



## YOUR CHECKLIST FOR OPTIMUM SILAGE PRODUCTION

**The starting point for growing good grass silage is the soil. Having adequate soil fertility and a good soil structure are crucial.**

If you do not pay any attention to the soil, silage yields and quality will be compromised. Regularly assessing your soil structure, pH, and nutrient values is important to ensure you are not impacting on plant growth and development. Through correct management, we can greatly increase silage production, cost-effectiveness and quality.

### SOIL COMPACTION

Soil compaction restricts root growth, reducing crop yield and quality. Typically, land with a poor soil structure yields 10-20% less than healthy soil.

Compaction also limits the plant's ability to access vital nutrients, which in turn can lead to attacks from weeds and diseases.

We can help to reduce compaction naturally by planting crops with different rooting depths to improve soil structure.

Mechanically, we can alleviate compaction by using sward slitters for compaction in the upper layers (<10cm depth) or lifters for deeper compaction (>10cm).

### PH AND NUTRIENT VALUES

Having a good balance of nutrients is important for crop production. Nitrogen (N) helps to drive plant growth and quality, while Phosphate (P) improves root growth and development. Potash (K) aids the movement of water, carbohydrates and nutrients throughout the plant tissue. Soil testing is something that should be considered on a bi-annual basis. A soil with a low pH will not utilise fertiliser and nutrients efficiently. In fact, nearly one-third of fertiliser is wasted at pH 5.5 (see table 1).

### SWARD

Grass-silage is only as good as the ley from which it comes. It is important to assess the sward for preferred species, as ingress from less desirable ones impacts yield and nitrogen response. Typically, a ley that is more than five years old can lose up to 50% of its yield potential.

**Table 1:** The effect of soil pH on nutrient availability and fertiliser efficiency

Soil pH	Nutrient Availability			Fertiliser Efficiency	
	Nitrogen	Phosphate	Potash		
7	100%	100%	100%	100%	
6	89%	52%	100%	80%	
5.5	77%	48%	77%	67%	
5	53%	34%	52%	46%	
4.5	30%	23%	33%	29%	
pH	<4.5	4.5-5.0	5.0-5.5	5.5-6.0	6.0-6.5
Yield	87%	88%	91%	96%	100%

Weeds also influence silage quality and quantity, with a dock infestation reducing yields by up to 10%. Therefore, it is important to have a regular reseeding and weed control programme in place.

### SILAGE AVERAGES

Last year's first cut silages showed huge variation in silage quality:

- Dry matter averaged 35% but ranged from 18%-49%
- Protein averaged 12.8%, ranging from 7.8% – 19%
- Metabolisable Energy averaged 10.9 and ranged from 9.2 – 11.9.

Last season, the prolonged wet conditions impacted slurry and fertiliser applications, which delayed first cut and impacted protein levels.

Neutral Detergent Fibre levels in first cut samples were high, averaging 50. This was down to the milder weather earlier in the year. Grass continued to grow throughout the winter, which increased the stemmy fibrous proportion of the grass and lowered its nutritional quality, reducing intake potential.

An increase in rainfall throughout the growing period reduced rapidly fermentable carbohydrates in grass, decreasing energy. As a rule of thumb, the energy will reduce by 0.6ME and 3.5% protein in one week from when the grass starts to push up flowering stems.

So, what lessons have we learnt from this?

Soil analysis must be carried out to establish the pH levels and other soil nutrients.

With the wet winters we have been having it is even more important to get soil tested after leaching. Fertilisers cost up to £400/tonne (t), yet lime is just one-tenth of this at £40/t. This is money well spent to ensure fertiliser reaches its true potential.

In March, we will hold three on-farm meetings to discuss this in more detail. There will be five presentation pods, each discussing different topics to help farmers make better silage.

**For more information on the farm meetings, please speak to your Feed Specialist.**



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Feed Specialist  
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The co-author of this article is Imogen Ward, our new Field Sales Representative for Massey Harpers Country Stores. She has a wealth of knowledge and experience. Imogen is available for the following services:

- Soil testing:  
Basic PH through to broad spectrum
- SFI Soil, Nutrient and Manure Management Plans
- Sward analysis
- Silage Sampling
- Agri-chemical recommendations
- Grass seed sales
- Bespoke grass mixes tailor made to suit your individual needs

# FARMING THOUGHTS

# ADVICE FOR FEEDING FINISHED CATTLE

**The year has started off on the right foot, with dairy and the red meat sector flying! Although milk production is up on the previous year, demand for dairy products is good, with the spot price jumping 10ppl in January.**

Lower numbers of suckler cows and breeding ewes have meant lamb and beef prices have already hit record highs.

The world population is expected to grow from eight billion to 10 billion by the end of the century. An increase in wealth will mean better, healthier diets and an increased demand for red meat and dairy products.

On the feed front, prices are very static going into the next 12 months. We are offering fixed formulated, fixed prices until Christmas.

I am delighted to welcome Imogen Ward to the Massey Harpers Country Stores sales team. Imogen has a wealth of knowledge and experience and has Basis crop protection qualifications. She will cover south of Holsworthy, north east and north west Cornwall.



**Well, six months ago, who'd have thought that beef would be £6+ / kg deadweight?**

Also, processors have raised the maximum weight paid from 400kg to 420kg. I'm told this is because cattle are getting short, and some of the schemes (Aberdeen Angus) like the beef to come from younger, lighter carcasses. Therefore, the total meat yield is lower, which is not good news when demand is strong.

**WHAT OPPORTUNITIES DOES THAT GIVE THE FINISHER?**

The feed price compared to beef price ratio is favourable and it pays to feed growing and finishing cattle well.



**HOW CAN HARPERS HELP MAXIMISE YOUR RETURNS?**

We have two well-proven, off-the-shelf feeds.

**Beef Finisher** and **Premier Beef** which are available in a nut or molassed blend.

Both are high in starch and energy, with the addition of digestible fibre, protein, minerals, and vitamins to provide a balanced diet. Yeast is added as standard to help the rumen flora digest and work under low pH conditions.

The difference between the rations is Premier Beef has maize grain included to provide a little more starch from a different source to help grow and fatten continental cross cattle faster.

For those of you who like to use your own cereals, we have a range of protein mixes and pellets to provide a balanced diet.

**Please speak to your Feed Specialist for more information.**

**We can sample forages and create a diet to complement these and meet your individual requirements.**



# GRAIN AND STRAIGHTS MARKETS

**Trump has been inaugurated as President, and the markets are already being impacted, with the dollar-to-pound exchange rate dropping to 1.22, back from 1.34 in September.**

The pound remains weak after the budget, but the dollar continues to strengthen with good economic growth predicted. To put the currency effect into context, if we were at 1.34 today, soya would be £30/tonne (t) cheaper!

Trump thinks energy prices are too high and intends to produce more oil and gas. Lower energy prices generally lead to lower commodity prices.

Soya prices dipped to a four-year low (below \$290) in December but have since firmed by over \$25, as we see bullish news entering the market.

In January, the USDA reported lower US yields, which increased demand and lowered stocks.

The soya crops in South America are now being downgraded with wet weather hindering harvests in Brazil. Argentina have seen their lowest rainfall in January for 30 years and their crop has been downgraded by at least 3 million t.

China has rejected soya from five Brazilian companies due to quality and is purchasing from the US instead. However, China does hold record stocks of soya (44m t) due to concerns over US tariffs. The reality is soya has been a cheap protein source in many countries.

Maize prices have also firmed in price with lower yields and greater demand in the US. China has also increased its stocks. There are also concerns over crops in South America, with Argentina's dry weather and Brazil's prolonged soya harvest delaying maize planting.

Wheat prices remain reasonably stagnant, but we must be careful maize prices don't drag them up. There seems to be plenty of grain available locally and the gap between wheat and barley is around £10-£12/t, down from £25/t earlier in the season when barley exports were competitive.

Other commodities are in short supply as winter demand increases and shipments run behind schedule. Some shippers are not sellers of certain products, which leads to spot premiums which inflate future prices.





# FEED LAMB CREEP EARLY TO REAP THE BEST REWARDS

**Incorporating Lamb Creep into your lamb-growing diet can result in significantly accelerated growth rates. Faster growth means that lambs spend less time exposed to environmental stresses, reducing the chances of health problems and associated treatment costs.**

Additionally, the enhanced feed efficiency associated with creep feeding is noteworthy. Young lambs are particularly adept at converting feed into bodyweight gain. In fact, they have a feed conversion ratio of 4:1 up to weaning. This means for every 4kg eaten, 1kg of weight is gained. This reduces to 10:1 as lambs get older.

To maximise the benefits of incorporating Lamb Creep feed, it is imperative to adopt strategies that ensure cost-effectiveness. One of the most crucial steps is selecting the right concentrate feed. Harpers Lamb Start 2 Finish Pellets meet the nutritional needs of your lambs whilst offering a balanced ration for all stages of the lamb's growth.

Lamb Start 2 Finish Pellets provide your lambs with a consistent diet throughout their growth cycle. For those with early lambing flocks, Lamb Start 2 Finish Pellets are the ideal choice.

This diet has high levels of starch to ensure lambs gain finish and grow frame, ultimately leading to higher carcase weights and killing out percentage.

Additionally, its highly palatable taste encourages lambs to start eating it as early as two weeks old. When offered in creep feeders, this well-balanced formulation of quality protein and energy maximises lamb growth and protein conversion efficiency.

## **DON'T FORGET...**

Regular health checks and weight monitoring can provide valuable data on the effectiveness of your lamb creep-feeding programme. This information can guide future adjustments, helping you to fine-tune your approach and achieve the best possible results in terms of growth rates and financial returns.



**WIN**  
a big bag of  
**Lamb Start 2  
Finish Pellets**



**Jake Chisholm**  
Feed Specialist  
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## **CUSTOMER TESTIMONIAL**

Bryan and Liz Griffiths, Southcott Farm, Burrington.

### **Why did you start using Lamb Start 2 Finish Pellets?**

*"We have used Harpers Feeds for many years and trust their products to perform well. The customer service is great – both the office staff and the sales team."*

### **What results have you seen since using the Lamb Start 2 Finish Pellets as your chosen lamb creep feed?**

*"Our objective is to get lambs finished and off the farm in the shortest time. The lambs readily start to eat the pellets from a very young age, and finished weights can be reached from 10 weeks."*

### **What do you like most about the product?**

*"The product is a proven, consistent formulation. We know from experience that even a small change can have an immediate impact on intake. It is highly palatable with the lambs coming to eat it as soon as it is offered. We find it to be dust-free and it flows freely in the hoppers."*

### **Why would you recommend the product to other sheep farmers?**

*"For those looking to finish lambs early and take advantage of good conversion rates, this product works well."*

### **What has been the best thing about the product?**

*"It results in good intake at an early age which leads to good liveweight gains and fast finishing."*



# NEW PARLOUR COMPOUND FOR GRASS-FED HERDS

**After a mild winter, the challenge isn't "is there enough grass on the grazing platform?" but more about how quickly we can get on the platform to graze it.**

When we write, we often assume the perfect world, but we all know this is often not the case.

## ADVICE FOR GRAZING AT THE START OF THE SEASON

Grass covers are already strong unless the sheep have been in to graze. Early turnout will be desirable, as forage stocks are sparse in most areas.

## HOW DO WE PROCEED?

Graze when you can for allocated times – two to four hours on the grazing platform will enable the cow to eat a large percentage of the dry matter she requires. Then, she can be supplemented with buffer feed at night to maintain intakes. Remember to adjust grass allocation according to grazing times and the volume of grass available.

A milking cow requires around 15-17% crude protein in the total diet, depending on its yield and stage of lactation. The good news is that grazed grass is typically 16-28% protein. This varies depending on the sward type, growth stage, fertiliser regime, and time of the year. This means that, in theory, grass can go a long way towards meeting the protein requirements of cows. But to achieve this, the cow must be able to utilise the protein efficiently inside the rumen.

## UTILISING GRASS PROTEIN

Grass protein contains a high proportion of rumen degradable protein (RDP). This is often supplied in high quantities and is more than the rumen can utilise. If the rumen microbes cannot use all the RDP, it will be broken down to ammonia in the rumen, absorbed into the blood stream and converted to urea. This leads to high levels of urea in the milk and blood.

## GRAZEPRO NEW FEED RANGE

GrazePro is Harpers' new go-to compound feed range, which allows the farmer to react quickly to the seasonal grass growth. Starting with a 13% protein for abundant, high-protein spring grass, all the way up to a 17% protein for the tired, late-grazing or buffer-fed herds.

By focusing on the type of protein, we have steered away from rapeseed inclusion – as this has the same fatty acid profile as grass – in favour of soya with its excellent Digestible Undegradable Protein (DUP) provision. It also contains sunflower, which means it is high in Oleic Fatty acids and works symbiotically with grazed grass.

The GrazePro range also contains the tried-and-tested blend of essential oils Novatan. Novatan can inhibit the activity of hyper ammonia-producing bacteria and improve the digestion of protein in the rumen. This increases protein efficiency to ensure the diet meets more of the cow's protein requirements.

The increased protein capture in the rumen and reduced ammonia emissions also aids fertility by keeping the uterine PH stable. This is beneficial for conception rates while cows are at grass – a key focus for all block calvers.

The result in all of this better protein utilisation and efficiency means that our farmers can reduce expensive bought in proteins in compound and buffer feeds adding to overall profitability.

As with all diets, it is incredibly important to know the full analysis of all forages before we make a recommendation, so please get in touch with one of our team members who will be able to assist.



## DATES FOR YOUR DIARY

**We look forward to seeing you at events throughout the rest of the year. Make sure to pop in and see us.**

Event	Date	Location
<b>Tuesday 11th February</b>	Massey Harpers Game Feed Meeting	Harpers Feeds, Holsworthy, 11.30am
<b>Saturday 15th February</b>	Wadebridge Rugby Game- To book, call 01409 254 300	Wadebridge Rugby Club, PL27 6AQ 12.30pm
<b>Tuesday 4th March</b>	Forage Event To book, call 01409 254 300	TBC, 11.00am -2.30pm
<b>Wednesday 5th March</b>	Forage Event To book, call 01409 254 300	TBC, 11.00am -2.30pm
<b>Thursday 6th March</b>	Forage Event To book, call 01409 254 300	TBC, 11.00am -2.30pm



### Harpers Feeds

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