

**ULSTER GRASSLAND SOCIETY**  
**PRESIDENTIAL ADDRESS**

**John Orr, Churchtown Farm, Downpatrick.**

Ladies, Gentlemen and Fellow Members: The 50<sup>th</sup> year was a special one for the Ulster Grassland Society and it required exceptional leadership. Roy McClenaghan provided that in full and I would like to congratulate him on an excellent year. While Roy is a hard act to follow, it is a personal privilege for me to take on the baton, coming many years after a former president John Lowe who was my mentor when I did research in white clover.

In the late 1960's controlled environment chambers were the new technology of the day and I used them to study the effects of light and temperature on the growth of white clover and grass. Knowledge of grass and clover growth has come a long way since then as shown by GrassCheck and CloverCheck, developed by AFBI and CAFRE. Based on data from sites across Northern Ireland and with the help of computer modelling, it is now possible to predict growth rates up to two weeks ahead. This service is unique to Northern Ireland and I believe it will become increasingly useful as more farmers become involved in feed budgeting of grass.

Now at the start of the second 50 years of the Society, grassland farmers and researchers are faced with a double challenge. We have to become much more efficient in the way we produce our milk and meat, and at the same time we have to minimise our impact on the environment. Our international competitors have advantages of economies of scale and, in some cases, climate. These are not available to us, so our only option is to concentrate our efforts on improving what we already have - the pastures we grow and the way we use them.

I suggest there are two areas where we may be able to improve efficiency and minimise our environmental impact. Coming from my research experience I believe clover really has a lot to offer us at this time. Coming from my farming career I believe we can graze grass more efficiently than we do at present.

The case for increased use of clover is an old one and it has been put many times. Up to now the benefits to be gained from having a high percentage of clover within the sward have been only of passing interest to farmers. The reason, as we all know, was the convenience and reliability of using relatively low-cost nitrogen fertiliser. But if ever there was a time when clover deserved to be taken seriously, surely that time is now. Unless cheap sources of non-fossil fuel can be found (which is unlikely), fertiliser nitrogen could become prohibitively expensive. Clover-based swards offer an alternative that is economic and has a smaller carbon footprint.

Much has been said about the disadvantages of using clover-based swards – mainly their lower yield compared to heavily fertilised perennial ryegrass swards and their poor performance in some years. Researchers from Moorepark have been studying the performance of white clover-based swards on their dairy farm at Solohead over the last ten years. These swards receive about 70 units of nitrogen/year and consistently carry 0.9 cows per acre and produce 5,100 litres per acre, with less than half a tonne of concentrate fed per cow. In other words, they produce 1.5 times the

national average milk production but use only half the amount of nitrogen. This excellent piece of development work shows what can be achieved when close attention is paid to the management of clover swards in a farming system.

This is exactly what I mean by investigating the potential of clover in a serious way. If similar work could be carried out with dry stock here in Northern Ireland, it would give farmers more confidence to use white clover. There is potential for clover to replace nitrogen fertiliser on beef and sheep farms. For example, the stocking rate on the Greenmount Organic Unit is currently at 1.66 LU/ha, similar to that on the majority of beef and sheep farms where nitrogen fertiliser is being used. Here is an opportunity for white clover to reduce costs, improve livestock performance and lower the carbon footprint of livestock farming.

We ignore the ability of red clover-based swards to produce high yields of top quality silage without the application of nitrogen. One reason may be the difficulty in grazing red clover swards towards the end of the season. However, organic farmers who rely on red clover for silage find that these problems can be overcome by using efficient grazing techniques. Another reason may be the reluctance on all-grass farms to reseed silage ground every three or four years. Stitching in grass and clover seed has been used successfully as an alternative to reseeding with white clover swards. If similar guidelines could be developed for stitching red clover swards, it would remove a hurdle for red clover use and eliminate the environmental impact of ploughing.

Over the last 50 years, the principles of making high quality silage have been well established. However, the way we graze our grass is one of the most neglected aspects of grassland farming. Very few farmers are achieving the full potential of grazed grass. It is estimated that we utilise only about 2/3rds of the grass we produce. This is an obvious waste, but it is also an opportunity for farmers to improve their grazing management and increase profitability without incurring major capital investment.

Many farmers neglect grazing management because it is a difficult concept and therefore not high enough up on their agenda. Admittedly, it is difficult to match variable grass growth and quality with the demand of the herd or flock. Perhaps the most difficult aspect of all is to strike the right balance between grass utilisation and animal performance. Consequently, we tend to regard grazing management as being more of an art than a science. Some people are exceptionally good grassland managers but many of us, including myself, still have a lot to learn.

We now have the toolkit to make grazing management more of a science. We have methods of estimating grass dry matter yield that allow us to calculate the supply of grass ahead of stock i.e. the Grazing Days Ahead. We have proven concepts like building up grass wedges to extend the grazing season in autumn and spring. There is a target for grass quality - to maintain an ME value of 12 in our grazing consistently throughout the year. We also have the predictions of growth ahead produced by GrassCheck and CloverCheck. We now need to develop the skills to use these tools effectively and the belief and discipline to apply them.

Some far-thinking advisors and farmers are showing us what good grazing management can achieve in our conditions, all the time pushing up the income from the farm business. We have advisors like Michael Doherty, who has painstakingly shown farmers the skills to develop. We have dairy farmers like Peter Merron at Portaferry, the 2009 regional winner of the BGS Grassland Management Competition. He's getting 4,300 litres of milk from forage on a grazing-based system. We have beef farmers like Marcus Hall and Sam Hamilton at Warrenpoint. They are achieving outputs of 220-230 kg lwg/head over the grazing season by using efficient grazing systems over an extended grazing season, while keeping concentrate, fertiliser and silage costs to a minimum.

I have tried to show two possible ways in which grassland farmers can address the economic and environmental challenges ahead – use more clover and graze our swards more efficiently. I am not suggesting these are the only things that matter, but I am suggesting they are among the issues that can be addressed. Unfortunately, going down these routes offers no commercial advantage to anyone except farmers themselves. There is nothing to advertise, nothing to sell, nothing to show off to the neighbours. These ideas are not new, 'sexy,' headline grabbing or in any way attractive. However, I suggest they are of fundamental importance to achieving efficient grassland farming in this country.

If we are to make progress in this direction, all of us – researchers, advisors and farmers - must have confidence that improved grassland management will produce worthwhile financial dividends. We need to work collectively towards producing blueprints that farmers can apply and adjust, if necessary, on their own farms. Most of all we need commitment at farm level. If that is not forthcoming, then our grass-based enterprises will continue to plod on down the slippery slope. Farmers themselves need to critically assess the standard of grassland management on their own farms and seek ways of improving it. Perhaps if more farmers benchmarked their farm businesses they would realise the necessity to improve their grassland management skills.

Farmers who are committed to get more from their grass need guidance and support to develop the necessary knowledge and skills. Resources are available to help them – they can talk to their local advisor, join a discussion group of like-minded farmers, follow the progress of the CAFRE Monitor farms, visit Focus Farms where grassland management is of a high standard etc.

The Ulster Grassland Society has a valuable role to play here, too. Our mission is to highlight the best grassland practices around the country. That function is needed every bit as much today as it was 50 years ago and we have a lot to offer. The issue of our grazing booklet today and the forthcoming launch of our website this year are some of the ways we are living up to our mission statement. We continue our role as the main forum for those interested in the production, management and utilisation of grass and alternative forages. There is no substitute for meeting like-minded people and seeing good practice on the ground to help develop new ideas for use on the farm. Today in the Ulster Grassland Society we finish the celebrations of our first half century. We see stimulating challenges and opportunities ahead, and we set out on the next 50 years with energy and enthusiasm. .