

## Scotland grass and forage crops

Proudly supporting farmers

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### Proudly supporting British farmers

- We've been breeding our agricultural grass varieties in Britain in Partnership with AFBI for nearly 30 years
- We're using nearly 20 British bred varieties in 2019
- We have over 10 years of British trialling and testing at our own Cropvale Farm Research Site
- We have over 2000ha of British farmland producing our grass seed
- All our mixtures are designed and formulated to ensure continuous improvement for British Farming
- Our varieties are tested in 17 different locations in the British Isles



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## Dedicated to you

**Enterprise Guides** 

#### We understand how important the grass crop is to Scotland

- Almost 80% of Scotland's agricultural area is grassland
- Over 1.3 million hectares is manageable and improveable
- The UK has the ideal climate for growing grass as 95% of the time the temperature is between 5°C and 25°C
- Our varieties are independently assessed on 11 UK sites before we market them
- Our UK based breeding partnership with AFBI, which has existed since 1991 has produced nearly 50 new grass varieties
- One variety takes around 5000 plots and over 15 years to commercialise
- Grass breeding has improved potential yield by around 0.5%/year over the last 25 years if you wouldn't use old animal genetics, why do the same with grass?
- Management is KEY! Recording and management just got a whole lot easier with our updated version of our Good Grass Guide

Discover our Enterprise and Advice Guides and turn your grass into gold.		
🗹 Dairy Guide	🗹 Good Grass Guide	🗹 Silage Guide
🗹 Sheep Guide	🗹 Beef Guide	🗹 Forage Crops

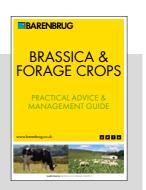


#### Long-term it is essential to maintain swards in the best possible condition to ensure consistently good yields.

This means measuring and monitoring growth regularly and getting up close with your grass. Many fields look good at a glance and it is not until you get right up to the sward that you can spot problems. Most farms will have fields at different stages of maturity – and this variation can make it difficult to know which tasks to prioritise. To help farmers decide where to focus their efforts, we have devised a simple field indexing system to monitor field performance, which can be employed regardless of grass type or management technique. The system is easy to use and draws on the stock conditioning method that many farmers use to grade their livestock. It provides a five-step scoring system that enables farmers to grade grass and decide what, if any, action is required to keep fields productive.







## What's new for 2019



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#### GOSFORD

Gosford is an intermediate heading variety with a heading date of 29th May (REE 42) putting it at the later end of that category.

Exhibiting a first cut quality of over 70D and a total cutting yield of 102% of control, combined with total grazing yields of 107% and a grazing D value of 76.8, Gosford is an ideal variety to include in long term mixture that will be cut and grazed.

Gosford was named after a 240ha Forest Park in central Armagh and the variety can be found in Cut & Graze and Barmix during 2019.

#### BALLINTOY

An exceptional Late tetraploid Perennial ryegrass, Ballintoy was named after a very pretty harbour village on Co. Antrim by one of the Barenbrug Board members.

Ballintoy has a heading date of 1st June (REE 46) and provides exceptional yields under both cutting and grazing management.

Under a cutting regime, its first cut is 115% of control making it the highest yielding in the group with an overall yield of 109%, again, the highest in the group.

Under grazing, an early spring growth of 122%, strong seasonal yields and a grazing D value of over 75 makes Ballintoy a top choice where grazing is required. You can find Ballintoy in Cut & Graze, Adapt, Highlander and Barmix in 2019.

## **Reseeding** Can you afford not too?

#### Why?

Reseeding can be an expensive business if you pay full care and attention but, in the first year, the value of the improved yield and grass quality can be worth:

Over 12,500 litres of milk Over 1000kg of lamb Over 1200 kg of beef Over 500% of the cost

#### How?

Follow the advice in the Good Grass Guide to identify the worst performing field on the farm – this is the priority for remedial work and is not necessarily the oldest field.

#### What with?

Just as a cow is not the same as another cow, one grass seed mixture is not the same as another. As with feed, you should always ask 'Whats IN the bag?' and not just 'How much is an acre of grass?'.

#### Purity

#### Not all mixtures are the same

Alongside supporting the UK farming industry, we're also aiming to produce all our grass seed to the Higher Voluntary Standard (HVS), which is unique to the UK, guaranteeing a higher level of purity than European Union standards. The next time that you see a bag of grass seed, don't just look at the price – delve a little deeper.



## Mixture selector Which is right for you?

Our grass seed mixtures have been formulated carefully using species and varieties that should suit almost any circumstance in Scotland.

We don't just put grass seed in a bag and put it on a shelf. As well as developing a range of mixtures suited to different farm management focuses we have a full support team throughout the UK and a range of tools to help you get the best from your grassland.

The make-up of each mixture and its subsequent management can have significant impacts on the longevity and levels of production you can achieve. Deciding how long the ley will last and what it needs to deliver will help ensure you get the best mixture for your enterprise. Each mixture is formulated for a specific job, which you'll find detailed on each product page.

If you are in any doubt, contact your local supplier or one of our team who can advise you on the merits of a mixture for the requirements of the job.

#### NEW Biodiversity section on pages 30-33

#### Short term

Maximum yield up to 2 years

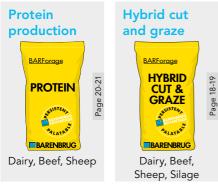


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BARForage	
OVERSEEDER	le 25
BARENDEUG	Page
BARENBRUG	
Dairy, Beef, Sheep, Silage	

**Overseeding** 



#### Medium term



#### Long term

Dual purpose cut and graze mid-May cut



Extended grazing for upland situations



Dual purpose cut and graze without clover



Extensive grazing and cutting with clover



Beef, Sheep



## Cut & Graze Silage with grazing

Top quality silage production with grazing option.

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BarForage Scotland 2019

Cut & Graze produces top quality silage with the option to graze. It's a long-term, persistent, highly flexible mixture with clover. Ensign white clover blend is included for nitrogen fixation, increased protein content and persistency.

In the bag		
5.00kg	Moira	Intermediate Perennial Ryegrass (DIP)
3.50kg	Gosford	Intermediate Perennial Ryegrass (DIP)
2.50kg	Fintona	Intermediate Perennial Ryegrass (TET)
2.00kg	Ballintoy	Late Perennial Ryegrass (TET)
1.00kg	Comer	Timothy
1.00kg	Ensign	White Clover Blend

15kg per acre. Sowing: 2,903 seeds/m<sup>2</sup>

#### When to sow

Sow when soil temperature is above 8°C, clover will germinate at 10°C. The mixture has been designed to provide season-long production, with exceptional early spring and late summer growth.

#### When to cut

Produces highly digestible forage from a late May first cut with the mixture averaging over 70% D value throughout the season ensuring that this mixture is ideal for all enterprises.

#### When to graze

This top-quality dual purpose mixture has the ability to be grazed from early spring through to late summer. If it's being used for both cutting and grazing, the mixture will deliver two exceptional silage cuts and summer grazing, making it truly flexible.

The mixture is balanced for season-long performance with intermediate and late perennial ryegrasses included.

BALLINTOY is included for its exceptional early spring growth (122%) and GOSFORD for its late summer growth (119%) ensuring season-long performance.



Maximum production by using the top yielding varieties including MOIRA and FINTONA, both top of their classes for yield.

> ENSIGN white clover blend is included for nitrogen fixation and increased protein content.

Contains only first choice SRUC varieties.



## Highlander Flexible long-term

Flexible, extensive, long-term ley suited to cutting and grazing.

BarForage Scotland 2019

Ideal for upland areas and less favoured areas with the inclusion of extra Timothy and strong creeping red fescue, which provides a strong sole to the sward. High plant population and use of high ground cover species improves sward density and carrying capacity.

#### In the bag

bag	
Moyola	Early Perennial Ryegrass (DIP)
Glenariff	Intermediate Perennial Ryegrass (DIP)
Caledon	Intermediate Perennial Ryegrass (TET)
Clanrye	Late Perennial Ryegrass (DIP)
Ballintoy	Late Perennial Ryegrass (TET)
Polka	Strong Creeping Red Fescue
Comer	Timothy
Ensign	White Clover Blend
	Moyola Glenariff Caledon Clanrye Ballintoy Polka Comer

15kg per acre. Sowing: 3,368 seeds/m<sup>2</sup>

#### When to sow

Sow when soil temperature is above 8°C, clover will germinate at 10°C. The mixture has been designed to provide season-long production, with exceptional early spring and late summer growth

#### When to cut

When cut, this mixture will produce good conserved fodder for winter feed. Up to two cuts can be achieved after early grazing.

#### When to graze

Provides excellent early spring growth, making it ideal for outdoor lambing or cow turnout. Excellent early season grazing can be followed by a baled silage or hay crop then autumn grazing.

Outstanding persistency, using varieties with proven durability and winter hardiness.

MOYOLA is the highest yielding grazing early diploid variety on the SRUC recommended list (114% of control varieties) coupled with the highest early spring growth (123%) and best quality grazing. CLANRYE has excellent mid and late season growth with good quality and ground cover rating of A.

> ENSIGN white clover blend is included for nitrogen fixation and increased protein content.

Contains only first choice SRUC varieties.

Long term

## Adapt No clover option

A long-term, top class, highly flexible, dual purpose mixture without clover, which produces top quality forage suitable for cutting and grazing.

This blend of yield and palatability creates a very flexible ley meaning you will get long-term production from this highly persistent ley. The omission of clover allows for cost effective weed control.

In the bag		
5.50kg	Moira	Intermediate Perennial Ryegrass (DIP)
2.50kg	Fintona	Intermediate Perennial Ryegrass (TET)
4.00kg	Tyrella	Late Perennial Ryegrass (DIP)
2.00kg	Ballintoy	Late Perennial Ryegrass (TET)
1.00kg	Comer	Timothy

15kg per acre. Sowing: 2,604 seeds/m<sup>2</sup>

#### When to sow

Perennial ryegrass germinates at 8°C; ensure this is sown when soil temperature is above 8°C.

#### When to cut

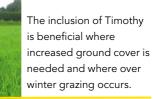
Produces exceptional silage cuts of extremely nutritious forage. Produces highly digestible forage from a late May first cut with the mixture averaging over 70% D value throughout the season ensuring that this mixture is ideal for all enterprises.

#### When to graze

This top-quality dual purpose mixture has the ability to be grazed from early spring through to late summer. If it's being used for both cutting and grazing, the mixture will deliver two exceptional silage cuts and summer grazing, making it truly flexible.

The mixture is balanced for season-long performance with intermediate and late perennial ryegrasses included.

Maximum production by using the top yielding varieties including MOIRA and FINTONA, both top of their classes for yield (106% and 111% respectively of control varieties). Designed to perform especially well in early summer (May/June), ADAPT gives over 10% more yield than SRUC control varieties during the season.



Contains only first choice SRUC varieties.



## Barmix Long-term

The long-term, low input, high output mixture for beef and sheep enterprises.

A highly successful, persistent, drought tolerant, high protein sward for beef and sheep production from a clover-based sward. BARMIX uses the best new cocksfoot and tall fescues to produce a highly palatable, very productive ley. As a result it produces considerably more grass than conventional ryegrass leys especially under low fertility conditions and low fertiliser usage.

#### In the bag

3.50kg	Gosford	Intermediate Perennial Ryegrass (DIP)
3.50kg	Ballintoy	Late Perennial Ryegrass (TET)
2.00kg	Barolex	Tall Fescue
2.00kg	Bardoux	Tall Fescue
1.00kg	Baraula	Cocksfoot
1.00kg	Comer	Timothy
1.00kg	Ensign	White Clover Blend
14kg per acre. Sowing: 2,814 seeds/m <sup>2</sup>		

#### When to sow

Sow when soil temperature is above 8°C. The mixture has been designed to deliver exceptional late winter and early spring growth. This mixture has a lower proportion of ryegrass, so will thrive on more marginal land and under a clover only or very low nitrogen system.

#### When to cut

Produces exceptional silage cuts of extremely nutritious forage. BARMIX can be shut off mid season for a big bale silage cut or can be grazed all year.

#### When to graze

This mixture can be grazed all year. Tall fescue and cocksfoot grow very rapidly, particularly in early spring, so to maintain the sward in its optimum condition, it's strongly recommended to tightly graze the sward from late winter. This stops the grass becoming too strong, and remaining highly palatable to grazing animals or giving the best combination of quality and quantity when conserved.

This innovative mixture has been developed by us to offer an alternative mixture for beef and sheep enterprises looking for a low input, high output mixture.

BARAULA (cocksfoot), BAROLEX and BARDOUX (tall fescues) are proven in on-farm grazing trials to be highly palatable due to their soft leaves. The ryegrasses in the sward are highly productive, contributing to the total performance.

> Tall fescue is a winter active species and cocksfoot grows earlier in the spring than other species, delivering that vital early bite for lambing. Tall fescues BAROLEX and BARDOUX add excellent drought tolerance due to their deep rooted, persistent nature. They are also more tolerant of waterlogged soils.

#### **Medium term**

## Hybrid Cut & Graze Medium-term

A top quality hybrid ryegrass based ley, designed to give excellent forage cuts with the option to graze. An excellent cutting and grazing ley using the most persistent hybrid varieties for up to five years' production. Designed to provide excellent spring growth, enabling an early first cut or early grazing. Great for medium-term rotations and mixed livestock units.

#### When to sow

Sow when soil temperature is above 8°C, clover will germinate at 10°C. The mixture has been designed to provide season-long production, with exceptional early spring and late summer growth.

#### When to cut

Produces highly digestible forage from a mid-to-late May first cut with the mixture averaging over 70% D value throughout the season. Can produce three-four cuts a season for up to five years.

In the bag		
7.00kg	Aston Crusader	Hybrid Ryegrass (TET)
3.50kg	Boyne	Intermediate Perennial Ryegrass (DIP)
3.00kg	Fintona	Intermediate Perennial Ryegrass (TET)
0.50kg	Barblanca	White Clover
14kg per acre. Sowing: 1,338 seeds/m <sup>2</sup>		

#### When to graze

This top-quality dual purpose mixture has the ability to be grazed from early spring through to late autumn. Hybrid ryegrasses grow at 6°C, therefore extend the growing season. This makes HYBRID CUT & GRAZE a very flexible mixture for mixed enterprises who need cutting and grazing opportunities.

This mixture delivers maximum production by using the top yielding varieties including BOYNE with its excellent first silage cut of 109%.

Close heading date pattern to ensure uniform crop quality.



The high proportion of tetraploid varieties ensures better drought resistance and higher water soluble carbohydrate content.

> FINTONA is the highest yielding perennial ryegrass ever listed in the UK. First cut of 105% and total cutting yield of 110%.

Contains only first choice SRUC varieties.



## **Protein Sile**

Grass and clover silage

An excellent low input, high output, high protein cutting ley for three to four years with the option to graze. An intensive cutting mix that will produce up to four prolific cuts of leafy, high protein forage per year, with the option to graze cattle or finish lambs (although it's not advisable for breeding sheep due to phytoestrogen production).

#### When to sow

PROTEIN will grow at soil temperatures of down to 5°C, enabling the growing season to be extended. Clover will germinate at 10°C.

#### When to cut

Three cuts of high protein forage can be taken from this highly productive mixture. Both grass and clover heading dates have been matched to ensure a consistent, quality crop of silage.

in che	bug	
2.00kg	Barsilo	Hybrid Ryegrass (DIP)
4.75kg	Aston Crusader	Hybrid Ryegrass (TET)
4.00kg	Fintona	Intermediate Perennial Ryegrass (TET)
3.00kg	Ensign Red	Red Clover Blend
0.25kg	Barblanca	Large White Clover
14kg per acre. Sowing: 1,208 seeds/m <sup>2</sup>		

#### When to graze

In the had

Post-cutting grazing is ideal for finishing lambs or grazing young cattle.

Breeding sheep should avoid all red clover sources for six weeks pre-tupping until six weeks after tupping as phytoestrogens can affect the breeding cycle and conception rates.

Animals fed on red clover/ grass silage will eat more and perform better than those fed on grass silage alone due to increased intakes and protein levels.

This mixture 'Fixes' up to 200kg/Ha of nitrogen meaning it grows with no applications of bagged nitrogen. Designed for yield and persistence, combining the yield of the grasses with the additional protein from the ENSIGN RED clover blend.

Trials have shown a 3% improvement in kill out percentage for lambs finished on red clover.

The high clover content will benefit from a pH of 6 or more and close attention to P and K levels.



## High D Italian

A highly productive short-term Italian ley.

HIGH D is a highly productive Italian ley, which will give exceptional crops for silage, hay or grazing from a high input system. It's ideal for growers who want to produce the maximum amount of forage possible from their own land.

HIGH D has a very long growing season; its exceptional spring growth makes it ideal for lamb finishing or early turnout. An early grazing can be followed by up to four cuts of quality silage and a late flush for grazing.

In the bag		
7.00kg	Javorio	Italian Ryegrass
7.00kg	Gemini	Italian Ryegrass

14kg per acre. Sowing: 1,202 seeds/m<sup>2</sup>

#### When to sow

Grows at temperatures as low as 3°C so the farm must be able to make use of this early growth.

#### When to cut

A first cut at the end of May, following a spring grazing, will produce 70+ D value silage, with a second cut, five weeks later. The ultimate silage mixture which will yield up to 17tDM/ha in its first year under high input management. For maximum production up to six cuts a year under high N systems.

#### When to graze

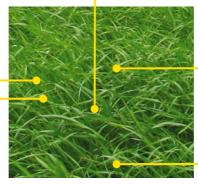
Early grazing for turnout of ewes and lambs or finishing long keep store lambs.

HIGH D is a better option than sowing a single Italian ryegrass variety.

Includes two Italian ryegrasses, which perform very well compared to their rivals.

It will provide massive amounts of clean, quality forage throughout the year without any loss of production mid season.

HIGH D grows down to 3°C soil temperature extending the growing season for store lambs or wintering hoggs.



(DIP)

(TET)

JAVORIO and GEMINI are high yielding, all-round varieties, with excellent quality.

Responds very positively to high levels of fertility and will produce 20% more yield than perennial ryegrass leys.

## Overseeding

Guide

Get your grassland productive.

- Dig a soil assessment pit to look for compaction and plant rooting structure which should go 30cm deep in PRG/ Timothy sward. Address compaction with aerators or sub-soilers as needed.
- 2 Soil testing (4" deep) would also be advantageous as high levels of water can leach nutrients and reduce pH significantly. Assess what plants are there – learn to identify what species you want to have e.g. PRG/Timothy. Check for weed grasses, they are usually shallow rooted and pull out very easily.
  - If they make up more than 30% of the sward, harrow hard to remove them
    With a sward of more than 70% weed grasses the best option is to reseed the sward.
- 3 Minimise competition to new seedlings by grazing tightly with sheep or taking a silage cut. DO NOT fertilise before overseeding.

- 4 Control perennial weeds before seeding by spraying with a selective herbicide.
- 5 Use a spring tine harrow to remove any dead stalks, thatch and shallow rooted weed grasses. Make sure that the tines are working the top 1cm of the soil as this will create the seed bed for the new seeds.
- 6 Sow when the soil conditions are neither excessively dry nor wet and use a specialist mixture designed to establish rapidly.
- 7 Roll the sward to ensure good seed contact with the soil to conserve moisture.
- 8 Graze lightly when the seedlings are 10cm high and continue at frequent intervals until the plants are well established. All the best things start from the ground up and it's important you choose a mixture designed for the job.

Medium term



Forage production is expensive – get your sward back into maximum, long-term productivity by over seeding.

In the bag
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6.00kg	Barvitra	Hybrid Ryegrass (TET)
7.00kg	Fintona	Intermediate Perennial Ryegrass (TET)
7.00kg	Youpi	Late Perennial Ryegrass (TET)

Supplied as 20kg, two acre packs. Sowing: 664 seeds/m<sup>2</sup> OVERSEEDER is a 100% ryegrass blend for areas of high fertility.

- Increases the proportion of productive ryegrass in the sward
- Improves the quality of the grass for better animal performance
- Improves the Nitrogen efficiency of the sward
- Repairs the damage caused by poaching of grazing swards
- Specifically designed to work best with specialist overseeding techniques
- Includes varieties which are aggressive enough to establish in an existing sward, yet easy to manage

## The Benefit of including clover

## Clover provides nitrogen for soil, forage for livestock

In recent years, the prices of inputs have fluctuated drastically, making it difficult for farmers to budget from year to year. The inclusion of clover in grass leys can provide a range of benefits to enable producers to become more resilient and make more from the resources they have at home.

Generally, white clovers make for better grazing, while red clovers are best suited to silage and/or growing youngstock. Clover also serves as feed for all livestock classes, chickens, geese and birds although care should be taken with red clover and breeding sheep.

Always maintain a soil pH of at least 6.0 and P & K indices of 2 for optimal clover content and health.

## The benefits of adding clover to the farm

- Clover can maintain higher quality pasture under low fertiliser.
- An established clover sward can fix up to 200kg N/ha/year dependant on species used and environmental conditions.
- White clover thrives mid-season when companion grasses are not at their optimum, improving overall digestibility and protein levels of the sward.
- The presence of clover improves grass health making it more resilient against disease and environmental stress.
- All these improvements in sward quality lead to increased intakes and therefore higher milk yields and daily liveweight gain.
- Clovers enhances the level of minerals including calcium, magnesium, cobalt and selenium - which is beneficial to livestock health.
- With clover, you can reduce bought in nitrogen AND leave residual nitrogen for a subsequent crop making the system environmentally and economically better off.
- Clover has significant potential to improve profitability from a grass based system.
- Clover are also extensively found in wildflower and stewardship mixtures to improve soil health and promote pollinators and insects. It is also used in mixtures in sanctuaries to attract wild geese away from farmland.

## **Ensign** White Clover Blend

ENSIGN is a blend of white clovers, which gives better animal performance, higher milk yields and better live weight gains. It also produces a better quality sward, with fewer weeds and less disease.

In the bag		
50%	Crusader	White Clover
30%	Alice	White Clover
20%	Barblanca	White Clover

Pack sizes: 5kg and 25kg. Sowing rate: Up to 1kg per acre. It has an exceptionally long growing season and 'fixes' free nitrogen from the atmosphere for maximum production.

- By using a blend of different varieties there are always at least two that are best suited to whatever the management being applied to the sward
- Animals prefer to graze a clover/ grass sward - this results in higher voluntary intakes and better animal performance
- Potential nitrogen fixation for white clover up to 150kg N/ha

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## Ensign Red Red Clover Blend

ENSIGN RED is a blend of red clovers, which balances production through the growing season, while maintaining excellent persistency and disease resistance. Red clover swards managed correctly can meet the forage requirements of many farms and significantly improve protein contents and overall feed value of winter forage.

It's better suited to silage production than white clover because of a more erect growth habit and its significantly higher forage yields.

In the bag	
Discovery	Red Clover
Lemmon	Red Clover
Pack sizes: 5kg and 25kg.	

Pack sizes: 5kg and 25kg. Sowing rate: Up to 2.5kg per acre.

- Red clover silage has a high crude protein content of 16% to 20% and a ME content of 10 to 12MJ/kg DM
- Because red clover is high in phytoestrogen, breeding sheep should be kept off for six weeks either side of tupping
- Store/fat lambs can be fattened very effectively on red clover silage aftermaths
- Low levels of structural carbohydrate in the leaf result in higher intakes, better feed conversion and therefore improved animal performance
- Potential nitrogen fixation for red clover up to 200kg N/ha

Ensign Duet Red & White Clover Blend

ENSIGN DUET is a unique mixture of red and white clovers, developed to meet the need for rapid nitrogen fixation to feed new leys.

Red clovers establish faster than white and are able to make nitrogen available to the ley as the white clover is establishing and brings additional benefits.

#### In the bag

67%	Ensign Red	Red Clover Blend
33%	Ensign	White Clover Blend

Pack sizes: 5kg and 25kg. Sowing rate: Up to 2.5kg per acre.

- Increased yield. Our mixture trials showed a yield increase of 5% in the first year after sowing, worth around £100.00 per hectare (£40.00/acre)
- The increase continued into the second harvest year, producing additional yields worth £75.00 per hectare (£30.00/acre)
- Increases the overall protein content of the sward, red clover's protein content is around 17% compared to grasses of around 12%
- Because red clover is high in phyto-oestrogen, breeding sheep should be kept from grazing for six weeks either side of tupping
- Red clover is excellent feed for growing and finishing stock



Herbal Leys or biodiverse mixtures are those containing more than, or something different to conventional agricultural leys. These mixtures bring a number of benefits such as nitrogen fixation, more varied mineral contents which aid animal health, drought tolerance, anthelmintic properties and soil health improvement. Including a biodiverse mixture in your rotation can bring numerous benefits to your enterprise regardless of what you farm.

#### BARMIX

Our highly popular, high productive, low input long-term ley with four grass species and white clover for beef and sheep enterprises. Barmix has the potential to yield 15-20% more under a clover-only system than ryegrass-only mixtures.

Please see pages 16-17 for full details.

## Herbal Graze

A bio-diversity multi-species herbal ley which will adapt and thrive in diverse locations and soil types.

This diverse mixture has been proven to provide a hardy, very long grazing season for ruminants and is coupled with multi legume species to fix nutrients to sustain year-long production. HERBAL GRAZE comprises of 15 different species including 5 grasses, 5 legumes and 5 herbs' all of which bring a range of benefits to the biodiversity ley.

- Using the flowering species in this mixture alongside the all diploid grass constituents, vital beneficial pollinators can feed and gain shelter.
- These species with deep penetrating roots will improve soil structure and they have the ability to make the best use of the available soil nutrients – all available moisture & minerals – helping with animal health and reducing the need for bought-in nutrients.

#### In the bag

	3	
2.00kg	Barelite	Tall Fescue
2.00kg	Cosmonaut	Meadow Fescue
2.00kg	Baraula	Smooth Leaved Cocksfoot
0.50kg	Comer	Early Timothy
0.50kg	Motim	Late Timothy
2.00kg	Moira	Intermediate Perennial Ryegrass (DIP)
2.00kg	Clanrye	Late Perennial Ryegrass (DIP)
0.20kg	Alice	Large Leaf White Clover (Legume)
0.25kg	Crusader	Medium Leaf White Clover (Legume)
0.20kg	S184	Small Leaf White Clover (Legume)
0.66kg	Lemmon	Red Clover (Legume)
0.10kg		Sanfoin (Legume)
0.10kg		Birdsfoot Trefoil (Legume)
1.00kg	Barvicos	Vetch (Legume)
0.25kg		Chicory (Perennial) (Herb)
0.05kg		Ribwort (Plantain) (Herb)
0.03kg		Yarrow (Herb)
0.05kg		Sheeps Parsley (Herb)
0.11kg		Salad Burnet (Herb)
Pack siz	es: 14kg.	

Sowing rate: 14kg per acre.



Graze, cut or both Sowing Period Spring with soils ideally

at 10°C or above

#### Utilisation Period

Use for up to 18 months after sowing

PROTA PLUS is an exceptionally versatile mixture which can provide a number of benefits. It is an ideal break crop in any arable rotation or an exciting alternative to brassicas in livestock systems.

#### How it works

- BARMULTRA II provides high yields of high quality grass into the second year.
- CONTEA Crimson clover is an erect type single cut annual clover, which will grow from seed to flowering in around 120 days. It should be cut before flowering for maximum quality.
- LIGHTENING Persian clover is more prostrate type multi-cut annual species.

In the bag					
6.00kg	Barmultra II	Italian Ryegrass (TET)			
4.50kg	Contea	Crimson Clover			
1.50kg	Lightening	Persian Clover			
_					

12kg per acre

#### **Animal benefits**

- Suitable for any livestock class including breeding sheep
- High yields of high protein (20%), high ME (12-14MJ) silage achievable
- Very long growing season
- Can shorten finishing period and lower winter feeding requirements compared to grass only

#### **Environmental benefits**

- Requires no Nitrogen applications in the first year
- Can leave up to 50kg N/ha in the soil for subsequent crops
- Attractive to bees and other insects
- Cleaner ground conditions than traditional brassica feeding systems & no bare soil overwinter
- Aggressive root system can improve soil structure and contribute to soil organic matter





Graze in situ

BAR FINISHER is a mix of chicory, white clover, red clover and plantain with excellent animal performance potential. It produces a leafy, high quality feed over spring, summer and autumn when traditional pastures can decrease in quality.

BAR FINISHER can be used as a six month or two year crop depending on the farm system and/or grazing management approach. The clover in the mix will provide nitrogen to feed the crop, also filling space not occupied by herbs. The red clover component, alongside the herbs, will provide high quality feed through a dry season, helping to reduce risk in summer dry areas.

Utilisation Period		
Spring, Summer & Autumn		

In the bag					
1.50kg <b>E</b>	nsign Red	Red Clover Blend			
1.00kg	nsign	White Clover Blend			
1.50kg <b>T</b>	onic	Plantain			
1.00kg <b>(</b>	Commander	Chicory			

Pack size 10kg (2 acres). Sowing rate: 5kg per acre.

- Highly palatable, providing an excellent feed for high live weight gains
- Provides high quality feed through summer that recovers quickly after grazing
- High protein option for dairy farmers
- Clover provides fixed nitrogen
- High mineral content, particularly zinc, potassium and copper
- Grass can be established into the mix in autumn.

## Brassica and forage crops

Grass has to be the first priority for feeding livestock efficiently; however forage crops are a valuable tool for meeting the changing feed and energy requirements throughout the year.

Feed supply and stock performance can be manipulated through the use of different forage species. We recognise the integral role of brassicas, forage herbs and lucerne in breeding and research and we are proud to supply products specifically bred for UK systems.

#### Benefits of Brassica and Forage Crops

- Strategic crop in pasture renovation makes regressing easier i.e. less weed pressures
- Means of controlling spring surplus and shifting feed from spring into summer or autumn to winter
- Breaking up insect pest cycles to help renovate pasture
- High animal performance potential
- Many options with a lot of flexibility
- Consistently high quality ME 10.5-13, proteins 16-24%.

Sowing & Utilisation Guide	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
STUBBLE TURNIP	USE	USE		SOW	SOW		SOW	SOW	USE	USE	USE	USE
FORAGE RAPE						SOW	SOW	SOW		USE	USE	USE
KALE	USE	USE	USE	SOW	SOW	SOW				USE	USE	USE
LUCERNE	USE	USE	SOW	SOW	USE	USE	USE	USE	USE	USE	USE	USE
VETCH	USE	USE	SOW	SOW	SOW	USE	USE	USE	SOW	SOW	USE	USE
PLANTAIN	USE	USE	SOW	SOW					SOW	SOW	USE	USE
CHICORY				SOW	SOW	SOW	SOW	SOW				

Discover our Forage Crops Guide for management advice

## Marrow Stem & Thousand Head

#### Utilisation

Graze in situ & Zero Graze Sowing Period Spring & Early Summer Utilisation Period Autumn & Winter

Days to maturity

170-220 days

Kale is a well-proven, highly adaptable fodder crop which consistently provides very high yields of succulent green fodder. Two varieties available:

#### **Marrow Stem**

A high yielding marrow stem type kale with clubroot tolerance. Its huge yield makes it ideal for utilisation by dairy and beef cattle.

#### **Thousand Head**

A medium height kale with excellent leaf to stem ratio (greater than 50% leaf). Suitable for sheep and cattle grazing.

#### Potential

• High-yielding giant type kale with potential yield of 18,000kg DM/ha

#### **Advantages**

- Excellent tolerance to frost
- Good aphid tolerance
- Very high dry matter yields
- Good winter hardiness
- Good clubroot tolerance.

#### Sowing rate:

Drilled: 1–2kg/acre (2.5–5kg/ha). Broadcast: 3kg/acre (7.5kg/ha).

**Pack Sizes:** Available in pack sizes of 5kg or 25kg (untreated), 2kg (treated).



Utilisation	Sowing	Utilisation	Days to		
	Period	Period	maturity		
Graze in situ	Spring & Autumn	Summer & Winter	60-90 days		

## Stubble turnips have a high leaf to bulb ratio resulting in high levels of protein, and a tankard bulb shape to enhance utilisation.

BARABAS is a variety which has been very successful wherever it has been used throughout the UK and with some farmers proclaiming as the best stubble turnip variety they have encountered!

#### **Advantages**

- High leaf to bulb ratio resulting in high levels of protein
- Full-leaved late tetraploid bulbing with very good early vigour
- Proven very palatable to grazing animals with good disease resistance
- Early maturing (60-90 days) for excellent summer/winter feed.

#### Management advice

Plant two-thirds of the crop area in early maturing BARABAS and one-third with a late maturing variety, such as BARCOLI, at the same time (not together). This will provide a high quality summer feed that can be grazed from 60-150 days after sowing.

#### Sowing rate:

Spring sown at 3kg/acre (7.5kg/ha) for high leaf percentage Autumn sown at 2kg/acre (5kg/ha) for larger bulb percentage.

#### Pack sizes:

Available in pack sizes of 5kg or 25kg.



Graze in situ





**maturity** 90-110 days

Days to

#### A multi-purpose forage rape with excellent autumn/early winter feed potential.

BARCOLI is a flexible forage option. It can be spring sown for a late summer feed behind turnips or autumn sown for winter grazing.

#### **Advantages**

- Good regrowth potential with excellent winter keeping properties
- Good aphid tolerance
- Fast growing leafy catch crop
- High protein content
- Longer lasting than stubble turnips
- Flexible sowing period
- Sheep, dairy or beef production.

#### **Management advice**

Plant two-thirds of the crop area in early maturing BARABAS and one-third in late maturing variety BARCOLI, at the same time (not together). This will provide a high quality summer feed that can be grazed from 60-150 days after sowing.

#### Sowing rate:

Drilled: 2.5kg/acre (6kg/ha). Broadcast: 4kg/acre (10kg/ha).

Pack sizes: Available in pack sizes of 10kg or 25kg.



Sowing Period Spring & Autumn

Cutting/silage

#### A common vetch, delivers a quick coverage of soil, highly productive and rich in proteins.

BARVICOS fixes large amounts of nitrogen and is high in protein. It can be used for annual forage production either alone or in a mixture with grasses. It is also ideal for green manuring

BARVICOS has vigorous growth and is winter hardy. It will establish and grow well on most soil types, helping to soak up nutrients and hold in the soil for use by spring cropping or reseeding

Vetch can be used typically 70-100 days after sowing, when 30-50% of the plants have flowered.

& Winter

Utilisation

Period

Summer

Days to maturity

70-100 days

#### **Advantages**

- Deep rooting and improves soil structure
- Quick coverage of soil
- Highly productive and protein rich forage variety
- Can be sown both in spring and autumn
- This vetch can be sown either as monoculture or as part of mixtures with other species, such as clovers and/or annual grasses
- Good resistance to colder temperatures
- Good resistance against diseases

#### Sowing rate:

Sown on own: 16-20kg/acre (40-50kg/ha) Companion plant: 8-10kg/acre It is recommended to sow a vetch at a depth of 2-3cm

#### Pack Sizes:

Available in pack sizes of 25kg.



Grazing and silage

**Period** Spring

Sowing

Utilisation Period

Days to maturity

40 days

Lucerne is a highly nutritious forage for livestock. It combines good digestibility with high proteins providing excellent milk yields or daily live weight gains. A more mature hay crop would be more suitable for feeding young stock.

#### **Potential**

- One of the most underrated and underutilised forage crops available to livestock farmers in the UK
- To utilise lucerne, ensure a minimum of 50% flowering (50% of the tallest stems have a flower) prior to the first grazing/cutting. If the stand is weedy at establishment it can be grazed/cut ONCE if it is 15-20cm tall and then left to flower to a minimum of 50%
- >300 500 g/hd/d rotationally grazed or cut
- High MJME and high protein, which is easily digested.

#### **Advantages**

- Perennial Well managed crops can persist for up to 5 years
- Performs well in free draining, drier environments due to tap roots
- Dual purpose.

#### Limitations

- Legume pH 6.0 and high levels of P to establish
- Requires good management
- For more information and advice on management, please contact us for the guide.

#### Sowing rate:

8-10kg/acre (20-25kg/ha). Drill at 5-12mm deep on normal soils or up to 25mm on light sandy soils.

#### Pack sizes:

Available in pack sizes of 25kg.



It is estimated that around 95% of British wildflower meadows were lost after the Second World War – but thankfully, we are now seeing increased interest in native wildflowers – thanks in part to environmental stewardship schemes. Establishing flower rich margins on the edges of fields can be hugely beneficial – helping farmers maintain a healthy ecosystem and attracting insects, which in turn can help to pollinate crops.

With around 1,500 different wildflowers available in the UK, it can be hard for farmers to know which wildflowers to grow. To make it easier, Barenbrug has added 21 wildflower mixtures to the range of seeds it offers. To demonstrate the value of wildflowers, we've been trialling some of the mixtures at Cropvale, adding colour and interest to the site as well as improving its biodiversity. If you are interested in adding wildflowers to your margins, August and September are the ideal months to sow seeds. Our range of wildflowers include both annual and perennial mixtures and can be pure wildflower or mixed with grass to satisfy a range of situations and requirements.

Order your copy of Wildflowers for the full range or download it from our website.

## **Equestrian** Hunters Grass Seed

Young, well managed grass can provide most of a horse's feed requirement. Our mixtures are designed especially for horses. A herb mixture is also available.

#### **GENERAL PURPOSE**

Hardwearing general-purpose mixture designed to withstand the pressures of equestrian use and provide good quality grazing for horses.

- Grass varieties used have been specifically selected for roughage and low fructan content
- Produces a good, spring, dense turf
- The low fructan concentration reduces the risk of laminitis
- Strong grass plant rooting system, making the sward dense, hardwearing and persistent
- Paddock will deliver grazing and forage production
- Yields good levels of effective roughage, ideal for a fit and healthy equine gut



In th	ne bag		
70%	Perennial ryegrass		
16%	Strong creeping red fescue		
8%	Meadow fescue		
6%	Timothy		
10kg packs			
Sows up to 0.7 acre Repairs 1 acre			



#### TRADITIONAL MEADOW

Formulated to recreate the nutritional characteristics of a natural habitat. The mixture is ryegrass free and uses species with a less aggressive growth habit to aid diversity.

- Swards sown with this mixture are likely to be lower in fructans than a ryegrass sward, reducing the risk of laminitis
- The healthiest pasture for your horse
- Helps prevent laminitis
- Effective fibre in your horse grass
- The optimum grass seed for your horse meadow
- Good horse pasture that can be effectively managed

	In th	ne bag			
UNTERS	25%	Tall fescue			
ADITIONAL MEADOW GRASS SEED	25%	Strong creeping red fescue			
CENT	20%	Meadow fescue			
	15%	Timothy			
	15%	Smooth-stalked meadowgrass			
	10kg packs				
Sows up to 0.7 acre Repairs 1 acre					



## Landscaping

Order or download your copy of Green Velvet Landscaping for the full range.

#### THE ALL ROUNDER

A multipurpose, hard-wearing grass seed that's ideal for creating new lawns, overseeding or repairing worn patches.

- A great everyday lawn for the rough and tumble of family use
- Rapid germination and establishment
- Withstands heavy foot traffic
- Ideal for the whole family to play on and enjoy
- Attractive appearance

#### The mixture

60% Perennial ryegrass

40% Strong creeping red fescue

**Sowing** 25-35g per m<sup>2</sup> **Oversowing** 15-20g per m<sup>2</sup>

#### THE PERFECTIONIST

A fine and luxury traditional lawn seed mixture.

- A very fine leaved and dense lawn
- High quality and beautiful looking lawn
- Improved tolerance to common lawn diseases
- Ideal for the traditional ornamental lawn

#### THE ACTION HERO

GREEN VELVET LAWN SEED

A very hard wearing mixture that contains tough wearing grasses which is ideal for playing areas with high traffic.

- High levels of perennial ryegrass in this mixture give it substantial ability to withstand wear and tear
- This tough mixture is ideal for areas of the garden that are used frequently
- Hard wearing ryegrass specifically chosen for the job
- Gives an attractive lawn that's extremely tough

The	e mixture
80%	Perennial ryegrass
20%	Strong creeping red fescue
Sow Over	ing 25-35g per m <sup>2</sup> rsowing 15-20g per m <sup>2</sup>

## The mixture 40% Strong creeping red fescue 30% Slender creeping red fescue 30% Chewing fescue Sowing 25-30g per m² Oversowing 15-20g per m²

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### Your regional manager



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## Barenbrug

## Grass experts since 1904

Our profession is plant breeding; selecting and developing quality varieties with the essential, unique characteristics to meet the ever-increasing demands from farmers for top quality forage grass.

From its founding days in 1904 the Royal Barenbrug Group has grown into a global seed company with breeding and research stations on six continents.

Still privately owned, our knowledge and experience of grass seed is second to none.

We specialise in plant breeding, seed production and the international marketing of forage grass, forage crops and turf grasses.

With over 700 employees and operating companies in 18 countries on 6 continents, we have been the leading grass seed business in the world for over 100 years.

#### Barenbrug UK Ltd

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T 01324 633188 E info@barenbrug.co.uk

#### WWW.BARENBRUG.CO.UK



#### Conditions of sale

In case of unavailability Barenbrug UK Limited reserves the right to substitute any variety in any mixture with one of similar merit.

Any change will be detailed on the bag.

The placing of an order constitutes an acceptance of our terms and conditions of sale by the buyer.

Full terms and conditions can be found at www.barenbrug.co.uk.

