Supporting & Increasing Organic Production

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Organic Farm Walk Sheep & Cereals

on the farm of Jason Stanley, Rathdowney, Co. Laois

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Supporting & Increasing Organic Production

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An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture Food and the Marine

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Foreword - Minister Hackett

I would like to welcome all attendees, farmers and exhibitors to today's inaugural "Growing Organics" event in Errill, Co. Laois. We have had a momentous 12 months in the Irish organic sector and I am very excited to be launching this new monitor farm programme here today.

A key element of showing farmers the benefits of switching to organic farming is understanding practical and financial implications. This programme will show best practice and how organic farms evolve and perform over 5 years. Animal health, grass growth, biodiversity, water quality, healthy soils, financial security and family wellbeing are



Pippa Hackett Minister of State at the Department of Agriculture, Food and the Marine

key concerns for farmers that will be addressed through this programme. The key objectives of the programme include increasing the adoption of new technologies with particular emphasis on grassland management and livestock health, the environmental footprint of organic production, establishing and supporting profitable organic producers. This programme will be complemented by other Teagasc activities such as advice on clover and multispecies swards.

A number of talks will be held today that will provide you with the knowledge to make informed choices on switching to organic farming. The speakers are experts in their fields and they will provide insights based on the latest research and scientific data which will show you how resilient organic farms are and how your farm will benefit from going organic. Improving advice to existing organic farmers will be a cornerstone of this programme as we seek to build on their valuable knowledge and experience. Many of the key stakeholders of the organic farming sector are represented here today, making it a great opportunity to network and share knowledge and expertise as we continue building a thriving organic food sector in Ireland. Together with the €256 million CAP funding I have secured for the Organic Farming Scheme, farm walks and advice are a key part of the infrastructure needed to support the record numbers choosing to switch to organic farming.

The results from the activities on the demonstration farms will be made available to all farmers and researchers so that we can improve the data that we have available to us on different aspects of organic farming. Providing up to date technical advice to organic farmers is a key objective of the National Organic Strategy 2019-2025. These objectives will be reviewed by the Organic Strategy forum over the next twelve months and will be updated to reflect new developments in the sector.

I would like to thank the Stanley family, Jason, Grace, George, Shirley and Jacob, for hosting today's event and for their many years of commitment to the organic sector. I also wish to thank the organics teams in Teagasc and in my own Department and in Bord Bia, as well as the organic certification bodies, organic advisers and everyone across the sector for their continued support.

I hope all attendees have an informative and enjoyable day, and that those who aren't already organic leave here today asking themselves why they haven't already made the decision to go organic!

FippaMadett

Foreword from Stan Lalor -

Director of Knowledge Transfer, National Advisory, Teagasc

On behalf of Teagasc, I am delighted to welcome you to Errill, Co. Laois today for the first farm walk taking place as part of the new 'Growing Organics' monitor farm programme that will run for the next five years as part of promoting the adoption of best practice at farm level to increase the future viability and sustainability of the Irish organic sector.

Teagasc are delighted to be working with the Department of Agriculture, Food and the Marine and with the organic demonstration farmers on this joint programme. I especially want to thank all the farmers that will be involved in the Growing Organics programme, and in particular the Stanley family for hosting today's event.



Stan Lalor Director of Knowledge Transfer, Teagasc

This programme will allow other farmers interested in converting to Organic farming, and those already farming organically, to learn from these demonstration farmers who are implementing best practice and who are operating organic systems that are economically, socially and environmentally sustainable.

This group of demonstration farmers are a vital part of the programme to act as information hubs for other farms to learn from and follow. They will work closely with our Teagasc organic specialist team and our team of organic advisors across our advisory regions.

I hope you enjoy today's event and find it a valuable source of ideas and information for helping you and your farm.

Stan Lalor

Director of Knowledge Transfer, Teagasc.

Introduction

The Stanleys began looking at organic farming, as an option in 2010. The high cost of concentrates and labour in their intensive sheep system had become prohibitive. After careful consideration and attending a Teagasc Introduction to Organic Production course, the decision was made to take the organic option. In 2011, the farm entered conversion to organic production and full organic status was achieved in May 2013.

Jason along with his wife Grace and son Jacob have taken over the running of the farm since 2017 from his parents George & Shirley. They continue to develop the organic farming system, improving on aspects that have worked on the farm and making changes where necessary.

On the farm today there is a sheep enterprise with 400 ewes lambing in March and also a cereal enterprise growing malting seed barley, oats and beans.

Farm Details and Land Use

The holding is made up of one block of land totalling 78 hectares. This is made up of 65 ha owned and 13 ha leased. Since 2011, significant changes have been made to the land use. Prior to this, the land area was predominantly permanent pasture.

Land Use	Hectares	Use	
Spring Barley	12	Organic Seed Barley for Boortmalt	
Spring Oats	18	Flahavans & Feed	
Spring Beans	1.6	Feed	
Forage Rape	8	Grazing for lambs	
MSS Ley	18.4	Grazing & Silage	
Grass-Red Clover	7	Grazing & Silage	
Grass	13	Grazing & Silage	
TOTAL	78.0		

 Table 1 – Planned Land Use Details 2023

Sheep Enterprise

Table 2 – Stock Details 2023

Stock Type	2023
Ewes	400
Rams	12

Sheep Breeds

Rams

The breeds of rams on the farm are:

- Charollais
- Belclare

Ewes

The breeds of ewes on the farm are:

Belclare x New Zealand Suffolk

Management of Ewes

- Rams were introduced the second week of October for breeding.
- Ewes are housed in mid-November. Housing is made of up of two large straw bedded sheds. Ewes are let out according as they lamb.
- Scanning is carried out in January.
- In 2023 lambing started in mid-March and was completed in 5 weeks.
- Lambs will be sold from early July onwards.

Lamb Sales

Jason is a member of the Laois/Offaly Producers Group. All finished lambs are sold to I.C.M in Camolin, Co Wexford from 38 – 44 Kg's. The later lambs are finished on forage crops of Fodder Rape along with red clover silage, oats and potatoes.

Grazing Management

Sheep are grazed on a rotational basis around the farm using a paddock system. Sheep graze pastures of red clover, herbal ley and white clover ley. Topping is carried out as necessary to improve grassland performance and to control weeds.

Winter Feed Management

Ewes are fed for 8 weeks prior to lambing and the diet consists of red clover silage, oats & beans and is tailored to single/twin/triplet bearing ewes. This Total Mixed Ration (TMR) is fed with a Diet Feeder which Jason has found to be a huge benefit in terms of *"creating a more efficient diet for the ewes, saving on feeding time and helps in terms of safety as there is no need to enter pens with feed and risk being knocked over"*. No concentrate feed is purchased for his flock. The inclusion of beans has been a new development to meet the protein requirement of the ewe without having to purchase in soya bean meal.

Grassland Management

Clover drives grass growth on an organic farm by fixing nitrogen from the atmosphere and is a key way for an organic farmer to get nitrogen into the soil. There are two main types of clover; white clover and red clover. Since the farm entered organic conversion in 2011 a large proportion of the farm has been reseeded. The mixture is suitable for silage and grazing. Currently, there is 7 hectares of grass-red clover leys on the farm.

Herbal/Multi-species Ley

A herbal ley contains a diverse range of grasses, herbs and clovers. Its aim is to produce a well-balanced forage and not just large volumes of grass. Many of the species used are deep rooting and have the ability to unlock nutrients

Multi-species Mix – Needs Derogation				
Seed Variety Kgs				
Chicory	0.7			
Plantain	1			
Red clover	1.5			
White clover	1.5			
Aberclyde	3.3			
Aberchoice	3.3			
Timothy	0.7			
12 kg per acre				

 Table 3 – Multi-species mix 2023

from deeper in the soil profile. The herbal mixture does not demand high fertiliser inputs and is therefore ideally suited to organic farming. These leys provide increased levels of minerals and vitamins to livestock. Also, when herbal leys are grown for around four years, they have the ability to naturally improve soil structure with their deep roots.

Forage Crops for Winter Grazing

Winter grazing forage crops are cold-hardy plants and can produce a thick palatable crop. They can be used to feed from October to February as part of an outdoor wintering system. Initially this will be grazed with the heavier lambs after weaning. They also play an important role is maintaining soil structure over the winter and preventing nutrient losses.

Organic Cereal Enterprise

There is a strong demand for organic cereals both for livestock and human consumption. The demand for organic cereals is expected to continue to increase for the foreseeable future as numbers of drystock farmers

Spring Malting Barley				
Area: 12 ha				
Variety: Geraldine & Hunter				
Sowing Date: 3/5/23				
Sowing Rate:	75 kg/acre & 83 kg/ acre			

Table	4 –	Spring	Malting	Barlev	Details
	-	op ing	11 milling	Duricy	Deconto

Table	5	– Spring	Oat	Details
	-	opring	0000	Deconto

Spring Oats				
Area: 18 ha				
Variety: Isabelle				
Sowing Date: 8/5/23				
Sowing Rate:	70 kg/acre			

Table 6 – Spring Bean Details

Spring Beans				
Area: 1.6 ha				
Variety:	Lynx			
Sowing Date:	6/5/23			

converting to organics increases. Currently on the farm there is 31.6 hectares of land devoted to cereals and beans. Spring oats is being grown for the organic porridge market and the barley is grown for organic seed for the malting industry. The beans are replacing the need to buy in organic soya for the feed ration.

Organic Regulation for Seed Usage

- Organic seed database with details of suppliers and available organic seed www.organicxseeds.com
- Must seek permission to use un-treated non-organic seed from your Organic Certification Body (OCB).
- A derogation must be obtained from the OCB for use of any untreated non organic seed prior to sowing.
- Conventional treated seed is not permitted to be used.

Sources of Nutrients Used on the Farm 2023

- Farm-yard manure from the over-wintering of sheep spread on cereals
- Imported dairy sludge (sourced from Tirlan, Ballyragget) applied on the grass, silage and cereals
- Lime where required

Animal Health on the Farm

- The switch to organics has not lead to any adverse effects with regard to animal health on the farm.
- Faecal analyses are taken to assess the level and identify the type of internal parasites if present.

Financial Performance

Organic farming systems are no different to any other enterprise. In order for any farm enterprise to be profitable, the returns from the enterprise must be greater than the costs of production. Outlined overleaf is the physical and financial data for the farm in 2022 based on Jason's Teagasc e-Profit monitor analysis. The main focus on organic farms is to reduce the variable costs which will leave a better net margin for the farmer.

Key Observations on financial performance

Sheep Enterprise

- The overall aim is to maintain good level of production. The stocking rate on this farm is high at 156 kg's/ha Org N.
- The variable costs were on average higher than other years due to extra soil fertility products applied in 2022 to address low P & K soils.
- The higher output/ha requires that soil fertility be maintained and while there was an extra spend in 2022, this is not the norm every year.
- Jason buys in no concentrate feed, it is all produced on the farm.

Сабаяс Алассилие ная Роко Дочисочных Астисичих	Teagasc eProfit Monitor Farmer: Jason Stanley Year 2022			
	Sheep Tillage Crops			
Physical				
Land ha	43.5	28		
Organic N/ha	156	-		
Financial (€/ha)				
Gross Output Value	€1,992	€2,151		
Total Variable Costs	€969	€510		
Total Fixed Costs	€624	€1387		
Net Margin	€399	€254		
OFS Payment/ha	€250	€270		

Table 7

Cereal Enterprise

- While the output/ha is reduced in the organic system, the sales value/ton is greater which makes the sales/ha comparable to a non-organic system.
- The variable costs are significantly lower,
- However the fixed costs are high on the farm currently due to the scale of tillage being half that of CSO average on tillage farms and due to recent investment in machinery. However, these fixed costs will be significantly reduced in the next 2- 3 years when repayments are completed and this will reflect in an even more positive Net Margin in the future.

Using forage brassica crops for lamb finishing

Frank Campion and Mark Dolan

Teagasc Animal and Grassland Research and innovation centre, Mellows Campus, Athenry, Co. Galway, Ireland.

Introduction

The use of forage brassica crops such as forage rape and hybrid brassicas to finish lambs and out winter ewes has been a long established practice by some farmers in parts of Ireland. Interest in using these crops for lamb finishing had grown further in recent years but despite this being a relatively long held practice information pertaining to lamb performance and the performance of these crops under lamb grazing is somewhat limited. In recent years in Teagasc Athenry, a study has been undertaken to investigate how hill bred lambs grazing forage brassica crops perform compared to lambs offered perennial ryegrass based swards or ad-libitum concentrates. A key part of this study has been looking at the performance of forage brassica crops and their management during grazing in order to get the best use out of them. As with any forage be it grass or brassicas there is a cost associated with growing the crop and poor management of either will negatively influence the performance of the forage but also the livestock grazing the forage.

Teagasc Athenry Studies

There are six dietary treatments included in the current study with three forage brassica crops included namely; Forage Rape (Stego variety), Kale (Maris Kestrel variety) and Hybrid Brassica (Redstart variety). Performance from these forages is being compared to newly reseeded perennial ryegrass sward (Abergain and Aberchoice varieties), permanent pasture sward (predominantly perennial ryegrass) and ad-libitum concentrates offered indoors. Lambs commenced their treatment diets from early October and remained on their treatment diet until they were deemed suitable for slaughter or the dietary forage was exhausted.

Acclimatising to the forage brassicas

Lambs need to be introduced to forage brassicas gradually with a run back to grass up until the point of full time access after approximately 10 days after first access. Once lambs have acclimatised to the diet and are full time on the crop they require ad-libitum access to a fibre source such as silage, hay or straw. Any of these sources will do and although intakes will be low from what we have recorded in our study, it is still essential to provide it. Forage brassicas, particularly the leaf component, can be very digestible and lower the rumen pH as you would experience if feeding ad-libitum concentrates. Therefore, providing a roughage source ensures that even at this lower pH the rumen continues to function correctly.

Crop Management

In the studies carried out by Teagasc lambs received two-day allocations of forage brassica, to try to maximise the utilisation of the crop and the performance of the lambs. While this length of time can vary, it is important that lambs are not left grazing the one area for too long. The key principle behind this is that the lambs will selectively graze the leaves of the crops first followed by the soft stem and eventually the harder stem with the highest nutritional benefit to the lamb coming from the leaf. By moving the lambs regularly, they are getting access to the leaf of the plant every two days and only having to graze the harder to graze and lower nutritional value parts for shorter periods. It is still important that lambs be allowed to graze some of the stem, which will improve utilisation but also ensure they are getting a balance of fibre from the plant. However, care is needed when allocating the crop area that they are not left too long grazing a certain area and are short on forage. The area of crop offered should is based on the number of lambs grazing, the yield of the crop and the approximate dry matter (to calculate DM yield). Lamb intake for this calculation should be calculated based on 3% of body weight.

Lamb performance

Our studies have shown no significant difference in lamb growth rates between lambs grazing Forage Rape and Hybrid Brassica and Kale. There was also no difference in carcass weight or kill out percentage between lambs from each of the forage brassica treatments. Average kill out percentage was 45%. In terms of performance for the crops (grown under non-organic commercial conditions) all three crops grew similar levels of dry matter per Ha (Figure 1).



Figure 1. Effect of forage type on pre-grazing yield (kg DM/Ha)

However, there were differences in utilisation levels and particularly in the level of leaf and stem in the different crops. Lambs grazing Forage Rape and Hybrid Brassica utilised 58% and 62% of the crop respectively while the Kale was more difficult to utilise (53%) due to its thicker stem. As shown in Table 1 there is higher level of stem in the Kale compared to forage rape and hybrid brassica which makes it more difficult for the lambs to graze.

Conclusion

Results from our studies have shown that using forage brassicas to finish lambs in the autumn/winter is effective but good management of the crop is required to maximise the utilisation and the performance of the grazing lambs. It is important that grazing decisions are made on actual crop yields and lamb weights to as the most efficient use of the crop is possible.

	Total Utilisation (%)	Leaf (%)	Leaf Utilisation (%)	Stem (%)	Stem Utilisation (%)
Forage Rape	58	46	86	53	37
Hybrid Brassica	62	47	76	53	56
Kale	53	37	58	63	45

 Table 1 – Effect of forage type on pre-grazing leaf and stem content.

The Importance of Good Soil Health

Cathal Somers ASSAP Advisor, Waterford

"To be a successful farmer one must first know the nature of the soil" (Xenophon, 430-354 BC)

Farming has come a long way in the last fifty years, with huge improvements in how we grow our crops and rear our animals. These days farmers are constantly finding ways to become more efficient and have become very aware of environmental challenges, however with advancement comes increased pressure on our soils.

'It's in our DNA'

Farmers are always drawn to soil, I think it's in our DNA. I have had great chats with farmers about compaction, soil type and looking to solve specific problems in relation to production or ponding on land. But what really interests people is hearing about the life in soil and all the hard work that goes on behind the scenes underneath our feet 24 hours a day, 365 days a year carried out by the soil microbiome.

'There are more organisms in one tablespoon of healthy soil than there are people on earth'

A microbiome is all of the microorganisms within or associated with a particular environment, you would often hear of the human microbiome in relation to products you can buy to improve digestion and health. The soil microbiome is much more complex and it does vital work for farmers in helping to produce food.

The soil microbiome consists of a diverse community of micro-organisms such as bacteria, archaea and fungi. Each group consist of millions of different species that carry out different functions in our soils such as producting food, releasing nutrients, cleaning water, storing carbon and a home for biodiversity. Lots of farmers know earth worms are a great sign in land but we also need to be aware of the huge amount of microbes doing other vital jobs for us such as rhizobia bacteria for example who work with white clover to produce free nitrogen for us to grow grass.

In order for us to ensure our soil is resilient enough to deal with the pressures our management puts on it we must look after it to the best of our ability. Different soil types have different abilities to carry out the vital functions mentioned above, however it is important to remember that our management on the farm can improve or damage soil health. The three main areas for a farmer to focus on in order to improve soil health is physical, chemical and biological management of soil. Maintaining balanced fertility and pH, avoiding physical damage to soils and increasing organic matter in our soils helps to build a healthy and resilient soil.

Top tips for safeguarding your soil biology

- Avoid physical damage (compaction) to soil as much as possible
- Return organic matter to soils (straw, dung & slurry), in particular to arable land and silage ground
- Balanced fertility and pH
- Diversify your crops and crop rotation (mixed species swards/cover crops/green cover)
- Always have a living root in the soil
- Check your soil health, take out the spade and have a look for yourself

How to Assess Soil Structure(QR code)



Agricultural sustainability support and advisory programme (ASSAP)

Noel Meehan¹ and Fiona Doolan² ¹ASSAP Manager, Teagasc, Deerpark, Ballinasloe, Co. Galway ²ASSAP Advisor, Teagasc, Friary Rd., Naas, Co Kildare

Summary

- Ireland has been set a target by the E.U. Water Framework Directive of achieving 'Good Status' for all waters
- The River Basin Management Plan for Ireland sets out Irelands plan to achieve good status
- The ASSAP service is available to farmers in 190 Priority Areas for Action (PAA's) and is a key part of helping achieve good status
- The ASSAP is a free and confidential advisory service available to all farmers in a PAA

Introduction

In Ireland all water policy and management is led by the Water Framework Directive. Under this directive Ireland has been set a target of achieving at least 'good status' for all waters in Ireland. However, despite a lot of good work over the last 20-30 years we are falling short in achieving this target and water quality has declined in recent years.

Irelands response to challenges around water quality is set out under the national river basin management plan. As part of this plan, 190 priority areas for action (PAA) have been identified across the country where water quality improvements need to be made. There are multiple pressures across each of these PAA's including industry, waste water treatment plants and septic tanks, forestry, agriculture and urban pressures.

Implementation of the ASSAP

The Local Authority Waters Programme (LAWPRO) have deployed a catchment assessment team of 60 scientists across the country to assess

streams in PAA's in detail and identify the significant pressures impacting water in each PAA. This group communicates the detailed information about the PAA to all of the stakeholders across the local community including agricultural and non-agricultural land owners and businesses.

Where an agricultural pressure is identified the farmers in the area will receive the offer of a free farm visit from an advisor under the ASSAP programme.

The ASSAP programme is made up of a group of 35 advisors (20 working under Teagasc jointly funded by DHLGH and DAFM and 24 advisors from the dairy processing co-ops). These advisors are available to provide farmers with a free and confidential advisory service that farmers in a PAA can avail of on a voluntary basis.

The advisors will meet the farmer to assess the farm for any potential issues that are having an effect on the water quality in the local stream. In general an advisor will assess the farmyard, nutrient management practices and general farm land management practices including the use of pesticides and other toxic substances like sheep dip, etc.

At the end of a visit the advisor and farmer will agree on where the farmer should focus improvements or actions, if any are required, on his farm. The practical advice will be designed to 'break the pathway' and prevent nutrients and other contaminants from entering water. A written summary of the advice and actions will be provided and a timeframe for completion agreed between them.





Figure 1: Heavy rainfall leads to overland flow of water, Phosphorus and soil particles

Figure 2: Nitrogen that is not used up by grass/plant is available to leached to groundwater/ streams during heavy rainfall

Conclusion

The ASSAP programme is collaborative and the funding and support received from DAFM, DHLGH and the dairy industry has been critical to allow a new approach to enabling local landowners to engage positively in seeking solutions to local problems with the support of a confidential advisory service. Support from the farming organisations for the programme has been very strong and this is vital in communicating and informing farmers about the ASSAP programme and its key messages.

Health and safety on the Stanley farm.

Francis Bligh Health & Safety Specialist, Teagasc

There is strong focus on health and safety on the Stanley Farm

Some key areas:

- **Risk Assessment:** Jason updates his farm safety code of practice risk assessment document on a regular basis. He also makes sure it is available for all contactors and visitors to the farm. When hazards are identified on the farm there is a plan put in place to control the hazard without delay.
- **Farm vehicle safety:** There is a strong focus on regular checks and maintenance of all farm vehicles, particularly brakes in addition to their appropriate and careful operation. The ATV on the farm was replaced by a Gator last year. This gator was identified as safer vehicle for Jason and his father to use and it also provides a seat with a seatbelt for Jason's son. Children can only travel in a farm vehicle when they are over 7 years and when there is a seat and seatbelt provided. The livestock trailer receives regular maintenance to ensure all lights, brakes, tyres, axels and couplings are in a safe and roadworthy condition.
- **Child Safety:** The risks and dangers on the farm are communicated to all children visiting the Stanley farm. Children only enter the farm when they are properly supervised.
- **Lambing season:** One of the main high risk periods of the year is lambing. Good facilities are in place on the Stanley farm with well-designed lambing pens and passageways to move sheep easily. Lambing equipment is stored close by and the pens are serviced by a lambing camera. The

camera helps to reduce the number of visits to the shed. Every effort is made to keep pens clean and dry to reduce the likelihood of a disease outbreak and any associated increase in workload.

Animal handling: Good sheep handling facilities help to improve productivity and safety but they also help to make tasks easier and more enjoyable. Sheep are always handled with care and restrained safely.

Flock Health

Jason works closely with his vet and adviser to proactively manage the health and nutrition of his flock and he has a strict culling policy for any problem sheep. Maintaining a healthy flock helps to reduce the likelihood of disease and its associated increased workload. Healthy flocks also make it easier to organise and manage the farm as more tasks can be planned rather than having to react to problems.

Farmers Health

The Stanley farm is organised and managed to ensure the workload is sustainable and that help is sought during busy periods. Long working hours can negatively impact on mental and physical health so it is important to get adequate rest, eat a healthy diet and maintain a good work life balance.

Supporting the Growth of Irish Organics

Emmet Doyle

Organic Sector Manager, Bord Bia.

Summary

- Positive developments for the Irish organic sector through increase farmer participation
- Strong consumer openness for Irish organic produce in the domestic market
- Bord Bia are delivering a range of services and supports to help the organic sector reach its potential

Introduction

Aligned to the European Green Deal, Ireland's Climate Action Plan 2023 has set a target of 450,000 ha to be farmed organically by 2030. This will bring Ireland's agricultural land under organic production to 10% from less than 1.5% in 2022.

Ireland's organic sector vision will be delivered by increasing the scale and capability of Irish organic production through increasing the participation in the Organic Farming Scheme (Green Deal Action Plan axis 1). While developing and activating a clear marketing proposition for Irish organics to help the consumption and consumer trust of Irish organics in the domestic and export markets (Green Deal Action Plan axis 2).

Organic Sector Growth

In January 2023, the new Organic Farming Scheme (OFS) begun with over 4,000 Irish farmer participants, which is double the number of farmers from the previous scheme. Such an increase in OFS participants has led to the Irish agricultural land under organic production growing from approximately 1.5% in 2022 to 4.5% in 2023. The application process will open again in Autumn 2023 with forecasts of another strong uptake into organics by farmers.

This growth in organics is not only impressive but actually very important as this will increase the volumes of Irish organic food, drink and horticulture produced, helping to deliver the necessary scale to supply key retail and foodservice customer both in the domestic and export markets.

Beef Sector Overview

Cattle Data from DAFM shows that the organic cattle herd stood at 62,000 head in 2021, which is just under 1% of the total cattle population recorded in December 2021. Cattle numbers on organic farms increased by 9% between 2017 and 2021 with an acceleration in 2022 as over half of the applications accepted for the Organic Farming Scheme came from the cattle sector. As a result, numbers are projected to reach around 70,000 head reflecting cattle numbers on farms going through the conversion process.

Within the total organic cattle herd, it is estimated that there were around 19,500 suckler cows in 2021. It is estimated that around 22,000 calves were born on organic farms that are destined for beef production or breeding in 2022.

The number of finished cattle processed increased by 20% between 2019 and 2022 resulting in organic beef output reaching an estimated 4,100 tonnes carcase weight equivalent (cwe).

Sheep Sector Overview

Similar to cattle, increasing numbers of sheeP farmers have applied for the Organic Farming Scheme in 2022. Total sheep numbers on organic farms are estimated to have stood at 95,000 head at the end of 2021, which represents a rise of just over 20% on 2017 levels. Data from DAFM showed that breeding ewe numbers stood at over 62,000 head in 2020. By the end of 2022, it is estimated that this figure will be closer to 85,000 head.

It is estimated that 73,000 lambs were born on organic farms in 2022. Leakage of store and indeed finished lambs into conventional remains a real challenge for the organic lamb category and all organic industry stakeholders are working together to address this supply chain challenges, The number of finished lambs processed as organic stood at an estimated 22,000 head in 2022, this number doubling from annual numbers in 2017, reflecting increased sales of organic lamb in Ireland and the emergence of additional export markets.

In 2022, total organic production stood at around 450 tonnes carcase weight equivalent for 2022. Like beef there has been a considerable jump in the level of carcase utilisation over the last few years, which is estimated at over 95% for 2022 with increasing volumes of product frozen rather than being sold as conventional.

Dairy Sector Overview

Figures from DAFM suggest that there were just over 4,700 dairy cows on just over 70 organic dairy farms in 2021. This represents an increase of 85% relative to 2017. With a further increase predicted to over 5,400 cattle on organic farms in late 2022.

The slower growth in the organic dairy herd is due to the fragmented nature of the sector and due to high conventional milk price in 2022. However, due to changing market and sector dynamics in 2023, this could lead to increase number of dairy farmers joining the Organic Farming Scheme when it reopens in the autumn of 2023.

Cereal Sector Overview

Organic cereals have increased in importance over recent years, tied in to the importance and need for organic feed. The land area dedicated to organic cereals stood at 3,342 hectares in 2021 according to DAFM data. The cereals area is dominated by oats, which accounted for over 70% of the total in 2022. The organic oats areas have recorded consistent growth since 2017, more than doubling over the period.

The remainder of the area is utilised for beans, wheat and barley, all of which are consumed in Ireland. It is estimated that total organic oats production amounts to around 13,000 tonnes annually with the vast majority destined for breakfast cereals and the remainder utilised for drinks and animal feed. Organic oats has consistently delivered a price premium of around 70% over recent years, which has been a key driver of growth over the period. Production of other cereals/pulses estimated at 5,000 tonnes annually, the majority of which are utilised as animal feed or sold as cereals product on the domestic market.

The Irish Consumer Facts

- Irish retail sales of organic food, drink and horticulture totalled €168 million
- Irish retail sales of organic food, drink and horticulture saw seven years of growth from 2015 2021
- One in two Irish shoppers aged 18-35 are looking to increase the amount of organic food and drink they purchase each week.
- One in two Irish shoppers buy organic vegetables, eggs, dairy and meat a week.
- 73% of Irish shoppers willing to pay a premium for Irish organic food, drink and horticulture

Bord Bia Supports

Bord Bia is delivering several projects to support the future growth for Irish organic production. These include the development of a marketing proposition for Irish organic produce coupled with an Irish organic marketing campaign in the Autumn of 2023. This national campaign will promote the quality of Irish organic produce to Irish consumers. Bord Bia is also engaging with retailers to identify promotions for Irish organic produce in this same period.

For the export markets, in early autumn Bord Bia will also present the results of an in-depth study into opportunities for Irish organic produce in France, building on investment in a similar study focusing on the Nordics and German markets. Finally Bord Bia with a number of Irish organic manufacturers will exhibit at Natexpo, a leading organic B2B trade show in Paris later this year.

Economics of Growing Organic Tillage Crops

The current market for organic tillage crops is very strong. A recent DAFM organic feed survey has highlighted a very high demand for organic cereals and legume/grain mixes on organic livestock farms. Currently, most of this demand is being met by expensive imported organic feed costing between \in 850 to \in 1,000 per tonne. Irish organic tillage growers are very well placed to grow crops to meet this demand.

Oats for the organic porridge market also provides a very positive margin for organic tillage growers.

Looking to 2023, the profitability of organic tillage production compares very favourably to conventional tillage production. With 2023 green price offers for grain approximately $\in 100$ per tonne lower than harvest 2022, and given that most fertiliser was purchased at high prices along with a considerable recent rise in chemical prices, the profitability of conventional tillage is under serious pressure when compared with organic tillage. Table 1 highlights the expected gross margin for 2023 of conventional versus organic spring oats.

	Conventional Spring Oats (€/ha)	Organic Spring Oats (€/ha)	Organic Spring Oats (no premium) (€/ha)
Seed	125	212	212
Fertiliser	675	0	
Sprays	190	0	
Machinery Operations	480	450	450
Miscellaneous Costs	72	40	40
Total Variable Costs	1,542	702	702
Grain Sales	1,368	1485	855
Straw	250	250	250
Gross Margin	76 (31/ac)	1,033 (418/ac)	403 (163/ac)
Organic Payments	0	270 to 300	270 to 300

Table 1 – Profitability of Conventional v Organic Spring Oats (2023)

Notes on table 1 above:

- Grain price assumed of €190/tonne for green conventional oats, €330/ tonne for green organic oats.
- Assumed yield of conventional oats is 7.2t/ha (2.9t/ac) which is the national five year average yield (CSO).
- Assumed yield of organic oats is 4.5t/ha (1.8t/ac). Machinery operations for organic spring oats includes a figure of €125/ha for organic manure spreading.
- Input costs for conventional spring oats from Teagasc Crops Costs & Returns 2023 Booklet.

The addition of clovers or herbs to a sheep grazed perennial ryegrass sward: effects on animal and sward performance

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In recent years there has been growing interest in the use of diverse sward mixtures for grass based ruminant production systems. Numerous studies have shown the benefits of multispecies swards relative to a perennial ryegrass only swards. These include increased animal and sward performance, reduced requirement for artificial nitrogen application and reduced need for anthelmintic drenches. Presented below is some of the results from a study in Teagasc Athenry over the last number of years. The aim of this study was to compare a perennial ryegrass sward to binary sward mixtures of perennial ryegrass and one companion forage, in terms of sward and animal performance under an intensive sheep production system. The sward types under investigation were: i) perennial ryegrass (PRG), ii) perennial ryegrass and white clover (PRG+WC), iii) perennial ryegrass and red clover (PRG+RC), iv) perennial ryegrass and plantain (PRG+Plan), and v) perennial ryegrass and chicory (PRG+Chic).

Results

The addition of any companion forage significantly improved lamb lifetime average daily gain (ADG). As a result of improved animal performance, average days to slaughter (DTS) was reduced by 19, 28, 15 and 28 days respectively for lambs grazing PRG+WC, PRG+RC, PRG+Plan and PRG+Chic relative to lambs grazing PRG which took 228 days to reach the appropriate slaughter weight. Furthermore, reductions in DTS led to reduced rates of concentrate supplementation required where average concentrates consumed per lamb drafted was reduced by 6.1, 11.3, 8.2 and

10.7 kg concentrates/lamb drafted for lambs grazing PRG+WC, PRG+RC, PRG+Plan and PRG+Chic respectively relative to PRG which consumed 14.2 kg concentrates/lamb drafted. Carcass weight, carcass conformation, fat score and kill out percentage were similar across all sward types.

Average annual herbage production was 11 t DM/ha, and was similar across all sward types. Annual grazed herbage yield was 9.1 t DM/ha and silage herbage yield was 1.9 t DM/ha, which were also similar across all sward types. For this study all sward types received the same amount of inorganic nitrogen; however, studies have shown that similar levels of herbage production can be achieved from grass and clover swards at lower nitrogen application levels, relative to a perennial ryegrass only sward receiving higher nitrogen application levels.

Challenges exist around the establishment, management and persistence of companion forages within sheep grazed swards and for that reason a number of plot based studies were carried out in Athenry to try to improve companion forage persistency within a sheep grazing system.

Post-Grazing Sward Height

Post-grazing sward height significantly affected all sward types with the exception of PRG+WC. The 4.0 cm PGSH had a negative impact on red clover content, whilst the 5.5 cm PGSH had a negative impact on plantain and chicory contents



Figure 2 – Companion forage content in a year 3 sward (2022) by post-grazing sward height

Seeding Rate

	Low	Medium	High
	Seeding Rate	Seeding Rate	Seeding Rate
PRG+WC /	2.5 kg clover/ha &	5.0 kg clover/ha &	7.5 kg clover/ha &
PRG+RC	22.5 kg PRG/ha	20 kg PRG/ha	17.5 kg PRG/ha
PRG+Plan /	2.0 kg herb/ha &	3.5 kg herb/ha &	5.0 kg herb/ha &
PRG+Chic	23 kg PRG/ha	21.5 kg PRG/ha	20 kg PRG/ha

Table 2 - Seeding rates applied in seeding rate plot trial



Figure 3 - Companion forage content by seeding rate

The low seeding rate was sufficient for a PRG+WC sward, the medium seeding rate was sufficient for a PRG+Chic sward and the high seeding rate was needed to achieve sufficient levels of companion forage content in PRG+RC and PRG+Plan swards. Results from these plot trials illustrate that the sward mixtures respond differently to the various management practices. In conclusion, with appropriate management these binary sward types can be successfully incorporated into sheep grazed swards.

Organic Certification in Ireland

The Department of Agriculture, Food and the Marine is the competent authority (i.e. - the Department's Organic Unit is based at Johnstown Castle Estate Wexford) for regulating the organic sector and ensuring that the obligations and requirements of Council Regulation (EU) 2018/848 as amended and adhered to. The Organic Unit of the Department of Agriculture, Food and the Marine have designated Official Certification Bodies whose role is to certify organic producers, farmers and processors through and inspection process of each individual's unit or farm. Further information can be sourced from these organic certification bodies:

IOA (Irish Organic Association)

13 Inish Carraig, Golden Island, Athlone.
Tel: (090) 64 33680
Web: www.irishorganicasssociation.ie
Email: info@irishoa.ie

Organic Trust

Office A1, Town Centre House, Dublin Rd, Naas, Co. Kildare Web: *www.organictrust.ie* Email: info@organictrust.ie



An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

Targeted Agricultural Modernisation 3 Scheme Organic Capital Investment Scheme (OCIS)

A standard rate of aid of 60% on investments up to a ceiling of \in 90,000 for all organic farmers.

How to Apply and Closing Date:

Online applications only through *www.agfood.ie* facility.

Full details and T&C:

https://www.gov.ie/en/service/d7556-organic-capital-investment-scheme/

Queries:

DAFM Organic Unit, Johnstown Castle: (053) 91 63400

Organic Processing Scheme

Grant aid of up to 40% on \leq 1.75 in facilities for the processing, preparation, grading, packing and storage of organic products with minimum level of investment in excess of \leq 3,000.

More Details:

https://www.gov.ie/en/service/51e8d-organic-processing-investment-grant-scheme/

Queries:

DAFM Organic Unit, Johnstown Castle: (053) 91 6340



An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

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Supporting & Increasing Organic Production





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