

# **COVER CROPS**

## **2025/26**





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# WELCOME

UK agriculture continues to play a pivotal role in feeding the population while supporting biodiversity, maintaining healthy soils and ensuring water quality. These outcomes are increasingly supported by implementing innovative practices such as cover cropping, which has grown in popularity in recent years.

Typically established after harvest, cover crops are non-cash crops grown to protect and improve soil between regular crop production. The right mixture can help reduce erosion and leaching, increase organic matter and assist in mitigating pest and disease outbreaks.

More recently, cover cropping has become an important farming practice as growers look to operate more sustainably.

At McCreath Simpson & Prentice, our range of cover crop mixtures is carefully formulated to meet the needs of mixed, arable and livestock systems. Combining different species into a mixture can extend the utilisation period, help to attract and hold specific types of game and provide feed and cover where both are required. Bespoke mixtures can also be tailored to suit individual farm requirements.

It goes without saying that if any of our team can help you, please don't hesitate to get in touch.

**'WE TAKE PRIDE  
IN HELPING  
GROWERS  
ACHIEVE THE  
MOST FROM THEIR  
COVER CROPS  
BY COMBINING  
QUALITY  
SEED, VARIETY  
SELECTION AND  
SPECIALIST GRASS  
KNOWLEDGE.'**



**Alasdair Ralston**  
Small Seeds Manager

## BENEFITS OF COVER CROPS

Farmers sow cover crops for various reasons, as they provide numerous benefits to both the soil and the overall farming ecosystem. Here are some key reasons why farmers choose to sow cover crops:

### Improved soil structure

The deep, vigorous roots of cover crops improve soil structure by creating bio pores that loosen dense soils, encourage natural soil aggregation and promote better aeration, water infiltration and nutrient flow – leading to improved overall soil tilth.

### Increased organic matter

Cover crops increase soil organic matter by protecting the soil surface from erosion, adding biomass to the soil and creating a habitat for microorganisms like fungi that contribute to the soil biology.

### Enhanced drainage

Deep and dense root systems create natural channels that improve water infiltration and slow surface runoff, helping water soak into the soil where it's needed most.

### Reduced blackgrass & grass weeds

Cover crops suppress blackgrass and other grass weeds by outcompeting them for light, water and nutrients, while also improving soil structure and recycling nutrients.

### Increased soil biodiversity

Cover crops contribute to soil biodiversity by providing habitat and food sources for beneficial insects and microorganisms such as worms. This can enhance the natural balance within the agricultural ecosystem.

### Increased worm activity

Conditions are created that earthworms thrive under by providing continuous organic matter, minimising soil disturbance due to reduced tillage and protecting the soil from extreme weather.

### Nematode control

Certain cover crop species have soil-fumigating properties that reduce soil-borne pests and nematode pressure. Selecting non-host cover crop species can reduce soil-borne pathogen carryover.

### Carbon sequestration

Carbon dioxide from the atmosphere is captured by cover crops and stored in the soil organic matter, which helps to build stronger soil and supports wider sustainability goals.

### Improved fertiliser efficiency

Integrating cover crops into arable rotations can improve nitrogen uptake, reduce fertiliser requirements and minimise post-harvest nitrogen surplus, all while achieving the desired crop yields.

### Reduced erosion

Cover crops help prevent erosion by stabilising the soil with their roots and shielding the surface from wind and water, making them especially valuable on sloping or erosion prone land.

### Reduced leaching and improved nitrogen availability

Nitrogen fixing cover crop species capture and retain nitrogen during the winter, preventing it from leaching. This nitrogen is then released back into the soil for use by the following crop.

### Grazing potential

Some forage crops can also be used as forage for livestock, providing an additional income source for farmers.





# OUR MIXTURES

## MSP PROTECTOR (34-45KGS/HA)

70%	Forage Rye
30%	Vetch

**Suitable for all rotations on light / medium soil**

- Deep, soil penetrating roots that enhance soil structure and fertility
- Capable of fixing high nitrogen levels
- Inclusion of leguminous species
- Contributes good organic matter, specifically medium biomass



## MSP MULTI (30-40KGS/HA)

50%	Black Oats
20%	Vetch
10%	Oilseed Radish
10%	Stubble Turnip
10%	Forage Rape

**Designed to intercept the maximum amount of sunlight to enhance carbon sequestration and boost soil health**

- Multi-species mix for maximum diversity
- Ideal for a grazing option
- Efficient nutrient capture and fixation
- Varied root types to stimulate soil biology and improve soil structure
- Winter hardy





**MSP ECO (7-10KGS/HA)**

<b>80%</b>	<b>Brown Mustard</b>
<b>20%</b>	<b>Tillage Radish</b>

**Winter hardy economic cover crop suitable for all rotations**

- Biofumigation properties
- Fast establishing nutrient capture and fixation
- Improves soil structure and health
- Cost effective mixture that provides full season ground cover
- Produces medium biomass

**MSP CAPTURE (35-45KGS/HA)**

<b>60%</b>	<b>Forage Rye</b>
<b>10%</b>	<b>Black Oats</b>
<b>15%</b>	<b>Radish</b>
<b>5%</b>	<b>Brown Mustard</b>
<b>5%</b>	<b>Vetch</b>
<b>5%</b>	<b>Phacelia</b>

**Ideal for OSR-free or extended rotations on medium / heavy soils**

- Multi species mixture with robust, complementary root systems that penetrate compacted soil
- Varied root depths for full soil engagement and a structured soil profile
- Rapid establishment
- Reduces diffuse pollution and suppresses weed growth
- Produces substantial biomass





## VARIETIES USED IN OUR MIXTURES

### Black Oats

A rapid growing leafy cereal with strong early vigour and good weed suppression. Just 25kg/ha delivers the same soil conditioning as 125kg/ha of Tame Oats. Its roots release avenocins, which suppress blackgrass germination. For optimal results, sow in 15-20cm rows and be wary that it is not frost hardy.

### Brown Mustard

A fast-growing, winter hardy crop with biofumigation properties, sown from March to September. It can improve soil health by increasing organic matter and offers soil stabilisation by reducing erosion, leaching and water runoff. However, it is susceptible to Clubroot.

### Forage Rape

A fast-establishing brassica that is ready for grazing within 10-14 weeks of sowing in optimal conditions. Forage Rape produces a highly palatable, protein rich and high yielding crop for livestock grazing. It is tolerant of cooler conditions, offering reliable late-season growth, but it is not fully frost hardy. It is best sown from May to September for optimal yield and ideally strip grazed to minimise wastage.

### Forage Rye

A vigorous, winter hardy crop with rapid establishment, good tillering and a wide sowing window. It performs well when paired with Vetch and helps prevent soil erosion and leaching. Forage Rye is the most effective cover crop for capturing and retaining nitrogen and should always be drilled for optimal results.

### Oilseed Radish

A frost-resistant brassica that provides effective ground cover for weed suppression. With excellent biomass yields and deep rooting ability, it aids in improving soil structure. It is resistant to Clubroot and offers moderate resistance to beet cyst nematode (level 2).

### Phacelia

A prolific seeder, very fast to establish and a good weed suppressant. Phacelia produces a mass of sweet smelling flowers providing a good source of nectar, making it beneficial to a large variety of insects. Although not known as a deep-rooted species, its dense, shallow roots are very good at conditioning the top 3-4cm of soil. However, it is not winter hardy.

### Stubble Turnip

A winter hardy, fast-growing and high-protein cover crop valued by livestock farmers for finishing stock. Its low sowing rate and small seed size makes it a very economical way of feeding livestock. Stubble Turnips are good at scavenging residual nitrogen that might otherwise leach away.

### Tillage Radish

A fast-growing brassica known for its deep penetrating taproots, which help break through compacted soil. It produces high levels of biomass, improving soil structure and organic matter, and is an excellent nitrogen scavenger.

### Vetch

A winter hardy legume with excellent ground coverage and weed suppression properties. Due to its large seed size, Vetch is typically the latest establishing legume and requires a fine, firm seed bed.

## BIGGEST COVER CROP MISTAKES



### Expecting immediate results

Cover crops should be viewed as a long-term investment that gradually improves. While some short-term gains like grazing may be visible in year one, the biggest benefits such as nutrient cycling and soil structure build over multiple seasons.

### Insufficient attention to detail

Cover crops require the same attention to detail as cash crops. Species selection, establishment technique and clear objectives are important to achieve the most meaningful and tangible benefits of cover crops.

### Not terminating the crop at the appropriate time

While growth and protection of the soil associated with cover crops is key, too much growth can hinder the establishment of the following cash crop by depleting nutrients and soil moisture.

### Not considering herbicide residues

Prior herbicide use can impact the success of subsequent crops due to residue and, therefore, it is vitally important to pay attention to the herbicides used in cash crops and the potential for carryover to the cover crop.

### Planting too late

Where possible, it is best to drill cover crops immediately after a cash crop is harvested. Any delay in planting can contradict the benefits of cover crops. This is particularly relevant in Scotland and Northern England.

### Not monitoring for manganese deficiency

Crops such as spring barley on sandy soils and legumes often show high susceptibility to manganese deficiency. Consider manganese seed treatment to support early growth and reduce the risk of deficiency-related issues later in the growing season.



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