



Farming Connect Management Exchange

Tomas Jones

Rotational grazing and herbal leys

UK

09-Aug-19 and 11-Aug-19

1 Background

I work part time and during the weekends with my mother on our small family farm of 120 acres. The current stocking rate of the farm is 160 ewes plus 30 ewe lambs and 12 Aberdeen Angus and Hereford cross cows. We also keep some stores through to finishing with the rest sold at 15 months of age. The farm struggles with costs, (feed, fertilizer and wintering) and we have realised that we don't make the most of the grass we grow. We have an average annual rainfall of 900mm.

The intentions and aims of the exchange visits were to learn how to make better use of the grass currently grown on our farm, and to grow more grass on farm without increasing the use of nitrogen fertilizer. This would enable the farm to increase the stocking rate and reduce the winter cost of the farm due to a longer grazing season.

As well as looking at different grazing systems, I also wanted to learn their effect on herbal leys and what they do to the soil structure of the farm in terms of reducing soil and nutrient runoff from the farm. I was also looking into how this would help towards improving flock and herd health on farm.

2 Itinerary

9th August 2019, James Evans, Partridge Farm, Linley, Bishops Castle, Shropshire.

James stocks 330 Stabiliser cows (190 spring calving and 130 autumn calving) and 550 Lleyn ewes (lambing in April). The farm was run conventionally until a few years ago, when a change in ownership wanted to convert the land to organic. This would've meant a reduction in stock numbers on the set stocked system. But with investment in electric fencing and a water system, it meant that the farm can be operated at nearly the same stocking rate as the old system. All the cattle on the farm are on 3 day moves and the sheep are moved around the steeper permanent pasture after lambing.

Key points from visit



- All cattle from the spring calving system are outwintered on deferred grazing with no slowing down in growth in the spring.
- Herbal leys are used on the ex-arable land to help improve soil structure, with the aim of improving soil health and not getting maximum output from this land (longer rotation, less emphasis on residue after grazing, not topping).
- Worn out fields are left for longer between grazing so that the grass and clover sets seed (which is self-seeded by the cattle). They are also looking into ways to seed clover and grass through the cattle without machinery.
- Improvement in the permanent pasture through the grazing system achieves more clover content, a more diverse sward and better ground cover.
- Sheep are outwintered on bales from January until March to allow grass covers to build in order to cut out concentrate use.
- A plate meter is used monthly to measure grass covers with the data inputted into Farmax to help them make grazing decisions (with the input of their grazing consultant).
- Above ground water system has been put in with hydrants every 100 meters to allow water troughs to be moved with the cattle.

11th August 2019, Marc Jones, Trefnant Hall, Berriew, Welshpool,

Trefnant Hall is a 220 hectares farm in 2 blocks. Marc stocks

- 500 Romney ewes and 125 ewe lambs
- 400 10-month-old Aberdeen Angus and Hereford cross calves
- 400 22-month-old Aberdeen Angus and Hereford cross finishing stores.

The calves are brought in on milk in October, and cattle over 12 months are outwintered on fodder beet and bales. All cattle are finished off on grass and fodder beet before 27 months of age. Ewes are lambing in April and all lambs are finished on farm throughout the year. The focus of the farm is ensuring a high stocking rate and high daily liveweight gain from grass alone.

Key points from visit

- 20 hectares acres of fodder beet are grown for 5 ½ months of food for the outwintered cattle. No slowing down in growth is seen in the cattle in the spring after outwintering.
- All cattle are moved every 2 days with the focus on rotation length to get maximum growth from grass (average of 1.6kg/day).
- All paddocks are pre-mown a minimum of once a year to keep quality and to maximise grass growth (average of 12 tonnes DM/ha).
- Herbal leys had been direct drilled in sprayed off pasture with a Guttler Greenmaster drill on the steeper land because of burning on the south facing slopes over the summer. They have yielded well in the first season of trying this.



- Aber high sugar grasses and red clover has been seeded after the fodder beet to increase the protein content of the sward and to lift daily liveweight gains. These are then over-seeded with white clover once the red clover content starts to drop.
- Ewes are wintered on fodder beet and swedes between January and March. They are then set stocked a month before lambing.
- A plate meter is used to measure the farm grass growth rates once a week with the information then inputted into AgriNet to help with grazing and fertiliser decisions.
- The water system on the farm is a permanent system using concrete troughs because of the mob size of the cattle (only 2 mobs of cattle, 1 younger, 1 older).

3 Next Steps

At the home farm, I'm going to

- Start measuring grass to try and build the farm cover towards the winter.
- Try to extend the grazing season for the cattle before we start feeding bales to them by back fencing to build covers into winter.
- Start feeding the sheep bales earlier (December) to build covers for the ewes for lambing outside from the 15th March.
- Graze the cattle earlier next spring to encourage grass growth.
- Close up silage fields once the grass cover is more than the demand.
- Increase the use of back fencing to stop the livestock going back onto areas that they have already grazed to aid recovery.
- Increase the grass cover on some worn out fields and not worry about the residue left behind in order to try and improve the soil structure of these areas.
- Decrease the area the stock can graze at one time so that they are only grazing areas for a maximum of 3 days.
- Reseed areas after a break crop of rape to finish lambs with herbal leys not straight rye grass.

4 Key Messages to the industry

- 1. Increase the use of back fencing to improve sward recovery.
- 2. Increase the use of clovers and herbal leys to improve daily liveweight gain and cut fertiliser use which will also improve the soil structure and decrease the nutrient runoff due to different rooting depths.
- 3. Soil test regularly
- 4. Average farm cover in March and early April has a big effect on grass growth through the spring and summer.





Simple hydrant and moveable trough at Partridge Farm



Herbal lay and an 18-month-old bullock grazing the ley at Partridge Farm



40 cows with calves grazing a 1ha paddock on day 2 of rotation at Partridge Farm





Red clover growing after feeding it as bales to the heifers on the deferred grazing over the winter. This has been allowed to set seed to try and spread it throughout the field (Partridge farm)



A single mob of 370 cattle grazing at Trefnant Hall



A mob of lambs rotated on day 1 to red clover leys at Trefnant Hall



Fodder beet and bales ready for the winter at Trefnant Hall

