



## CASE STUDY — CHRISTY DOWD ON GRASS MEASURING

CHRISTY DOWD, a Green Acres programme farmer based Co Roscommon, has been measuring grass using a plate meter and recording the results on the PastureBase system for the last couple of years.

He outlined to me the main benefits of grass measuring and how does he do it.

### THE BENEFITS

**More Control** I now walk all my paddocks at least once per week, things can change very quickly, particularly in May and June and it is important to keep up with what is happening on farm. By measuring once a week paddocks that are getting too strong and need to be taken out as baled silage are easily identified, and also in poor growth, paddocks that are struggling and need extra fertiliser or need the rotation to be slowed down are also easily spotted.

I feel that I am now better able to match grass supply to different groups of stock throughout the grazing season.

**Grazing tighter** Measuring has given me the confidence to graze tighter, especially in the first rotation and this allows better quality swards for the rest of the year.

**Reduced pre grazing covers** Prior to measuring I was grazing too high of grass covers at approx 12 plus centimetres (2000kg dry matter per hectare), now I can start grazing paddocks at ten centimetres (1500kgs DM/ha).

**Working to a plan** In the spring grass measuring helps me keep on target of having 30 days grass ahead of himself during February and March.

As the year progresses the days ahead then change to 12 to 14 for April to June, 16 to 18 for July and August and more than 25 days

ahead in September. During the main grazing season I work to a 21 rotation plan and each week I do a grass wedge which show whether I will run into surpluses or deficits.

**More output from farm** Each paddock is now grazed at its optimum quality of grass, thereby increasing average daily gain and also excess grass can be taken out as silage giving extra quality fodder in the yard.

**Poor performing paddocks** From the cumulative results over the course of a year it is very easy to see which fields are not performing well. The PastureBase system gives you a cumulative figure for each paddock as to how much grass it has grown over the last year. Fields/paddocks for reseeding can be easily identified from this.

### WHATS INVOLVED IN GRASS MEASURING?

There are a couple of different methods to grass measuring, using the quadrant and grass clippers, eye balling, grass measuring stick and the plate meter. I use the plate meter method. I don't think it matters too much which method you use, the important point is that you use some method and get measuring.

It will take one to two hours per week and these are the best hours spent on your farm for that week. You will require a map of the farm with all paddocks numbered or named.

On entering the paddock make a note of the starting figure on the dial near the bottom of the plate meter, walking in a V or W shape across the paddock, drop the plate meter at regular intervals. Don't look for very good or bad spots in the field as these will give distorted results. Do 20 drops in each field, this can be counted on the dial at the top of the plate me-

ter, record the closing figure on the bottom dial.

To calculate the centimetres of grass in the paddock. Subtract the starting figure from the finishing figure and divide by double the number of drops.

The ideal scenario is to start grazing the paddock at 10 cm (1500kg DM/ha) and to leave it when it is at 4cm. Every one cm of grass is approx. equivalent to 250kgs of dry matter per hectare. One hectare at 10cm will graze approximately 55, one and a half year old animals for three days.

Example	Pad. 1	Pad. 2
A. Starting figure on dial	1260	1590
B. Ending figure on dial	1580	1810
C. B minus A	320	220
Number of drops	20	20
D. Number of drops X 2	40	40
E. Grass height (cm) = C divided by D	8cm	5.5cm
Centimetres of grass	Kg Dry matter per Hectare	
4	0	
5	250	
6	500	
7	750	
8	1000	
9	1250	
10	1500	
11	1750	
12	2000	

To calculate the centimetres of grass in the paddock. Subtract the starting figure from the finish figure and divide by double the number of drops.

## Summer fertiliser management tips

### NITROGEN

Keep nitrogen out after each grazing to keep ahead of grass demand.

Grass growth has really taken off in the last couple of weeks and it may seem like an ideal opportunity to cut out a round or two of nitrogen application, but it is better to keep nitrogen spread after each grazing even at lower stocking rates where the level of nitrogen applied can be cut to 15 units per acre.

Every tonne of grass needs to get 24 units per acre of nitrogen from the soil. The soil on its own won't do this.

Keeping nitrogen out keeps good quality leafy grass ahead of the stock and if paddocks get too strong don't be afraid to take them out as high quality baled silage.

Many yards are depleted of silage reserves and every opportunity to rebuild stocks in the yard should be taken.

### SULPHUR

Sulphur is often the forgotten nutrient in grassland, it is essential for grass growth and is closely associated with nitrogen uptake and efficiency.

Sulphur deficiency can lead to a reduction in the quantity and quality of grass produced.

Deficiencies will occur where more is removed from the soil as a result of crop growth and leaching, than is replaced by either fertilisers or depositions from the air, which come from smoke discharged by industrial and domestic fires.

There is no soil test for sulphur. Lighter stocks tend to be more prone to being deficient in sulphur.

On grazing ground it is recommended to apply 16 units of sulphur per acre per year from April to July, therefore consider spreading a product like Sul CAN which

contains 5pc sulphur or a compound with sulphur included instead of CAN.

Apply in two or three splits over the summer. Silage ground requires 16 units per cut.

### LIME

Lime is another essential nutrient for good grass growth and proper efficiency of other applied nutrients.

The amount of P in the soil that is available to the plant is influenced by having the pH of the soil at 6.3-6.5.

Take the opportunity during the summer when there is good ground conditions to get lime out where required.

Apply after silage or on grazed out paddocks.

Do not apply on silage ground where you plan to take a second cut as a lot of lime could well come back in to the pit affecting preservation and being no benefit to the field it was applied on.

### SLURRY

Get slurry out early, don't run the risk of having full slurry tanks entering the winter period.

When the weather is good and ground conditions favourable, target silage fields and fields that are low in P and K's with slurry.

Don't wait for the weather to turn bad in the autumn. Every one thousand gallons of typical cattle slurry in the summer will be equivalent to a bag of 3/5/30.

### PHOSPHORUS AND POTASSIUM

A little and often approach to applying P and K in summer can be good to boost P content in grass.

Use your soil analysis to good effect in order to correct soil fertility levels. Target low P, and especially K fields for extra P and K, for soil fertility build up in the back end.

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