

## Marketing at Woodlands Farm

"The biggest challenge is marketing," according to Andrew Dennis of Woodlands Farm near Boston in Lincolnshire.

Woodlands Farm will have more than 700 ha of organic silt land when conversion is complete and to an extent the scale dictates that supermarkets will be a primary outlet. Andrew has found it difficult to know, however if he has been receiving a fair price for his produce from packers. "Supermarkets will happily source organic vegetables from abroad if they can get them cheaper" he says. "I would like to see a commitment from retailers to buying British grown organic vegetables backed up by joint venture agreements or fixed price contracts."

In order to balance and diversify their marketing strategy Woodlands Farm introduced a county-wide box scheme in April 2000 and have since expanded beyond the county boundaries by taking on a neighbouring round. After the first year they are selling 400 boxes a week, with 100% growth in 6 months.



This scheme will run as a pilot project for two years. Produce is also sold on stalls at local Farmers Markets. Andrew is committed to locally produced food for local people and is developing a recognisable brand under the Woodlands Farm label. As well as the field-scale production of potatoes, brassicas, onions, beetroot, carrots and leeks a small scale 'market-garden' of less than 2 ha has been established where a greater diversity of crops can be grown for local marketing.

## Dissemination

The results from the projects eleven case studies are evaluated and used to provide data and information for farmers undergoing conversion. The results are disseminated in collaboration with the Organic Advisory Service, EFRC and other organic advisors. They are also incorporated into the Organic Farm Management Handbook. Information is disseminated at open days, events and workshops, through technical articles in the farming press as well as through publications in scientific journals.

Please note the information is based on results from the first phase of project (1996 - 2000) during which time many references farms were at initial stages of organic field vegetable production. Results need to be interpreted with caution as the performance will be influenced by weather and market conditions for those particular years.

The information is supplied without obligation and on the understanding that any person who acts upon it or otherwise changes his/her position in reliance thereon does so entirely at his/her own risk.

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## Thinking of converting?

The first point of contact for farmers interested in converting should be the government funded Organic Conversion Information Service (OCIS). This provides a telephone helpline service (0117 922 7707) and introductory information booklets about organic farming and OCIS. In addition producers can receive a farm visit by trained advisers from the Organic Advisory Service intended to help them decide if they are suitable for conversion, and explanation of the certification requirements.

Every organic farmer and producer must be registered with a certifying body. There are nine available in the United Kingdom. Regulations are available from all certifiers and the farm type and sales should be matched to the most appropriate body.

## Certifying bodies

- United Kingdom Register of Organic Food Standards - 020 7238 5605
- Organic Farmers and Growers - 01743 440512
- Scottish Organic Producers' Association - 01786 458090
- Organic Food Federation - 01760 720444
- Soil Association - 0117 914 2405
- Biodynamic Agricultural Association - 0131 624 3921
- Irish Organic Farmers and Growers' Association - 00 353 506 32563
- Organic Trust Ltd - 00 353 185 30271
- CMI - 0131 317 2500

# Conversion to Organic Field Vegetable Production



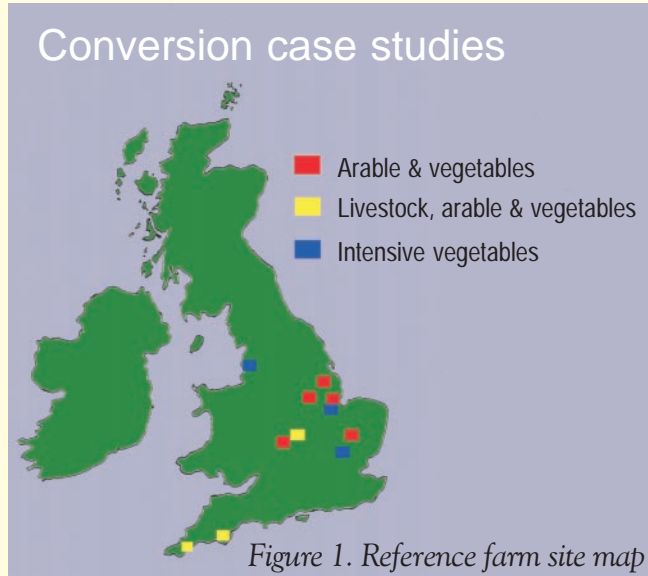
This leaflet outlines information gathered to date from the DEFRA funded project 'Conversion to Organic Field Vegetable Production'. The research aims to provide information on the agronomic and economic performance during conversion from conventional to organic systems with field vegetables.

## Background

At present around 80% of organic vegetables in the UK are imported. Despite strong growing demand from British consumers to buy fresh organic produce, growers have been reluctant to convert. A major barrier for farmers to change is a lack of information and advice relating to conversion. This project aims to address these issues by providing information on the agronomic and economic performance during and following conversion.

The study involves 11 sites that are undergoing conversion. Two are on experimental farms (HRI Wellesbourne and Kirton) and the other nine on commercial farms spread across the main vegetable producing areas in the country (Figure 1). The performance during the two 'in-conversion' years followed by the first cycle of the crop rotation is monitored. The study began in 1996 with farms now in various stages of organic production.

The farms will all grow organic field vegetables but are converting from different systems, for example from arable, mixed, or intensive vegetable production. The overall aim is to document and assess these conversions as case studies to provide information for farmers who are considering changing to organic systems with field vegetables.



## Conversion planning

On all farms conversion plans have been drawn up considering agronomic, economic and management implications. The arable and vegetable farms tended to make staged conversions, whereas the livestock farms made one whole farm change.

### Rotations

Crop rotation is the cornerstone of organic production and forms a major part of conversion planning. Rotations are designed with the aim of ensuring adequate supply of nutrients to the crops whilst minimising nutrient losses. They should also maintain and improve the organic matter content and structure of the soil and aid in control of weeds, pest and diseases. On all of the farms in the study the rotations include a mixture of fertility-building crops and exploitative cash crops. The balance between the two being crucial as this will have a direct impact on the performance of the system, agronomically and financially.

### Fertility-building

The farmers are growing a wide range of legumes/fertility-building crops, either grown in one long-term or several short-term phases. These will provide nitrogen and organic matter whilst improving soil structure. At the

## Research Partners

Leaders	HDRA
Collaborators	Horticulture Research International (Wellesbourne and Kirton)
	Organic Advisory Service, Elm Farm Research Centre
	Institute of Rural Studies, University of Wales, Aberystwyth
	Nine commercial farms

## Weed control at Polybell Farm

Businesses converting to organic production often find weed control one of their greatest technical challenges and at Polybell it has been a steep learning curve. However the crops are particularly clean, testament to the fact that weeds can be managed effectively on a large scale.

Polybell Farm grew 68 ha (170 acres) of field vegetables in 2000/01 their second year of organic vegetable production. Much of the farm is fertile black peat land which poses particular challenges for organic conversion with high weed pressures from redshank, pale persicaria, knotgrass and chickweed in particular.



Reducing hand labour is the key to profitability. “Do as much as possible with tractors and reduce the number of people in the field” says David McArthur, organic crop manager. “The farm has experienced problems in getting a large number of competent people on a short-term basis for hand-weeding” adds Peter Cornish, Farms Director.

After advice from the Organic Advisory Service and farm walks they invested in a range of equipment which gives them flexibility. This year they have managed to grow some crops such as calabrese and potatoes through to harvest without any hand labour. They found their finger weeder particularly useful in the leeks and brassicas and hope to use it for more crops next year. Stale seed beds are used whenever possible and pre-emergent flame weeding is used for drilled crops. Timeliness is crucial and the windows of opportunity are often very small. Post-emergence they directly follow the brush weeder with a bed weeder to hand weed within the row.

It is important to set up a system that avoids having to adjust your equipment frequently for different crops and “go through the crop with the tractor hoes as often as you can” says David McArthur.

organic unit at HRI Wellesbourne, target rotations with different fertility-building regimes (species and period) are being evaluated. As the land on most of the farms is registered for IACS payments, the farmers have been able to claim set-aside on their leys, and by obtaining a derogation from DEFRA (providing proof of organic certification) they have been able to utilise an increased clover content in these leys.

An example of a horticultural rotation is shown in Figure 2. The most nutrient-demanding crops are usually grown directly after the ley to make maximum use of the nutrients, especially the nitrogen, that are released as the material breaks down. Less demanding crops can be grown the following season, and in the third cropping year of an arable rotation a cereal undersown with clover starts the rotation again. Crop rotations will vary according to farm and on many of those involved in this study they are much longer and also vary between different fields within the farm. Marketing and practical considerations will also influence the order of the crops.

Each harvested crop removes nutrients from the farm. There are several ways of replacing these without using synthetic fertilisers. Most of the farms have applied animal manure from their own or a nearby farm. Compost is another option. Green waste compost is available from companies specialising in composting park and garden waste and has been applied at the organic unit at HRI Wellesbourne.

## Pest, diseases and weeds

Pests and diseases have in general been less of a problem during conversion than was anticipated by the farmers. Growers have used a variety of techniques; rotations, time of sowing, crop covers, use of resistant varieties and of permitted sprays to minimise the impact of pests. For most of the crops grown on the reference farms during the 2000/01 season, damage by pests and diseases were not considered to have been significant in terms of affecting marketable yields. Diseases were generally more of a problem than pests, with potato blight being the most significant.

In most of the crops on the farms weeds have been managed and kept to satisfactory levels using a combination of accepted organic techniques; stale seedbeds, thermal and inter-row cultivations and by hand weeding. The farmers have had to adapt to new techniques and to new machinery for weed control, but they were found to do this relatively easily. Most crops apart from potatoes have required at least one hand weeding, and this has proved to be expensive, although it was mainly used in high value crops where the cost has been recouped through high sales values. Annual weeds caused more problems than perennial weeds in the first season, although there are indications that perennial weeds are becoming more of a problem in the second year of production.

## Soil management

Problems related to difficulties with soil management were highlighted on several of the farms including HRI Wellesbourne. At present, best practice regimes for soil management are poorly defined and the long term effects and implications on the soil of different cultivation activities are not well understood.

On a number of farms compaction and poor soil structure was identified to be the cause of poor plant growth and yields. It is clear that the compaction may not necessarily have arisen as a result of converting to organic production, but in the organic system the consequences of poor soil structure manifested themselves more clearly e.g. the crop showing symptoms of nitrogen deficiency.

## Economics

Financial performance is one of the central factors affecting a grower's decision on whether or not to convert to organic production. Uncertainty and low prices in the conventional sector set against high demand and premium prices for organic produce seem an attractive alternative. It is however important to consider all implications.

The conversion process can be very costly in terms of reduced income. Many of the farmers in the study have stockless systems which have to take land out of production to put it into a fertility-building leys. The Organic Farming Scheme offers conversion aid payments of £450/ha over 5 years on IACS registered land. This coupled with the ability to claim set-aside payments on eligible grass/clover leys does help to offset some of the loss of income during conversion.

In the first year following conversion farmers in the study have obtained vegetable yields on average 40-50% below conventional averages and 28% below typical yields from established organic farms. However, there were considerable variations between farms and between crops. The significant price premiums that organic vegetables crops have attracted, has enabled farmers to obtain overall returns that are competitive or in some cases more profitable than conventional production. According to the Soil Association prices for organic vegetables are 20-200% higher



than conventional. However, as more growers convert and supply of organic produce increases, prices are falling and market specifications are becoming tighter. Marketing is likely to become more difficult and growers may have to look at alternative strategies such as direct marketing and processing their own crops as a means of adding value (see 'Marketing at Woodlands Farm').

Costs of production in organic systems are often higher than conventional ones. The most obvious cost is the loss of income attached to land devoted to fertility building. Organic systems often require more casual labour and capital investments such as mechanical weeding equipment will probably be necessary as well.

Current organic vegetable gross margins are often higher than conventional, but the economics of the whole rotation must be considered because fewer cash crops can be grown in an organic system. However, the initial findings from this project are indicating that over-all farm income levels have the potential to be higher following conversion.

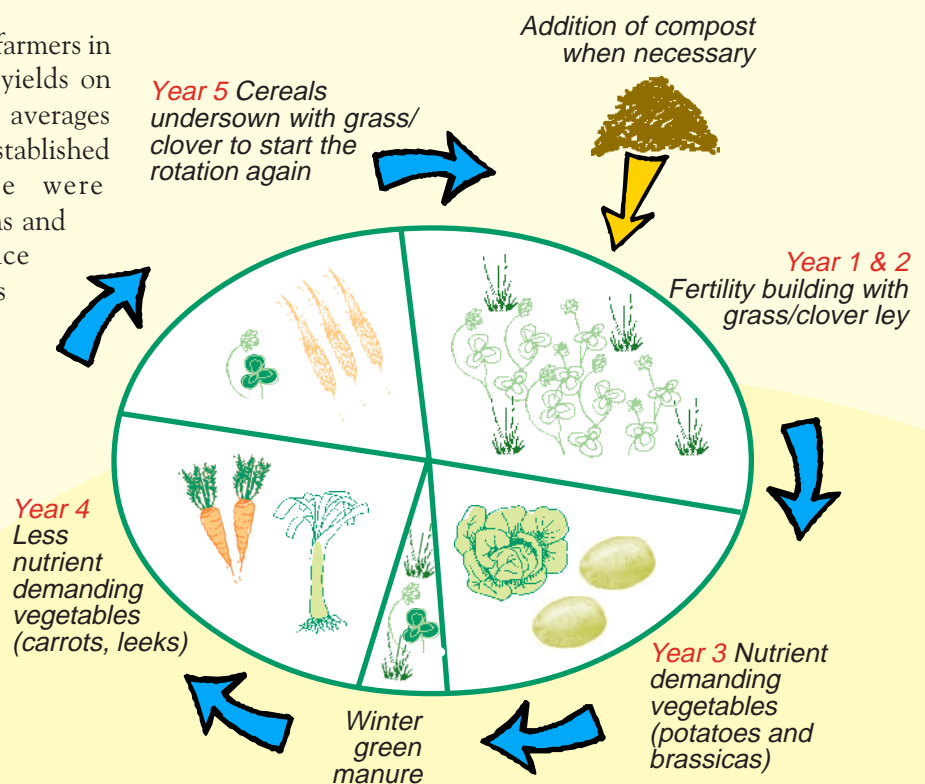


Figure 2. An example of a typical rotation with vegetables