

## Pasture

# SLURRY ADDITIVES



### What are we doing?

Carrying out a study into the benefits of slurry additives.

Slurry Additives contain a mixture of Enzymes and Bacteria which are added to the slurry. The enzymes and bacteria break down fibrous material and retain more nutrients in slurry.

Bacteria require a carbon and nitrogen source to encourage them to grow. The carbon comes from organic material in the slurry and the nitrogen comes from ammonia in the slurry.

The overall aim of the trial is to increase the nitrogen value in the slurry with the addition of slurry additives which will reduce the producer reliance on chemical nitrogen. Slurry that is more nutrient dense will also result in reduce chemical nitrogen application to the land. Without the addition of slurry additives the ammonia would have otherwise been lost into the atmosphere as a pollutant gas. Reducing the dependency on chemical fertilisers and decreasing time taken to agitate tanks will contribute to a reduction in embodied Green House Gas emissions.

### Did you know...

 That good pasture management maintains the carbon stored in the soil.

 Reduced agitation time reduces GHG released into the atmosphere.

### Other Benefits



Reduced fuel usage and time to agitate tanks.



Less burden on soil microorganisms and earth worms improving soil structure.



# Pasture PADDOCK GRAZING



## What are we doing?

Carrying out a study into the benefits of grass management.

On the Foyle Food Group Research farm we have identified the increased grass yields which can be achieved when grass usage is strategically managed through a rotational paddock system.

Each grazing mob is managed in a 8 paddock rotational system. Grass is measured weekly and we are currently stocking 2900kg liveweight animals per Hectare (HA) (farm was previously stocking 1900kg liveweight animal per HA on set stocking system).

Grass remains the cheapest feedstuff available for beef production on farm and there is significant potential to increase grassland performance on farm. The Measured Grazing Platforms on the farm records average grass growth yields of over 11T / DM/HA. The average estimated growth on a Northern Ireland beef farm is 4T / DM/HA.

## Did you know...

- 🌱 Extra 340Kg Liveweight gain on rotational paddock system, @ £2 per Kg = £680 per HA benefit over set stocking on FFG Research Farm.
- 🌱 Increasing utilised grass yield by 1T / DM / HA and quality by 0.5MJ gives potential to increase stocking rate by 19% per Hectare and Liveweight gain by 35% per Hectare.

## Other Benefits

- 🌱 1 Tonne of extra Dry Matter utilised = +£204 / HA.
- 🌱 Decrease concentrate input by 21% per Hectare.
- 🌱 Overall good pasture management sequesters more carbon from the atmosphere.



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# ELLIOT BRAVO GENETIC EXCELLENCE



### What are we doing?

In 2018 Foyle Food Group embarked on a programme of sourcing an Aberdeen Angus bull, with superior genetics. Elliot Bravo T452, was purchased as part of the programme, and the semen from the bull was provided to Aberdeen Angus Quality Beef Ltd members. 'Bravo' boasts an exceptional set of Estimated Breeding Values (EBV's), with his Terminal and Self Replacing Indices in the top 1% along with many other individual traits (*see table 1*). An initial calving survey of over 360 calving's has now been completed on the Sire and as we expected the results are excellent.

### Did you know...

 Bravo's calves have arrived promptly with an average gestation length of just 280.6 days in both Suckler and Dairy cows with bull calves carrying 1 day longer than heifer calves on average. An impressive 90% of Bravo calves have been born completely unassisted. Of the remaining 6% received slight assistance and 4% medium assistance and only 1 caesarean section out of all calving's reported. (*Table 2*)

 Experience from the first crop of calves from Elliot Bravo T452 confirms that he has produced calves which were born easily after a short gestation. Farmers feedback has been extremely satisfying in terms of quality and also reports that calves are lively at birth with very little mortality.

### Other Benefits

 Both short gestation and ease of calving are very important traits in both dairy and beef production systems as they have a direct impact on the production achieved from the cow, by maximising the cows days in milk and providing the best opportunity to go back in calf quickly.

Elliot Bravo



Table Two (Elliot Bravo Calving Survey)

	Gestation (days)	Birth Weight (kg)
All	280.6	41.4
Dairy		
Male	280.8	39.2
Female	280.1	37.5
Suckler		
Male	281.4	45.9
Female	279.8	40.2

Table One

