 300kg per hectare of feed is a threshold point, below which feed intake declines because it takes a lot of energy to graze short and sparse feed.





Using the Ceres Tag GPS ear tags in conjunction with the satellite forage maps can help producers to make evidence-based decisions to better manage the feed supply and cattle production.





Photo credits: Aileron Station and Dionne Walsh



Drought









