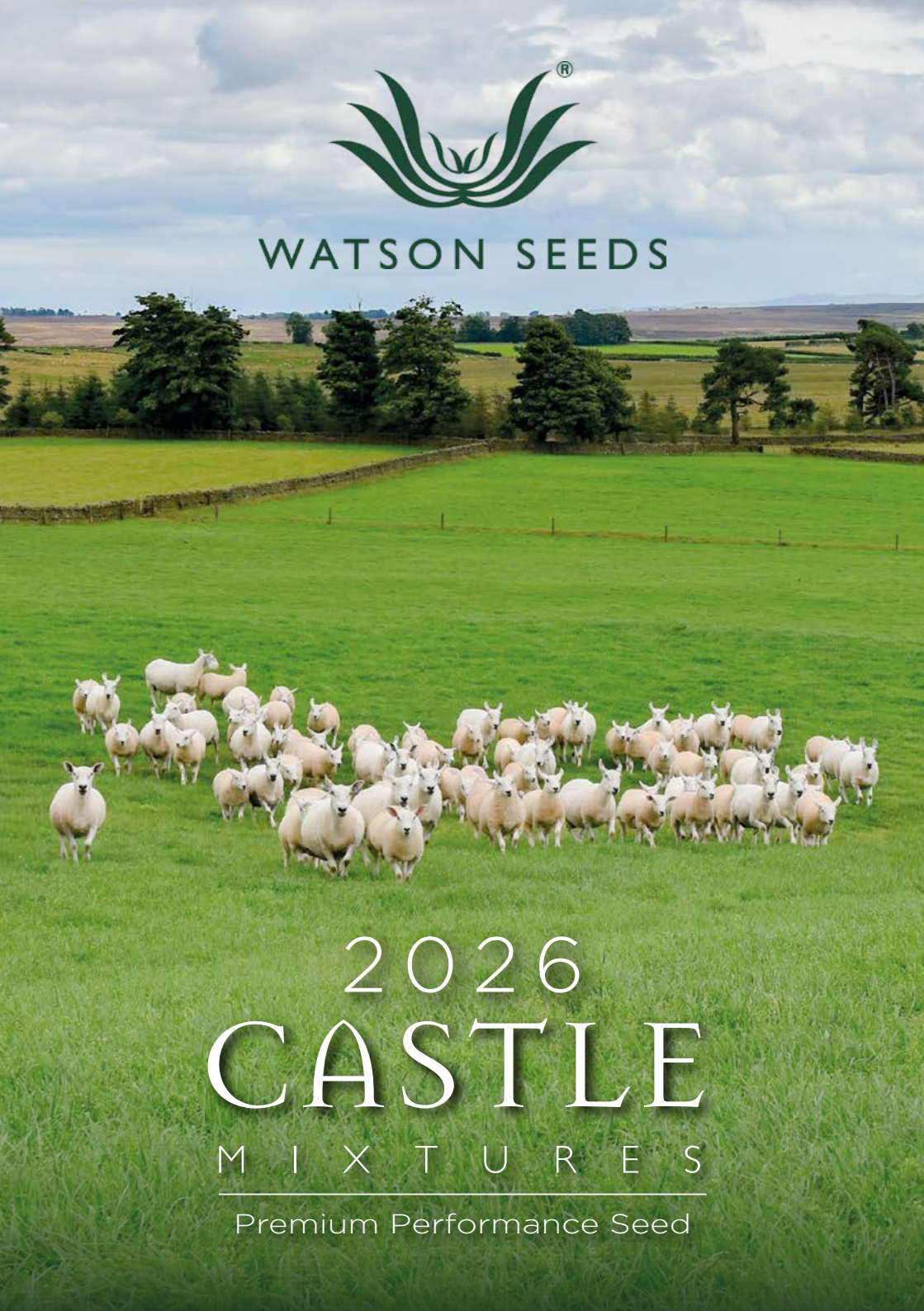
WATSON SEEDS



2026 CASTLE MIXTURES

Premium Performance Seed

CONTACT US

LOTHIANS, STIRLINGSHIRE, FIFE & BORDERS

Andrew Best

07500 859274
abest@watsonseeds.com

ANGUS, EAST PERTHSHIRE, KINCARDINESHIRE & ABERDEENSHIRE

Alex Eggo

07595 120898
aeggo@watsonseeds.com

SPEYSIDE, MORAY, HIGHLANDS & ISLANDS

Euan Campbell

07393 699522
ecampbell@watsonseeds.com

NORTH OF ENGLAND & SCOTTISH BORDERS

Pat Lambert

07968 606001
plambert@watsonseeds.com

WEST SCOTLAND & NORTH WEST ENGLAND

Andy Nelson

07967 395588
anelson@watsonseeds.com

Until the end of February

Mhairi Dawson

07967 395588
mdawson@watsonseeds.com

From the end of February

OFFICE

01368 840655
enquiries@watsonseeds.com
www.watsonseeds.com

1 Cheviot House, Mill Wynd,
Haddington, EH41 4EX

RSABI
Corporate supporter

FARM STRONG Scotland
Business Club Member

COVER PHOTO:
J & J Campbell, Wedderlie Farm, Westruther, Gordon, Berwickshire.

INTRODUCTION

We are pleased to present our 2026 seed catalogue, designed to guide you in improving sward performance, increasing soil health and building a more resilient farming system. Selecting the appropriate mixture for each field remains fundamental to achieving optimal results, and we hope the information provided will support your decision making.

The 2025 season was marked by significant weather extremes. Following a very wet 2024, conditions shifted dramatically as much of the country experienced a prolonged dry spring and summer. While this brought more favourable lambing and calving conditions, it also created challenges for fieldwork. Livestock markets performed exceptionally well, reaching record prices. However, the cereal sector faced difficulties, with strong yields offset by high screenings and reduced demand for malting barley, resulting in subdued prices.

Throughout the year, we were pleased to attend a wide range of industry events, including the NSA Highland Sheep at Midfearn, where we welcomed many visitors to our demonstration plots. The Royal Highland Show was once again an excellent event, and it was a pleasure to meet so many of you over the four days and express our appreciation for your continued support. We are now looking forward to this year's NSA Scotsheep, hosted at Wedderlie Farm by the Tilson family. It promises to be a superb showcase of a Borders farming enterprise, with further details available on page 40.

Successful reseeding begins with getting the fundamentals right, and soil sampling remains a core part of our service, ensuring that seed is sown into optimal conditions. Guidance on soil health and fertility can be found on page 34. Demand continues to grow for more diverse mixtures, driven in part by changes to the EFA in Scotland and the SFI in England. While many mixtures may meet scheme requirements, it is essential that species selection also supports livestock performance. To assist with this, we have included a species guide on pages 36 to 38 to help identify the most suitable options. Due to the increasing complexity of agri-environmental requirements, we have also produced a dedicated catalogue, available for download on page 41 or as a printed copy on request.

Forage crops remain an attractive option, offering highly palatable feed that can reduce costs, act as a pioneer crop and support soil improvement. Selecting the correct crop depends on sowing date, utilisation period and livestock class. Our brassica guide on page 48 provides further detail to support this choice.

We continue to work closely with leading plant breeders across Europe and further afield, drawing on recommended lists and our own on farm palatability trials to select the most suitable varieties for our mixtures. Ultimately, the best mixture is the one tailored to your specific conditions, and we welcome the opportunity to discuss your requirements.

We thank you for your continued support and wish you a productive and successful year ahead.

CONTENTS

GRASS SECTION

AGRI-ENVIRONMENTAL SECTION

FORAGE SECTION

SPOILT FOR 1ST CHOICE

We enjoy a very positive relationship with a range of key breeders across Europe and beyond that enables us to procure the best varieties possible for our Castle Mixtures.

VARIETY ASSESSMENT

All grass varieties contained in our Castle Mixtures are 'First Choice' as published in the Grass and Clover Varieties for Scotland 2025-2026.

		SRUC 1st Choice	PPI Rated	AHDB Recommended	Ground Cover	REE
ITALIAN RYEGRASS						
MERIBEL	Meribel is high yielding with strong late growth, good D values and ground cover, but some winter risk.	✓		✓	A	32
MESSINA (T)	Exceptional early season growth and good quality across all its cuts.	✓		✓	C	34
HYBRID RYEGRASS						
BARCLAMP	A later heading hybrid combining good ground cover with consistent quality and yield across the season.	✓		✓	A	39
INTERMEDIATE PERENNIAL RYEGRASS						
ABERGREEN	Excellent mid season D value in second cut and spring growth under grazing.	✓	✓	✓	A	43
ABERMAGIC	A proven variety that is good for cutting but is an exceptional grazing variety providing quality yield into the autumn.	✓	✓	✓	A	42
GALGORM	Exceptional yield and quality particularly under grazing. It has excellent mid to late season growth.	✓	✓	✓	B	36
GOSFORD	Good all round yields with particularly good mid to late season grazing productivity.	✓		✓	B	42
STRANGFORD	Exceptional first cut yield and excellent quality across all the cuts. Consistent grazing across the whole season.	✓			B	35
BANBRIDGE (T)	Reliable seasonal yields coupled with high quality first cut herbage.	✓		✓	C	35
CALEDON (T)	Delivers good yields under both cutting and grazing, with consistent growth and quality.	✓			C	44
SEAGOE (T)	Offers early season growth giving excellent spring grazing and first cut yield.	✓	✓	✓	C	35
TOLLYMORE (T)	Provides early season growth combined with high yields under cutting and grazing. Particularly good yield in third year of conservation.	✓	✓	✓	C	34
LATE PERENNIAL RYEGRASS						
ABERCHOICE	Stand out variety in its category offering exceptional quality at first cut and good growth at the shoulders of the season under grazing.	✓	✓	✓	A	55
ABERLEE	Performs exceptionally well especially under grazing providing high yields and category leading quality.	✓		✓	A	55
BALLYVOY	Overall a good variety for conservation, with good yields throughout the year especially at first cut.	✓	✓	✓	B	47

BANDON	Exciting new addition bred at Teagasc, Oak Park. Excellent conservation yields and consistent grazing and ME yield right through the season.	✓		✓	C	48
CALLAN	Good productivity under both managements early on in the season.	✓		✓	B	46
CROSSGAR	Late heading diploid with a good quality profile under grazing and conservation with a strong 1st cut yield.	✓		✓	A	50
DUNDROD	Good conservation yield, particularly at second cut combined with consistent grazing throughout the season.	✓		✓	B	47
ABERBITE (T)	Very even performance over the grazing season. First cut and grazing yields are excellent.	✓	✓	✓	C	50
ABERPLENTIFUL (T)	Good yields and quality at the first cut and good seasonal growth under grazing particularly at the back end.	✓	✓		C	53
BALLINTOY (T)	With a heading date between intermediate and late, it can be utilised as either in our mixtures. Exceptional early season performance and excellent quality.	✓	✓	✓	C	46
GLENFIELD (T)	Particularly good grazing at the shoulders of the season combined with good herbage quality.	✓	✓		-	47
GRACEHILL (T)	Consistent quality throughout the season under both managements with particularly good mid to late season grazing.	✓	✓	✓	C	47
KILLYLEA (T)	Exceptional quality under both cutting and grazing with consistent yield throughout the season.	✓			C	49
RICHHILL (T)	Exceptional 1st cut conservation yield and D value (ME) throughout the season. Good late growth profile under grazing.	✓		✓	B	46
TIMOTHY						
BARONAISE	An exceptional timothy with outstanding growth at the season's shoulders, particularly strong at the back end.	✓		✓	A	58
COMER	Best spring growth of the timothys. Softer than others for better palatability.	✓	✓	✓	A	53
WHITE CLOVER						
ABERYSTWYTH S184	Good persistence and yields with intensive sheep grazing.	SMALL				
CRUSADER	Good performance both early and late in the season.	MEDIUM				
ALICE	High yielding and good ground cover.	LARGE				
BARBLANCA	Excellent persistency and good early spring and autumn growth.	LARGE				
CLODAGH	Exciting new large leaf variety from Teagasc with high ground cover under conservation and rotational grazing.	LARGE				
RED CLOVER						
GARANT	Excellent yield and very good early growth.	EARLY				
ROZETA	A widely used variety that performs well under cutting and grazing and has good persistency.	EARLY				

CASTLE MIXTURES®
FOR ALL YOUR NEEDS

Mixture	Duration (Years)	Mainly Cutting	Dual Purpose (mostly cutting)	Dual Purpose (mostly grazing)	Mainly Grazing	Guide Sowing Rate (Kg/Acre)
BALVENIE™	1-2	✓				14
TANTALLON®	2-3	✓	✓			14
RED TANTALLON®	2-3	✓	✓			14
AIRLIE™	3-4	✓	✓	✓	✓	15
RED AIRLIE™	3-4	✓	✓			16
DUART™	4-7	✓	✓		✓	15
CARRICK™	4-7	✓	✓		✓	15
EDZELL®	4-7		✓	✓	✓	15
DUNDAS®	4-7		✓	✓	✓	15
HERMITAGE™	4-7			✓		15
HERBAL LEY	4-7			✓	✓	14
GREENAN™	7+		✓	✓	✓	15
MINGARY®	7+			✓	✓	15
FYVIE™	7+			✓		15
FYVIE™ + HERBS	7+			✓	✓	15

- Varieties have been selected from the U.K. recommended lists.
- Special mixtures available - for example, extra clover, no clover, addition of cocksfoot or westerwolds.
- Please contact your Watson Seeds representative to help choose the best mixture for your situation.
- If we make any substitutions of varieties in our mixtures, owing to demand, we will ensure that we only use the best alternative available.

Castle Mixtures®
Balvenie™, Tantallon®, Red Tantallon®, Airlie™, Duart™, Duart (NI)™, Greenan™, Carrick™, Edzell®, Dundas®, Hermitage™, Brodie™, Mingary®, Fyvie™
©2017 Watson Seeds Ltd

GRASS MIXTURES

THE RIGHT MIXTURES FOR THE BEST RESULTS

To maximise field performance, it's essential to choose the right grass mixture for your farming system. Grass should be managed like any other crop, with the same level of attention to mixture and variety selection as you would give to spring barley. Although establishing a new grass sward can be costly, it is a worthwhile investment that ultimately provides the cheapest feed for ruminant livestock.

The combination of grasses, clover and, where suitable, herbs should be tailored to the main purpose of the farm. Components such as perennial ryegrass, Italian and hybrid ryegrasses, cocksfoot, and timothy can be adjusted to match the specific needs and growing conditions of each field.

HOW LONG WOULD YOU LIKE THE MIXTURE TO LAST?

If it is a break crop that will be in the ground for 2-3 years, you may include shorter term species such as Italian ryegrass, hybrid ryegrass, and intermediate perennials. If you are looking for long term production, the mixture should have a higher percentage of late perennials, timothy, and cocksfoot.

WHAT IS THE SWARD GOING TO BE USED FOR?

Do you need a dual purpose mixture that can be cut or grazed? Will it be intensively grazed, or is it primarily for silage production? Some mixtures are better for hay making, while others are well suited to multi cut systems.

GRAZING MIXTURES

If well managed, grazed grass can supply 90% of the energy required for beef cattle and sheep and 70% for dairy cows. Factors that should be considered when selecting a grazing mixture include intended duration, management, fertiliser use, type of stock, soil type and drainage.

WHAT ARE YOUR TARGETED SILAGE DATES?

Try to match your mixture to when you anticipate cutting. If silage production is a priority, a mixture with a tighter heading date between the varieties will ensure less variation in the maturity of the sward at cutting time.

MAKE SURE YOU CONSIDER YOUR SOIL TYPE

What suits one area does not suit another. Sowing a mixture into the wrong soil type can lead to poaching and a sward that is less robust than it should be, ultimately reducing its longevity. Tetraploid ryegrasses are more palatable, deeper rooting and suit lighter soils. On heavier soils a higher inclusion of diploid ryegrasses are more appropriate as they tiller twice as much as the tetraploids resulting in a dense sward that stands up to grazing. They are also 30% smaller than tetraploids, so you get more seeds in a bag, leading to a greater plant population.

SHOULD I INCLUDE CLOVER WITH THE MIXTURE?

In most cases, the answer is yes. It provides a free nitrogen source and improves livestock performance. If the field has a weed burden, it may be worth leaving the clover out and overseeding once the weeds have been managed.

BALVENIE™

VERY BULKY 1-2 YEAR MIX

"I have used Balvenie as a break crop in a one year rotation. It was direct drilled in August 2024 after winter barley. Once established, it was grazed with sheep until January 2025, then shut off until the start of May, which produced an impressive first cut. I got three cuts in total. However, this summer's dry weather had a serious effect on the yield of the second and third cuts. I have kept one field of Balvenie in for next year, which will be grazed with sheep over the winter."

Euan Smith, Cairndinnis, Haddington, East Lothian.

VARIETY	TYPE	%
Meribel Messina (T)	Italian Ryegrass	64.3
Barclamp	Hybrid Ryegrass	35.7

Very bulky over several cuts

Leafier than straight Italian ryegrass

Offers fast establishment

The addition of hybrid ryegrass in the Balvenie mixture enhances quality compared to straight Italian ryegrass. With little impact on the yield, the sward will develop greater leaf composition. The hybrid ryegrass is slower to produce a seed head, helping maintain consistent forage quality throughout the season.

TANTALLON®

OUTSTANDING 2-3 YEAR MIX

"We currently run 150 pure Limousin cows and 300 Grey Faced gimmers. We've been using Tantallon since we moved to West Meikle Pinkerton 32 years ago, and it has always performed well. It's grazed in the spring, then we take two cuts of silage. We always establish it undersown, and it provides a good two year break."

James Gilchrist, West Meikle Pinkerton, Dunbar, East Lothian.

VARIETY	TYPE	%
Barclamp	Hybrid Ryegrass	21.4
AberGreen Strangford Banbridge (T) Seagoe (T)	Intermediate PRG	75.0
Rotational White Clover Blend		3.6

Fast growth throughout the year with the potential for 3 to 5 cuts

A careful combination of hybrids and intermediates offers better quality than other short term options

It has excellent aftermath grazing potential

The inclusion of medium and large leaved clover complements silage production

RED TANTALLON®

HIGH PROTEIN 2-3 YEAR MIX

"I have been delighted with the performance of the Red Tantallon since it was sown in 2024. It has been particularly impressive this season with the deeper rooting red clover keeping going through prolonged dry periods. It has provided two quality cuts of silage with only P and K applied, followed by aftermath grazing, with the lambs finishing very well off it."

Angus Dickson, Sorrowlessfield Mains Farm, Earlston, Scottish Borders.

VARIETY	TYPE	%
Barclamp	Hybrid Ryegrass	21.4
AberGreen Strangford Banbridge (T) Seagoe (T)	Intermediate PRG	53.7
Rotational White Clover Blend		3.6
Red Clover Blend		21.3

Large inclusion of red clover delivers high protein silage production with limited inputs

Vigorous growth with 3 to 4 cuts throughout the season

Red clover provides the potential to reduce nitrogen costs and fix 150 to 200kg per hectare

Silage aftermath provides a high quality forage to fatten lambs

High sugar grasses have been included to complement the red clover and aid in fermentation

"We tried Red Tantallon for the first time in 2025. The first cut was mostly grass with a small amount of clover, with the percentage of clover in the sward increasing with each subsequent cut. We cut it a total of four times throughout the summer, and it provides grazing for lambs in the winter months. The high protein silage provides high quality feed for the dairy herd."

David Laird, Middle of Balbeggie, Kirkcaldy.

RED CLOVER - Establishment & Management

Soil health is key to a successful red clover ley with it thriving in free draining soils with a pH of 6.0–6.5. Adequate phosphate and, in particular, potash are essential. A soil analysis should be undertaken before sowing to ensure pH, P and K are correct for optimum growth. Red clover fixes its own nitrogen, so no bagged nitrogen is required. Small amounts may be applied in spring to boost early grass growth, but never at establishment.

Leave at least five years between red clover crops to reduce risk of Sclerotinia and stem eelworm.

Sow between April and August when soils are moist and above 10°C. Later sowings risk poor establishment.

Prepare a fine, firm seedbed broadcasting followed by rolling gives the best results. Direct drilling is possible, but the seedbed must be clean, and seed depth no more than 1cm (ideally 0.5–1cm).

Rotational grazing maximises performance and clover persistence by allowing adequate recovery.

Graze at 10–15cm and move stock on at 5–7cm. Avoid grazing in late autumn to ensure strong spring growth.

Introduce stock gradually to rich clover swards and provide extra fibre, especially if moving from older pasture, to reduce bloat risk.

Cut at 7–10cm to support regrowth; cutting too low weakens the plant. In most climates, a cut every 5–6 weeks is achievable.

Allow clover to wilt to 30–40% dry matter before ensiling. Due to its high moisture content, wilting is essential for good fermentation.

To avoid fertility issues do not allow ewes to graze pure red clover pastures or those with greater than 30% red clover content especially 6 weeks pre and post tupping.

AIRLIE™
INTENSIVE 3-4 YEAR MIX

"This is the fourth year of this Airlie field as part of the five year temporary grass rotation on the farm. Each year, we take two early cuts of high quality silage before grazing the aftermath until November. To grow these two cuts, we apply a total of 90kg N in a 60:30 split. Overall, the mixture has been a great performer within our system and could probably remain productive for longer if necessary."

Andrew, Robert & James Kennedy, Seggarsdean, Haddington, East Lothian.

VARIETY	TYPE	%
AberGreen Gosford Strangford Banbridge (T) Tollymore (T)	Intermediate PRG	74.0
Crossgar AberBite (T) Killylea (T)	Late PRG	22.0
Rotational White Clover Blend		4.0

Combining perennial ryegrasses produces a leafy and dense sward that is ideally suited to intense production

A higher inclusion of tetraploid ryegrasses encourages excellent silage production

Carefully selected ryegrasses lead to improved mid season D value compared to other short term options

On lighter ground, it can also be used for intensive grazing

RED AIRLIE™

INTENSIVE 3-4 YEAR MIX

This Red Airlie mixture was undersown to oats and cut for wholecrop. It then grew at 110kgs dry matter per day before being grazed by the Lisodigue Pedigree Holstein herd.
"I'm really delighted with production on it."

Micheal O Sullivan, Fenit, Co Kerry, Ireland.

VARIETY	TYPE	%
AberGreen Gosford Strangford Banbridge (T) Tollymore (T)	Intermediate PRG	65.6
Crossgar AberBite (T) Killylea (T)	Late PRG	18.15
Rotational White Clover Blend		3.75
Red Clover Blend		12.5

Combination of top performing intermediates for yield and quality

Designed for multiple cut silage systems with tight heading dates

Blend of red and white clovers for persistency and performance with restricted nitrogen applications

Varieties selected for palatability and high utilisation traits under grazing

CARRICK™

MEDIUM TERM DUAL PURPOSE MIX

"This field was established in spring 2024 and I was delighted with the vigorous germination of the mixture. The establishment was very even and weed free. We have used it for both haylage and grazing and are well satisfied with the results."

Patrick Stephen, Carden Livestock Company, Firth Farm, Lilliesleaf, Melrose, Scottish Borders.

VARIETY	TYPE	%
Gosford Strangford Banbridge (T)	Intermediate PRG	56.7
Dundrod Killylea (T)	Late PRG	32.0
Baronaise	Timothy	8.0
Rotational White Clover Blend		3.3

Our most popular hay making mixture

The combination of intermediates and lates offers early cuts of hay and silage

The higher percentage of smaller leaved diploid and timothy aids in the drying and production of hay

It has good ground cover and has excellent mid season digestibility and grazing yields

EDZELL®

DUAL PURPOSE LONG TERM MIX

"When choosing a grass mixture, I rely on those tough enough to handle a hard winter, dense enough for heavy grazing, and early to provide grazing for ewes and lambs. Having tried various mixtures, I've found Edzell to be very reliable, especially here in the hills of Glenlivet with our short growing season. We place great importance on crop rotation and soil health, given the number of livestock we run, aiming to produce as much home grown forage as possible without buying in. Edzell also performs well through the autumn. Grass is vital to what we do and where we farm, as shown in the photo highlighting the vast terrain we work on."

Michael Durno, Auchorachan Glenlivet, Ballindalloch, Banffshire.

VARIETY	TYPE	%
AberGreen Strangford	Intermediate PRG	25.6
Ballyvoy Crossgar AberBite (T) Ballintoy (T)	Late PRG	61.7
Baronaise	Timothy	8.0
Rotational White Clover Blend		4.7

Higher diploid inclusion leads to high leaf to stem ratio and ensures high quality silage

Inclusion of top late heading varieties promotes long term performance and persistence

Winter hardiness and early season growth have been targeted through variety selection and inclusion of timothy

A blend of medium and large leaved white clover to boost silage yield and fix nitrogen

Produces a dense sward, which is excellent for beef and sheep grazing

DUART™
HIGH ENERGY GRASS MIXTURE

"We've been using Duart grass seed here at Townend for several years, and it's made a real difference to our silage production. The crop establishes quickly, gives a dense, even sward, and produces a heavy, leafy cut that's ideal for high quality silage. The feed value has been excellent, and the cows are milking well on it. It's a reliable mix that performs consistently year after year, even under pressure, and fits perfectly with our system for producing top quality forage. I'd happily recommend Duart grass seed to anyone looking to improve their cutting ground and silage quality."

John Drummond, Townend Farm, Tarbolton, Ayrshire. Robbie, John, Ian & James pictured.

VARIETY	TYPE	%
Gosford	Intermediate PRG	13.3
AberChoice Ballyvoy Callan AberBite (T) Richhill (T)	Late PRG	86.7

Also available with clover

Tailored specifically to produce outstanding energy and protein levels

Later heading varieties give a high leaf to stem ratio and flexibility in cutting dates

Varieties are selected with close heading dates to produce very high D value silage

High diploid content promotes excellent ground cover and persistency

Exceptional new variety Richhill included

"The Duart Castle Mixture has been a great success on our farm. It's improved both silage and grazing quality, producing a thicker, more productive sward with a good balance of white clover throughout. We've seen clear increases in grass yield and have been able to reduce fertiliser use as a result. Overall silage quality has improved in all aspects. We're very pleased with the results and will definitely continue using Duart."

Craig Marshall, Auchinleck Farm, Castle Douglas.

"We've been really happy with the Duart grass seed mixture. It gives us excellent quality silage with strong yields, and the regrowth provides great grazing aftermath after three cuts. The sward is dense, the grass is very palatable, and our cows yield really well on it."

Murray Wright, Risk Farm, Castle Douglas.

GREENAN™

HEAVY/WET SOILS MIX

"We switched to Greenan grass mixture for our beef and sheep farm in Twynholm, and it's made a real difference. Our heavy land can be challenging, but this mixture has really thrived, producing a strong, reliable sward that's perfect for grazing. The animals are grazing more efficiently, and we've seen improvements in both animal condition and pasture quality. The resilience of the Greenan mix in tough conditions is exactly what we needed, and it's been a great investment for the farm."

Andrew Graham, Beef & Sheep Farmer, Twynholm, Kirkcudbright.

VARIETY	TYPE	%
Gosford Strangford	Intermediate PRG	23.4
Ballyvoy Crossgar Dundrod	Late PRG	70.6
Permanent White Clover Blend		6.0

The smaller seed of the diploid combined with its greater tillering ability will lead to a very dense sward

Excellent option on challenging heavier ground and will resist poaching

Very well suited to rotational grazing

Small and medium leaved clovers ensures clover persistency under grazing and assists with palatability

Combination of late heading and diploid grasses should promote longevity

HERMITAGE™
MULTISPECIES MIXTURE

"Here on the farm, we decided to introduce the Hermitage multispecies grass mixture into our grazing platform to build greater resilience against the increasingly variable weather, from dry spells to intense rainfall. The multispecies pasture develops a diverse, deep root system that improves soil structure, boosts nutrient cycling, and fixes nitrogen, reducing our reliance on artificial inputs. With the added benefit of better stock performance, particularly for lamb finishing, its introduction has been a real win win."

Ed Munt, Shepherd at Mains of Murthly, Aberfeldy, Perthshire.

VARIETY	TYPE	%
Gosford Strangford	Intermediate PRG	30.0
Ballyvoy Ballintoy (T)	Late PRG	33.3
Baronaise	Timothy	6.7
Bardoux	Soft Tall Fescue	6.7
Barustic	CR Fescue	6.7
Archibaldi	Cocksfoot	6.7
Chicory	Herbs	2.3
Plantain		1.6
Permanent White Clover Blend		6.0

A mixture combining the quality of perennial ryegrass with the more robust native upland species

Inclusion of diverse grasses offers the chance to extend the grazing season

Variable rooting depths of the species offers a more robust mixture for the challenging parts of the year

Diverse grasses that will grow in lower input systems and an inclusion of clover to fix nitrogen

A flexible mixture that will grow on a range of soil types

DUNDAS®

DUAL PURPOSE MEDIUM/LONG TERM MIX

"Dundas works well within the rotation at Blackburn, generally being down for four years. It provides two bulky cuts, with the first usually taken around the 10th of June. It has never proved to be a disappointing crop and then gives good grazing for the cows until around mid November."

Robert Walker, Blackburn Farm, Grantshouse, Scottish Borders.

VARIETY	TYPE	%
AberMagic Gosford Banbridge (T)	Intermediate PRG	37.5
Ballyvoy Bandon Ballintoy (T) Richhill (T)	Late PRG	49.2
Comer	Timothy	8.3
Rotational White Clover Blend		5.0

- **Produces a dense and productive sward**
- **Inclusion of key top intermediates ensures heavy silage cuts**
- **Medium and large leaved clover contributes to silage and fixes nitrogen**
- **Careful combination of grasses that can exploit seasonal growth**
- **Our most popular dual purpose mixture that is tried and tested in producing quality silage and grazing**
- **Exceptional new varieties Bandon & Richhill**

"We were looking for a leafy mixture that covers the ground well for our multi cut system. Quality and overall yield are vital to the performance of our high yielding Holsteins, which we can achieve with Dundas."

Sandy Milne, Robert Milne Ltd, East Pitforthie, Brechin, Angus.

"We have used Dundas for many years now, and it performs well with our cattle and sheep. We use it early in the spring for turning out March lambed ewes and lambs. It is then shut off for one cut producing big bulks of silage. Aftermaths are then grazed with various stock groups, including store cattle, newly weaned lambs, and groups of cows for bulling. It is under a lot of grazing pressure but performs very well throughout the year. The pictured field was established in spring 2024 with the inclusion of Hobson forage rape for grazing in its first year. The photo shows weaned lambs in the silage aftermath ready for finishing off grass."

Will Barnetson, WM Barnetson & Sons, Lynegar, Wick, Caithness.

MINGARY®

LONG TERM MAINLY GRAZING MIX

"I am always pleased with the performance of our Mingary leys and this field in particular has been in long term and is still performing well, taking three to four cuts of silage and grazing sheep and youngstock. It is due a reseed, but James and Gregor (pictured) aren't looking forward to lifting all the stones!"

David Nelson, Redcroft, Castle Douglas.

VARIETY	TYPE	%
Galgorm Tollymore (T)	Intermediate PRG	20.1
AberChoice Ballyvoy Crossgar Ballintoy (T) Killylea (T)	Late PRG	65.3
Baronaise	Timothy	8.6
Permanent White Clover Blend		6.0

Our most popular long term mixture

Inclusion of high tillering diploids leads to dense grazing swards

Small and medium leaved clovers ensures clover persistency under grazing and assists with palatability

Ideally suited to grazing but can also be cut, producing leafy quality silage or hay

Extremely versatile mixture that can grow on a variety of soil types

Including outstanding timothy, Baronaise

“The Mingary has worked really well for us, and I’m very impressed with its performance. This field is at 1,100 feet and was rotavated and direct drilled in July. It has completely transformed it, improving grass quality and growth. All lambs have been finished this year on grass from the Mingary and Herbal Ley mix.”

Jack Hartley, Pendle Side Farm, Nelson, Lancashire.

"Having been in spring barley the previous year, this field was sown in late May, later than planned due to the dry conditions. Despite the challenging growing season, the grass and clover established very well, and I was able to wean lambs onto it just six to seven weeks after sowing. Going forward, I plan to cut it for silage, with the aftermaths used for finishing lambs post weaning and for flushing ewes later in the season."

John Callum, Ashlea, Milton of Culloden, Inverness.

FYVIE™

HIGH CLOVER MIX

"The performance of the new grass sward has hugely exceeded our expectations. The difference in the quality and quantity of grass from this field has been remarkable since it was reseeded with Watson's Fyvie in June. For several weeks, we grazed 400 lambs and added 40 500kg bullocks to help keep the sward down over the 17 acre field. It has been fantastic to see all stock gaining weight and thriving in what had previously been a field of predominantly old grasses, moss, and rushes on lighter soil. We are looking forward to grazing ewes over tupping, resting it over the winter, and turning ewes and twins onto it in the spring."

Rebecca Duncan, Lands of Drumhead, Glasgow.

VARIETY	TYPE	%
Gosford Strangford Banbridge (T)	Intermediate PRG	26.7
Ballyvoy AberBite (T) Ballintoy (T)	Late PRG	60.0
Baronaise	Timothy	4.0
Permanent White Clover Blend		9.3

High inclusion of deeper rooting tetraploid varieties gives it excellent drought resistance

It is excellent on lighter ground

More upright growth habit of the tetraploids leaves room for a higher clover content, which encourages greater nitrogen fixation

Small and medium leaved clovers ensures clover persistency under grazing and assists with palatability

Tetraploid content ensures high palatability and quality grazing

FYVIE™ + HERBS

HIGH CLOVER MIX

"The field was sown into grass this year following a crop of rape which helped break up the old sward. We used a stale seedbed technique to eliminate weed pressure and will aim to spot spray in the future to try and maintain the herb and clover population. The objective is to get the lambs finished as quickly and cheaply as possible and the fresh grass allows us to do that. The herbs have come into their own through the drier parts of the year and the lambs tend to do well off them."

Colin Campbell, Easter Happrew, Peebles, Scottish Borders.

VARIETY	TYPE	%
Gosford Strangford Banbridge (T)	Intermediate PRG	24.37
Ballyvoy AberBite (T) Ballintoy (T)	Late PRG	57.0
Baronaise	Timothy	4.0
Chicory Plantain	Herbs	5.33
Permanent White Clover Blend		9.3

Chicory and plantain aid early production and drought insurance

Livestock health and performance enhanced with herb inclusion

Mixture requires some rest and recovery periods to aid persistence

Higher tetraploid and clover content has good synergy with herb percentage

HERBAL LEY

MULTISPECIES MIXTURE

"We established this herbal ley in April 2025, and it has performed incredibly well given we're over 1,000 ft above sea level. Establishment was quick, and the herbs took hold strongly, transforming the field's productivity compared to the previous ley. It has been grazed throughout the year with no silage taken, maintaining excellent growth and persistence. The herbs have been key to improving soil organic matter and overall soil health. I'm thoroughly pleased with how well this mixture has performed in a challenging high altitude environment."

James Pitchard, Evistones Farm, Rochester, Newcastle Upon Tyne.

Excellent soil improver through varying root depths
Low input
Provides extended grazing
Ideal for paddock rotation
Can be cut occasionally
Diverse feed for ruminants
Herbs offer anthelmintic benefits

VARIETY	TYPE	%
Ballyvoy Ballintoy (T)	Late PRG	40.0
Timothy Cocksfoot Soft Tall Fescue Meadow Fescue	Grasses	30.0
White Clover Blend Red Clover Blend Alsike Clover Yellow Blossom	Clovers	20.0
Chicory Plantain Yarrow Burnet Sheeps Parsley	Herbs	10.0

"This is our first year of rotational grazing using paddocks sown to herbal leys in autumn 2024. A 20 acre field was divided into six paddocks and strip grazed, carrying around 100 cows through the summer. The herbal leys performed very well during the dry spell in April and May, with strong growth and rapid regrowth afterwards. Each paddock was cut and baled once, producing 120 bales totalling over 72 tonnes of forage at 60% dry matter, 10.4 ME and 13.9% protein."

Gordon & Michael Lewis, Bainsbank, Middleton, Kirkby Lonsdale, Cumbria. John Long of New Breed pictured.

HERBAL LEYS - Establishment & Management

With the high legume content, keep soil pH above 6.0. Sow into warm soils (8-10°C) and no deeper than 1cm. Broadcasting and rolling into a firm, well consolidated seedbed ensures good seed to soil contact. When direct drilling into a burnt off or existing sward, set discs no deeper than 1cm and manage residues to prevent smothering seedlings.

For spring sowings, a cover crop of arable silage or wholecrop can aid establishment and suppress weeds. Autumn sowings help where broadleaf weeds are a problem, giving a head start before winter. Control perennial weeds (docks, thistles, bromes) before sowing. Lightly graze after 6-8 weeks to encourage tillering and reduce weeds, but avoid overgrazing.

Effective management relies on rest and recovery through rotational grazing. Avoid set stocking or selective grazing, as herbs and red clover will not persist under constant pressure.

Compared with perennial ryegrass and clover swards grazed on an 18-21 day rotation, herbal leys need 28-40 days depending on growth and soil moisture. Maintain higher residuals (around 6cm). Allow the herbs to flower for persistency and pollinator benefit.

Smaller paddocks or larger groups with more frequent moves help extend rotations and maintain species balance. If topping, cut high to tidy weeds without harming regrowth. Avoid nitrogen fertiliser as red clover will supply it, supported by healthy soil biology.

Aim to graze down by late October, then rest over winter to protect crowns, promote spring recovery, and maintain long term sward resilience.

REJUVENATION

ALL TETRAPLOID RYEGRASS MIX

"This field was originally sown in 2020 with the Castle Mixture Mingary with herbs. Over time, it succumbed to pressure from various perennial invasive weeds, so I had the field sprayed to clear them. This left a sward in need of rejuvenation. I decided to reseed with Rejuvenation + Clover and a range of herbs, as I believe that including a diverse range of species in the sward greatly benefits livestock health, supports weight gains, and keeps them busy grazing. Now, coming into its fifth year, the persistence of the individual herbs and grasses is clear to see."

Euan Campbell, Ellis Park, Conon Bridge, Dingwall.

VARIETY	TYPE	%
Banbridge (T)	Intermediate PRG	35.0
AberBite (T) Ballintoy (T) Killylea (T)	Late PRG	65.0

The all tetraploid mixture has greater vigour to establish within an existing sward

Highly palatable

Puts new life into ageing swards

A flexible mixture that is suitable to improve both silage and grazing ground

Also available with Permanent Clover Blend

ORGANICS
CASTLE MIXTURES

"We have used Organic Dundas for many years. We can cut it or graze it and it suits our style of farming very well. We use British Friesian to breed our replacements, and Aberdeen Angus on our heifers and on half of the cows to produce tasty beef for Dovecote Park and Waitrose."

Robert Shanks, Queenscairn, Stichill, Kelso, Scottish Borders.

TANTALLON	For intensive cutting or grazing, contains high red clover content
AIRLIE	Highly productive 3 – 4 year mixture
DUART	A specialist all perennial ryegrass mixture for conservation or grazing
DUNDAS	The very best dual purpose medium/long term mixture suitable for cutting and grazing
MINGARY	The long term grazing mixture
FYVIE	Specialist grazing mixture with a high clover content
HERBAL LEY	4-7 year multispecies mixture
REJUVENATION	The mixture to put new life and vigour into ageing swards

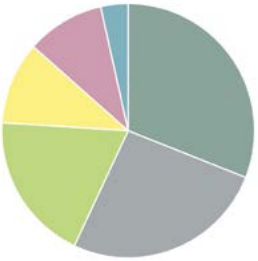
For our full range of organic mixtures, please visit our website www.watsonseeds.com.
Mixtures have been developed to suit organic farming requirements.

COST OF ESTABLISHMENT

Establishing a new ley involves a number of costs, which vary depending on the method used. Direct drilling offers a lower cost, reduced disturbance approach, while ploughing is more traditional and ensures a clean seedbed but with higher establishment costs. The comparison below highlights the typical breakdown for each method.

DIRECT DRILLING

Total cost - £309.50 per acre / £765 per ha



31%	Grass Seed Mixture (5-7 Years)
26%	Calcium Lime + Spreading
19%	Compound Fertiliser + Spreading
10.5%	Direct Drilling (Moore Unidrill)
10%	Sprayer Hire + Chemical
3.5%	Heavy Roll

PLOUGHING

Total cost - £378 per acre / £935 per ha

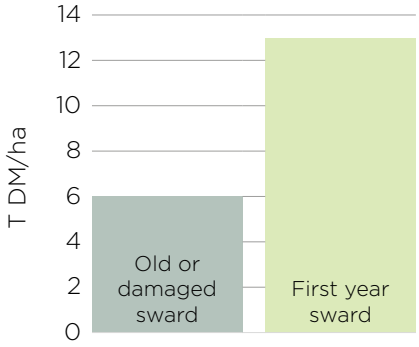
25%	Grass Seed Mixture (5-7 Years)
21%	Calcium Lime + Spreading
16%	Compound Fertiliser + Spreading
13%	Power Harrowing/Levelling x 2
9%	Ploughing
8%	Sprayer Hire + Chemical
4.5%	Air Seeder (Opico/Einbock)
3.5%	Ring Rolling x 2

VALUE OF RESEEDING

Reseeding is one of the most effective ways to improve grassland productivity and profitability. As swards age and ryegrass content falls, yields and quality decline, driving up feed costs. In contrast, a new ley dominated by perennial ryegrass delivers higher yields of more digestible forage, adding clear value per hectare through improved livestock performance and reduced reliance on bought in feed.

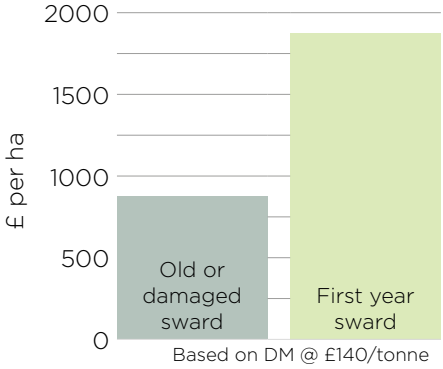
YIELD

The yield difference can be substantial between an older or damaged sward, where perennial ryegrass may make up only around 50% of the population, and a newly established ley in its first year, where ryegrass dominates. Older swards are typically less productive and of lower feed value, while the newer ley not only delivers higher yields but also provides forage of superior quality, palatability, and consistency. This results in better animal performance and more efficient utilisation of the available ground.



VALUE

The difference in value per hectare between an older or damaged sward with only 50% perennial ryegrass and a newly established first year ley is considerable. Older swards produce lower yields of poorer quality forage, increasing reliance on purchased feed. In contrast, a new ryegrass ley delivers higher yields of more digestible forage, adding significant value per hectare through improved livestock performance and reduced feed costs.



Based on DM @ £140/tonne

SOIL FERTILITY

Watson Seeds has been providing a soil sampling service for our customers for more than a decade. In that time, we have built a large database of information. In 2015 and 2016 we identified 58.8% of the soils sampled as below pH 6.0. From 2020 to 2022 a further 1,446 samples were taken and still three in five samples were below pH 6.0 with 23% at pH 5.4 or lower. Most recently, between June 2023 and June 2025, 53%of samples were below pH 6.0 and 24.6% were at pH 5.4 or lower.

Phosphate levels showed 25% were deficient, causing a 57% loss of DM production. Yet 50% were index 3 and 4, which is excessive, but in many cases the phosphate is locked up and unavailable due to other deficiencies in soil health. No other soil characteristic is more important in determining the chemical environment of plants and soil microbes than the pH. There are few reactions involving the soil, or its biological inhabitants, that are not sensitive to soil pH. Acidification is a natural process in soil formation that is accentuated in humid regions where processes that produce hydrogen ions outpace those that consume them. Soil erosion, emissions from power plants and vehicles, as well as inputs of nitrogen into agricultural systems, are the principal means by which human activities accelerate acidification. Soil pH also effects the activity of beneficial soil microbes.

Bacteria and actinomycetes prefer alkaline pH levels, while fungi do better in acidic conditions. Earthworms prefer a more neutral pH. Plants grow better when beneficial

organisms are abundant in the soils, so a soil pH range of about 6.3 to 6.5 is ideal for most soils and most crops.

Serious shortages of lime on grassland encourage the formation of a matted layer of undecomposed grass on the soil surface. Under these conditions, the better agricultural grasses die out and are replaced by inferior species like bent and Yorkshire Fog. Clovers are usually absent in acidic grassland although a few weak plants of wild white clover may survive. Red clover will not tolerate strongly acid conditions. Grassland may be limed at any time of year that will carry the weight of the spreader and full loads without damaging the sward, but stock should not be allowed access until rain has washed the lime off the herbage. For improvement of acid grassland lime should be worked into the matted layer otherwise the mat is slow to decompose. The same applies when burning off an acidic

sward with glyphosate, it takes time for the surface thatch to break down unless lime is worked in. Because of the risk of over liming no more than 5 t/ha should be applied in one application where surface renovation is undertaken. On short term grass leys where clovers are a key part of the mixture a moderate shortage of lime may cause poor growth by reducing the activity of the micro-organisms on the clover roots. Micro-organisms which fix atmospheric nitrogen to the benefit of clovers and associated grasses are very sensitive to soil acidity and it is essential that lime status of soil remains satisfactory if they are to function correctly. The target when setting out with these grass/clover leys is for an initial pH of at least 6.5 to get the vigorous stands of clover.

All plants need calcium, but some plants need more calcium than others. Legumes require larger amounts of calcium than magnesium. Calcium is important in many cellular functions and no matter what the crop higher calcium levels improve root growth, disease resistance and crop quality. Calcium improves soil structure and helps bring other elements into line, it also stimulates beneficial soil organisms. Magnesium lime has historically been used widely in the North of England and Scotland due to its availability as a competitively priced liming source with a low extraction cost. High magnesium levels are undesirable not only because they exclude calcium but also because in some soils higher magnesium tends to bind clay particles together leading to tight soils and poor soil structure. Ideally a calcium to magnesium ratio of 5:1 to 7:1 is desirable.

Potash is key to getting the most from grass, especially silage. It is required to develop and maintain the strength and structure of the foliage and plays a role in sugar formulation, assists root development and is involved in the transport of metabolites and nutrients within the plant. Potash renders the magnesium in pasture less available and grass staggers may result so careful use of potash in the spring and autumn when stock is susceptible to staggers is recommended.

The importance of phosphate is often underappreciated with the grass having a smaller demand for it, but it is fundamental to grass growth and is especially important at establishment. Phosphate helps with root development, energy transfer and tillering and a deficiency often leads to small, stunted plants.

Sulphur was once a secondary element and was found in many fertilisers based on mined rocks and more came from air pollution. However, with the use of NPK fertilisers and lower sulphur from power station emissions, many crops are low or deficient. Most crops take up as much sulphur as they do phosphate. In good biologically active soils 70/90% of the total sulphur is released each year from organic matter. About 55% of the sulphur in raw manure is released in the first year. Sulphur is necessary to produce quality, complete protein. It is needed for chlorophyll formation, root growth, and nitrogen-fixing root nodule bacteria. The balance between nitrogen and sulphur in the soil system is critical as to how much humus/organic matter is retained in a soil.

Achieving the correct and safe balance in the application of nitrogen, phosphate, potash and sulphur is key to getting the most from grass, both grazing and cutting.

SPECIES GUIDE
GRASS & LEGUMES

Perennial Ryegrass

Quick to establish, highly responsive to fertiliser N, and very palatable to stock. Combines strong production with excellent persistency, particularly from its intermediate and later varieties.

Timothy

Well suited to heavier soils, with strong early and late growth. Extends the season beyond most species and is a key component in hay mixtures.

Cocksfoot

Drought tolerant, best on light soils. Suited to grazing but can dominate, so use sparingly in mixtures.

Italian Ryegrass

Italian ryegrass is a cost effective, two year option with a long growing season. Ideal for short term conservation, it provides early spring and late autumn grazing.

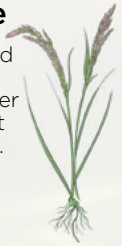
Hybrid Ryegrass

A hybrid of perennial and Italian ryegrasses, offering early bulk with added quality and persistence.

SS Meadow Grass

One of the more useful fescues for forage. Early and palatable providing good ground cover.

Creeping Red Fescue



Valuable in grazing mixtures and horse paddocks, its creeping habit forms a dense sward. Lower yielding than other grasses but versatile for cutting or grazing.

Tall Fescue

Deep rooted fescue very tolerant of stress. As a bunch grass it's growth habit can lead to "tussocky" swards. Can be difficult to establish in cooler seasons.

Sheeps Fescue

A fine leaved native fescue. Very slow growing, so limited forage value but it is tolerant of low fertility situations. Very hardy and persistent.

Meadow Fescue

Extremely winter hardy grass that can be grown on a range of different soil types. This combined with early spring growth and versatility makes it an excellent choice for more marginal ground.

White Clover

A versatile legume with creeping stolons that store reserves, allowing white clover to overwinter and regenerate each spring.

Red Clover

An upright clover with a deep taproot and nutrient storing crown. Suited to silage and rotational grazing, with good drought tolerance. Requires grazing before hard frosts.

Alsike Clover

A shorter term clover for heavier, acidic soils. Slow to flower in spring; small seed size, so use sparingly.

Yellow Blossom

Also called Sweet Clover, this biennial legume improves diversity and soil with its deep taproot. Often used for green cover.

SPECIES GUIDE

HERBS

Chicory

A vigorous, drought tolerant herb providing high protein forage. Its deep roots improve soil, and it has anthelmintic benefits for livestock.

Plantain

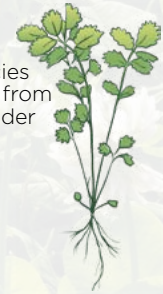
A perennial herb that can persist long term if well managed. Drought tolerant with deep roots that improve soil.

Yarrow

A nutrient rich, palatable herb with good drought tolerance. Establishes easily and boosts diversity in mixtures.

Burnet

A reliable herb for multispecies leys, supplying trace elements from depth and quality grazing under rotational use.



Sheeps Parsley

A biennial herb tolerant of poorer soils, adding diversity and palatability to herbal mixtures.

AMENITY MIXTURES

A specialist shade mixture at Penicuik Estate Partnership LLP, Penicuik, Midlothian.

Our landscaping mixtures deliver rapid and even establishment, creating dense ground cover with fine leaved turf that tolerates close mowing while reducing the need for frequent cutting. The range offers two main options: durable, hardwearing mixtures for robust performance, and fine, luxury mixtures for a refined finish.

DURABLE, HARDWEARING LAWN GRASS

All Rounder — 50m² packs, 10kgs & 20kgs

FINE & LUXURY LAWN GRASS

Perfectionist — 50m² packs, 10kgs & 20kgs

NSA SCOTSHEEP

We are delighted that John and Marion Tilson and their daughter Wanda will be hosting this year's NSA Scotsheep at Wedderlie Farm on Wednesday 10 June.

Wedderlie is an outstanding Border hill farm extending to 2,500 acres and rising to 1,250 feet. Around 1,200 acres are rough grazing with 800 acres of permanent pasture and 60 to 80 acres of forage crops grown to finish lambs and renew grassland.

The sheep enterprise is an integral part of the farming system, with around 1,900 breeding ewes made up of Cheviots on the hill and Cheviots on the lower ground put to Bluefaced Leicesters to produce the Cheviot mules, which are then crossed with Texels to produce high quality prime lambs. Cheviot gimmers are put to Dutch Spotted or Charollais tups. There is also a small flock of Herdwick ewes, which have proved they are the King's meat.

The Cheviots replaced the Blackface ewes on the hill many years ago, which has provided stronger returns from every aspect of their production. Forage crops such as kale and swedes provide valuable winter feed and an entry for reseeding, ensuring a productive and sustainable rotation.

The Wedderlie Angus herd was founded in 1914 by Major A. W. Baird with twin heifers of the Royal Erica family, marking the beginning of one of the most enduring Aberdeen Angus herds in Scotland. In 1942 Captain Tom Elliot purchased the farm and herd for his son Jack, who was sadly killed in World War Two. His sister Jenny Campbell inherited Wedderlie in 1953, later merging it with her Primrosehill herd. Alongside her husband Jock Campbell, a former Chairman of Directors of the RHASS and President of the Aberdeen Angus Cattle Society, she developed the herd with a strong commercial focus while maintaining pedigree excellence.

Today, Wedderlie is run by John, Marion and Wanda, continuing the family's long tradition of breeding sound and functional Angus cattle. Successive generations have strengthened Wedderlie's reputation through selective use of leading bloodlines from the United Kingdom, New Zealand and Canada. Sires are selected from within the herd with outcrosses, often going back to Wedderlie breeding on the female side to balance the existing herd. They also buy back their own bulls that have been sold and have bred well commercially.

With around 220 cows, Wedderlie continues to breed cattle suited to profitable beef systems. Bulls are selected for structure, conformation and balanced EBVs, while females are chosen for the three Fs: fertility, functionality and femininity, with calm temperament a hallmark.

For NSA Scotsheep, John, Marion and Wanda are organising a farm tour that will take visitors around Wedderlie, highlighting the diverse cropping and reseeding work that supports both the cattle and sheep enterprises. The tour will showcase the range of grass and forage mixtures they sow and provide an opportunity to view an excellent selection of the Wedderlie cows and sheep. It promises an informative and enjoyable insight into a family run Borders farm that continues to blend tradition with progressive farming practice.

AGRI-ENVIRONMENTAL

This section brings together a range of our most popular agri-environmental, greening and game cover options to support the requirements of new schemes across Scotland and England. These programmes emphasise soil health, reducing emissions, improving water and air quality, and enhancing biodiversity above and below ground.

Watson Seeds focuses on seeds and knowledge-based solutions that optimise both productivity and sustainability. We work closely with farmers running mixed and rotational systems, understanding the soils, climates and histories that shape them. Our mixtures and straights are tailored to deliver reliable performance while meeting environmental scheme objectives.

For more detail, we have a full Agri-Environmental, Greening & Game Cover Guide available. Please contact us to request a copy or simply scan the QR code to view the PDF.

DISCLAIMER: Any information provided is given in good faith and to the best of our existing knowledge. No liability can be accepted for any actions taken by growers as a result of this information. Scheme rules may change and it is the growers responsibility to ensure that mixtures or species chosen meet the requirements of their individual scheme. We make every effort to provide and supply products as stated, however availability may vary subject to season and demand.

SCOTTISH SCHEMES

EFA FALLOW LAND

EFA Fallow Land is arable land that is kept out of production and not used for grazing between 15 January and 15 July inclusive. The aim is to create a diverse and beneficial habitat that supports pollinators, farmland birds, and soil health.

Grass + Legume Fallow Mix

A late heading mixture that has been designed to retain its quality after the fallow period has ended. The inclusion of legumes will provide a valuable nitrogen source as well as enhancing soil health.

TYPE		%
Dundrod Glenfield (T)	Late PRG	89.7
Rotational White Clover Blend		6.0
Birdsfoot Trefoil		1.8
Alsike Clover		2.5

STUBBLES FOLLOWED BY GREEN MANURE IN AN ARABLE ROTATION

A stubble followed by green manure option keeps residues in place after harvest, then establishes a cover crop to protect soil, capture nutrients, add organic matter, and support biodiversity. This helps maintain soil health and improves fertility for the next crop within an arable rotation.

Green Manure 2

Very vigorous green manure.

TYPE	%
Vetch (common)	40.0
Mustard	40.0
Fodder Radish	20.0

Disclaimer: The information provided is offered in good faith and reflects our current knowledge. We cannot accept liability for any actions taken by growers based on this information. Scheme rules may change and it is the responsibility of each grower to ensure that the mixtures or species selected meet the requirements of their own scheme. We make every effort to supply products as described, although availability may vary with the season and with demand.

EFA HERB & LEGUME RICH PASTURE

Aims to increase and maintain species diversity in rotational grass swards by overseeding or reseeding with diverse grass and legume mixes. Extending the grassland phase in arable rotations builds organic matter, reduces soil disturbance, retains carbon, and improves soil health, habitat diversity, and livestock performance.

Basic Herbal Ley 1

A combination of species that have proven their worth across various soil types and geographical locations.

TYPE			%
Strangford Seagoe (T)	Intermediate PRG	Grasses	84.64
Dundrod Gracehill (T) Glenfield (T)	Late PRG		
Timothy			
Permanent White Clover Blend Alsike Clover		Legumes	10.71
Chicory Plantain		Herbs	4.65

Basic Herbal Ley 2

A mix of species that have shown their value across many soil types and regions.

TYPE			%
Strangford	Intermediate PRG	Grasses	86.44
Dundrod Gracehill (T)	Late PRG		
Timothy			
Cocksfoot			
Soft Tall Fescue			
Creeping Red Fescue			
Permanent White Clover Blend Alsike Clover		Legumes	9.28
Chicory Plantain		Herbs	4.28

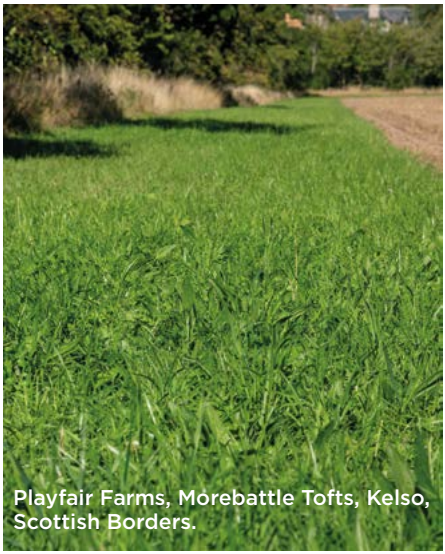
EFA MARGIN

Margins provide vital habitat for farmland wildlife, strengthen ecological networks, and protect water quality. They must remain in place from 1 January to 31 December. Features such as headlands, beetlebanks, and grass or watercourse margins support pollinators, natural pest control, and reduce erosion and nutrient loss.

Mat Forming + Herbs

More diversity for insects, pollinators and invertebrates

TYPE	%
Soft Tall Fescue	25.0
Smooth Stalked Meadow Grass	12.0
Timothy	6.0
Cocksfoot	5.0
Meadow Fescue	14.0
Highland Bent	4.0
Creeping Red Fescue	17.0
Red Clover Blend	9.0
Birdsfoot Trefoil	3.0
Plantain	4.0
Yarrow	1.0



Playfair Farms, Morebattle Tofts, Kelso, Scottish Borders.

ENGLISH SCHEMES

AB9/CAHL2/AHL2 - WINTER BIRD FOOD

Provides vital winter food for seed eating farmland birds. Sow a spring mixture of cereals, oilseeds, and specialist plants (e.g. barley, linseed, quinoa, millet, sunflower). Plots must be 0.25–2 ha, kept uncut and ungrazed until at least 15 March, and ideally placed near hedges or cover. Helps support declining bird species while adding diversity to the farmed landscape.

Winter Bird Food 2

The inclusion of millet blend, sunflowers and chicory to give a more diverse range of seeds for two consecutive years.

TYPE	%
Triticale	67.5
Quinoa	4.0
Kale	5.0
Sunflowers	10.0
Linseed	8.0
Millet Blend (Red & White)	5.0
Chicory	0.5

Guy Lee, Sandystones Ltd, Jedburgh, Scottish Borders.

NUM2/CNUM2 - LEGUMES ON IMPROVED GRASSLAND

Supports the introduction of legumes into improved grassland to increase soil nitrogen, boost forage quality, and reduce reliance on artificial fertiliser. It encourages a more diverse sward that benefits livestock performance and supports pollinating insects. Helps support declining bird species while adding diversity to the farmed landscape.

Clover Mixture

A great blend of clovers to give your pasture new vigour.

TYPE	%
Permanent White Clover Blend	75.0
Alsike Clover	25.0

CSAM3 HERBAL LEYS

Encourages diverse swards with grasses, legumes, and herbs to improve soil health, fertility, and resilience. Must include a minimum of 1 grass, 2 legumes and 2 herbs. Can be grazed or cut, but must be maintained for the full agreement period. Builds soil structure, fixes nitrogen, and supports pollinators while fitting well into arable or mixed rotations.

Herbal Ley Diverse Grass Overseeding

A combination of grasses, legumes and herbs to put new life into a tired sward. The selection of species are designed to extend the grazing season, improve the palatability of the sward and provide a diverse feed.

TYPE		%
Seagoe Intermediate PRG (T) Gracehill Late PRG (T) Timothy Cocksfoot Meadow Fescue Soft Tall Fescue	Grasses	71.0
Red Clover Blend Alsike Clover Permanent White Clover Blend	Legumes	18.6
Chicory Plantain Burnet Sheeps Parsley Yarrow	Herbs	10.4

Herbal Ley Diverse Mixture

Provides a vigorous sward, with abundant legumes and herbs, to provide habitat and food for a variety of insects and wildlife and to improve soil structure and water infiltration.

TYPE		%
Dundrod Late PRG Gracehill Late PRG (T) Cocksfoot Timothy Meadow Fescue Soft Tall Fescue	Grasses	69.0
Red Clover Blend Birdsfoot Trefoil Alsike Clover Yellow Blossom Sweet Clover	Legumes	23.0
Burnet Sheeps Parsley Chicory Plantain Yarrow	Herbs	8.0

Basic Herbal Ley 1 & 2 (on page 43) also comply with CSAM3


Evistone Farm, Rochford, Newcastle Upon , Tyne, Northumberland.

DISCLAIMER: Any information provided in this catalogue is given in good faith and to the best of our existing knowledge. No liability will be accepted for any actions taken by growers as a result of this information. Scheme rules may change and it is the growers responsibility to ensure that mixtures or species chosen meet the requirements of their individual scheme. We make every effort to provide and supply products as stated, however availability may vary subject to season and demand.

ROOTS & FORAGE

Rising feed costs have renewed interest in forage crops as a cost effective and reliable feed source. With the potential to deliver very high yields in a short growing season, these crops offer flexibility, with sowing possible from early summer through to the beginning of August. Many can be grazed or lifted within ten to fourteen weeks of sowing, providing valuable feed at key times of the year.

Root and forage crops suit all classes of livestock, supporting both milk production and liveweight gain. They fit well into both conventional and organic systems and require relatively modest inputs of fertiliser and agrochemicals. With high dry matter yields, their production costs compare favourably with conserved grass, maize, and wholecrop cereals.

At Watson Seeds, we carefully select varieties from leading plant breeders to ensure our customers have access to a versatile range of options. Whether swedes, kale, forage rape, fodder beet, rape/kale hybrids, stubble turnips, or our own specially designed mixtures, each offers proven performance across a wide range of farm systems.

This section also includes helpful practical information, including a feeding guide, to support you in getting the most from your crops.

CROP	SOW	MATURE (WEEKS)	UTILISABLE	RATE PER ACRE (Drill | Broadcast)	DM (T)	CRUDE PROTEIN	D VALUE
Fodder Beet	Apr - May	24-28	Oct - Nov	45,000 seeds/acre	6.0-7.25	12-13%	78
Stubble Turnip	May - Aug	12-14	Aug - Feb	2kgs | 3kgs	1.6-2.25	17-18%	69
Rape/Kale Hybrid	July - Aug	12-14	Sep - Feb	2kgs | 3kgs	1.4-1.6	15-24%	66
Forage Rape	May - Aug	10-12	Sep - Feb	3kgs | 4kgs	1.4-1.6	19-20%	65
Kale	May - Jun	16-20	Sep - Mar	2kgs | 3kgs	3.25-4.0	16-17%	70-75
Swedes	May	20	Sep - Feb	100-325g	2.85-4.0	10-11%	82
Main Crop Turnips	May - Jun	12-15	Sep - Feb	0.2-0.3kgs | 0.75kg	2.2-2.45	17-18%	68-70

SPECIES GUIDE
BRASSICAS

Fodder Beet

High energy, high yielding winter feed for cattle or sheep. Usually lifted but can be grazed in situ. Requires higher management and good conditions in northern UK.

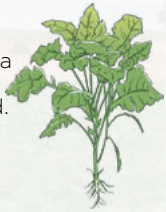
SOWING RATE	TERM TIME
45,000 seeds/acre	1 Years

Stubble Turnip

A very fast and economical crop to establish into stubbles. Can also be included in forage rape mixtures. 12-14 weeks from establish to a full crop with bulbs.

SOWING RATE	TERM TIME
2-3 kgs/acre	1 Years

Forage Rape



A reliable, fast growing brassica for livestock grazing. Provides high yields of high energy feed. Reasonable winter hardiness.

SOWING RATE	TERM TIME
3-4 kgs/acre	1 Years

Rape/Kale Hybrid

A hybrid brassica with kale and rape parentage. Resultant hybrid vigour plus kale winter hardiness and rape yield potential offers a potential advantage.

SOWING RATE	TERM TIME
2-3 kgs/acre	1 Years

Kale

Higher energy and more winter hardy than forage rape. Suitable for most livestock classes and utilisable from September to March. It adds value to game cover and wild bird mixes with two years of cover.

SOWING RATE	TERM TIME
2-3 kgs/acre	1 Years

Swedes

A slower developing winter hardy full season forage that offers high yields of high energy winter grazing.

SOWING RATE	TERM TIME
0.1-0.325 kgs/acre	1 Years

Main Crop Turnip

Yields well, very winter hardy, and combines with kale, rape, or stubble turnips for extended grazing.

SOWING RATE	TERM TIME
0.2-0.75 kgs/acre	1 Years

HOW TO CHOOSE BRASSICAS

The brassica crop options range from fast establishing stubble turnips and forage rape, which take around ten to twelve weeks to grow, to swedes and kale, which require more than twenty weeks but offer the highest yield potential.

The key determining factor is the month in which you aim to utilise the crop in order to gain the maximum nutritional contribution for your class of stock.

Forage rape and hybrid kale, along with stubble turnips, are ideally suited for utilisation from November to January. Their weakness is that in areas prone to prolonged periods of hard frost these crops are the first to succumb, and the nutritional quality is lost.

The benefit of these crops is that they allow you to harvest silage crops and cereals before establishment. They are genuine catch crops that can help fill a gap in forage stocks in a dry season such as we experienced in 2025. Direct drilling into burnt off swards or stubbles allows for low cost establishment and successful results when soil nutrition is good. More arable rotations are looking at these catch crop options and the golden hoof as a means of returning fertility to their soils and recycling nutrients.

The advantage of maincrop kales and swedes is the increased yield potential and their ability to carry more stock over a prolonged period after the first of January. Good strong crops of kale can provide more than double the utilisable yield of a short term hybrid or forage rape. Swedes likewise are an excellent feed option to provide nutrition for sheep into March and April.

Choosing your crop option for this time of year depends very much on altitude and soil type to achieve good utilisation.

The downside of maincrop kales and swedes is the challenge of establishment given the longer period in the ground. Weed control is a major issue, whether keeping grasses suppressed in direct drilled crops or tackling broad leaved weeds in cultivated soils, especially now that chemical options for brassicas are much reduced. Another significant challenge in many areas is the cabbage stem flea beetle which has developed an uncanny ability to find young emerging brassica cotyledons to attack. Many of these beetles move out of oilseed rape crops in May and June and look for newly emerged brassica crops to feed on.

We are investigating and trialling work on diversionary mixtures with mustard and radish included, as these are very attractive to the cabbage stem flea beetle at a time when resistance to pyrethroid insecticides has become widespread.

Whichever crop option best suits your farm requirements and any seasonal challenges, we at Watson Seeds can share our knowledge to ensure that you get the correct varieties and species for your brassica solution.

SOWING RATES FOR GRADED SEEDS (g/acre)

	SEED SPACING			
ROW WIDTH	2" (5cm)	4" (10cm)	6" (15.25cm)	8" (20cm)
20" (50cm)	325	275	225	200
24" (60cm)	300	250	200	150
26" (65cm)	275	225	175	125
28" (70cm)	250	200	150	100

PRECISION DRILL RECOMMENDATIONS

SEED GRADING	GRADE	SIZE (mm)	STANHAY BELT SIZE	SPRING BASE	CHOKE	WEBBS SELECTOR WHEEL
Fodder beet pelleted	Q-U	3.5-4.75	15 OR 16	C	A	EP
Swedes	H	1.75-2.0	8	A	T	B
Turnip	G	1.5-1.75	7	A	T	A
Kale	J	2.0-2.25	8.5	A	T	C

FERTILISER GUIDELINES FOR FORAGE CROPS

CROP	Nitrogen (kg/ha)	Phosphate (kg/ha)	Potash (kg/ha)	N applied at sowing	N applied later (% of total)
Swedes	40-100	45-100	80-215	50%	50% at 10-12 weeks
Kale	40-130	50-80	130-260	50%	50% at 10-12 weeks
Stubble Turnip	40-100	25-85	20-110	60%	40% at 6-8 weeks
Grazing turnips	40-100	25-85	20-100	100%	Further N may be applied for regrowth
Forage rape/ rape kale hybrid	40-100	25-85	20-110	100%	Further N may be applied for regrowth

100kg per ha equals 80 units per acre. (Source: Fertiliser Manual (RB209) - Germinal GB)

Brassicas are also prone to sulphur (S) deficiency which is shown by yellowing of the leaves. If suspected, a tissue analysis is the best guide. 10-30kg S/ha (8-24 units/acre) is recommended depending on deficiency severity.

SWEDES

"When growing swedes, I take great care and attention to what varieties grow well and to the overall agronomy to ensure that the swedes grow to the best of their abilities. Every year has its challenges, and this year it was incredibly dry when the sowing window came around, so picking the right time was key. With the help of my son Michael, and a little bit of luck on my side, this field of swedes is a joy to see. After a year of dry and pest pressure, I am delighted with the swedes and the photo at the back of this year's Watsons catalogue where you can see the clear distinction between Kenmore and Triumph which is a fascinating observation."

Sandy Munro, Sorum, Easter Kinkell, Dingwall. Michael & Euan are pictured.

Can be fed to sheep, dairy and beef cattle

Ideal for finishing lambs

High energy winter grazing, winter hardy, high yield

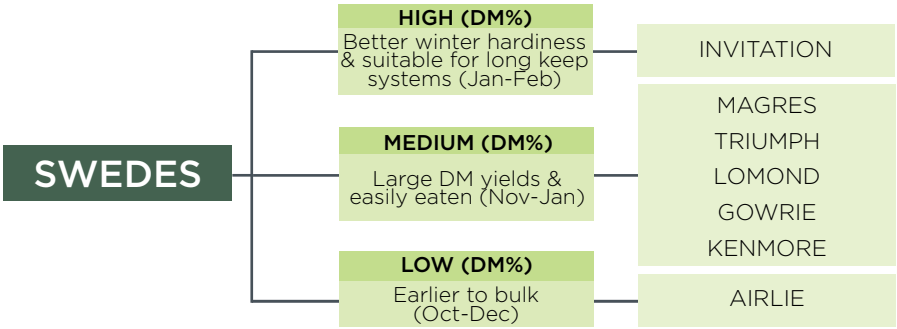
Can be sown on a range of soil types

Low production costs and cost effective

SOWING RATES FOR GRADED SEEDS (g/acre)

	SEED SPACING			
ROW WIDTH	2" (5cm)	4" (10cm)	6" (15.25cm)	8" (20cm)
20" (50cm)	325	275	225	200
24" (60cm)	300	250	200	150
26" (65cm)	275	225	175	125
28" (70cm)	250	200	150	100

WHICH VARIETY IS BEST FOR YOU?



VARIETY	DESCRIPTION	TYPE
INVITATION	Winter hardy with large leaves for extra potential	Forage
MAGRES	Excellent resistance to mildew and splitting	Culinary
TRIUMPH	Optimum bulb dry matter and good winter leaf retention	Forage
LOMOND	Big yields and consistent performance *natural seed only*	Dual Purpose
GOWRIE	Excellent yield and disease resistance	Dual Purpose
KENMORE	Early variety with high yields *natural seed only*	Forage
AIRLIE	Bulky and early with good resistance to mildew	Dual Purpose

"Swedes Triumph and Gowrie are grown for stock feed. Our lambing flock are folded on the swedes for a number of weeks prior to lambing. This supports the ewes' wellbeing while carrying lambs, increasing milk quantity and quality, and creating more womb fluids to aid lambing. Having sheep folded on the swedes over the grazing season also greatly supports the fertility of the farm."

Robin Croal, Parkhead Farm, Wolfhill, Perthshire.

FODDER BEET

"This is our second year growing Robbos and we are delighted with the yield and the ability of the crop to keep our March and April calving cows fit and content outside while they strip graze it. Getting the crop accurately established and providing good nutrition with FYM is key to big yields regardless of the season."

Alan MacIntyre, Manager, Binn Agriculture Ltd, Glenfarg, Perth.

One of the highest yielding forage crops

High in energy, palatability and digestion

Can be grazed in situ or lifted, stored and then fed whole or chopped

VARIETY	DESCRIPTION	DM%	SKIN COLOUR
ROBBOS	Clean yellow roots, very consistent performance	20	Yellow
JAMON	High palatability and easily eaten in situ or fed whole or chopped	18	Orange
GERONIMO	Very high potential yield and greater bolting resistance	16	Orange
LACTIMO	Good seedling vigour and produces very high fresh yields of medium dry matter	16	Orange
FELDHERR	Orange roots which grow out of the ground producing huge fresh yields	16	Orange
FORTIMO	Produces excellent yields of medium dry matter	15	Red
BRIGADIER	A traditional polyploid, mangel type fodder beet	14	Orange
FOSYMA	New variety with a high dry matter content which provides a high energy feed for dairy and beef.	20	Pink

Sowing Rates	Sowing Period	Utilisation Period
40,000-48,000 seeds/acre	April to May	October to November

SOIL
Fodder beet grows in many soils but performs best in light to medium, free draining fields with a pH of 7.

SEEDBED
Aim for a firm, fine tilth with minimal moisture loss in spring. Soil temperature should reach 5°C before sowing to avoid bolting. Precision drill seed 2.5–3 cm deep.

FERTILISER
Fodder beet is nutrient hungry. Apply two-thirds of nitrogen with all phosphorus and potassium at sowing, and the remaining nitrogen two months later. Trace elements, especially boron and manganese are important.

Requirements:

With farmyard slurry:	Without farmyard slurry:
N 100kg/ac	N 125kg/ac
P 50kg/ac	P 75kg/ac
K 50kg/ ac	K 150kg/ac

WEED CONTROL, DISEASE AND PESTS
Effective weed control is vital for yield. A pre-emergence herbicide is recommended. Seed treatments protect against early disease and insect attack, but regular monitoring is still needed. Main pests include flea beetle, slugs, springtails, symphylids and beet cysts.

HARVESTING
Many varieties can be grazed in situ, allowing use of both tops and roots. If lifting, remove tops to the leaf base and minimise soil contamination.

FEEDING
Lifted beet can be fed whole to cattle over 250kg or chopped if smaller. Indoors, feed up to 8–10kg beet per head per day with fibre, making up around 60% of daily dry matter (DM). When grazed, beet can supply up to 70% of DM. Introduce gradually, starting at 2kg DM per head per day and increasing by 1kg every two days to the maximum.

FODDER BEET SELLS OUT FAST - PLEASE ORDER EARLY TO ENSURE YOU GET YOUR PREFERRED VARIETY

"We've grown fodder beet for the last three years and found the variety Robbos works well in our system, as its large leaf area protects the bulb from frost until we utilise it in January or February. Twin bearing ewes go onto beet after scanning and stay on it for about five to six weeks before coming inside for lambing. Last year, single bearing ewes were also put on a smaller area of beet to take them off grass and help recovery ahead of lambing. We give the ewes a fresh break each day, calculating how much crop they need to meet nutritional requirements for energy and protein. Any excess crop was lifted and sold, with no issues finding a buyer. Weed control is important, as beet can be slow to establish and easily outcompeted."

Rachel Young, Ballicherry Farm, Dingwall.

KALE

"We have consistently used Maris Kestrel over the years and have always found that it provides good quality winter forage. It gives a decent yield without growing too tall and seems to be easily utilised and palatable for the lambs, who finish well on it. They normally go on around mid October, which allows us to take some pressure off the grass fields and freshen them before tupping."

Malcolm Coubrough, Tintoside Farm, Lanarkshire.

Best for late utilisation
Buffer feed for dairy cows during dry summer
Used for out wintering systems
Winter hardy
Second highest utilisable yield
Higher yields than hybrid rape/kale

Sowing Rates	Sowing Period	Utilisation Period
Direct drilled - 2kgs/acre Broadcast - 3kgs/acre	May to June	September to March

WHICH VARIETY IS BEST FOR YOU?

KALE

- **DAIRY & BEEF** — Taller, thick-stemmed varieties with maximum yield potential
  - BOMBARDIER
  - CALEDONIAN
- **SHEEP & LAMBS** — Leafy types with a shorter growing season
  - KEEPER
  - MARIS KESTREL

VARIETY	DESCRIPTION
CALEDONIAN	Our highest yielding kale which is clubroot tolerant. Its high yield and quality makes it an ideal feed for cattle.
BOMBARDIER	Produces a high dry matter, high yielding crop. Clubroot tolerant. Suitable for sheep and cattle.
KEEPER	Low growing winter hardy variety. Good leaf to stem ratio and high dry matter. Suitable for sheep and cattle. Popular game cover.
MARIS KESTREL	Low growing, high yielding. High dry matter content with good leaf to stem ratio. Suitable for sheep and cattle.

"We've been growing Maris Kestrel kale to outwinter our Luing cows, and it's worked really well. The crop grows strong and leafy, and it keeps its feed value right through the winter. The cows do very well on it and hold their condition with no problems. It stands up to the weather here in Borgue and doesn't waste much, which makes it easy for us to manage. Overall, Maris Kestrel has been a reliable, good quality feed and a simple way to keep our Luings out and happy over the winter."

David Clark, Earlston, Borgue, Kirkcudbright.

KALE MIXTURES

"I have grown a mix of Maris Kestral kale and Kenmore swedes for a number of years now and have found it consistently suits this farm in both dry and wet seasons. The crop is used for feeding lambs and for wintering the breeding ewes. Both are fed in breaks to give the lambs a reasonably consistent and nutritious diet, while the ewes have their intake controlled by the time allowed for grazing the crop each day. I find there are fewer risks growing kale than the alternatives, and the high bulk means the crop grazes a lot of mouths with very acceptable results."

Ian Duncan Millar, Tirinie, Aberfeldy, Perthshire.

Our full season forage mixture options combine high yield with strong winter hardiness. Kale 1 is ideally suited to finishing lambs, while the inclusion of swede in Kale 2 and 3 gives greater winter hardiness and an energy source. The marrow stemmed Caledonian in Kale 3 has a greater yield potential but is more suited to cattle grazing.

KALE 1 MIXTURE

TYPE	%
Maris Kestrel Kale	30.0
Keeper Kale	30.0
Gorilla Forage Rape	32.0
Massif Turnip	8.0

KALE 2 MIXTURE

TYPE	%
Maris Kestrel Kale	95.0
Lomond Swede	5.0

KALE 3 MIXTURE

TYPE	%
Caledonian Kale	45.0
Maris Kestrel Kale	45.0
Triumph Swede	10.0

KALE 4 MIXTURE

TYPE	%
Maris Kestrel Kale	76.0
Triumph Swede	8.0
Oil Radish	12.0
Brown Mustard	4.0

MAIN CROP TURNIP

Very high fresh yields

Slower growth than stubble turnips

Suitable for late sowing (later than swedes)

Can be mixed with kale, hybrid or rape to extend grazing days

VARIETY	DESCRIPTION	DM %	SKIN COLOUR	FLESH COLOUR
IMPERIAL GREEN GLOBE	Traditional white fleshed variety, with some winter hardiness.	8.2	Green	White
MASSIF	A very high yielding variety of good keeping quality. A replacement for Greentop Scotch.	9	Green	Yellow

Sowing Rates	Sowing Period	Utilisation Period
Direct drilled - 0.2-0.3kgs/acre Broadcast - 0.75kgs/acre	May to June	September to February

RAPE & HYBRIDS

"2025 has seen the return of forage rape to Glensaugh. Gorilla, chosen for its vigour and resistance to clubroot, was broadcast onto a surface cultivated seed bed (with lime and FYM incorporated) in late June. As an easily established break crop it will help us to finish a few more lambs, but its primary purpose is to help us to improve soil structure and control weeds in a field that hasn't been cultivated for many decades. The crop will be followed by a Saltire 7 mix in spring 2026."

Donald Barrie, James Hutton Institute, Glensaugh, Laurencekirk, Aberdeenshire.

Hardy, can grow on poorer soils and exposed sites

Ideal for fattening lambs or flushing ewes

Can also be lightly grazed by cattle

Flexible sowing period

Fast growing

Sowing Rates	Sowing Period	Utilisation Period
Direct drilled - 2-3kgs/acre Broadcast - 3-4kgs/acre	May to August*	September to February

*Some varieties don't suit early sowing, speak to your seed specialist to discuss

VARIETY	DESCRIPTION
SWIFT (HYBRID)	A very aggressive growing variety that will present a fast and reliable forage option. Consideration must be taken into sowing and utilisation dates as can become quite fibrous if not grazed on time.
GORILLA (RAPE)	It is a dark green dwarf variety that has a higher than average DM, which leads to high total dry matter yields. Its shorter status presents a very palatable crop that is easy to fence for strip grazing. It is a valuable option if clubroot may be an issue as it has good tolerance.
HOBSON (RAPE)	Highly digestible variety with good standing power and mildew resistance.
MAINSTAR (RAPE)	Mainstar forage rape is a high yielding, high quality source of forage. It is well suited to the UK climate and conditions. This crop is known for its high palatability, nutritional benefit for livestock and its fast growing capabilities with a good potential for regrowth.
RAMPART (RAPE)	A newer variety of forage rape that is fast growing and has good yield potential. It is suitable for both dairy and lamb production.
REDSTART (HYBRID)	A winter hardy hybrid offering a high energy protein crop that is ideally suited for cattle and sheep grazing. It combines rapid establishment and growth rates with good winter hardiness. It has regrowth capability when early sown for multi-graze options.
UNICORN (HYBRID)	A hybrid variety that is fast to establish and ready to utilise in 12-14 weeks. It produces a high DM yield that is suitable for sheep, beef, and dairy. It is not as winter hardy as some of the other hybrids so would be ideally suited to pre-Christmas grazing.

"Redstart hybrid kale has been the ideal break crop to allow reseeding of tired old permanent pasture. It offers excellent grazing at the end of the grass growing season and allows us two opportunities to control stubborn grasses and dock and thistle challenges. The brassica break is a great cultural method of controlling soil borne pest challenges and builds fertility for our subsequent reseeds."

Johnny Elliot, Roxburgh Mains, Kelso, Scottish Borders.

HYBRID MIXTURES

"This is our first year trying a hybrid mix. It was a bit of an experiment, direct drilling onto sprayed off grass, and what a tremendous yield we've had from it. We'll start strip grazing lambs on here from October and start selling off fat lambs from November onwards. This field will then be ploughed next spring and sown with a Fyvie mix, which always works really well for us."

Steven Blackwood, Bisset & Blackwood, Mill Farm, Caithness.

Our hybrid mixtures are a careful combination of mid season brassicas. They all provide fast growth and the potential for high energy, high protein forage. The hybrids offer greater winter hardiness than rape alternatives and are palatable to both sheep and cattle. The main crop turnip provides greater winter hardiness, while the stubble turnips offer a faster growing energy source.

HYBRID 1 MIXTURE

TYPE	%
Redstart Hybrid	30.0
Swift Hybrid	30.0
Gorilla Forage Rape	32.0
Massif Turnip	8.0

HYBRID 2 MIXTURE

TYPE	%
Redstart Rape/Kale Hybrid	80.0
Samson Stubble Turnip	20.0

HYBRID 3 MIXTURE

TYPE	%
Redstart Hybrid	40.0
Swift Hybrid	40.0
Samson Stubble Turnip	20.0

FORAGE RAPE MIXTURES

"The field was drilled in late June following a grazed mixed fodder crop of clover, chicory and vetch. Historically the field has been very wet and is heavy clay, so a good series of break crops was needed. Cattle dung was applied before the forage crop, which was drilled with a Claydon drill."

John Davidson, Penicuik Estate, Penicuik, Midlothian. Pat, Andrew and Cameron are pictured.

The forage rape mixtures combine valuable catch crops that offer the potential to extend the grazing season. They are all fast growing and can produce a crop in around 12 to 14 weeks under the right conditions. Main crop turnips add a winter hardy aspect, while stubble turnips provide a fast growing energy source. The large percentage of stubble turnips in the Rape 3 mixture makes it suitable for post winter cereal sowing, and the inclusion of rape helps to boost the protein content of the forage.

RAPE 1 MIXTURE

TYPE	%
Gorilla Forage Rape	87.5
Samson Stubble Turnip	12.5

RAPE 2 MIXTURE

TYPE	%
Gorilla Forage Rape	93.75
Massif Turnip	6.25

RAPE 3 MIXTURE

TYPE	%
Gorilla Forage Rape	40.0
Rondo Stubble Turnip	30.0
Samson Stubble Turnip	30.0

STUBBLE TURNIPS

"After what I can only describe as a challenging year for growing a successful crop of swedes, I had to act quickly and re-sow a failed field into stubble turnips. The field was sown on 2nd August, when conditions were extremely dry, and I could hardly see the tractor tyre marks. Thankfully, a rain shower arrived a few hours later. To say the results are unbelievable would be an understatement. With all the unused swede fertiliser incorporated into the new seedbed, the crop has produced an impressive mass of stubble turnips. I was advised to use the variety Rondo for its excellent winter hardiness, and I plan to utilise it for finishing lambs when time allows."

Drew Fraser, Tignahinch, Conon Bridge, Ross-shire.

Summer buffer for dairy cows
Good winter feed for sheep or cattle
Easy to establish
Good resistance to bolting
Palatable and easy to digest
Can be sown after harvest

Sowing Rates	Sowing Period	Utilisation Period
Direct drilled - 2kgs/acre Broadcast - 3kgs/acre	May to August	August to February

VARIETY	DESCRIPTION
SAMSON	Can produce very large tankard shaped purple bulbs. This variety which is tried and tested in the UK has been shown to be preferentially grazed, which can lead to higher intakes and live weight gain. Ideal for finishing lambs and grazing cattle.
RONDO	It is a winter hardy variety that has excellent root anchorage that can reduce wastage. It is green skinned and quick to establish with a leafy growth habit. Being frost tolerant it is a viable option for sowing later in the season.
WHITESTAR	Trusted for its winter hardiness and palatability, it is an excellent choice for after harvest. It is a white skinned globe type which mostly sits out of the ground but is well anchored. It has a very clean root.
TYFON	A hybrid turnip that is a cross between a stubble turnip and a Chinese cabbage. It produces a very small bulb but massive palatable leaves. It benefits from being spring sown and grazed in the summer and offers regrowth potential. Extremely fast growing and can be utilised in 8-10 weeks.
SKYFALL	A leafy brassica that is ideally suited to grazing. Produces a small bulb but large palatable leaves that are well suited to dairy, beef or sheep. Deep rooting species that has good regrowth potential.

"I am using the stubble turnips as a pioneer crop to break up an old pasture with the objective of getting it into a more productive field of grass. The turnips established quickly and, despite needing to be sprayed for turnip sawfly larvae, have yielded extremely well. A well-established crop is hugely valuable, and the feed quality and winter hardiness of the bulbs shouldn't be underestimated. The lambs were clearly starting to slow down on the grass fields, but since moving them onto the stubble turnips in November they have been motoring."

Hamish Dykes, South Slipperfield, West Linton, Peeblesshire.

WINTER FEED ALLOCATION

Fodder Crop Requirements

The table below helps estimate how much fodder crop is required for different classes of stock. It gives a guide to how many animals can be fed per hectare over a 90-day period, and the likely time to full utilisation.

CROP	DM YIELD (T/HA)	NUMBER OF ANIMALS/HA OVER 90 DAYS				DAYS UNTIL UTILISATION
		Sheep		Cattle		
		Ewes	Lambs	Cows	Stores	
Kale	9	96	119	6	14	154-210 days
Rape/Kale Hybrid	3.5	37	46	3	5	70-110 days
Stubble Turnip	4	43	53	3	6	56-100 days
Swedes	9	96	119	4	14	170-220 days
Fodder Beet	17	181	225	12	26	175-210 days

Based on 70% of diet from crop and 25% wastage. Intakes assumed: ewes (70kg) 1.6% LW, lambs (30kg) 3% LW, cows (750kg) and stores (350kg) 2.2% LW.

Feed Allocation

The DM yields shown are guide values taken from book figures. Actual yield will vary with variety, soil, climate, and crop management. To plan feeding accurately, a simple field assessment should be carried out. This allows calculation of DM yield and daily allocation, which in turn determines how far to move the fence each day.

Measuring DM Yield – Quick Method

You will need:

- 1m² quadrat (or 3.54m pipe loop)
- Bag
- Shears or a knife
- Hand scales
- Notebook and pen

Steps

1. Place the quadrat on a representative part of the field, avoiding headlands or poor patches.
2. Harvest within the square
   - Roots – lift all roots and leaves, clean off soil.
   - Leafy crops – cut 2–3cm above ground.
3. Weigh the sample.
4. Multiply weight by 10,000 = fresh weight/ha.
5. Multiply by crop DM % ÷ 100 = DM/ha.

Example:

Sample weight = 7kg
7 × 10,000 = 70,000kg FW/ha
× 15% DM = 10,500kg DM/ha = 10.5 t DM/ha

Using DM Yield

Once DM yield is known, stock requirements can be matched to available feed. This provides a practical guide to stocking rate, grazing duration, and fence movement. An example calculation for a 70kg ewe is shown overleaf.

Calculating Daily Allocation (adapted from AHDB)

		EXAMPLE: 70kg ewe
A	Total Estimated Intake (using 1.6% of liveweight)	1.20kg DM/day
B	Crop Inclusion of the Diet (allowing 30% fibrous forage)	70%
C	Daily Requirement of Forage (AxB)	0.84kg DM
D	Number of Animals Grazed	300
E	Daily Requirement of Fodder Beet (CxD)	252kg DM
F	Estimated Crop Yield (DM/m2) (crop yield as above – 10.5 tonnes @ 80% utilisation – (1.05kg/m2 x 0.8)	0.84kg/DM/m2
G	Total Grazing Area Required/Day (E/F)	300m2
H	Length of Electric Fence (Feed Face)	150m
I	Width of Fence Moved Per Day (G/H)	2.00m/day

Using simple DM and daily allocation calculations show how far to move the electric fence each day to achieve high utilisation.

A feed budget can then be used to calculate the total area needed for the winter, as shown below for 70kg ewes.

Calculating Feed Budget (adapted from AHDB)

		EXAMPLE: 70kg ewe
A	Total Estimated Intake (using 1.6% of liveweight)	1.20kg DM/day
B	Crop Inclusion of The Diet (allowing 30% fibrous forage)	70%
C	Daily Requirement of Forage (AxB)	0.84kg DM
D	Feeding Period	120 days
E	Total DM Requirement per Animal (CxD)	101kg DM
F	Total Required for flock (e.g.300 ewes x E/1000)	30.30 tonnes DM
G	Forage Utilised Yield (t DM/ha) 10.5 tonnes @ 80% utilised	8.40 tonnes DM
H	Forage Area Required for Winter (F/G)	3.60 hectares

Ensure an area of run-back is also budgeted for.

WATSON SEEDS®

01368 840655
enquiries@watsonseeds.com
www.watsonseeds.com