



Unpublished Report

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Sheep CRC Report 2_71

CRC MWOW Progress Report

Project 1.2 Task 1

Milestone: Completed development of walk over weighing system, without RFID

% Completed: 75%

The original project design was to have 6 sites set up for Mob Based Walk Over Weighing (MWOW) trials. To collect weight data from these sites, write some computer software to filter the weights and validate the accuracy of the filtered weights when compared to a crate weight.

After unsuccessfully trying to enlist co-operators in each state, it was decided to set up trials at the following sites

First Name	Surname	Address1	City	Postcode	State
David	Brown	Hassall & Associates	Wagga Wagga	2650	NSW
David	Counsell	"Dunblane"	Barcaldine	4725	QLD
Jonathan	England	Department of Agriculture and Food	Narrogin	6312	WA
Robert	Pocock		Lameroo	5302	SA
Stephen	Semple	Orange Agricultural Institute	Orange	2800	NSW

No Victorian site was forthcoming. David Brown's site at Wagga Wagga was accepted as part of a Master's Project. The other sites have been commissioned and despite some animal training issues are capturing weights on a regular basis.

Brown Master's Site (3 Units);

- 1 site is operational and collecting useful weights, with the 1st validation weight having already captured
- At this stage the other 2 sites have not commenced, with David having some time constraint issues with the commencement of his Master's project and also locating suitable co-operators

QLD site;

- Is working well with the co-operator very happy with the results so far. He is at the stage of training a second group of animals, this time ewe hoggets to monitor weight gain leading up to mating.

WA sites;

- 2 have been set up although little data has been collected at this time due to technical difficulties with the weighing indicator at one site and sheep training at the other. Hopefully, these anomalies will be sorted out shortly and useful data will start to come on line.

SA site;

- Is not operational at this stage, due to other on-farm work commitments and the onset of medical problems for the co-operator. Hopefully these problems can be sorted out shortly and still leave sufficient time to collect at least one month of MWOW weights and a validation weight.

Orange sites;

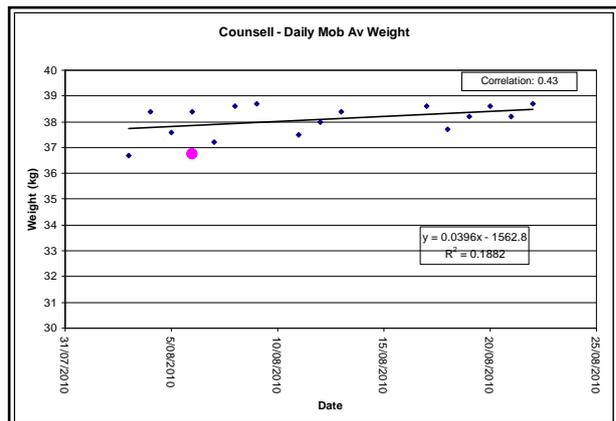
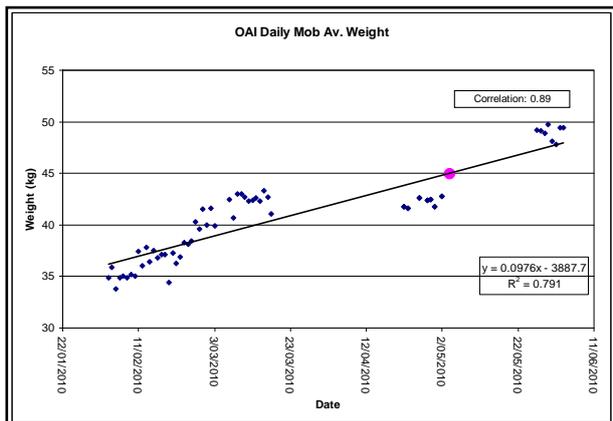
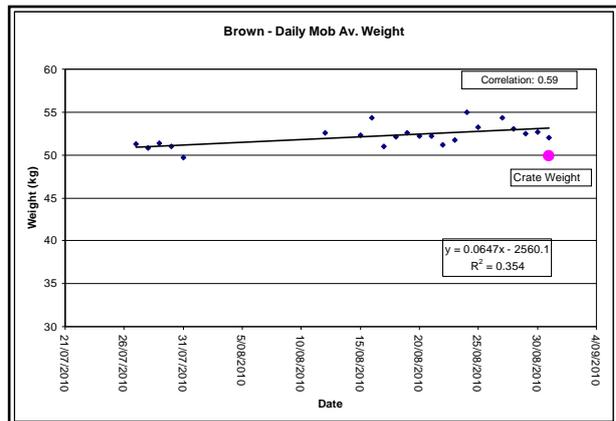
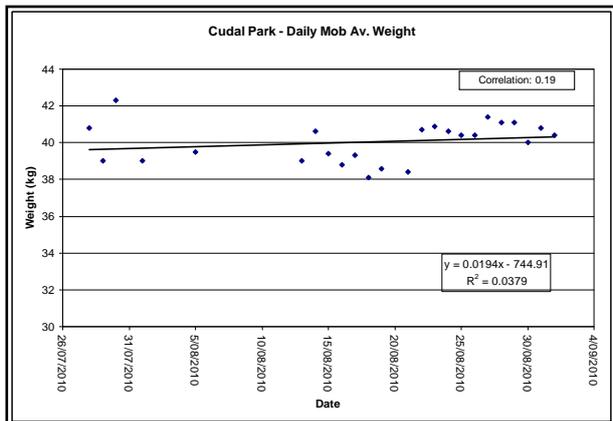
- OAI - the group of lambs has been sold after reaching target weights. It is hoped to re-deploy this platform in the next week or so to an alternative site
- Cudal – after a brief training period, weights are being collected, although the very wet weather has prevented the validation weight occurring, it should occur later this week

The table below lists the number and type of animals at each site.

Site	Platforms	Number of Animals	Validation Weighed
Brown	1	500 ewes	Yes
Counsell	1	120 rams	Yes
England - Lake Grace	1	200 Ewes	No
England - Ridgefield	1	130Ewes	No
Simple - OAI	1	200 lambs	Yes
Simple - Cudal	1	500 ewes	No
Pocock	0	Nothing set up due to time & medical constraints	

Analysis software has been written and as each data set is collected, the data is processed through the software. As the validation weights are collected they will be compared with the collected & processed data from each site.

The charts below some the results for some of the sites compared to the weights taken from a crate weighing. At this stage many of the sites don't have sufficient weights to be a very meaningful result. Also there are still some sites that have yet to do the validation weighing.



The results from these 4 sites indicate that the process of data collection and analysis is working, but will probably need a little refinement as more of the validation weights come to hand. At this stage the data is filtered based on a calculation of mode from the data and then using a proportion to include the desired weights around the mode. The program has been altered slightly to allow a filtering method by selecting actual kilograms of weight rather than proportion (to allow for the possibility of a skewed distribution of weights). This alteration to the program has only just been made and has not been tested. This will occur over the next few weeks with data already collected and analysed