

BUILDING AND SHARING AGRICULTURAL KNOWLEDGE THROUGH TRIALS

SUSTAINABLE AGRICULTURE



2015 When NRM South discovered the Redlands Estate whisky distillery and farm in 2014, we couldn't have predicted what a tremendous opportunity being involved in Tasmania's growing whisky industry would provide.

The idea of demonstrating how using sustainable practices could improve the quality of the product that goes into the whisky bottle got us hooked, what we didn't expect was the amount of knowledge and interest this project would generate.

In 2014, NRM South's Regional Landcare Facilitator Ken Moore formed an agreement with owners Peter and Elizabeth Hope. The Redlands Estate includes a working whisky distillery and farm, which grows and malts the barley used to make the whisky onsite.

The land's agricultural history dates back to 1840 with Count Strzelecki and historical features on the farm include functional convict built aqueducts used for irrigation. It is the land use history in these 175 or so intervening years that immediately presented challenges for growing barley sustainably.

Ken Moore says that the right approach for the farm was to go back to basics and look at the farm holistically in order to make sound decisions that would set the foundation for long term productive outcomes.

The landowner also recognised the value in being able to create a growing system that would, after some years, yield a whisky that could be labelled 'sustainably produced' and see the pathway from paddock to bottle.

"Our approach at Redlands was to understand what the property owner wanted to achieve, and then develop a sustainable farming plan that would guide production while also reducing impact on the farm's natural resources and the surrounding environment," Ken explained.

"Our first step was to design and implement a plan for sustainable cropping and grazing. We identified a number of sustainable cropping practices to trial including minimum till, soil testing for nutrients and biology, a Soilife Australia soil builder trial, soil moisture and in-crop weather monitoring and drone UAV imaging. We also designed a planned grazing trial as part of the broader plan and enabled a biodiversity assessment and rehabilitation plan for the Redlands Estate Farm and Plenty River Catchment."

Our initial year was a learning experience. In the first year, inputs were reduced, an approach established for the property and the process generated significant data about the effects of applying a sustainable approach to crops designated for commercial use.

The barley crop itself was harvested in February 2015 and a portion of the harvest required by the Distillery for the 2015 batch went into storage ready for malting. Analyses carried out after harvest showed the barley was of a very high quality for malting. This data will improve future management and understanding of growth conditions, potential yield and crop vigour.

This work has also cultivated partnerships including the University of Tasmania through Sense-T (sensing and data) and the Australian Centre for Research on Separation Science (who are interested to identify how the flavour compounds of whisky are linked to the barley), DroneAg and the Tasmanian Whisky Producers Association. The project also created very high visibility within the media and provided a platform for conversations with other landholders interested in a range of sustainable on farm practices.

It's fair to say that the sustainable agriculture seed has only just been planted in relation to our work in this industry and with other barley growers. This research and knowledge has clear application to other distilling industries and we hope to explore the application of sustainable practices to these industries further in the future.

For more information on the Redlands project, visit:

www.nrmsouth.org.au/projects/redlands-project/