

FODDER PLANNING

HOW TO BOOST WINTER SUPPLIES



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Fodder planning

FOREWORD

FALLOUT FROM FODDER CRISIS WILL LAST FOR AT LEAST ANOTHER YEAR

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Weather conditions over the past 14 months have had a major impact both on farm productivity and farm finance.

An early winter in 2012, followed by a late spring in 2013, has left fodder supplies totally depleted throughout the country. The emergency measures that were implemented throughout the spring in the form of imported hay and other forages helped farmers bridge the gap to grass. However, the impact of a 30% to 40% drop in spring grass growth rates will be felt for at least another year.

In order to minimise disruption at farm level and relieve pressure on farm finances, farmers now need to look ahead to next autumn and see what measures can be taken to boost fodder

“We will have to think outside the norm next winter in order to manage feed supplies efficiently

reserves as efficiently as possible.

In this supplement, our specialist team look at the options available to farmers to boost fodder supplies. Ultimately, the most cost-effective way will be to boost production inside the farm gate either through applying additional nitrogen to good ryegrass swards or diverting grain crops into forage. We will have to think outside the norm next winter in order to manage feed supplies efficiently. Feeding low forage diets with the energy deficit made up with concentrates will, on many farms, be the most cost effective option especially in regions where low dry matter feeds cannot be sourced locally.

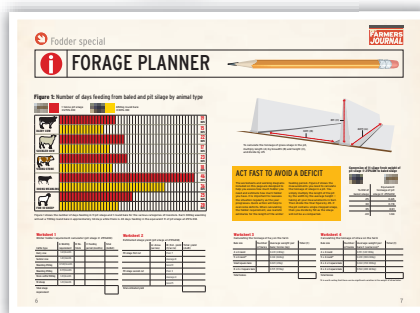
Throughout the coming months, we will continue to give advice on what additional steps can be taken as the summer progresses.



GETTING TO GRIPS WITH GRAZING

Find the right balance between meeting grazing demand and conserving sufficient winter fodder

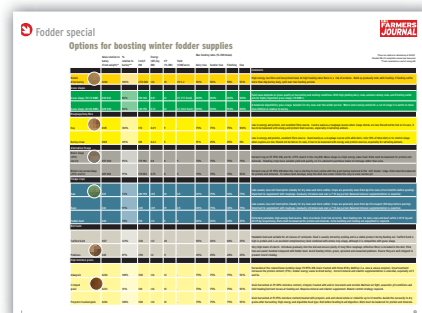
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WORKSHEET

Calculations for your farm

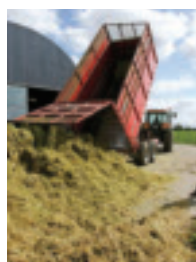
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COMPARISONS

Options for boosting winter fodder supplies

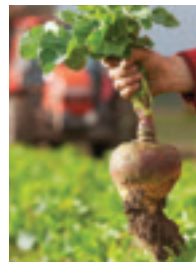
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WHOLECROP

What you should look out for when buying or selling

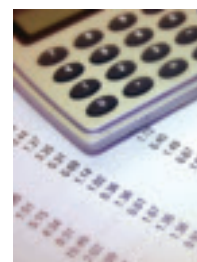
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The team



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MAXIMISE GROWTH

Optimise yield by spreading at least 30 units of nitrogen per acre after grazing

Maximising growth on your farm is the most efficient and cheapest way to source winter forage for next winter. The accelerator at this time of year is bag nitrogen and most farmers looking to maximise winter feed should be keeping the foot down, spreading at least 30 units of nitrogen per acre after grazing to optimise yield.

If the field goes too strong for grazing, it can be cut out for round bales. It can be allowed to bulk up if growth rates are high or cut out fast if growth rates are up and down. Of course, high levels of fertilizer should only be applied where there are good grasses and where ground conditions allow. Soils in the west and north west have been under more pressure with heavy rainfall limiting the opportunities to travel and get fertilizer applied regularly.

Again, each farm has to stay within the limits of the Nitrates Directive but maximising growth now will give you a much higher

response than spreading in autumn when growth rates are normally much lower. There is no point in spreading nitrogen on badly damaged fields. If this is the case, you are better off trying to spend money fixing the problem. Remember a good half year of growth for some paddocks is better than a full year of limited growth where a lot of ground damage has taken place.

Summer is the time of year with the highest requirements and best response for nitrogen uptake by grass. The best research suggests that if you are closing paddocks for silage, you are better off closing and fertilising with the required nitrogen (60 to 80 units per acre for second and third cuts) and then leaving the crop bulk up for 40 to 50 days to maximise yield.

There is little or no point spreading bag nitrogen on poor paddocks — you're better spending the money repairing them and getting them back growing — no matter how highly stocked you are. There is also no point spreading urea on bare paddocks when the sun is shining. Spread CAN (27% N) or compounds when grass cover is low or where phosphorus (P) and potassium (K) levels are low. After the last number of years, P

and K levels have been reduced considerably on some farms, so there is a requirement for P and K, especially on dedicated silage areas.

SECOND CUT

➔ Fertilizer advice for second cut silage is 80 units of nitrogen, eight units of phosphorus (P) and 28 units of potassium (K) per acre.

➔ Slurry applied on warm summer days has little or no nitrogen value but will supply five units of P and over 30 units of K per 1,000 gallons.

➔ Soils that are light textured or low in organic matter are often responsive to application of sulphur (S). Start applying S now in fertilizers on these soils.



Silage is potassium hungry, so make sure if closing for silage that you fertilise with soil test results in mind





Fodder planning

The focus on most farms is on trying to find a balance between meeting grazing demand and conserving sufficient winter fodder

With silage stocks depleted and growth rates running well behind normal levels, there has never been a more important year to avoid grass wastage over the grazing season. Adopting such an approach will help to maximise the volume of silage conserved and build a buffer for next year.

Spring growth has been slow with marginal lands receiving high levels of rainfall particularly affected. We are now in early June and while grass growth rates should be at their seasonal peak, only a minority of areas has witnessed this close to materialising. This has left some farms with only a small percentage, if any, of their silage ground closed.

HOW MUCH AREA TO CLOSE

How much area to close will depend on three factors: 1) area required for grazing, 2) volume of silage required, 3) the time of closing, i.e. first cut or second cut. A good first cut of silage will usually yield 10t to 12t/acre (25t to 30t/ha). A typical second cut of silage will yield 6t to 9t/acre (15t to 20t/ha).

However, it is likely considering growth rates, to date, that first cut yield could be back by as much as 20%. Yield will depend on a number of factors such as closing date, fertilisation rate, growing conditions, etc. Where silage fields are not normally grazed before closing off for cutting, but this year needed to be grazed due to a shortage of grass, farmers should note that yields could be reduced by 10% to 15%.

During the year, farmers should compare actual yields and grass growth and update the winter fodder budget, as required. Advice and worksheets are detailed on **pages 6 and 7**.

The question of targeting quality or quantity in the silage cut depends on the farm's circumstances. Obviously, having a supply of top quality silage would be the ideal



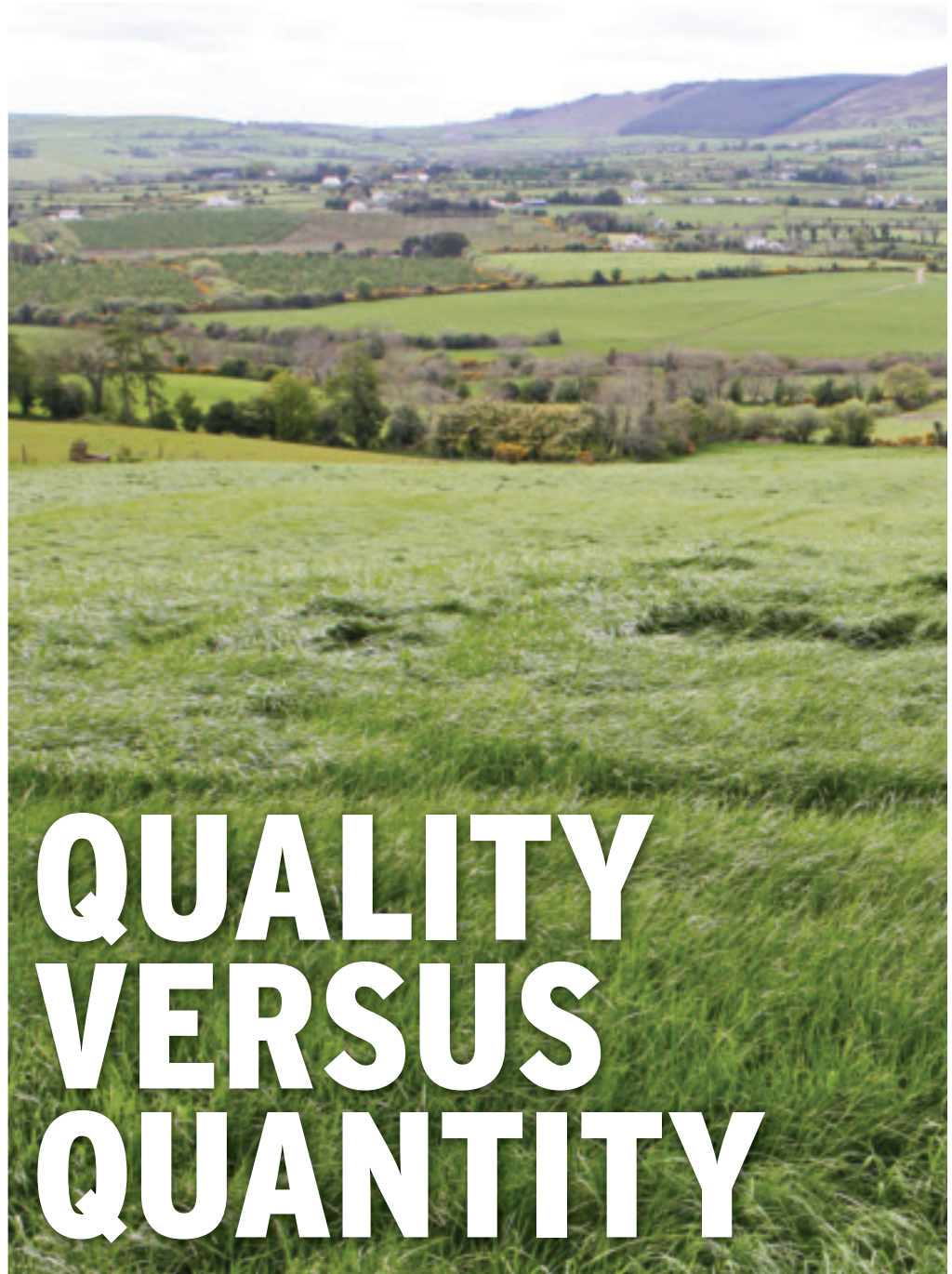
situation heading into the winter. But, this year, farmers may have to compromise on quality a little to lift silage reserves.

Many farmers who have been lucky enough to have silage ground closed have found that despite receiving adequate nitrogen, crops have not bulked up to their liking. They are questioning if growth rates have all but stalled in these swards and are taking a decision to harvest these crops immediately in the hope of getting ground closed again quickly for a bulkier second cut. This is serving two purposes: it is ensuring there

is a supply of higher quality forage for priority stock on the farm, (e.g. lactating animals, finishing animals, weanlings, etc), while also hopefully conserving sufficient fodder in the second cut.

Be careful, however, if you are thinking of cutting early that adequate time has passed for nitrogen applied to be used up.

In good grass growing conditions, a sward utilises approximately two units of nitrogen/day or 14 units per week. Applying 100 units of nitrogen per acre (124kg of N/ha) will mean that the sward cannot be cut for at least seven weeks. Cutting before this will lead to elevated levels of nitrate in the grass, which will affect fermentation.



KEY POINTS

- Do a fodder budget to determine silage requirements.
- Where fields are not usually grazed before housing, but were required for grazing this year, silage yields may be reduced by 10% to 15%.
- Grass utilises two units of N/day or 14 units of N/week. Where 100 units of N are applied, the crop will require at least seven weeks before cutting can take place.
- Balance quality and quantity to suit farm circumstances.
- Walk the farm often and remove grass surpluses fast.
- A split application of N for silage will allow the ability to re-graze fields, if required, in three to four weeks.
- Grass surpluses should be removed from paddocks that are gone past grazing.

➤ ALTERNATE FROM GRAZING TO CUTTING

It may not be possible due to farm layout and fragmentation, but closing alternate areas for first cut and second cut can be advantageous.

For example, if a silage field is harvested in the first cut harvest in the first or second week of June, aftergrass should be available to graze in early July. Where this aftergrass can be grazed, it may be more beneficial to close off grazing ground in early June for a second cut.

This will help to maintain grass quality in the grazing rotation without topping, will help to increase the bulk in the second cut and will also decrease the P and K drain on silage ground as both

cuts are not taken from the same area.

➤ REMOVING SURPLUSES

This year, farmers should be focusing on maximising the amount of grass grown, utilised and the volume of silage saved.

The best grass managers will measure growth rates up to twice a week during periods of high growth rates to monitor grass supply and they will remove any surplus as invaluable feed. For farmers who don't measure grass, even ensuring to walk the whole farm at the same time once every week gives a good insight into grass availability and provides the information to make decisions.

When removing surpluses, it is vital to cut covers that have gone past grazing

straight away on highly stocked farms, so that they will re-join the rotation in three to four weeks.

Those lowly stocked may risk allowing these paddocks to bulk up, which will slow re-growth but will deliver higher yields.

➤ SPLIT FERTILIZER APPLICATION

When closing ground for silage, it may be worth considering using a split fertilizer application.

This will allow farmers the flexibility to graze silage ground in three to four weeks' time, if required. If the area is not required for grazing, then it can be topped up with nitrogen and harvested three to four weeks later.



Fodder planning



FORAGE PLANNER

Figure 1: Number of days feeding from baled and pit silage by animal type

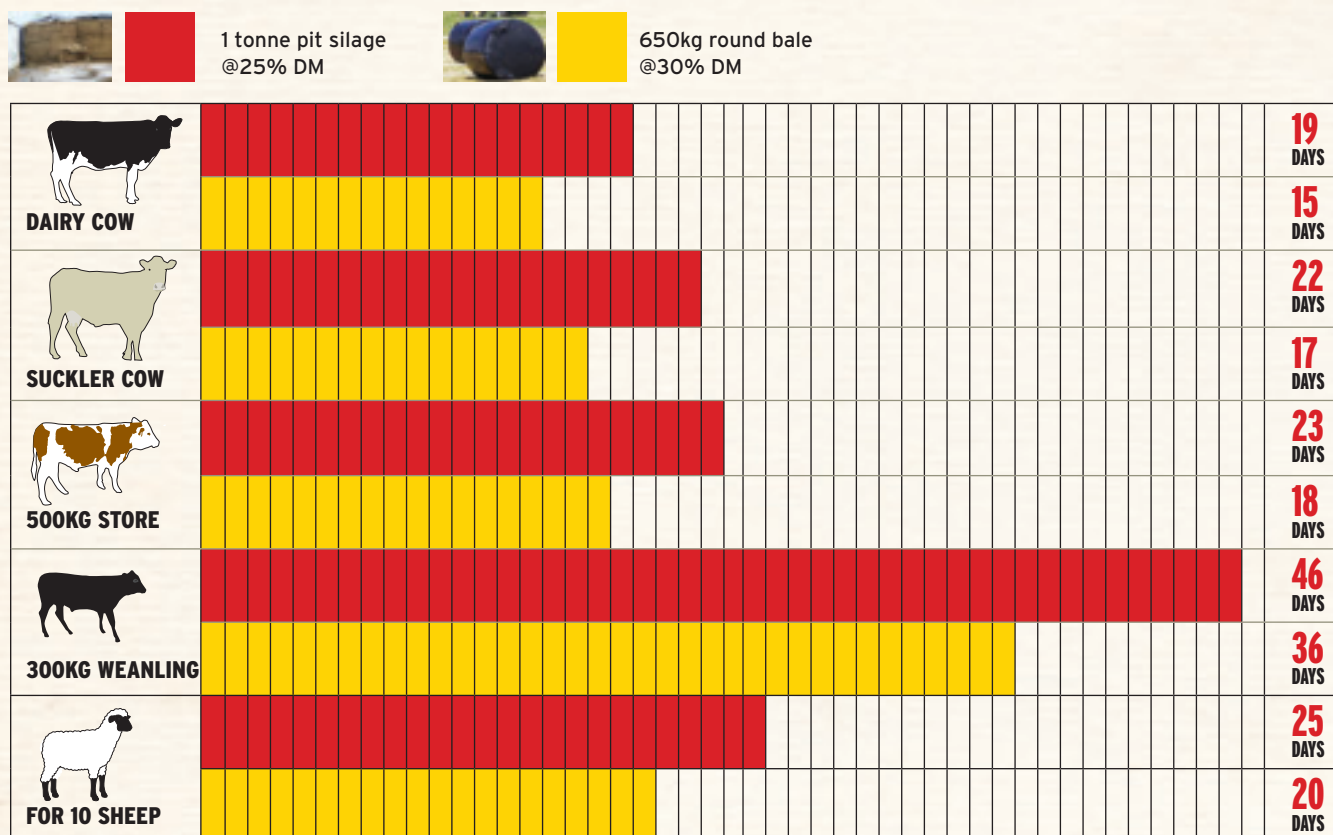


Figure 1 shows the number of days feeding in 1t pit silage and 1 round bale for the various categories of livestock. Each 300kg weanling will eat a 700kg round bale in approximately 34 days while there is 43 days feeding in the equivalent 1t of pit silage at 25% DM.

Worksheet 1

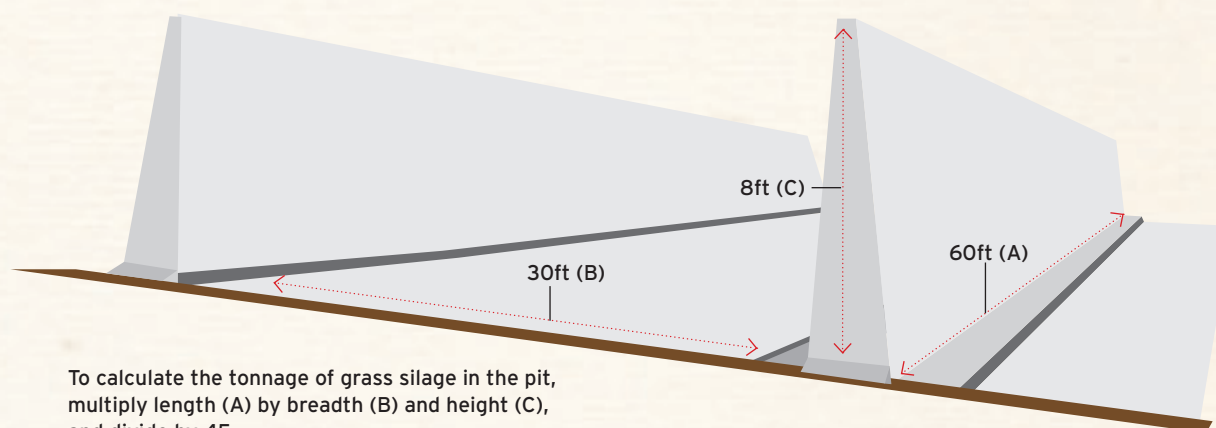
Winter fodder requirement calculator (pit silage @ 25%DM)

Cattle type	A: Monthly requirement	B: No. Stock	C: Feeding period (months)	Total (AxBxC)
Dairy cow	1.6t/month			
Suckler cow	1.4t/month			
Weanling 250kg	0.54t/month			
Weanling 350kg	0.7t/month			
Store cattle 500kg	1.3t/month			
10 sheep	1.2t/month			
Total silage requirement				

Worksheet 2

Estimated silage yield (pit silage at 25%DM)

	A: Area (acres)	B: Est. yield (t/acre)	Total yield (AxB)
Pit silage first cut		Poor 7	
		Average 8	
		Good 9	
Pit silage second cut		Poor 3	
		Average 4	
		Good 5	
Total estimated yield			



To calculate the tonnage of grass silage in the pit, multiply length (A) by breadth (B) and height (C), and divide by 45

ACT FAST TO AVOID A DEFICIT

The worksheets and working diagrams included on this page are designed to help you assess how much fodder you need and estimate how much fodder you have. It is important to reassess the situation regularly as the year progresses. Quick action will help to overcome deficits. When calculating the fodder requirement, use realistic estimates for the length of the winter

feeding period. The figure above shows the measurements you need to calculate the tonnage of silage in a pit. You simply multiply the length of the pit by the width by the average height – taking all your measurements in feet. Then divide the final figure by 45. If the pit contains single chopped silage, then you divide by 50 as the silage will not be as compacted.

Conversion of 1t silage fresh weight of pit silage @ 25%DM to baled silage



% DM of baled silage	Equivalent tonnage of pit silage @ 25%DM
25	0.65
30	0.78
35	0.91
40	1.04

Worksheet 3

Calculating the tonnage of hay on the farm

Bale size	Number of bales	Average weight per bale; t (kg)	Total (t)
4 x 4 round		0.24t (240kg)	
5 x 4 round*		0.36t (360kg)	
Small square bale		0.02t (20kg)	
8 x 4 x 3 square bale		0.57t (570kg)	
Total tonnes			

Worksheet 4

Calculating the tonnage of straw on the farm







Bale size	Number of bales	Average weight per bale t (kg variance)*	Total (t)
4 x 4 round		0.15t (140-180kg)	
5 x 4 round*		0.20t (180-240kg)	
8 x 4 x 3 square bale		0.36t (350-380kg)	
8 x 4 x 4 square bale		0.56t (480-600kg)	
Total tonnes			

*It is worth noting that there can be significant variation in the weight of straw bales.



Fodder planning

Options for boosting winter fodder supplies

		Value relative to barley (fresh weight)*	% relative to barley**	Cost/t DM	Energy (UFL/kg DM)	CP (% DM)	Yield (t DM/acre)	Max feeding rates (% DM Intake)			
								Dairy Cow	Suckler Cow	Finishing	Ewe
Rolled dried barley		€240	100%	270-280	1.16	10	1.9-2.2	50%	50%	50%	50%
Grass silages											
Grass silage (70-72 DMD)		€30-€32	80%	150-160	0.81	14	1.5 (7.5 fresh)	100%	100%	100%	100%
Grass silage (64-66 DMD)		€28-€30	84%	140-150	0.72	14	2.1 (10.0 fresh)	100%	100%	100%	100%
Roughage/long fibre											
Hay		€145	103%	170	0.69	9	.	75%	75%	75%	100%
Barley straw		€108	101%	108	0.44	5	.	15%	25%	25%	0%
Alternative Forage											
Maize silage (25% starch)		€55-€60	95%	175-190	0.8	8	5	75%	75%	75%	75%
Whole crop cereal silage (25% starch)		€65-€69	97%	170-180	0.75	8	5	75%	75%	75%	50%
Forage crops											
Kale		€33	73%	180-190	1.05	18	4.5	30%	75%	30%	75%
Rape		€44	97%	245	1.05	19	2.5	30%	75%	30%	75%
Fodder beet		€40	78%	210	1.12	9	6	20%	30%	30%	25%
Wet feeds											
Trafford Gold		€127	123%	330	1.12	20	.	50%	30%	60%	25%
Potatoes		€40	87%	250	1.2	11	.	30%	25%	20%	25%
High moisture grains											
Alkagrain		€240	108%	300	1.16	14	.	75%	75%	75%	50%
Crimped grain		€233	111%	310	1.16	10	.	75%	75%	75%	50%
Propcorn treated grain		€246	108%	300	1.16	10	.	75%	75%	75%	50%

*Prices are relative to rolled barley at €240/t.
Standard DM, UFL and protein values have been used
**Costs calculated on a unit of energy DM

	Comments
	High energy, low fibre and low protein feed. At high feeding rates there is a risk of acidosis. Build up gradually onto adlib feeding. If feeding cattle more than 4kg barley daily, split over two feeding periods.
	Feed value depends on grass quality at harvesting and ensiling conditions. With high yielding dairy cows, autumn calving cows, and finishing cattle aim for highly digestible grass silage (70 DMD+).
	A moderate digestibility grass silage. Suitable for dry cows over the winter period. Where land is being rented for a cut of silage it is worth no more than €100/acre relative to barley.
	Low in energy and protein, but excellent fibre source. Can be used as a roughage source when silage stocks are low. Should not be fed on its own, it has to be balanced with energy and protein feed sources, especially in lactating animals.
	Low in energy and protein, excellent fibre source. Used mainly as a roughage source with adlib diets (min 10% of total diet) or to stretch silage when supplies are low. Should not be fed on its own, it has to be balanced with energy and protein sources, especially for lactating animals.
	Harvest crop at 25-35% DM, aim for >25% starch in the crop DM. Maize silage is a high energy value feed. Diets must be balanced for protein and minerals. Standing crops have variable yield and quality, so it is advised to purchase maize on tonnage rather than area.
	Harvest crop at 35-45% DM when the crop is starting to turn yellow with the grain having matured to the 'soft cheddar' stage. Diets must be balanced for protein and minerals. To reduce feed wastage, keep the feed face small. Ensile the crop in a low narrow pit.
	Late season, low cost feed option (ideally for dry cows and store cattle). Crops are generally sown from April to June (4 to 6 months before grazing). Important to supplement with roughage. Gradually introduce kale over a 7-10 day period. Balanced mineral supplementation is essential.
	Late season, low cost feed option (ideally for dry cows and store cattle). Crops are generally sown from April to August (100 days before grazing). Important to supplement with roughage. Gradually introduce kale over a 7-10 day period. Balanced mineral supplementation is essential.
	Extremely palatable, high energy feed source. Risk of acidosis if not fed correctly. Max feeding rate for dairy cows and beef cattle is 10-12 kg and 20-25 kg respectively. Diets must be balanced for protein and minerals. Extra handling and feeding out equipment is required.
	Palatable feed and suitable for all classes of ruminants. Feed is usually stored by ensiling and is a stable product during feeding out. Trafford Gold is high in protein and is an excellent complementary feed combined with whole crop silage, although it is compatible with grass silage.
	Very high levels of starch. Introduce gradually into the diet and ensure plenty of long-fibre roughage (effective fibre) is included in the diet. Potatoes are easier handled compared with fodder beet. Avoid feeding rotten, green, sprouted and unwashed potatoes. Ensure they are well chopped to prevent risk of choking.
	Harvested at the conventional combine stage 70-85% DM. Grain treated with Home N'Dry Additive (i.e. urea & urease enzyme). Urea treatment increases the protein content (17%). Similar energy value to dried barley. Correct mineral and vitamin supplementation is essential, especially vit E and Se.
	Grain harvested at 25-40% moisture content, crimped, treated with acid or inoculants and ensiled. Maintain air tight, anaerobic pit conditions and limit heating/nutrient losses at feeding out. Requires mineral and vitamin supplement. Rodent control strategy required.
	Grain harvested at 15-25% moisture content, treated with propanoic acid and stored whole or rolled for up to 12 months. Avoids the necessity to dry grains after harvesting. High energy and digestible feed type. Roll before feeding to aid digestion. Diets must be balanced for protein and minerals.

Fodder planning

A major barrier to the purchase of standing wholecrop is the inability to accurately estimate the actual yield being purchased or sold

A degree of trust is required when buying wholecrop as the amount of grain can only be estimated based on the appearance of the crop prior to harvest and the subsequent harvest yield of similar fields for verification. But even this has limitations.

The grain yield of any grain crop is made up by the multiplication of the number of heads or ears in a square metre (ears/m²) or acre or hectare (we use square metre as this is possible to count) multiplied by the average number of grains in each ear or head (GPE), multiplied by the average physical weight of these grains as measured by the thousand grain weight (TGW) in grams.

$$\text{Grain yield} = \text{Ears/m}^2 \times \text{GPE} \times \text{TGW.}$$

But few buyers or sellers are likely to get involved in such counts (and they are subject to sample accuracy), so you are going to rely on other factors. Guessing yields is precisely that — guessing. Growers think they can have a good idea but look at how often we were wrong in recent years.

However, in general, dense crops, especially of barley, are essential to produce a high yield potential so if you can easily walk through a barley crop, it may not have the highest yield potential. But you have to walk through a poorer one before you recognise a good one. Good two-row barley crops need 800 to 1,000 heads per square metre to have a high yield potential.

Wheat is much more difficult as ear count is not an indication of yield potential. But first crop wheat growing in a good fertile field with organic manure in the rotation has the potential to exceed five tonnes of grain per acre at 20% moisture. Whether there will be any such crops this year is another matter.

Crop value to a livestock producer is broadly similar to its use for feed as grain. Good grain

EXTRA FODDER
If you intend to access additional fodder sources from crop producers it is important to make contact and get agreements in place soon.

fill on lots of grains is where the bulk of the feed value comes from. But it is up to the livestock farmer to decide whether soft dough wholecrop, hard dough wholecrop, crimping or, indeed, green grain is the most suitable method of utilisation. Both parties must be happy that the yield level on which a trade is done is fair, or else such deals will not occur again.

VALUING A CROP

The crop producer will look at the value of a crop as being the grain yield, the price on the day of sale (could be before harvest) and the straw value. All crop producers will look to optimise these.

There will be offers to sell headlands or poor parts of fields for convenience but this is very difficult, short of having access to a weighbridge to get the volume of the crop. But if such crop areas are recovering, they could be very useful as whole-crop because they are likely to have a much higher proportion of grain to straw in the silage at normal grain cutting heights.

Grain crops can be sold and bought in many ways and used in different ways. Delivery at 20% moisture or green is the main method of selling but this price will be significantly below its dry matter equivalent.

Even where the crop is taken at 40% to 45% dry matter, the price will generally



BUYING OR SELLING WHOLECROP



Table 1: Wholecrop pros and cons

Producer	
Pros	Cons
Early harvest	Possible yield uncertainty
Definite market	Locked into one buyer
Agreed payment dates	Payment uncertainty?
Early planting option	
Can forward sell	
Following catch crop option	

User	
Pros	Cons
Guaranteed feed supply	Possible yield uncertainty
Possibility of deal for catch crop	Good pits essential
Could use slurry as part payment	Must be balanced for protein
Possibility of future deals	Difficult to carry across years
Very good quality feed that's easy to feed out	

“There are many additional forage options. Some are more transportable, such as maize silage, baled ground ear maize or fodder beet

based on co-operation to utilise slurry or paddock reseeding.

If soft dough wholecrop (this is the 40% to 45% DM harvest option) is the objective, you need to know when to target harvest. Oven tests are possible but unlikely so the best crop development guides must be used.

It is generally stated that the best indicator of a 40% to 45% DM crop is when the grains are at the soft dough stage.

This is when milk can no longer be squeezed out of the grains in the centre of the main head (grains in different parts of the head and on different heads can be at different stages). The grain will start to turn from green to a golden shade and you can dent the grain with your nail but it will fill out again when the pressure is removed.

TOTAL YIELD

At this stage, the crop has produced its maximum total yield but some of the dry matter is still in the process of being transformed from sugars to starch. If you pull off the coat of the seed, you should be left with a white cheesy grain texture.

In general, this stage is likely to occur within three to four weeks of the normal harvest date for any given year. This also means that fields can be cleared early to plant other crops like oilseed rape or even fodder crops.

If a crop destined for wholecrop gets much drier, it can be difficult to pack in the pit. This could force a different process and even a different type of feed. Barley crops will dry down much quicker than wheat and, so, can easily pass the 'best-by' stage for wholecrop. Wheat takes a little longer but weather, temperature and drying conditions will govern the speed of dry down. Rain could also be the cause of delayed harvest at this time.

Unlike grass silage, wholecrop is subject to attack by rodents in the pit, so you need to put and keep protection in place. Sometimes, the wholecrop is put up onto an earlier grass clamp or covered totally with grass silage to make it less accessible to rodents but this may make feeding awkward, depending on the size of the pit face.

revert back to green price equivalent.

So, if you are a seller and both parties are happy that a green yield of 2.8 t/ac is achieved, then at current harvest prices of €155/t to €160/t, this will cost 2.8 x 160 = €448/ac if you were to cut it green off the combine (grain only). If you take wholecrop for forage, the value of the straw must be added in, plus an additional premium, because soft dough wholecrop will remove additional P and K that will have to be replaced to maintain soil fertility.

In the sale above, the net cost will be €448, plus up to €80/acre for the green straw value, i.e. €528/acre. This should be higher where the grain yield is higher and lower where there is less grain

involved. One of the hidden benefits of wholecrop from the user's perspective is that you do not have to account for the P content in the grain as it is purchased as a moist feed.

It must also be said that lower yielding crops will often have less straw yield. While this may help the forage value in a wholecrop scenario, it will decrease the total size of the crop.

All crops can be purchased for wholecrop on the basis of value of the crop at harvest based on real yield level and straw value. The buyer doesn't just want bulk — the value is in having the grain in the straw.

As well as a straight cash value, farmers could consider a production deal



Fodder planning

USING BRASSICAS TO BUILD RESERVES

Fodder crops are either grown by the user or they can be grown for a user. A range of factors govern the suitability of different crop options. These can range from land availability and suitability to the type of crop and animal to be fed.

The sowing dates for many of these crops has already passed or is approaching fast, as shown in Figure 1. There are still limited opportunities for farmers to plant kale, with more opportunities for rape and stubble turnips or a kale/rape hybrid. These crops can be used to graze animals over the winter and help conserve limited fodder supplies. Also, in the case of lambs and ewes especially, they can be used to help finish lambs. The advantages and disadvantages of each crop, and other relevant considerations, are summarised below.

MANAGING & GRAZING FORAGE CROPS

➔ All forage crops are low in fibre and, as such, require animals to be supplemented. The general recommendation is to supplement about 25% of the diet with a fibre source.

➔ Placing bales of silage or wrapped hay/straw strategically in the field will reduce soil traffic damage and compaction in winter.

➔ Mineral supplementation is required. Crops are low in magnesium, copper and iodine.

➔ Introducing animals slowly and strip grazing is the preferred grazing method.

➔ Variable in terms of labour needs.

FORAGE RAPE

ADVANTAGES

- ➔ Can be sown later in the year e.g. after a crop of winter barley, a wholecrop cereal or a late silage harvest.
- ➔ Suitable for finishing lambs.
- ➔ Known to take in a rougher seedbed and acts as a good crop to break up marginal grassland.
- ➔ More suited to young stock than kale.

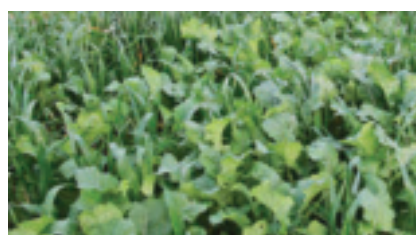
DISADVANTAGES

- ➔ Lower crop yield potential.
- ➔ Less winter hardy and ideally should be grazed by the end of year.
- ➔ Needs decent soil fertility.

Feed value and yield of brassica crops



Crop	DM %	DM yield (t/ac)	Protein (CP %)
Turnips	15-17	2.5	17-18



Crop	DM %	DM yield (t/ac)	Protein (CP %)
Hybrid crop	12-15	3	18-19



Crop	DM %	DM yield (t/ac)	Protein (CP %)
Rape	12-15	2.5	19-20



Crop	DM %	DM yield (t/ac)	Protein (CP %)
Kale	15-17	4.5	15-17



Crop	DM %	DM yield (t/ac)	Protein (CP %)
Swedes	17-20	3	10-11

Table 1: Optimum sowing and feeding periods for the main brassica crops

	J	F	M	A	M	J	J	A	S	O	N	D
Kale												
Forage rape												
Swedes												
Stubble turnips												

■ Grazing
■ Sowing

FORAGE KALE

ADVANTAGES

- ➔ Little to no specialised equipment required.
- ➔ Relatively easy to manage and graze.
- ➔ It can be planted in late spring, thus allowing early grazing of grassland or silage harvesting before sowing.

DISADVANTAGES

- ➔ Needs rotation as consecutive growing will leave it susceptible to club root (a yield-robbing root disease).
- ➔ May need active management in terms of herbicide and insecticide.
- ➔ Planting after mid-June reduces yield potential.
- ➔ Only suitable for dry free-draining soils as normally grazed in situ.

FORAGE TURNIPS

ADVANTAGES

- ➔ Like rape, provides a source of winter dry matter after a relatively short growing period, compared to Swedes.
- ➔ Can be grazed in-situ or supplemented to animals.
- ➔ Need decent soil fertility.
- ➔ Can be sown later in the season meaning area is out of production for shorter timeframe.

DISADVANTAGES

- ➔ Utilisation can suffer if sown in heavy soils & more suitable to sheep than cattle.
- ➔ More prone than Swedes to frost damage.

CASHFLOW CHALLENGES

The *Irish Farmers Journal* gives advice on how best to manage finances

It doesn't matter if you do it yourself or get an adviser or accountant to do it for you. Work out what money you know will come into your account (Single Farm Payment/other schemes) and what you will expect to come in (stock sales, milk sales, grain sales, etc). Then identify what money will go out in the form of bills and when they will go out.

It is your business and you know the costs. In many cases, this exercise has shown that the prospect of higher prices means they show a higher surplus at the end of the year than farmers realised. The first thing a bank or merchant will ask for is a cashflow. The reason is that it will show when there is surplus available to repay them.

HOW TO CHANGE THE CASHFLOW

Fodder budget: There is a lot of talk about the country not being able to gather enough fodder to feed animals next winter.

Do your own fodder budget. It is the same as doing a cashflow, except instead of money in, you use fodder stocks and you replace bills with monthly animal requirements. If you are in deficit in this budget, you have to look at ways of get-

ting more fodder, which has a cost.

The other option is to reduce the requirements by selling stock earlier. It is better to make decisions about moving culls and other stock now if deficits are large. These changes will affect your cashflow budget which can help you make the right decision.

Tighten the belt: Many farmers are already doing this by buying what they need, not what they want. Many are putting off jobs they had planned on the farm.

Credit limits: Apart from getting forage to feed stock, access to credit is the biggest problem for farmers now. Most farmers have credit limits in the form of what merchants will allow them on account. Banks give overdraft limits, although some farmers have no overdraft for one reason or another.

One option for farmers is to get credit limits increased either by the merchants or the banks. The only way to do this is to talk to them. The relationship you have built up with merchants will dictate how far they are willing to go.

With banks, contact your bank manager to start them working on getting extra credit when it is required. Do not wait until you have reached or gone over your overdraft. The spotlight is on the main banks in terms of access to credit for farmers. They said they have money to lend and want people to contact them.

Take them up on the offer, but remember it is easier if you have the figures and make a strong case as well. Be business-like.

FACTS

Many farmers are having cashflow difficulties:

- ➔ Do a cashflow
- ➔ Make changes inside farmgate.
- ➔ Increase credit limits.
- ➔ Restructure loans.

In difficult situations:

- ➔ Get control of your cashflow.
- ➔ Make decisions.
- ➔ Apply for Farm Assist.
- ➔ Ring the Department helpline – 1850 21 19 90.



The first thing a bank or merchant will ask for is a cashflow as it shows if there is surplus available to repay them

Some will have to make tough decisions

Farmers whose cashflow was tight coming into last summer are in the biggest difficulties. The reason was they more than likely already had overhanging merchants' bills and were continually using their bank overdrafts.

They have no buffer in their business

as profitability is normally low.

Every situation will be different and it could be due to bad health, heavy borrowings, poor farming or bad business decisions being made. For these farmers, hard choices will have to be made, regardless of what the rest of the year brings. They will find it hard to get additional credit.

Destocking or, in some cases, not restocking might be needed to cut down costs and pay existing bills. Can silage or standing meadows be sold? Maybe

surplus machinery can be sold?

Those in the most difficult situation have to get control of their cashflow.

This could mean setting up an account in a credit union or another bank to divert some money to ensure the family have living expenses.

Apply for Farm Assist now. It takes a while, but payment will be backdated if you are eligible.

The Department of Agriculture emergency fodder helpline (lo-call number is 1850 21 19 90).

Fodder planning

The *Irish Farmers Journal* looks at the options for repairing swards, which vary from simple broadcasting grass seed to a full conventional reseed

The cost will limit options for farms, but some effort should be made to repair swards this year. A soil fertility test should be carried out first, with the correct nutrients applied to the sward to increase the chance of a successful reseed. Options for sward improvement are as follows:

BROADCASTING GRASS SEED

- ✓ Pro = cheap and easily carried out
- ✗ Con = low success rate

This is the cheapest way to repair a sward but the least effective. It involves dispensing grass seed via the fertilizer spreader and success is dependent on having an open sward. A thick sward base will limit the degree of soil contact with the seed, reducing germination. Broadcasting should only be carried out during periods of low grass growth to reduce competition from the existing sward or on fields that are sprayed off. Apply seed at one bag/acre and graze the existing sward tight for the remainder of the season.

STITCHING IN GRASS SEED

- ✓ Pro = cheaper than ploughing and less weather dependent.
- ✗ Con = more expensive than broadcasting and needs high level of management post seeding.

Stitching in requires specialised equipment but as it scratches and places the seed directly onto the soil surface, the prospect of a successful germination are greatly enhanced. Stitching is less vulnerable to weather, compared with ploughing, as the seed bed is firm and sown in a one pass operation.

Spraying the sward with glyphosate to kill off weeds and unproductive grass is advisable, but many not be entirely necessary. Spraying will increase the cost of reseeding and if carried out, it is beneficial to apply lime in advance as dead grass becomes very acidic. A dry run of the grass harrow will remove dead matter from the seed bed and expose more soil for seed contact.

Grass seed should be applied at one

bag/acre with sowing carried out in both horizontal and vertical directions. As the soil surface is not disturbed, the grazing paddock can carry stock once the grass seed is firmly established and anchored. Stitching can be carried out in spring, summer and autumn and works best during periods of low growth or after silage has been harvested.

Management after stitching the seed is crucial. The sward must be grazed tight throughout the season to

encourage seedling development. Only graze with light weanlings or sheep and limit each grazing to three days every two weeks.

DIRECT DRILLING

- ✓ Pro = Better soil contact than stitching machines.
- ✗ Con = Existing sward needs to be burned off before sowing.

Direct drilling grass seed is very similar to stitching in, but as it places the seed directly into the soil, establishment of new grass seedlings is higher. Often one or two

SWARD IMPROVEMENT OPTIONS

- ➔ Broadcasting grass seed
- ➔ Stitching in grass seed
- ➔ Direct drilling
- ➔ Ploughed reseed





Table 1: Cost comparison of reseed options (€/acre)

	Plough	Stitching/drilling	Broadcasting
Lime (one tonne)	€25	€25	€25
Glyphosate	€12 - €16	€12 - 16	
Ploughing and harrow	€80		
Sowing/stitching	€30	€35 - €70	€5
Grass seed	€70	€70	€70
Herbicide	€12	€12	
Fertilizer (two bags 10-10-20 @ €450 to 470/t)	€45	€45	
Roll	€10	€10	€10
Total cost/acre	€284	€209	€110

runs of a power harrow is used to create a tilth in the top two inches and seed is dispersed on the surface. Management after sowing is similar to stitching in and slug pellets are advisable.

➡ **PLOUGHED RESEED**

✓ Pro = Opens soil relieving compaction and increases drainage.

✗ Con = Expensive and weather sensitive

Conventional reseeding offers multiple benefits, but will have equally multiple drawbacks. Where ground has become severely poached, ploughing will level ground and improve soil drainage. There is no competition on an existing sward, but weeds can be a problem in

the first season. Ploughing can bury the fertile layer of soil and bring less fertile soil to the surface.

Once the seed bed has been prepared, grass seed can be applied by broadcasting, using a stitching machine or drilled.

As ploughing is weather dependent, there is a higher risk that the field can be out of use for a lengthy period of time if the weather turns unfavourable. Disturbing the seed bed makes it difficult to carry heavy livestock during the first grazing season, limiting use.

➡ **OTHER FACTORS**

Drainage and relieving soil compaction are important but will involve further

expense and, ideally, should be carried out before reseeding.

➡ **COSTS**

Table 1 outlines the main costs associated with reseeding via broadcasting, stitching in or ploughing. Farmers can eliminate certain tasks such as spraying, applying lime or rolling which will obviously reduce costs.

Rejuvenating swards is not cheap, but the alternative of leaving ground for another year and expecting it to respond to further fertilizer applications is unrealistic.

Where reseeded grass is present on farm this spring, it will have been invaluable.

Are you experiencing weather related farm cash flow pressure? Talk to us about short and medium term finance options.

Drop into any AIB branch or business centre.
Alternatively, call us on 1890 47 88 33.
Lines are open Monday-Friday 8am-9pm
and Saturdays 9am-6pm.

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