



## North Queensland takes on Evoke Ag 2020

Evoke Ag, the premier ag-tech conference for Australasia, is an annual event where start up and established companies display their latest tech offerings and producers, researchers and agricultural professionals alike discuss the issues facing the industry and what the future holds. To gain exposure to presenters and technology that remote Australia has little access to, the Department of Agriculture and Fisheries facilitated the partial funding of Evoke Ag attendance for seven producers through the Smart Farms Partnership funded E-beef project, led by Southern Gulf NRM.

The E-beef project aims to promote the use of technology on farm to assist in making timely management decisions. The project encompasses six 'smart farms' coupled with innovation hub producer groups across the Northern Gulf, Southern Gulf and Desert Channels NRM regions. Smartfarms demonstrate the use of walk over weigh technology and NDVI pasture data to closely monitor cattle performance. Cattle liveweight and pasture quality data can be used to make timely and planned management decisions on stocking rates, for supplementary feeding strategies and to maximise market opportunities. Innovation hub members have access to all demonstration property recorded data, they participate in scenario analysis using FarmEcco by Agrihive and attend quarterly workshops covering relevant topics to improve on farm practices.

The producers who attended Evoke Ag are involved in the E-beef project either as a smart farm host or as an innovation hub member. Selection was completed through an expression of interest process. Beef extension officer, Eloise Moir accompanied the producers to facilitate discussion, to foster connections within the group and to encourage the sharing of findings and ideas for implementation. Evaluation of the experience was completed immediately after the conference and four months afterwards to identify new ways of thinking, and to capture any technology or concepts that have been incorporated into their practices to improve productivity. Findings from the evaluation are described below.

### Expectations before attending

The producers were excited to broaden their horizons and gain exposure to the technology and ag-tech providers who are changing the landscape in agriculture. It was understood that some technology wouldn't be applicable to the northern system, but all were hoping to take home some new ideas used in southern Australia to improve current practices. There was a keenness to potentially play a role in the conversation about what would be useful to extensive operations and how tech start-ups could expand into the north. The group was particularly enthusiastic about travelling as a like-minded unit that could discuss the conference sessions and the interesting findings that others may have missed.

The E-Beef project is supported by a partnership comprising Southern Gulf NRM, Desert Channels Queensland, Northern Gulf RMG, and Queensland Department of Agriculture and Fisheries.



Funding for the project is from the Australian Government's National Landcare Program and the Queensland Government Drought and Climate Adaptation Program.



L-R: Emma Willis- Eveleigh Station, Mt Surprise, James O'Shea- Scardons Hill Station, Dimbulah, Sam Fryer- Railview Station, Hughenden, Eloise Moir- DAF Cloncurry, Robert Bulley- Moonamarra Station, McKinlay, Ruth & Robert Chaplain- Wynberg Station, Cloncurry, Angus Propsting- Villadale Station, Richmond.

### **Musings during and immediate impressions**

With the large distances covered each week checking waters, it was no surprise that a common interest within the group was the use of remote water monitoring. Producers engaged at length with providers such as Farmbot and Goanna Ag, to learn how units used across northern Australia reduce labour costs by providing an alert when issues arise with water supply. All attendees agreed that this would be useful for their businesses.

Producers found the concept of GPS tracking of beasts to be useful, particularly for recording bull movements or calving maiden heifers, but were disappointed by the applicability to a northern setting with network connectivity issues and the outlay to purchase trackers.

Ground cover and biomass assessment via satellite imagery by providers such as Cibo Labs was also a point of interest for the producers. This company is working with northern corporate agricultural companies which appealed to the attendees. Company founders were keen for the northern producers to interact with the trial version and to contribute data before its commercial release.

The benefit of attending as a group was highlighted when one attendee discovered the trade display of the LIVeStock Pricing app. The concept was useful to themselves and knowing that it would be of interest to the other producers, they encouraged the entire group who were yet to find the stall to speak with the creators.

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Immediately after attending the conference, there was an overall sense of excitement for the future of northern agriculture but a mutual respect for the difficulties that lay ahead with the tyranny of distance, connectivity issues and expense of using start up technology within large scale operations. Producers were keen to follow up with a number of providers upon returning home and looked forward to seeing how emerging technology featured at Evoke would progress in the future.

### Implementation

Recent follow up with attendees indicated that many have been inspired by their trip to Evoke Ag and have incorporated technology into their operations. Three producers have started using the Cibo Labs biomass assessment and satellite imagery technology, currently still in the trial phase. Benefits expressed were having an objective measure of pasture to back up visual inspection, and having the ability to plan new water infrastructure to improve paddock utilisation with assistance from grazing pressure mapping. It was noted that this technology will not replace in person assessments of country for these producers. Biomass measurement accuracy in timbered country requires some improvement, but this may improve as the trial continues and the technology advances. One producer was very interested in the technology and has since starting reviewing the Long Paddock Forage products to assist with ground cover and pasture growth monitoring and decision making.

Remote water monitoring sensors have been purchased by one producer with a further four currently exploring the best options for their property. For one producer who regularly travels between properties and already had some water monitors in use, the peace of mind of being able to check water levels regardless of his location was well worth the investment and more have been purchased.

While no one in the group has purchased a drone, there is still significant interest in their application in agriculture. One producer is looking to be involved in a trial, using drones to identify and spray weeds. There is a keen interest in using drones for fence line regrowth control, checking floodgates after rain and for monitoring difficult to access country. Two attendees and many innovation hub members have expressed interest in drone use and consequently, E-beef project staff are exploring options to run a relevant workshop.

Producers could see the value in GPS tracking with one producer having had discussions with a provider; however, the cost of required repeater towers unfortunately proved to be prohibitive. There may be possibility for greater implementation once the connectivity options expand and pricing decreases. The benefit of monitoring bull activity would particularly be useful in the vast expanses of northern Australia where visual inspection isn't possible.

While attending Evoke Ag, all group members spoke with Farmers2Founders regarding their Ideas Program, encouraging ag-tech start-up ventures. One attendee applied for the course with an app idea and while wasn't successful in the first round, is in the process of applying for round two. This producer noted that they wouldn't have known about this course or been inspired to create an app if it hadn't been for the Evoke Ag trip.

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Reflecting on the learnings and experience gained at Evoke Ag, one producer commented, “While this outcome isn’t as tangible as purchasing a water monitoring unit, a significant personal benefit has been the thought provoking and inspiring nature of the conversation from presenters and within the group. It has provided motivation to not just persist in the industry but to thrive. It’s been the boost we needed.”

### **Broader community benefits**

As only a select number of producers could attend the conference, it was deemed a priority for attendees to present on their experience to their respective innovation hubs. These presentations were an excellent opportunity for other group members to hear about innovative technology that would be applicable to their own operations and generated robust discussion. It is envisioned that the attendees will report on progress and share their impressions of implemented technology with their groups and other community members for the duration of the project and beyond.

Attending Evoke Ag 2020 was an eye opening experience for the attending producers. Not only did it allow them to speak directly to providers about their own businesses and issues, it encouraged them to think critically about opportunities to enhance their operations using technology. A key outcome has been the establishment of a likeminded, but diverse network amongst the E-beef producers from northern Queensland; a network that will no doubt prove useful in the future. Despite variance in demographic, production system and land type, all attendees identified ways in which technology could improve their practices. This forecasts the future of the beef industry where technology integration will be as commonplace as the solar panel. The opportunity to travel to Evoke Ag 2020 would not have been possible without the support of the Queensland Department of Agriculture and Fisheries and the E-beef Smart Farming Partnership.

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