PastureBase Ireland – Increasing Grass Utilisation on Irish Dairy Farms

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Summary

- Dairy farms recording farm cover regularly on PastureBase Ireland have grown between 12 and 14 t DM/ha per year over the past four years (2013-2016)
- There was large variation between dairy farms for grass DM production ranging from 18.8 t DM/ha to 7.3 t DM/ha
- The Spring Rotation Planner targets have not been achieved on farms; in spring 2015 and 2016 dairy farms were 10% behind target
- Spring DM production is variable on dairy farms. Top producing farms are achieving 1.8 t DM/ha
- Autumn closing date has a very significant impact on what level of grass is available for the following spring. Each week delay in closing in autumn, reduces spring grass availability by 77 kg DM/ha

Introduction

PastureBase Ireland is an internet-based grassland management tool. In operation since 2013, it offers farmers 'grassland decision support' and stores a vast quantity of grassland data from dairy, beef and sheep farmers in a central national database. At the moment the vast majority of farms recording grass measurements on PBI are dairy farms, currently there are 3,000 farmers using the system.

The database stores all grassland measurements within a common structure. This will allow the quantification of grass growth and DM production (total and seasonal) across different enterprises, grassland management systems, regions, and soil types using a common measurement protocol and methodology. The background data such as paddock soil fertility, grass/clover cultivar, aspect, altitude, reseeding history, soil type, drainage characteristics and fertiliser applications are also recorded.

Grass DM production on dairy farms - PastureBase Ireland data (2013-2016)

It is obvious that there is significant variation in grass DM production on and between farms. High grass DM production can be achieved on dairy farms with good grazing and soil fertility management irrespective of location. This is one of the key early findings already emerging from PastureBase Ireland over the past four years (2013-2016). There are many reasons for this, including differences in stocking rate, soil fertility and grazing management practices. If soil fertility and grazing management can be improved, many farms are capable of increasing their DM production substantially.

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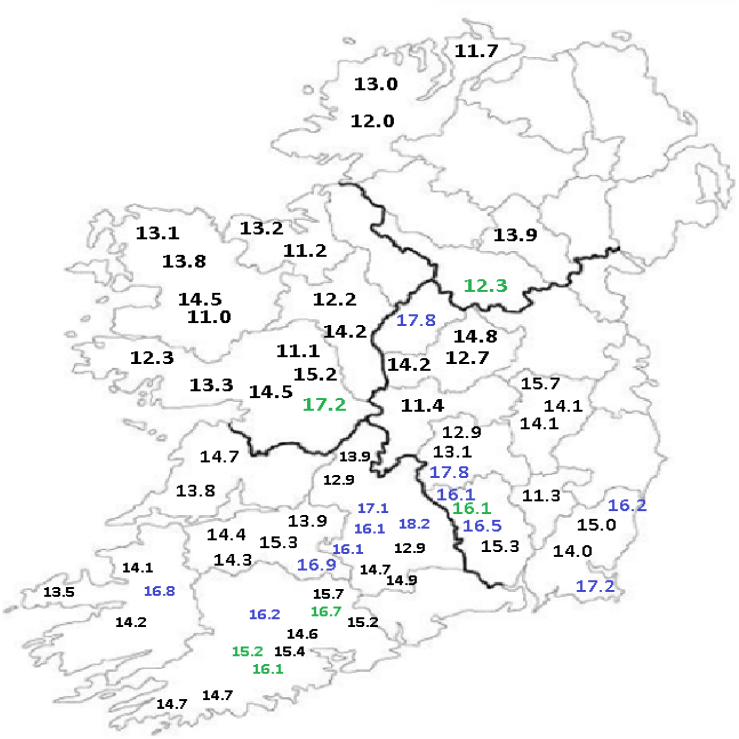

Figure 1 Grass dry matter production (t DM/ha) from PastureBase Ireland dairy farms across the country in 2016

Figure 1 shows the annual DM production data from farms across the country in 2016. These farms have in excess of 30 weekly farm walks completed during the grazing season. In 2013, these farms produced an average of 12.2 t DM/ha, increasing to 13.5 t DM/ha in 2014 and 14.1 t DM/ha in 2015. The variation between farms is large (+9.4 t DM/ha) while year also has a significant effect on grass DM production. The highest producing farms are growing more than 16.0 t DM/ha with little variation between paddocks whereas lower producing farms have much greater variation between individual paddocks.

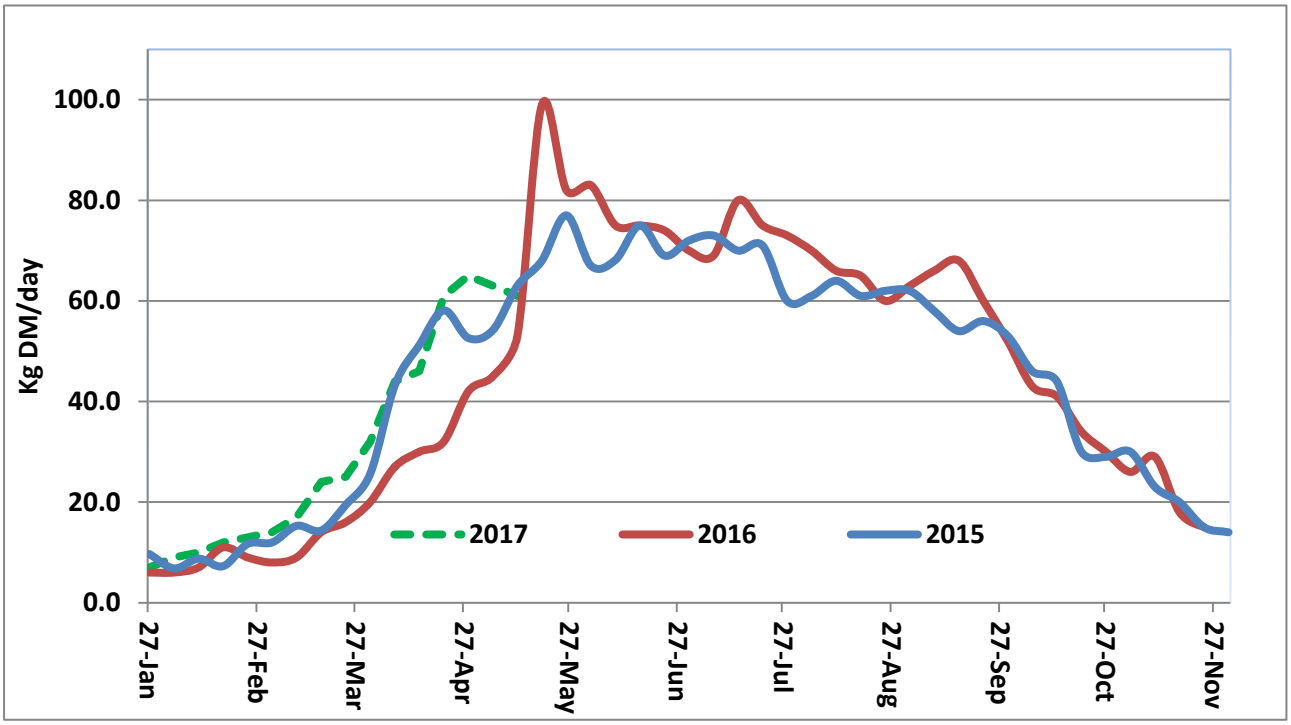

Figure 2 Mean daily growth rates (kg DM/ha per day) for PastureBase Ireland farms for 2015, 2016 and to date in 2017.

Future Plans

Since early 2016, PBI and AgriNet Grass have merged to form one grassland management decision support tool for farmers. This venture is a great asset for Irish farmers as it will offer world leading grassland software to aid decision making on farm. Large quantities of data will now be stored in one database for dissemination and for the benefit of Irish farmers. Over the past 12 months, PBI has undergone considerable redevelopment with the addition of new management tools and a more user friendly interface.

Conclusions

It is clear that Ireland has massive potential to increase annual DM production with a better focus on grazing management. PastureBase Ireland, the national database, will allow the industry to move forward with a better understanding of the performance of grassland farms. PastureBase Ireland has highlighted that all dairy farms can increase DM production and as a consequence increase milk solids output and overall farm profitability.

Sign up

If you wish to join PBI and start managing your grass better, contact your local Teagasc adviser or support@pbi.ie.