

Technology

Profit or Distraction
@sheepsback @agpromanagement



In the beginning



Sheep Handler – Individual immobilize-weigh
& draft + autodraft + side + EID Reader



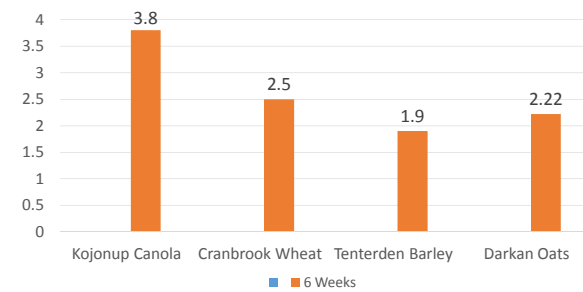
Multi-staff



Capsuling with an immobilizer



Comparative KG per head weight gain advantage of ewes grazing chaff piles V non-chaff piles over a 6 week period



Show Me The Money

- Create a Model Farm
- 2000 Ha 50% Sheep 50% Crop
- 9DSE or 7500 sheep that utilise stubbles over Summer
- Average weight advantage 3.1 kgs per hd- 50% cereal 50% canola
- What's this worth?
- Sheep conversion ratio 3/1 – 3 kg's of feed for 1 kg of live weight
- Feed cost \$250
- 80 k Chaff cart 21 % ROI

Net Cost Saving

	Weight Sheep Gain	Total Weight Gain	Tonnes Feed Required	Feed Cost
	7480	3.1	22692	\$250
Net Feed Cost Saved			<u>\$17019</u>	

Technology

- Apps
 - Stock management
- Hardware
- Sheep handling
 - Individual v multiple
 - Building new yards - save 5k on drench race and spend on handler.
- Sheep feeding - chaff cart.
- Water & stock management
 - Cameras/sensors
 - Drones
- Electronic tags/ stud / prime lambs / keep a good count of stock
- What's next
 - foo by phone
 - NDV on phone
- Blue Sky
 - Virtual fencing
 - More drones



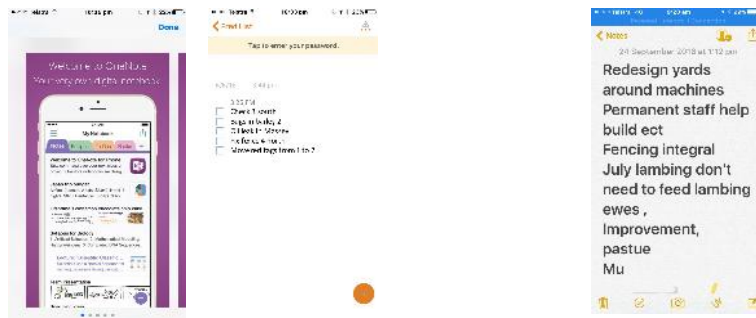
Phoney!?



Farm Management Apps
Stock/whole farm- aglive, mymob, agriweb,
farmware



Notes / Task Allocation



- Improved livestock recording- generally appalling
- Feedlotting lambs- getting rid of non-performers
- Stud or nucleus flock - no brainer- efficiency & accuracy (big issue)
- Passive recording of bodyweight data, when processing sheep, culling
- If you do lots of separating – twin/early late lamb etc, boxed up mobs

How many DSE have you got?

Class	No	DSE	Total DSE
Ewes	2000	1.5	3000
E Hoggs	900	1	900
W Hoggs	900	1	900
	3800		4800

Remote Water Monitoring
USEE, Observant



Quadcopter / Drone



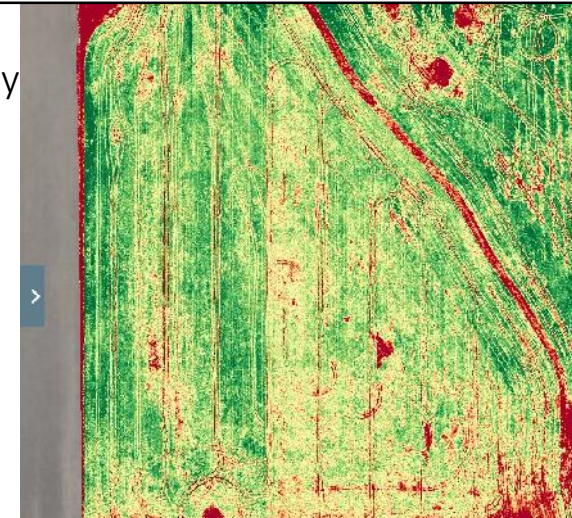
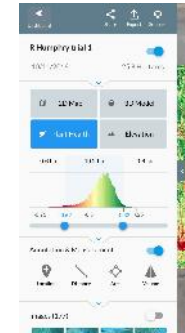
New Mavic



Litchi - preprogrammed mission



Drone Deploy



Drones

- Less than 2 kg, no licence required
- Livestock - water runs
- Lambing observation
- Infrared potential, stock health, stock counting
- NDVI potential
- Assisting with mustering

What's coming?

Virtual fencing- grazing management & stock loss
 Tattoo - indicating stress, pregnancy, infection
 Passive drone - fixed wing - different algorithms



Assumptions

Sheep machinery				
Sheep Numbers	4000	3000	4000	3000
Purchase Price	30000	30000	15000	15000
Trade In Value	30%	30%	30%	30%
Trade In Value	9000	9000	4500	4500
Years	15	15	15	15
Depreciation Per Annum	1400	1400	700	700
Interest Cost	8.00%	8.00%	8.00%	8.00%
Interest Cost Per Annum	\$1,560	\$1,560	\$780	\$780
Total Fuel/Oil/Electricity	300	300	300	300
R&M Per Year	300	300	300	300

Show Me The Money

DSE	4000	3000	4000	3000
Cost	30000	30000	15000	15000
Depreciation	\$1,400	\$1,400	\$700	\$700
Interest	\$1,560	\$1,560	\$780	\$780
Fuel and Oil /Electricity	\$300	\$300	\$300	\$300
R&M	\$300	\$300	\$300	\$300
Total	\$3,560	\$3,260	\$1,780	\$1,780
Cost per DSE	0.89	1.09	0.45	0.59
Cost Per HA @ 4DSE	\$4.75	\$6.52	\$2.37	\$3.56

Keeping It Real

Cost	4000 DSE	3000 DSE
30000	.89	1.09
15000	.45	.59
Current Sheep GM	25-30	25-30