

Improve flock performance

Improving grassland management on sheep farms could radically increase grass dry matter production

Phil Creighton and Ciaran Lynch
Teagasc Animal and Grassland Research & Innovation Programme

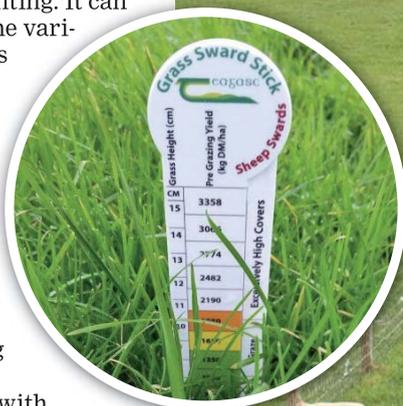
Improving grassland production and utilisation is one of the biggest challenges, and opportunities, on sheep farms. There's always scope to improve some aspect of grassland management irrespective of location, land quality or prevailing weather conditions.

The main hurdle is making the decision to address this key task. But experience from the BETTER farms sheep programme shows that managing grass effectively has given the best return on investment on the farms.

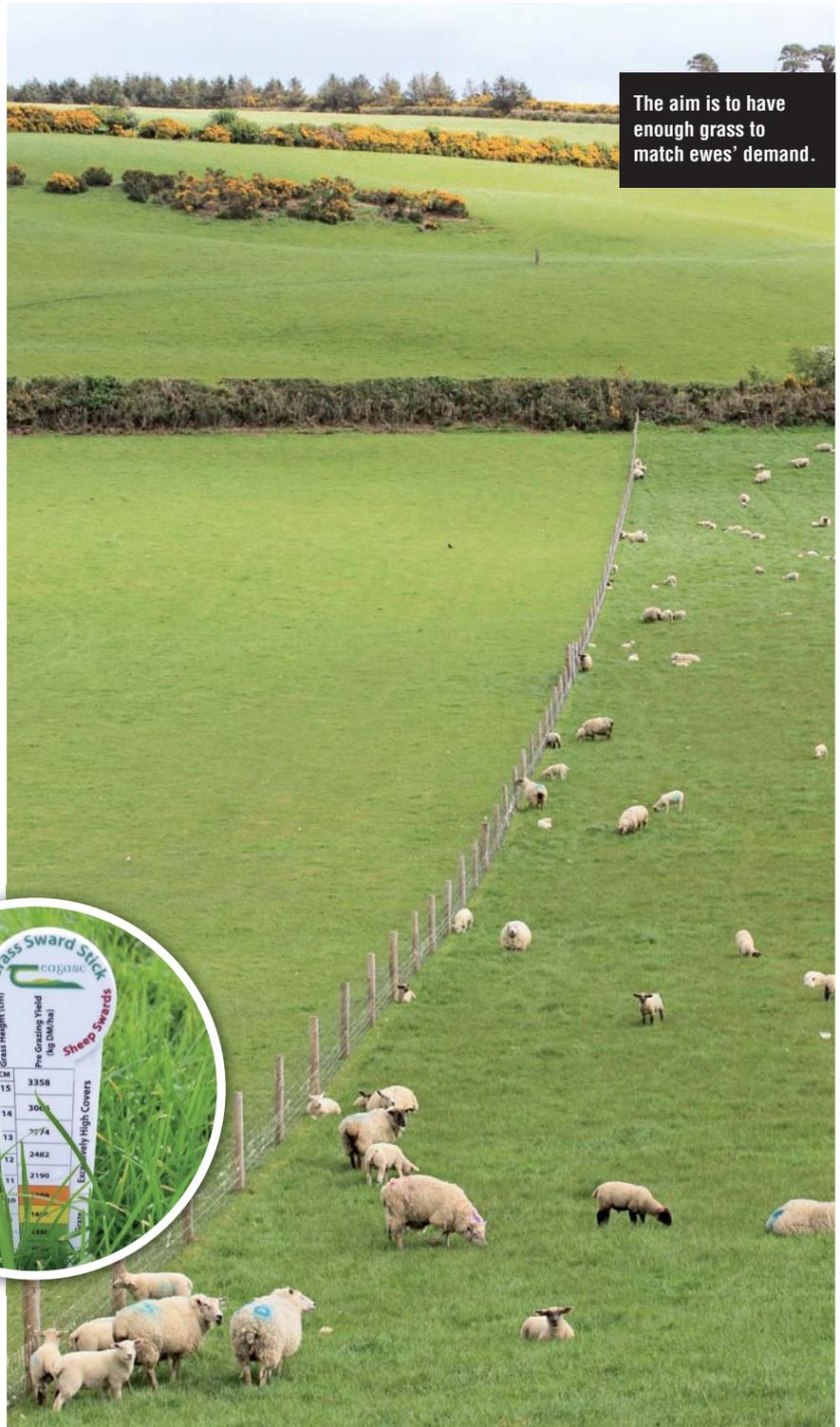
Where to start

Striking the balance between meeting current demands and maintaining sward quality can be daunting. It can also be hard to relate to the various guidelines and targets reported from research. The best way to learn and make progress is by getting out there and gaining the necessary experience by seeing what is happening on your own farm. Simply measure your grass supply and use this information to make your grazing decisions.

To help you get to grips with grass measuring and management, Teagasc has released a sward stick (see picture).



The aim is to have enough grass to match ewes' demand.



» Continued on next page

» From page 17

The sward stick will help you to train your eye to measure the amount of grass on the paddocks. It also provides some useful guidelines for management.

For those who want to go a step further, a platometer or the cut-and-weigh method using a shears and quadrat will enable more accurate measurements. To get the most from these measurements, Teagasc has developed the Pasturebase Ireland system.

This web-based grassland management tool assists with recording and budgeting of grass supply. Furthermore, it also has a facility for farmers to view the supply and demand of other farmers in their own area with similar systems.

Pasturebase also has a capability that will allow your Teagasc advisor to log in and view your weekly measurements and offer real-time advice where needed. If you are a sheep farmer interested in measuring grass this season, contact your local Teagasc advisor who can explain the necessary steps involved and help get you enrolled on the Pasturebase Ireland system.

Benefits include:

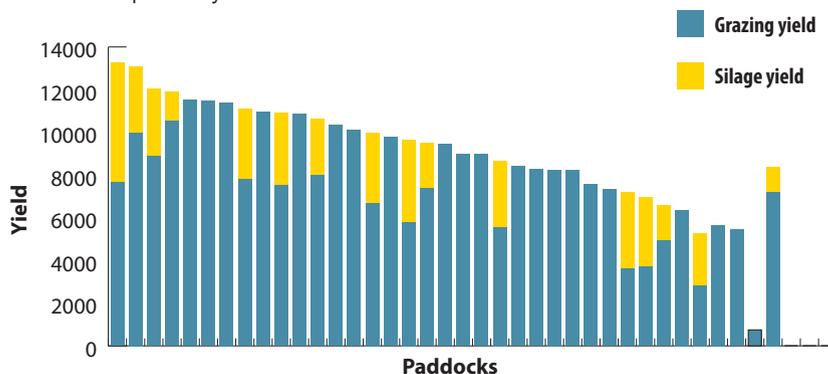
- Improved animal performance.
- Knowing the optimum stage to graze and remove sheep from paddocks.
- Matching grass supply to demand.
- Comparisons with other farmers in your area.

How well are your fields performing?

In an era where measuring performance has become ever more important, how does our grassland actually perform? You may be familiar with figures quoted of 12t DM/ha being produced on dairy farms but how do drystock farms compare? The research demonstration farm in Athenry is producing an average grass yield of 11.5 t/ha per annum, with the BETTER farms producing between 7.0 and 8.5 t DM/ha in 2015. In most cases, the area you farm is

Figure 1

Cumulative paddock yield to 1 December 2015



Key messages

- On this farm, the top-performing paddocks are producing nearly twice as much grass as the poorest paddocks.
- In practical terms, the top performing paddocks are being grazed 10 to 12 times within the grazing season. By comparison, the poorest paddocks are only being grazed five to six times.
- Identifying these poorer paddocks and putting a plan in place to deal with them is critical to increasing the performance of your farm.
- The difference is most likely due to soil fertility issues, sward type (reseeding needed) and grazing management.
- Addressing these areas has led to an increase in total grass production per annum on the BETTER farms.

limited so it's vital to achieve good performance from the land.

There are many factors influencing grass production, not least N input. So, what about grass production on your farm? One of the many useful applications of Pasturebase is in quantifying how much grass is

produced within each paddock, as measured on the farm, within each grazing season. We know from the grass-measuring being done on the BETTER farms that there is huge variation in individual paddock yield. Taking the performance from one of the BETTER farms as an example, the total grass production per paddock for the 2015 grazing season is displayed in Figure 1.

Spring targets

The aim in spring is to have enough grass to match ewes' demand until supply increases and matches demand (called Magic Day). For an early/mid-March lambing flock, we would like to see an opening farm cover of 600kg to 700kg grass DM/ha (average sward height of ~6cm across the farm) or 20 to 25 days ahead.

How do we come up with the figure of kg grass DM/ha? A ewe's average daily grass requirement in early lactation will be 2.5kg DM/head/day. If we take a farm stocked at 10 ewes/ha, this equates to a daily grass requirement of 25kg DM/ha. If we had an average farm cover of 650kg DM/ha, this would support the flock for 26 days (650/25 = 26 days ahead). If we estimate average grass growth rate of 15kgDM/ha/day in early/mid-March, this will add another 10 to 15 days, so we have 35 to 40 days which should bring us to mid-April (Magic Day).

ISSUES & CHALLENGES

Issues

Having sufficient grass supply in spring for sheep farms operating a grass-based system requires planning.

There are a number of factors influ-

encing it on sheep farms, but experience from the BETTER farms has highlighted some of the key areas to consider:

- Insufficient area closed in autumn to build covers for spring.
- Suitable lambing date to match grass growth.
- Soil fertility issues
- No N applied to boost covers and enhance March growth rates.
- Lack of reseeding in previous years.

Challenges

The benefits from improving grassland management are clear; the challenge for most farms is taking the necessary steps to improve their own farming system. Individual farmers or groups interested in improving their grassland management through measuring and budgeting should make contact with their local Teagasc advisor who can provide the relevant information to get them started.