Making Cover Crops work for you A practical discussion on when and how to use them 16th November 2022

With thanks to Lord Willoughby de Broke from Ditchford Farm, near Shipston-on-Stour, Lewis Hall his Farm Manager and Peter Dews, his Agronomist from Agrovista.

Twelve members of the South Warwickshire Sustainable Farming Group (SWSFG) met for an informative and interactive discussion followed by a look at cover crops growing on Ditchford Farm land.

Why use cover crops?

There are many scenarios that cover crops can address and attendees were using them for a wide variety:

- Catch crop to retain nutrients
- Environmental schemes overwinter brassica (and other species) crop for grazing
- Improve organic matter and retain moisture in sandy soil. Also resulted in earlier tractor access to the land
- Soil biodiversity and biology encourages worms and microbes vital to crop growth
- Build soil fertility and fix nitrogen increasingly important with the rising cost of inputs
- Improve soil structure with deeper and wider rooting plants
- Decrease soil erosion
- Manage pests
- Manage weeds
- Reduce cultivations
- Clean the crop
- Green manure
- Reduce reliance on metal iron

Species selection for different scenarios

There are many options which were touched on, too many to go into here and selecting the right cover crop for the required scenario requires careful consideration. Peter provided a useful booklet for information on mixes and straights; talk to your agronomist or seed supplier for your particular situation; use your usual routes of information; talk to SWSFG members who are already using cover crops.

Establishment and management of cover crops

Remember, you are establishing a crop, so it needs looking after.

Obviously, species selected require different methods of managing, as well as managing differently for the job they have been selected to do.

Destruction of the crop is key. As well as timing this correctly within the rotation of your cash crops, it is of course weather dependent. This can mean that the timing is not always perfect and can introduce other problems.

Considerations

It may seem obvious, but:

- Avoid introducing another species that will become a weed
- Avoid species that could be a host for another pest e.g. black oats harbour aphids (use Cereals instead), slugs love Vetches and Clover. Legumes though can encourage Pea and

- Bean Weevils and also nematode survival in the soil so care needed. Choose species that fit in with the farm cropping rotation
- Early crop destruction, provided it has served its purpose, can be key in managing the 2 points above. Note if in SFI schemes the destruction date is the end of February or can be earlier if drilling early sown spring crops such as Spring Barley or Wheat
- Costs of growing and establishing the cover crop versus its efficacy
- If the Glyphosate ban comes into force, might have to look grazing if off or growing something that naturally dies off

Considerations of the SWSFG members:

- Having rape and oats in rotation doesn't leave many options for cover crops so look at legumes and phacelia
- Buckwheat has a place if you are not planning on grazing it as it can harm sheep's mouths (in non pigmented/white headed breads. Also note Buckwheat is not frost hardy

Using cover crops is a balance of utilising a crop that meets your management needs without introducing anything detrimental to your system and the following crop.

The cover crops in the field

Black oats and phacelia were direct drilled into the stubble 10/9 following Wheat and had been selected for a few reasons:

- To retain water and reduce run-off
- Build soil structure black oats have a slow initial root growth but are strong
- Allow black grass weed seed bank in the soil to germinate
- Mop up excess nutrients which could then be utilised by the following Sping Linseed crop

Due to the dry autumn conditions, it was slow to get going but is now making progress and Peter feels that it will have done its job by Christmas. Destruction timing is going to be important and will be done when practical and ideally 8 weeks before the Linseed is due to be planted. We could see that the black oats were growing strong roots and outcompeting the black grass which will be sprayed off and should kill it, and the phacelia was now establishing well and developing a strong root mass to mop up nutrients whilst improving soil structure. Linseed will be direct drilled into the land in the spring.



"Good to come together and learn from one another."

"Well attended, very informative."

"Thank you, that was really useful."



