



WATSON SEEDS



2026  
CASTLE

MIXTURES

Premium Performance Seed



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# INTRODUCTION

We are pleased to present our 2026 Castle Mixtures catalogue, bringing together a carefully selected range of grass, clover and multispecies mixtures designed to deliver reliable performance across Irish farming systems. Whether the goal is maximising grass utilisation, producing high quality silage or building greater resilience into grazing platforms, choosing the right mixture for each field remains fundamental to achieving consistent results.

The past season once again highlighted the challenges posed by increasingly variable weather. Periods of favourable growth were often followed by extended dry spells, testing sward resilience and grass supply on many farms. While livestock markets remained strong, rising input costs and tighter nutrient regulations have sharpened the focus on efficiency, grass quality and home grown forage as the foundation of profitable systems.

Demand continues to grow for mixtures that offer more than yield alone. Greater emphasis is now placed on persistency, utilisation, soil structure and reduced reliance on artificial fertiliser. The inclusion of clover and, where appropriate, multispecies components plays an increasingly important role in meeting

these objectives, while still supporting high levels of animal performance. Successful reseeding starts with getting the basics right. Soil fertility, pH and structure remain critical to establishment and long term performance, and soil sampling continues to be a core part of our service. By ensuring seed is sown into the correct conditions, we help protect the investment made in reseeding and maximise the return from each mixture.

Our Castle Mixtures are developed in close collaboration with leading plant breeders and supported by recommended lists, independent trial data and on farm experience. Varieties are selected for yield, quality, palatability and persistence, ensuring each mixture performs as intended under Irish growing conditions.

Ultimately, the best mixture is one that is tailored to your soils, stocking system and management. Through our local distribution partners, we are always available to discuss individual requirements and help identify the most suitable option.

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



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# SPOILT FOR 1<sup>ST</sup> 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 in Castle Mixtures are First Choice as listed in Grass and Clover Varieties for Scotland 2025 - 2026.

SRUC 1st Choice

PPI Rated

Ground Cover

REE

## HYBRID RYEGRASS

**BARCLAMP** - Later heading hybrid with strong ground cover and consistent seasonal yields. ✓ A 39

## INTERMEDIATE PERENNIAL RYEGRASS

**ABERMAGIC** - Excellent summer and autumn growth with very good digestibility, good silage performance, ground cover and persistence. ✓ ✓ A 42

**GALGORM** - Excellent seasonal growth with very good silage yield, digestibility, ground cover and persistence. ✓ ✓ B 36

**MOIRA** - Excellent spring growth with good silage yield, ground cover and persistence. ✓ ✓ B 38

**BANBRIDGE (T)** - New to the Recommended List, it offers strong spring and summer growth, the highest silage yield, and moderate ground cover. ✓ ✓ C 35

**TOLLYMORE (T)** - Good seasonal growth and dry matter digestibility with excellent silage yield, ranking second overall, and moderate ground cover. ✓ ✓ C 34

## LATE PERENNIAL RYEGRASS

**ABERBANN** - Strong summer and autumn growth with excellent silage yield, moderate dry matter digestibility, and good persistence. ✓ ✓ A 51

**BALLYVOY** - Very good spring growth with good dry matter digestibility, ground cover and persistence. ✓ ✓ B 47

**BANDON:** New Teagasc Oak Park variety with excellent conservation and consistent ME yields. ✓ C 48

**CALLAN** - Good productivity under both managements early on in the season ✓ ✓ B 46

**BALLINTOY (T)** - Good spring to autumn growth with good digestibility, very good silage yield, moderate ground cover and persistence. ✓ ✓ C 46

**GLENFIELD (T)** - Very good growth across the season with good digestibility, very good silage yield, moderate ground cover and strong persistence. ✓ ✓ - 47

**GRACEHILL (T)** - Excellent summer and autumn growth with category leading silage yield, plus moderate ground cover and good persistence. ✓ ✓ C 47

## TIMOTHY

**BARONAISE** - Outstanding growth at the season's shoulders, particularly strong late season. ✓ A 58

## CLOVERS

**ABERYSTWYTH S184** - Good persistence and yields with intensive sheep grazing. Small Leaved

**ABERSWAN** - Strong persistence with good ground cover. Medium Leaved

**CRUSADER** - Reliable performance early and late in the season. Medium Leaved

**DUBLIN** - Good yield with strong persistence. Medium Leaved

**CLODAGH** - New Teagasc variety with high ground cover under conservation and rotational grazing. Large Leaved

# 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)
TANTALLON®	2-3	✓	✓			14
RED AIRLIE™	3-4	✓	✓			16
DUART™ + CLOVER	4-7	✓	✓		✓	15
ROSLIN™	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

- 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™

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# 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.



# TANTALLON<sup>®</sup>

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	20.0
AberMagic Galgorm Banbridge (T) Tollymore (T)	Intermediate PRG	76.5
Rotational White Clover Blend		3.5

**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 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	%
AberMagic Galgorm Banbridge (T) Tollymore (T)	Intermediate PRG	62.3
Ballyvoy Gracehill (T)	Late PRG	20.7
Rotational White Clover Blend		4.0
Red Clover Blend		13.0

**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**





"We tried Red Tantalion 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.



# ROSLIN™

MEDIUM TERM DUAL PURPOSE MIX

Tim has a spring calving dairy & drystock farm on free draining land in mid-Cork. This field was sown out in April 2021, lightly grazed with young stock and a first cut taken in mid-July followed by 2nd cut on 31st August. 'Roslin gives us top yields and quality for silage cuts through the season as well as the persistency for grazing different classes of stock.'

**Tim O Leary, Coachford, Co Cork, Ireland.**

VARIETY	TYPE	%
AberMagic Moira Banbridge (T)	Intermediate PRG	41.9
Ballyvoy Callan Glenfield (T) Gracehill (T)	Late PRG	53.1
Rotational White Clover Blend		5.0

**Our most popular hay making mixture**

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

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

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





# EDZELL®

## DUAL PURPOSE LONG TERM MIX

Paddy Barron Agri Ltd seen here harvesting a second crop of Edzell near Youghal, Co. Cork. Edzell is particularly suitable for a two - three cut silage and graze system. Due to its unique blend of high percentage diploid grass inclusion plus late tetraploids and timothy and clover it produces a dense sward that can continue to deliver quality silage and aftermath grazing for up to six seasons.

VARIETY	TYPE	%
AberMagic Galgorm	Intermediate PRG	23.9
AberBann Ballyvoy Callan Ballintoy (T) Gracehill (T)	Late PRG	64.9
Baronaise	Timothy	6.5
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™ + CLOVER

## 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	%
Galgorm Moira	Intermediate PRG	11.0
AberBann Ballyvoy Bandon Ballintoy (T) Glenfield (T) Gracehill (T)	Late PRG	81.0
Rotational White Clover Blend		8.0

**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**





"Duart plus clover complements our early February calving, grass based milk production system. We have a long grazing season and the blend of late perennials and clover gives us leafy palatable swards with good pasture clean out all through from February to November. We also use Duart plus clover on our silage swards where it gives consistent quality and excellent yields. The inclusion of clover in our swards has an ever more important role in helping us reduce our dependence on artificial fertiliser."

**Michael Broderick, Watergrasshill. Co. Cork pictured with Reidin Murphy, Area Manager Southern Fuel and Farm Supplies and Pat Lambert Watson Seeds.**

Niall Bolger farms with his father PJ and brother Andrew in Rathvilly, Co Carlow. The Bolger's run an autumn and spring calving dairy herd as well as a calf to beef system. They have been using Watson's mixtures for a number of years and find the quality and persistency of the mixtures to be excellent. Eoin Jordan & Steve Tracey of Jordan Agri pictured with Niall in a field of Duart + Clover what was sown in 2017. These paddocks are still performing really well on the farm with excellent ground cover and graze outs with the cows. These paddocks are occasionally cut for silage and produces excellent quality silage.





# 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	%
AberMagic Galgorm	Intermediate PRG	14.0
AberBann Ballyvoy Callan	Late PRG	80.0
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	%
AberMagic Moira	Intermediate PRG	26.7
Ballyvoy Ballintoy (T) Glenfield (T)	Late PRG	41.6
Baronaise	Timothy	13.0
Senu Pajberg	Meadow Fescue	3.3
Barustic	CR Fescue	6.7
Alsike	Clover	2.7
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<sup>®</sup>

DUAL PURPOSE MEDIUM/LONG TERM MIX

Noel O Shea manages a traditional spring calving Friesian dairy herd. The herd turnout to spring grass is early due to the local mild temperatures and almost continuous grass growth of this coastal farm. Quality grass mixes are important to best avail of these natural advantages. The Dundas mixture has performed well on my farm well across a mixture of soil types. It produces good yields of quality grass for grazing with a dense sward and good ground cover. The inclusion of productive clover blends is ideal and is ever more important in our nitrogen reduction targets.

**Noel O Shea, Lough Hyne, Skibbereen, Co. Cork** pictured with **Niall Dwyer Area Manager, Barrett Agri**

VARIETY	TYPE	%
AberMagic Galgorm Banbridge (T)	Intermediate PRG	38.4
AberBann Ballyvoy Ballintoy (T) Glenfield (T) Gracehill (T)	Late PRG	50.1
Comer	Timothy	6.5
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**





"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 lambing 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

Quality grass swards are important to our dairy business both for silage and for grazing. Mingary has proven to be an ideal mixture for us with its palatability and consistency of yield. Its blend of ryegrass varieties and clover provides choice grazing for our dairy herd across the season. The addition of timothy is also beneficial to some of our more challenging ground.

**Anthony O Shea, Bantry pictured in the foreground of Bantry Bay with Dan Lynch, Barrett Agri Area Manager.**

VARIETY	TYPE	%
Galgorm Tollymore (T)	Intermediate PRG	20.1
AberBann Ballyvoy Callan Gracehill (T)	Late PRG	67.4
Baronaise	Timothy	6.5
Permanent White Clover Blend		6.0

- Our most popular long term mixture

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- Inclusion of high tillering diploids leads to dense grazing swards

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

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

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





“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.**





# HERBAL LEY

## MULTISPECIES MIXTURE

'Watson Seeds Multi Species Mixture is helping us to farm with significantly less artificial fertiliser and has enhanced our dairy herd performance . Farmacyard slurry has been the only source of fertiliser used on our multi species swards this past season. Furthermore they contribute as much grass as conventional swards and our herd produces 2 litres extra milk yield while grazing multi species compared to our existing swards'

**Johnny O Hanlon, Golden Hill Farm, Co. Kerry pictured with Nicholas Leen, Watson Seeds agent and Pat Lambert Watson Seeds.**

**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	%
Barclamp	Hybrid Ryegrass	10.0
Banbridge (T) Tollymore (T)	Intermediate PRG	40.0
Ballintoy (T) Gracehill (T)	Late PRG	40.0
Permanent White Clover Blend		10.0

**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**



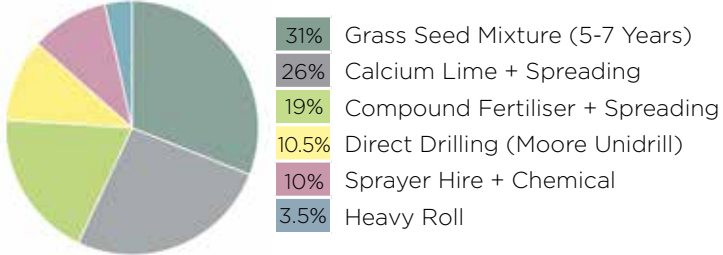


# COST OF ESTABLISHMENT

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.

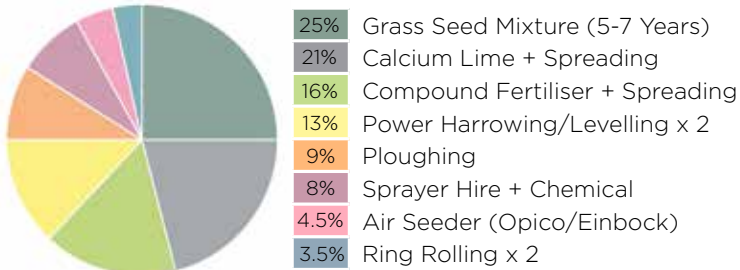
## DIRECT DRILLING

Total cost - €355 per acre / €877 per ha



## PLOUGHING

Total cost - €435 per acre / €1,075 per ha



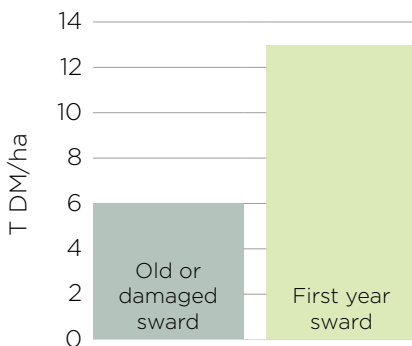


# VALUE OF RESEEDING

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.

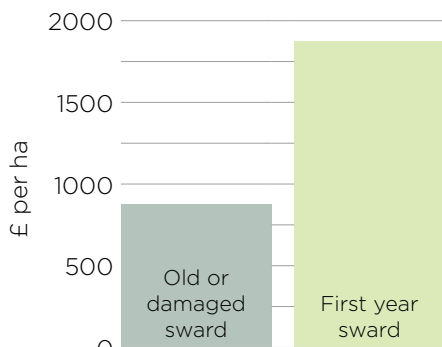
## YIELD

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.



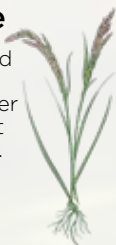
### SS Meadow Grass

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.



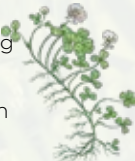
## Meadow Fescue

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.



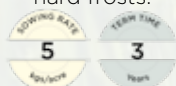
## White Clover

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.





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