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GOOD FERTILISER PRACTICE
A FARMERS VIEW

By Mike Magan
President of Grassland Association of Ireland.

When I started to farm in the early ‘70’s fertiliser use was very low in Ireland. Granted it was well developed from my earlier memories of big jute sacks full of “Guano” which for the uninitiated is dried bird droppings. Since those days fertiliser use on intensive Irish farms has become a very necessary part of routine farm practice. Its absence would be close to what it is like when the water or the power goes off i.e. we take it for granted so we would really miss it if denied its use.

For environmental as well as economic reasons, we must use fertiliser with care. I accept that this is a sweeping all embracing statement so I will try to go into a number of areas where we can ensure good fertiliser practice.

1. Soil Analysis – We analyse all fields on the farm every second year in a two year rotation i.e. roughly half the farm each year. When you get a good profile of how the farm is set up soil nutrient wise the term of soil testing can be extended a little. On our farm we sometimes change crops or reseed ground so it is money well spent to analyse the soil to see what fertilisers are needed or better still what is not needed for the coming season.

2. Spreader calibration – This is probably an area of some neglect on a lot of farms, ours being no exception. In the last few years we have been making a better effort to ensure the correct application rate for the fertilisers that we use. Since we use a lot of high Nitrogen fertiliser incorrect calibration of the spreader causes big problems. The problem of high N in silage ground is well known, but excesses of N on grazing ground is equally wasteful. We have found that calibration of the spreader is very much a personal thing with as much as 10% variation in spreading occurring with the same setting and supposedly the same driving width with different tractor drivers. It is well worth putting time and effort into getting a good system going for any fertiliser spreading operators on the farm.

3. Use of Slurry – Farmers are more likely to talk of the nuisance value of slurry rather than its nutrient value! We aim to use slurry in the Autumn or very early Spring but with the grass growing season being extended we find ourselves dealing with slurry on a more opportunistic basis. We found a few years ago that some of the silage ground that did not get its full share of slurry was underperformning. Now we try and ensure that we use the slurry evenly all over the farm. This means that we now have to spread slurry between silage cuts which is something I dislike because of the risk to the subsequent crop of silage, but we now reduce the application rate of the fertiliser to account of the nitrogen in the slurry.

We have also started to apply a dressing of slurry to each paddock as we finish it off in the Autumn. This is working well both in the use of slurry and also in setting up the
paddock for the following years grazing. If I had my choice I would prefer not to have to deal with slurry at all but since it is there we have to make the best possible use of it.

4. Matching applications to plant response – We find that the fertiliser requirements of the new reseeds on the farm are considerably higher than the old swards. It is good practice to put any input into the area of greatest response, so increased fertiliser on new swards pays dividends. In the past year or two we are applying the first application if high N fertiliser earlier in the year – in January. This is to get the paddocks off to an early start and the response is very good provided the paddock has been well rested in late Autumn.

5. Ground conditions – We have an active farm policy of spreading fertiliser right through the year. The only climatic conditions that disrupts this rule is very wet weather, if we have heavy rain or if heavy rain is forecast, we hold off any spreading scheduled for that time. It is important that any long-term disruption does not alter the programme for any particular part of the farm. We are lucky to have a dry farm with no field drains but we are still aware of the potential damage to the environment that is done by spreading in adverse conditions. We all become losers if farmers disregard their role in the protection of the environment.

Ground or soil compaction is a big problem, bigger than most people realise. It is only when a grain or maize crop is sown on compacted ground that the extent of the problem manifests itself. Spreading fertiliser or more importantly slurry under poor ground conditions greatly damages the soil structure, so we avoid this if at all possible.

6. Knowing your farm – We plan at the end of each year which paddocks will be used first the following Spring. We select the drier paddocks and rest them the longest and fertilise these accordingly for the earliest possible use the next season. The driest part of the farm should be exploited to its fullest potential at each end of the grazing season.

7. Returning slurry to the silage ground – I have already dealt with this topic but it is important to note that if we fail to get slurry on some of the silage fields that we alter the fertiliser programme for that field accordingly and increase the P & K rate in nutrients to our cost in the past and will not do so again! We prefer high N compounds with a constant supply of P & K rather than Autumn dressings of P & K also.

8. Field margin device – There is an increasing use of field margin devices when spreading fertiliser. I have seen them in every day use in Holland but not so much in the country. We don’t use one but the logic for doing so is quite clear. At the moment we just avoid spreading close to ditches or hedges but this means poor performance in these areas. The use of margin devices ensures greater total field production coupled with good environmental protection. Now having convinced myself, I must get one!!

This article might indicate to the reader that I am an environmental “goodie goodie”. I am not, but I am becoming increasingly environmentally aware. We must all do so.
We have developed three ponds on the farm and are careful not to fertilise too close
to them and not to allow cattle into them. I know it is a small gesture but if we are to
do a little we can achieve a lot.

Fertiliser has become very important input on our farm over the years and while I
strive to buy it as cheaply as possible, the cheapest is not necessarily the best.
Fertiliser is still good value for money and since there is no better animal food in
Ireland than GRASS we should put as much effort as possible into growing and
utilizing as much grass as possible.

Mike Magan