



# 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.



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



PastureBase IRELAND

# Range of Tools

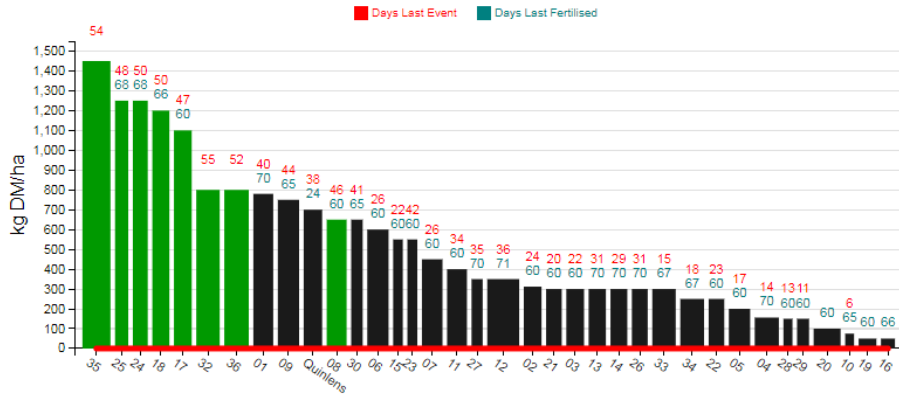
## Grass Wedge



Grass: Wedge 07/11/2020

ADD NEW COVER

ADD GRAZE/SILAGE CUT

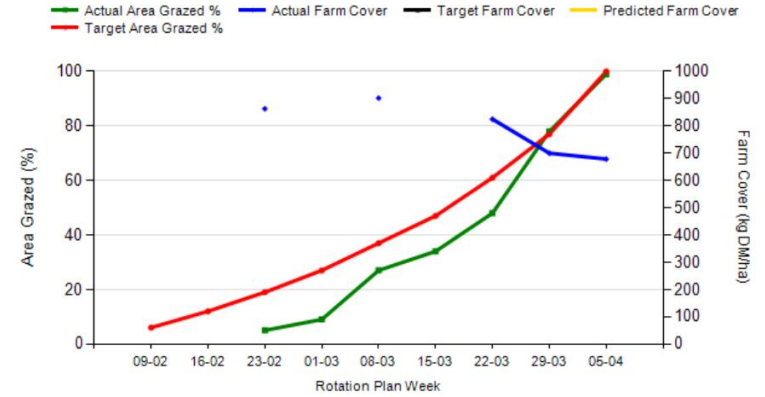


Farm Cover: 519 Cover/LU: 0 Growth/ha: 10 Demand/ha: 0 Stocking Rate: 0

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

## Rotational Planners

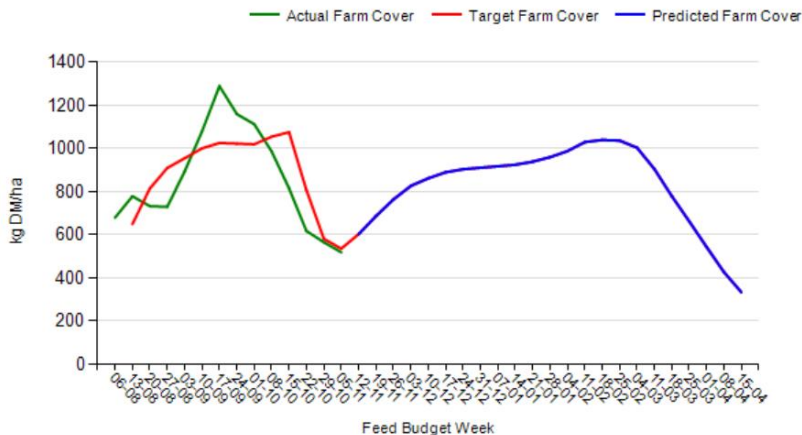
Comparison Chart



## Fodder Budget

### Grass Budget

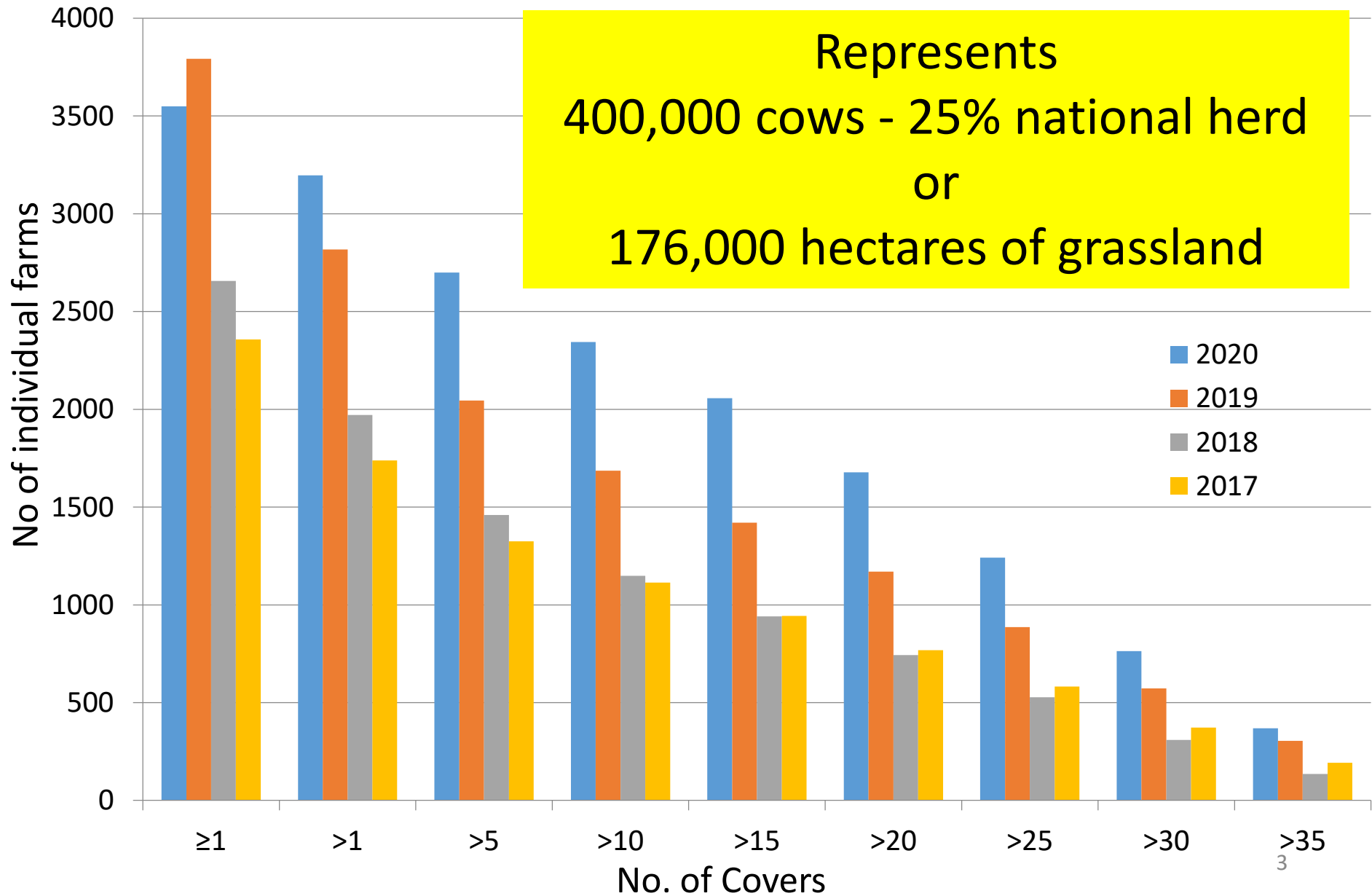
Comparison Chart



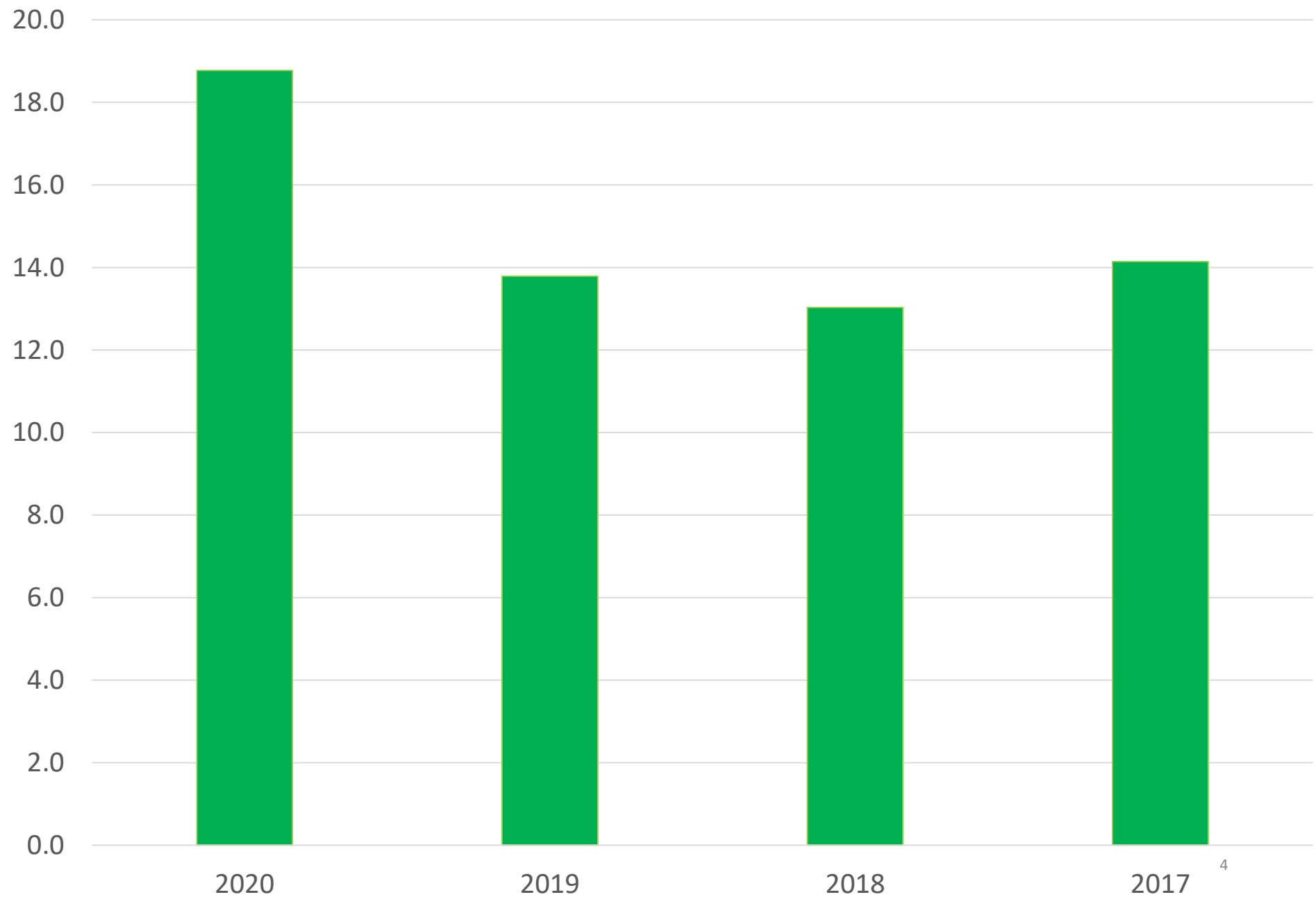
Livestock Details								PRINT	UPDATE
STOCK	NO. OF DAYS	STOCK NO.	STOCK WT.	DIMS %	TOTAL DIMM- KG/DAY	MEAL FED KG/DAY	FORAGE INTAKE KG DM/DAY	TOTAL TONNES OF FORAGE DM REQUIRED	TOTAL TONNES OF MEAL REQUIRED
Deiry Cows (Milkng)			800	3.2	19.2	0	19.2	0	0
Deiry Cow (0-40 DIM)			800	2.7	16.2	0	16.2	0	0
Deiry Cows (Dry)			800	1.8	11.7	0	11.7	0	0
Dry suckler Cows			700	1.25	8.8	0	8.8	0	0
Calved suckler cow			800	1.7	11.1	0	11.1	0	0
In-calf Heifers			800	1.9	9.5	0	9.5	0	0
Weanlings / Yearlings			310	1.9	5.9	0	5.9	0	0
Stores 1-2			475	1.7	8.1	0	8.1	0	0
Finishing Steers			800	2	12	0	12	0	0
Finishing Heifers			490	1.9	9.3	0	9.3	0	0
Bulls			800	2.2	15.2	0	15.2	0	0
Ewes			90	2	1.8	0	1.8	0	0
<b>Total Required</b>								<b>0</b>	<b>0</b>

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
Grass Silage (Pitted)	55	12	5	3300	1738.5	35	623.48
Grass Silage (Pitted) - Second				0	0	28	0
Maize Silage (Pitted)				0	0	32	0
Wholecrop Silages (Pitted)				0	0	45	0
NO. OF BALES ON FARM	WEIGHT OF EACH BALE (KG)						
Grass Silage (4x4 Round Bales)	800				0	30	0
Hay (4x4 Round Bales)	300				0	85	0

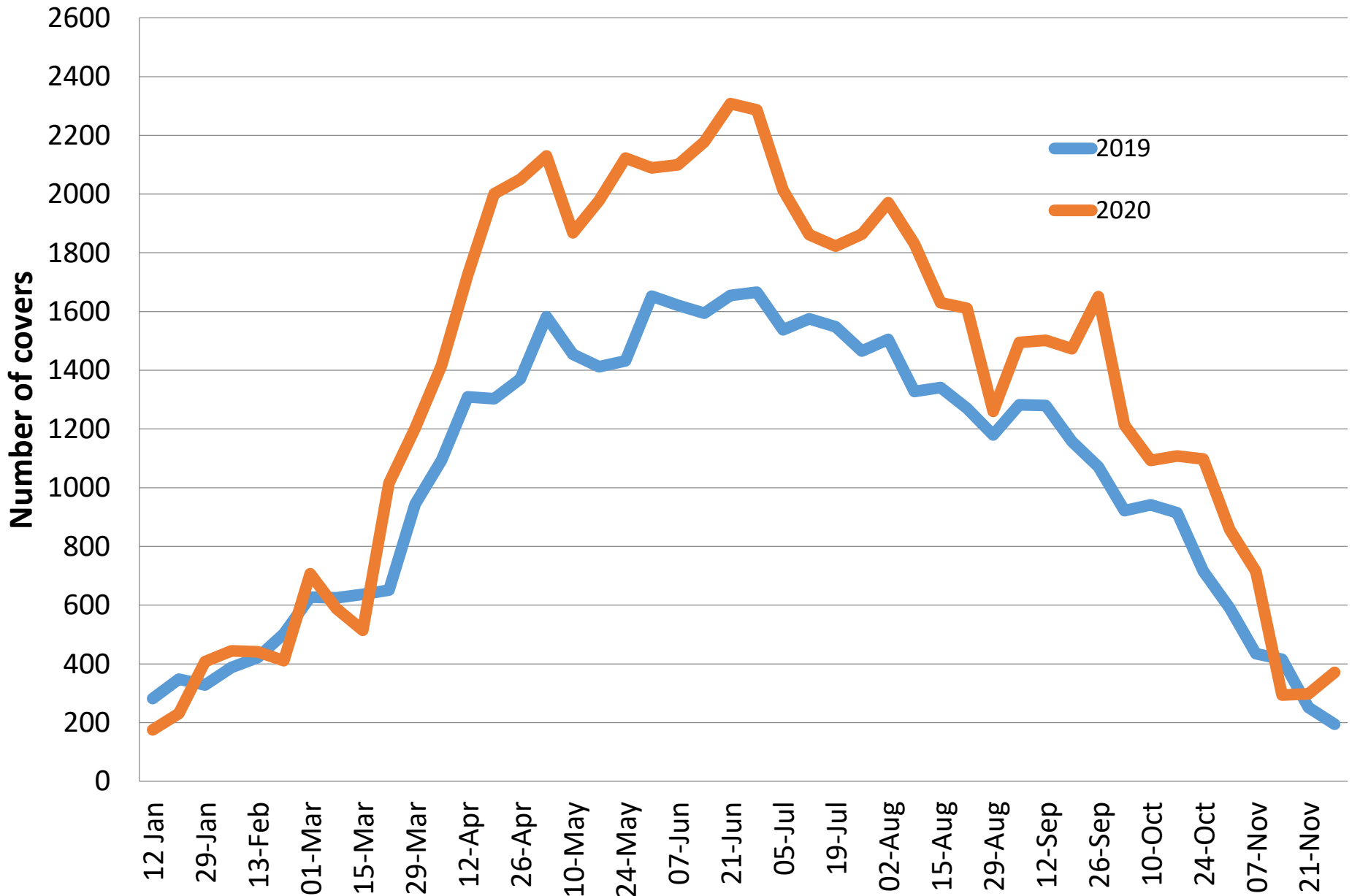
# No of farms using PBI



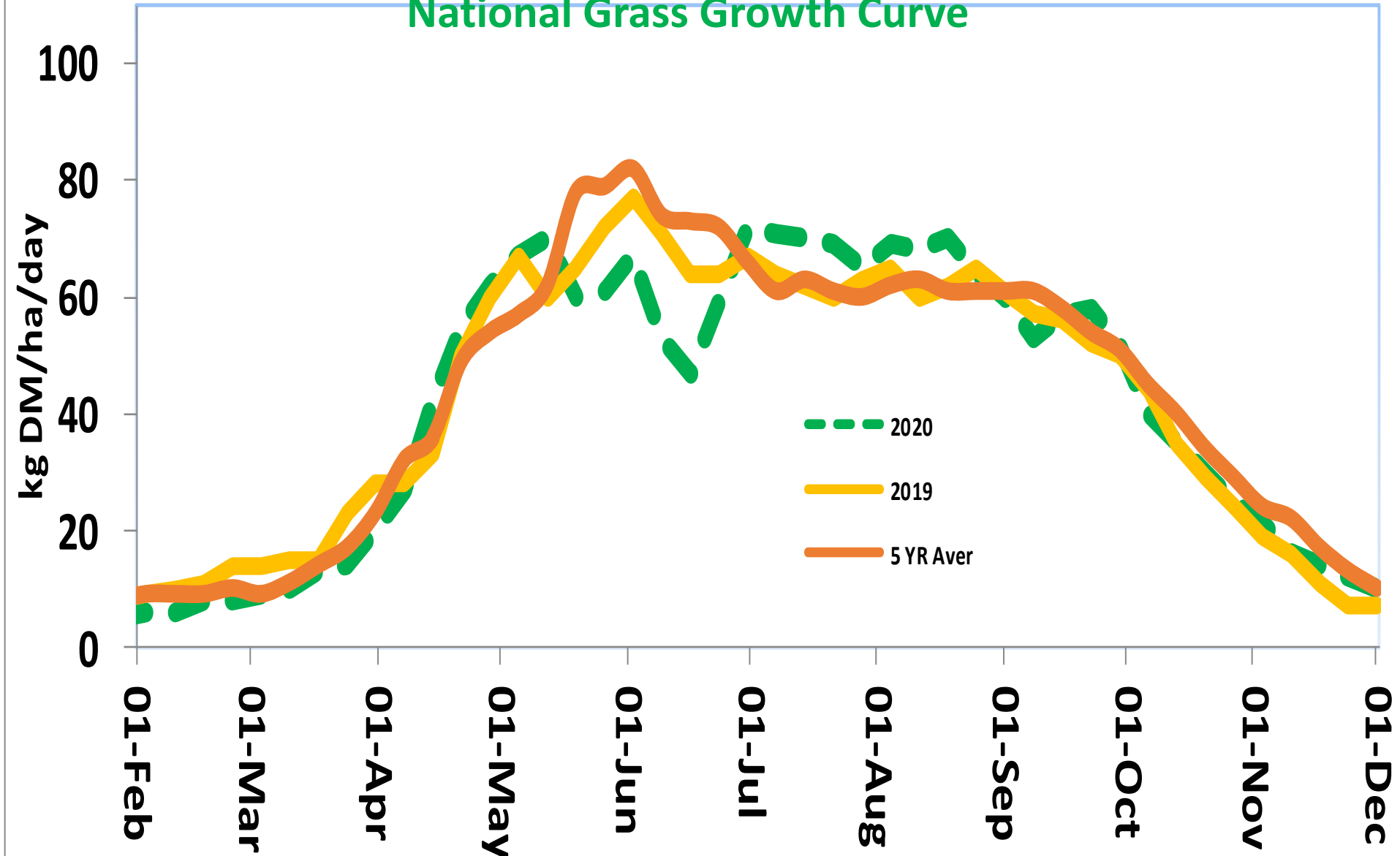
# Number of covers recorded per farm



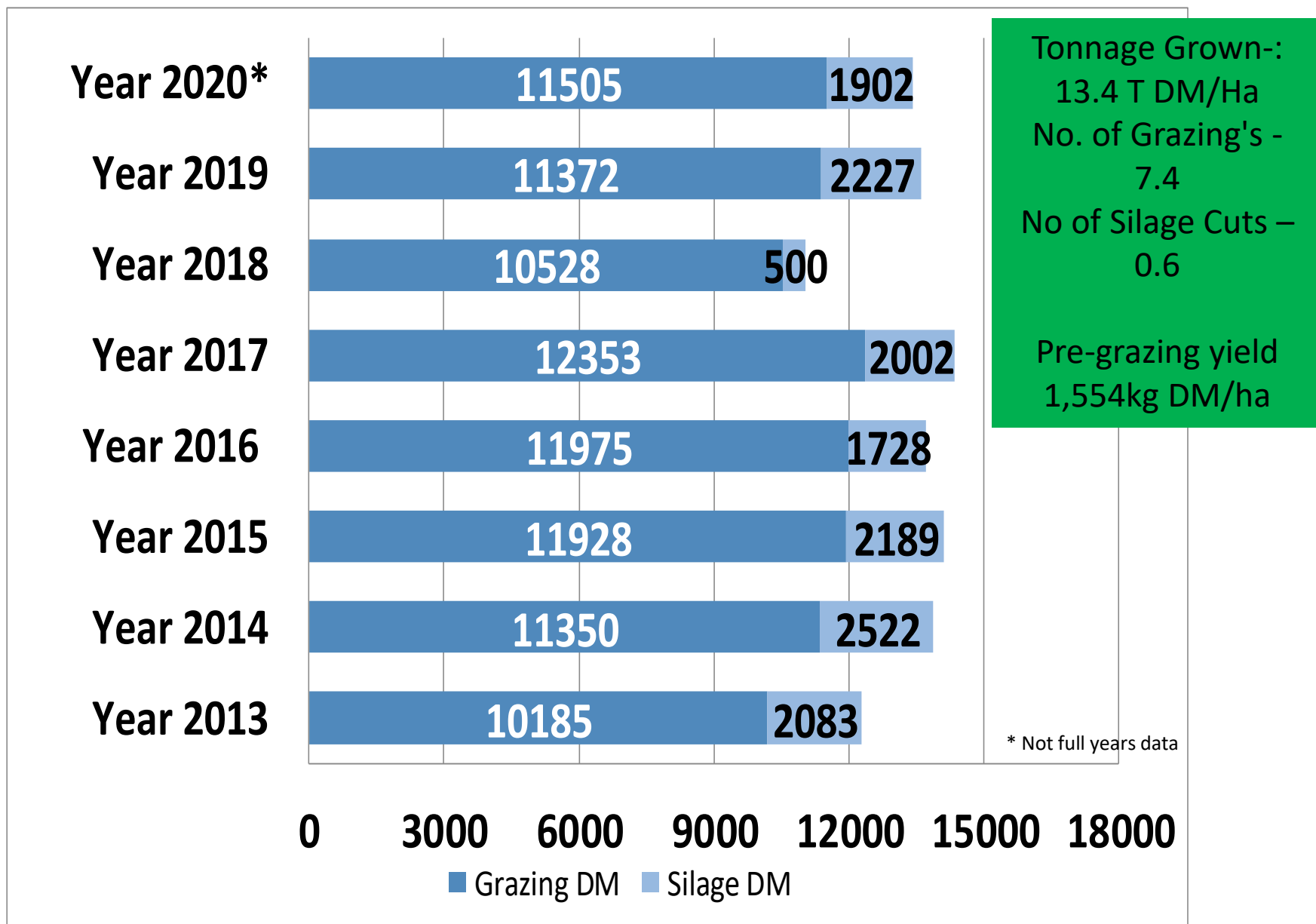
# Number of covers recorded per week



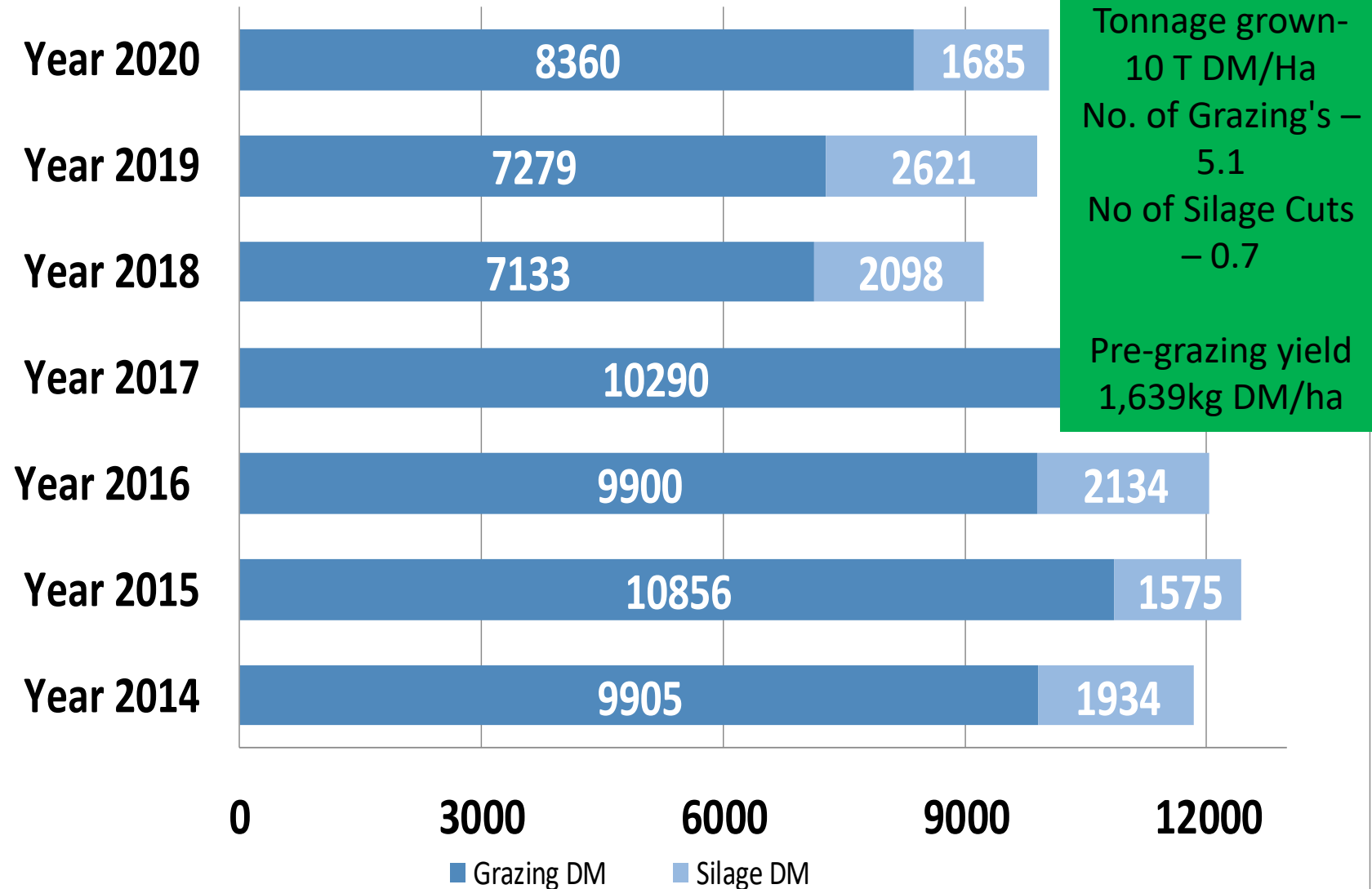
## National Grass Growth Curve



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

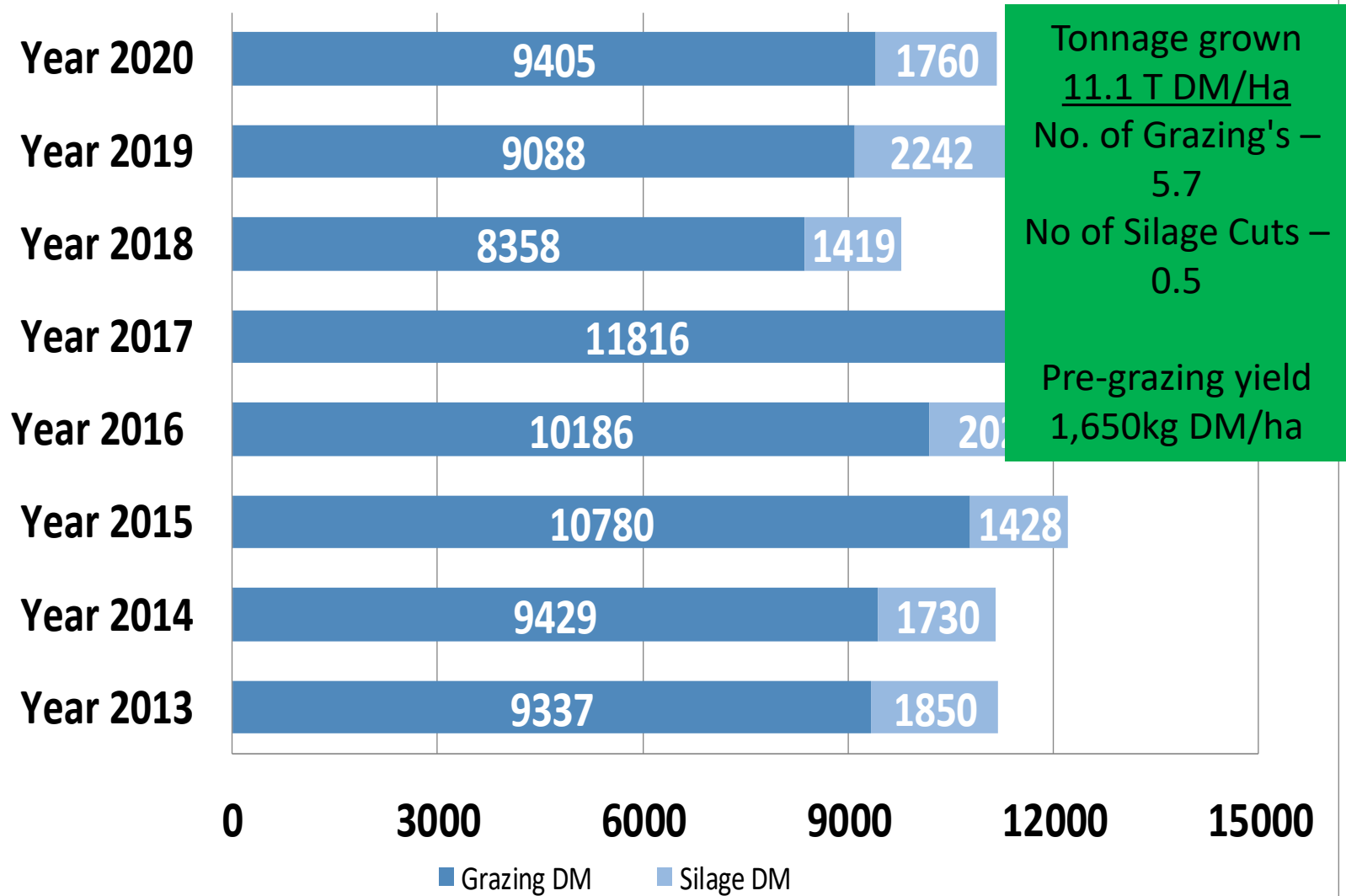


# Grass DM Production – Beef $\geq 20$ covers recorded

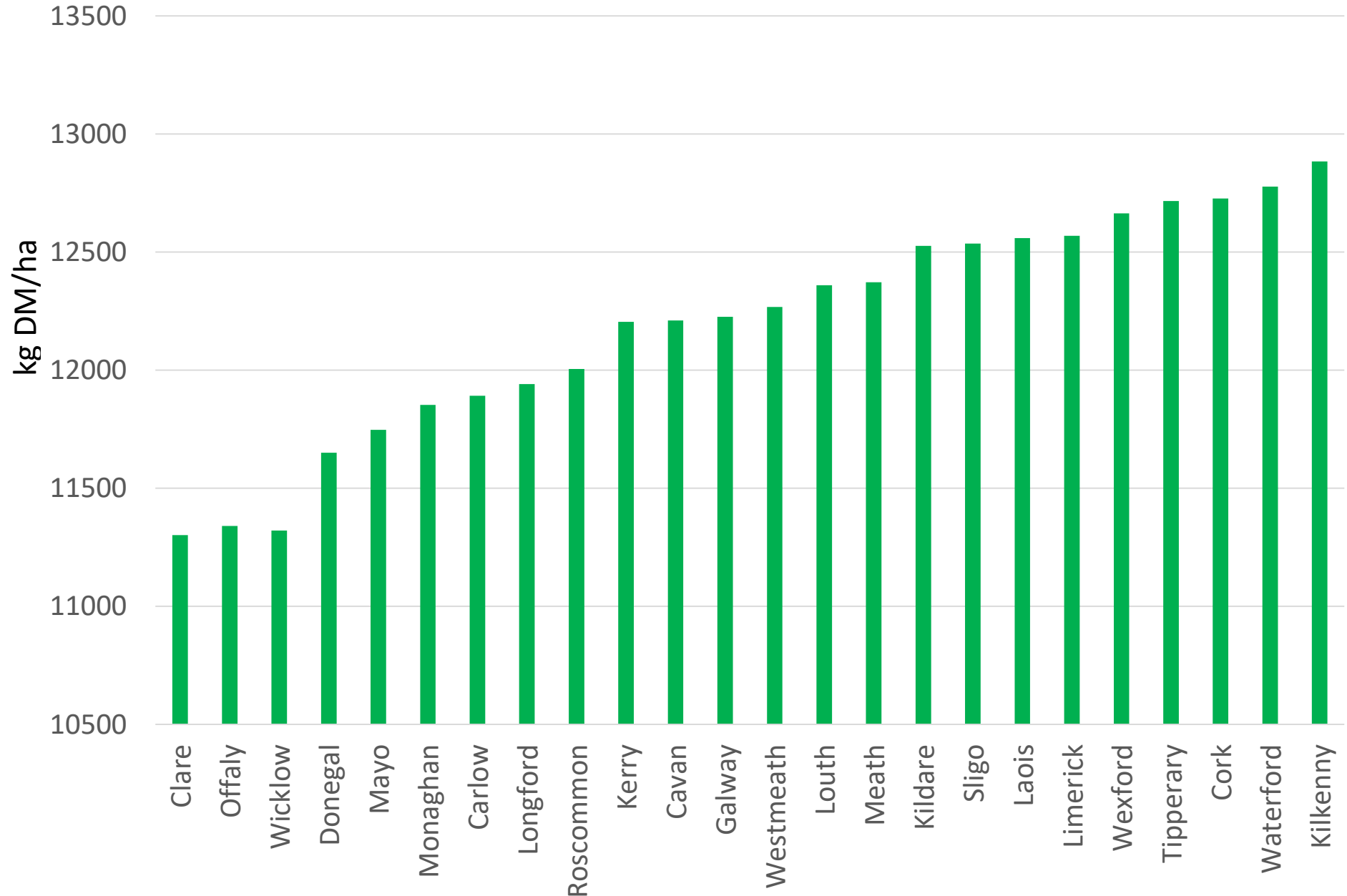




# Grass DM Production – Sheep $\geq 20$ covers recorded

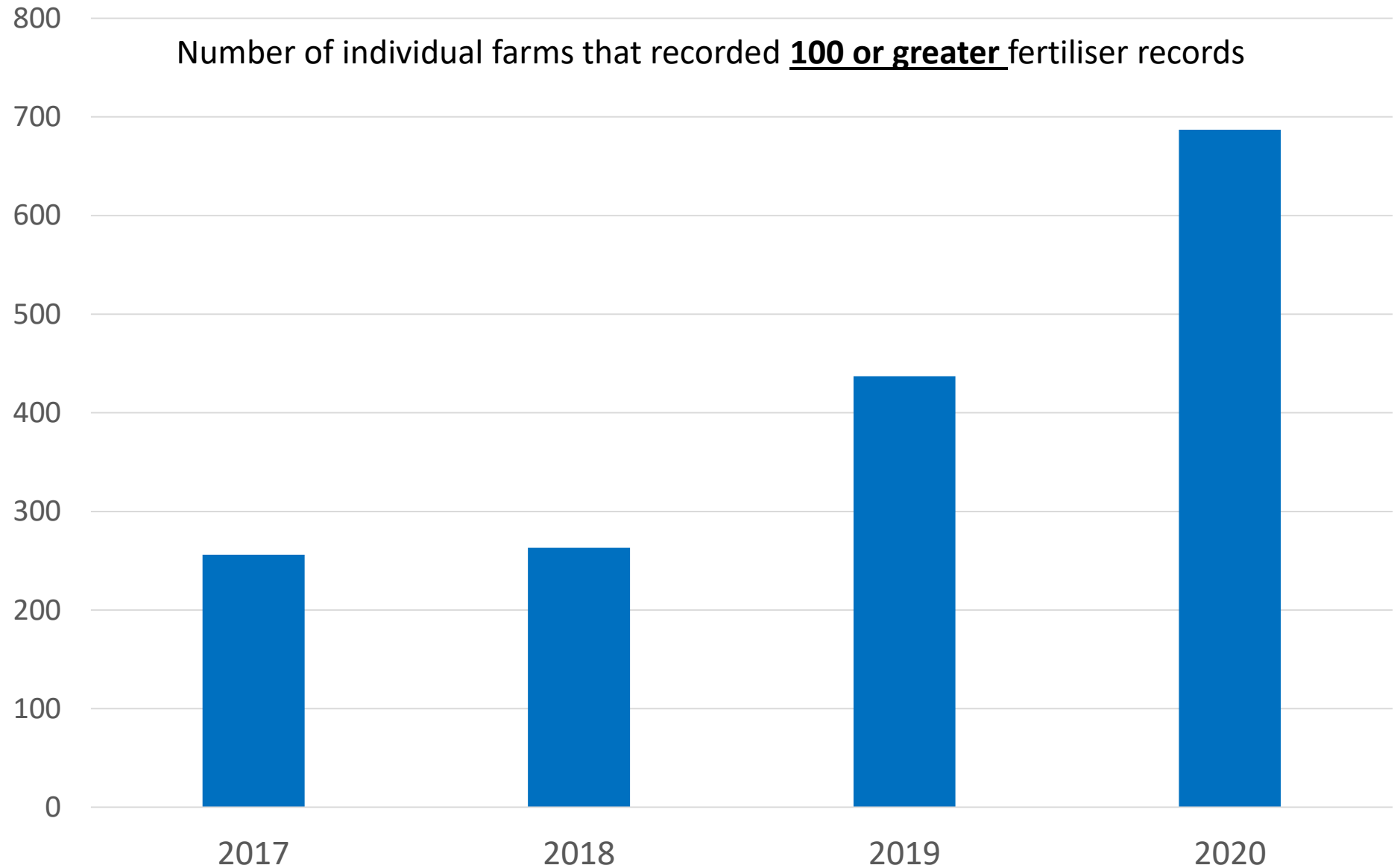


# Grass DM Production – All farm by County $\geq 20$ covers



# 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

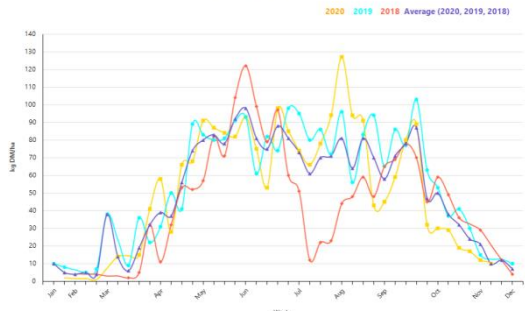
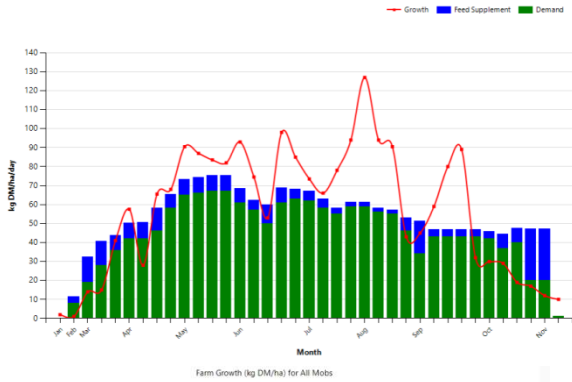
- Generate reports automatically
- Grass Growth Predictor
- Display results/data in graphs

Farmer

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

- Nitrogen efficiency

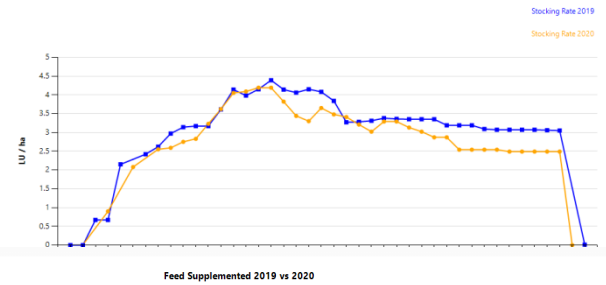
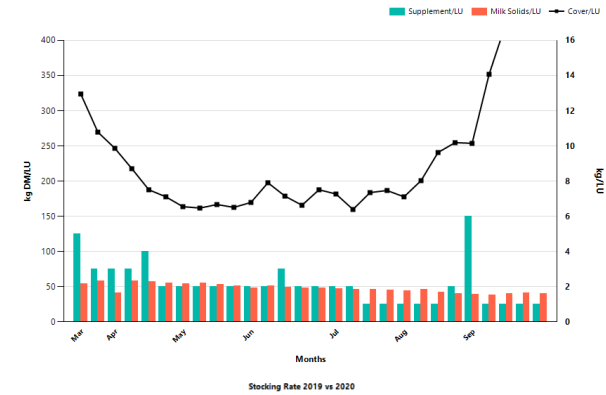
Graph for 2020



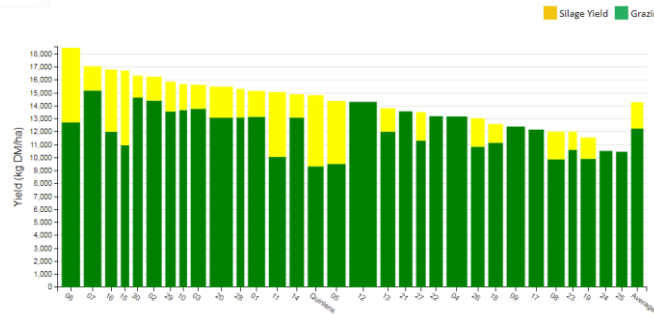
# Reports on PBI

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	

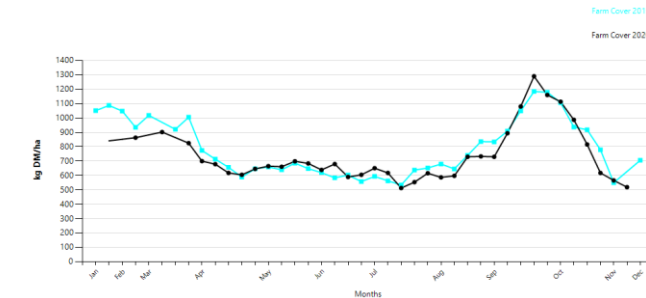
Cover/LU vs Supplement/LU or Milk Solids/LU for 2020



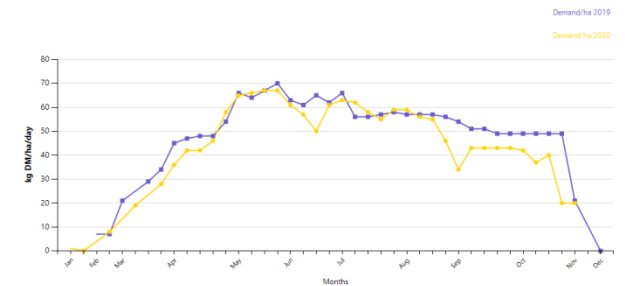
Cumulative Paddock Yield to 18 Nov 2020



Farm Cover 2019 vs 2020



Demand/ha 2019 vs 2020



Parameters	2020	Week		
		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/Jan)		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)	54.73		54.73	
Silage Yield (Tonnes of DM)	151		151	
Area Reseeded (%)	21.31 (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, 35, 30			
Your 5 Worst Paddocks are	32, 36, 35, 34, 33			



'We are  
now grazing  
**high quality grass**  
for longer  
because of PBI'

For more information visit [www.pbi.ie](http://www.pbi.ie)



Dairy Research Ireland

funded by Irish Dairy Farmers

[www.dairyresearchireland.ie](http://www.dairyresearchireland.ie)



# Jim's 4-Year Average Grass Performance

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

\*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:

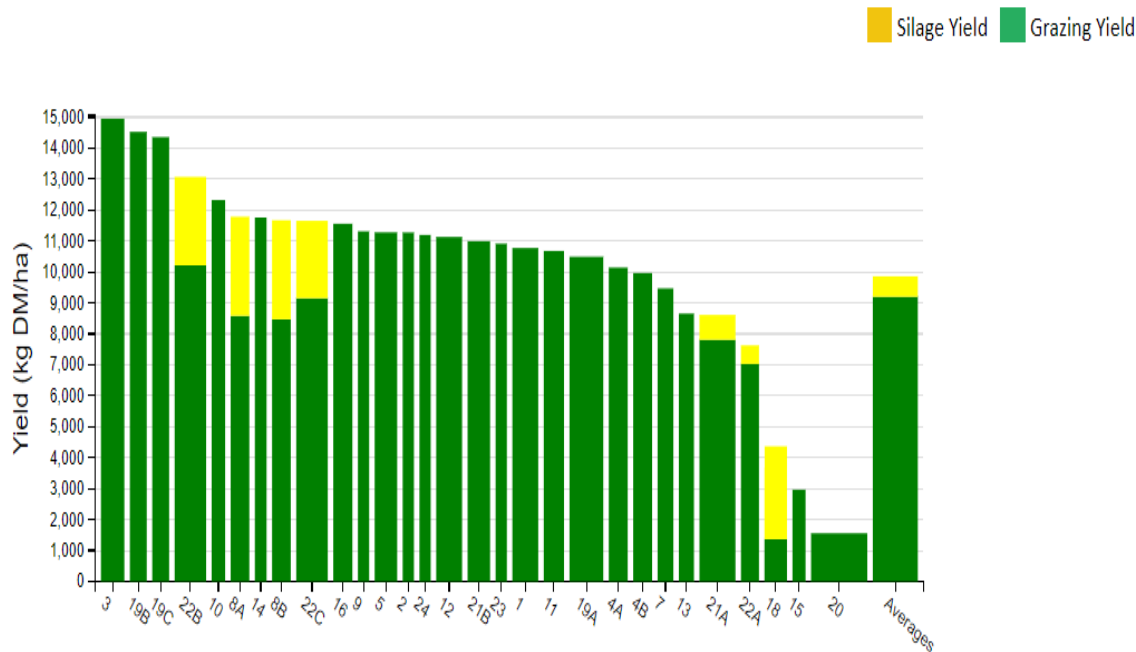
- Graze 1300-1400 kg DM/ha
- Rotation Length 18-19 days
- 160-180 Kg DM/LU

### 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

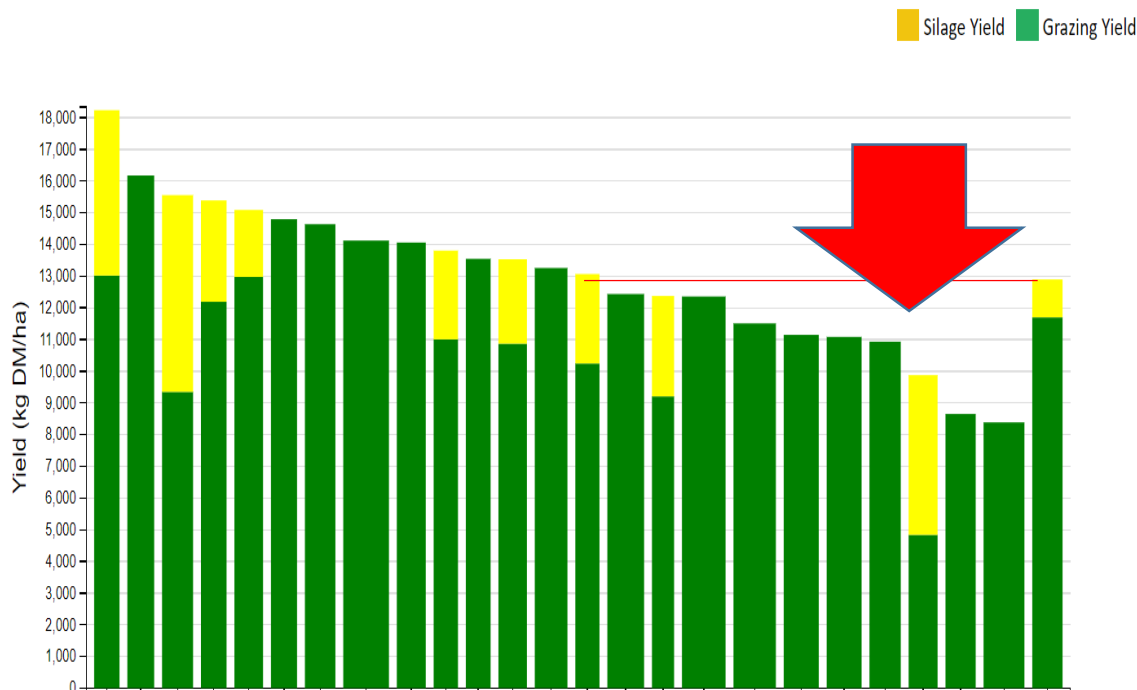
Wet Paddock?  
Soil Fertility?  
Lime Status?  
Perennial Ryegrass?

# 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	
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	Aug	4
July	3	1; 16; 22	Sept	3
August	3	6; 16; 29	Oct	3
September	2	8; 18	Nov	1
October	3	1; 19; 30	Dec	1
November	0		Total	32-38
December	0			
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



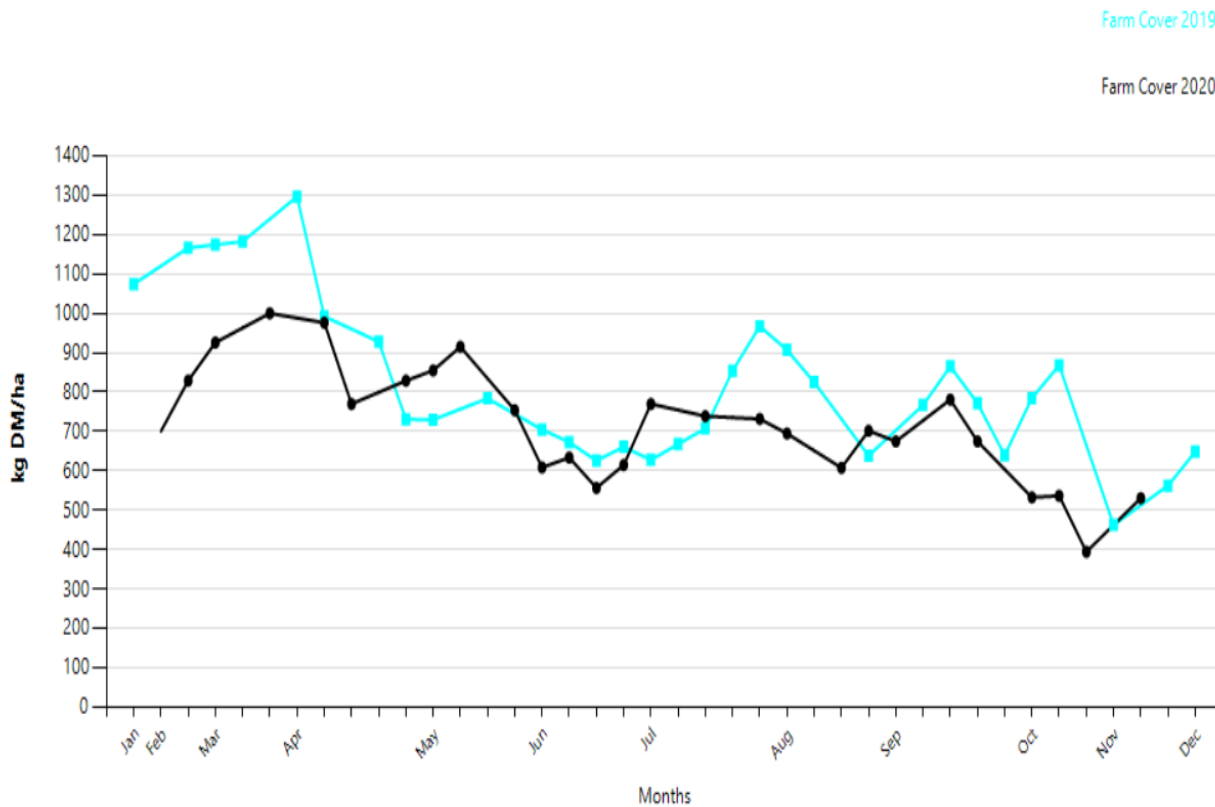
# Grass Reports

# 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
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# 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

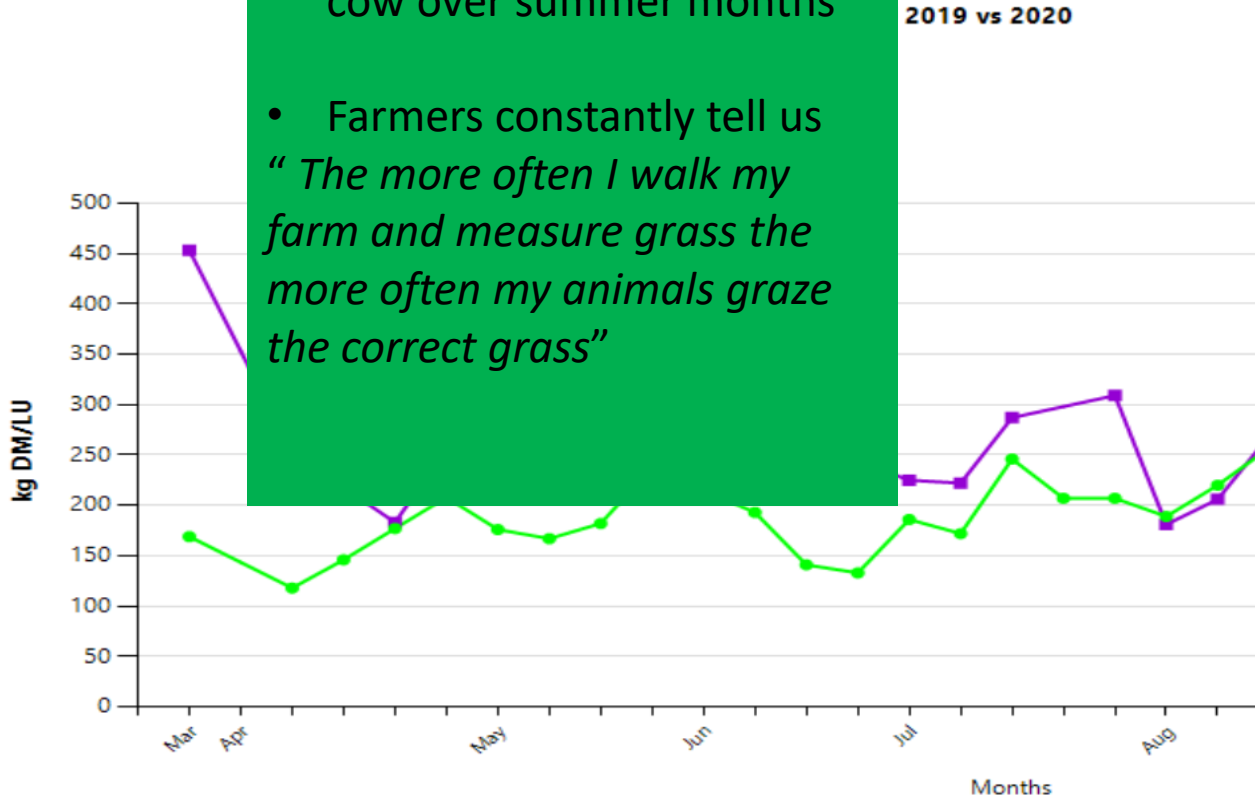
Rotation length Key!





## 2) Walks and Farm Covers Affect 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

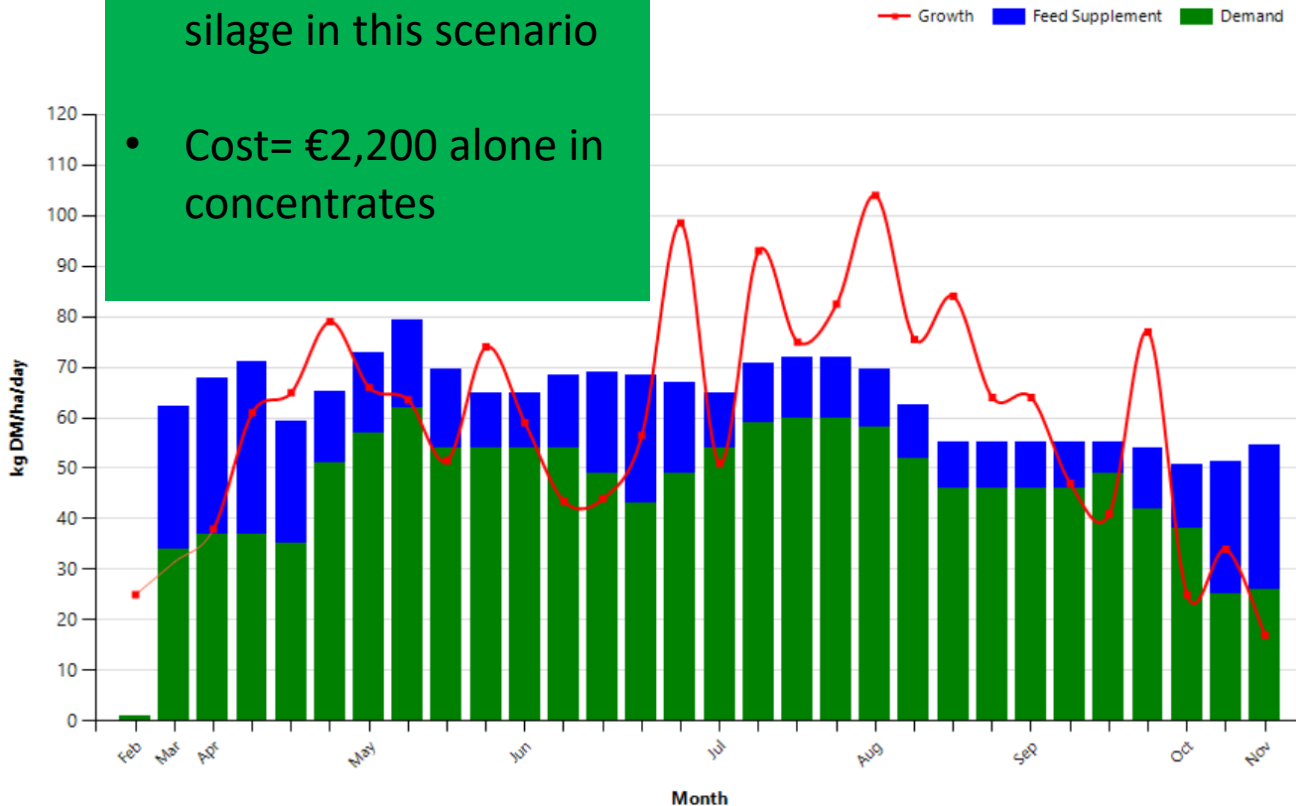
Cover/LU: 182 kg DM/LU  
No. Walks 27 Farm Covers

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.

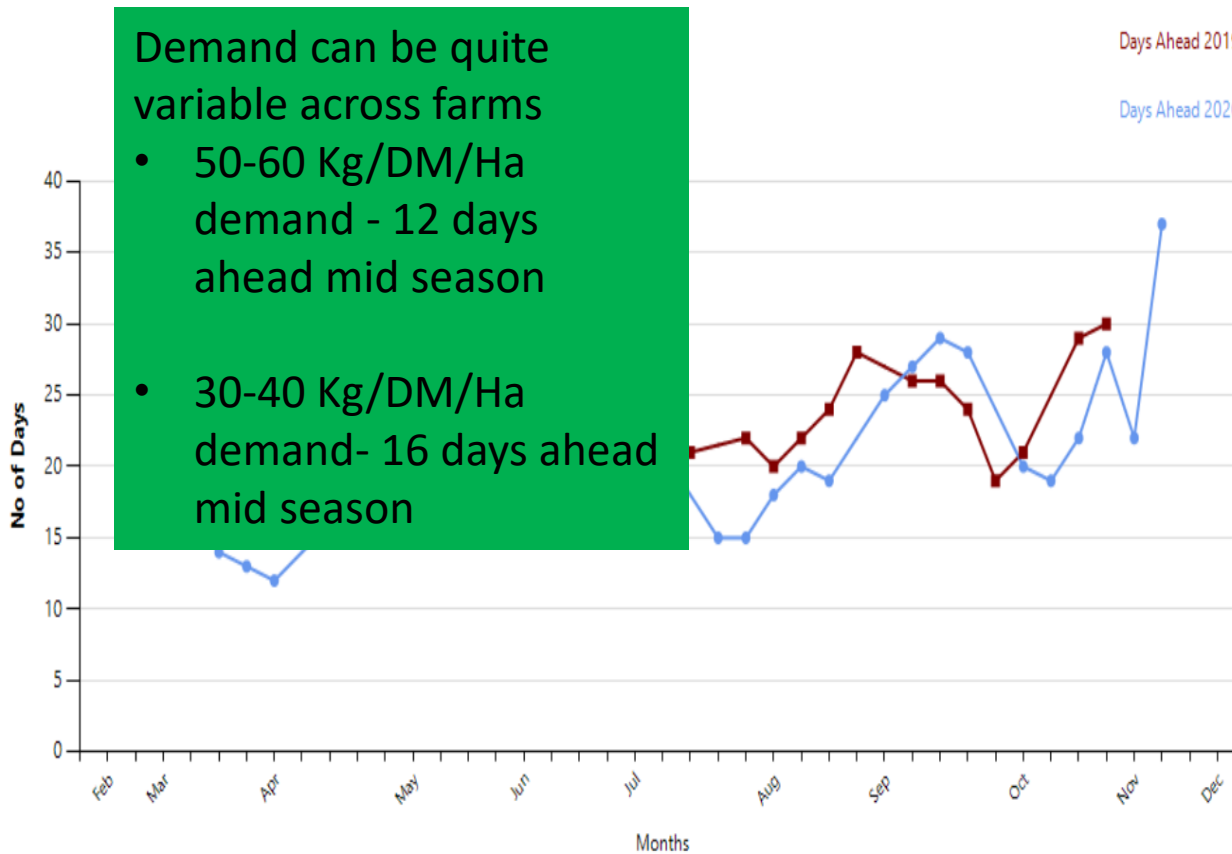
During this period growth averaged **85 kg/day** whilst demand was only **60 kg/day**.  
If meal reduced to 1 kg then demand 68kg/day.

**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



Demand can be quite variable across farms

- 50-60 Kg/DM/Ha demand - 12 days ahead mid season
- 30-40 Kg/DM/Ha demand- 16 days ahead mid season

## Summer Walks 2019: 12

Days Ahead: 23  
 Pre Grazing Yield: 1662kg/DM/Ha (10-11 cm)  
 Demand: 35 kg per ha

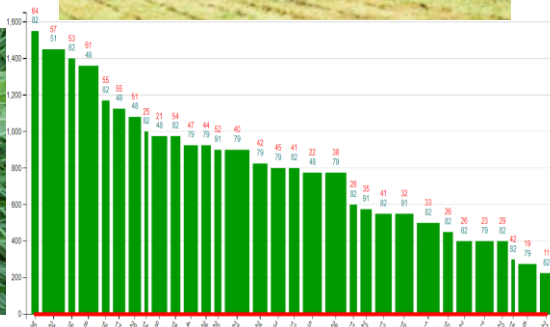
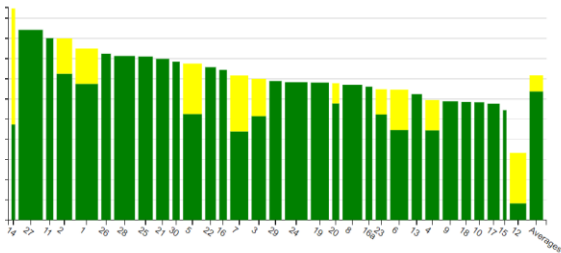
## Summer Walks 2020: 17

Days Ahead: 18  
 Pre Grazing Yield: 1506kg/DM/Ha (9- 10 cm)  
 Demand: 41 kg per ha



# Improving Nutrient Use Efficiency using PastureBase Ireland

When and where? 13<sup>th</sup> January 2021 @ 7pm on Zoom



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

A banner for the Grass10 Grazing Courses 2021. The background is a close-up of a hand holding a blue and black pasture meter over green grass. On the left, the text 'Grazing Courses 2021' is written in large white font. On the right, there is a red button that says 'ENROLL TODAY'. At the top right, there are logos for Teagasc, Grass10, and the Department of Agriculture, Food and the Marine. At the bottom right, there are logos for Grassland, AIB, Farmers Journal, and FBD.

## Grazing Courses 2021

**ENROLL TODAY**

Teagasc  
Grass10  
An Roinn Talmhaíochta, Bia agus Áiríochas  
Department of Agriculture, Food and the Marine

Grassland  
AIB  
FARMERS JOURNAL  
FBD

## 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



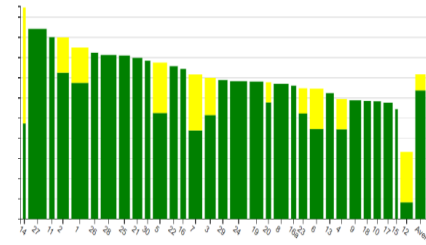
- Walk and measure your farm weekly on PastureBase Ireland. Aim for 30+ measurements in 2021. The more data you have, more improvements you can make
- Join a Grass10 Grazing Group for practical on farm help improving your grazing techniques in 2021
- Read our weekly Grass10 Newsletter for tips and updates 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.



8th December 2020

### Grass10 Weekly Update

AFC	Growth	PastureBase
733 kg DM/ha	19g DM/ha	Grass Dry Matter %
Closing Average Farm Covers 100 Kg DM/ha ahead of 2019		
Over the last 2 weeks, the majority of PastureBase Ireland users have completed a closing average farm cover AFC for their farms. Completing a closing AFC for your farm allows you to accurately measure over winter growth when you walk the farm early next spring.		
In early September 2020 AFC closed at 627 kg DM/ha across PastureBase Ireland. This was on the 1st Dec 2019 with 19 plants at 13 kg DM/ha on foot. Cows, heifers and sheep grazed over winter. 15% more grass available on these farms as we look towards Spring 2021.		
If you are yet to complete a closing AFC, complete it this week.		
Ensure you have 20 farm walks entered throughout 2020 on PastureBase Ireland to meet your closing average requirements. Make sure you have measured at least once in December.		
With your closing AFC completed see where you are ahead or behind in the league. Target areas regarding your stocking rate, cutting time, cutting rate and land type.		
Remember that you should aim to have 1500 kg DM/ha available with an AFC of between 700-750 kg DM/ha on the 1st Dec to have 900-1000 kg DM/ha opening cover on 1st Feb in an average year when growth rates are high DM/ha during winter months.		
Expected Opening AFC, depending on growth		



# Thank you for your attention!



An Roinn Talmhaíochta,  
Bia agus Mara  
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