



# Do you understand & capitalise on your PastureBase reports?

Join our webinar with Teagasc Grass10 & PastureBase Ireland experts & achieve grazing excellence in 2021!

Wednesday, 9<sup>th</sup> December | 7pm

Hear from special guest, dairy farmer **Jim White** and learn how he uses his reports to identify areas for improvement on his dairy farm.



**PastureBase**  
IRELAND



Open the camera on your phone and scan the QR Code to register  
Or visit [www.teagasc.ie/grass10](http://www.teagasc.ie/grass10)

# Range of Tools

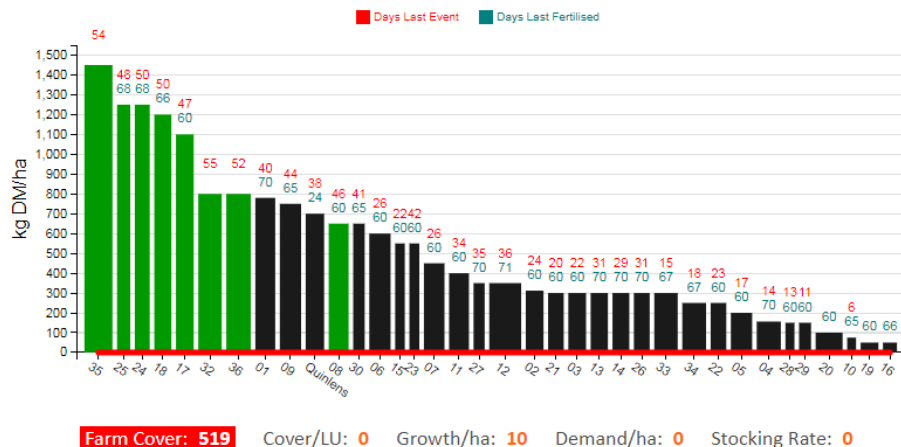


Grass: Wedge 07/11/2020

## Grass Wedge

ADD NEW COVER

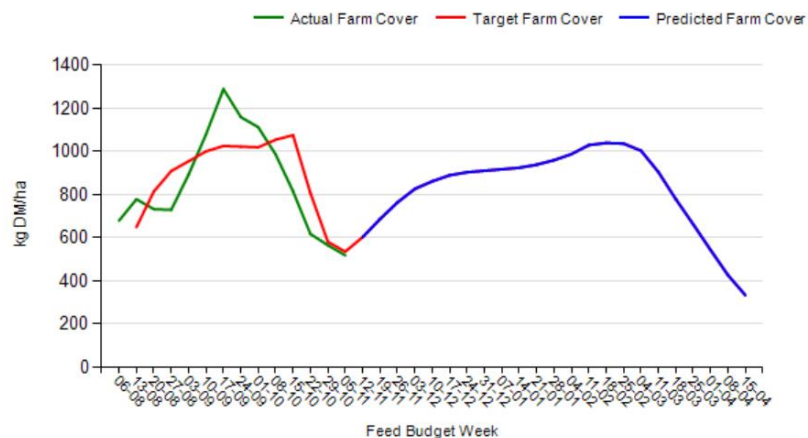
ADD GRAZE/SILAGE CUT



	Number of stock	Grass intake	Meal intake	Silage intake
Spring Milkers	223	0	3	15

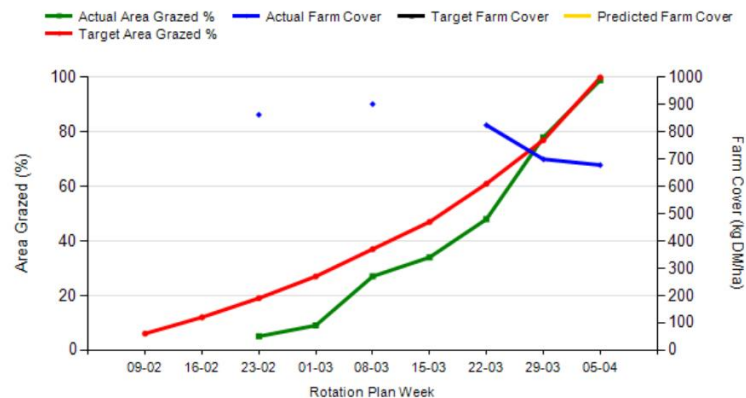
## Grass Budget

Comparison Chart















## Rotational Planners

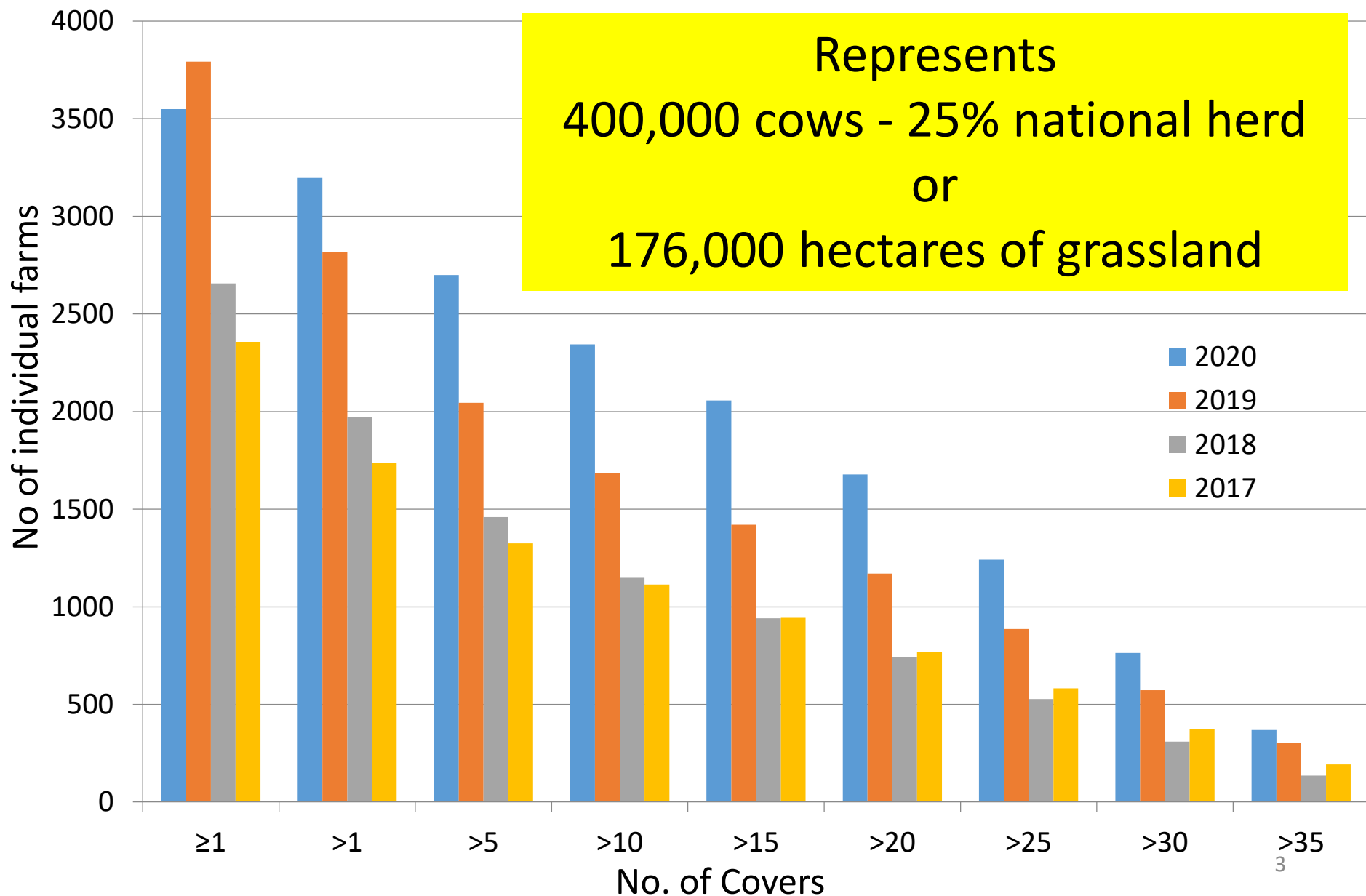
Comparison Chart



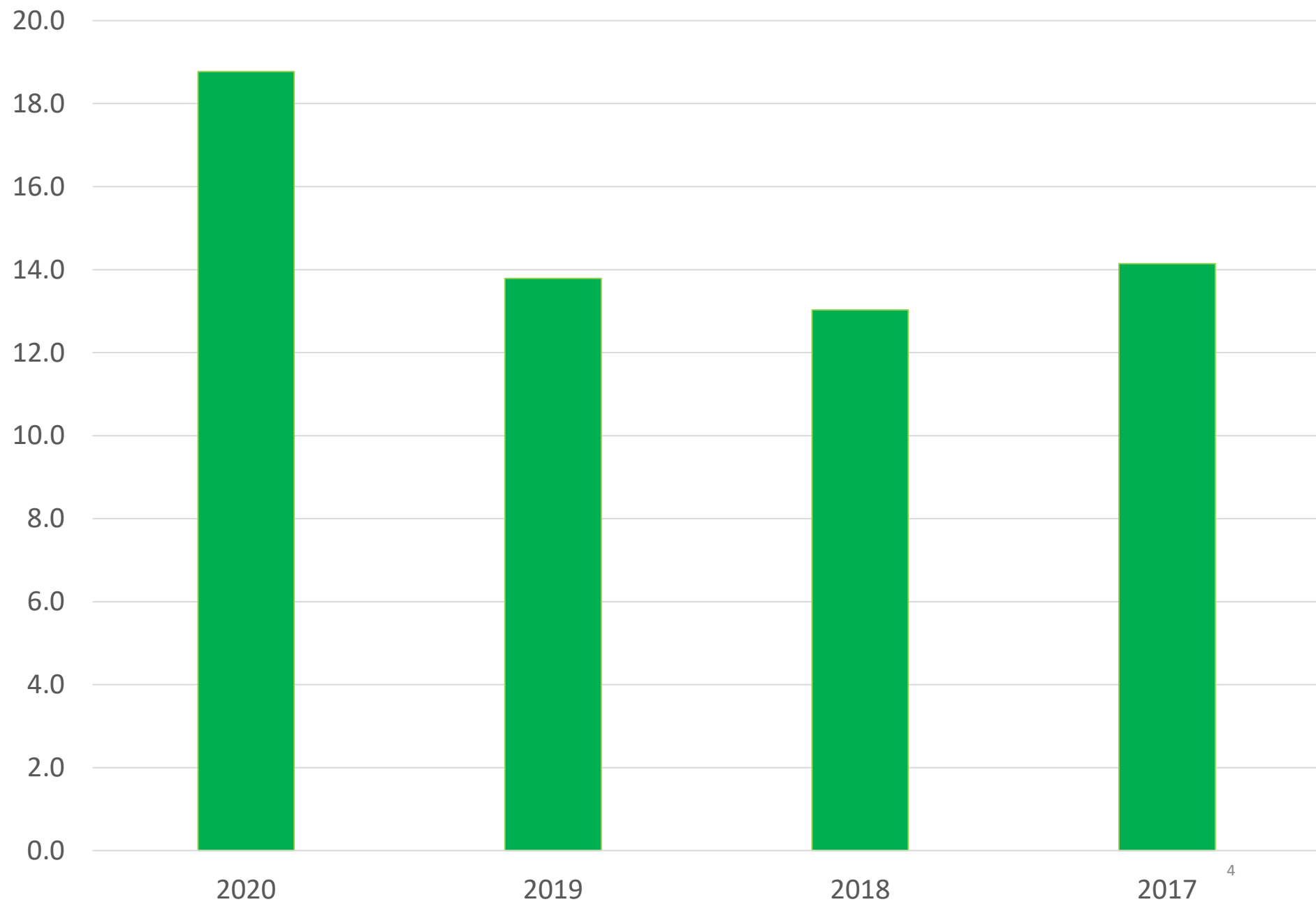
## Fodder Budget

Livestock Details								PRINT	UPDATE
ADD LIVESTOCK TYPE									
STOCK	NO. OF DAYS	STOCK NO.	STOCK WT.	DM% %	TOTAL DM- KG/DAY	MEAL FED KG/DAY	FORAGE INTAKE KG DM/DAY	TOTAL TONNES OF FORAGE DM REQUIRED	TOTAL TONNES OF MEAL REQUIRED
 Dairy Cows (Milking)	<input type="text"/>	<input type="text"/>	600	3.2	19.2	<input type="text"/>	19.2	0	0
 Dairy Cow (0-40 DIM)	<input type="text"/>	<input type="text"/>	600	2.7	16.2	<input type="text"/>	16.2	0	0
 Dairy Cows (Dry)	<input type="text"/>	<input type="text"/>	600	1.8	10.8	<input type="text"/>	10.8	0	0
 Dry suckler Cows	<input type="text"/>	<input type="text"/>	700	1.25	8.8	<input type="text"/>	8.8	0	0
 Calved suckler cow	<input type="text"/>	<input type="text"/>	600	1.7	10.1	<input type="text"/>	10.1	0	0
 In-calf Heifers	<input type="text"/>	<input type="text"/>	500	1.9	9.5	<input type="text"/>	9.5	0	0
 Weanlings / Yearlings	<input type="text"/>	<input type="text"/>	310	1.9	5.9	<input type="text"/>	5.9	0	0
 Store 1-2	<input type="text"/>	<input type="text"/>	475	1.7	8.1	<input type="text"/>	8.1	0	0
 Finishing Steers	<input type="text"/>	<input type="text"/>	600	2	12	<input type="text"/>	12	0	0
 Finishing Heifers	<input type="text"/>	<input type="text"/>	400	1.9	7.6	<input type="text"/>	7.6	0	0
 Bulls	<input type="text"/>	<input type="text"/>	600	2.2	13.2	<input type="text"/>	13.2	0	0
 Ewes	<input type="text"/>	<input type="text"/>	80	2	1.6	<input type="text"/>	1.6	0	0
Total Required								0	0
Silage / Bales									
HOME STORED FORAGE	LENGTH (M)	WIDTH (M)	HEIGHT (M)	CLAMP VOLUME (CUBIC METRES)	FRESH WEIGHT AVAILABLE (TONNES)	EST. DRY MATTER % OF FORAGE	TOTAL TONNES OF FORAGE DM AVAILABLE ON THE FARM		
Gross Silage (Pitted)	55	12	5	3300	1735.5	35	623.48		
Gross Silage (Pitted) - Second	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0	28	0		
Maize Silage (Pitted)	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0	32	0		
Wholecrop Silages (Pitted)	<input type="text"/>	<input type="text"/>	<input type="text"/>	0	0	42	0		
	NO. OF BALES ON FARM	WEIGHT OF EACH BALE (KG)							
Gross Silage (4x4 Round Bales)	<input type="text"/>	800			0	30	0		
Hay (4x4 Round Bales)	<input type="text"/>	300			0	85	0		

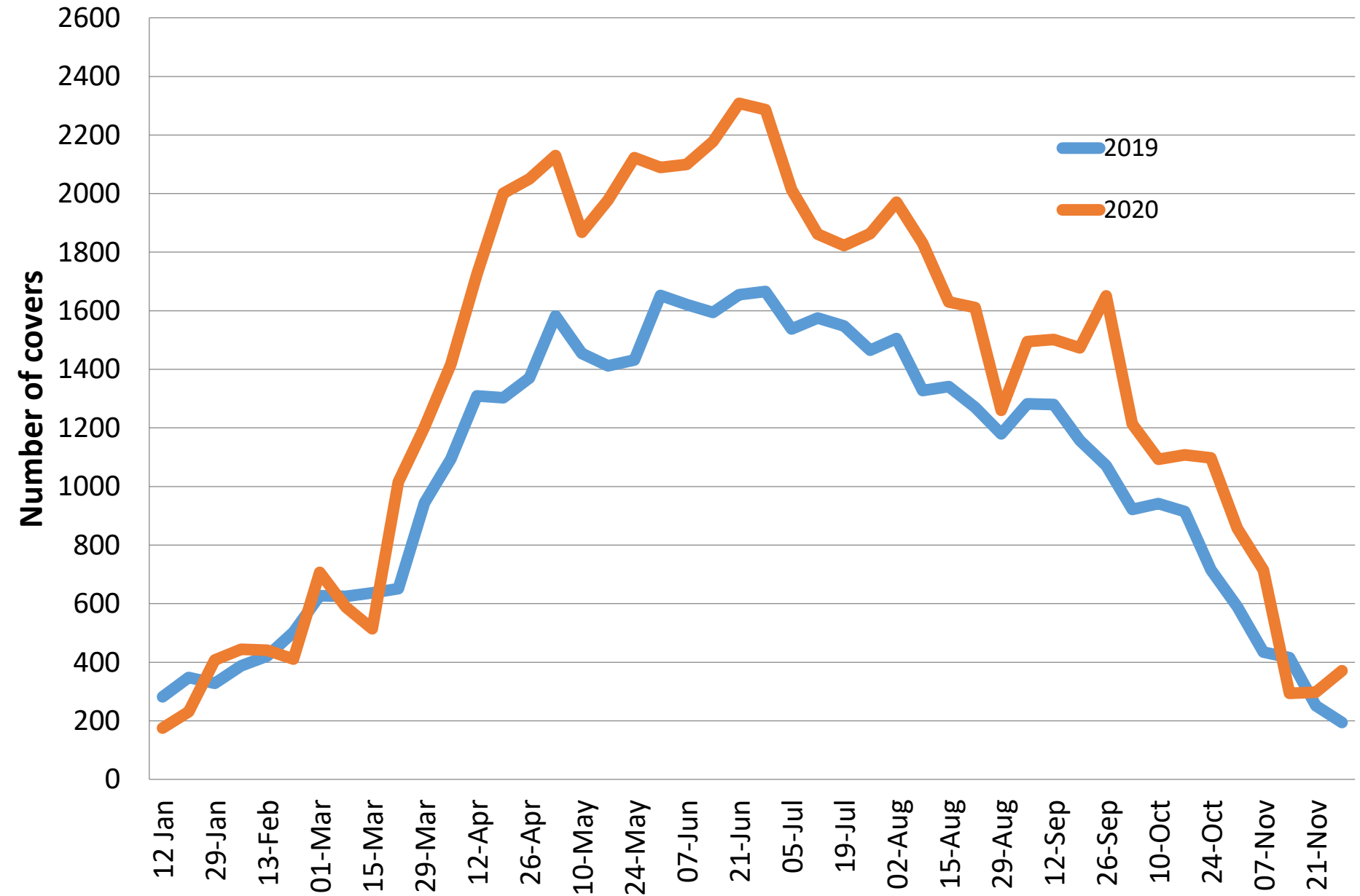
# No of farms using PBI

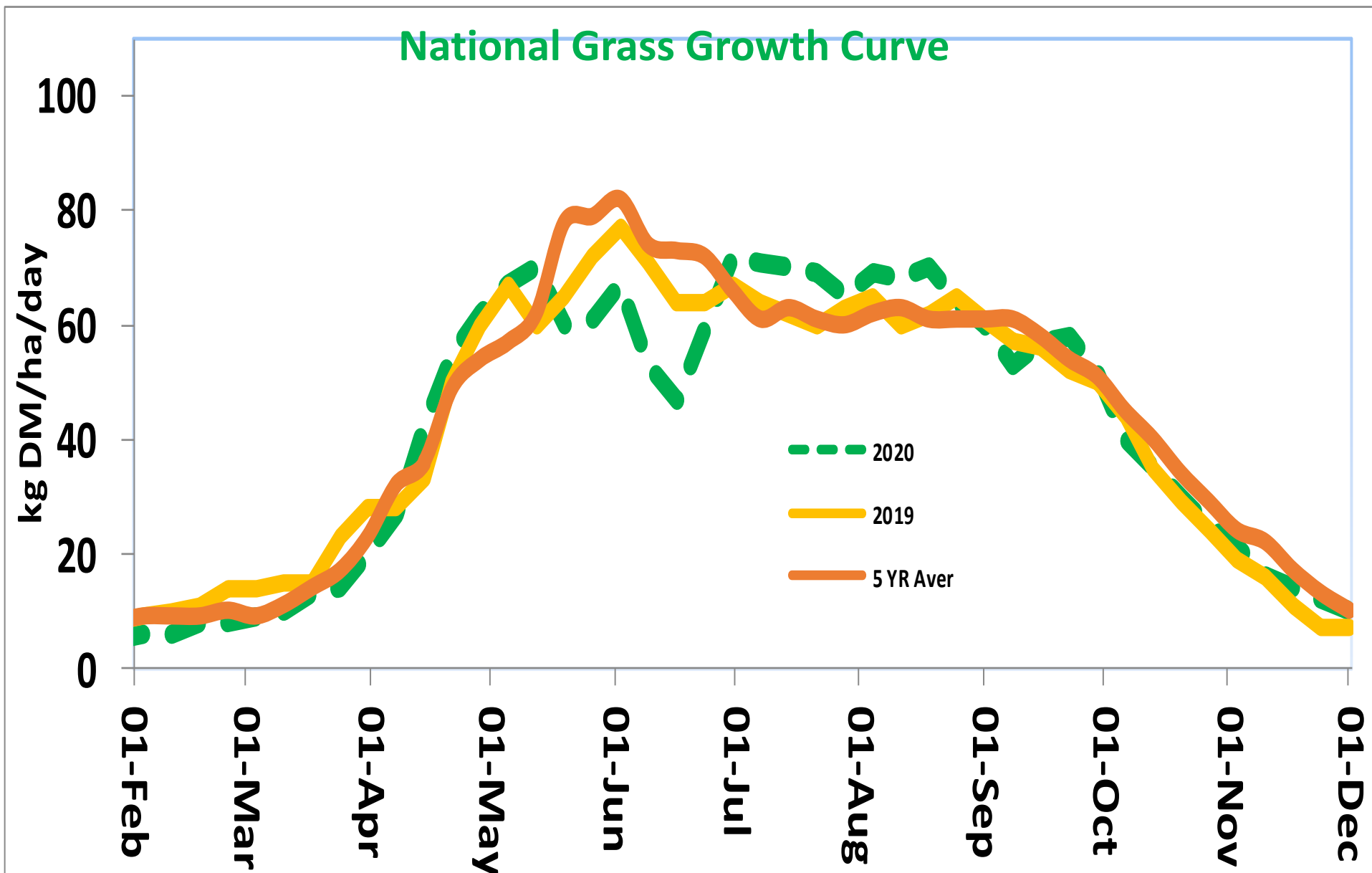


# Number of covers recorded per farm

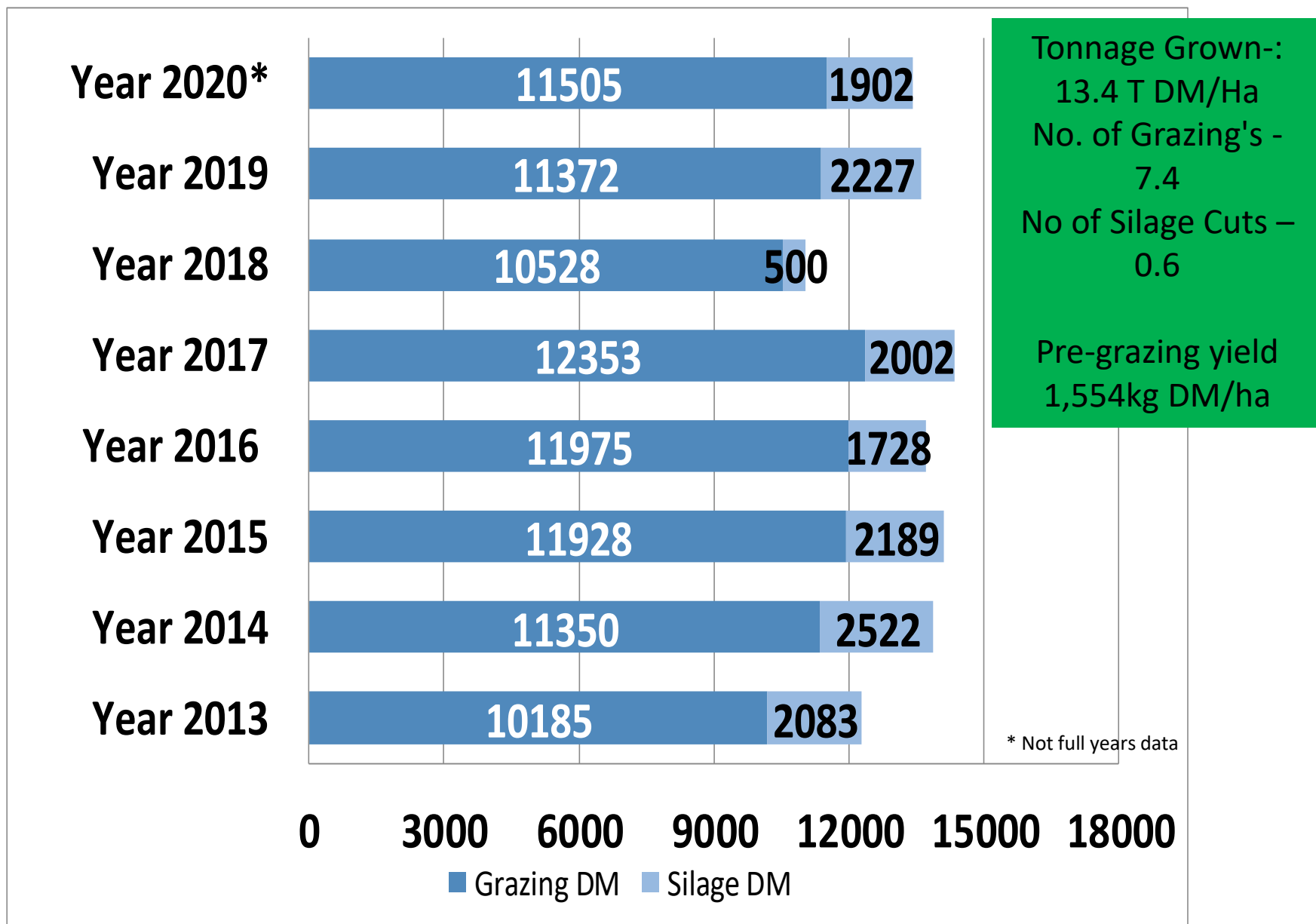


# Number of covers recorded per week





# Grass DM Production – Dairy $\geq 30$ covers recorded

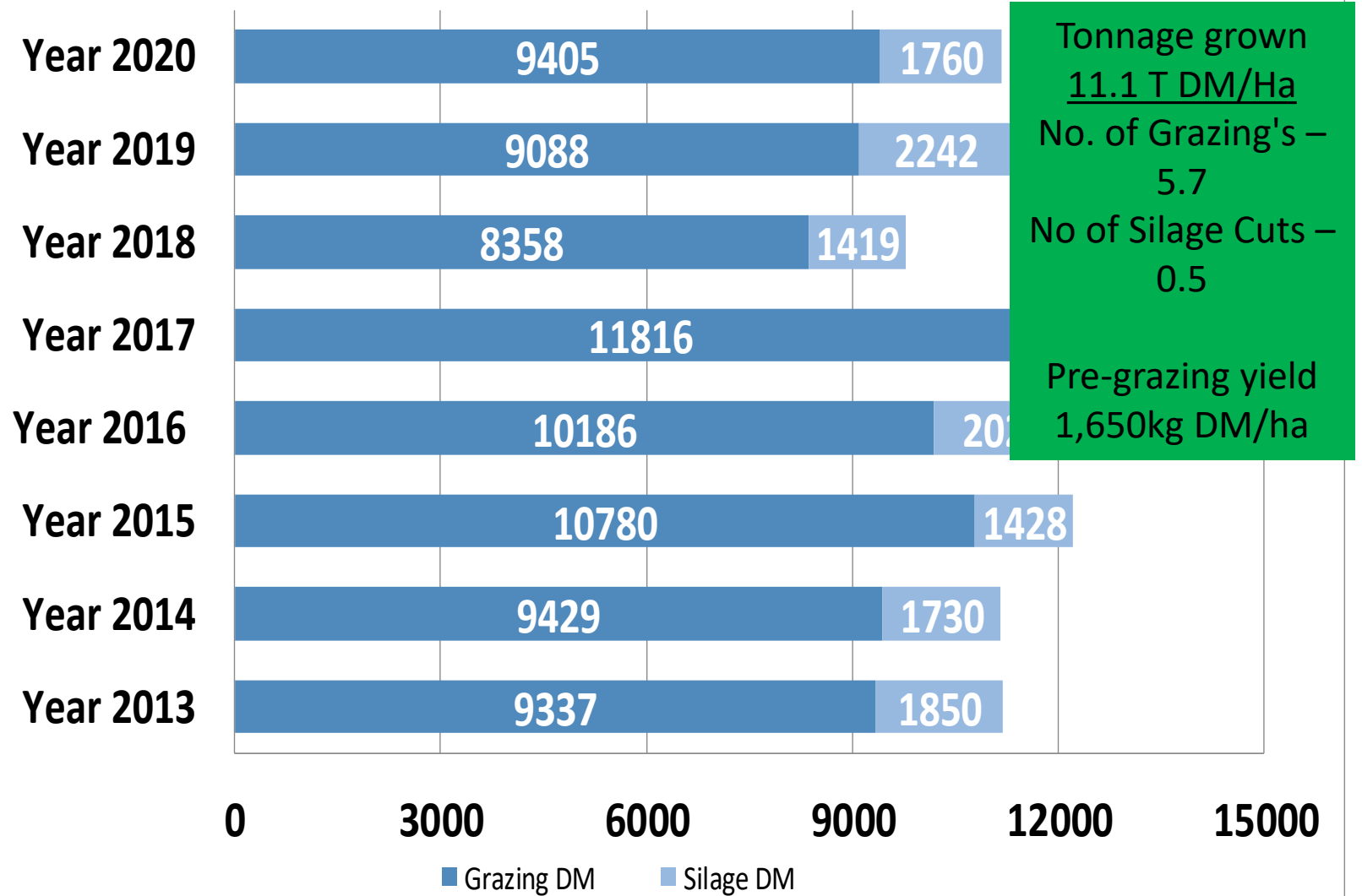


# Grass DM Production – Beef $\geq 20$ covers recorded

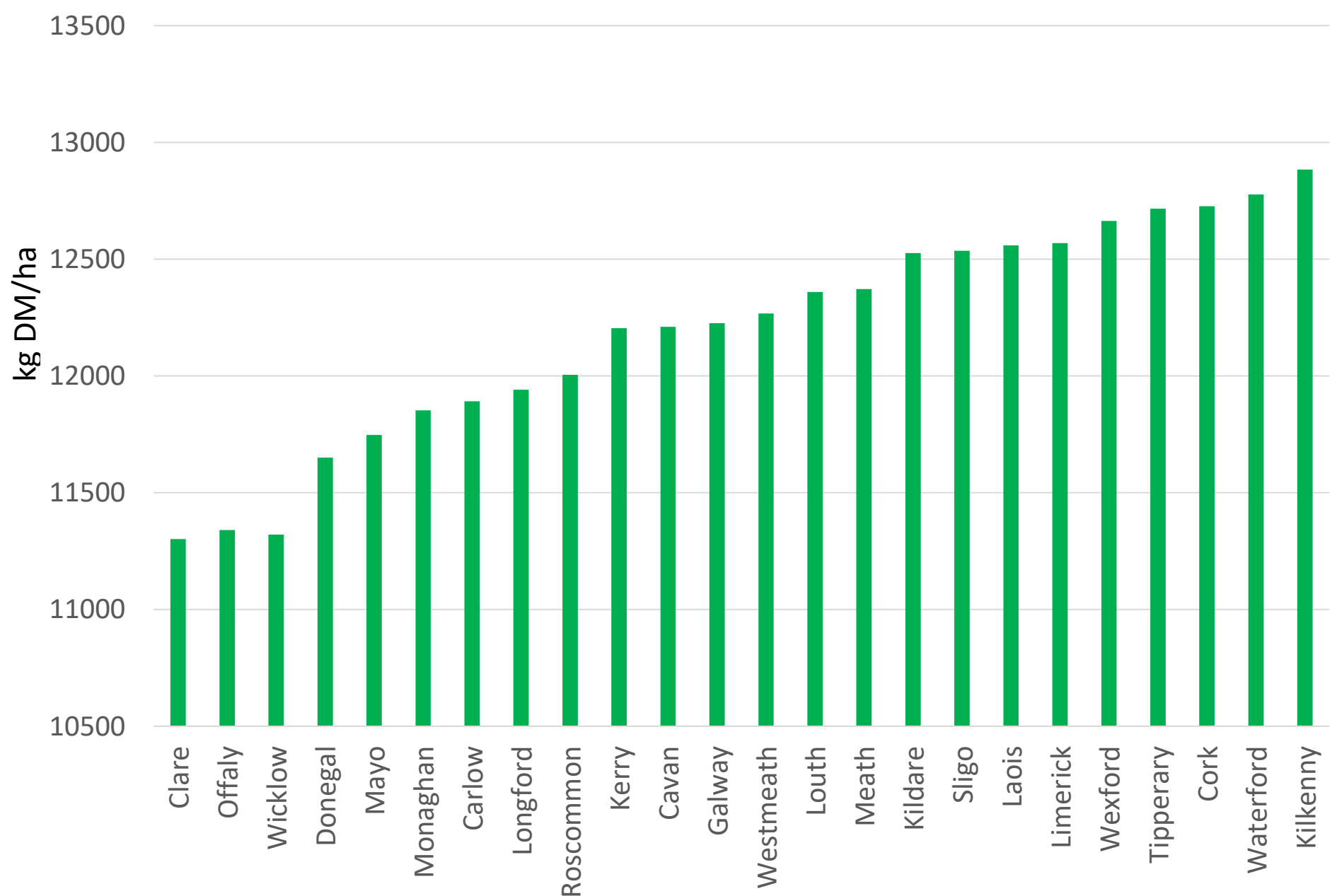




# Grass DM Production – Sheep $\geq 20$ covers recorded

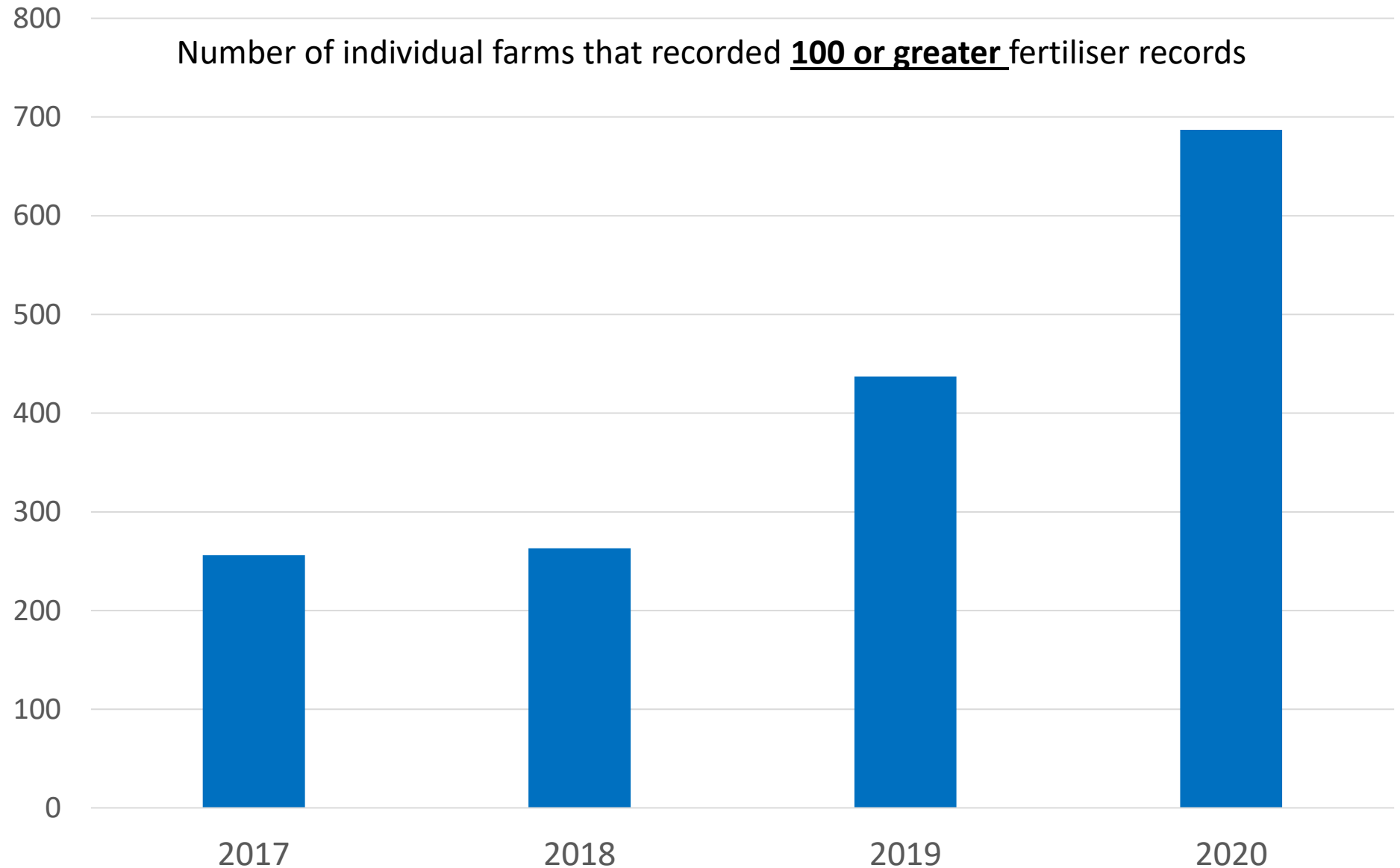


# Grass DM Production – All farm by County ≥20 covers



# Fertiliser Recording on PBI

Number of individual farms that recorded 100 or greater fertiliser records



# Milk Processors sending Milk Data to PBI



# PBI – where to next for our farmers

- Fertiliser management
- Soil fertility management
- Farm mapping/soil type
- Weather data

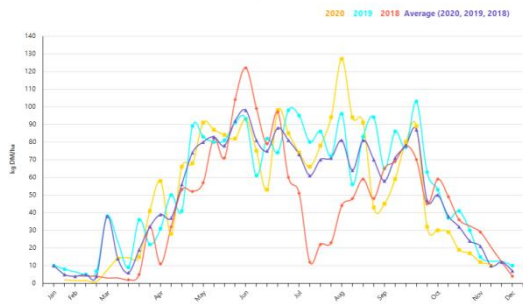
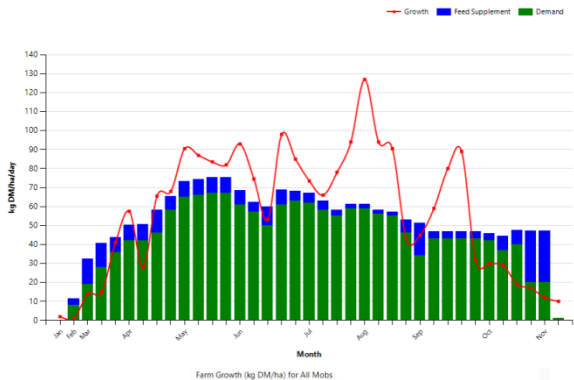
- Generate reports automatically
- Grass Growth Predictor
- Display results/data in graphs

Farmer

- Purchased feeds
- Silage from out farm
- Feed budget
- Grass calculator

- Nitrogen efficiency

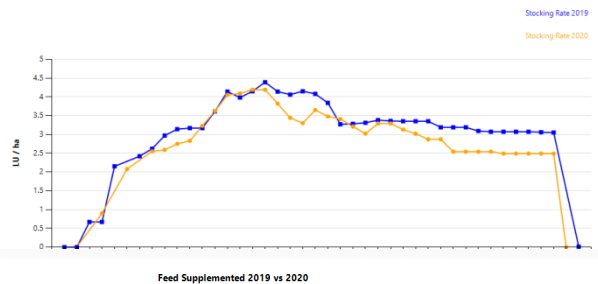
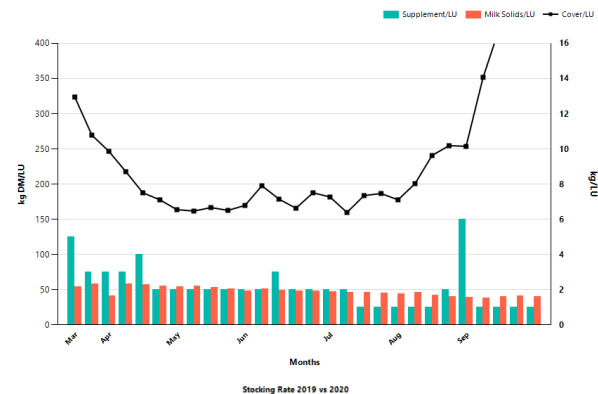
Graph for 2020



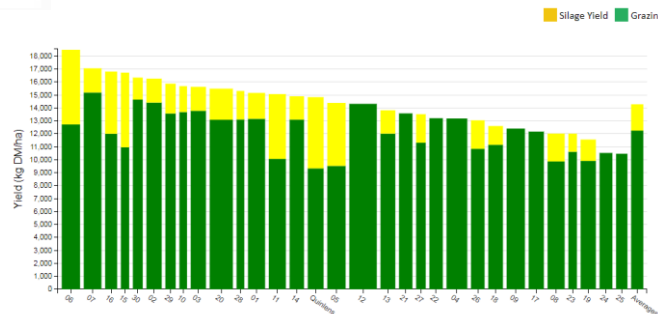
# Reports on PBI

Month	Count	Cover Date(day)
January	1	22
February	1	19
March	3	3; 16; 25
April	5	7; 13; 17; 22; 27
May	6	1; 5; 17; 21; 25; 29
June	8	2; 5; 10; 15; 18; 22; 25; 29
July	8	3; 7; 11; 14; 18; 22; 25; 29
August	5	6; 11; 15; 22; 29
September	4	4; 12; 18; 26
October	5	2; 9; 16; 23; 30
November	1	7
December	0	
TOTAL	47	

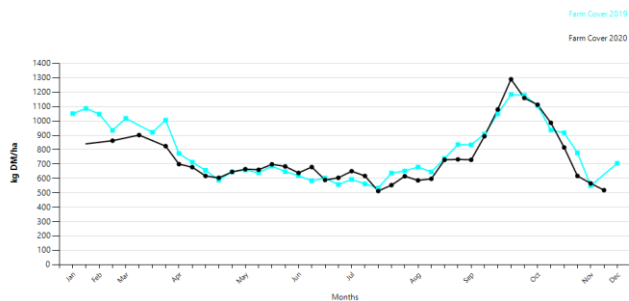
Cover/LU vs Supplement/LU or Milk Solids/LU for 2020



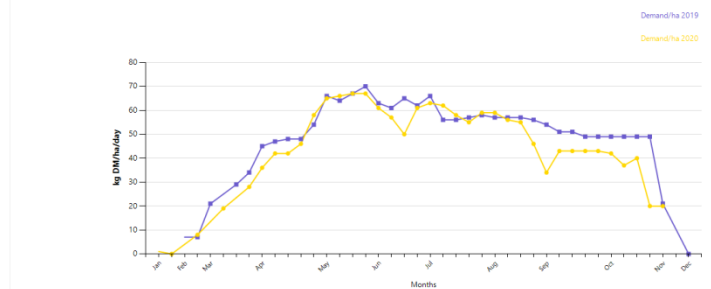
Cumulative Paddock Yield to 18 Nov 2020



Farm Cover 2019 vs 2020



Demand/ha 2019 vs 2020



		Weeks			
		J F M A	M J J A	S O N D	
No. of Covers Recorded	52	12	30	10	
No. Of Grazings	7.1	1.7	4.6	1.3	
No. Of Silage Cuts	0.7		0.8		
Grazing DM (kg DM/ha)	10555	2178	7175	2450	
Silage DM (kg DM/ha)	1648		1865		
Total DM (kg DM/ha)	12203	2178	9040	2450	
Over Winter Growth (kg DM/ha)	134				
Average Pre-grazing Yield(kg DM/ha)	1487	1281	1560	1885	
Average Growth Rate (kg DM/ha)	53	22	81	45	
Max Farm Cover (kg DM/ha)	1290 (18/Sep)	902 (03/Mar)	779 (15/Aug)	1290 (18/Sep)	
Min Farm Cover (kg DM/ha)	03/Aug	548 (13/Apr)	03/Aug	519 (07/Nov)	
Demand/ha (kg DM/ha)	41	22	59	36	
Stocking Rate (LU/ha)	2.66	1.68	3.49	2.54	
Opening/Closing Cover (kg DM/ha)		841 (22/Jar)		519 (07/Nov)	
Total Meal Fed/LU (kg/LU)	583	234	211	138	
Total Supplement Fed/LU (kg/LU)	771	291	223	257	
Area Cut for Silage (ha)	5473		5473		
Silage Yield (Tonnes of DM)	151		151		
Area Reseeded (%)	22.31 (23%)		21.31 (23%)		
Total Kg MS Produced	108583	29662	54389	24533	
Average Milk Solids per ha	1182	323	592	267	
Average Milk Solids per cow	509	171	234	108	
Average kg N/ha (%)	221	83 (38)	118 (53)	20 (9)	
Average kg P/ha (%)	43	16 (37)	23 (53)	4 (9)	
Average kg K/ha (%)	156	46 (29)	67 (43)	42 (27)	
Average kg S/ha (%)	25	10 (40)	15 (60)		
Start Grazing on	19/Feb				
Finish Grazing on	07/Nov				
Grazing Season Length (days)	262				
Start Date of 2nd Rotation	05/Apr				
Growth Exceeded Demand on	25/Mar				
Peak Growth was on	18/Jun (148)	27/Apr (97)	18/Jun (148)	18/Sep (89)	
Your 5 Best Paddocks are	06, 07, 16, 15, 30				
Your 5 Worst Paddocks are	32, 36, 35, 34, 33				





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Dairy Research Ireland

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## Jim's 4-Year Average Grass Performance

Annual Tonnage	14.7 T DM/ha (13.9)*
Grazing Yield	12.6 T DM/ha (12)*
No. Grazings Per Paddock	8.6 (8.2)*
Silage Yield	2.1 T DM/ha (1.9)*
No. Silage Cuts Per Paddock	0.4 (0.3)*
Pre-Grazing Yield	1465 Kg DM/ha
No. Farm Walks Per Year	40
Days at grass	302

\*Figures for 5-year average, which includes drought year 2018



# Jim's Grass Year

## Autumn

### Jim's Objective:

- Build for autumn
- **1100 kg DM/Ha AFC** on 1<sup>st</sup> Feb  
Grass for spring - day and night with no silage

### Jim's Targets:

- **1200 Kg DM/ha AFC** at end Sept
- 65-70% closed by Nov 1<sup>st</sup>
- Closing cover 750-800 Kg DM/ha

### Decisions Made to Achieve Target:

- Grass Budget – stay on track
- Walk farm 5-6 times in August
- Reduce Demand to match your budget
- Stay above 550 kg DM/ha

## Spring

### Jim's Objective:

- Grass for cows everyday
- Set up for 2<sup>nd</sup> rotation

### Jim's Targets:

- 40% grazed by Mar 1<sup>st</sup>
- Stay above 550 Kg DM/ha
- 70% by 17<sup>th</sup> March
- Start 2<sup>nd</sup> round last week March

### Decisions Made to Achieve Target:

- Using Grass Budget
- On/off grazing – don't poach
- Fertiliser/Slurry applied
- Increase supplement to keep on track

## Mid Season

### Jim's Objective:

- Grazing the Right grass
- Focus on quality

### Jim's Targets:

- Graze 1300-1400 kg DM/ha
- Rotation Length 18-19 days
- 160-180 Kg DM/LU

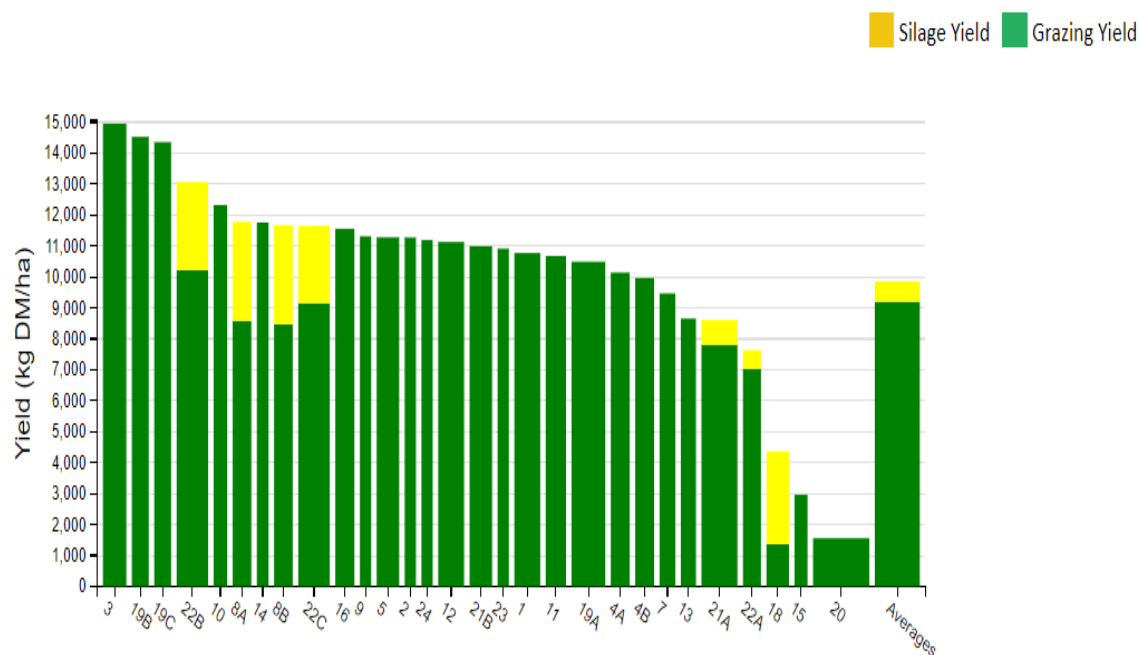
### Decisions Made to Achieve Target:

- Back Calculations
- Topping up fertiliser –quality
- PBI Planner
- Remove surplus
- Set demand right match growth

# Annual Tonnage Report Improvements?



Cumulative Paddock Yield to 03 Dec 2020



- 1) **Paddock 20-** Silage ground – No tonnage entered for 2 cuts
- 2) **Paddock 15 and 18** were only measured handful of times
- 3) **22A, 21A, 13, 7** we can improve in 2021

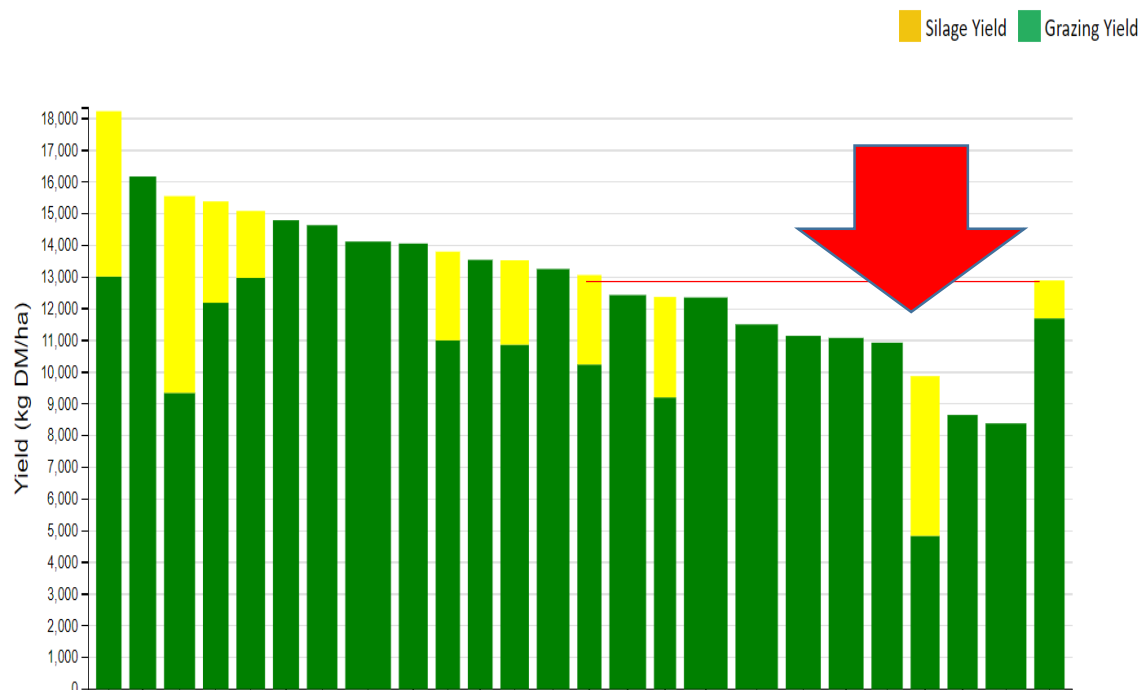
Wet Paddock?  
Soil Fertility?  
Lime Status?  
Perennial Ryegrass?

# Annual Tonnage Report

## Cost of poor paddocks



Cumulative Paddock Yield to 09 Dec 2020



46 Ha milking platform.  
Growing 13 T /DM/Ha

22 Ha sub optimum for  
grass growth

Cost of these paddocks?

36 T DM losing out.

80% utilisation- 28  
T/DM/Ha

Grass worth= €173 per  
tonne DM/Ha

**28 T x €173= €4844**

# Annual Tonnage Report

## GROWING 14 TON GRASS DM/Ha

Growth Period	Grass Grown/Rotn (kg/ha)	Rotn. Length (days)	No. of Rotations	When Does Grass Grow?
Feb to Mid Apr	1000	65	1	10%
Mid Apr to Mid Aug	1400	20	2-7	
Mid Aug to Mid Sep	1600	30	8	60%
Mid Sep to Mid Oct	1900	35	9	
Mid Oct to Mid Nov	1100	35	10	
				30%
Total Grass production/ha	14000	285	10	100%

# Farm Cover Report

Month	Count	Cover Date(day)	Month	Target
January	0		Jan	1
February	0		Feb	1
March	2	4; 29	Mar	2
April	2	14; 19	Apr	4
May	3	3; 24; 31	May –July	4-6
June	1	10		
July	3	1; 16; 22	Aug	4
August	3	6; 16; 29	Sept	3
September	2	8; 18	Oct	3
October	3	1; 19; 30	Nov	1
November	0		Dec	1
December	0		Total	32-38
TOTAL	19			

The target (in green) is to measure farm cover 30 + times per year.

## Common Pitfalls-:

- No opening/ closing cover
- Not measuring weekly in April during the transition period from low to high growth rates (grass gets out of control)
- Not measuring twice per week during peak growing times. This leads to suboptimal pre-grazing yields and lower animal performance
- Stopping regular grass measuring in the autumn build up period which leads to less days at grass

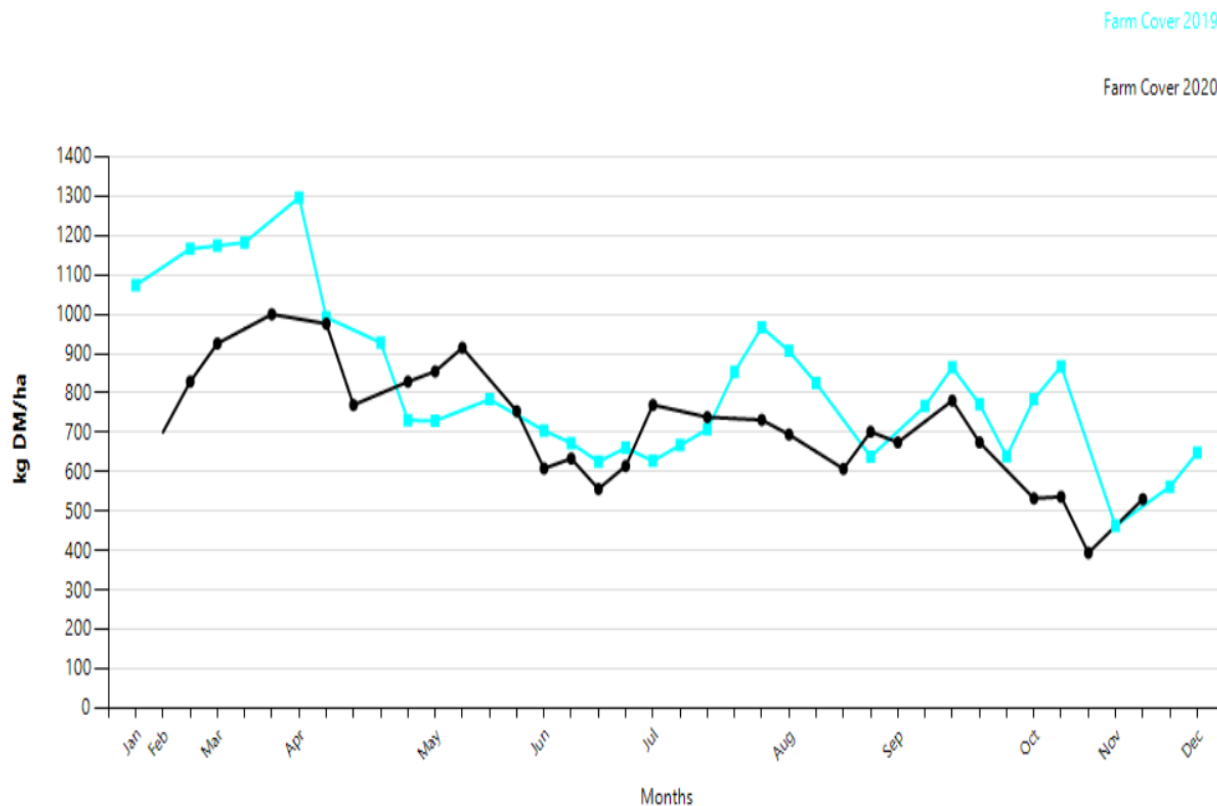


# Grass Reports

## Farmer Examples

# 1. Too much cover in Spring + too little in the Autumn!

Farm Cover 2019 vs 2020



## Cover per cow in 2020

Running at > 200 per LU until 1<sup>st</sup> June.

Take action!

Bale out paddocks in Spring

In August, extend rotation and build cover to suit your farm.

No of farm walks in August



August	2	12; 27
--------	---	--------



# Autumn Grazing Targets



Date	Cover/Cow (Kg DM)	Average Farm Cover (Kg DM/Ha)	Rotation Length
<b>STOCKING RATE OF 2.5 LU/HA</b>			
1 <sup>st</sup> August	180	450	20 Days
Mid - August	200	500	25 Days
1 <sup>st</sup> September	300	750	30 Days
Mid-September	400-450	1,000-1,100	35 Days
1 <sup>st</sup> October	400	1,000	40 Days
1 <sup>st</sup> November	<b>60% of your grazing platform should be closed for Spring at this stage</b>		
Fully Housed		550-600	
<b>STOCKING RATE OF 3.0 LU/HA</b>			
Mid - August	250	750	25 Days
1 <sup>st</sup> September	330	990	30 Days
Mid-September	370	1100	35 Days
1 <sup>st</sup> October	380	1150	40 Days
1 <sup>st</sup> November	<b>60% of your grazing platform should be closed for Spring at this stage</b>		
Fully Housed		600-650	
<b>STOCKING RATE OF 3.5 LU/HA</b>			
Mid - August	220	770	25 Days
1 <sup>st</sup> September	280	980	30 Days
Mid-September	340	1200	35 Days
1 <sup>st</sup> October	335	1175	40 Days
1 <sup>st</sup> November	<b>70% of your grazing platform should be closed for Spring at this stage</b>		
Fully Housed		700-750	

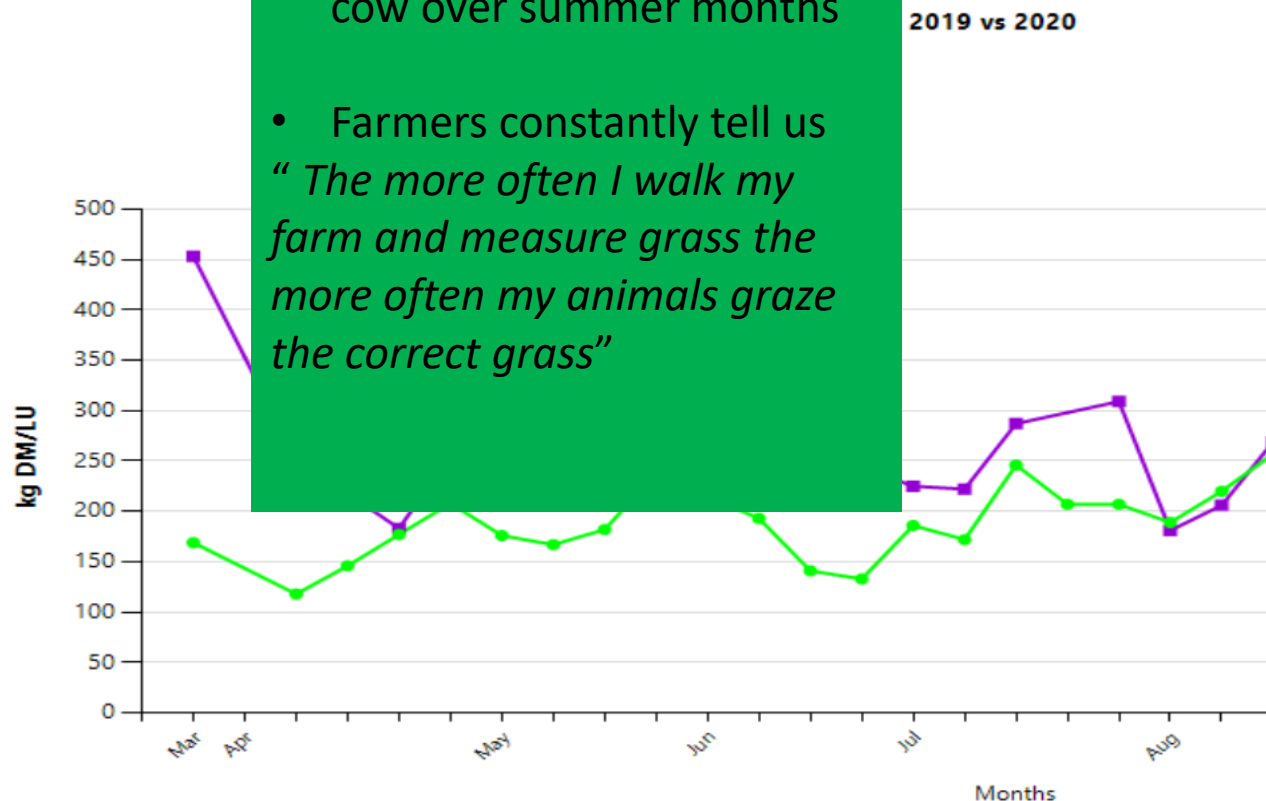
Targets available  
on the Grass10  
page on Teagasc  
Website

Rotation length  
Key!



## 2) Walk and Measure Pre - Grazing Yield

- Target 160-180 kg/DM per cow over summer months
- Farmers constantly tell us *"The more often I walk my farm and measure grass the more often my animals graze the correct grass"*



Mid-Apr to Mid-Aug (Mid-Season)

2019

Cover/LU: 260 kg DM/LU  
No. Walks 13 Farm Covers

Pre- Grazing Yield

1855 Kg/DM/Ha

2020

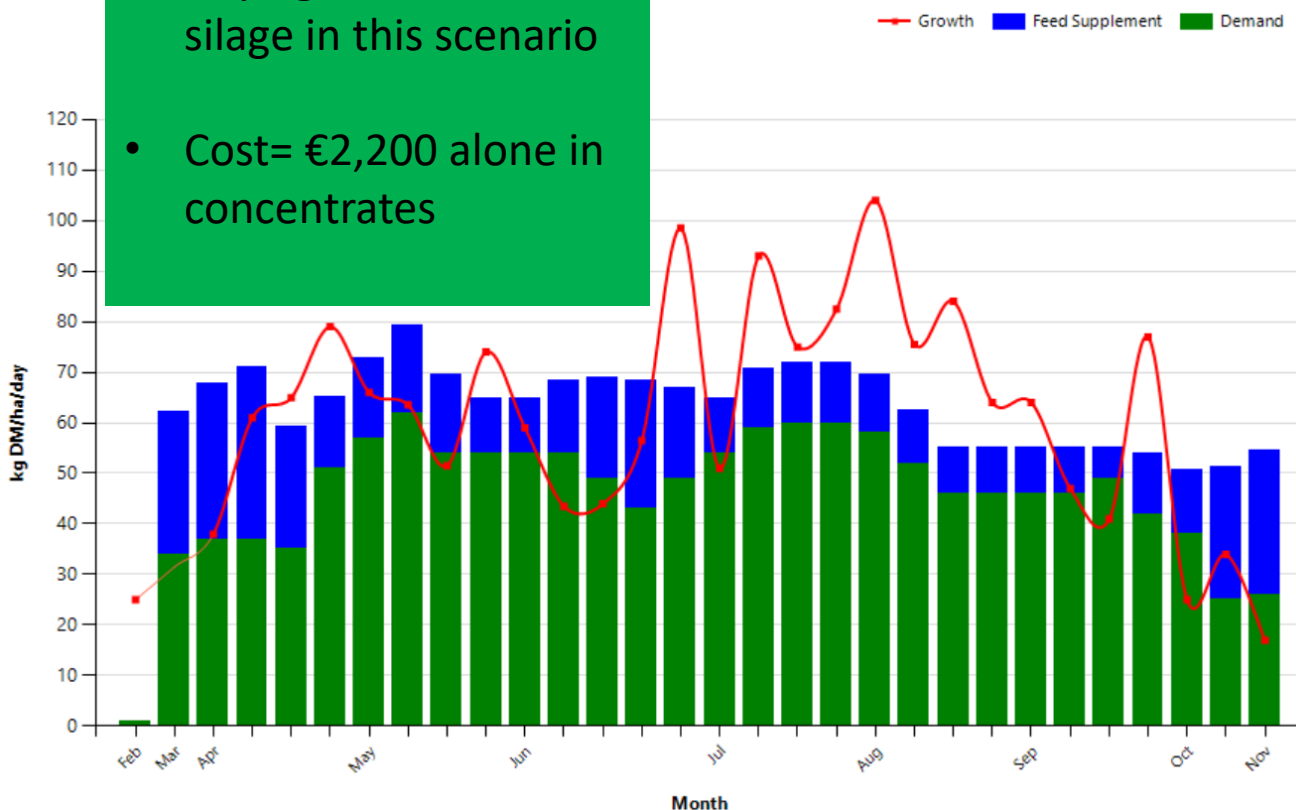
Cover/LU: 182 kg DM/LU  
No. Walks 27 Farm Covers

Pre- Grazing Yield

1590 Kg/DM/ha

### 3) Matching Growth v Demand during the summer months

- Buying meal to make silage in this scenario
- Cost= €2,200 alone in concentrates



During July this Farmer did not act to reduce meal after drought period.  
Stocking rate 4 LU/Ha

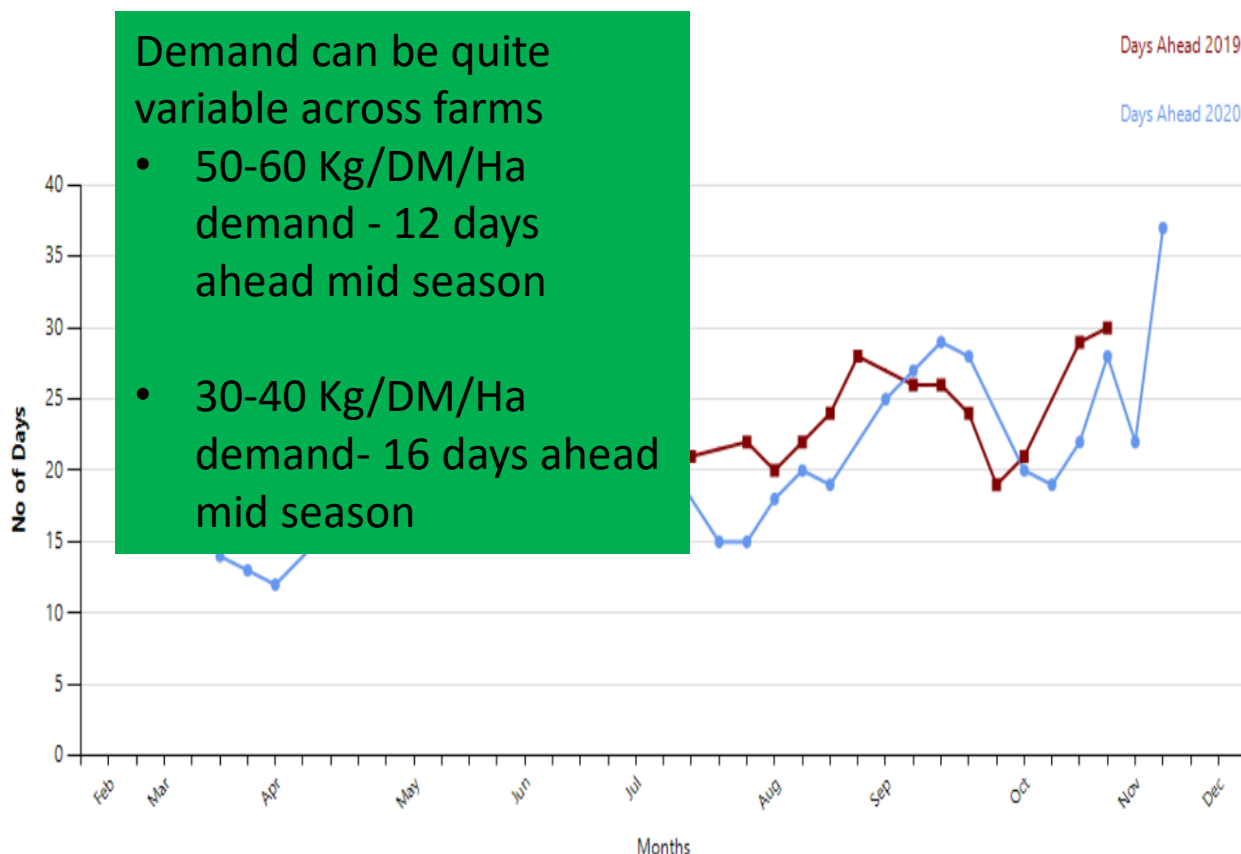
12 kg/ha meal (3kg/cow) left in diet.

During this period growth averaged **85 kg/day** whilst demand was only **60 kg/day**.  
If meal reduced to 1 kg then demand 68kg/day.

**Over 30 days this equated to 8T extra meal fed. Plus making an additional 40 bales silage.**

# Correct Pre - Grazing Yield and days ahead on Beef, Sheep and Drystock Farms

Days Ahead 2019 vs 2020



## Summer Walks 2019: 12

Days Ahead: 23

Pre Grazing Yield:

1662kg/DM/Ha

(10-11 cm)

Demand: 35 kg per ha

## Summer Walks 2020: 17

Days Ahead: 18

Pre Grazing Yield:

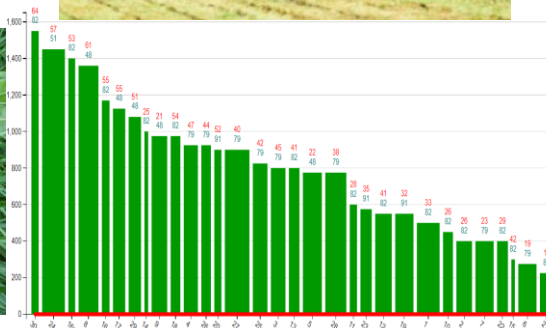
1506kg/DM/Ha

(9- 10 cm)

Demand: 41 kg per ha

The bar chart displays the frequency of nodes in the network. The x-axis is labeled with node counts from 1 to 25, and an 'Average' category. The y-axis represents frequency, with a scale from 0 to 10. Each bar is composed of two segments: a green segment at the bottom and a yellow segment on top. The total height of each bar represents the total frequency for that node count.

Number of Nodes	Green Segment (Frequency)	Yellow Segment (Frequency)	Total Frequency
1	10	0	10
2	9	0	9
3	7	2	9
4	7	2	9
5	7	1	8
6	7	1	8
7	7	1	8
8	7	1	8
9	7	1	8
10	7	1	8
11	7	1	8
12	7	1	8
13	7	1	8
14	7	1	8
15	7	1	8
16	7	1	8
17	7	1	8
18	7	1	8
19	7	1	8
20	7	1	8
21	7	1	8
22	7	1	8
23	7	1	8
24	7	1	8
25	7	1	8
Average	7	1	8



3

10:34

<

Fertiliser

Fertiliser

+ Select Paddocks

Area:

Date

09/06/2020

Fertiliser/Slurry    Nutrient%: N:46, P:0, K:0

Protected Urea

Amount type

Units of N/acre

Units of N

20

Total Amount(kg/ha) 53.48

Reason

Grass

Save



# Grass10 Grazing Courses 2021



## Why should you join a Grass10 Grazing Course in 2021?

- Develop your knowledge of grazing management to grow and utilise more grass
- Learn to measure grass and use PastureBase Ireland to make grazing decisions
- Encourage and support from advisors and farmers to help you to stay focused and make progress
- Help you to meet your derogation requirements through grass measuring

<https://bit.ly/grass10grazingcourse>

Visit the Grass10 page on Teagasc Public Website or the Grass10 Newsletter



## PastureBase training with Advisors / Discussion groups

Grass10 and PastureBase Team are available to go through reports with Discussion groups and Advisors over Zoom in the month of January.

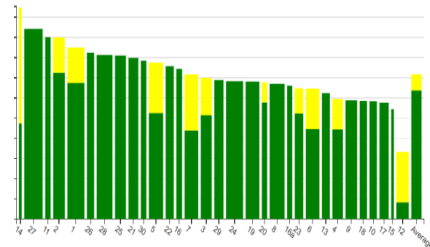
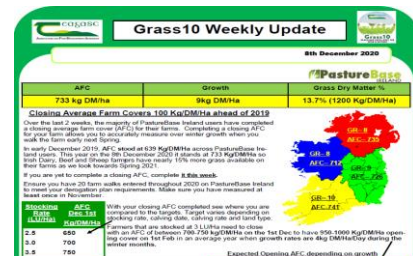
Email -: [support@pbi.ie](mailto:support@pbi.ie) to register your interest!



# Summary



- Walk and measure your farm weekly on PastureBase Ireland. Aim for 30+ measurements in 2021. The more data you have, more improvements you can make
- Join a Grass10 Grazing Group for practical on farm help improving your grazing techniques in 2021
- Read our weekly Grass10 Newsletter for tips and updates throughout the year
- Look through your own reports and identify areas for improvement on your farm in 2021 to help you to achieve grazing excellence.



# Thank you for your attention!



An Roinn Talmhaíochta,  
Bia agus Mara  
Department of Agriculture,  
Food and the Marine

