



Sowing future seeds.

**Ben Wixey**

National Agricultural Sales Manager  
T: 07990 578550

**Paul Morgan**

Southern England and South Wales  
T: 07713 878069

**Adam Simper**

Midlands England and North Wales  
T: 07880 469645

**William Fleming**

Scotland and North East England  
T: 07971 640428

**Helen Mathieu**

Central, Eastern and North West  
England and North Wales  
T: 07866 456056

**Germinal GB Limited**

Camp Road  
Witham St. Hughes  
Lincoln LN6 9QJ

T: +44 (0) 1522 868 714  
[lincoln@germinal.co.uk](mailto:lincoln@germinal.co.uk)



Germinal GB is committed to an environmentally sustainable future. This brochure is made from entirely bio-degradable products.

**Please recycle this brochure.**

# SeedMark 2022

Award winning  
seed options

# Contents

Introduction	01 – 02
Mixture selector	03
Quality cutting and grazing mixtures	04 – 10
Multi Species leys	11
Equestrian and pasture renovation	12 – 13
Organic mixtures	14 – 15
Anaerobic digestion	16 – 17
Puna II perennial chicory	18
Tonic plantain	19
Brassica fodder crops	20 – 21
Reseeding advice	22 – 27
Overseeding clover	28

## SeedMark

SeedMark is the long established, guaranteed quality range of mixtures from Germinal, formulated from our years of expertise as suppliers of market-leading forage products to the livestock sector.

# Forage innovation fit for the future

Good grassland management is a powerful tool in efforts to increase carbon capture and protect soil carbon storage. But grass must also continue to produce food efficiently and this needs high-performing, 'climate smart' varieties.

At Germinal, we are always looking to the future. Committed to research and development, we are driving innovation in seed breeding and working to enhance agricultural productivity in the face of today's climate challenges. Our research and innovation team, Germinal Horizon, is developing varieties which underpin sustainable agriculture, currently focusing on capturing the benefits of legumes, such as clover.

Through its nitrogen-fixing abilities, clover has potential to reduce the need for artificial N fertiliser. Germinal Horizon scientists are developing new strains of red clover with added resilience to withstand grazing, while retaining its high-quality protein levels, reducing reliance on bought-in supplements. Similarly, hybrid white clovers are being bred with greater drought tolerance.

Our expertise in seed development means we're well placed to help farmers improve productivity and profitability, while addressing environmental impact.

SeedMark 2022 details carefully selected mixtures designed specifically by our grass and forage seed specialists to produce high-quality performance leys, for cutting or grazing over the short, medium and long term.

**Ben Wixey**  
National Agricultural  
Sales Manager  
Germinal GB



# Mixture selector

	SHORT TERM	MEDIUM TERM	LONG TERM	ORGANIC
CUTTING	Sprint	Relay Multi Species Cutting Ley		Bio Cutting Bio Red 5
DUAL PURPOSE	Pit Filler	Dual Purpose  Haylage (Equestrian)	Greengold  Permanent Pasture  Horse Paddock (Equestrian)	Bio Dual
GRAZING			Permanent Pasture  Clover Ley  Multi Species Grazing Ley	Bio Pasture



## SHORT TERM

## Sprint

A highly productive ley of Italian ryegrasses lasting for two years, suitable for silage, haylage or hay.

Fig 01.

**Sprint:**

Kg / acre	Variety	Type	Heading Date
4.50	Kigezi 1	Italian Ryegrass (T)	20 May
4.50	Fox	Italian Ryegrass	20 May
4.00	Muriello	Italian Ryegrass	20 May
<b>13.00</b>			

T = Tetraploid

Heading date average for Sprint is 20 May for central Britain. When cutting for silage, aim to cut 5-10 days before average heading date for optimum quality.



AVAILABLE  
WITH  
RED CLOVER

## Pit Filler

A high yielding silage mixture, which will last three to four years, with the potential for excellent aftermath grazing.

Fig 02.

**Pit Filler:**

Kg / acre	Variety	Type	Heading Date
6.00	AberEve HSG	Hybrid Ryegrass (T)	21 May
4.00	AberWolf HSG	Perennial Ryegrass	25 May
3.00	AstonEnergy	Perennial Ryegrass (T)	01 Jun
<b>13.00</b>			

T = Tetraploid

Heading date average for Pit Filler is 25 May for central Britain. When cutting for silage, aim to cut 5-10 days before average heading date for optimum quality.

**MEDIUM TERM**



**AVAILABLE  
WITHOUT  
CLOVER**

# Relay

Medium term (4 – 5 years) multi-cut mixture containing high yielding hybrid AberEve High Sugar Grass, giving excellent spring growth and quality aftermath grazing potential.

**Relay now includes the high ranking Aber HSG varieties AberWolf and AberEve, and becomes an ideal replacement mixture for Germinal's Cut & Graze dual purpose mixture.**

Fig 03.

**Relay:**

Kg / acre	Variety	Type	Heading Date
4.00	AberEve HSG	Hybrid Ryegrass (T)	21 May
3.00	AberWolf HSG	Perennial Ryegrass	28 May
3.00	Calao	Perennial Ryegrass (T)	03 Jun
2.00	Delika	Perennial Ryegrass	05 Jun
1.00	AberDairy	White Clover Blend	
<b>13.00</b>			

T = Tetraploid

Heading date average for Relay is 28 May for central Britain. When cutting for silage, aim to cut 5-10 days before average heading date for optimum quality.

**White clover blends**

- 33% AberDai
- 32% AberHerald
- 45% AberSwan

AberDairy:	AberPasture:
45% AberSwan	35% AberSwan
33% AberDai	20% AberDai
32% AberHerald	15% AberHerald
	15% AberPearl
	10% AberLasting
	5% AberAce

## MEDIUM TERM

## Dual Purpose

This is a five year ley, with a balanced blend of intermediate and late heading varieties, making the ideal flexible long term cutting and grazing ley. Suitable for all livestock systems with excellent spring and autumn grazing.



AVAILABLE  
WITHOUT  
CLOVER



AVAILABLE  
WITH  
PUNA II

Fig 04.

**Dual Purpose:**

Kg / acre	Variety	Type	Heading Date
3.00	AberWolf HSG	Perennial Ryegrass	28 May
2.00	AstonEnergy	Perennial Ryegrass (T)	01 Jun
4.00	AberPlentiful HSG	Perennial Ryegrass (T)	03 Jun
3.00	Delika	Perennial Ryegrass	05 Jun
1.00	AberDairy	White Clover Blend	
<b>13.00</b>			

T = Tetraploid

Heading date average for Dual Purpose is 01 June for central Britain. When cutting for silage, aim to cut 5 -10 days before average heading date for optimum quality.



## LONG TERM



AVAILABLE  
WITHOUT  
CLOVER



AVAILABLE  
WITH  
PUNA II

## Greengold

A long term ley suitable for cutting and grazing within all livestock systems. Timothy is included to provide improved spring growth and greater persistency for winter grazing or other harsh conditions. Ideal for silage or hay, with dense and palatable aftermath grazing.

**Greengold now includes the high ranking Aber HSG variety AberChoice and becomes an ideal replacement mixture for Germinal's Milk Maker dual purpose mixture.**

Fig 05.

### Greengold:

Kg / acre	Variety	Type	Heading Date
4.00	AberWolf HSG	Perennial Ryegrass	28 May
4.00	AberPlentiful HSG	Perennial Ryegrass (T)	03 Jun
4.00	Delika	Perennial Ryegrass	05 Jun
1.00	Comer	Timothy	10 Jun
1.00	AberDairy	White Clover Blend	
14.00			

T = Tetraploid

Heading date average for Greengold is 02 June for central Britain. When cutting for silage, aim to cut 5-10 days before average heading date for optimum quality.







AVAILABLE  
WITHOUT  
CLOVER



AVAILABLE  
WITH  
PUNA II

Fig 06.

**Permanent Pasture:**

## LONG TERM

# Permanent Pasture

A long term persistent ley with a dense sward, suitable for all livestock systems, with excellent spring and autumn growth for year-round performance.

Kg / acre	Variety	Type	Heading Date
5.00	Nifty	Perennial Ryegrass	24 May
4.00	AberWolf HSG	Perennial Ryegrass	28 May
3.00	Delika	Perennial Ryegrass	05 Jun
1.00	Comer	Timothy	07 Jun
1.00	AberPasture	White Clover Blend	
<b>14.00</b>			



AVAILABLE  
WITH  
PUNA II

## Clover Ley

A long term grazing mixture with extra clover for increased intake potential and nitrogen-fixing. Use where additional clover is required or clover establishment is challenged. Persistent under all management systems.

Fig 07.

**Clover Ley:**

Kg / acre	Variety	Type	Heading Date
3.00	AberDart HSG	Perennial Ryegrass	25 May
3.00	AstonEnergy	Perennial Ryegrass (T)	01 Jun
2.00	Calao	Perennial Ryegrass (T)	03 Jun
4.00	Delika	Perennial Ryegrass	05 Jun
1.00	AberPasture	White Clover Blend	
1.00	AberDairy	White Clover Blend	
<b>14.00</b>			

T = Tetraploid

Heading date average for Clover Ley is 31 May for central Britain. When cutting for silage, aim to cut 5-10 days before average heading date for optimum quality.

## MULTI SPECIES LEYS

## Grazing Ley

Multi Species leys perform by combining plant types with complementary characteristics, such as nitrogen-fixing clovers and nitrogen-lifting grasses. There are also advantages gained from swards with varying leaf and root architectures to maximise the use of light, moisture and nutrients above and below ground.



HERB  
OPTION  
AVAILABLE



AVAILABLE  
WITHOUT  
RED CLOVER

Fig 08.

### Multi Species Grazing Ley:

Kg / acre	Variety	Type	Heading Date
3.00	AberClyde HSG	Perennial Ryegrass (T)	25 May
3.00	AberZeus HSG	Perennial Ryegrass	27 May
3.00	AberGreen HSG	Perennial Ryegrass	30 May
1.00	Comer	Timothy	08 Jun
0.75	Tonic	Plantain	
0.50	Puna II	Chicory	
1.00	AberPasture	Clover Blend	
1.50	AberClaret	Red Clover	
13.75			

T = Tetraploid



HERB  
OPTION  
AVAILABLE

Fig 09.

### Multi Species Cutting Ley:

## Cutting Ley

Kg / acre	Variety	Type	Heading Date
3.00	AberClyde HSG	Perennial Ryegrass (T)	25 May
3.00	AberZeus HSG	Perennial Ryegrass	27 May
3.00	AberGreen HSG	Perennial Ryegrass	30 May
1.00	Comer	Timothy	08 Jun
0.75	Tonic	Plantain	
1.00	AberDairy	Clover Blend	
1.50	AberClaret	Red Clover	
0.75	Cavroux	Crimson Clover	
4.00	Vetch	Vetch	
1.00	FIXatioN	Clover	
19.00			

T = Tetraploid

## EQUESTRIAN

## Haylage

A high yielding, extremely palatable, easy-to-dry haylage mixture with excellent aftermath grazing potential.

Fig 10.

### Haylage:

Kg / acre	Variety	Type	Heading Date
4.50	Fox	Italian Ryegrass	20 May
4.50	AberEve HSG	Hybrid Ryegrass (T)	21 May
3.00	AberPlentiful HSG	Perennial Ryegrass (T)	05 Jun
<b>12.00</b>			

T = Tetraploid

Heading date average for Haylage is 24 May for central Britain.

## Horse Paddock

A very resistant mixture with good establishment, ground cover and persistency, specifically designed for horses and ponies. It is also suitable for hay production.

Fig 11.

### Horse Paddock:

Kg / acre	Variety	Type	Heading Date
5.00	Nifty	Perennial Ryegrass	24 May
2.00	AstonEnergy	Perennial Ryegrass (T)	01 Jun
2.00	Comer	Timothy	07 Jun
1.00	Laura	Meadow Fescue	
3.00	Maxima	Red Fescue	
<b>13.00</b>			

T = Tetraploid

## PASTURE RENOVATION



AVAILABLE  
WITHOUT  
CLOVER

## Renovation

Specialist mixture for overseeding into worn out swards, to boost cutting and grazing performance.

Fig 12.

### Renovation :

Kg / acre	Variety	Type	Heading Date
3.00	AberWolf HSG	Perennial Ryegrass	28 May
3.00	AstonEnergy	Perennial Ryegrass (T)	01 Jun
3.00	Calao	Perennial Ryegrass (T)	03 Jun
1.00	AberHerald	White Clover	
<b>10.00</b>			

T = Tetraploid

Heading date for Renovation is 30 May for central Britain.



## ORGANIC MIXTURES

## Bio Cutting

Fig 13.

**Bio Cutting:**

Kg / acre	Variety	Type	Heading Date
3.50	AberEcho HSG Organic	Hybrid Ryegrass (T)	16 May
3.50	AberClyde HSG Organic	Perennial Ryegrass (T)	25 May
2.80	AberDart HSG Organic	Perennial Ryegrass	25 May
2.00	AberSpey HSG	Perennial Ryegrass (T)	29 May
1.20	AberGreen HSG	Perennial Ryegrass	30 May
1.00	Aran	White Clover	
<b>14.00</b>			

T = Tetraploid

**Key benefits in summary**

- High cutting yields
- Large leaved, high yielding white clover
- Persists for three to five years
- Three cuts per year

## Bio Dual

Fig 14.

**Bio Dual:**

Kg / acre	Variety	Type	Heading Date
2.00	AberDart HSG Organic	Perennial Ryegrass	25 May
2.00	AberWolf HSG Organic	Perennial Ryegrass	28 May
3.00	AberClyde HSG Organic	Perennial Ryegrass (T)	25 May
2.80	AberChoice HSG Organic	Perennial Ryegrass	10 Jun
3.20	AberGain HSG	Perennial Ryegrass (T)	04 Jun
1.00	AberPasture	White Clover Blend	
<b>14.00</b>			

T = Tetraploid

**Key benefits in summary**

- One or two cuts followed by grazing
- Three to five year ley
- High D-value
- Aber HSG varieties

## ORGANIC MIXTURES

## Bio Pasture

Fig 15.

**Bio Pasture:**

Kg / acre	Variety	Type	Heading Date
3.00	AberDart HSG Organic	Perennial Ryegrass	25 May
2.90	AberClyde HSG Organic	Perennial Ryegrass (T)	25 May
0.80	AberAvon HSG	Perennial Ryegrass	03 Jun
3.90	AberChoice HSG Organic	Perennial Ryegrass	10 Jun
1.60	AberLee HSG	Perennial Ryegrass	07 Jun
0.80	AberGain HSG	Perennial Ryegrass (T)	04 Jun
1.00	AberPasture	White Clover Blend	
<b>14.00</b>			

T = Tetraploid

**Key benefits in summary**

- Seven years plus
- Suitable for grazing by cattle and sheep
- Aber HSG content
- Small and medium leaved white clover

## Bio Red 5

Fig 16.

**Bio Red 5:**

Kg / acre	Variety	Type	Heading Date
3.00	AberEcho HSG Organic	Hybrid Ryegrass (T)	16 May
3.00	AberClyde HSG Organic	Perennial Ryegrass (T)	25 May
2.40	AberDart HSG Organic	Perennial Ryegrass	25 May
0.60	AberSpey HSG	Perennial Ryegrass (T)	29 May
2.00	AberClaret	Red Clover	
1.00	Avisto	Red Clover	
<b>12.00</b>			

T = Tetraploid

**Key benefits in summary**

- A true five year ley for high protein silage
- Grasses and clovers chosen to perform together and last the full term

## Grass as a feedstock for anaerobic digestion

Anaerobic digestion (AD) is a growth area in renewable energy with increasing numbers of farm businesses involved with their own plant or by growing feedstock.

The use of grass leys as a feedstock is attracting interest due to the range of advantages offered:

- Grass as a crop is relatively cheap and easy to grow in our climate and soil types
- It is cost effective compared to other biogas fuels
- Equipment and infrastructure to grow and handle this feedstock is already in place
- Grass can be used fresh (offering the highest rate of gas production) and would be cut and carried on a rotational basis; it can also be stored and used as silage
- Medium and long term grass leys offer a more environmentally sustainable option than crops requiring annual cultivations
- Grass leys allow more opportunity to spread the waste products from the digesters, whether that is liquid or solid, without the need to plough back under
- Blackgrass control, using the rotational aspects and cutting regime to reduce seed banks

### **Aber High Sugar Grasses for AD**

As with the supply of feed for livestock, where well managed Aber HSG leys are the cheapest source of nutrition for meat and milk production, Aber HSG offers great potential for biogas production.

Studies carried out at Germinal Horizon show Aber HSG varieties perform well compared to general grassland mixtures. All the Aber HSG varieties out-performed mixed grassland with the conclusion that higher water-soluble carbohydrate (sugar) content in grass has a positive effect on both the yield and rate at which biogas is produced.

To help answer outstanding questions, Germinal Horizon is comparing Aber HSG varieties with alternative feedstocks that have a range of D-values and varying harvest dates.

Aber HSG varieties bred for higher water-soluble carbohydrate (sugar) content, and rank high for D-value, offer the ideal combination of characteristics for an AD feedstock, whether ensiled or as a fresh crop.

**Aber HSG mixtures for AD**

Fig 17.

**AD Short term:**

Kg / acre	Variety	Type	Heading Date
5.00	AberEve HSG	Hybrid Ryegrass (T)	21 May
5.00	AberNiche HSG	Festulolium	22 May
4.00	AberClyde HSG	Perennial Ryegrass (T)	25 May
<b>14.00</b>			

T = Tetraploid

Fig 18.

**AD Medium term:**

Kg / acre	Variety	Type	Heading Date
6.00	AberEve HSG	Hybrid Ryegrass (T)	21 May
8.00	AberWolf HSG	Perennial Ryegrass	28 May
<b>14.00</b>			

T = Tetraploid

Fig 19.

**AD Long term:**

Kg / acre	Variety	Type	Heading Date
5.00	AberWolf HSG	Perennial Ryegrass	28 May
4.00	AberGreen HSG	Perennial Ryegrass	30 May
5.00	AberBite HSG	Perennial Ryegrass (T)	05 Jun
<b>14.00</b>			

T = Tetraploid

## Puna II perennial chicory

### The leading perennial chicory for UK farmers

Puna II is the leading perennial chicory variety, selected through a long-term breeding programme in New Zealand for its nutritive value, productivity, palatability and persistency.

It is a broad-leaved perennial forage crop that can be grown in the UK as a pure stand, or as a key part of mixed swards with clover, or grass and clover, for medium to long-term rotational grazing (2 - 5 year persistency).

Perennial chicory should not be confused with short-lived common chicory previously grown unsuccessfully. Selective breeding for Puna II has produced tolerance to the fungal disease Sclerotinia, which causes plant death, and an erect growth habit to improve compatibility with ryegrass.

### Key benefits of Puna II

- Outstanding animal performance (e.g. lamb growth rates of 300 - 400g/day)
- Yields up to 10tDM/ha in a season; crude protein up to 25%; D-value 70 - 80
- High mineral content, including zinc, potassium and copper
- Good tolerance to drought, acidic soils and major pests
- Rapid regrowth after grazing
- Reduces the effect of internal parasites
- Provides high quality feed through the summer
- Does not cause bloat

## Tonic plantain

Tonic plantain is a broad-leaved perennial forage herb that is an ideal companion in mixed species swards, with Aber red and white clovers and Aber High Sugar Grasses.

It is a coarse-rooted plant well adapted to a range of soil types. With similar total annual yields to Puna II perennial chicory, it has slightly better spring and autumn growth.

Tonic plantain is highly productive and provides high quality feed that can boost liveweight gain in livestock. It is ideally suited to intensive or rotational grazing systems, with rapid regrowth post-grazing in dry summers.

### **Key benefits of Tonic plantain**

- More milk or meat production
- Increased daily liveweight gain
- Heavier weights at weaning
- High dry matter production from early spring to late autumn
- Reduces the effects of internal parasites
- High in minerals, especially copper and selenium
- Very palatable



## Cost-saving fodder crops

Brassicas include a wide variety of fodder crops that offer dairy, beef and sheep farmers in the UK valuable alternative sources of home produced feed.

Leafy crops, such as kale, and roots including stubble turnips and swedes, have had a traditional role on livestock farms, but there are now more modern varieties and innovative systems of utilisation that offer fresh dimensions. Hybrid brassicas provide a good example, combining the fast growth characteristics of rape with the winter tolerance of kale.

With more versatile forage crops in the armoury, the options to fill summer grazing gaps, extend autumn grazing or support outwintering systems have never been greater.

### **Summary of benefits of brassica fodder crops**

#### **Feed cost savings**

- Economic solution to summer grazing deficiencies
- Reduce the need for conserved winter forage
- Limit reliance on bought-in concentrates

#### **Rotational benefits**

- Pioneer crops for previously uncultivated areas
- Valuable break before pasture renewal
- Good break crop in arable grazing rotations

#### **Overall enterprise profitability**

- Extended grazing season
- Increase output per hectare
- Reduce labour, machinery and housing costs

#### **Health, welfare and environment**

- Avoid housing-related health problems by outwintering
- Reduce fuel required for silage and bought-in feeds
- Limit the risk of forage shortages due to drought

# Forage brassica options

## **Triumph swede**

- High energy winter grazing for cattle and sheep

## **Maris Kestrel kale**

- Leading kale variety renowned for high digestibility and long utilisation period
- Ideal for outwintering

## **Swift hybrid brassica**

- High yielding forage crop with regrowth potential
- Summer, autumn or outwintered grazing

## **Redstart hybrid brassica**

- Rapidly establishing forage crop with regrowth potential
- Ideal where rapid growth is the priority, to provide summer, autumn or winter grazing

## **Stego forage rape**

- High yielding with high leaf-to-stem ratio
- Excellent disease resistance, including mildew

## **Vollenda stubble turnip**

- Easy establishment, high yielding fodder crop with good resistance to bolting
- Summer, autumn or outwintered grazing

## **Appin grazing turnip**

- Fast growing leafy grazing turnip
- Autumn/winter grazing with regrowth potential

## **Brassica mixtures**

- Allow fodder crops to be tailored to specific circumstances
- Higher intakes and greater production per hectare

## Are your leys past their best?

However well managed, grass leys will decline with time, and after seven or eight years around half the herbage will be less-productive weed grasses.

Some leys may deteriorate more quickly, with common causes including:

- Poor establishment at the outset
- Inadequate soil fertility
- Pest and disease attack
- Poor mixture or variety selection
- Excessive use of slurry
- Poor drainage
- Poaching and/or soil compaction
- Under stocking or poor utilisation

## Your pasture health checklist

- Increased presence of docks, thistles, nettles, chickweed or other weeds

- Unproductive grasses such as bents, meadow grasses, red fescue and Yorkshire fog

- Drop offs in silage production or stock carrying capacity

- Slow regrowths after cutting or grazing

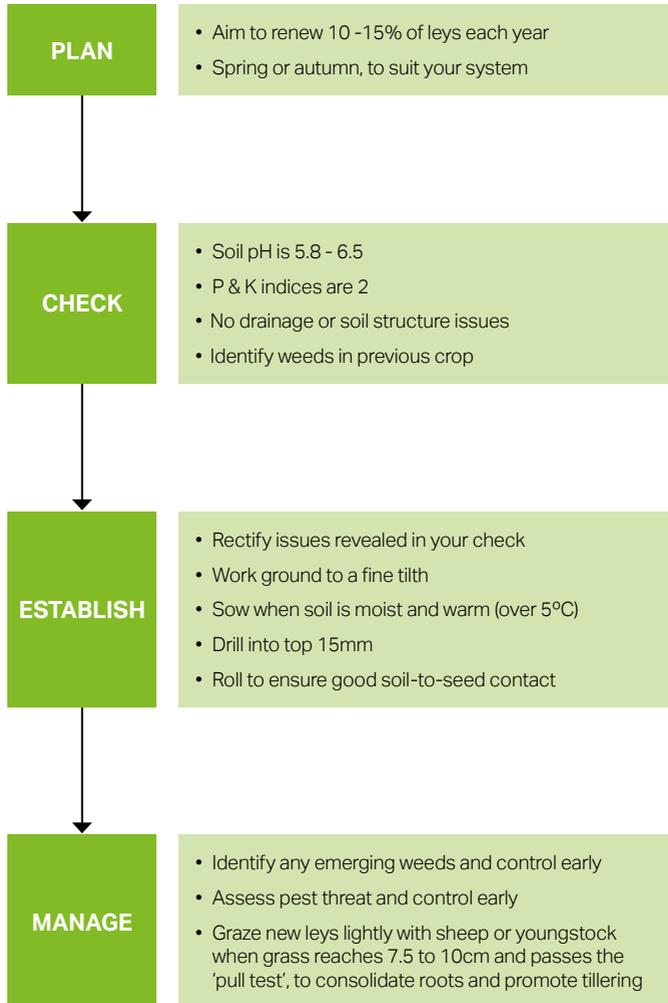
- Reduced response to fertiliser

- Rejection or uneven grazing

- Intermittent growth or shortening of growing season

**If you have ticked any of the above, your ley is certainly coming to the end of its productive life and will benefit from some form of renovation or even replacement.**

# Successful establishment



# Reseeding grassland

Using unique hybrid brassicas as a beneficial break

## Full reseed or sward renovation?

Whilst short-term productivity can be improved cost effectively through a variety of over-seeding methods, there is no doubt that a full cultivation reseed is the best method of establishing a new ley.

Plough up an old ley and carry out a full reseed when any of the following are evident:

- Sown species make up less than 50% of the sward
- The cost of controlling weeds, pests and/or diseases is prohibitive
- Poaching or compaction levels have become unmanageable
- Rotational policy dictates a change of crop

## Why use a break crop?

In the context of pasture renewal, a break crop offers the following advantages:

- Additional forage dry matter production per hectare (from the break crop)
- Disruption of grass-specific pest and disease cycles
- Elimination of pasture-based animal parasites
- Enhanced weed control opportunities
- Extended opportunities to address soil nutrients and/or soil condition

## The role of unique hybrid brassicas in grassland reseed

The unique rape/kale hybrid brassica varieties Swift and Redstart have specific and unrivalled characteristics that make them key components of the SwiftStart reseed system:

- Short seed-to-grazing gap of 8-12 weeks
- Multiple grazings
- Outstanding yields of highly palatable forage with exceptional D-value
- Wide sowing window
- Winter hardy

**The SwiftStart system can be used for spring or autumn reseed.**

# Reseeding grassland

## Using minimum tillage techniques

Many modern drills are designed to sow grass, clover or brassica seeds without the need for ploughing. These include machines that create slots and place the seed, and others that disturb the soil surface and broadcast or dribble the seed. In all cases, rolling is important to create the required soil-to-seed contact and a fine and firm seedbed.

In most cases, the preceding crop (especially when grass follows grass) will need to be sprayed off (e.g. with glyphosate), and it is important to assess the potential impact of the sub-surface thatch or mat by first digging a number of holes across the field.

State of sub-surface	Recommended reseeding actions
Heavy mat	Wait for all plants to die back before proceeding with one of two options: <ul style="list-style-type: none"> <li>- Use a shallow cultivation and roll technique to increase oxygen levels and drill in the same season</li> <li>- Spray off in autumn, apply lime over winter, and drill in early spring (a second low rate spray may be required)</li> </ul>
Marginal mat	<ul style="list-style-type: none"> <li>- Apply lime to help neutralise the effects of acid decomposition and allow sufficient time for the old sward to die back</li> </ul>
Open ley	<ul style="list-style-type: none"> <li>- Typically the best situation for direct drilling as root mat is unlikely to hamper seedlings as it breaks down</li> </ul>

### Guidelines to reseeding using minimum tillage

#### Optimum timing: April (as soon as you have a surplus of grass in your rotation) or mid-August to mid-September

- Soil test in good time
- Check subsurface mat / thatch and compaction level – sub soil if necessary
- Tight graze or cut
- Harrow any dung pats
- Leave 5 - 7 days
- Spray off (e.g. with glyphosate)
- Apply lime at 2.5t/ha
- Apply P & K fertiliser
- Direct drill grass seed 5 days after spraying at full reseed rate
- Apply slug pellets
- Control weeds (e.g. chickweed) 4 - 6 weeks after sowing
- Graze as soon as plants are well established, approximately 7.5 to 10cm tall and able to withstand the 'pull test'

# Renovating (overseeding) grassland

## Without spraying off the established ley

Sward rejuvenation can be a good way to improve the yield and quality of grassland whilst minimising any time out of production, cost effectively extending the life of a ley by 2 – 3 years.

It should be used selectively on leys past their best but still with at least 50% of the sown species present, or in situations when ground is difficult to fully reseed due to slopes or stones, for example.

The uplift in performance will depend on the state of the old sward, but a 10% increase in dry matter yield and an improvement in the D-value of around 0.5MJ/kg ME should ensure a return on investment in the first year.

### **Guidelines to renovating established grassland**

#### **Optimum timing: late spring or early summer through to autumn**

- Soil test in good time
- Check subsurface mat/thatch and compaction level – sub soil if necessary (in situations where heavy levels of mat/thatch are present overseeding is less likely to be successful)
- Tight graze or cut
- Harrow any dung pats
- Apply lime at 2.5t/ha
- Apply P & K fertiliser (do not apply nitrogen)
- Direct drill grass seed immediately at the rate of 10kg/acre
- Apply slug pellets if necessary
- Control weeds (e.g. chickweed) 4 - 6 weeks after sowing
- Graze as soon as plants are well established, approximately 7.5 to 10cm tall and able to withstand the 'pull test'

## Overseeding clover

- Spray out broad-leaved weeds before overseeding clover
- Check soil pH (target 6 – 6.5); check P and K (target index 2)
- Ensure there is an open sward, for good soil-to-seed contact
- Overseed in May / June, while soils are moist
- Use a blend of two or three Recommended List varieties, selected for the purpose
- Apply clover seed at 5kg/Ha along with a compound fertiliser (e.g. 0:20:30 NPK) at around 60kg/ha
- Broadcast the clover seed and fertiliser, mixing carefully in the field to avoid segregation in the hopper
- Apply slurry after overseeding but avoid applying nitrogen fertiliser for the remainder of the year
- Graze hard (to residuals of 4cm) to prevent covers becoming too high and smothering the clover seedlings
- Continue tight grazing up to the point of closing up for winter. Graze tightly again in the spring to encourage clover establishment. Avoid overgrazing in the case of red clover as this can damage the crown and kill the plants



## Find out more

Should you require any more information or to request a selection of free brochures and technical guides, please visit our website:

[germinal.co.uk](http://germinal.co.uk)



[@GerminalUKAgri](https://twitter.com/GerminalUKAgri)

Aber® is a registered trademark of Germinal Holdings Ltd.

The mixtures in this brochure are correct at the time of going to press and the supplies of the varieties used in the mixtures should be adequate for this season. If, however, shortages occur, they will be replaced by the next best variety on the Recommended List.