Catch crops worth considering

Catch crops/cover crops deliver a feed bonus while preventing soil erosion and nutrient loss

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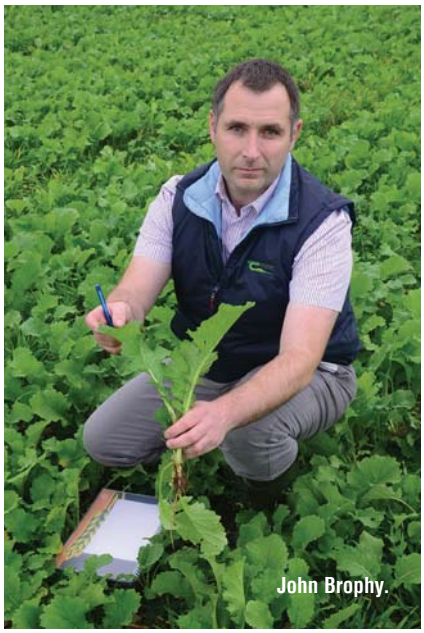

John Brophy.

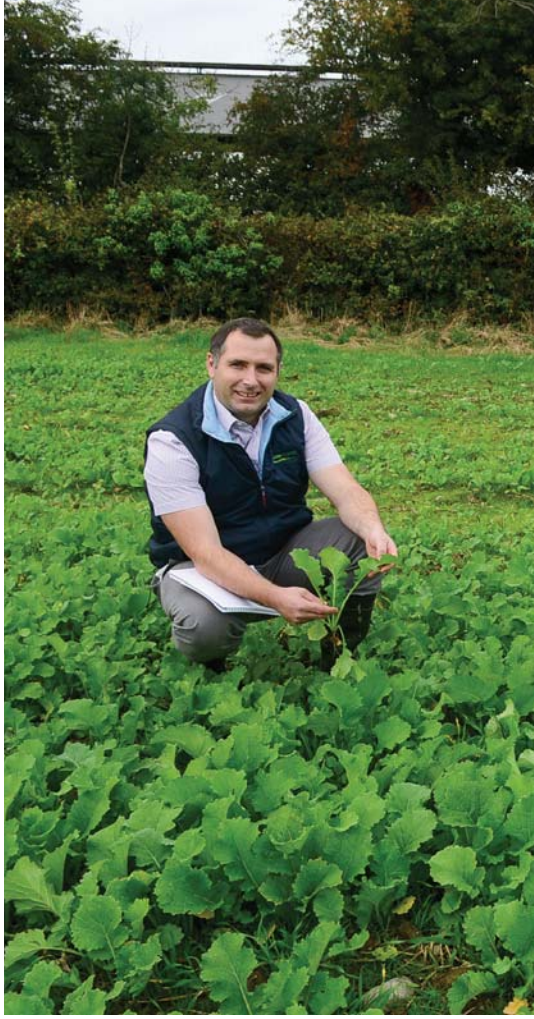
The old saying goes that "one day's growth in August is worth two in September." So, while GLAS sets 15 September as the deadline, earlier sowing of catch crops is needed for maximum benefit. Crops planted in August will trap more nutrients, establish deeper roots and generate more top growth than those sown later.

Provided that crops are established on time and grow well, a range of benefits can be achieved;

- Nutrients that might be lost through leaching over the winter are retained.
- Legume catch crop, such as peas, beans and clovers, will add nitrogen to the soil.
- Soil run-off or erosion is reduced.
- Soil structure and tilth improve, compaction is alleviated. This makes subsequent cultivations easier, saving money on fuel and time.
- Soil organic matter percentage increases and, in the long run, soil carbon does too.
- Earthworm activity is usually boosted.
- Suppressing and controlling weeds and problem grasses can be assisted by catch cropping.
- Catch crops act as green cover over the winter, or act as 'Greening Equivalence' within GLAS.
- If a good crop is established, it can be leased out for grazing or used to reduce feed costs with your own stock.
- Catch crops provide a habitat for wildlife, flowering crops can provide food for bees late into the season.
- There is a wide variety of crops that can be used – ideally two or more complementary species should be planted together. Where crops are grown for GLAS, there are guidelines that must be followed regarding seeding rates and crops, which are in the terms and conditions. Table 1 shows the claimed benefits of some of the available species.

Table 1: Benefits of different species.

Species	Benefits
Buckwheat	Nutrient trapping and increased availability of soil P
Forage Rape	Nutrient trapping, grazing, soil structure
Mustard	Nutrient trapping, soil structure
Leafy turnip	Nutrient trapping, grazing
Oats/Rye	Nutrient trapping, grazing
Tillage radish	Nutrient trapping, soil structure, compaction alleviation
Phacelia	Soil structure, compaction alleviation
Peas/Beans	Fix nitrogen
Crimson/ Berseem Clovers	Fix Nitrogen



One of the most important considerations when growing catch crops is how they can be incorporated into the farm rotation. There can be issues – for example, where oilseed rape is in the rotation, then brassicas should be avoided as clubroot may become a problem. Where oats are in the rotation, an oat cover crop also may not be suitable. Where legumes such as peas or beans are grown, avoid using these as cover crops.

On some GLAS farms, clubroot has been noted in brassica catch crops as a result of growing them continuously – this should be avoided if the scheme is extended. Crops should be rotated around the farm and other crops can also be used, for example, oats may be an alternative where crops are being grazed by sheep. Winter barley should be an important consideration in your rotation, due to its early harvesting allowing time to sow catch crops in early August.

What should I do with my catch crop?

Remember that catch crops in GLAS

John Brophy and Daniel Woods in a crop of fodder rape and stubble turnips.

cannot be grazed until after 1 December. If sown early, cover crops can offer an excellent source of winter fodder.

Grazing.

Grazing must be carefully managed:

- Introduce animals to brassica crops gradually – don't let them into the brassica crops when very hungry, as the resulting rapid intake can cause upset and sickness.
- Supply fibre such as hay or silage and clean water as well as the catch crop.
- Be aware of mineral deficiencies – minerals should be supplemented, e.g. Iodine for pregnant ewes.
- Crops should be grazed before they flower. Early sown crops may go to seed 12 – 14 weeks after sowing if conditions are right.
- Grazing can reduce N lockup as nitrogen in animal manure is more readily available than a decaying catch crop. Animals process the crop into readily available organic matter, which can influence the levels of nitrogen required for the following crop.
- Strip graze where possible using long narrow lengths rather than deep short ones.
- Avoid over grazing. Do not poach the land or cause soil erosion from the animals, as this can result in more soil damage. If soil conditions are poor or it is wet, partially graze the crop and incorporate the rest.

Incorporation.

Crops can be ploughed back indirectly, disked, or sown directly into them using strip-till. This may suit where there isn't a large canopy.

If there is a large canopy, use a disc, or roll to break down the crop. Do this as early as possible to allow the plant to break down before sowing, so as to release nutrients, create organic matter, and ease sowing.

Daniel Woods says he will let his steers graze his fodder rape/stubble turnip catch crop this year.

Chemical destruction

Glyphosate can be used for crop destruction and should be done early if spring cereals are to be sown. Cover crops containing volunteer cereals should be destroyed four to five weeks in advance of drilling, to avoid direct transfer of aphids. This also helps in the control of weeds grasses and volunteer cereals.

Catch crops in the future

GLAS may be extended and catch crops will have to remain within the specifications of the scheme.

Whether in GLAS or not, carefully develop a plan for the coming years, based on rotation, the available species, the desired function of the crop and the plan for destruction or incorporation. Once this has been completed, you will be well placed to maximise the benefits from the crop.

For many farms, whether in GLAS or not, catch crops are increasingly an integral part of the crop rotation. With ever increasing changes in land use, pesticide regulations and environmental commitments, catch crops are another factor to consider within integrated pest management, nutrient control and carbon sequestration.

• See also p4-5.

Farmer profile:

Daniel Woods farms approximately 130ha, including 12ha of catch crops near Clonmore, Co Louth: "We know all about trying to sow our catch crops early and the benefit that brings. But you don't always get to sow as early as you would like.

"I've had years where sheep men will happily pay to graze the crop, but when the crop is weaker, they'll say the value isn't there." This year, Daniel, who participates in GLAS, intends to let his six to nine month old steers graze his fodder rape/stubble turnip crop. "There's no doubt that catch crops improve soil structure and we sow it after winter barley. Of course, this year was a difficult harvest and our catch crops haven't performed as well due to later sowing. But, given half a chance, they make a good contribution to our rotation."