



Feed Budgets

Managing Feed quantity



30 YEARS
1995-2025

SFS

Southern Farming Systems



MEAT & LIVESTOCK AUSTRALIA

NAB Business Everyday Account

For further information call the

Business Servicing Team on 13 10 12

Account Balance Summary

Pasture growth

Opening balance	\$157,381.33	Cr
Total credits	\$17,048.28	
Total debits	\$70,089.00	
Closing balance	\$104,340.61	Cr

Animal
consumption (eat)

Pasture at start

Time period

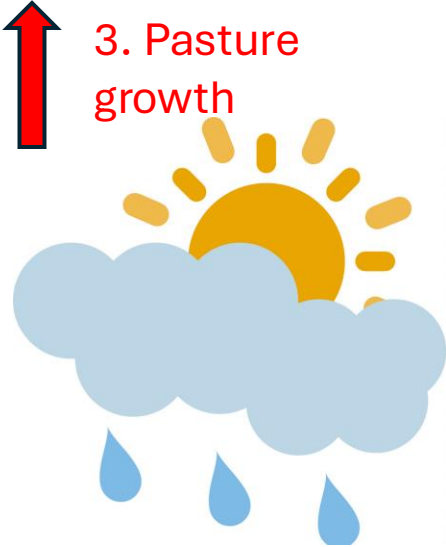
Statement starts 1 January 2021
Statement ends 29 January 2021

Pasture at end

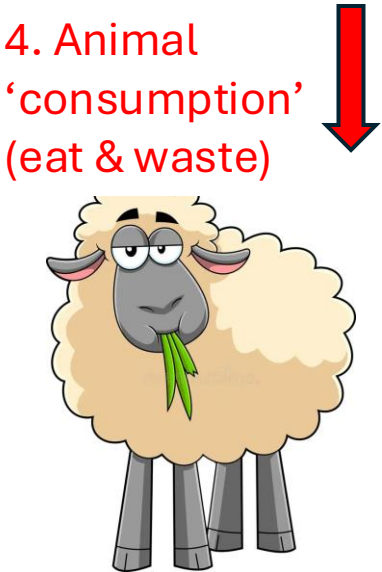
Feed budgets



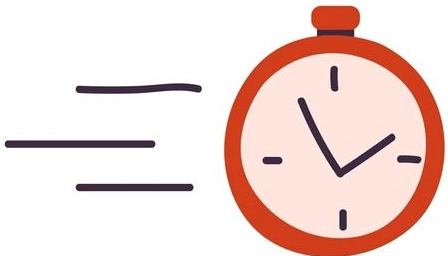
1. Pasture at start



3. Pasture growth



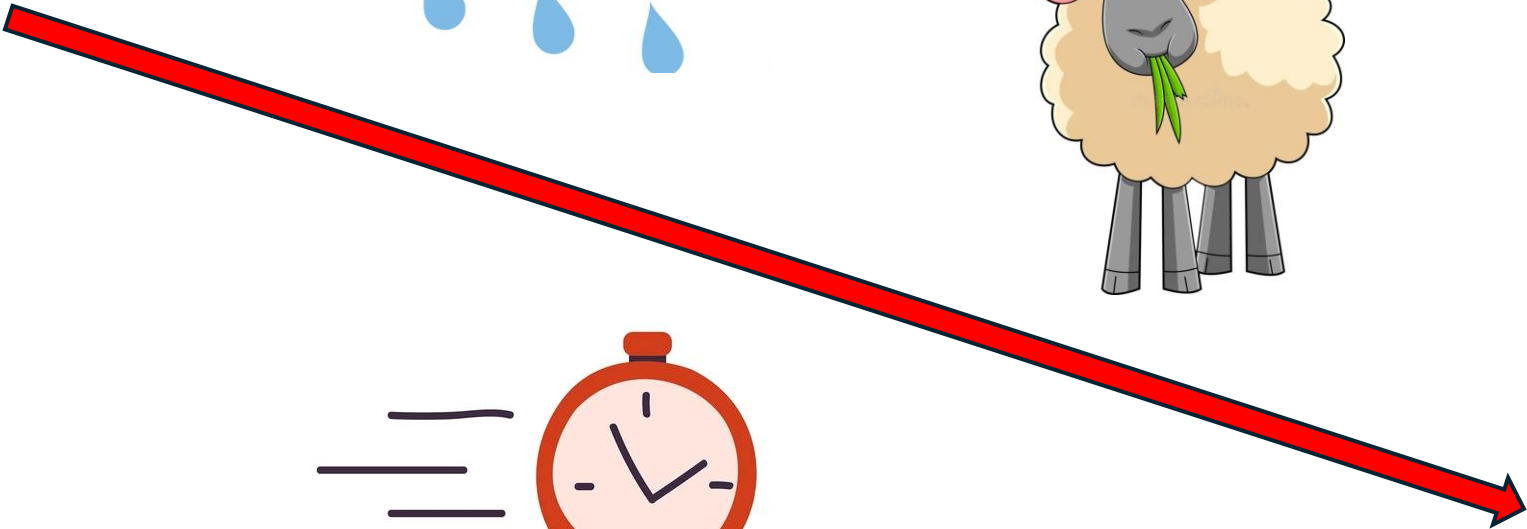
4. Animal 'consumption' (eat & waste)



5. Time period



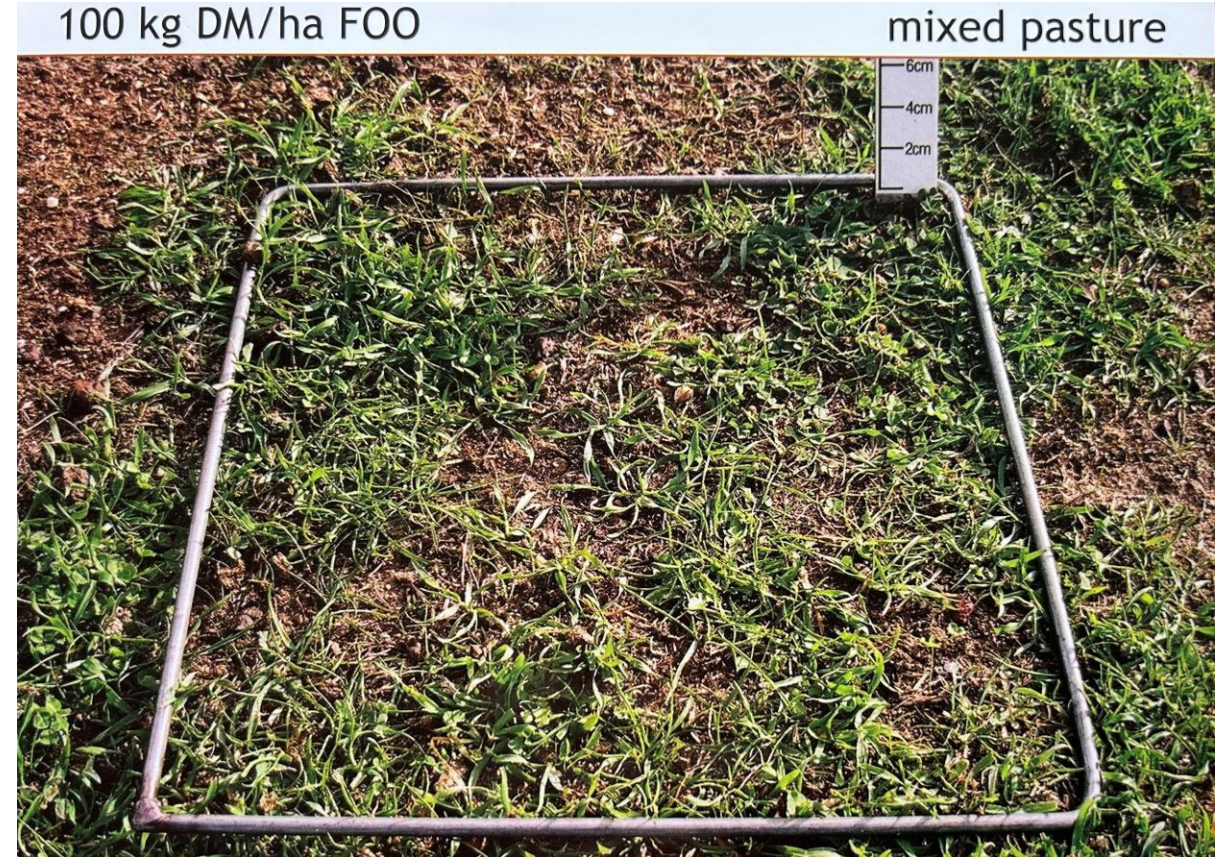
2. Pasture at end



1. Pasture at the start

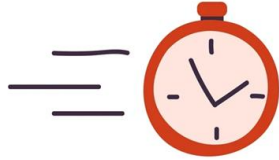


50 kg DM/ha green



100 kg DM/ha green

2. Time period



Have predetermined time periods:

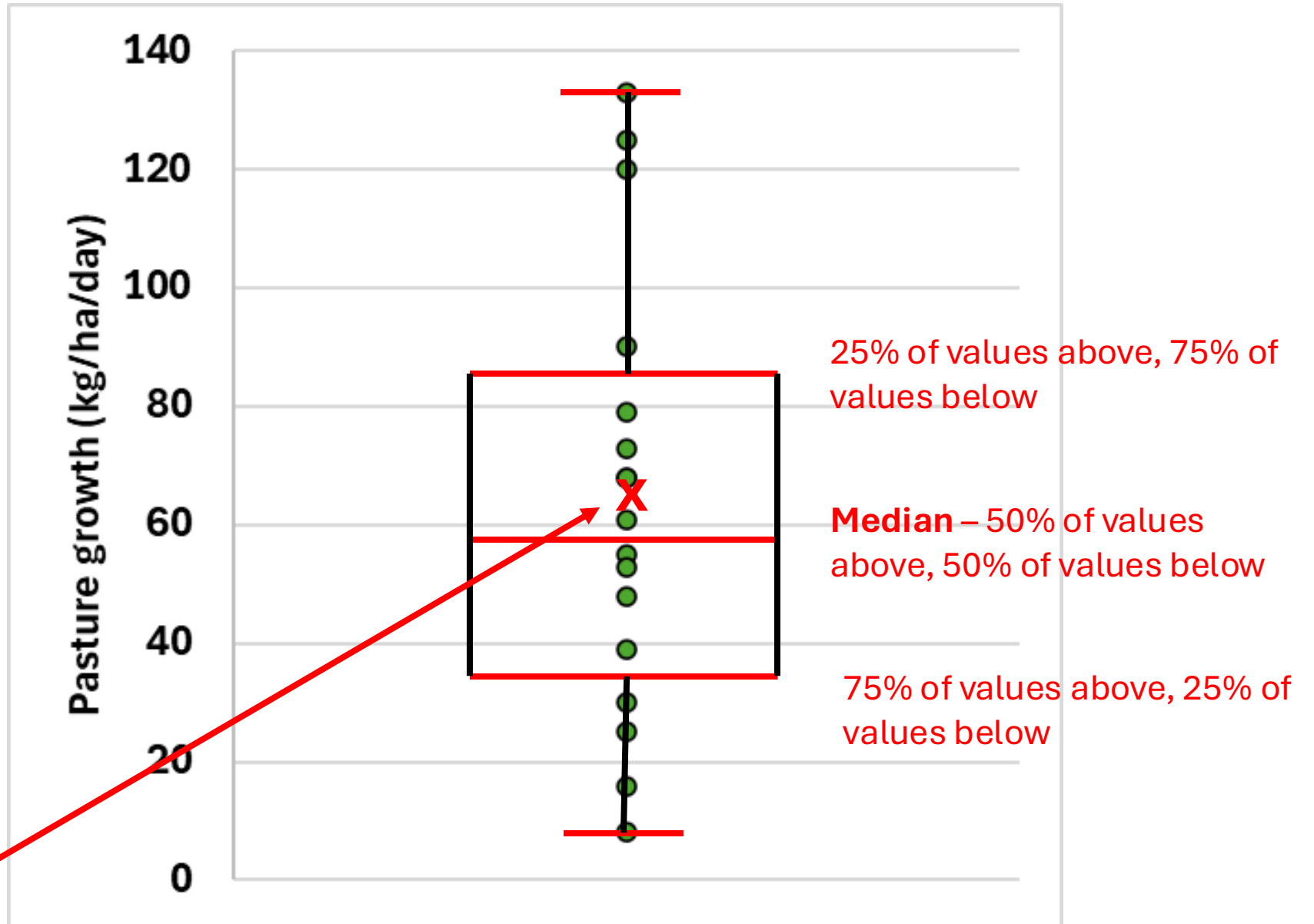
- End of May
- End of June
- End of July
- End of August

Box and whisker graphs

How they are constructed and how to interpret them

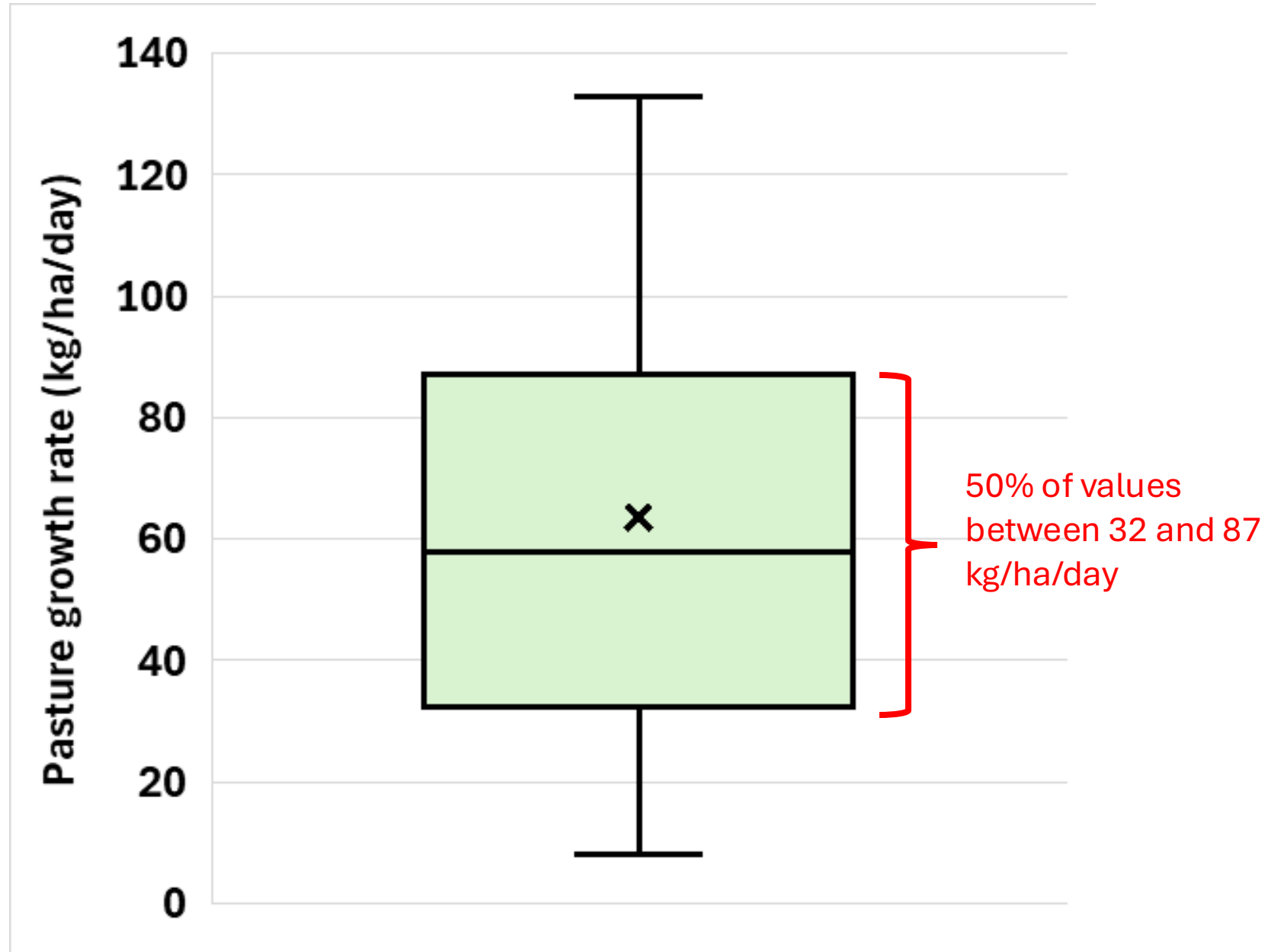
Consider an example with 16 years of November pasture growth

Year	Nov PGR (kg/ha)
2004	73
2005	39
2006	8
2007	133
2008	55
2009	61
2010	68
2011	53
2012	25
2013	120
2014	16
2015	30
2016	90
2017	48
2018	68
2019	79
2020	125



Consider an example with 16 years of November pasture growth

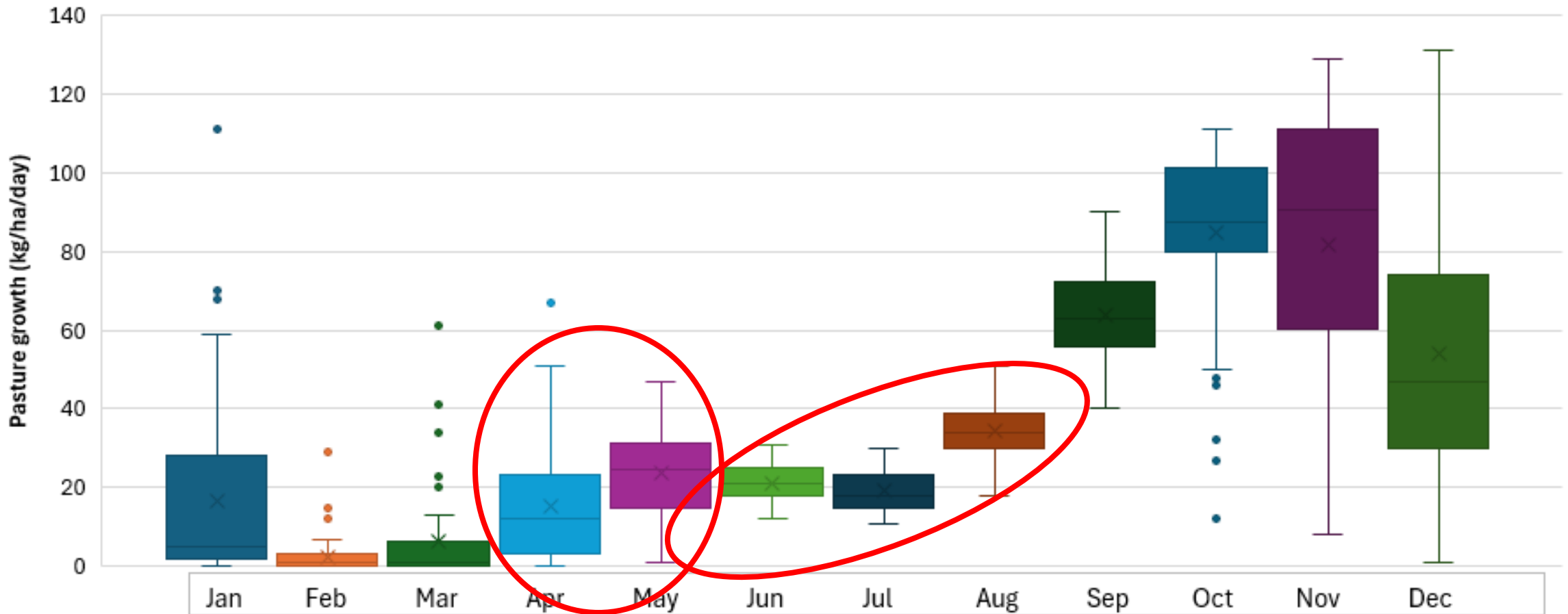
Year	Nov PGR (kg/ha)
2004	73
2005	39
2006	8
2007	133
2008	55
2009	61
2010	68
2011	53
2012	25
2013	120
2014	16
2015	30
2016	90
2017	48
2018	68
2019	79
2020	125
Average	64

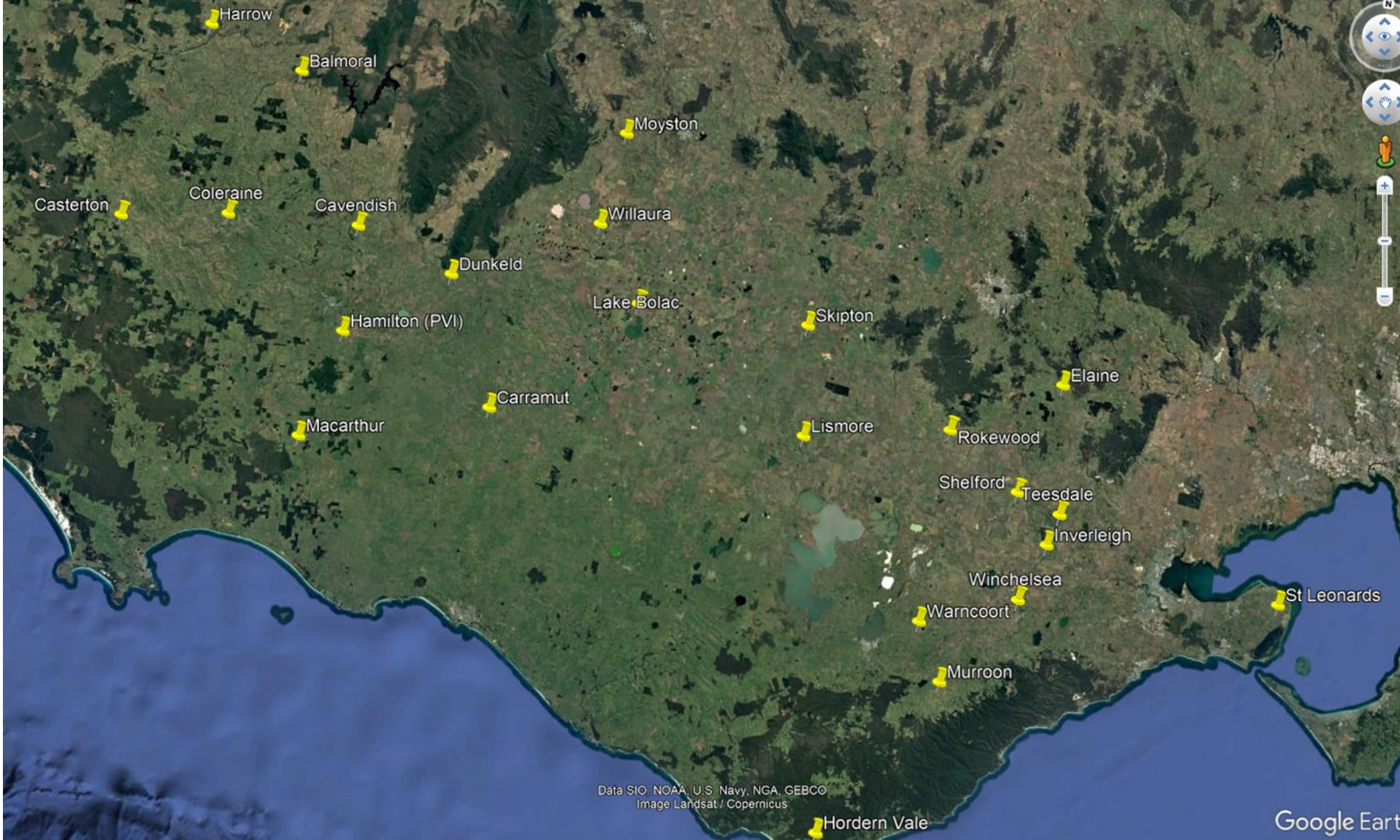


3. Pasture grown



Daily pasture growth rate (1970 to 2023)





Harrow

Balmoral

Moyston

Casterton

Coleraine

Cavendish

Willaura

Dunkeld

Lake Bolac

Skipton

Hamilton (PVI)

Elaine

Macarthur

Carramut

Lismore

Rokewood

Shelford

Teesdale

Inverleigh

Winchelsea

Warncourt

St Leonards

Murroon

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus

Hordern Vale

Google Earth

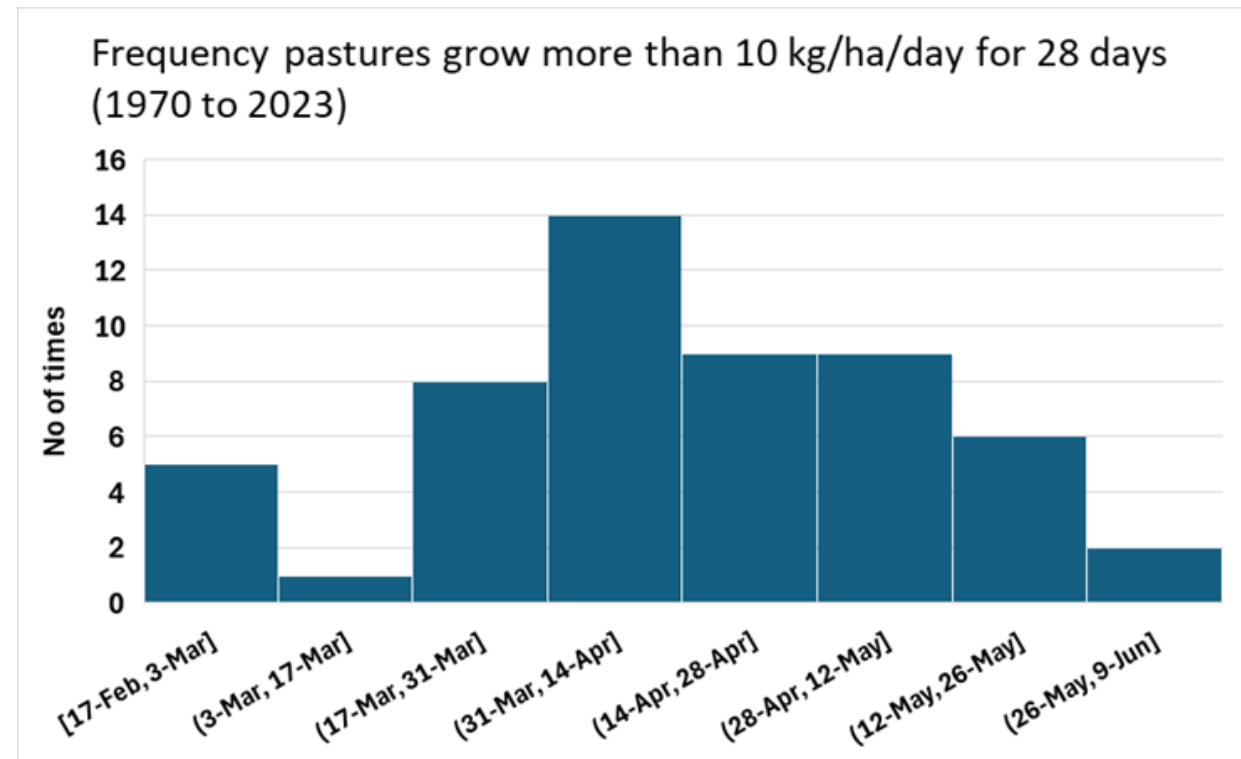
3. Pasture grown



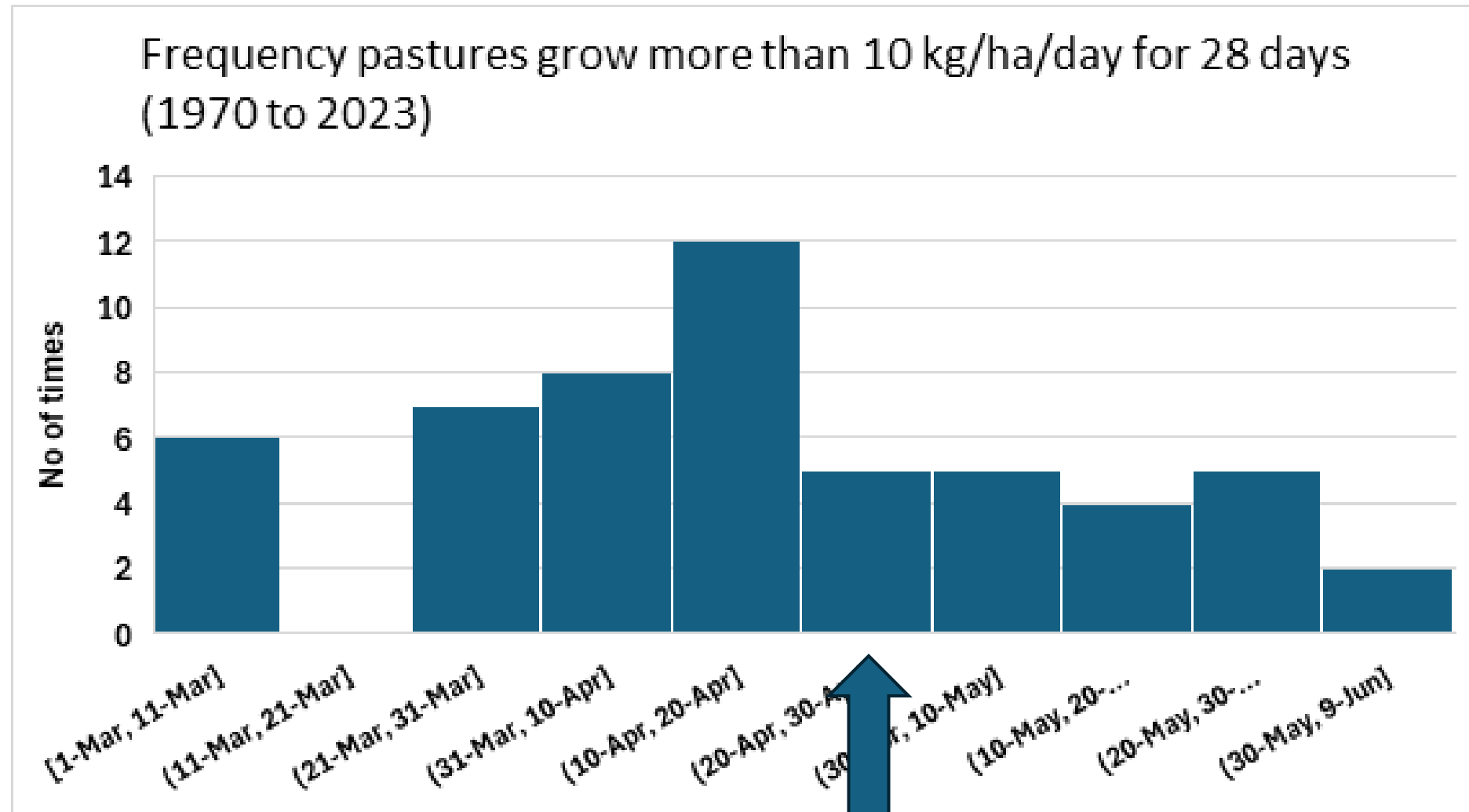
Different “start dates” (the autumn break)

- Start date refers to a period of 4 consecutive weeks where pasture growth is greater than 10 kg/ha/day (i.e. 70 kg/ha/week).

Date	Pasture growth 7 days (kg/ha)	Rainfall in 7 days (mm)
3/03/2022	0	14
10/03/2022	40	12
17/03/2022	128	0
False start	100	2
31/03/2022	62	5
7/04/2022	7	0
14/04/2022	78	13
True start	134	2
20/04/2022	130	9
5/05/2022	284	20
12/05/2022	270	12
19/05/2022	323	6
26/05/2022	230	29



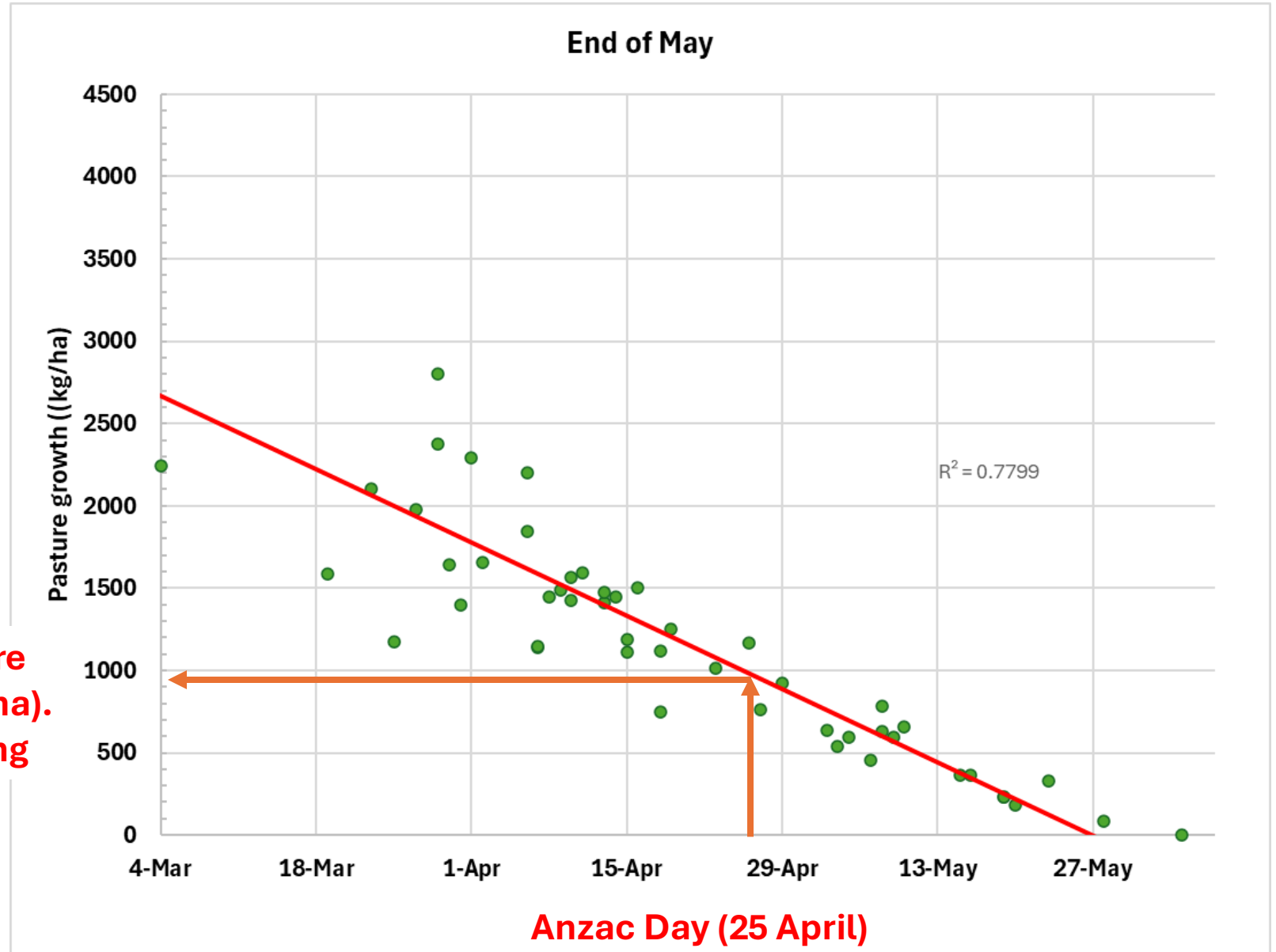
3. Pasture grown – Hamilton Frequency of Different Start Dates



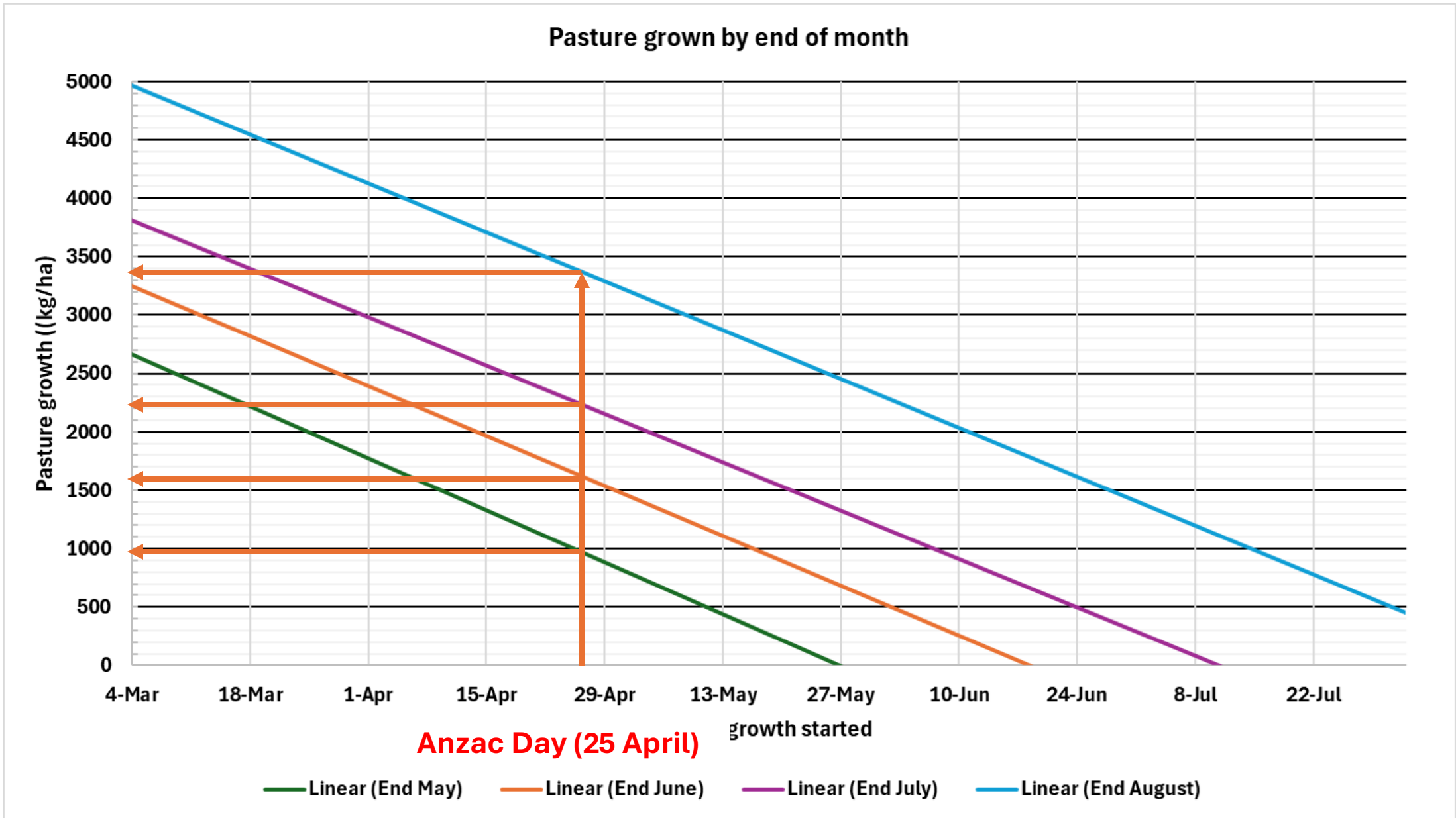
3. Pasture grown

Phalaris and sub clover perennial pasture, 90% fertility

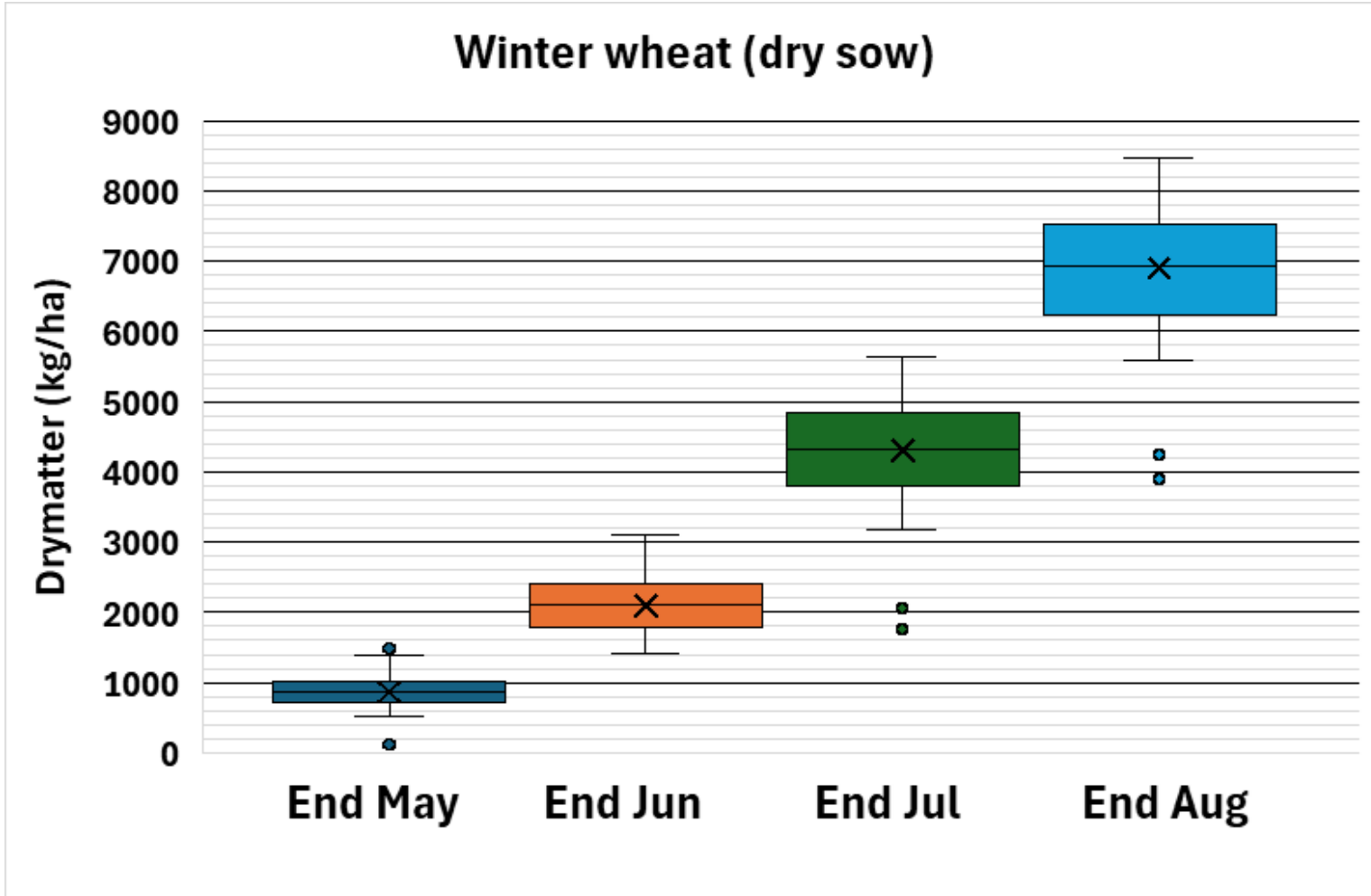
**Expected pasture growth (~ 950 kg/ha).
No animal grazing**



3. Pasture grown

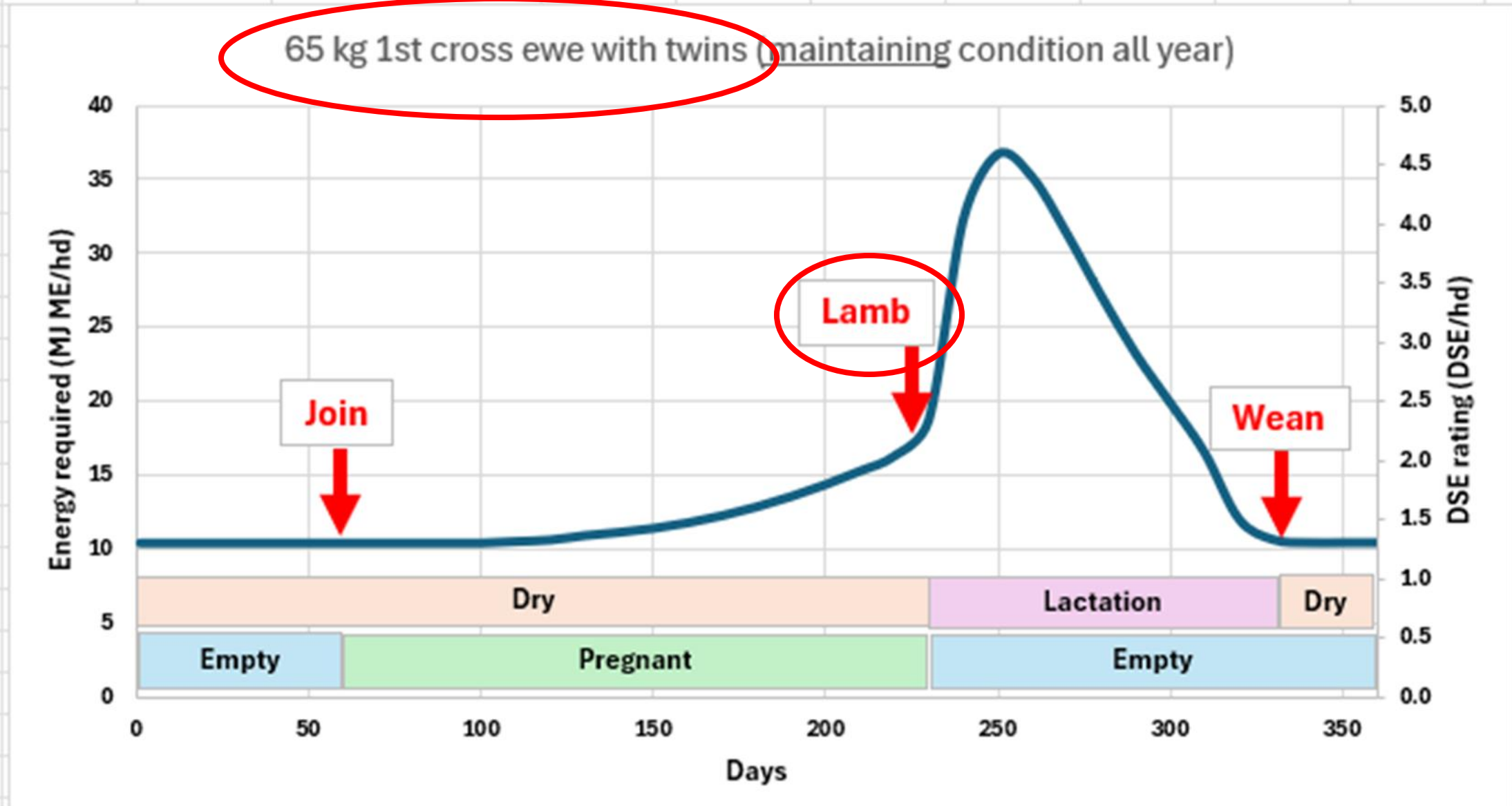


3. Crops grown (sown April 1)

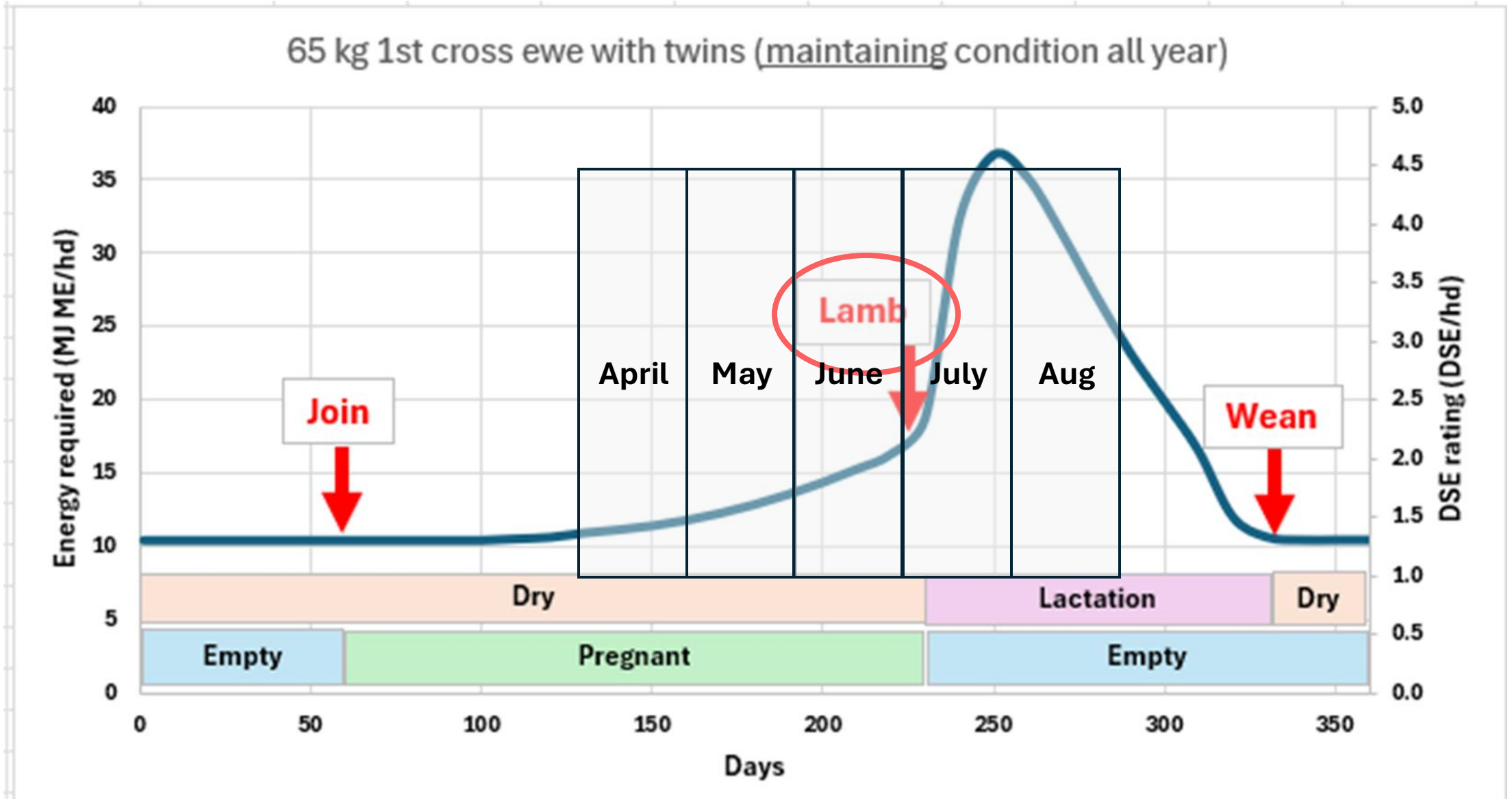


Date	Wheat (kg/ha)	Barley (kg/ha)	Oats (kg/ha)
End May	850	1000	600
End June	2100	2150	1550
End July	4300	4000	3450
End August	6900	5900	5900

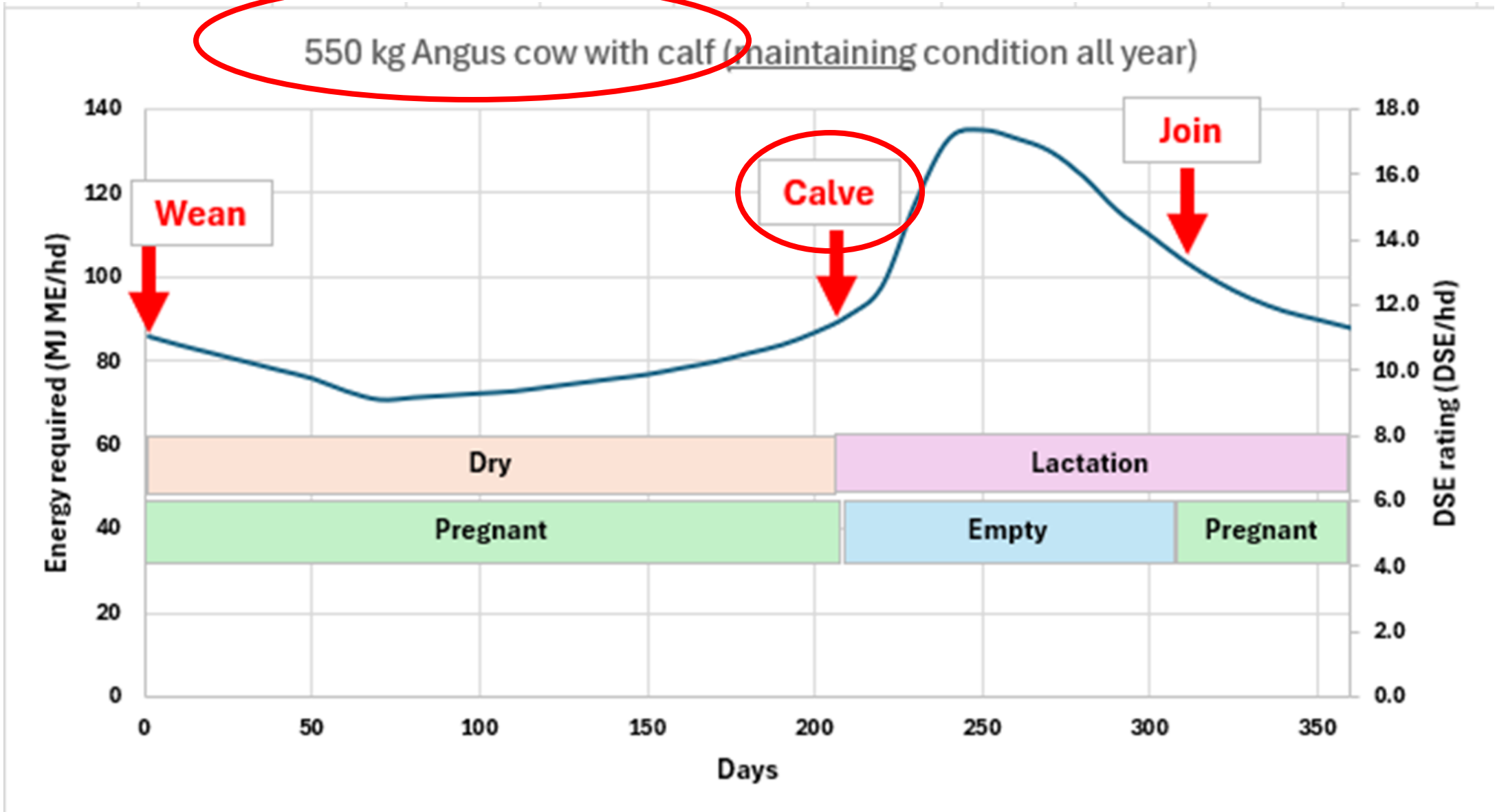
4. Animal consumption



4. Animal consumption



2. Animal consumption



Spring calving

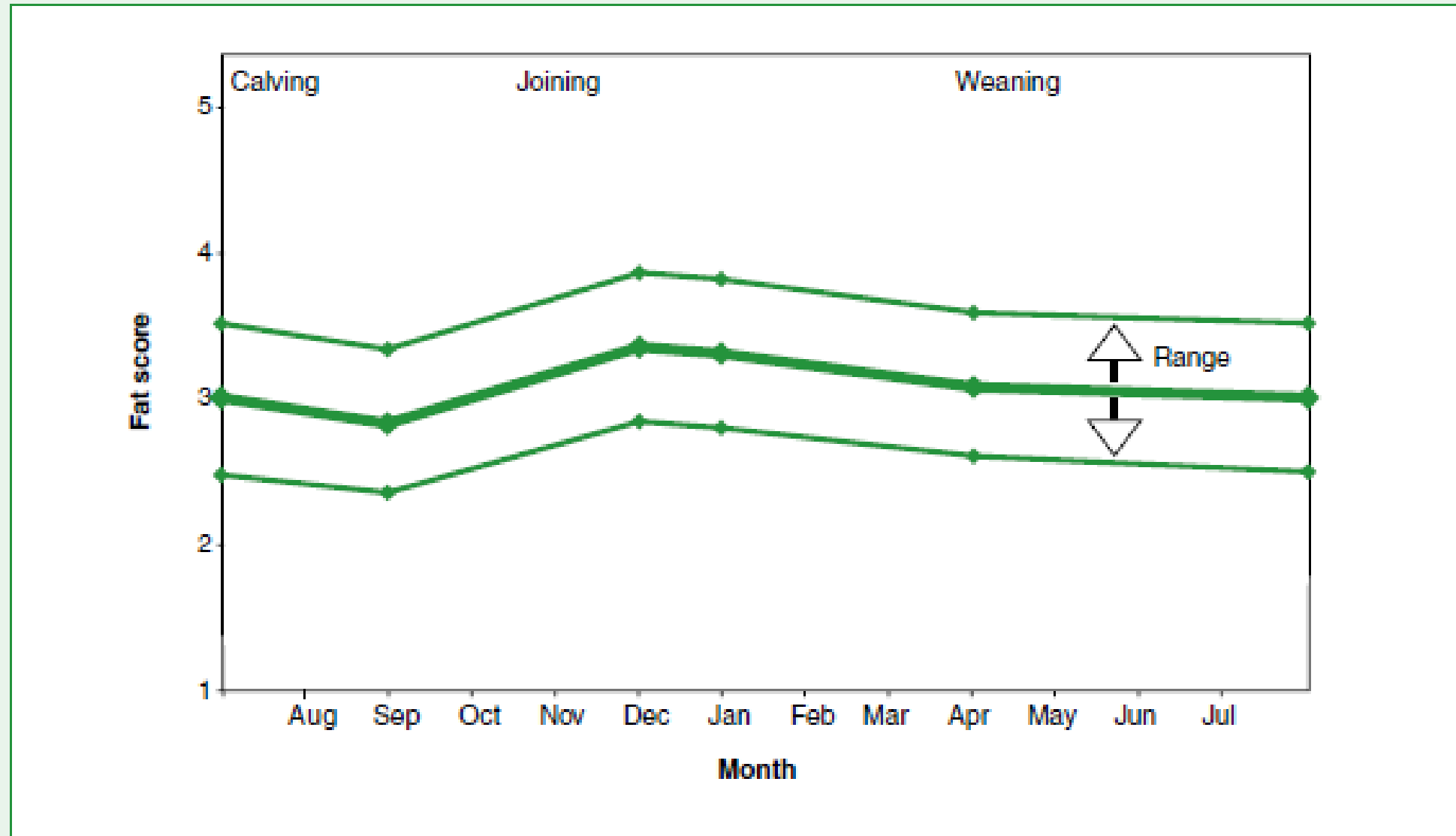
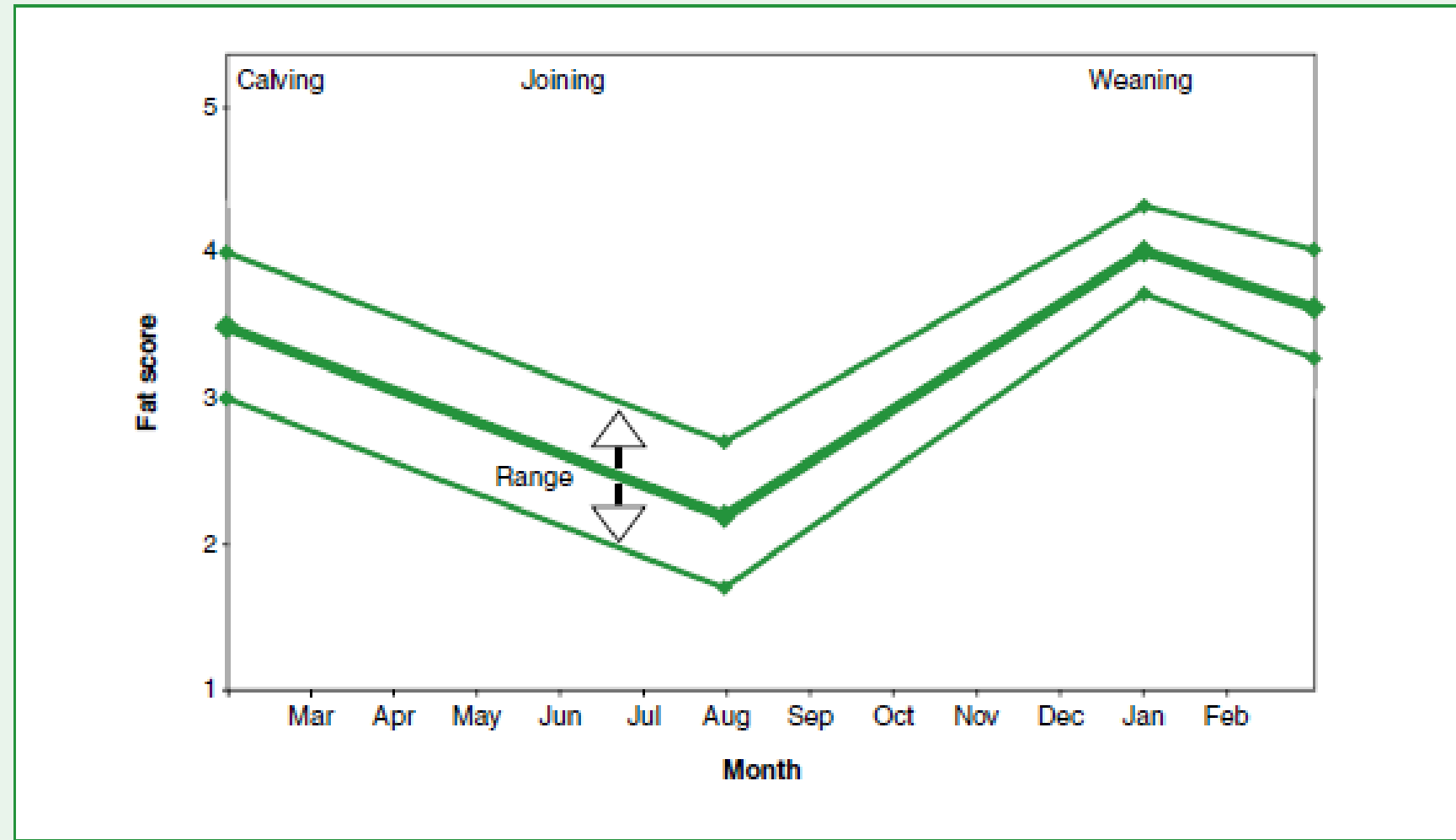


Figure 4.8 – Target and range of fat scores for cattle reproduction

Autumn calving



Whole farm autumn and winter pasture cover

Version 1.0 (Nicon Rural Services)

Only complete cells in white or light grey

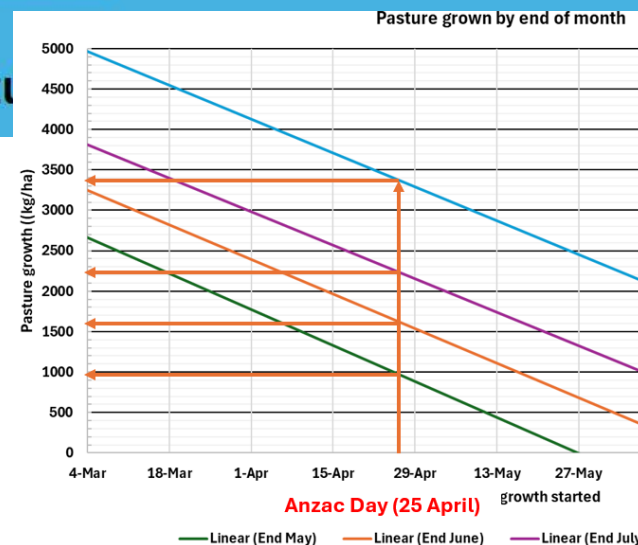


The output from using the pasture cover calculator is intended as a source of information only. While all care has been taken, Nicon Rural Services, Southern Farming Systems, the Commonwealth of Australia and its sub-contractors do not guarantee the calculator is without flaw of any kind or is wholly appropriate for your purposes and therefore disclaim all liability for any error, loss or other consequence which may arise from you relying on any information generated.

Step 1: What is the starting green whole farm pasture cover (kg DM/ha)

100 kg DM/ha

Pick a starting date (what if growth starts on Anzac Day (25 April))



Step 2: What pasture do you expect to grow?

Dominant pasture or cereal type		Your description (optional)		Apr	May	Jun	Jul	Aug
1	Perennial grass & clover	Good pasture	Area (ha)	250	250	250	250	250
			Pasture grown to end of month (kg/ha)	70	950	1600	2200	3400
2	Winter cereal	Oats for grazing	Area (ha)	50	50	50	50	50
			Pasture grown to end of month (kg/ha)	10	600	1550	3450	5900
3			Area (ha)					

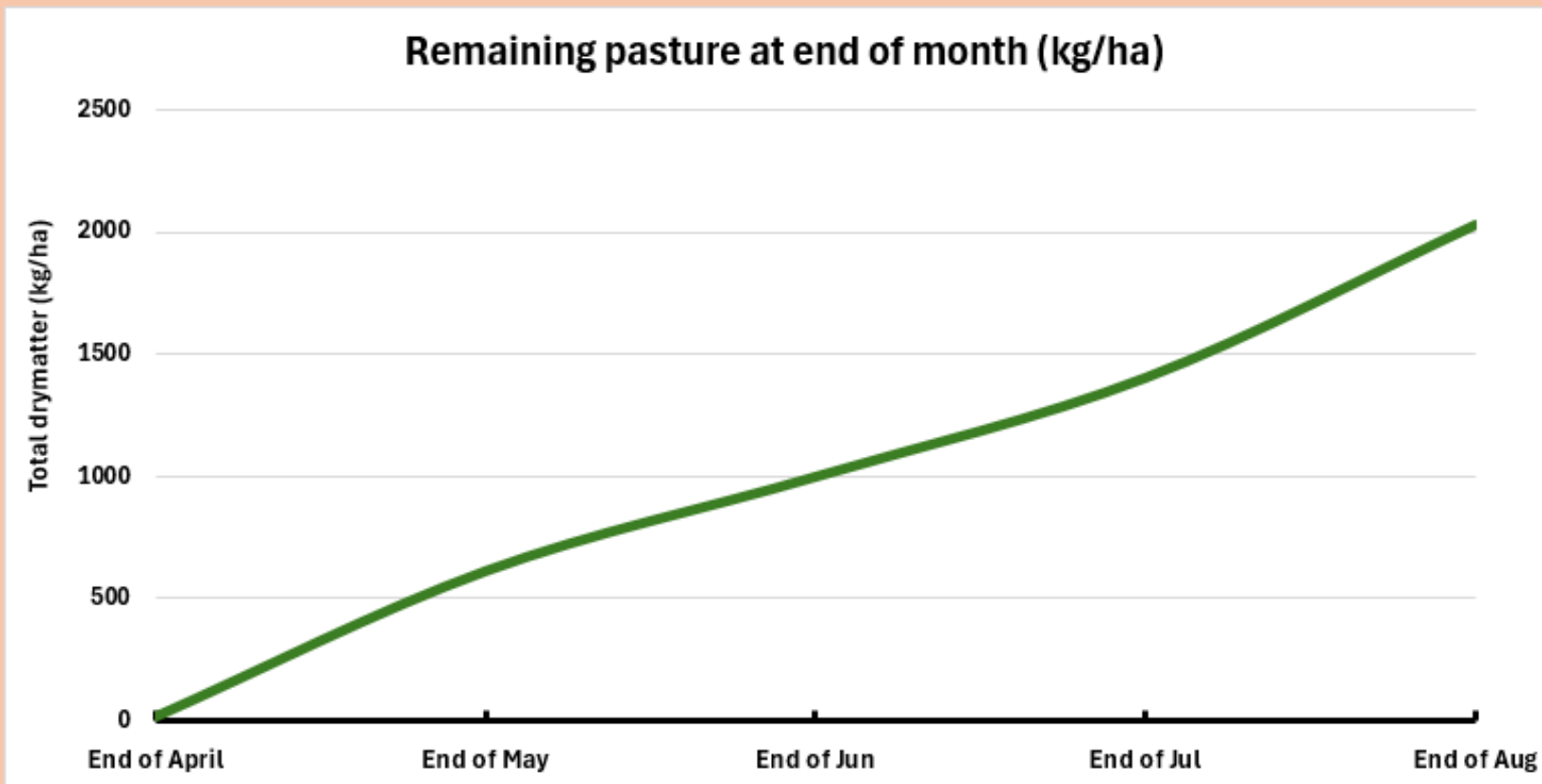
Step 3: What animals will be grazing and what will they eat ?

				Apr	May	Jun	Jul	Aug
1	Enterprise	Sheep - First cross	Your reference name (optional)	<i>Single scanned ewes</i>				
	Animal description	Ewes (> 2 years old), raises 1 lamb	Number of head	750	750	750	750	750
	Std ref wgt of mature female (kg @ CS3)	65	Intake per day (kg/hd/day)	1.1	1.3	1.7	2.2	2.6
	Approximate calving or lambing start time	Winter lambing (start 1 Jul)	Suggested intake - guide only (kg/hd/day)	1.1	1.3	1.7	2.2	2.6
2	Enterprise	Sheep - First cross	Your reference name (optional)	<i>Twin scanned ewes</i>				
	Animal description	Ewes (> 2 years old), raises 2 lambs	Number of head	500	500	500	500	500
	Std ref wgt of mature female (kg @ CS3)	65	Intake per day (kg/hd/day)	1.2	1.4	1.8	2.2	2.7
	Approximate calving or lambing start time	Winter lambing (start 1 Jul)	Suggested intake - guide only (kg/hd/day)	1.2	1.4	1.8	2.2	2.7

Whole farm autumn and winter pasture cover - results

End of month	April	May	June	July	August
Anticipated feed growth rate (kg/ha/day)	2	24	18	16	32
Estimated DSE carried on feed (DSE/ha)	4.8	5.6	7.3	8.2	11.0
Fodder at the end of the month (kg/ha)	17	612	998	1100	1250

Want 1250 kg/ha on average across whole farm at lambing



Need to:

- **Increase fodder growth** (N fert, Gibb acid) – change pasture grown to end of month
- **Decrease feed eaten** (containment feed) – change animal numbers to zero

Step 3: What animals will be grazing and what will they eat ?

				Apr	May	Jun	Jul	Aug
1	Enterprise	Sheep - First cross	Your reference name (optional)	Single scanned ewes				
	Animal description	Ewes (> 2 years old), raises 1 lamb	Number of head	0	0	750	750	750
	Std ref wgt of mature female (kg @ CS3)	65	Intake per day (kg/hd/day)	1.1	1.3	1.7	2.2	2.6
	Approximate calving or lambing start time	Winter lambing (start 1 Jul)	Suggested intake - guide only (kg/hd/day)	1.1	1.3	1.7	2.2	2.6
2	Enterprise	Sheep - First cross	Your reference name (optional)	Twin scanned ewes				
	Animal description	Ewes (> 2 years old), raises 2 lambs	Number of head	0	0	500	500	500
	Std ref wgt of mature female (kg @ CS3)	65	Intake per day (kg/hd/day)	1.2	1.4	1.8	2.2	2.7
	Approximate calving or lambing start time	Winter lambing (start 1 Jul)	Suggested intake - guide only (kg/hd/day)	1.2	1.4	1.8	2.2	2.7

Whole farm autumn and winter pasture cover - results

End of month	April	May	June	July	August
Anticipated feed growth rate (kg/ha/day)	2	24	18	16	32
Estimated DSE carried on feed (DSE/ha)	0.0	0.0	7.3	9.2	11.0
Fodder at the end of the month (kg/ha)	157	912	1280	1669	2260