









SCOTTISH FARMERS



We breed our agricultural grasses in Britain (in partnership with AFBI)



Our grasses are tried, tested and proven with British farmers (including at our own Cropvale Research Site)



We have over 2,000 hectares of British farmland producing our grass seed



All our mixtures are designed and formulated to ensure continuous improvement for British farming.

BARFORAGE GRASS SEED

- 14-15 CUT & GRAZE
- 16-17 HIGHLANDER
- 18-19 ADAPT
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- 24-25 PROTEIN SILE
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BRASSICA & FORAGE CROPS

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Good quality grazed grassland is the cheapest feed for ruminant livestock and is the base upon which profitable farming is built.

Around 70% of utilisable agricultural land in the UK is given over to grass - making it one of our nations' most important crops.

To help UK farmers get more from their grassland, we have created a series of enterprise- and applicationspecific guides that set out a clear and compelling case for proactively managing grassland performance, whatever the farm focus.

Recognising that market conditions have been difficult for some time, and that farmers have more forage options available to them than ever before, our guides are designed to help UK farmers make the right choices and pick the right products as they work to achieve their grassland goals.

Each guide contains useful information about grassland growth and practical advice on perfecting grassland performance and looking after leys long-term. There are also details about the different grassland management techniques, and varieties and species available to UK farmers.

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.

Discover our Enterprise and Advice Guides and turn your grass into gold.



















www.barenbrug.co.uk



We believe there are three areas to getting grass seed mixtures right on farm:

Persistency

Our breeders select potential varieties with the best disease resistance and physical characteristics and test them exhaustively.

One variety takes around 5,000 plots and 16 years to come to market!



Palatability

Our breeders focus on key aspects such as disease resistance and low re-heading and then we test our varieties on commercial farms in various locations.

BARENBRUG

Management

The key to maximising grassland output and subsequent meat and milk yields!

Correct management can increase output, reduce waste, reduce reliance on expensive inputs and improve yields. Recording has just become a whole lot easier with the introduction of our **Good Grass Guide**.

Few farmers would rely on genetics from the past for livestock breeding but many stick with the same grass seed varieties and mixtures year after year – even if they aren't delivering the best results.

For some farmers, the prospect of picking a new grass can seem daunting. There are hundreds of different varieties, blends and mixtures available – so how do you know which one will work best?

Our grasses have shown an average improvement of 0.5% yield per annum over the last 20 years, highlighting the benefits we're delivering to farmers nationwide.

If you are unsure about which product to pick, we advise selecting a grass seed from one of the UK's Recommended Lists. Bred to perform in UK conditions, grasses included on Recommended Lists have been have been tried and tested by farmers, who've seen real results.

Grass Seed Considerations

Grass seed research and development has come a long way in recent years and there are many new forage strains and blends available, which are proven to improve the performance and productivity of animals dramatically. High levels of dry matter production will always be a priority but consideration must also be given to palatability and persistency as well as nitrogen efficiency, drought and disease tolerance, winter survival, rumen stimulation and protein production.

Our advice for 2018 is very simple: plan ahead.

Decide what enterprise is most important to you; for example is it the all-year grazing sheep flock or the all-year housed cows in which case silage will be the key factor.

Next take into account any specific needs such as field soil types, disease pressure or potential weed burdens. Also ask, would clover be beneficial to me?

Lastly, make sure soil samples and rectifications are done well in advance of sowing. Recent soil analysis reports from across the UK still show that only around one third of grassland soils are at the target P, K or pH levels and all of these things are very influential to grass growth.



The UK has the ideal climate for growing grass. Ryegrass grows best at between 5° C to 25° C – and most of the UK is between these temperatures 95% of the time.

Making up 70% of utilisable agricultural land, grass is our national crop. Like all other crops, growing grass requires careful management to maximise yields and utilisation. It is a science – but a relatively simple one to grasp once you have a basic understanding of plant as well as animal physiology.

Armed with information about how grass grows and the different species and management techniques available, it is easy for farmers to make informed choices about what kind of grass to grow; when to sow it; when to graze it; how long to graze it for; and what to do to ensure its performance long-term.

UK Breeding

As commercial partner of the AFBI grass breeding programme at Loughgall, Northern Ireland, we have seen their varieties improve yield by an average of 0.5% every year.

UK Testing

We're celebrating ten years of research and development at its Cropvale trials site in Worcestershire. Established in 2008, Cropvale is a leading location for testing the performance, palatability and persistency of forage grass varieties and mixtures bred for use by UK farmers.

UK Production

We have over 2,000 hectares of grass seed produced in the UK, ensuring we are supporting UK farmers as well as helping them.

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.

Breeding success for Scotland

In Scotland, the Recommended Grass and Clover List 2017/18 saw three new forage grass varieties from Barenbrug added. Selecting products for its 2017/18 list, SRUC (Scotland's Rural College) included a diploid hybrid ryegrass and a diploid late perennial from Barenbrug's own breeding programme and a fantastic late tetraploid perennial ryegrass from the AFBI-Barenbrug programme.

The addition of these exciting new varieties takes the total number of Barenbrug 1st choice varieties to 25 and with David Johnston responsible for 20 of them, he is the most prolific breeder on the recommended list.

Mhairi Dawson, Research & Development Manager at Barenbrug UK, said: "The fact that our grass varieties regularly appear on Recommended Lists across the UK is testimony to the expertise of our grass breeding team. Year after year, their understanding of grass and their knowledge of grass-growing conditions across the UK ensures the development of top qualities varieties that can make a significant difference to a farmer's bottom line. The number of varieties we have listed on UK lists over the years really proves the value of having British breeding programmes for British Farmers."

In 2018 we have another group of varieties coming up for recommendation, one of which we are particularly excited about for the Scottish market. In fact, we have over 20 promising varieties coming through the testing system in the short term of five to six years.



New variety for 2018.

Caledon - an intermediate tetraploid perennial ryegrass that has been bred to offer obvious improvements in yield and disease resistance. Caledon has a very high total cutting yield in year 1 and 3 (108% and 105% of control); a high second cut yield of 117; and good second cut quality of 72.30D value.



Craig Malone and Katreen Millar from Pitcairn Farm near Lochgelly are taking part in Barenbrug's Grass into Gold – an initiative that is exploring the effect that proactive grassland management can have on grass quality, and grazing and forage yields, on ten UK farms.

Working closely with Mhairi Dawson, Barenbrug's Scottish grassland expert, Craig and Katreen have so far made improvements to three fields on their farm, where they run 500 Blackface ewes to produce mule lambs, and buy in heifers to bull and sell with calves at foot.

On two fields that were slow to start in spring and less productive than other areas of grassland, Craig and Katreen have implemented a soil improvement programme. This followed a visual assessment of the fields by Mhairi, who diagnosed a phosphorus (P) and potassium (K) deficiency – later confirmed by a soil sample. Tissue samples also revealed low sulphur contents of the grass, meaning plant utilisation of nitrogen (N) was low.

To remedy the situation, Craig and Katreen have been gradually introducing fertiliser to the land to correct soil status. Together, Mhairi, Craig and Katreen have also been overseeding a number of different fields. They've tackled an area of old grass at the back of the farm, which was unproductive, and difficult to plough and cultivate because of the presence of pylons. Here, the team overseeded a mixture that can put the life back into long-term leys and restore productivity. Containing ryegrass and clover, this blend increases grass quality for better animal performance and can repair damage caused by poaching. Several younger leys have also been overseeded; first with a ryegrass, enabling the team to monitor the emergence of any broad-leaved weeds that might need spraying out. A white clover was then added.

Commenting Craig said: "It's been great to work with Mhairi and the team at Barenbrug over the last year. With their help we've made some fairly incremental changes that will, hopefully, make a big difference to the bottom line of our business over the coming years. We started to notice an improvement in some of the fields last summer and look forward to assessing the results more carefully in 2017."

Commenting Mhairi said: "From grass, grazing is key to the success of Craig and Katreen's business and I'm delighted with the progress that we've made so far. Grassland management is a long-term investment but can make a huge difference to animal productivity, yields and overall profitability. I am particularly excited to see how the overseeding has improved the old pastures and the impact the red clover has on the young cattle."

Robert and Charlotte Baillie run Longlea Farm in Netherburn, a small village in South Lanarkshire, Scotland. The farm, which covers 530 acres, has been in the Baillie family for nearly 40 years and is now moving into third generation hands. Robert farms the land at Longlea with his dad – also Robert. They employ two full time and two part time employees to help look after their 300-strong herd of Holstein cows, which produce an average of 9750 litres of milk each year.

Of the 530 acres on farm, 180 are dedicated to grain production (whole crop, spring barley and winter wheat), with the rest allocated to grassland. The grassland acreage is split out as follows: 55% temporary grass (TGRS); 40% permanent grass (PGRS); and 5% rough grazing grass (RGR).

Feed wise the main focus at the farm is on silage production with the Baillies pitting around 3400 tonnes each year.

Robert explains more: "Signing up to Barenbrug's Grass into Gold programme we had one goal in mind – improving results at the three cut stages of the silage regime we've put in place. Typically we aim for a first cut in late May and two subsequent cuts thereafter. Once the final cut has been made we let the sheep graze the aftermath from September to March. We sowed three new seed mixtures in 2014 and appear to be getting some good results but know we could do more to improve our swards and ultimately increase the quality of our silage and the amount of milk we produce."

Mhairi Dawson, Regional Manager for Barenbrug in Scotland, and also the company's R&D Manager, said: "Our initial assessment of the fields and pastures at Longlea showed that the team face the usual Scottish grassland challenges of high rainfall and heavy soils – which can hinder silage results. Docks appear to be the main weed issue and there may by some pH problems to tackle too. In the past the Baillies have tried to utilise slurry and farmyard manure to target P & K levels – but that's not always possible due to storage, so we may have to think through some other options. We are now in the process of working with Charlotte and Robert to prioritise some areas for soil sampling and overseeding."



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.

SHORT TERM







MEDIUM TERM





Extended grazing

upland situations

HIGHLANDER

BARENBRUG

BARForage

LONG TERM













Top quality silage production with grazing option.

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.

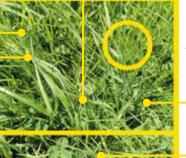
IN THE BAG **≗MOIRA** Intermediate Perennial Ryegrass (DIP) GLENARIFF Intermediate Perennial Ryegrass (DIP) **SEINTONA** Intermediate Perennial Ryegrass (TET) CALEDON Intermediate Perennial Ryegrass (TET) **TYRELLA** Late Perennial Ryegrass (DIP) 2.00kg BIJOU Late Perennial Ryegrass (TET) 1.00kg COMER Timothy 1.00kg Ens gn White Clover Blend 15kg per acre. Sowing: 2,903 seeds/m²



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

TYRELLA is included for its exceptional early spring growth (117%) and GLENARIFF for its late summer growth (116%) ensuring season-long performance.

Maximum production by using the top yielding varieties including MOIRA and FINTONA, both top of their classes for yield, while CALEDON has a second cut yield of 117%.



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

Contains only first choice SRUC varieties.

BARENBRUG

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.



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

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 Early Perennial Ryegrass (DIP) MOIRA Intermediate Perennial Ryegrass (DIP) SEAGOE Intermediate Perennial Ryegrass (TET) CLANRYE Late Perennial Ryegrass (DIP) NAVAN Late Perennial Ryegrass (TET) 1.25kg COMER 2.00kg SERGEI Strong Creeping Red Fescue 1.00kg Ens gn White Clover Blend 15kg per acre. Sowing: 3,368 seeds/m²



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

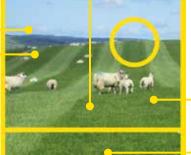
MOYOLA is the highest yielding grazing early

diploid variety on the SRUĆ recommended list (114% of control varieties) coupled

with the highest early spring

growth (123%) and best

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.

BARENBRUG

When to sow

quality grazing.

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.



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.

2.50kg MOIRA

Intermediate Perennial Ryegrass (DIP)

3.00kg GLENARIFF
Intermediate Perennial Ryegrass (DIP)

1.50kg FINTONA
Intermediate Perennial Ryegrass (TET)

2.00kg CALEDON
Intermediate Perennial Ryegrass (TET)

2.50kg TYRELLA
Late Perennial Ryegrass (DIP)

2.50kg BIJOU
Late Perennial Ryegrass (TET)

1.00kg COMER

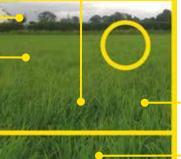
Timothy



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.



The inclusion of Timothy is beneficial where increased ground cover is needed and where over winter grazing occurs.

Contains only first choice SRUC varieties.

BARENBRUG

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 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.

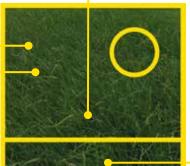
As a result it produces considerably more grass than conventional ryegrass leys especially under low fertility conditions and low fertiliser usage.

3.50kg GLENARIFF Intermediate Perennial Ryegrass (DIP) 3.50kg DUNDRUM Late Perennial Ryegrass (TET) 2.00kg BAROLEX Tall Fescue 2.00kg BARDOUX Tall Fescue 1.00kg INTENSIV Cocksfoot 1.00kg COMER Timothy 1.00kg Ensign White Clover Blend



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.

INTENSIV (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.

BARENBRUG

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.



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.

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

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.

BARENBRUG

When to sow

quality.

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.

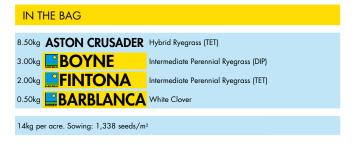
When to cut

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.

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 EARLY CUT & GRAZE a very flexible mixture for mixed enterprises who need cutting and grazing opportunities.





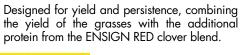
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An excellent, low input, high output, high protein cutting ley for three to four years with the option to graze.

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).

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.





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

This mixture 'Fixes' up to 200kg/Ha of nitrogen meaning it grows with no applications of bagged nitrogen.

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

BARENBRUG

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

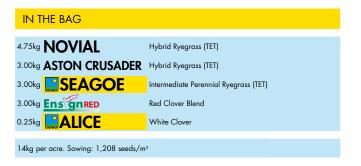
Three cuts of high protein forage can be taken from this highly productive mixture.

Both grass and clover heading dates have been matched to ensure a consistent, quality crop of silage.

When to graze

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.





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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.

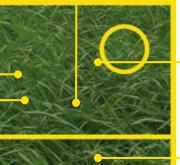
HIGH D has a very long growing season, its exceptional spring growth makes it ideal for lamb finishing or early turnout. An early grazing can be followed by up to four cuts of quality silage and a late flush for grazing.

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

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.

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



ALAMO 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.

BARENBRU

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.

IN THE BAG

7.00kg **ALAMO**

Italian Ryegrass (DIP)

7.00kg **GEMINI** Italian Ryegrass (TET) 14kg per acre. Sowing: 1,202 seeds/m²





Get your grassland productive.

1 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.

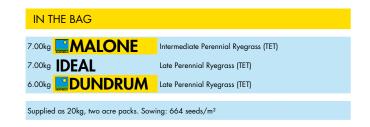
Restoring long-term productivity.

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

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

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High yielding Italian and clover blend

Used commercially on farm for over five years, PROTA PLUS is an exceptionally versatile mixture which can provide a number of benefits to Scottish farmers.

PROTA PLUS has a role to play in any system or farm enterprise and is an ideal break crop in any arable rotation or an exciting alternative to brassicas in livestock systems.

How it works

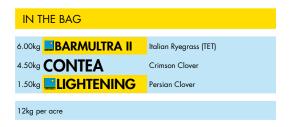
- BARMULTRA II has been a reliable component of this mixture from its conceptions and continues to provide high yields of high quality grass. It has good winter hardiness and good disease resistance ensuring a palatable sward that will provide right through into the second year.
- CONTEA Crimson clover is a very high yielding single cut annual clover, which will grow from seed to flowering in around 120 days, but should be cut before flowering for maximum quality. Its forage has a protein content of around 20% and an ME of 12-14MJ. It's a tap rooted clover, so improving the soil structure and will "fix" over 40kg/h nitrogen
- LIGHTENING Persian clover is a high quality, multi-cut species. It will survive in the sward, whether cut or grazed through the autumn. It has a fibrous rooting system that will improve soil organic matter.

Animal benefits

- Suitable for any livestock class
- Can be cut, grazed or a mix of both
- High DLWGs achievable for grazing stock
- High yields of high protein, high ME silage achievable
- Very long growing season
- Can shorten finishing period compared to grass only
- Can shorten feeding period for finishers
- Can lower feed requirement for overwinterers or in lamb ewes
- Ability to flush breeding sheep.

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
- Westerwold free to avoid self-seeding in the sowing year.







Clover provides nitrogen for soil, forage for livestock In recent years, the prices of nitrogen fertiliser, trace elements and protein feeds have fluctuated drastically

In recent years, the prices of nitrogen fertiliser, trace elements and protein feeds have fluctuated drastically meaning it is difficult for farmers to budget accordingly from year to year. The addition of clover can provide a range of benefits to enable producers to become more resilient to these fluctuation and make more from the resources they have at home.

Generally, white clovers make for better grazing, while red clovers are best suited to hay and silage. Red clover, however, is better suited to yearling growth and rotations. 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.

The benefits of adding clover to the farm

Clover can maintain high quality pasture under low fertiliser input as a well-established clover sward can fix up to 150kg nitrogen per hectare in a year. At today's price this is worth around £45/ha/year.

Grass and clover leys result in more milk production and higher daily live weight gains compared to grass alone meaning the use of clover in forage can have an enormous impact on the economics of grazing animals.

White clover thrives mid-season when companion grasses are not at their optimum, improving the overall digestibility and protein levels of the sward. The presence of clover improves the grass health making it more resilient against disease and environmental stress. All these improvements in sward quality lead to increased intakes.

Clovers enhances the level of minerals including calcium, magnesium, cobalt and selenium - which is beneficial to the general and reproductive health of your livestock. Clover fixes significant quantities of nitrogen depending on the type sown, meaning you can produce the same volumes of forage more efficiently and environmentally and leave residual nitrogen for the subsequent crop.

Environmentally, clovers have been used in seed mixtures to attract wild geese to sanctuaries and reduce damage to farmland and is extensively found in wildflower and stewardship mixtures.

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 less weeds and less disease.

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

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- Potential nitrogen fixation for white clover up to 150 kg N/ha





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.

- 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

Red and 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:

- 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

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- Red clover is excellent feed for growing and finishing stock







We are delighted to present this range of four organic mixtures which offer a broad selection of grass seed for your requirements.

All the mixtures are approved by the Soil Association.

In 2018 the minimum amount of organic grass seed in a mixture is set at 70%.

Organic ENSIGN and ENSIGN RED are also available in 5kg packs.

PERMANENT

Long-term intensive grazing mixture, with the option Long-term, top class cutting mixture which will also to take later cuts of quality silage.

- Permanent top quality grazing ley, with option of taking a late silage cut
- Produces a highly palatable grazing sward maximising animal intakes
- Creates tight persistent sward, highly resistant to poaching and weed incursion.

COMBI

produce quality grazing.

- Combines the benefits of high yields of quality mid-May silage production, with excellent sward density and outstanding mid-season digestibility for highly palatable grazing, creating a flexible ley
- Can be grazed before or after cutting.

LONG SEASON

Multipurpose, long-term ley, ideal for grazing and An excellent, high protein cutting ley for three-four conservation.

Creates a dense, persistent sward.

- Highly flexible, capable of producing excellent, season long grazing or conservation
- Varieties are selected for their palatability, improving animal intake and performance.

PROTEIN

years with the option to graze.

- Designed to give a high output of quality forage for conservation or grazing
- Gives very high yields of top quality forage from up to a 4 cut system
- Can be autumn grazed, after cutting, to finish lambs.

IN THE BAG DUNLUCE Organic Inter Perennial Ryegrass (TET) Organic Late Perennial Ryegrass (DIP) **≌DRUMBO CLANRYE** Late Perennial Ryegrass (DIP) 1.80kg POLIM Organic Late Perennial Ryegrass (TET) 1.50kg Ens gn White Clover Blend 14kg per acre. Sowing: 1,964 seeds/m²

IN THE BAG				
3.00kg GLENARIFF	Organic Inter Perennial Ryegrass (DIP)			
4.50kg DUNLUCE	Organic Inter Perennial Ryegrass (TET)			
2.30kg DRUMBO	Organic Late Perennial Ryegrass (DIP)			
2.70kg DUNDRUM	Late Perennial Ryegrass (TET)			
1.50kg Ens gn	White Clover Blend			
14kg per acre. Sowing: 1,857 seeds/m²				

IN THE BAG				
2.20kg MOYOLA	Early Perennial Ryegrass (DIP)			
1.50kg GLENARIFF	Organic Inter Perennial Ryegrass (DIP)			
3.80kg DUNLUCE	Organic Inter Perennial Ryegrass (TET)			
3.50kg DRUMBO	Organic Late Perennial Ryegrass (DIP)			
1.00kg POLIM	Organic Late Perennial Ryegrass (TET)			
0.50kg COMER	Timothy			
1.50kg Ens gn	White Clover Blend			
14kg per acre. Sowing: 2,461 seeds/m²				

IN THE BAG 4.00kg SHAKIRA Organic Italian Ryegrass (DIP) 5.10kg DUNLUCE Organic Inter Perennial Ryegrass (TET) 0.90kg BARBLANCA White Clover 3.00kg Ens gnRED Red Clover Blend 13kg per acre. Sowing:1,346 seeds/m²

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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.

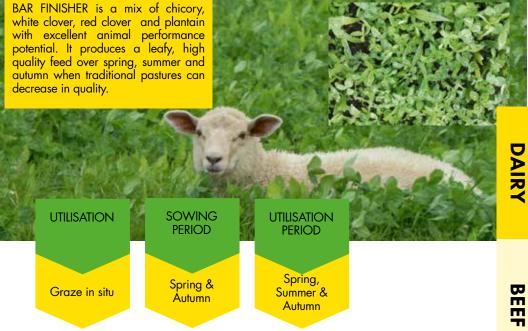
Feed supply and stock performance can be manipulated through the use of different forage species. We recognise the integral role of brassicas, forage herbs and lucerne in breeding and research and we are proud to supply products specifically bred for UK systems.

Benefits of Brassica & 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
- A number of options with a lot of flexibility
- Consistently high quality ME 10.5-13, proteins 16-24%.

SOWING & UTILISATION GUIDE	JANUARY	FEBRUARY	MAR	APR	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												

BAR FINISHER



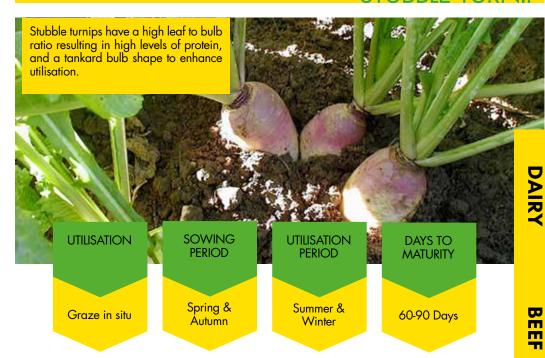
BAR FINISHER can be used as a six month or two year crop depending on the farm system and/or grazing management approach. The clover in the mix will provide nitrogen to feed the crop, also filling space not occupied by herbs. The red clover component, alongside the herbs, will provide high quality feed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

- 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.

IN THE BAG	BARENBRUG
1.50kg Ens gnRED	Red Clover Blend
1.00kg Ens gn	White Clover Blend
1.50kg TONIC	Plantain
1.00kg COMMANDER	Chicory
Pack size 10kg (2 acres). Sowing rate: 5kg per acre.	

BARABAS

STUBBLE TURNIP



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.

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.

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.

BARCOLI

FORAGE RAPE



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

Pack sizes: Available in pack sizes of 5kg or 25kg.

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SHEEP



CALEDONIAN / KEEPER

Two varieties available:

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

KEEPER is a medium height kale with excellent leaf to stem ratio (greater than 50% leaf).

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.

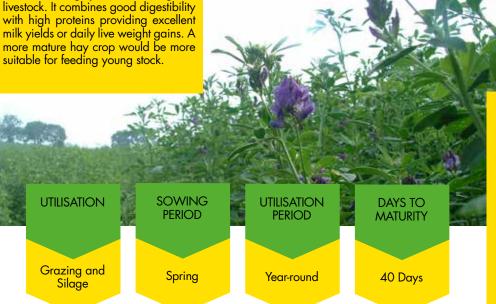
Limitations

- Suited to bigger cattle and colder climates

Drilled: 1-2kg/acre (2.5-5kg/ha). Broadcast: 3kg/acre (7.5kg/ha). Sowing rate: Available in pack sizes of 5kg or 25kg (untreated), 2kg (treated). Pack Sizes:

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.

ARTÉMIS



- 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 a/hd/d rotationally grazed or cut
- High MJME and high protein, which is easily digested.

Advantages

SHEEP

- 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.

Available in pack sizes of 25kg. Pack sizes:

BARFORAGE SCOTLAND 2018

BARFORAGE SCOTLAND 2018 |





It is estimated that around 95% of British wildflower meadows were lost after the Second World War – but thankfully, we are now seeing increased in 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 trialing some of the mixtures at Cropvale, adding color 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 or download your copy of Wildflowers for the full range.

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 fructane concentration reduces the risk of
- Strong grass plant rooting system, making the sward dense, hard-wearing and persistent
- Paddock will deliver grazing and forage production
- Yields good levels of effective roughage, ideal for a fit and healthy equine gut

10kg

REPAIRS: 1 acre

SOWS: Up to 0.7 acre

IN THE BAG

70% Perennial ryegrass

6% Strong creeping red fescue

8% Meadow fescue

6% Timoth

10kg packs.

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 THE BAG

25% Tall fescue

25% Strong creeping red fescue

20% Meadow fescue

5% Timoth

15% Smooth-stalked meadowgrass

10kg packs.

10kg SOWS: Up to 0.7 acre REPAIRS:1 acre



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.

60% Perennial ryegrass

A fine and luxury traditional lawn A very hard wearing mixture that seed mixture.

- A very fine leaved and dense lawn with high traffic.
- High quality and beautiful looking lawn
- Improved tolerance to common lawn diseases
- Ideal for the traditional ornamental This tough mixture is ideal for lawn.

ACTION HERO

contains tough wearing grasses which is ideal for playing areas

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

40% Strong creeping red fescue

Slender creeping red fescue

25-30g per m

20-30g per m²

30% Chewings fescue

Oversowing

25-35g per m² Oversowing 25-30g per m²

Strong creeping red fescue

80% Perennial ryegrass

20% Strong creeping red fescue

25-35g per m Oversowing 25-30g per m

YOUR REGIONAL MANAGER



Mhairi Dawson Scotland Regional Manager Research and Development Manage 07775 814397 mdawson@barenbrug.co.uk

OUR TEAM



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.



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.

Contact your local distributor 01324 633188 | www.barenbrug.co.uk | info@barenbrug.co.uk









Barenbrug UK Ltd,

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