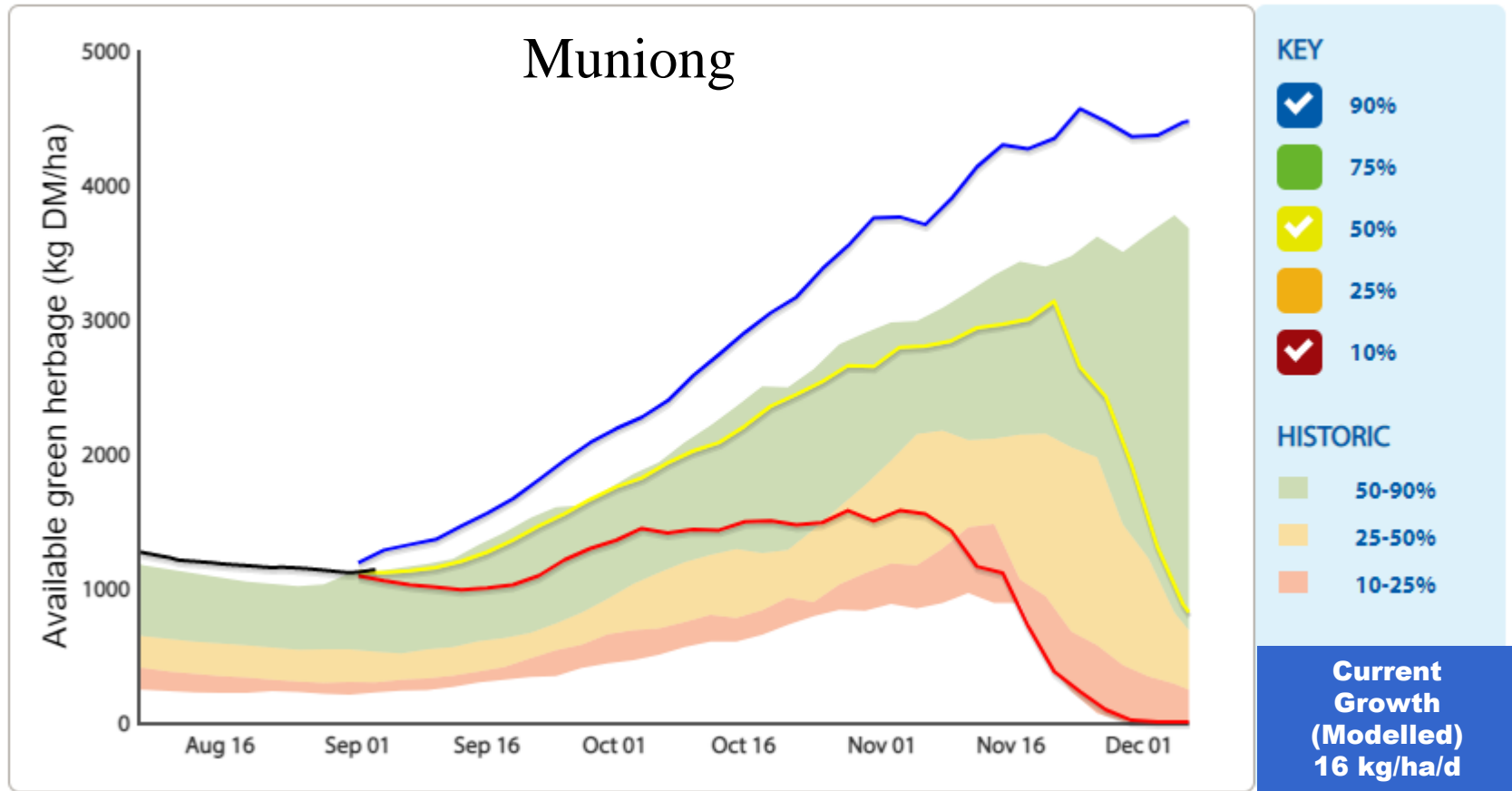


# Seasonal Projections

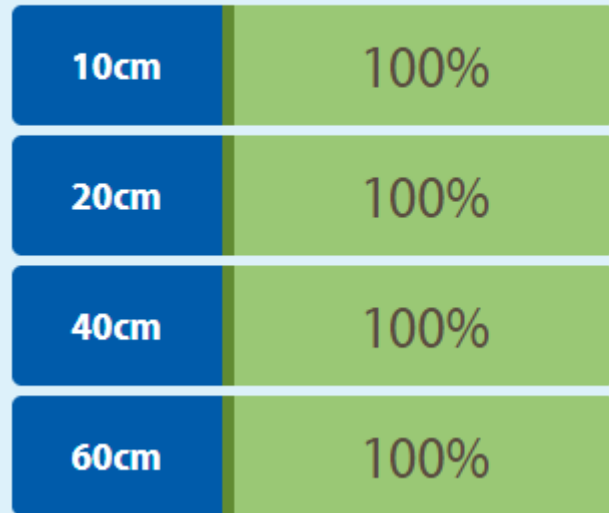


September 2021

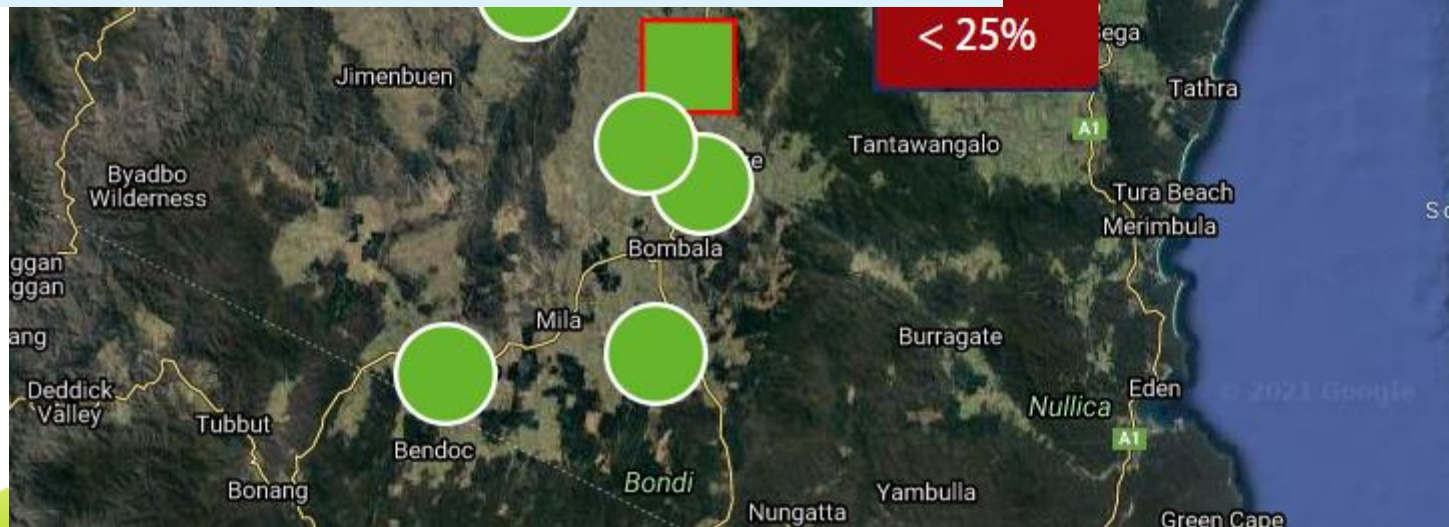
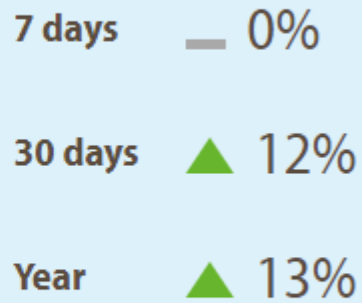
# Extraordinary Seasonal Conditions



## Soil Moisture

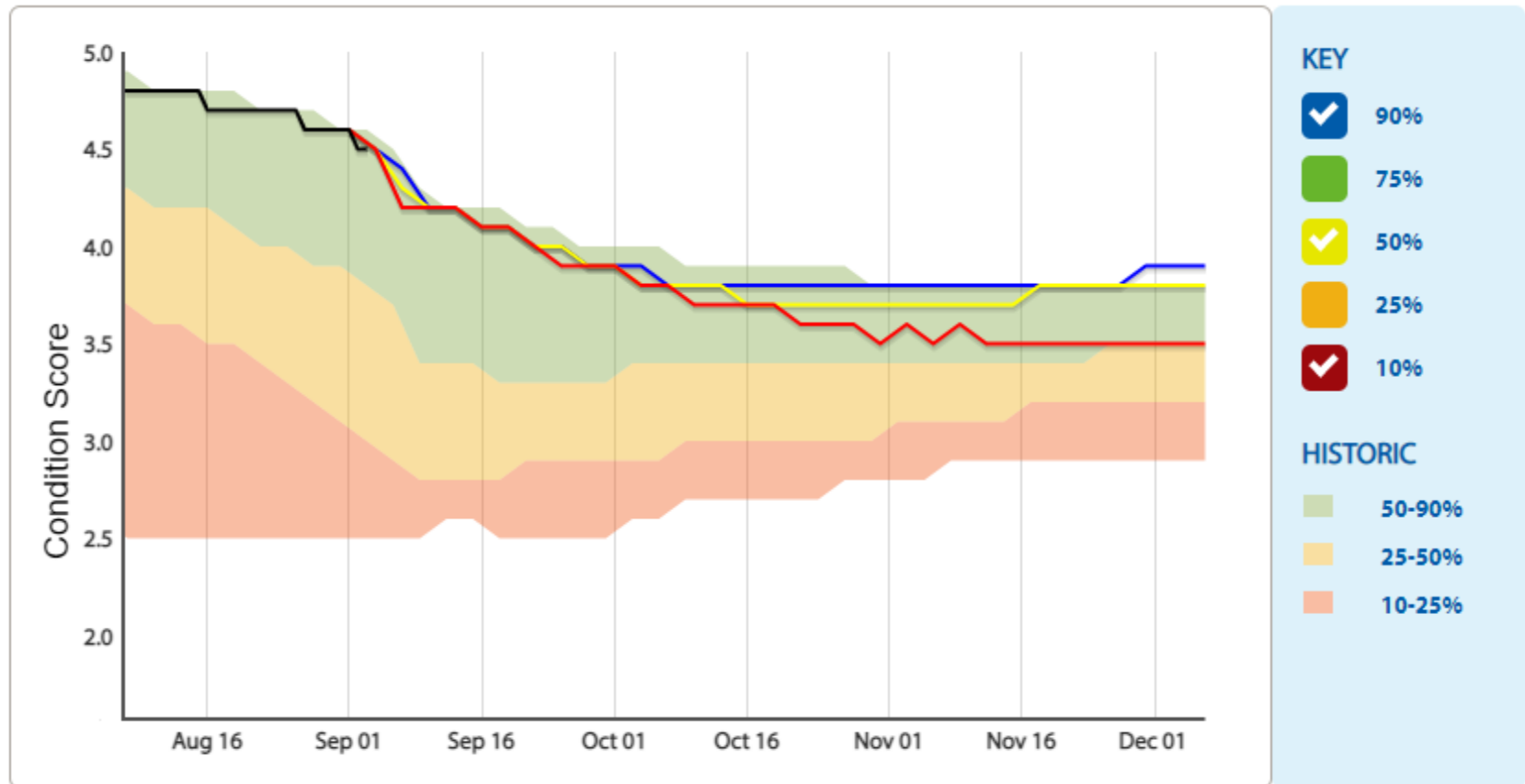


## Change 0-60cm



# Coolringdon

## Female Condition Score



# BOM Outlook

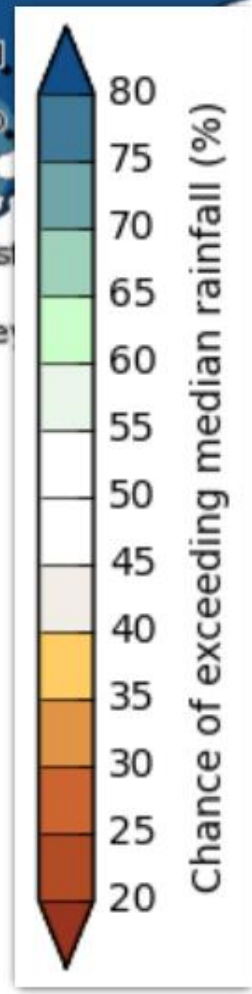
**Outlook for September to November at Coolringdon**

Rainfall	
Median	129 mm
Chance of above median	Very likely

Rainfall total of at least (mm)

Rainfall total (mm)	Chance (%)
50	95
100	85
150	65
200	35
250	10
300	5
400	2

Past accuracy: High



Issued: 2 September 2021



# Issues for spring

- How much spare carrying capacity?
- Under what circumstances would it pay to trade stock?

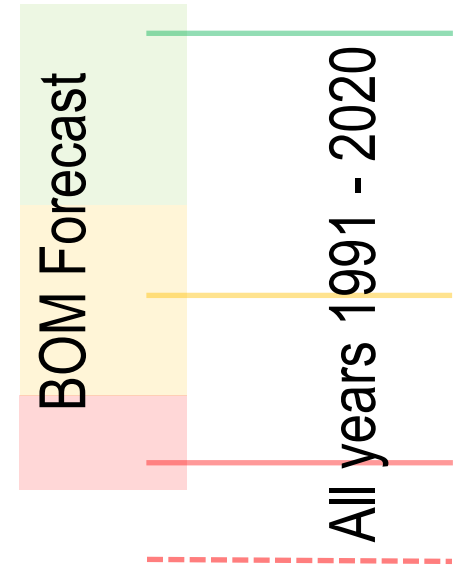
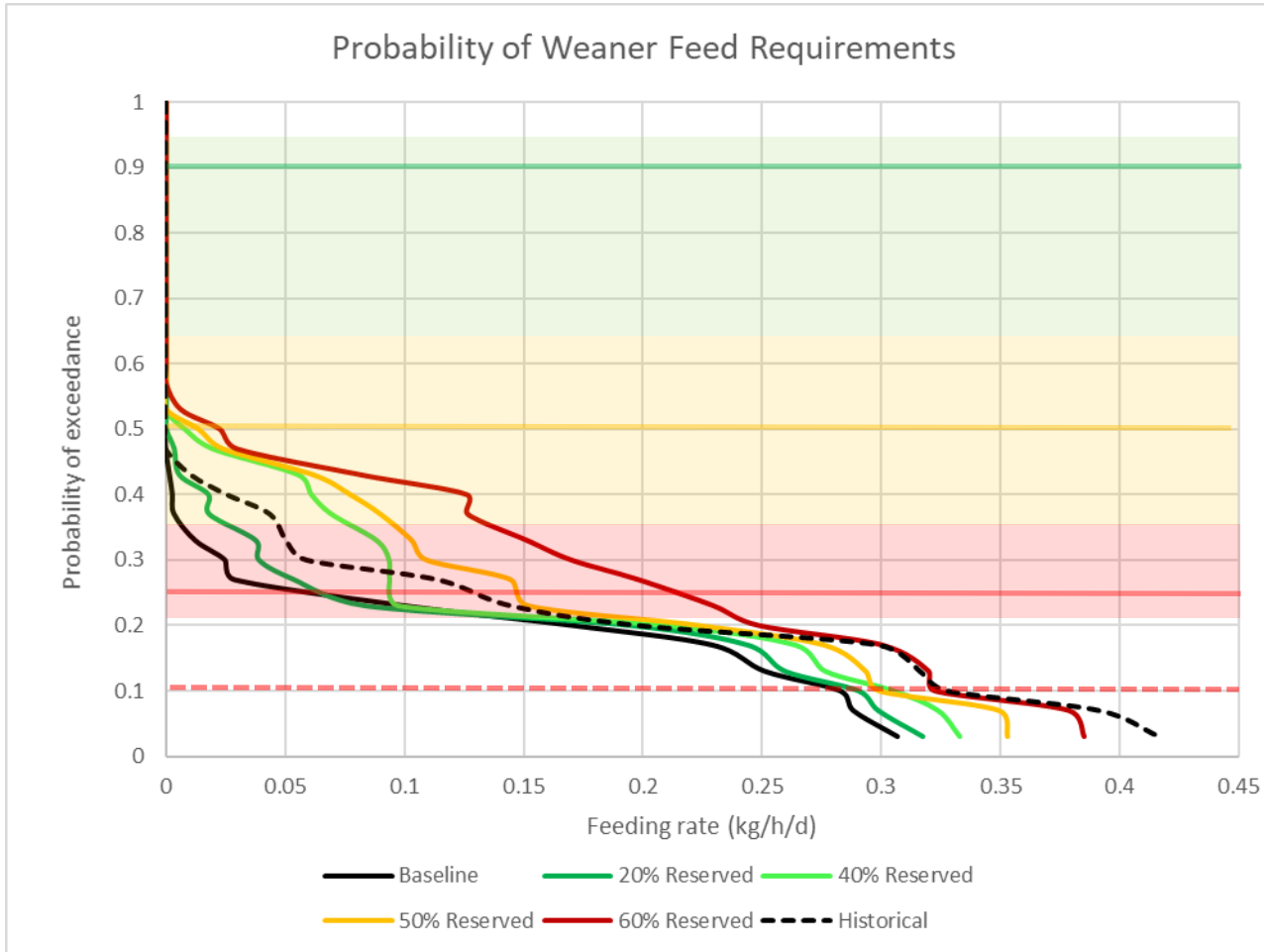


# Carrying Capacity Analysis

- The area available to the ewe enterprise was reduced incrementally.
  - 20%
  - 40% of the area reserved for trading.
  - 50%
  - 60%

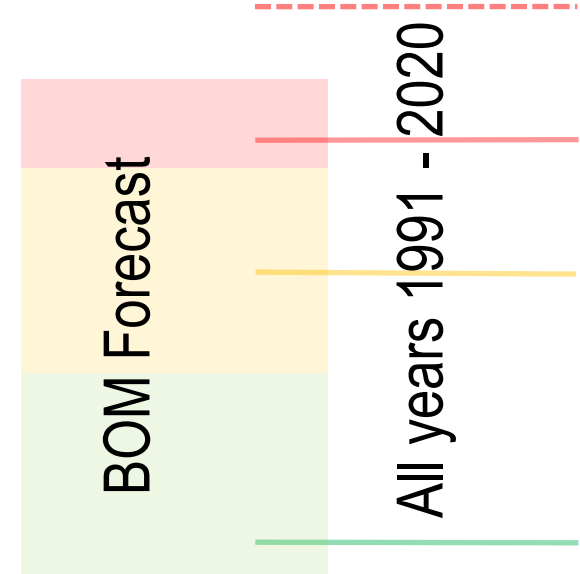
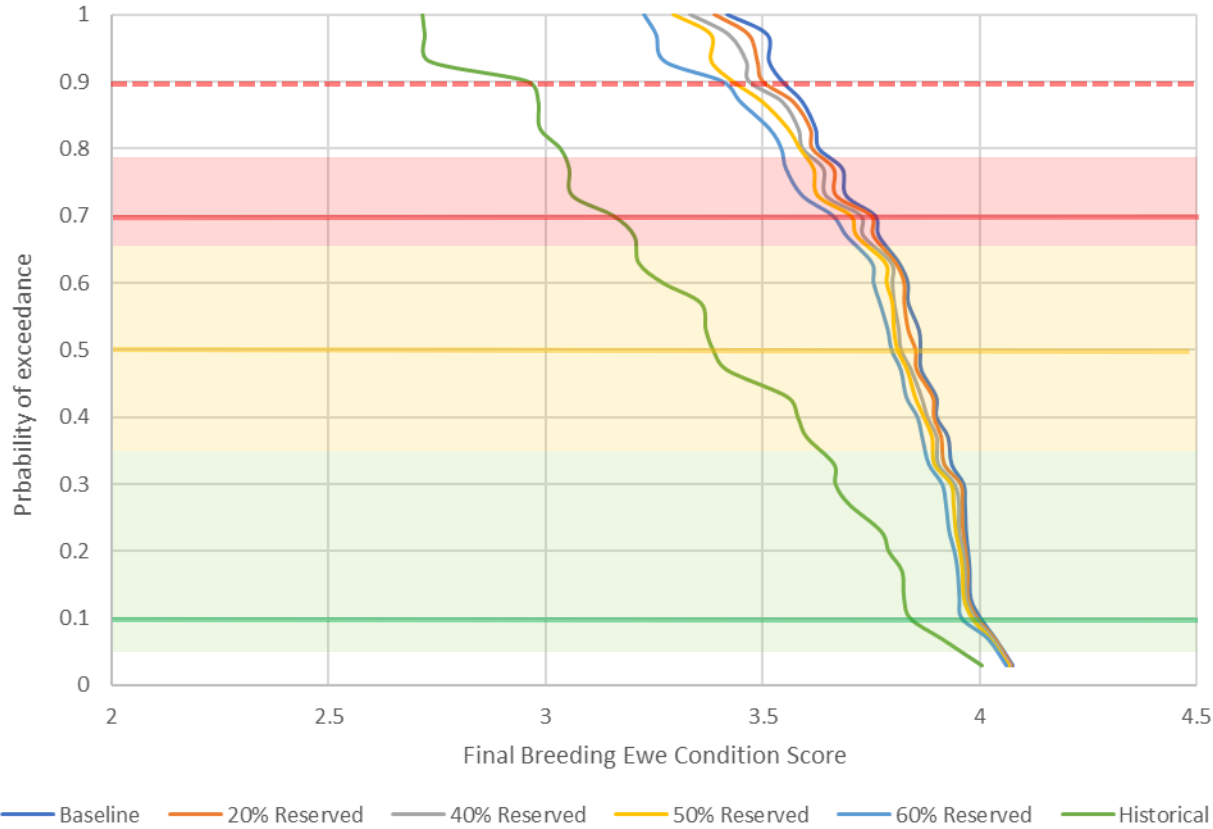


# Impact of running the ewe flock on less area.



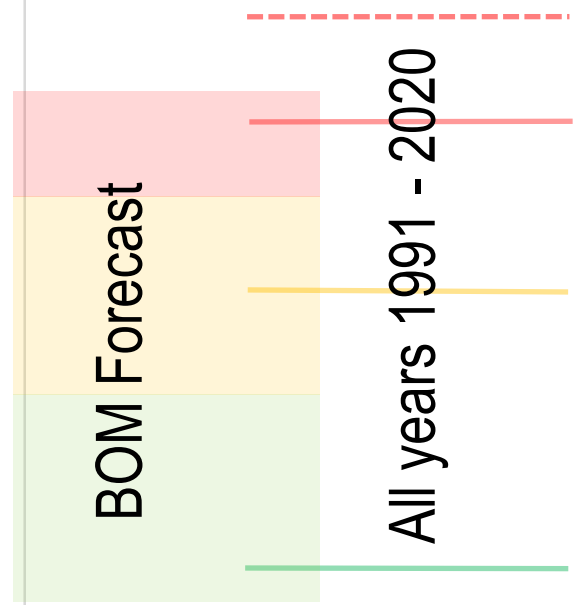
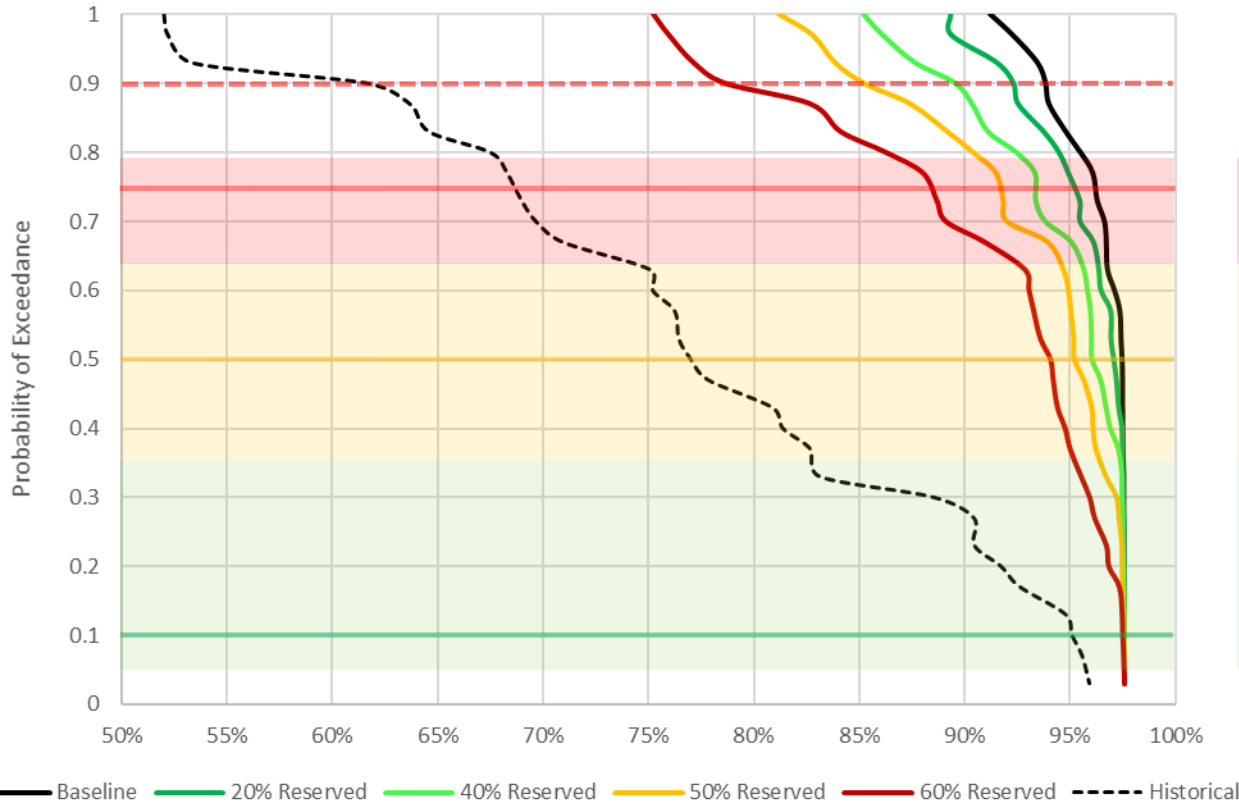
# Impact of running the ewe flock on less area.

Probability of Ewe CS at weaning



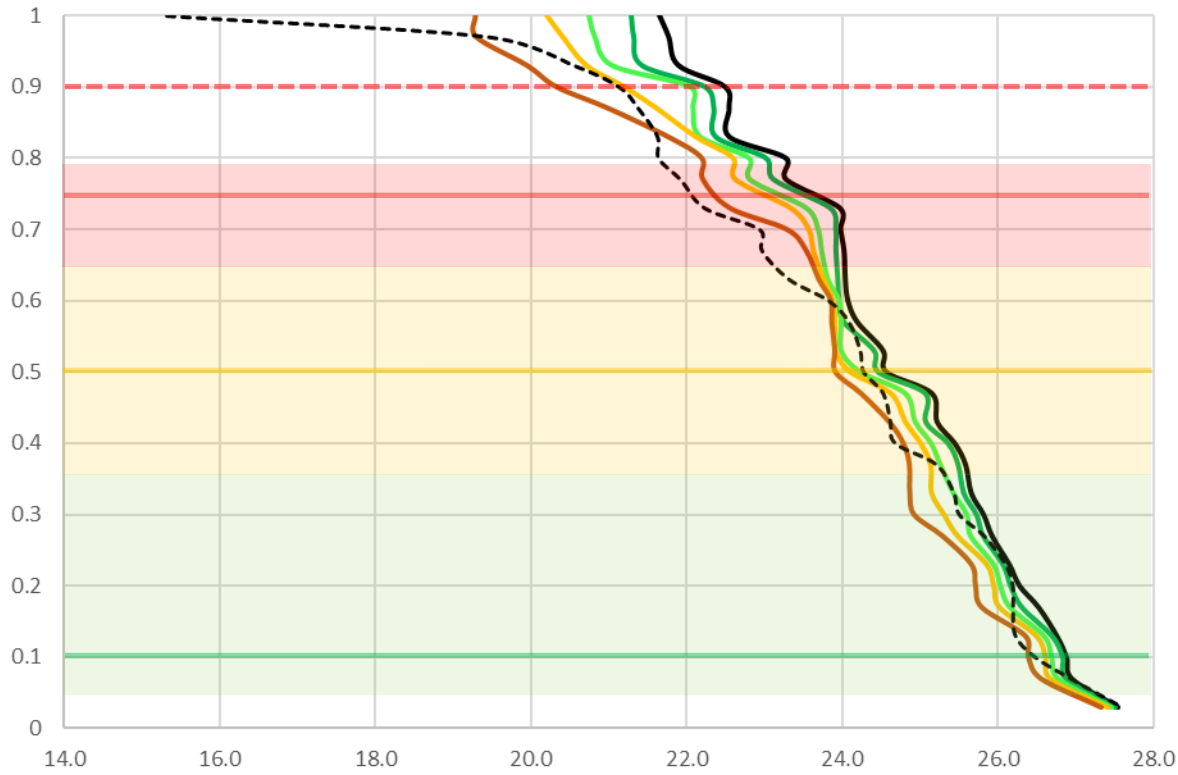
# Impact of running the ewe flock on less area.

Probability of Minimum Ground cover over the period



# Impact of running the ewe flock on less area.

Probability Wether Weaned Liveweight



BOM Forecast

All years 1991 - 2020



# There is significant spare carrying capacity this spring

- The existing enterprise could run at more than twice the long term stocking rate without significantly impacting
  - Ewe CS
  - Weaner liveweight
  - Weaner supplementary feeding
  - Ground Cover.



# What to do with the spare capacity?

- No real retention options.
- Trading seems fraught due to current buy in prices.
  - Buy in 330kg steers
  - Buy in 240kg steers
  - Buy in 35kg xbred lambs



# Buy in 330kg LWt steers

- Purchase on 15<sup>th</sup> September
- Run steers at
  - 0.5/ha, 1/ha, 1.5/ha and 2/ha
- Sell when gain ceases or by 31<sup>st</sup> Jan

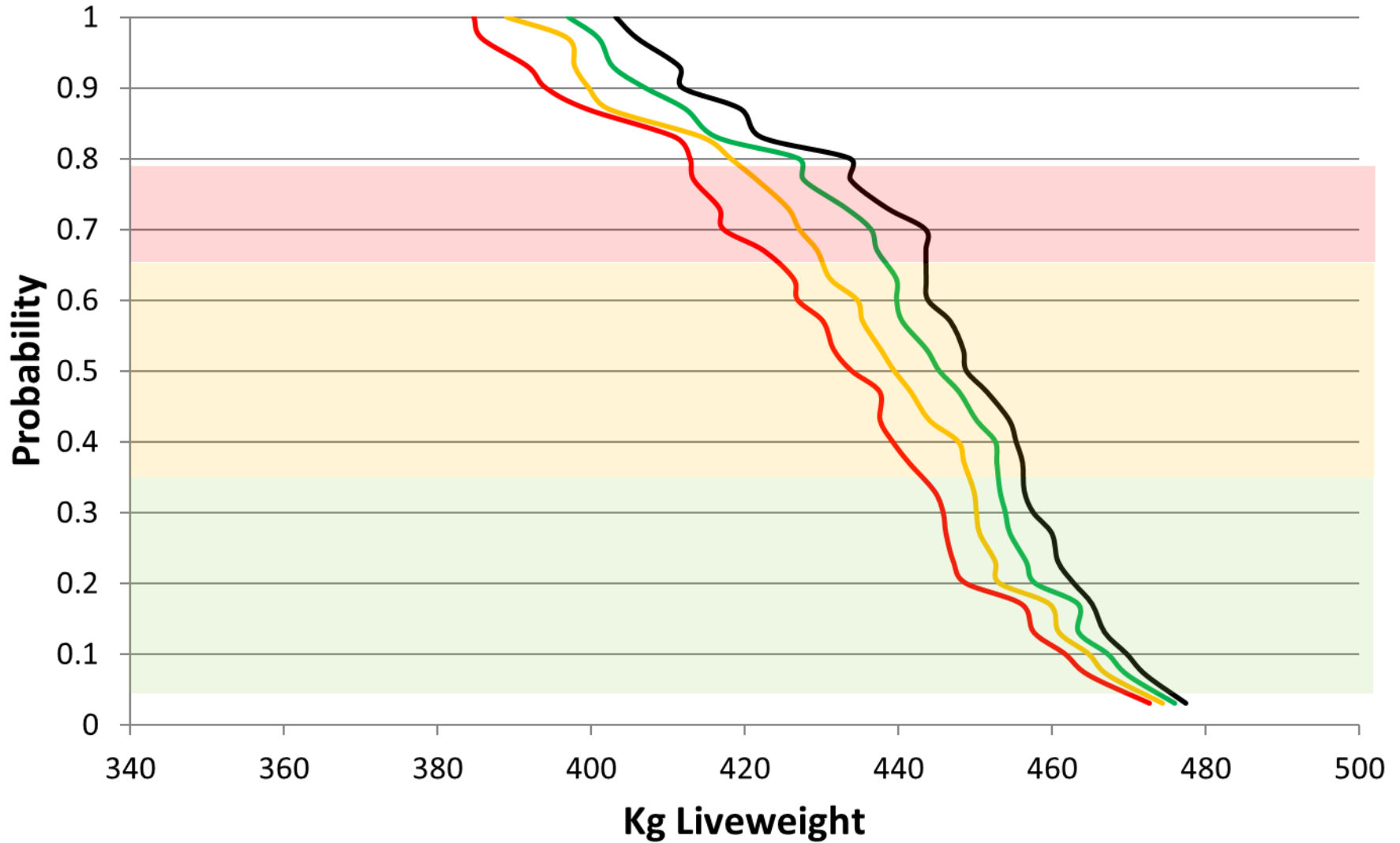


# Economic Assumptions

- Buy in price is 1200c/kg cWT
- Sale price is 1000c/kg cWT
- Costs
  - Husbandry = \$20/hd
  - Sale transport and fixed costs = \$37/hd
  - Sale Commission = 3.5%
  - Purchase Cartage = \$37 (400km)
  - Livestock finance costs = 7% pa (accrued and compounded monthly)
  - Mortality = 2%
  - Single Super (extra P required at 1% of body weight gained)

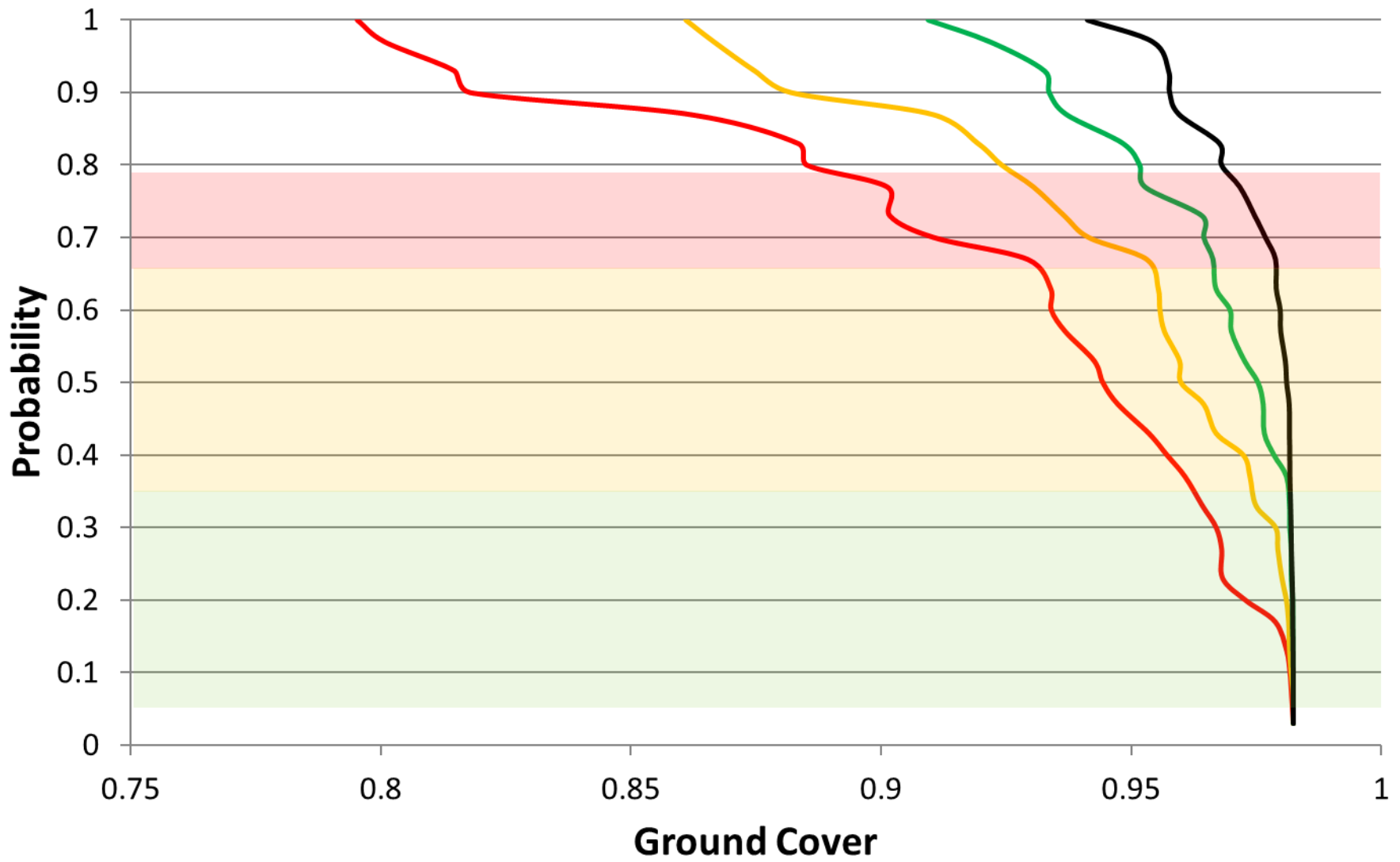


# Steer Sale Weight (330kg buy in weight)



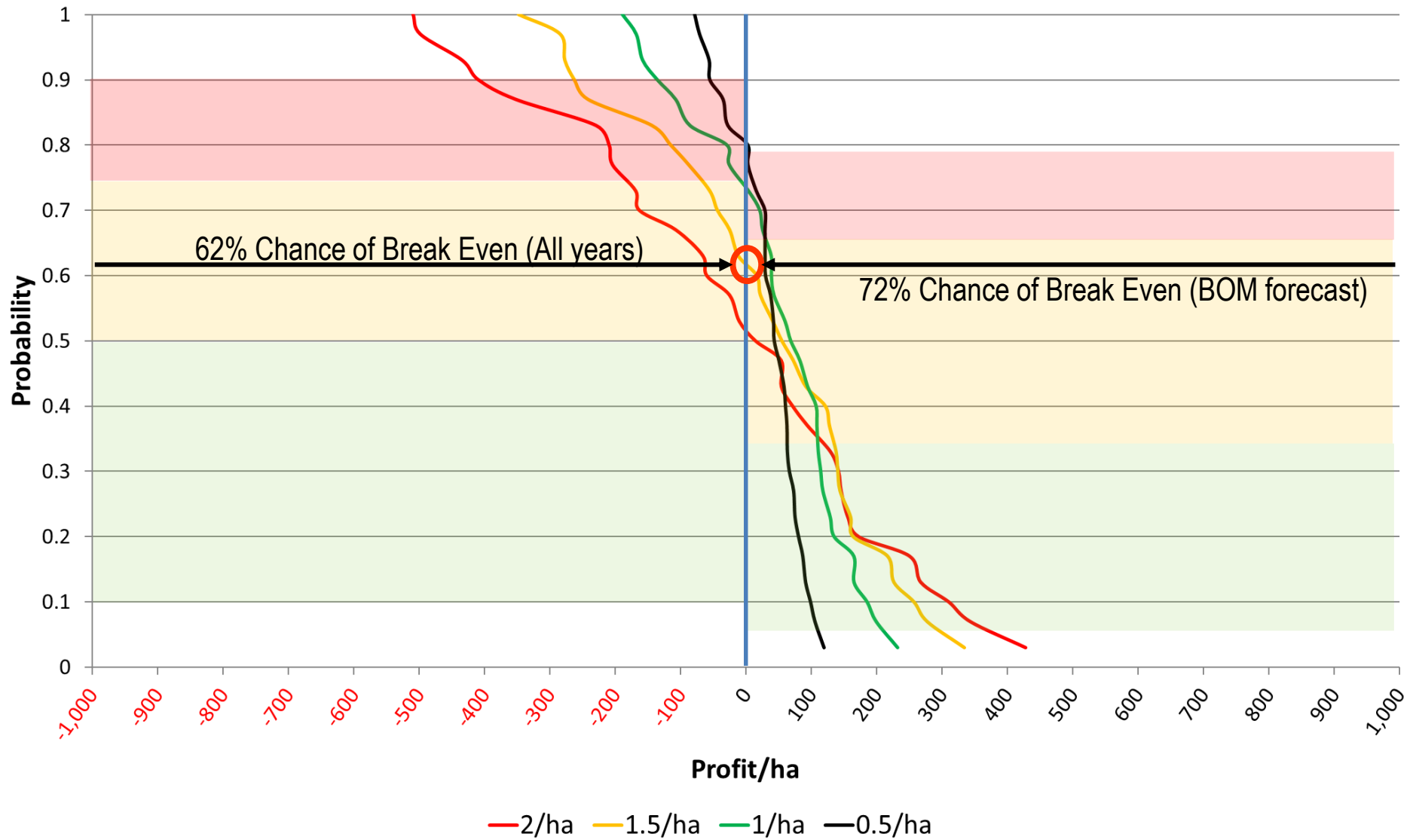
— 2/ha — 1.5/ha — 1/ha — 0.5/ha

# Projected Minimum Ground Cover



— 2/ha — 1.5/ha — 1/ha — 0.5/ha

# Steer Trading Profit (330kg Buy in weight)



# Buy in 240kg LWt steers

- Purchase on 15<sup>th</sup> September
- Run steers at
  - 0.5/ha, 1/ha, 1.5/ha and 2/ha
- Sell when gain ceases or by 31<sup>st</sup> Jan

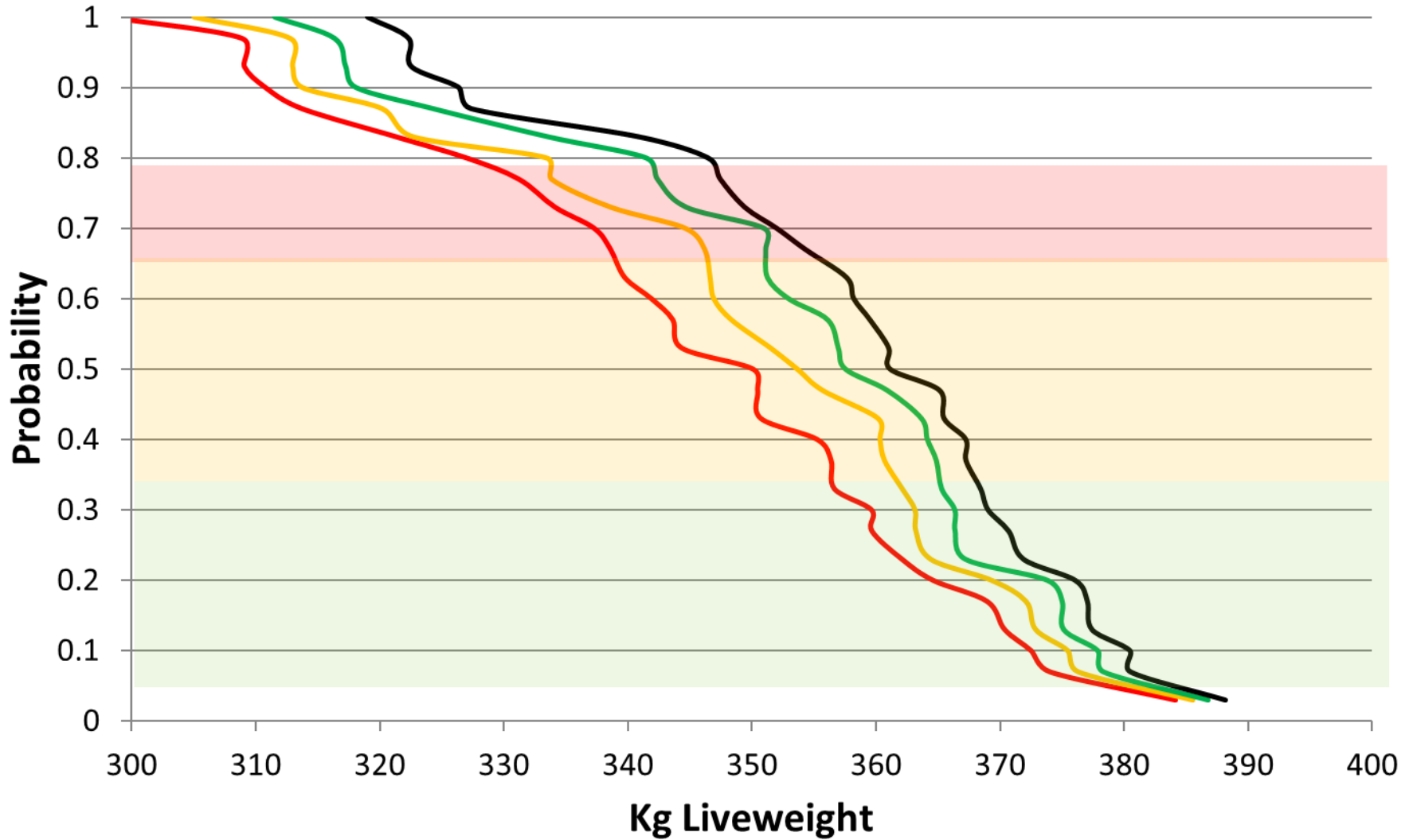


# Economic Assumptions

- Buy in price is 1200c/kg CWT
- Sale price is 1000c/kg CWT
- Costs
  - Husbandry = \$20/hd
  - Sale transport and fixed costs = \$31/hd
  - Sale Commission = 3.5%
  - Purchase Cartage = \$29 (400km)
  - Livestock finance costs = 7% pa (accrued and compounded monthly)
  - Mortality = 2%
  - Single Super (extra P required at 1% of body weight gained)

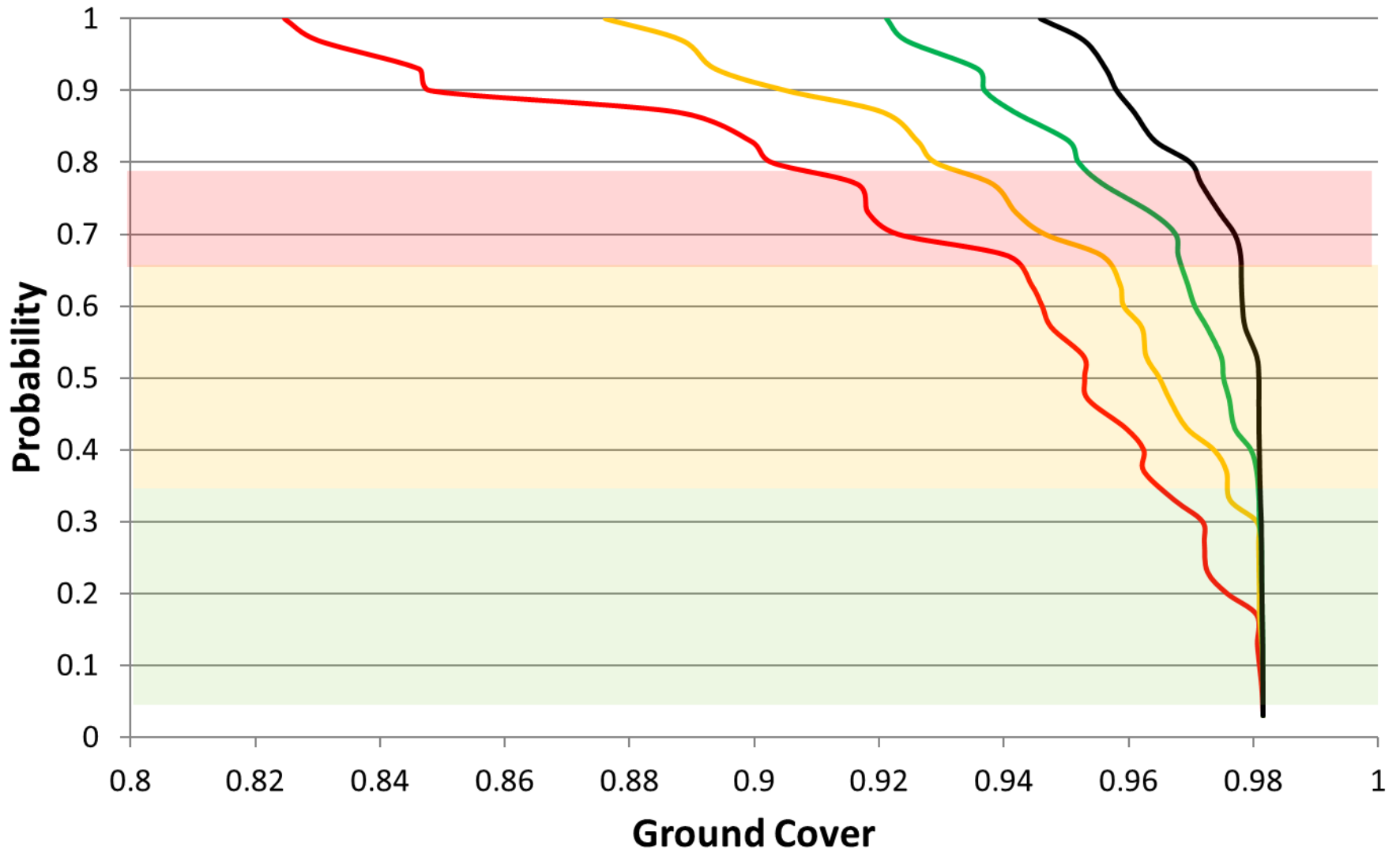


# Steer Sale Weight (240kg buy in wt)



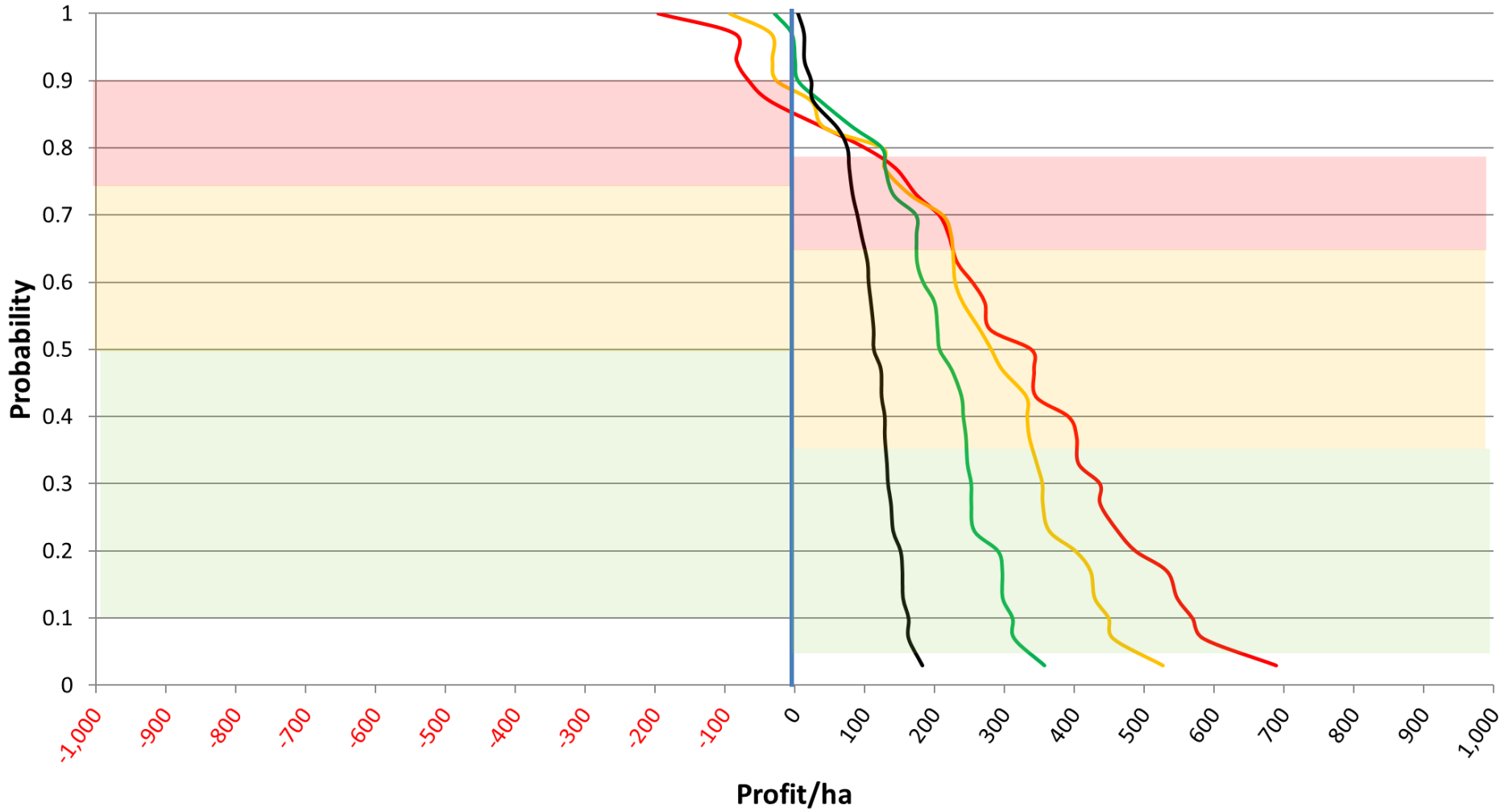
— 2/ha — 1.5/ha — 1/ha — 0.5/ha

# Projected Minimum Ground Cover



— 2/ha — 1.5/ha — 1/ha — 0.5/ha

# Steer Trading Profit (240kg LWt buy in)



— 2/ha — 1.5/ha — 1/ha — 0.5/ha

# Buy in 35kg 2<sup>nd</sup>-X lambs

- Purchase 15<sup>th</sup> September
- Run lambs at
  - 5/ha, 10/ha, 15/ha and 20/ha
- Sell during December when lambs reach 50kg or by 31 Dec final sale date.

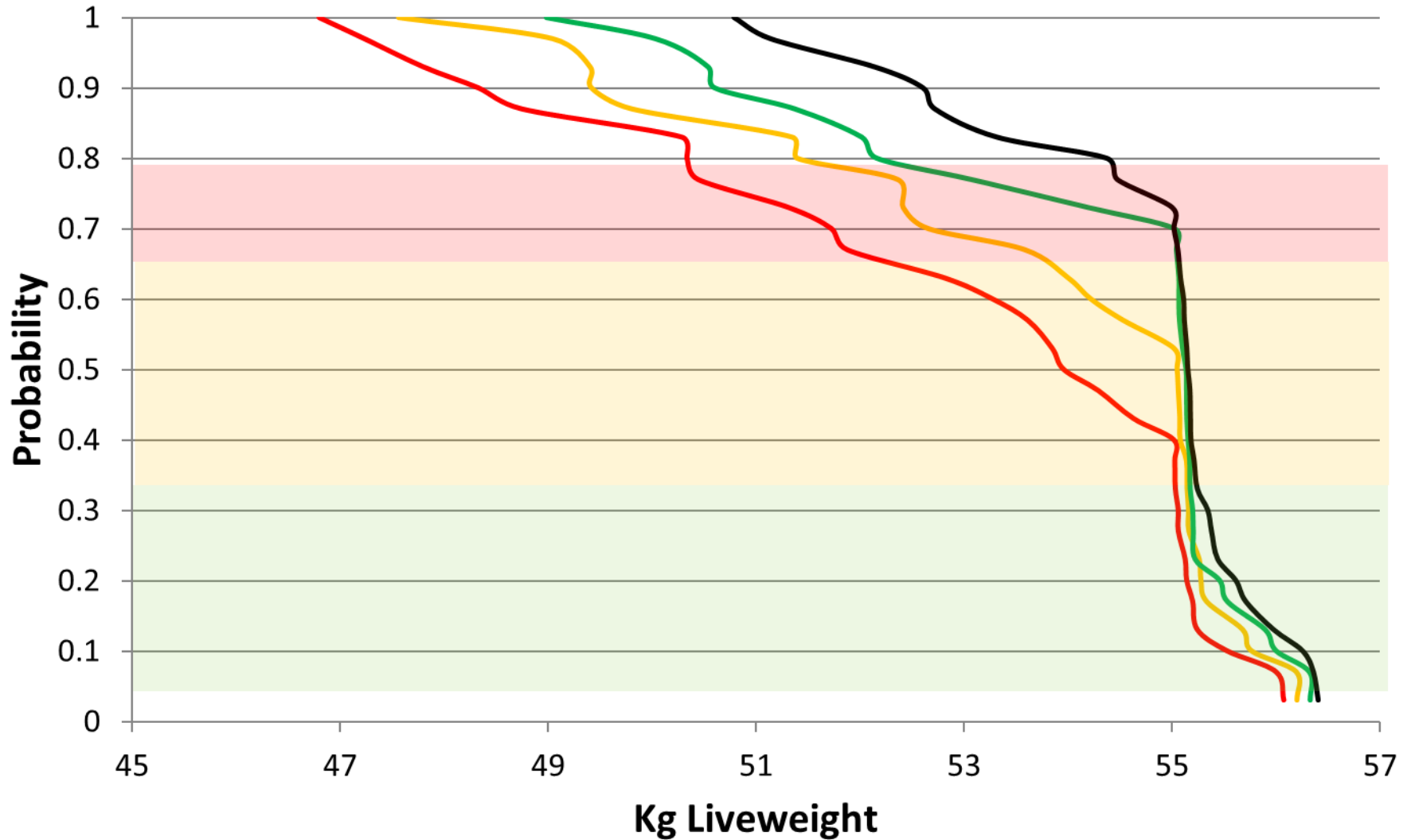


# Economic Assumptions

- Buy in price is 1005c/kg cwt
- Sale price is 944c/kg cwt
- Costs
  - Husbandry = \$4/hd
  - Sale transport and fixed costs = \$6/hd
  - Sale Commission = 3.5%
  - Purchase Cartage = \$5.20 (400km)
  - Livestock finance costs = 7% pa (accrued and compounded monthly)
  - Mortality = 2%
  - Single Super (extra P required at 1% of body weight gained)

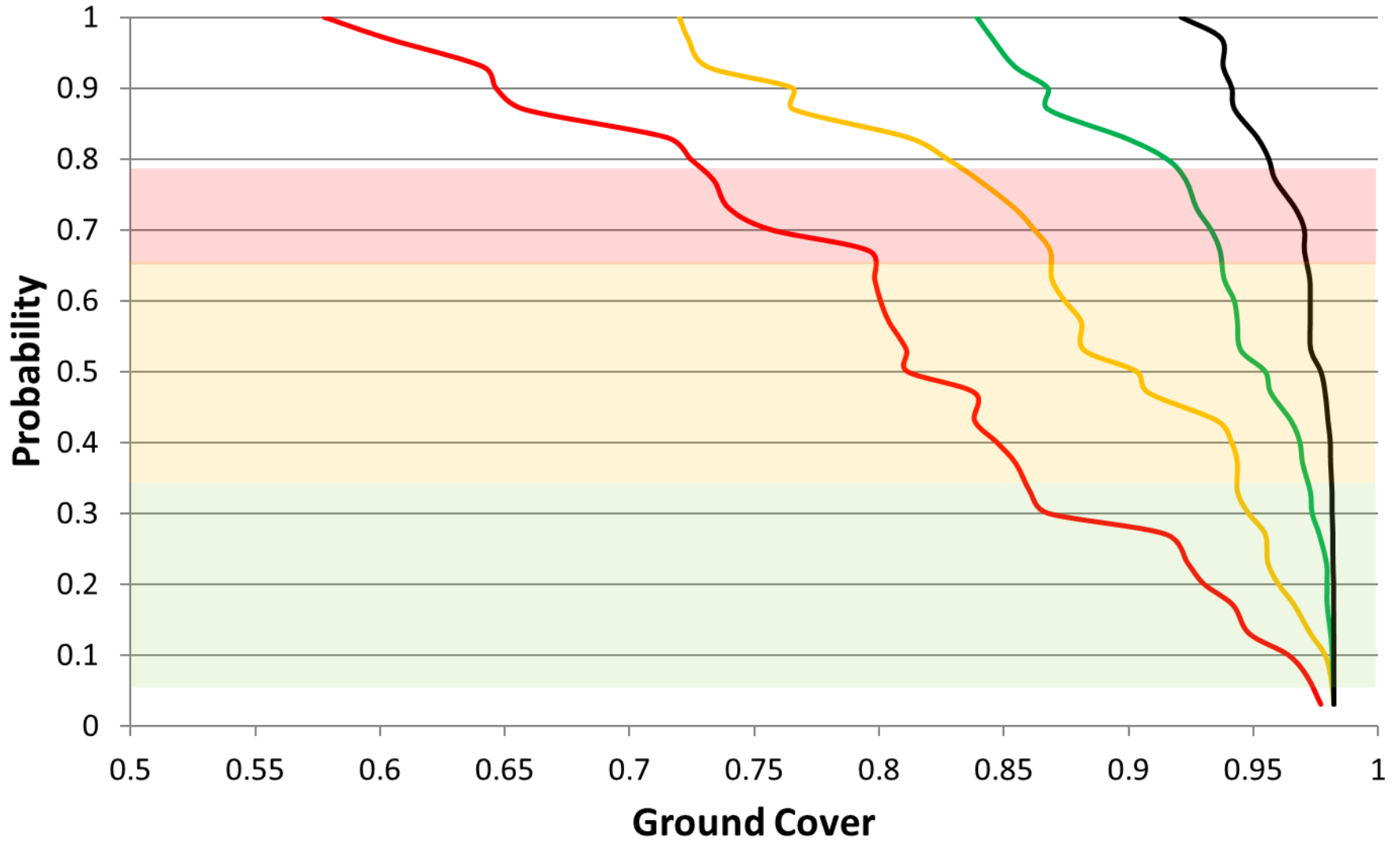


# Lamb Sale Weights (35kg Lwt buy in)



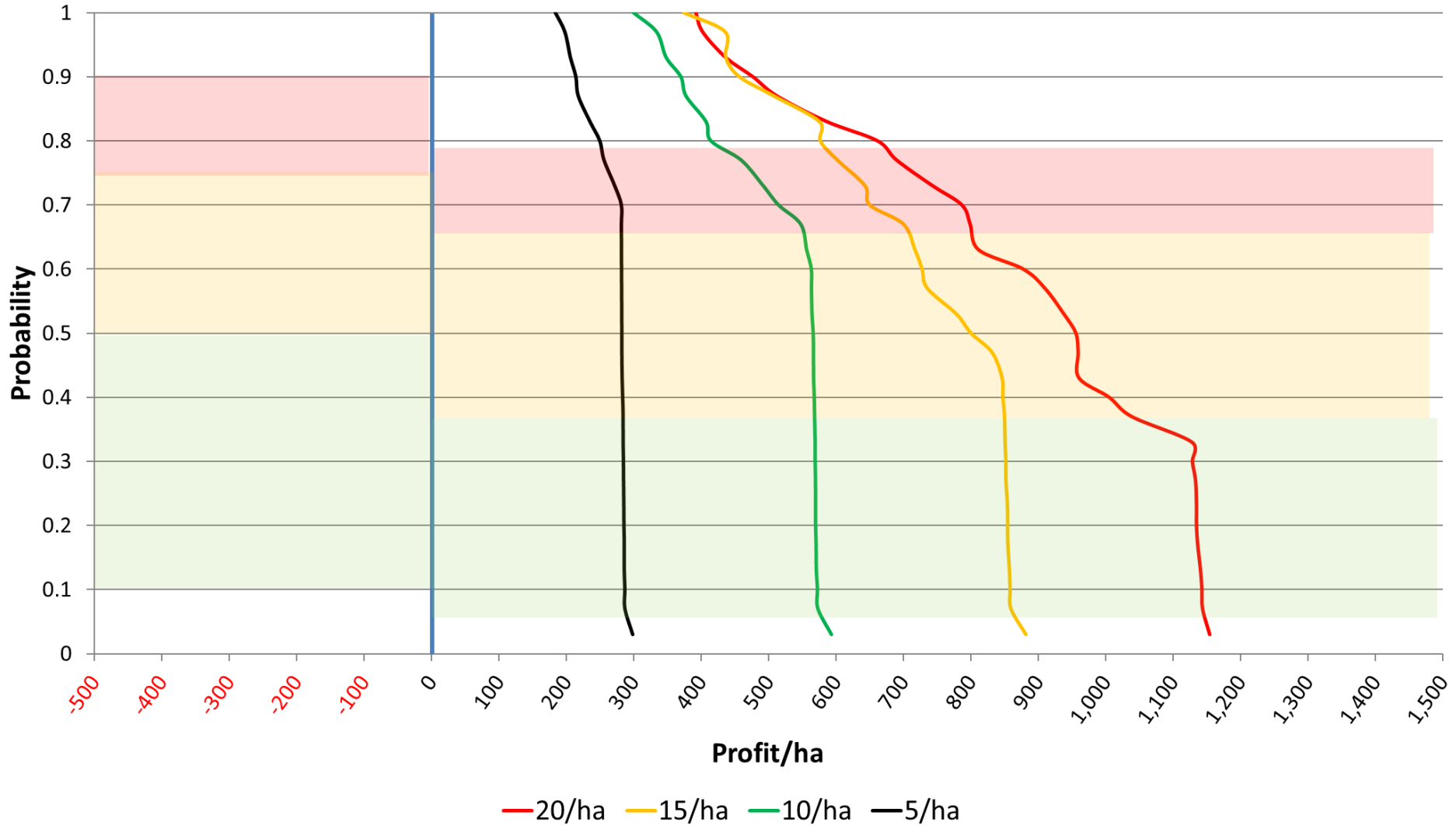
—20/ha —15/ha —10/ha —5/ha

# Minimum Ground Cover (lambs at 4 stocking rates)



— 20/ha — 15/ha — 10/ha — 5/ha

# Lamb Trading Profit (35 kg LWt Buy in)



— 20/ha — 15/ha — 10/ha — 5/ha



# Q) Why does trading a lighter steer or a lamb give a better return?

A1) Gain is a greater proportion of entry weight.

- Heavy Steers             $450\text{kg} - 330\text{kg} = 120\text{kg gain}$   
                                  $120\text{kg} / 330\text{kg} = 36\% \text{ gain}$
- Light Steers             $360\text{kg} - 240\text{kg} = 120\text{kg gain}$   
                                  $120\text{kg} / 240\text{kg} = 50\% \text{ gain.}$
- Lambs                     $55\text{kg} - 35 \text{ kg} = 15\text{kg gain}$   
                                  $15\text{kg} / 35\text{kg} = 42\% \text{ gain}$
- The financial loss on the initial kg is amortised over a relatively greater number of kg gained.

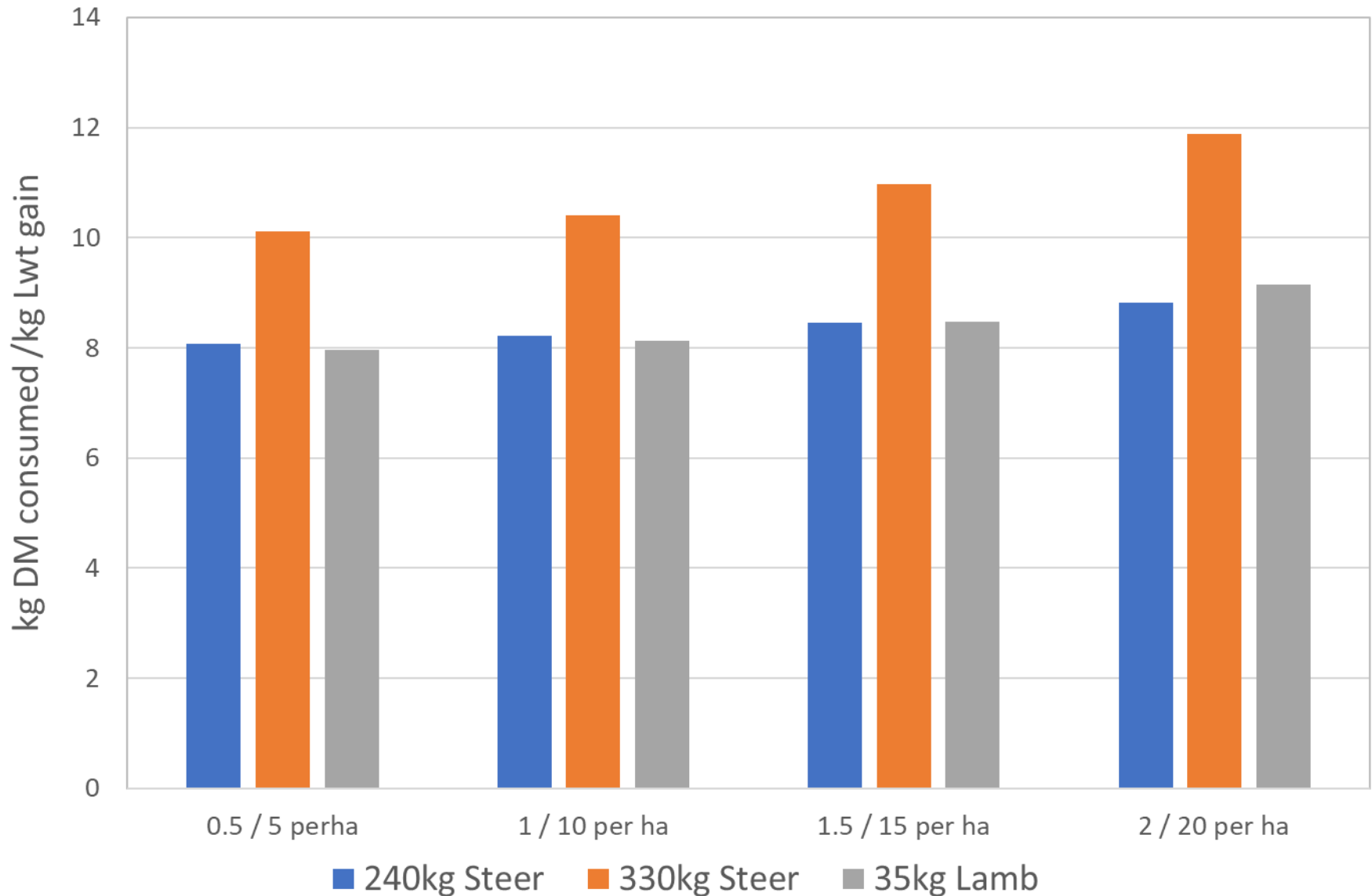


Q) Why does trading a lighter steer or a lamb give a better return?

A2) The less mature animals are more feed efficient due to gain having a relatively higher proportion of lean vs fat tissue.



## Average Feed Conversion for each option



# Sensitivity Analysis



