



John and Alexander Martin

Greyabbey, County Down

09/07/2026

Farm details

- 73ha (180 acres) farmed
- Stock
 - 160 ewes lambed January
 - 370 ewes & 130 ewe lambs lambed mid March
 - 30 dairy heifers wintered, non currently
- Crops
 - 10.5ha (30 acre) spring barley
 - 15.3ha (38 acres) Short Rotation Coppice willow

Farm Aims

- To make best use of the resources we have.
 - As additional land is difficult to obtain at a reasonable cost.
- Focus on soil fertility, grass varieties to optimise growth and grazing management for utilisation.
- Livestock genetics for efficiency.
- **Light bulb moment regarding mature ewe weight.**
- Measure and monitor to manage.



- **John has been recording grass growth weekly since 2018**
- 38 ha (94acres) across 29 paddocks
- Paddocks can be subdivided again with temp electric fencing
- March lambers grazed in 3-4 mobs
 - Target Average Farm Cover: 2300–2500 kg DM/ha (7–8 cm)
 - Target Pre-grazing cover: 3000–3200 kg DM/ha (10–12 cm)
 - Target Post-grazing cover: 1600–1700 kg DM/ha (4–5 cm)
- Creep feeding to lambs from about 6 weeks until weaning.
- Lambs trough fed post weaning, approx. 0.15kg/hd/day. Ensures lambs are used to meal feeding if drought impacts grass growth.

DIFFERENT STOCK. DIFFERENT MANAGEMENT.

Match your grazing targets to the animal for best performance and the best use of grass.

	CATTLE (BEEF / DAIRY-BEEF)	EWES WITH LAMBS	WEANED LAMBS
			
PRE-GRAZING TARGET (total cover)	2,800 – 3,200 kg DM/ha (approx. 10 – 12 cm)	2,800 – 3,000 kg DM/ha (approx. 8–9 cm leafy sward)	2,600 – 2,800 kg DM/ha (approx. 8 cm leafy sward)
POST-GRAZING TARGET (total cover)	1,600 – 1,700 kg DM/ha (approx. 4 – 5 cm)	1,500 – 1,700 kg DM/ha (approx. 4 – 4.5 cm)	1,900 – 2,100 kg DM/ha (approx. 5.5 – 6 cm)
KEY POINT	 Cattle can graze stronger covers than sheep, but quality is still key.	 Ewes with lambs need leafy covers, but paddocks still need cleaned out to maintain quality for the next grazing.	 Weaned lambs need leafy, quality grass. Do not graze too tight – leave a higher residual for performance.

SHEEP SWARDS ARE DENSER



Sheep swards are denser, so use about 300 kg DM/ha per cm for sheep swards, compared with 250 kg DM/ha per cm for cattle swards.

	HEIGHT (cm)	KG DM/HA PER CM ABOVE RESIDUAL
 CATTLE		250
 SHEEP		300

(Indicative values only)

USE LEADER-FOLLOWER GRAZING TO YOUR ADVANTAGE



Graze weaned lambs first to capture the best quality grass. Follow behind with ewes or hoggets to clean out and leave the desired residual.



DON'T GRAZE LAMBS TOO TIGHT

- ✓ At Teagasc Athenry, weaned lambs grazing to a 6 cm residual finished around 14 days earlier than lambs grazed to 5 cm.



NOTE:

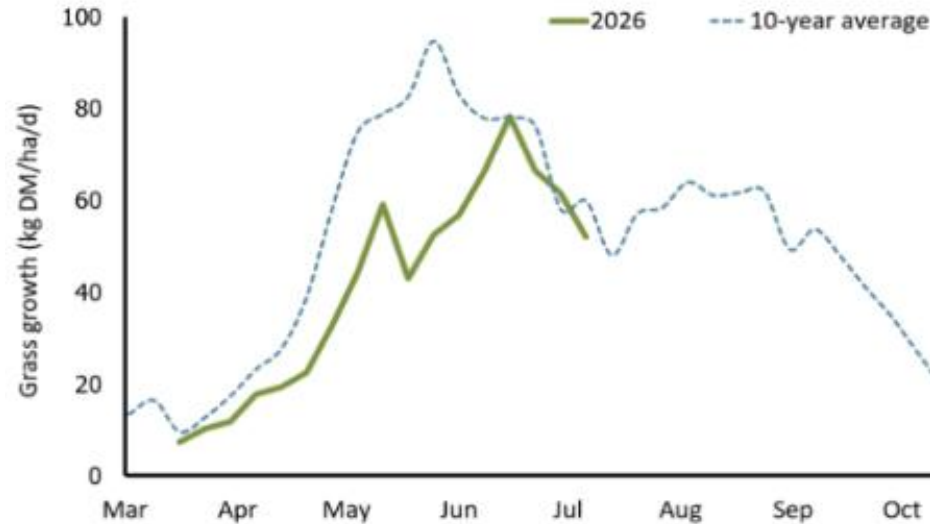
For rotational grazing, target post-grazing sward heights are 3.5 cm in April, 4.5 cm in May, 5.0 cm in June and 6.0 cm from July onwards.



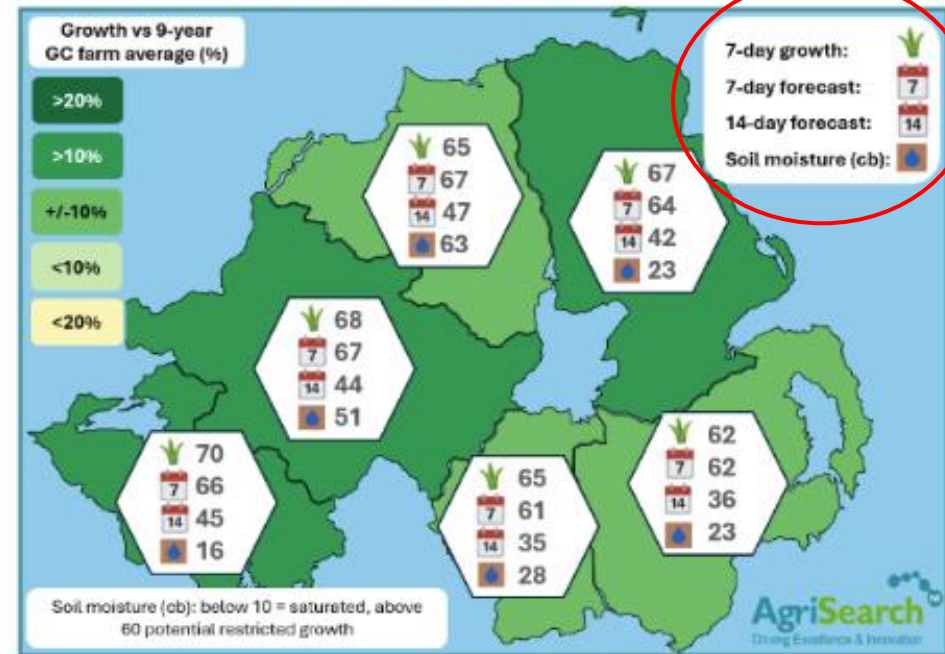
Right cover. Right residual. Better grass. Better performance.

Week beginning 06th July 2026

Plot growth at AFBI Hillsborough & CAFRE Greenmount

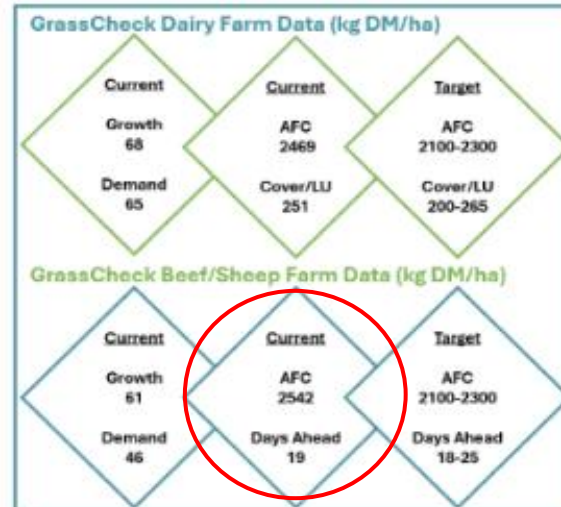


GrassCheck on farm grass growth (kg DM/ha)



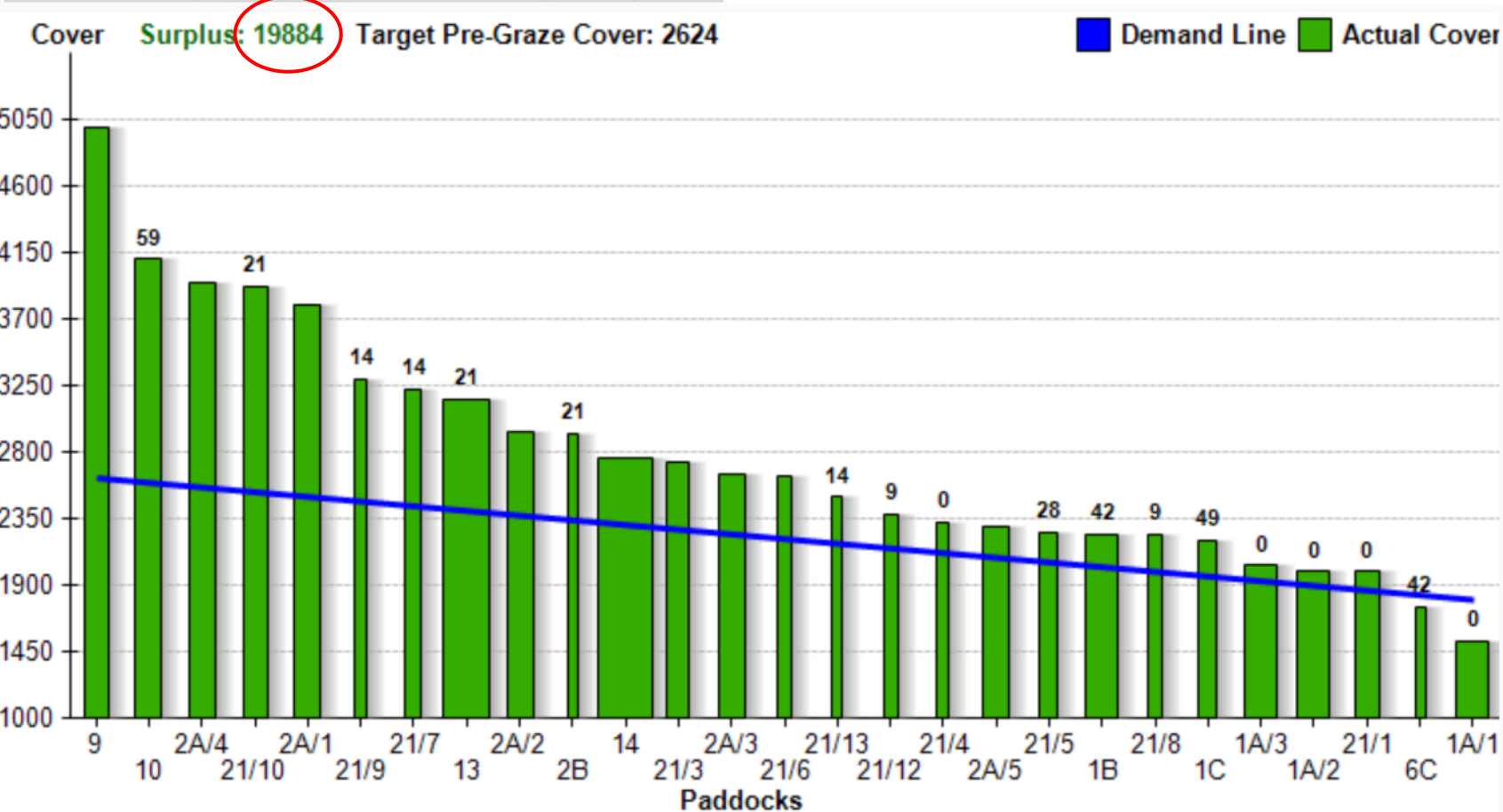
MANAGEMENT NOTES:

- Grass growth on GC farms has been slightly above the LT. av and is forecast to remain so over the next 7 days, before slowing down in part due to soil moisture.
- Heat wave weather predictions over the incoming 10 days, could potentially reduce soil moisture levels quickly in some parts. Therefore, regular measuring of the grazing platform (every 5 days) will be very helpful in reacting quickly to changes and making better and more timely decisions to reduce any impact.
- There is a range of AFCs across the GC farms, but it is important to not let the AFC fall below 2100kg DM/ha or the rotation length reduce below 21 days.
- If your grazing demand is going to out strip growth, limit the use of the mower and the topper as this mechanical intervention will further reduce grass growth rates.
- The settled spell forecast will provide a welcome window for silage making for many. Once safely in, update your fodder budget to access where you are in relation to demand as this will affect your NMP for the remainder of the season.



10 days ago

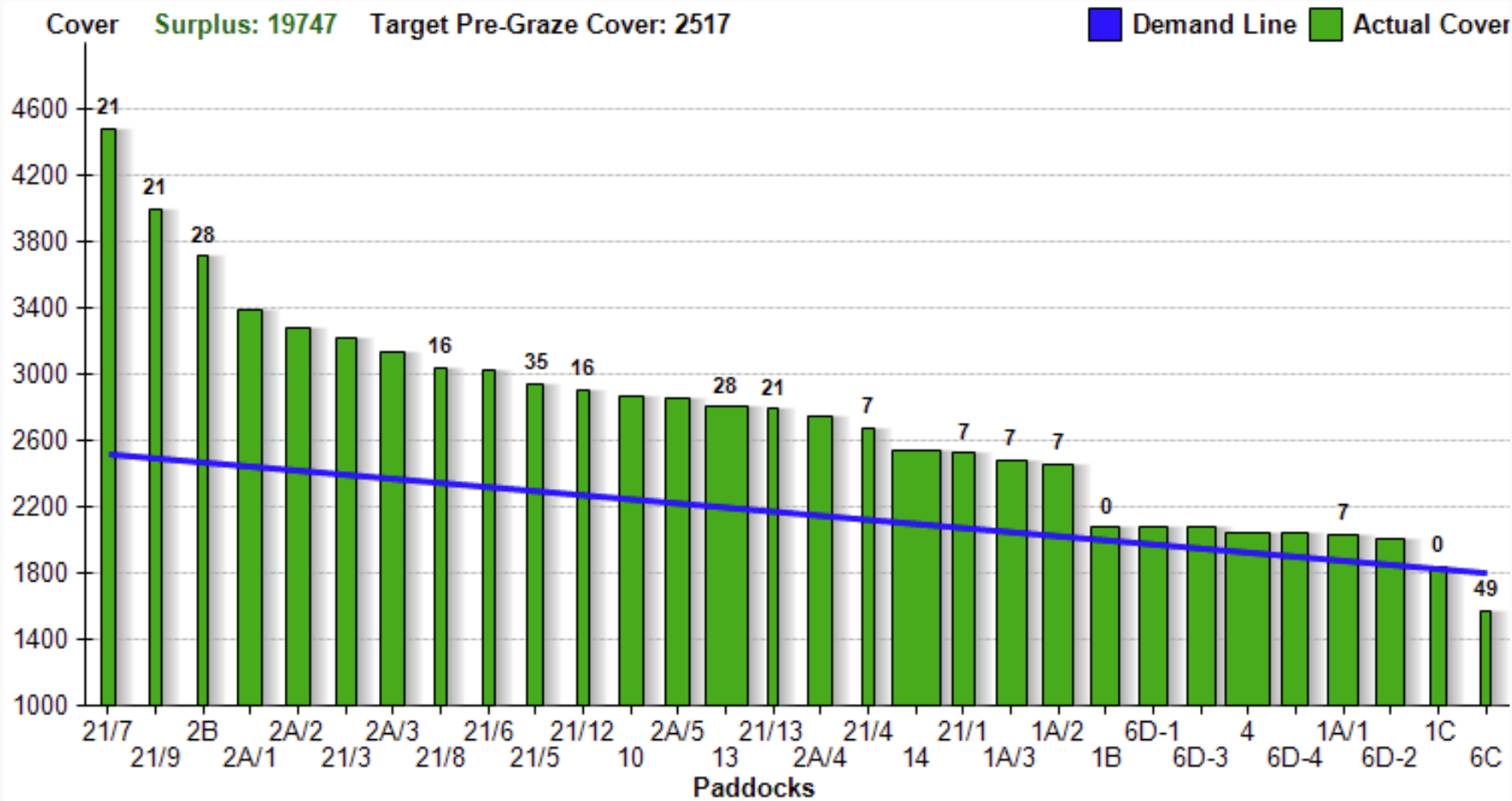
	No.	Weight Kg	Grass	Meal	Silage
Lactating Cows	0	0	0	0	0
Dry Cows	0	0	0	0	0
Cattle 0-1	130	36	0.7	0.34	0
Cattle 1-2	185	40	0.8	0.325	0
Cattle 2+	286	30	0.6	0.18	0
Bulls	100	65	1.3	0	0
Lactating Ewes	103	80	2.8	0	0
Dry Ewes	168	70	1.2	0	0
Lambs	260	DOB 15/03/2021	0.175	0	0



Date Measured	29/06/2026	▼
Selected Mob	All Mobs	▼ ⓘ
Daily Growth	60.8 (over 7 days)	(55.9) ⓘ
Farm Cover	2806	
Total Area	34.18	
kgLW/Ha	1608	
Demand / Day	1342	
Demand / Ha	39.3	
N Kg / Ha	0	ⓘ
N % Area	0	
Weather	0mm, 15°	
Graze Days Ahead	25.6	
Short Term Silage	0 (0Ha)	Reset
Long Term Silage	0 (0Ha)	Reset
Area Unmeasured	9.32 Ha	

3 days ago

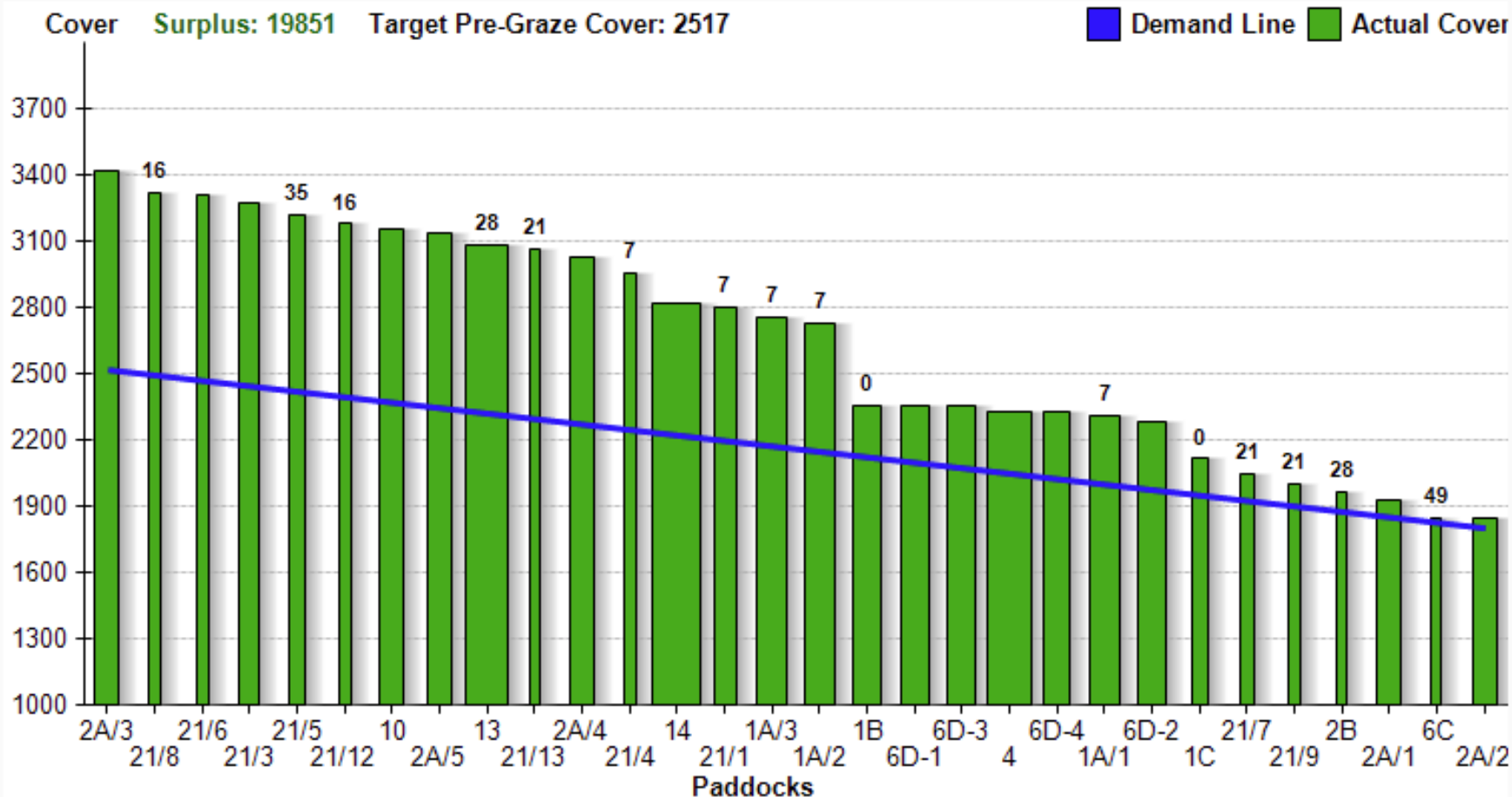
	No.	Weight Kg	Grass	Meal	Silage
Lactating Cows	0	0 ⓘ	0	0	0
Dry Cows	0	0 ⓘ	0	0	0
Cattle 0-1	130	36 ⓘ	0.7	0.34	0
Cattle 1-2	185	40 ⓘ	0.8	0.325	0
Cattle 2+	286	30 ⓘ	0.6	0.18	0
Bulls	100	65 ⓘ	1.3	0	0
Lactating Ewes	103	80 ⓘ	2.8	0	0
Dry Ewes	168	70 ⓘ	1.5	0	0
Lambs	260	DOB 15/03/2021 ⓘ	0.175	0	



Date Measured	06/07/2026
Selected Mob	All Mobs ⓘ
Daily Growth	78.4 (over 7 days)
Farm Cover	2608
Total Area	40.78
kgLW/Ha	1348
Demand / Day	1393
Demand / Ha	34.2
N Kg / Ha	0 ⓘ
N % Area	0
Weather	6mm, 16.1°
Graze Days Ahead	23.6
Short Term Silage	0 (0Ha) Reset
Long Term Silage	2 (2.72Ha) Reset
Area Unmeasured	0 Ha
Silage Reduction	6.4 Days ⓘ

In 7 days, time at half
the growth of last week

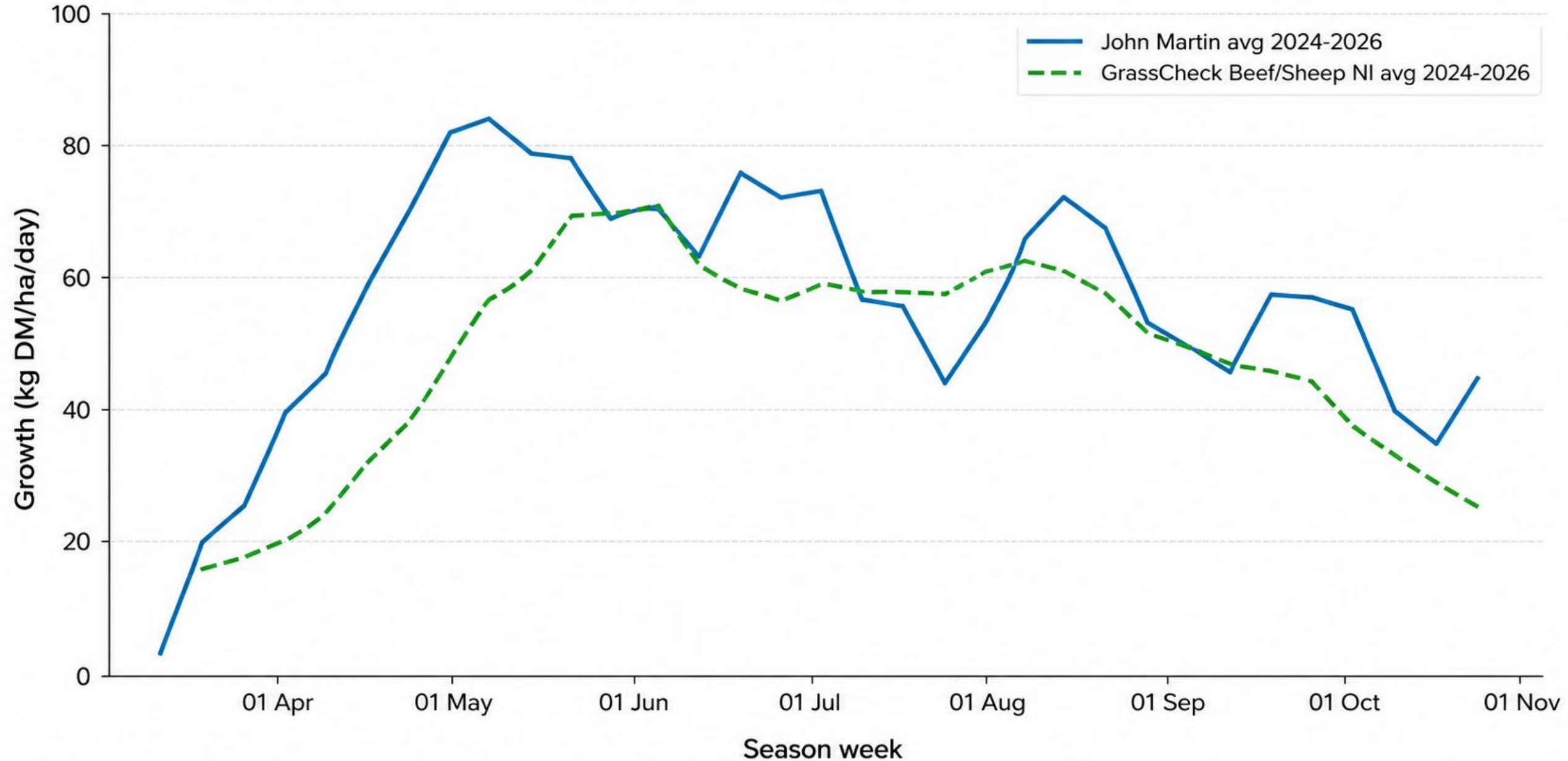
	No.	Weight Kg	Grass	Meal	Silage
Lactating Cows	0	0 i	0	0	0
Dry Cows	0	0 i	0	0	0
Cattle 0-1	130	36 i	0.7	0.34	0
Cattle 1-2	185	40 i	0.8	0.325	0
Cattle 2+	286	30 i	0.6	0.18	0
Bulls	100	65 i	1.3	0	0
Lactating Ewes	103	80 i	2.8	0	0
Dry Ewes	168	70 i	1.5	0	0
Lambs	260	DOB 15/03/2021 i	0.175	0	0



Date Measured	06/07/2026	i
Selected Mob	All Mobs	i
Daily Growth	78.4 (over 7 days)	
Farm Cover	2649	
Total Area	40.78	
kgLW/Ha	1348	
Demand / Day	1393	
Demand / Ha	34.2	
N Kg / Ha	0 i	
N % Area	0	
Weather	6mm, 16.1°	
Graze Days Ahead	24.8	
Short Term Silage	0 (0Ha)	Reset
Long Term Silage	2 (2.72Ha)	Reset
Area Unmeasured	0 Ha	
Silage Reduction	6.9 Days i	

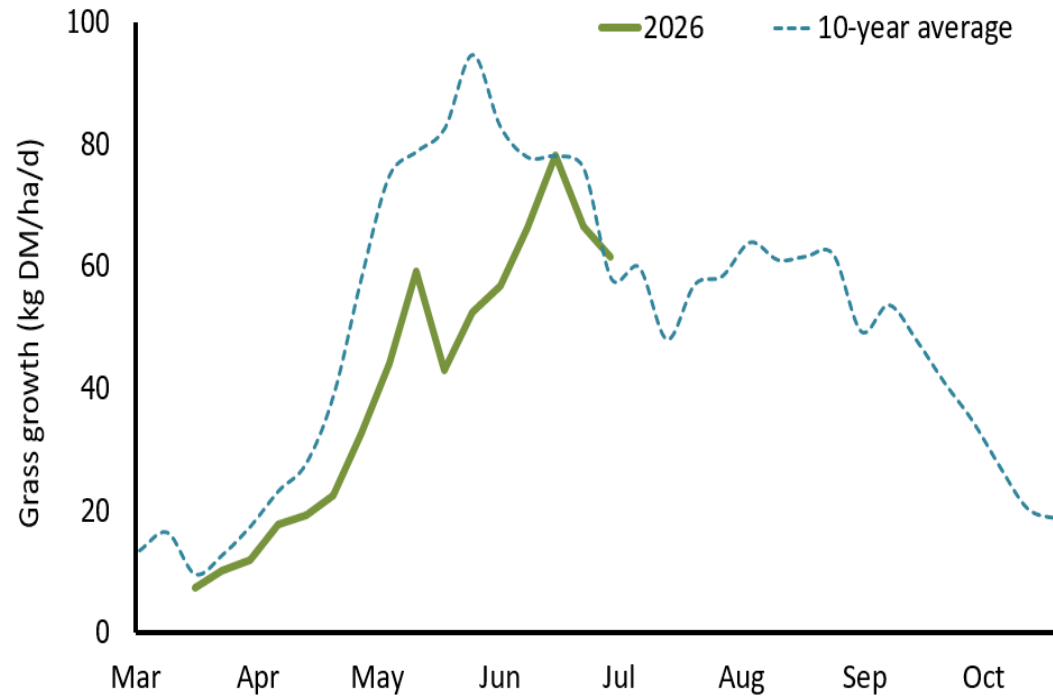
John Martin vs GrassCheck NI Beef/Sheep Growth

3-week rolling average

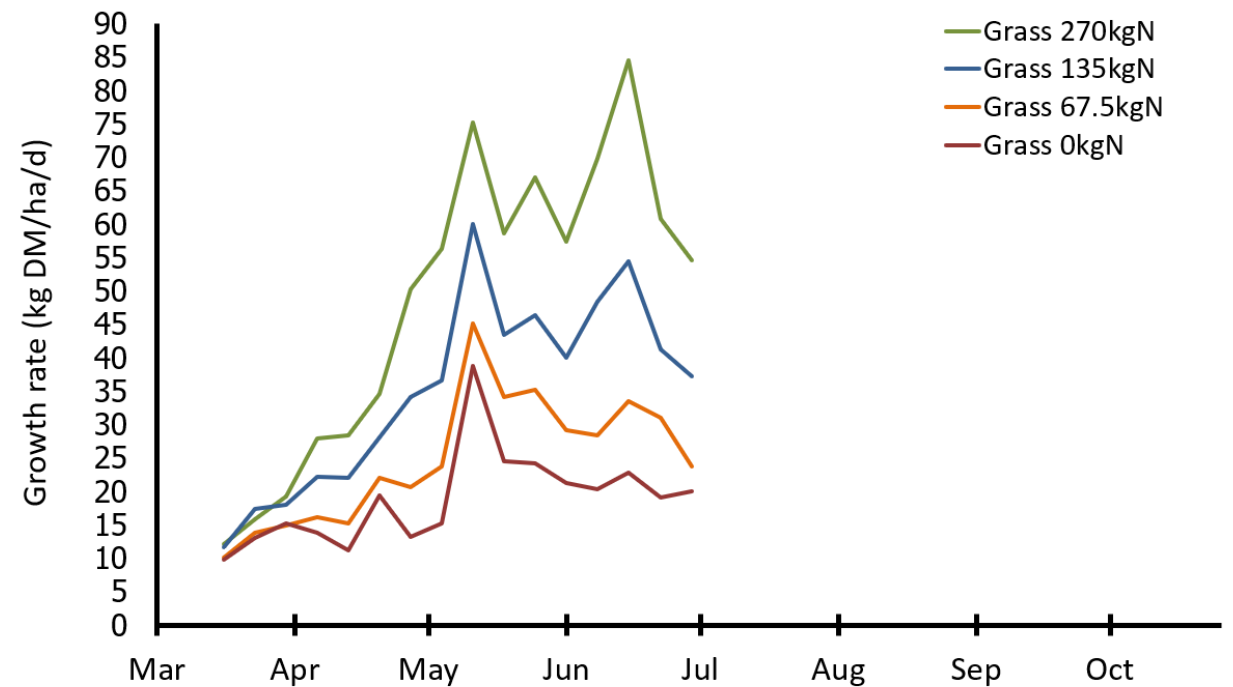


Results 2026 – herbage yield

Grass-only



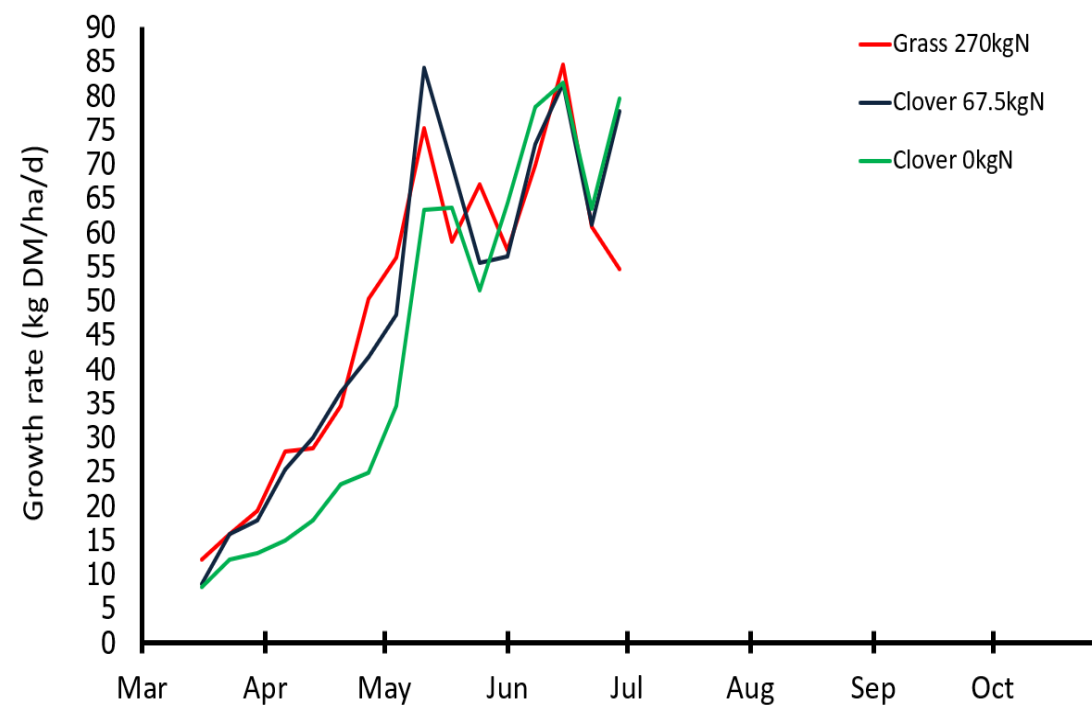
Fertiliser N rates



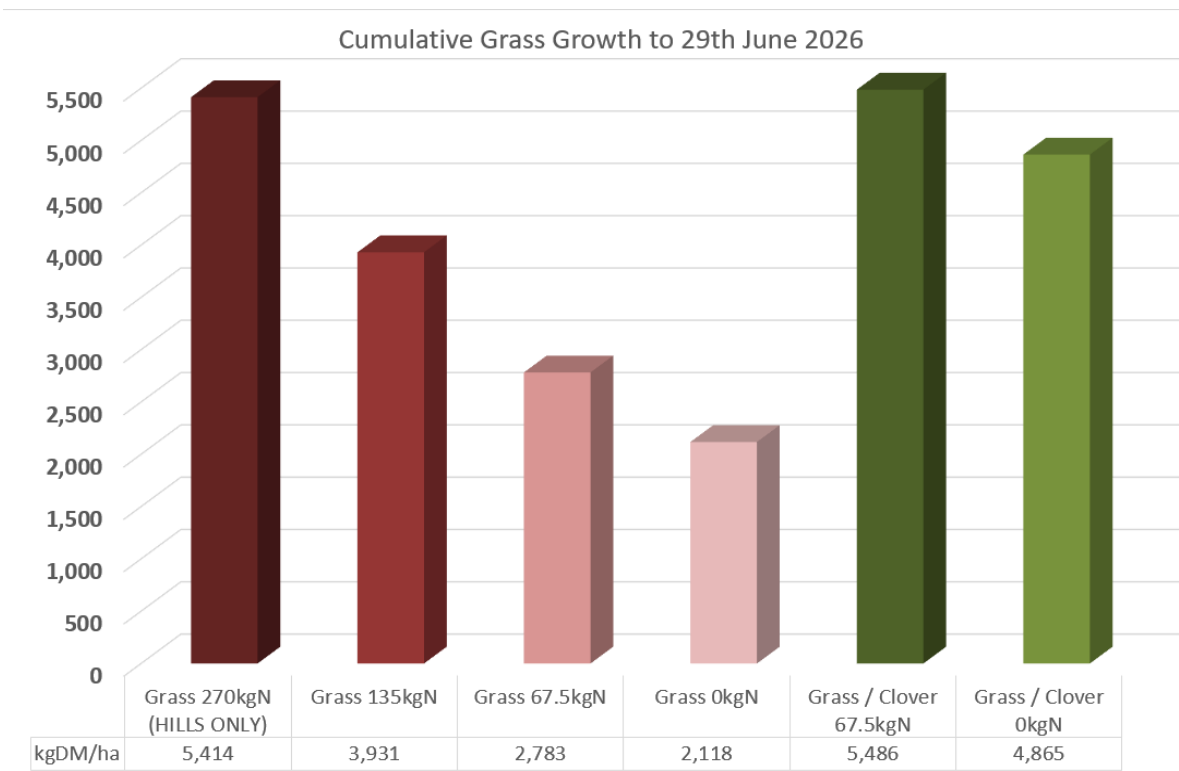
Results 2026



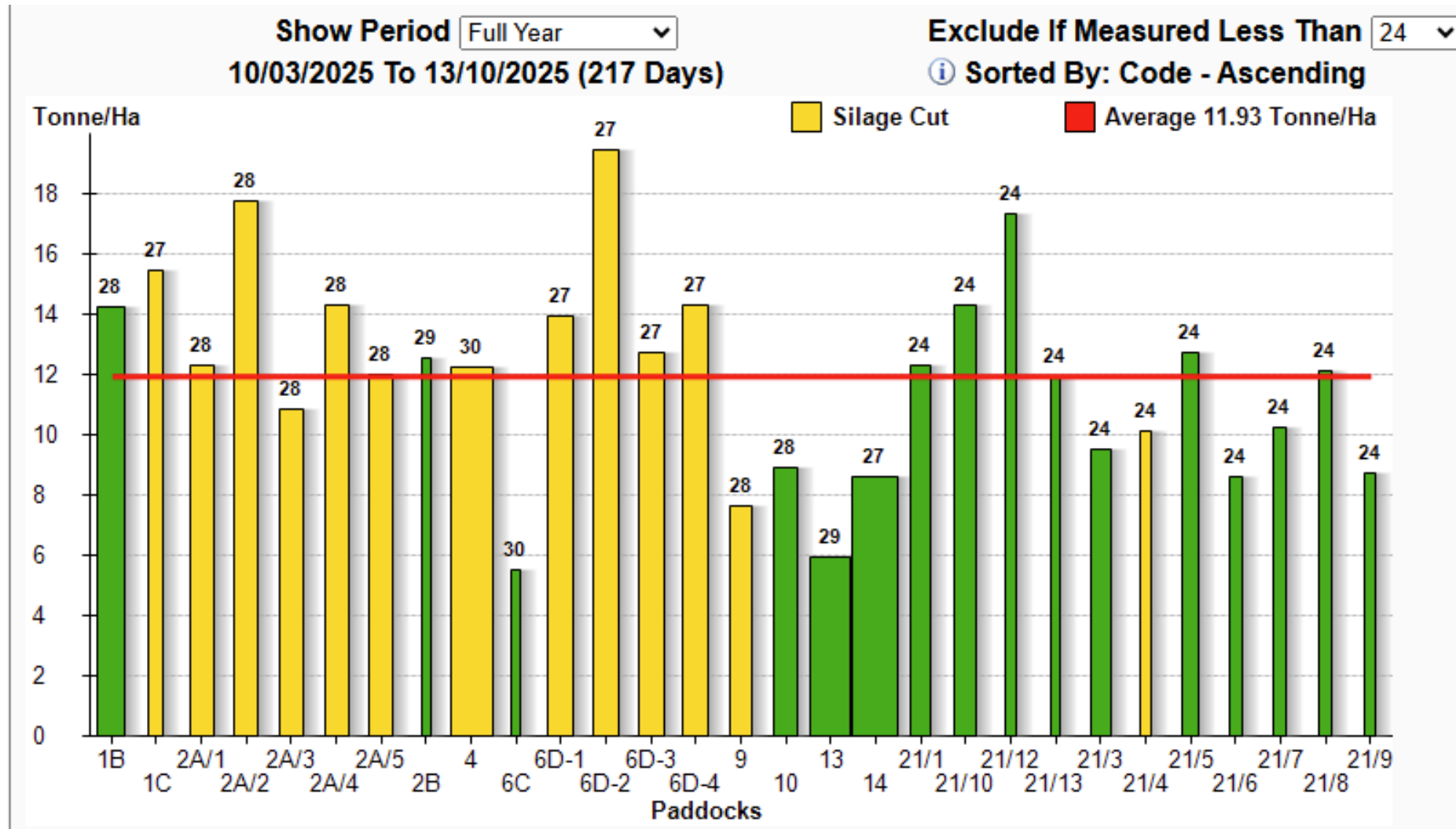
Grass vs Grass-clover



Cumulative yield



Best paddocks



Reseeding

- Burn off old sward after 2nd cut silage, power harrow and broadcast redstart for grazing by Jan lambing ewes.
- Then spring barley followed by stubble turnips and second spring barley, before autumn reseed.
- Cropping gives several opportunities to control weeds before going back to grass.
- Seed mixture based on high sugar Aber varieties with white and red clover.
- Looking to include chicory in non silage fields to help soil structure.
- Target pH levels 6.2-6.5.
- Crown rust is a problem in late summer and autumn, so selecting resistant varieties.
- Previously used 3 diploid varieties and 2 tetraploids, all medium or late heading. However sward was too open, so going to only 1 tetraploid and 3 or 4 diploid varieties.

Performance recording

- 10-year average scanning for whole flock, including Jan & March ewes and ewe lambs >200%. (Regulin used for January lambers and teaser rams for 9 days on all breeding females.)
- All lambs EID tagged at birth since 2010 so monitor lifetime performance.
- Pre weaning growth rate >320g/day and post weaning >270g/day.
- Aim to rear 1.8-1.85 lambs/ewe. Typically produce 450-520kg carcase weight/ha
- Target to have sold >95% lambs by mid December.

Selecting Replacements

- Most efficient ewes selected for replacement breeding to lamb to maternal rams in January. **Kg of lamb liveweight weaned / kg ewe liveweight to ram.**
- Rams with January ewes from 15th August for 4 weeks only.
- Any empties when scanned at end of October go back out to rams for March lambing
- Ewe Lambs mated October after birth to lamb at 13-14 months in March the following year. **NO PASSENGERS!**
- All females going to the ram have lambed every year with no faults, mouth/udder/body condition/milk supply etc.
- All empty ewes and ewe lambs at scanning at the end of December are culled. **No exceptions.**

Ram Selection

- Aim to purchase only high EBV rams, ideally top 10%.
- Maternal rams currently Highlander, Texel & Easycare
- Terminal rams -Sufftex, Texel & Charollais (for ewe lambs)
- Looking to source new Belclare rams this year
- Challenge sourcing any recorded rams due to Blue tongue import restrictions from GB and limited number of recorded flocks in NI. Can't access Innovis maternal rams.
- Looking for good growth rates and carcase conformation in terminal rams.
- Focus on maternal traits for breeding female replacements.
- Want positive fat EBV to help with lamb finishing.

Parasite management

- Using faecal egg counting to determine when to dose.
- Dose to weight of individual lamb
- Selective treatment based on DLWG eg. <250g/day
- Leave at least 10-20% untreated for refugia
- Always check accuracy of dosing gun with actual product to avoid under dosing.
- Have been registered to use deccox type product in home mixed lamb creep for coccidiosis. Product is not available this year so have been using herbal based alternative after dosing at 4 weeks old.
- We vaccinated ewes this year for Bluetongue. March lambers in January 2026 after scanning and January lambers after weaning.

Faecal Worm Egg Counting

ONLY AS USEFUL AS THE SAMPLE YOU TAKE.

Sample Size

Minimum of **15 animals** — or **15% of group** if the group is larger than 100.

Sample Volume

1 teaspoon of dung per animal.

Freshness

Fresh and **warm to the touch** — freshly voided only. Do not use old or cold samples.

Represent the Group

Sample a **variety of animals** across the group — not just the loose or scouring ones.

Sample 1

1789

Sample 2

421

Sample 3

2167

Sample 4

83

Sample 5

1564

Sample 6

309

Sample 7

2012

Sample 8

657

Sample 9

114

Sample 10

1897

Sample 11

732

Sample 12

47

Sample 13

1422

Sample 14

965

Sample 15

603

Mean Average (15 samples): 1065.27

**The more drenches we use,
the quicker the battery drains.**



BZ
(White)



LV
(Yellow)



ML
(Silver)



MP
(Orange)



De.
(Purple)

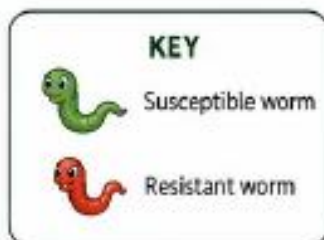
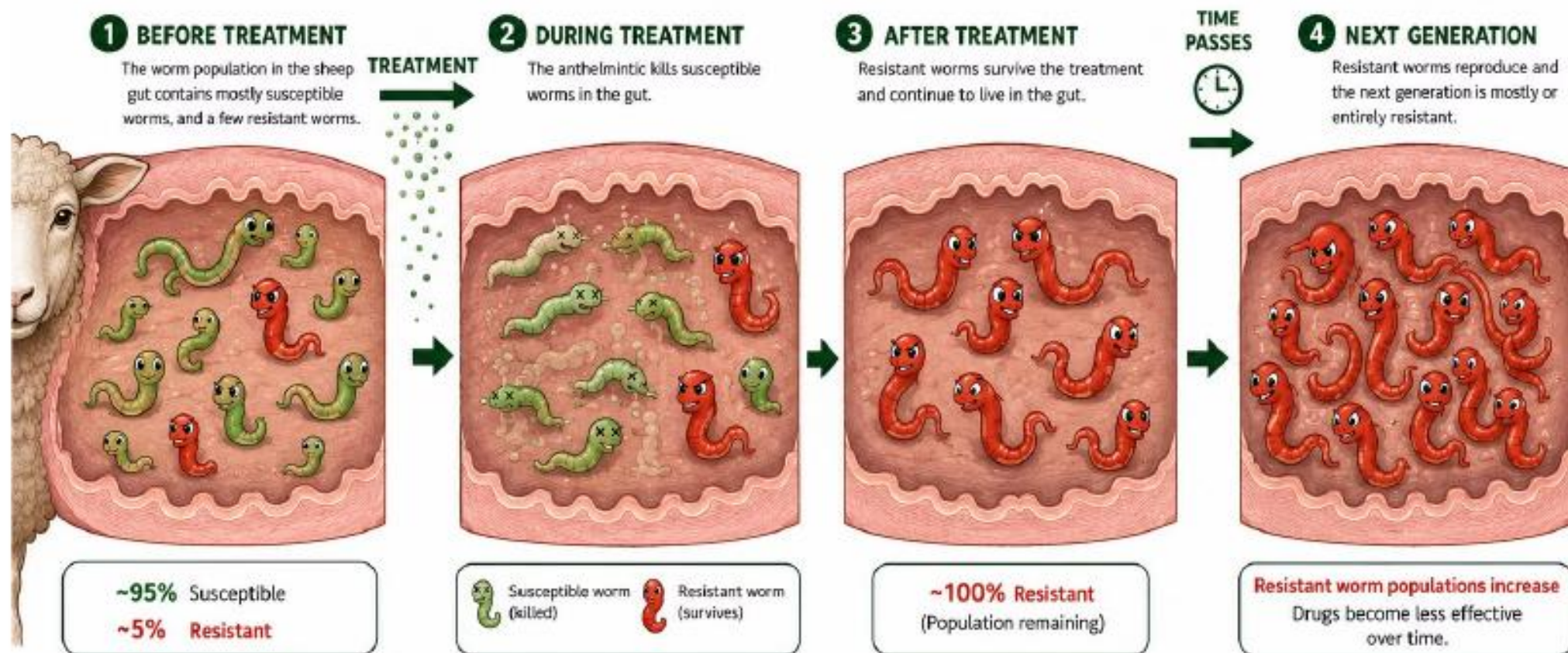


FEWER DRENCHES

MORE DRENCHES

HOW ANTHELMINTIC RESISTANCE DEVELOPS

Anthelmintics kill susceptible worms – resistant worms survive and reproduce

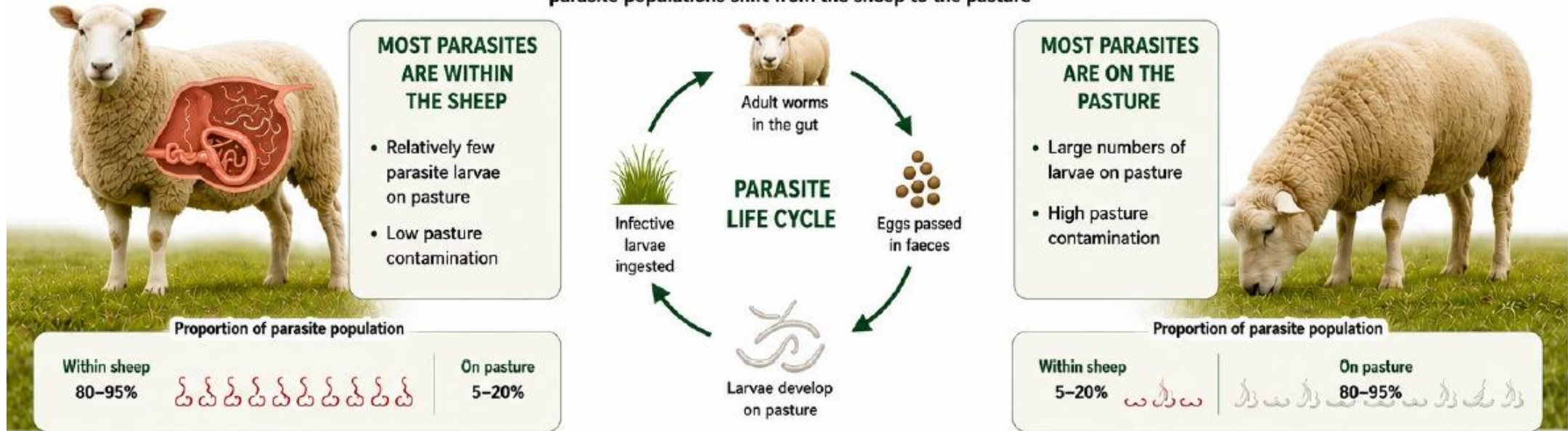


Parasite Location Changes Through the Year – Implications for Refugia

BEGINNING OF THE YEAR
Late winter – early spring

END OF THE YEAR
Autumn – early winter

As the grazing season progresses...
parasite populations shift from the sheep to the pasture



REFUGIA: THE KEY TO SLOWING ANTHELMINTIC RESISTANCE

MANY TREATMENTS EARLY IN THE SEASON

Large numbers of anthelmintic treatments when most parasites are within sheep removes susceptible worms.

Very few susceptible worms left to survive and pass on their genes (refugia reduced)

Most worms killed by treatment



LOW REFUGIA

WHAT IS REFUGIA?

The proportion of the parasite population not exposed to anthelmintic treatment.

The more refugia, the slower resistance develops.

FEW, TARGETED TREATMENTS

Targeted treatments leaves a proportion of susceptible worms as part of the worm population.

More susceptible worms survive to pass on their genes (refugia maintained)

Some worms killed by treatment



HIGH REFUGIA

IMPLICATION FOR RESISTANCE

LOW REFUGIA
= FASTER SELECTION FOR RESISTANCE

Resistant worms have less competition and survive to reproduce. Resistance develops more quickly.

HIGH REFUGIA
= SLOWER SELECTION FOR RESISTANCE

Susceptible worms dilute resistant ones. Resistance develops more slowly.



BEST PRACTICE: Use few, targeted treatments based on need (e.g. FEC, risk, performance). This maintains refugia, protects anthelmintic efficacy and keeps your flock productive for longer.

Maintaining Refugia: Dose, Delay, Move



Standard Actives

Dose → Delay → Move

Treat first, wait, then move animals to clean pasture. Never move immediately after dosing.



Persistent Actives (e.g. Moxidectin)

Move → Delay → Dose

Move to clean pasture first, wait for the drug's persistent activity window, then treat.

The Golden Rule: Never dose and move in the same step. Delaying the move (or the dose) ensures susceptible worms from refugia re-contaminate the pasture — diluting resistant survivors and slowing the development of anthelmintic resistance.

Next Steps

- Have obtained an additional 6.8ha of grazing. Not well enough fenced for ewes and lambs so better suited to weaned ewes.
- Hope to lamb more ewes in January 2027, with weaned ewes going to this land.
- SRC willows coming to the end of their lifetime so they will be phased out over next 3-5 years, giving an additional 15.3ha.
- More sheep/cattle/cropping?
- Invest in proven technology to improve efficiency eg. RAPPAs fencing, mobile sheep handling, pasture worm burden forecasting, improved use of genetics, GPS.

GrassCheck+

- Opportunity for farmers outside GrassCheck to measure grass and share their AgriNet data with like minded people
- Join a AgriNet GrassCheck+ discussion group
- Participate in wider Whatsapp discussion group
- Potential to be invited to future training events
- Wider group that can't commit measuring weekly
- Reserve list for future recruitment.
- For further info contact: john@agrisearch.org