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Economics of Feeding


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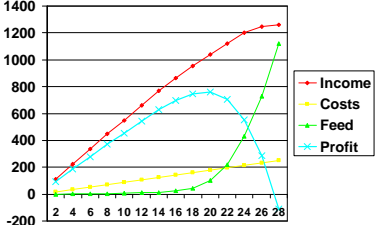
Key points

- Stocking rate
- Feed conversion efficiency (FCE)
- Cost of feed
- Specific examples:
 - Ewes pre-joining
 - Ewe lamb performance
 - Finishing lambs



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Stocking Rate




Stocking Rate	Income	Costs	Feed	Profit
2	100	50	0	50
4	200	100	0	100
6	300	150	0	150
8	400	200	0	200
10	500	250	0	250
12	600	300	0	300
14	700	350	0	350
16	800	400	0	400
18	900	450	50	400
20	1000	500	100	400
22	1100	550	200	350
24	1200	600	400	250
26	1300	650	800	100
28	1400	700	1200	0

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Stocking Rate

- Some feeding in system will be necessary
- If optimally stocked will use extra feed better
- Still need to target feeding



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Feed Conversion Efficiency

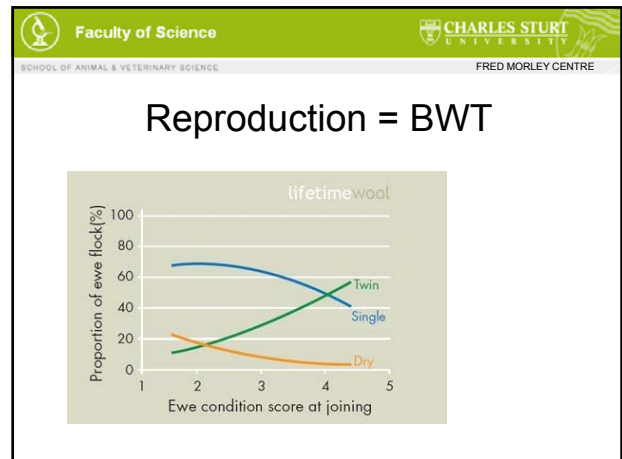
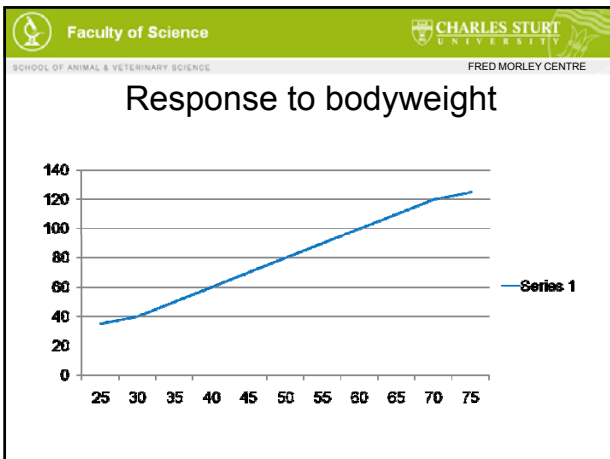
- Clean Wool 100: 1 \$18/kg wool
- Kg weight gain 5.5-7:1 \$1-\$1.20/kg
- Kg weight loss 3:1

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Free Kicks

- There are not many free kicks in farming
 - Compensatory growth
 - **Stopping weight loss**
 - Ewe management





Bwt and reproduction

- In general, every 1 kg increase gives 1-3% extra lambs
- Straight line response
- Note interaction between bwt and seasonality – still favours later joining BUT
- Weight loss gets 3:1 FCE (free kick)

At \$180/T, normally \$54 /lamb but \$27/extra lamb if feed before joining to maintain weight

Joining ewe lambs

- Need to be >40-45 kg
- Need to reach puberty + overcome seasonal issues
- If managed, most research suggests no decrease in future performance (increased?)
- MCPT – 5-8 kg ↑ , lambing rate 50% to 82% ie 1 kg gave 5% increase! Bwt very important!

1 kg gain = 6 kg feed or 600 kg = 5 lambs



\$21.60 / lamb

Finishing lambs

- For drought feeding, maintenance - cents /MJ ME
- For finishing, look at energy density
- Don't want low gains, want maximum gain
- Reduces proportion in maintenance
- If FCE 6:1 (high quality pasture/grain ^{12-13 MJ}), \$1.10 / kg liveweight gain
- If FCE 12:1 (_{9 MJ}), \$2.20/kg gain

Grazing crops

- If graze, no effect on yield?
- Extra urea – 80 kg@\$600 = \$50/ha
- Use 3 T feed @80% efficiency = 2.5 T
- \$20/T feed during feed crunch!

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Summary

- Stocking rate will influence value of feed
- Some feeding will be necessary
- Feed ewes to stop weight loss prior to joining
- Feed ewe lambs if joining
- If feeding lambs, get max weight gains