

Teagasc Organic Farm Walk *on the farm of* Ross and Amy Jackson Woodview House, Lacka, Carrig, Co Tipperary Wednesday 20th April 2022







Introduction

Welcome to the farm of Ross and Amy Jackson.

Prior to the farm being converted to organic production this was a tillage farm with predominantly barley, wheat, oats, oilseed rape and fodder beet being grown.

Ross's brother Alan converted his farm to an organic system, Ross and Amy seeing how the system worked became very interested in organic farming as an option for themselves, they both liked the idea of reducing the amount of chemicals being used on the farm and also the challenge of an organic farming system; they also believed there was potential to increase the financial performance of the farm.

In addition to farming, Ross works as a private agricultural consultant and is a Committee Member of the Offaly Quality Lamb Producer Group and member of the Agricultural Consultants Association, Irish Tillage Consultants Association, and BASE Ireland (Biodiversity Agriculture Soil Environment).

Amy has a degree in Environmental Management and completed her Green Cert in 2015 in neighbouring Gurteen Agricultural College, where she also works as College Secretary. She had previously enjoyed many years of working on farms with sheep and was very keen to farm sheep in an organic system when Ross suggested the idea back in 2015.

The farm entered conversion in 2015 with full organic status for the land and produce being achieved in 2017. On the farm today is a cereal enterprise of malting barley and oats, and a sheep enterprise of approx. 145 breeding females.

Farm Details and Land Use

The holding is made up of one block of land all of which is owned. The total area farmed is $|\sim 50.5$ hectares.

	Hectares
Winter Oats	8.8
Spring Malting Barley	12.1
Multi species sward	15.6
Grass	11.6
Wild Bird Cover	0.8
Woodland	1.6
Total	50.5

Figure 1: Land Use Details 2022

Organic Cereals

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

Currently on the farm, there is 20.9 hectares of land devoted to cereals. This is made up of 8.8 hectares of winter oats and 12.1 hectares of malting barley. The malting barley is grown for the organic distilling market and the winter oats is grown for the organic porridge market. Approximately 5 tonne of the oats/barley is kept on farm and fed to the sheep.

Figure 2:	Winter	Oats Details
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Winter Oats			
Area: 8.8 ha			
Variety: Husky			
Sowing Date: October			
Sowing Rate: 13 stone per acre			



Figure 3: Spring Malting Barley Details

Spring Barley		
Area: 12.1ha		
Variety: Prospect		
Sowing Date: Last Week in March		
Sowing Rate: 13 stone per acre		

Crop Rotation

Crop rotation is the key to successful organic crop production. The rotation provides the principal mechanism to provide crop nutrients and is a major way to control pests/diseases along with a variety of other benefits.

The Jacksons plan will be implementing a rotation of a 3 to 4 year fertility-building phase followed with 3 to 4 years cereals and then back to multispecies sward

Table 1: 2022 Cereal Crop MarginsVariable Costs exc. VAT (€/ac)

	*Winter Feed Oats	** Jacksons Winter Organic Feed Oats	*Malting Barley	**Jacksons Organic Malting Barley
MATERIALS	<u>357</u>	<u>50</u>	<u>344</u>	<u>100</u>
Seed	40	50	46	60
Fertilisers	241		223	
Manure				40
Sprays	76		75	
HIRE MACHINERY	<u>179</u>	<u>146</u>	<u>177</u>	<u>153</u>
Plough, one pass and	76	76	83	83
rolling				
Spraying	38		29	
Fertiliser Spreading	13		13	
Manure Spreading		18		18
Harvesting	52	52	52	52
MISCELLANEOUS	<u>38</u>	<u>16</u>	<u>27</u>	<u>23</u>
Interest (6%)	16	3	9	3
Transport	22	13	18	20
TOTAL VARIABLE COSTS	<u>574</u>	<u>212</u>	<u>549</u>	<u>276</u>
Net Price (€/Tonne)	195	450	230	530
Straw (€/ac)	101	101	101	101



Table 2: Cereal Crops Gross Margins (€/acre)(Incl. Straw)

	*Winter Feed Oats	** Jacksons Winter Organic Feed Oats	*Malting Barley	**Jacksons Organic Malting Barley
Tonnes/acre				
1.0		329		362
1.5		554		627
2.0		779		892
2.6	33	1049	151	1210
3.0	111	1229	243	
3.2	150		289	
3.6	228		381	
4.0	306		473	

*Source Teagasc Crops Costs and Returns 2022 ** Source Jacksons own figures

Expected Yields

The expected yield for the winter oats would be between 2-2.5 tonnes per acre and the malting spring barley 2 tonnes or slightly over per acre.

Soil Nutrients and Manure Management

- Management of organic farms should ensure regular inputs of manures and a level of microbial and earthworm activity sufficient to breakdown organic matter and ensure continuous and efficient nutrient cycling.
- Keeping soils at a pH that facilitates organic matter breakdown and nutrient recycling is essential for successful organic farming.
- Organic manure nutrient content can vary widely depending on the source of nutrients and it is advisable to have the nutrient content of manures checked through laboratory analysis.

Sources of Nutrients used on Farm

- Nitrogen from atmospheric fixation by clover and other legumes
- Farmyard manure from sheep when housed for lambing
- Imported farmyard manure and cattle slurry
- Imported dairy sludge

Soil Fertility on the Farm

- Soil fertility is good on the farm. •
- Lime is not required on the farm as all pHs are 6.8 to • 7.2.
- Outlined below is an overview of the soil Phosphorus ٠ (P) and Potassium (K) levels on the farm,

Soil Phosphorus (P) and Potassium (K) Levels on the **Jacksons Farm**

Fig 4: P Index Levels on farm Fig 5: K Index Levels on farm



Forage Crop for Winter Grazing

Winter grazing forage crops are cold-hardy plants and can produce a thick palatable crop. They can be used as feed from October to February as part of an outdoor wintering system

Straw is chopped after harvesting and disced in. Once crops are harvested early (July/August) a cover crop including Phacelia, Buckwheat, Fodder Radish, Forage Rape and Stubble turnip is sown. In late harvested crops straw is also disced in and a cover crop of Forage Rape and Leafy Turnip is sown.

The sheep from late November onwards graze these cover crops until they are housed for lambing. The plan is to have a winter grazing forage between cereal crops to provide winter grazing for the sheep

Multi Species Sward

A multi species sward 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 from deeper in the soil profile. The 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. Muli species swards also have the ability to naturally improve soil structure with their deep roots. In 2021, a multi species mixture was sown - details of the seed mixture are outlined below.

Figure 6: Multi Species seed mixture and rate used on the farm

Seed Variety		
Moira	2kg	
Astonenergy – Late Perennial	2kg	
Ryegrass (T)		
Red Clover	1kg	
Plantain	0.75kg	
Perennial Chicory	0.5kg	
Puma Chicory	0.25kg	
Aberace White Clover	1.25kg	
Cocksfoot	1kg	
Yarrow	0.25kg	
Timothy	1.5kg	
Sheeps Parsley	0.5kg	
Burnet	0.5	
Festulnm Lofa	1.5	
1 Bag = 26 kg		
Sowing rate: 32kg/ha (13kg /acre)		

Regulation for Seed Usage

- Organic seed database with details of suppliers and available organic seed <u>www.organicxseeds.com</u>
- 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.



Multi species sward on the farm April 2022

Sheep Enterprise

The opportunity to have a sheep enterprise on the farm arose when the decision was made to enter into organics, because all of a sudden there would be grass on the farm as part of the rotation for the tillage crops.

Ross grew up with sheep as his parents used to keep them, and Amy found her way onto sheep farms since her childhood initially helping out at lambing time but then to helping out all year round for a number of years, until she moved from Northumberland to Ireland – so when Ross asked Amy in 2015 if she wanted to get "a handful of sheep", she jumped at the chance.

The flock was established in 2015 with the purchase of 120 ewe lambs from three different organic farms (mainly Texel crosses, but also some Charollais crosses, some New Zealand Suffolk x Belclares, and some black faces).

Up until last year a Border Leicester ram was used for breeding replacements and Charollais for terminal; this year they have switched to Rouge for replacements with Charollais and Beltex for terminal.

The only sheep that are bought in are rams and occasional purebred females (for their sons).

Come each December, sheep numbers are approx. 120 mature females, 30 young females, and 5 rams.

Flock Management

This past breeding season, the Rouge Ram (5* maternal & 5* terminal) was let out a week ahead of any other rams, and he wore a yellow crayon so that when lambing started Ross and Amy knew to tag with breeding tags all female lambs born out of mothers with yellow backsides (as long as the lamb was a decent size, and fit and healthy) – this ensured that lambs were kept by the right ram, and should translate into bigger (more mature) ewe lambs by mating season. After the first week, the crayon colour was changed, and the ewes were divided up into groups for single-sire mating (main benefits being that the rams do not have to work so hard and they do not compete with each other so there is less risk of injury).

- Rams are introduced to the flock in early October for breeding.
- Ewes are scanned at approximately 80 days gestation.
- Lambing begins in early March.
- Shearing takes place in late May.
- Ewes are given boluses in August and February.
- Vaccinations are given for Clostridial Diseases in accordance with the recommendations, and foot bathing is carried out regularly to prevent scald and footrot.

Grazing Management on the Farm

Since 2015, all fields have been fenced into paddocks of a maximum area of 4 hectares – including the use of temporary electric fences used to maximise grass utilization and to make it easier to keep a clean supply of grass ahead of the lambs.

The sheep are grazed in rotation – ideally leaving fields closed for 3 weeks before re-grazing, and once the lambs are weaned there is a follower system whereby the ewes follow lambs. Topping is carried out if necessary (although the aim is to avoid this on multi species swards).

Winter Feed Management

Winter feed for late finishing lambs is grass and cover crops, (plus silage and a mix of home-grown barley and oats if they need it) - ideally lambs are gone by December and so this extra feeding is avoided or minimised when that is the case.

Winter feed for ewes is cover crops supplemented with silage to provide extra forage but also to get them used to the silage before being housed. Once housed they are on silage plus a bought-in organic high protein ration (19%).

After lambing, ewes are fed a mix of our own barley and oats for at least two weeks post lambing.

The area harvested for silage is rotated around the farm depending on growth and utilisation, with grazing areas taken out for silage that have excess grass covers.

Red clover grass silage was made in 2016 and 2017, and a red clover grass sward has been just sown now in 2022. The plan is to take two cuts of silage this year and three cuts in subsequent years.

Lamb Sales

The majority of lambs are sold from mid-June to mid-December (in small numbers at the start and finish).

Some lambs are sold through the Offaly Quality Lamb Producer Group to Irish Country Meats (ICM) based in Camolin Co Wexford (in which case the aim is to meet their maximum (paid) carcass weight of 20-23kg depending on the time of year), and some are sold directly to "Lacka Organic Lamb" customers in which case the Jacksons aim for a slightly higher carcass weight.

Generally early on in the season Ross and Amy would be selecting a 40-42kg lamb for a 20kg carcass *in the factory* (47%-50% kill out), and by the end of the season they would be selecting a 48-50kg lamb to achieve a 23kg carcass (46-47% kill out) – also they would have to take into account body condition and breed as those two factors influence the kill out too.



Ewes and lambs grazing

Teagasc Organic Farm Walk

Lacka Organic Lamb



In 2020, Ross and Amy decided to make their lamb available to the general public, through the sale of 'freshly frozen' whole or half lambs (butchered into roasts and chops) through a box scheme.

Lambs are brought to a local abbatoir and meat is hung for up to 8 days before being crafted into chops and roasts by their experienced butchers, in accordance with customer preferences.

Orders can then either be collected from the farm (when ready) or can be sent to customers by courier (nationwide delivery, Ireland, UK, and France).

The lamb is a seasonal product, usually available (by pre-order) from July to January. Customers are encouraged to order well in advance, and this allows us to ensure we keep back lambs for them so that the carcass weight will be a little larger than those we send to the factory (a butchers lamb, rather than a factory lamb).

Animal Welfare in Organic Farming

Livestock Health

- A healthy herd in organic farming is achieved by a combination of good management, sound nutrition and good animal husbandry skills.
- When a farm undergoes conversion to organic status an Animal Health Plan is required to be drawn up by the veterinary practitioner, who specifies the current animal health issues on the farm and how the farmer will tackle these problems into the future, while conforming to the requirements of organic certification standards.
- Detection of problems needs to be early, and timely veterinary advice is invaluable when an animal is ill the organic farmer reacts in the same manner as their conventional neighbour and veterinary assistance is required immediately.

Conventional Veterinary Treatments Permitted

- Animals for meat consumption: one course antibiotics within 12 months.
- Animals for breeding: two courses antibiotics within 12 months.
- Dairy Mastitis: 2 courses antibiotics within 12 months, otherwise the cow is removed from the milking herd.
- If limits exceeded, organic status is taken away from animal.

Withdrawal Periods for use of Veterinary Products

All withdrawal periods shall be doubled. Unless the medicinal product used indicates a withdrawal period, the specified withdrawal period shall not be less than: 14 days for eggs 14 days for milk 56 days for meat from poultry and mammals

Animal Health on the Farm

The switch to organics has not lead to any adverse effects with regard to animal health on the farm.

A closed sheep flock is operated as much as is possible to help minimise disease risks.

Faecal analyses are taken to assess the level and identify the type of internal parasites if present.



Organic Certification in Ireland

A major factor that distinguishes organic farming from other approaches to sustainable farming is the existence of internationally acknowledged standards and certification procedures. The standards for organic production within the European Union are defined and enshrined in law by Council Regulation EC 834/2007 as amended.

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 (EC) No. 834/2007 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:





Organic Farming Scheme 2022

The DAFM Organic Farming scheme opened on February 9th 2022 for new applications and it will close on April 22nd 2022.

Rule Changes

There are two new rule changes introduced for the 2022 scheme;

- Full OFS payment increased from 60ha to 70ha
- Reduction in Stocking Density to receive full payment 0.5 LU/Ha to 0.15 LU/Ha

Payment Rates for Livestock Holdings

Organic Status	Farmed Area of >3Ha up to 70Ha	Farmed Area >70Ha
In conversion	€220/Ha	€60/Ha
Full Organic Status	€170/Ha	€30/Ha

Payment Rates for Tillage Holdings

Organic Status	Tillage Area up to 70Ha	Tillage Area >20 Ha up to 70Ha	Tillage Are>70Ha
In conversion	€260/Ha	€220/ha	€60/Ha
Full Organic Status	€170/Ha	€170/Ha	€30/Ha

Steps for Applying for the 2022 OFS

- Contact one of the Organic certification bodies to get licenced as an organic producer
- Submit online application via Agfood before April 22nd 2022
- Make changes to your BPS application before May 16th 2022
- Complete 25 hour QQI approved Organic Farming Principles course before November 1st 2022

Further Information

https://www.gov.ie/en/service/d46aec-organic-farming-scheme/

https://www.teagasc.ie/rural-economy/organics/



Targeted Agricultural Modernisation Scheme Organic Capital Investment Scheme (OCIS)

A standard rate of aid of 40% on investments up to a ceiling of \notin 80,000 (i.e. can generate a grant of \notin 32,000 from an investment of \notin 80,000). For qualifying young organic farmers who meet the specific eligibility criteria, the standard rate of aid is 60% on investments up to a ceiling of \notin 80,000.

How to Apply:

Online applications only through www.agfood.ie facility.

Full details and T&C:

http://www.agriculture.gov.ie/farmingsectors/organicfarming/organicsschem e/organiccapitalinvestmentschemeocis/

Queries:

DAFM Organic Unit, Johnstown Castle: organic@agriculture.gov.ie

Organic Processing Investment Grant Scheme

Grant aid of up to 40% on $\notin 1.75$ million (i.e. can generate a grant of $\notin 700,000$ for an investment of $\notin 1.75$ million) in facilities for the processing, preparation, grading, packing and storage of organic products with minimum level of investment in excess of $\notin 3,000$.

More Details:

http://www.agriculture.gov.ie/press/pressreleases/2015/august/title,84203,en.html

Queries:

DAFM Organic Unit, Johnstown Castle: organic@agriculture.gv.ie



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

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Organic Farm Walks 2022

Teagasc, Department of Agriculture, Food & the Marine and organic organisations invite all farmers and members of the public to see organic farming in practice and to meet and speak with the producers and sector's experts.

Wednesday, 11th May | 12pm

Andrew & Leonie Workman, Dunany Flour Organic, Drogheda, Co Louth Cereals, Milling Flour

Wednesday, 1* June | 2pm

John Hurley, Castle Hill House, Knockalaughta, Ballintubber, Castlerea, Co Roscommon Suckler to Weanling, Sheep

Wednesday, 8th June | 2pm

Fergal Byrne, Calverstown Little, Dunlavin, Co Kildare Sheep, Cereals, Beef Finishing

Wednesday, 15th June | 2pm

Donal & Frederique Keane, Camelton Stud, Summerhill, Co Meath Suckler to Beef, Cereals

> Scan the QR code to book your ticket!

Wednesday, 22nd June | 2pm

Clive Bright, Ardsallagh, Ballymote, Co. Sligo Beef, Direct Selling

Wednesday, 6th July | 2pm Gavin Tully, Clonhenritte,

Camolin, Enniscorthy, Co Wexford Cereals

Wednesday, 13th July | 2pm Declan Houlihan, Corrigeen Organic Farm, Rathcabin, Birr, Co Offaly Cereals, Poultry-eggs

Tuesday, 19th July | 2pm

Rose O Sullivan & Martin Fox, Spring Cottage Organic Farm, Parke, Kinnegad, Co Westmeath Fieldscale Vegetables, Protected Cropping, Cereals, Poultry-eggs, Direct Selling