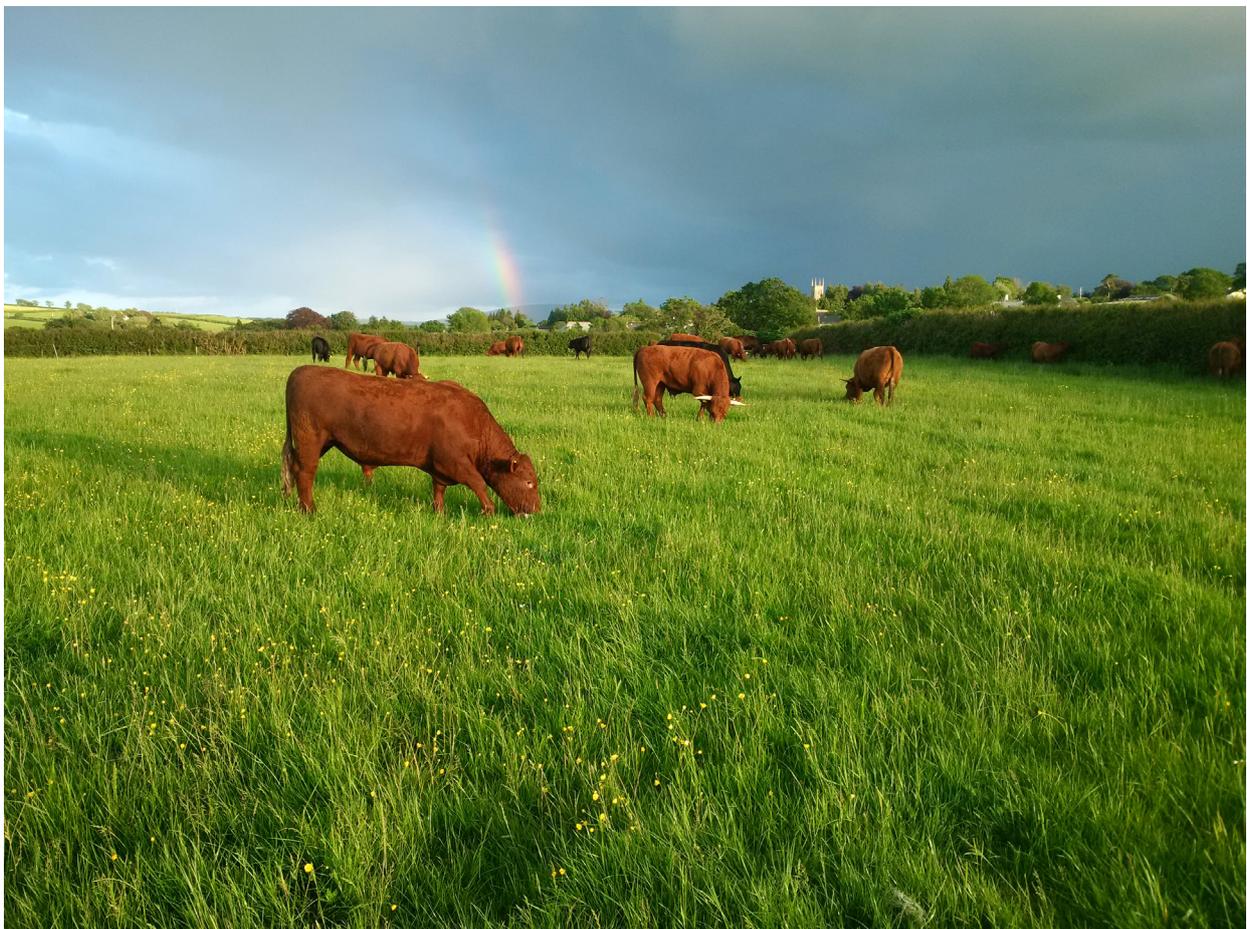




# Food Research Collaboration

## Voices from the field: Can farmers champion health?



Interviews by Rosalind Sharpe  
July 2019

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Educating, researching & influencing  
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Food, Farming  
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**\*Back and front cover photos by Graham Macklin - Hayes Meadow Farm, Devon**

# Foreword

One of the great joys of the RSA Food, Farming & Countryside Commission's work has been meeting and hearing from so many people who are already doing extra-ordinary things to bring a more sustainable, more healthy and regenerative future to life.

In this richly textured and inspiring collection of interviews by the Food Research Collaboration, we find insights into how farmers themselves see their relationship with health. The links between farming, health and wellbeing are wide and deep – from the health of the soil to the health benefits of being in nature – but they are often overlooked and undervalued. One of the core themes of the Commission's work is to raise our understanding of the link between health and wellbeing, farming and the countryside.

I am inspired and moved by these stories: Pennyhooks Farm in Oxfordshire providing support to young people with autism, giving them the space to thrive through caring for the animals; the important work Richard Betton is doing to protect farmers' mental health as well as their physical health; and the shift to no-till at Wexcombe Manor Farm brought about by realising the deep-rooted link between soil health and human health.

From care farming to education, land use to wildlife, healthy crops to soil health, the farmers we see here are leading the way forward, showing us a better version of the future – a future that is already coming into life.

The time is now for an historic drive to put health at the heart of our food system. As we've seen in many of the interviews, people are already making changes to incorporate health into their businesses – sometimes at considerable economic and emotional cost. Government holds many of the key levers to improve this, and must take the lead, in partnerships with businesses and civil society. All our efforts now - policy, legislation, money and resources - must be directed towards implementing and accelerating a transition plan for climate, nature, and public health and wellbeing.

## **Sue Pritchard**

Director, The RSA Food, Farming and Countryside Commission



# Introduction

What is farming for? An apparently simple question, to which a reasonable answer might be, to produce food. What is food for? To keep us alive - and, by implication, in good health. So another answer to the question 'What is farming for?' might be, to produce food that keeps us healthy.

But the idea that human health is a primary objective of agriculture is not reflected in current government policy, at least in England. The 2018 Health and Harmony consultation paper, which outlined the direction of travel for agriculture policy after Brexit, conspicuously neglected to talk about health, apart from in the title. In future, the document stated, the 'cornerstone' of policy will be support for farmers who produce environmental benefits, such as unpolluted water, or public amenities, such as natural spaces for recreation.

These are important priorities. But food policy must be broader and more integrated than this. Agricultural policy has enormous potential either to improve or to undermine public health, with linked benefits (or costs) to the wider economy. For example, policy could encourage farmers to grow more vegetables and pulses, or help them to rear livestock on grass-based diets, or support a transition away from pesticide-dependence, or underwrite widespread prescribing of on-farm experience as a treatment for ill-health. Advocates would argue that these changes could bring multiple benefits: to consumers, who would enjoy better health; to farmers, who would be rewarded for producing something of great public value; and to taxpayers, who would pay less to counteract the effects of diet-related disease. In other words, farmers could farm for food, health and nature. But these arguments are contested – and as Brexit looms, and with it possible trade deals that could undermine British food standards, farmers find themselves at the centre of a policy storm.

So what do farmers themselves think? Do they see themselves as the custodians of our health while they are ploughing, drilling, spraying, harvesting, marshalling their herds, milking, tending their grass, fattening for slaughter? Or indeed while they are thinking of ways to diversify in order to supplement the often small income they make from producing food; or while they multi-task as marketers, processors, retailers and administrators, things they often have to do to get their products to market?

**FOOD RESEARCH COLLABORATION**  
VOICES FROM THE FIELD: CAN FARMERS CHAMPION HEALTH?

Working in collaboration with the Food, Farming and Countryside Commission, we interviewed a selection of British farmers to ask them how they saw human health in relation to their farming activities, and how it affected their planning and decision making. We spoke to farmers who expressed an initial interest in the subject, so the selection is not a representative sample. But the collection provides insight into how these farmers balanced health against other priorities. And it shows how difficult they sometimes found it to attach a market value to the healthy qualities they felt their methods imparted to their products.

The interviews form part of the Food Research Collaboration's ongoing work on the policy disconnect between farming and human health.

**Rosalind Sharpe**

Research Fellow, Food Research Collaboration,  
Centre for Food Policy, City, University of London



# The Interviews

## Durwin Banks

**Farm: The Linseed Farm, Sussex**

*Durwin Banks grows linseed as part of the rotation on his 70-hectare family farm, aiming to have roughly 50 hectares of linseed every year. The linseed is processed on farm, and the products sold direct to consumers mainly via mail order.*

When people ask what led me to linseed, I usually say, 'poverty'. Trying to make a living on a small family farm is extremely difficult, so I was always trying to think of make-a-million ideas. I've had lots of failures. One thing I did was build a still and distil camomile, and that was successful but I discovered you have to have a big area to produce enough to be viable. But that led to linseed oil, about 20 years ago. I knew that we used to feed linseed oil cakes to the cattle and their coats shone and they were really healthy, so I knew it was a good thing. I began to think, can't I produce linseed oil? It has been an amazing journey.

I can't say I was motivated by health. The main thing was, I wanted to make a living. But as soon as I started researching it I began to realise it was an amazing seed, and had been recommended for human consumption, to maintain health, from Hippocrates onwards. I got small press, and converted an old fertiliser spreader into a hopper for the seeds to feed the press, and I started producing in 25-litre barrels. But of course there's sediment in there so you'd have to pick it up and tip it out and strain it. Quite a performance.

My initial thought was to sell it for horses, not humans, so I knocked on people's doors who kept horses. At the time they were buying lots of cod liver oil, but horses don't eat fish, so why



would cod liver oil be a good thing? I eventually got more merchants selling my product, and with the internet I was able to discover all sorts of other health benefits. It contains a lot of Omega-3, which is very anti-inflammatory.

From the animal point of view, you would have fed your dairy cows linseed and it would have helped them produce more milk and cope better with calving. In fact I have just written a paper about human pregnancy, called 'It's about time we treated women a little bit more like sheep'. Pregnant women talk about 'baby brain'. That is a real thing and to do with fats. You're not feeding your body the right fats at the time when the baby is taking the Omega-3s from your body. As farmers we know exactly how to get our ewes into the right condition, but we don't always make the link between the way we farm and human health.

What's gone on, of course, and farmers and the medical world are not completely to blame, is that they got sucked into the idea that scientific advances like fertilisers, weed killers, chemicals and tablets would be a better way forward. It wasn't unreasonable to think that. But we are pretty sure now, I think, that it was the wrong road, and in farming it has led to the destruction of the soil biome and in the medical world to the compromising of the human gut biome.

I have always tried to link farming and health. But I think it was never really the farmers' view that they were producing food for health. They were producing food that wasn't unhealthy. As consumers' time got stolen from them, they wanted convenience food. That was one of the drivers for the industrialisation of farming. And farmers thought, this is what we've got to do, we're pressured and we've got to produce more

and more. Whereas the real driver should have been to link food with health. The culmination is that we have worse food and more food-related disease than we've ever had, and it needs to be acknowledged. Farmers really are at the forefront, they need to produce food to keep people healthy.

I guess there are lots of farmers like me, looking for ways to make a living from small acreage, who may be driven by the thought that they want to create healthier food, and look after the countryside and the soil. That will give them the passion – but it will not necessarily be easy. What we do is hard work, labour intensive. Then you've got to sell your product, go to farmers' markets, shows, exhibitions, things like that. You haven't got a queue of people lining up to buy your product. People buy people, so you've got to be a people person in order to do it.

### **My message to policy makers**

Repair local infrastructure. Distribution is difficult for us. Most of our stuff goes out by post or courier. It would be great if we could cooperate a bit more with food boxes, say, but it doesn't seem easy to make contact. The traditional market town was supported by all the trades and served the surrounding famers, and there were butchers and greengrocers. We used to have milk trains, markets. When farmers hit on a new idea now, they want to get it into supermarkets, because that's how they can distribute it.

### **My message to the FFCC**

Take some of the money from Big Pharma and give it back to small farmers. What we've done in the last 60 years or so is move money from little farmers, and we've driven them from the land. We've created food that makes people ill, and as a consequence there's all this medication going on and a lot of it could be avoided by just being able to have the right kind of food, in season, and understanding how to feed people.

## Richard Betton

### Farm: Waters Meeting Farm

*Tenant farmer Richard Betton has 280 pedigree Swaledale sheep and 22 Aberdeen Angus suckler cows on a 290-hectare moorland farm high in the Pennines. Through the NFU, and the farmer support organisations the Farming Community Network and Upper Teesdale Agriculture Support Services, he also works to protect farmers' physical and mental health.*

There's really two strands to farmer health. There's the more obvious one, the physical wear and tear. Certainly in this area a lot of the work is still manual, repairing the drystone walls, handling cattle and sheep, hard physical work. There's not many older farmers who don't have aches and pains that the health service says we shouldn't have. And then there's the hidden ones, the mental health problems, a lot of it down to isolation. It's very easy when you're working on your own to think the whole world is against you because Natural England doesn't want you to do this, the estate don't want you to do that, your lambs didn't make enough money and the feed price has gone up. It's stressful. One of the things that I really try to push is that it's all right not to cope. And the first thing is to talk to somebody. Often just explaining your problems to somebody who is unfamiliar with them helps you to sort them out in your own head.

Farming Community Network has a helpline which operates 365 days a year, from 7am to 11pm. If a farmer phones up and is desperate, or just wants somebody to talk to, our volunteers will either phone them or go and visit them. There's over 400 volunteers, organised into county groups, including a lot of active and retired farmers. They'll talk and listen and signpost. We don't give advice, we befriend them if you like. And quite often they find it helpful to talk to somebody who's not part of the immediate family.



For a lot of farmers, there's a real elephant in the room in the subject of succession. The children don't want to say, what's going to happen when you die? Quite often it's a huge relief if you can get that conversation going and the family can start planning. All sorts of things come out. It may turn out that the son doesn't want the farm, and wants to do something else.

I'm also on the council of the National Farmers' Union, and I've made a big play about mental health and wellbeing. I'm getting a lot of support for it in the NFU now, which I wasn't getting some years ago.

I also work for a charity called Upper Teesdale Agriculture Support Services, where I help farmers with their paperwork. Back in the early 90s we had eight suicides in six months in Teesdale in the farming community. The health service commissioned some research and found a common was the ever-growing complexity of paperwork and fear of the consequences of getting

it wrong. So in 2000, UTASS was set up to help farmers with their paperwork.

Part of the reason is that Teesdale is dominated by big landed estates, so there's a lot of relatively impoverished tenant hill farmers. You don't have lots of assets as a tenant, just your livestock. Perhaps that had something to do with it. In my time in farming one of the big changes has been that the support payment has moved from the tenant's asset, which was his livestock, to the landlord's asset, which is the land. It's called decoupling. Ever since then, I think tenant farmers have almost been fighting a losing battle. And the big estates have been pushing to get rid of direct payments and replace them with payments for the 'public goods' which they own. It's another tension.

There are other things bearing down on farmers' mental wellbeing. We're more dependent on support payments, because food has got cheaper but the cost of production hasn't gone down, and we are far more aware of the environmental cost if we don't do it properly. The isolation has got worse, with lots of people leaving the land, farms getting bigger, very few farmers employing anybody, people working on their own. Nowadays a farmer has to be a shepherd, a stockman, a tractor driver, a drystone waller, an electrician, a plumber, and do all the management and the VAT accounts and the recordkeeping. They're highly skilled people. And they don't get any days off. When you're having to keep so many balls in the air, it's all right not to cope. It's absolutely natural.



### **My message to policy makers**

The thing that I'm really worried about is protecting the tenant farmer. If in future support is all attached to the land, via environmental schemes producing public goods that cover the whole estate, the owners may not pass the payment on to their tenants who are actually doing the delivery. I'm a first generation farmer, I'm a farmer by choice. I would never have afforded to buy a viable farm. So the tenancy sector has given me the chance to farm. But I see it becoming more and more something to enrich the owners of the land and not the people who are delivering the public goods, the livestock grazing in the fields, the drystone walls or the hedges. Which is what I think people come to see in the countryside. And I also think we need a proper return for our labour. The minimum wage doesn't apply to a lot of farmers and their families.

### **My message to the FFCC**

The most important thing is to remember that farmers and their families are people. I think they're often seen as a commodity or a problem, and actually farmers are the solution to a lot of the things that we want to do in this country. But you've got to handle them right, and farmers have got to be receptive and change their culture as well.

## Anna Blumfield

**Farm: Deersbrook Farm, Essex**

*Anna Blumfield is a third-generation farmer, raising Native Sussex beef cattle and rare breed pigs. The cattle are entirely grass-fed and Pasture For Life certified, and she and her husband have set up a butchery and a farm shop to sell their own meat products.*

Human health is why we do everything really, to feed the nation. It's where we start from, which is why we've gone down the Pasture for Life route, because it's better for the animal, the environment and us, the consumer. It has a higher nutritional value. We sent the beef off for analysis and found out that the omega levels are very elevated, on a par with wild fish or salmon. When I was choosing what I was going to do A-level-wise, that was when the BSE and FMD outbreaks were happening. We couldn't see a future in farming, so I did sports nutrition at uni. Farming and health have always gone together for me.

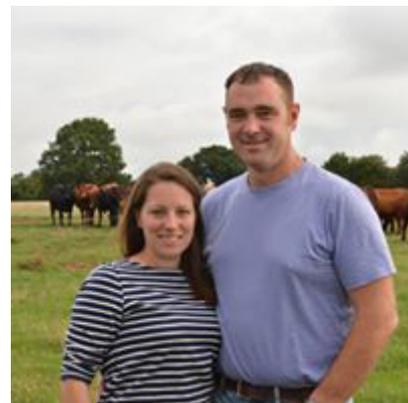
Having eaten our own meat growing up, I knew it tasted different. When mum and dad were farming, they had a continental herd, and although the cows and heifers were mainly outside on grass, the bulls were finished inside on grain. At home we used to probably eat more of the heifers and most of them were pretty much 100% pasture. But the continental bulls, if you didn't feed them grain they would just be a bag of bones. When my husband and I moved back, seven years ago, we introduced the native Sussex breed, got them certified as Pasture For Life, and started selling from the door.

It was an inner belief that got me started. The turning point for my parents to back me was the bank manager encouraging us, and customer feedback. People eating our produce and saying, 'This is how beef used to taste, this is the most flavoursome beef'. Then came the customers with health problems, who came back with test results after changing their diets and turned their health around.

We have a lot of vegetarians and vegans come to the farm shop to buy produce. Either they are buying for their families or they have been told

**“if producing healthy food is  
a by-product, it's a good by-product”**

Anna Blumfield



medically they ought to eat some meat, so then they look for the highest quality. They don't need much to get amazing nutrition from it, so we get on well with them. I actually think the vegan campaign has been beneficial. It's been a good thing to get people thinking. For a lot of people it has brought attention to what they are eating, why they are eating it, how much they are eating.

Our animals are born and raised on the farm. Most of them are outside all year round --they calve outside, and they thrive. The calves stay with their mothers till they're naturally weaned at eight or nine months, so they've got that natural resilience. We're lucky to have a local, family-run abattoir. So they go off to that and come back as a whole carcass. We age it at least four weeks in our hanging chamber, then they are ready to be butchered here and sold straight to the public and restaurants. All the beef and pork in our shop is our own. Then we have our friends' lamb and chickens, and game in season, so we know exactly where everything has come from.

Farming the way we do can be a challenge sometimes. The cows take longer to mature, so we need a lot more grazing, which can be hard to get hold of and difficult to manage, because of the weather. Whereas if we were more of a factory farm, the cows would be in most of the time, the grain would just turn up, and we wouldn't have to worry about whether the grass was growing. We just about make a living. We don't actually take any drawings from the farm, we are ploughing everything back in because we are still building it up.

The way to get other farmers to do this is somehow to educate and give incentives. It's true the financial incentives haven't gone for the nutrition viewpoint, it's environmental. But if producing healthy food is a by-product, it's a good by-product.

### **My message to the FFCC**

We would not need subsidies if people and markets were willing to pay the real price for food. Supermarkets are selling meat at a loss, giving consumers the wrong impression of cheap food and a throw-away ethos, instead of paying a real price for real food that you appreciate and enjoy. Education on food and farming is vital, and the media – get some good press.

### **My message to policymakers**

Carry on with the stewardship, and it will get people there in the end. But also, our cattle take 24-30 months, sometimes longer, before they are ready for slaughter. If cattle go over 30 months, the abattoir charges more as they have to remove spine, as a result of regulations in place since BSE. Then you have more area exposed, so you have wastage when you are dry-aging. This doesn't encourage farmers to allow their cattle to grow slowly. The Government say the regulations will change, as there's no evidence of cross contamination, but we're still waiting.

## Laura and Jonathan Chapman

**Farm: Bailey Hill Farm, Buckinghamshire**

*The Chapmans keep around 65 grass-fed pedigree Red Devon beef cattle, plus calves and followers, on their 180-hectare farm. They have a butchery on site, and sell their meat direct to regular customers, farm shops and a couple of restaurants in London. They have recently added a small flock of Wiltshire Horn sheep.*

### Laura:

There are various reasons why what we do is beneficial for health, from the impact on the environment through to the nutritional quality of our beef. The way we're farming is reducing reliance on chemicals, especially fertilisers, and fewer chemicals in our environment has got to be a good thing for human health. Then in terms of the nutritional quality of the produce, there is growing evidence that modern production techniques are reducing the nutrient density of all sorts of food. Particularly when it comes to meat, evidence suggests that when meat is fully finished on a mixture of different grasses it will have a higher mineral load and a more beneficial ratio of omega 3 and 6 fatty acids than grain-finished meat. And we're very much of the belief that eating pasture-fed red meat in sensible quantities is good for health.

We started this enterprise in 2011. Jonathan's father was a farm manager and Jonathan went to agriculture college, then did other things before coming back to farming. I grew up in farming country and had a real interest in food production and the way we interact with our environment. We started out with six Red Devon cattle with calves, and the more we learned, the more fascinated we became.

It's involved an enormous amount of reading and talking to people, trial and error, not being afraid to approach experts for advice, seeing how your own parcel of land performs, and having faith that something that sounds sensible might have good results even if it's not what the people next door are doing.

I think perhaps people may be less aware of the impact of farming systems on the nutritional value of what they eat, and more aware of potential impacts on the environment. But we have quite a lot of customers who come to us specifically because of the health aspects of our meat – people with food intolerances, people who have been advised by doctors to eat pasture-fed meat. So there's certainly awareness of it, but perhaps it's just in certain circles, at the moment.

### Jonathan:

The health of the soil is absolutely key to the health and future of the human race. And at present, farming is depleting the soil. And the food it's producing is, I use the word 'forced' in inverted commas, because the farmer's applying a massive amount of fertilisers, plus irrigation, just to get tonnage. Food is sold on weight or volume, not on nutrient density or even taste.

Land tenure is my bugbear. The first problem is that because of subsidies and tax breaks and other reasons, rural land is disproportionately valuable. The second is that most land is let on short tenancies, typically one to three years. So when a farmer takes on 100 acres of arable land on a three-year tenancy, he's not going to invest in that land, manure it, lime it, clear out the ditches or maintain the drainage or fencing. He'll do as little as possible and basically extract as much as he can, because that makes financial sense. And then in three years' time, the landlord may renew the tenancy or not.

We would be organic by choice, we effectively are in terms of how we manage everything. But we can't be, because we rent 160 hectares of our land, and the longest tenancy is three years and most of it is annual. To be organic, you need to have control of the land for a period of five years. There would be a lot more organic in this country if the land tenure provisions enabled it.

The current system exhausts the soil. Around here it's mainly arable, and it's wheat, barley, rape, year after year. That's not a rotation, it's just cash crop after cash crop. It defeats the object of rotation, which is to build up fertility. There is no nutrient cycle. There's just more fertiliser put on, and that kills the soil biology. The water cycle has broken down. You've got soil erosion because you haven't

got any organic matter to hold moisture, therefore when you get a drought it just blows off.

I get frustrated. What was the expression, 'Sustainable intensification'? They are two opposites. It's complete nonsense determined by high-tech companies to sell more technology. It frightens me that a lot of this technology costs so much money and there isn't the return there, and technology gets outdated very quickly. Whereas good management practice lasts forever. A lot of farmers are going back to what my grandfather was doing. Why did it change? Political intervention. When I was at college, wheat was subsidised a certain amount a ton. Anyone with an ounce of sense, even on poor ground, if you got two tons an acre, you'd make good money. That's why they all ploughed up the grassland.

#### **Laura's message to policymakers**

We need wider recognition of the benefits of the pasture-fed approach. Pasture-fed should be as clearly defined and well recognised as, say, organic.

#### **Jonathan's message to policymakers**

Make five or even better 10 years the minimum length of farm leases.

#### **Jonathan's message to the FFCC**

We have to start farming in a truly regenerative fashion. Sustaining what we have is not good enough, we have to improve it. And that can be achieved by putting more ruminants back on the land, more animals back into rotations. The soil quality will be enhanced long term, and with that will come the water cycle, nutrient cycle and everything else that goes with it.



## Polly Dumbreck

### Farm: Hoopers Farm, Kent

*Polly Dumbreck keeps a breeding flock of 150 ewes and a small herd of Sussex cattle. She is also a 'social farmer', which means that groups of children with behavioural or emotional challenges spend time on the farm and join in its activities, for therapeutic purposes.*

We have a group one day a week, and we've been doing it for about three years. We were approached by Farm Buddies, which was on the lookout for small family farms. To date, we have only worked with young people – the ideal age is between 11 and 16. The kids are from all sorts of backgrounds. Most are struggling at school, through behavioural issues, or because they're being bullied, or they are just struggling academically. Anger, depression, that sort of thing. The idea is that a lot of what they do here is in real work situations. Whereas some social farms are primarily therapeutic, ours is a farm first. So our visitors are doing real farm tasks, although obviously we have to choose the activities carefully.

My father was a farmer, but he died when I was 15 and the farm was sold. My husband and I started off with an agricultural contracting business 35 years ago. Then we bought an arable farm, which we sold after a few years and bought this one, in a very ruinous state. We own 130 acres and rent another 200 or 300 on grazing licences. We rear our livestock to be pasture finished, because I'm a great believer that grass-fed animals are better for human health.

For the social farming, I did CEVAs training – Countryside Educational Visits Accreditation Scheme. We have four children at a time, from 10 am to 3pm one day a week, for a minimum of 12 weeks. And it works really well. Basically they just become part of the family for the day. The current

lot, I jokingly say, we can't get rid of. This is their third session. Each child comes with a teaching assistant or parent, so that's eight extra people on the farm. I have four kids of my own, I suppose that was preparation.

We now have a sense of what they can and can't do. We don't get an awful lot achieved, although the longer you have them, the better it gets. Some of them have huge issues about things they can't cope with to begin with, smells or touches or taste. They also eat with us, and a lot of kids on the autism spectrum have problems eating. But somehow they always seem to eat what we have, and their helpers are always astounded. On the farm, because the lambs are cute, they don't notice the smells.

I think the benefits derive from the fact that they feel part of the family, and they feel that what they do is worthwhile, rather than stuff that's just to keep them quiet. And of course they benefit from being outside and with the livestock. And they absolutely adore my dog, and she adores them. If they're stressed they can have a cuddle with her and it just all seems to float away. And also, this is our home, so it's deliberately not institutional, we don't have signs everywhere.

It has been a real positive. We've seen the impact and it's very gratifying. One of the lads we had last year went off to agricultural college, having not been able to go to school. And it has the benefit for us of making us stand back from what we're doing.

It does add to the workload. There are certain things we don't do with them, for safety reasons, because the cattle are so big, or machinery work. So we sometimes struggle to get everything done. I don't think it's particularly commercial either, but then none of this farming lark is on the scale we do it. We charge a fee per child, and Farm Buddies charges us a commission. If we paid someone else to do our work while they're here, it wouldn't pay.

There's enormous potential for schemes like this, not just with youngsters. We farmers could really help a lot of people, but it would take money and training. We're lucky, we have a big farmhouse, so we can comfortably-ish fit eight extra people around our dining table. A lot of people couldn't do that. Having said that, our wellie room becomes a nightmare. It would be great to have a little social room, that would belong to the group. Also, some of these kids have attachment issues, so if you can encourage them to not always have mum trotting along behind, that's progress. But it's quite trusting of us, then, to leave mum in our house. Funding for that sort of thing would be an enormous help.

As a farmer, what impacts my own health is the amount of admin we have to deal with. We're in a high-level stewardship scheme, but we haven't been paid since 2017 because the Government have made a mess of it. We're in a Nitrate Vulnerable Zone, which is fine, but the administration is horrendous. We've got an abstraction licence, and they've just changed it to a different government website, which doesn't work.

But I am being gloomy! It's beautiful here. We're incredibly lucky to live where we do. And we feel privileged to be able to share it with other people. It is a real joy.

### My message to policymakers

I think a huge number of small farmers like us will quit. And that will have a huge effect on local communities in all sorts of ways, because we're the ones who live here, whereas big farmers and multinationals don't. And we value where we live. The small family farm is hugely important, and that really does need to be addressed.



## Duncan Farrington

### Farm: Bottom Farm, Northamptonshire

*Duncan Farrington is a partner in his family's 290-hectare arable farm, which grows combinable crops including oilseed rape. He is also a director of Farrington Oils, based at Bottom Farm, which cold-presses the farm's rapeseed to produce a brand of rapeseed oil, as well as salad dressings and mayonnaise that sell nationwide.*

Farrington Oils is based on research I did at university 25 years ago. I did my thesis on rapeseed, and realised how wonderfully healthy it is, low in saturated fat, lots of Omega oils, including Omega-3. I also realised it was an unloved, unknown commodity oil, and I have based my whole business on it. The product we make is healthy, but we don't sell it as a health food, we sell it as a mainstream, culinary product that happens to be healthy. We are promoting a British, quality, unadulterated food product to consumers. The motive was economic. When I came back to the farm, in 1993, it was pretty obvious that the economics of the industry just weren't there to provide a living, so I looked for ways to increase our income. I was the first person in Britain to grow, press and bottle rapeseed oil on farm. It was already there, but in a plastic bottle, a refined version, so not quite as nutritious as what we're doing. I was worried, but after four years, Farrington Oils had the same turnover as the farm.

But the way we farm our crops also benefits human health. We grow wheat, rapeseed, barley and beans, all for human consumption. We participate in the LEAF scheme, which stands for Linking Environment and Farming. I'm a LEAF-marque grower for rapeseed and a LEAF demonstration farm. What initially started off as an exercise in cost saving, trying to reduce the cultivation passes needed to establish my crops, has turned into something with the added

benefits of a more biologically active, nutritious soil. I've been learning how to look after the soil, with the goal of growing more profitable crops. That has to be the game we're in, I'm not doing it for some environmental idealism. But if you end up making the soil more healthy and nutritious, it follows that the crops you grow become more healthy and nutritious, and if you're growing healthy crops on healthy soil, you then end up hopefully getting more healthy people.



Farming this way has enabled me to cut costs. Traditionally, to plant a crop you would plough the ground, which is very intensive in use of diesel, labour and costly machinery. I stopped ploughing on the farm in 1998, and I replaced it with minimum tillage. I've also looked at zero tillage, where we plant the seed in the undisturbed ground from the previous year. It has huge risks, because if you get the drainage wrong or the soil is not in good condition, the seed will rot. Do I make a good living? The oil is a thriving business.

The farm, I am learning over the years and getting better at it. My cost base is lower but my yield is lower. I want to try and maintain yield.

**“Healthy living and eating is a life-long occupation, it’s not something you can do in five minutes...”**

Duncan Farrington

So I’ve made huge mistakes, made some big costs savings, learned a lot, and in the last few years am beginning to understand it. I suppose it would have been easier to stick with conventional methods, but life is boring if it’s all easy. As a farmer, you only probably have 40 harvests in your lifetime that you can learn from. So if you make a mistake once you’ve got to wait another 12 months before you can try something different.

I don’t think there’s a direct health benefit to my family from the way I farm because we aren’t eating just what we produce. But indirectly, as a family, including my teenage daughters, we’ve all learned about nutrition. And to me, it’s very important to do something you’re proud of. Some people just want to go to work and get home as quick as possible. Other people want to try and make a difference.

I have seen research showing how minerals have been depleted in British soils over the past 60 years. I have had soil analysis done for one of my fields, going back to 2002, and I can see I am making healthier soil. The level of minerals has increased, phosphorus has doubled through three applications of sewage sludge. In future, we will need to regain some of the knowledge our forebears had, with crop and pasture rotation, but we will also need to use modern technology, such as GPS and soil analysis, to identify areas for improvement. On health, for example, we could grow selenium enriched wheat by adding selenium to the soil, so we could replace the selenium-rich flour we used to get from Canada.

### **My message to policy makers**

The big one is actually get nutrition on the agenda. We farmers get £3.5 billion a year in agricultural support, but we could arguably get three or four times that amount from central Government to reduce ill-health. It could come from the NHS budget. Healthy living and eating is a life-long occupation, it’s not something you can do in five minutes, and you can’t do it by going to the NHS and saying, I’m obese and I’m malnourished and I’m unfit, can you sort me out? Put nutrition genuinely on the agenda.

## Liz Findlay

### Farm: Nantclyd Farm, Ceredigion

*Liz Findlay runs a mixed biodynamic enterprise on about 38 hectares, centred around her flock of 800 to 1,000 laying hens and the all-important aerobic composting system.*

We have a number of different enterprises here, all interlinked, and at the very heart of it is our compost system, which is completely integral to the whole farm. It feeds our soil, or rather the microorganisms in the soil, and supports the health of everything that lives on our land and also the people who eat our produce.

The poultry enterprise starts with day-old chicks, which we buy in, and we keep the birds until they're around two-and-a-half years old. They live in 200-bird laying sheds, which are out in pasture, surrounded by woodland, and they're free to scratch, roam, and find food for themselves, along with receiving a suitable poultry ration. At the end of their life with us, we sell them on, because they are still laying hens, or we slaughter them for home consumption.

Besides the poultry, we have 30 breeding ewes, Dorsets, that lamb in the autumn. They're integrated into the poultry system inasmuch as they graze the paddocks to maintain grass growth. We sell the lambs at around six months old, after they have been pasture fed over the winter.

We also have cattle that are, again, 100% pasture fed. They build up fertility, they paddock-graze to feed the soil and are finished at around 24-30 months and sold locally or wholesale. We also have arable land that produces grain for the poultry, and we grow a range of field-scale veg-roots, brassicas and alliums. And then we have polytunnels where we grow a mixture of salad crops, tomatoes, cucumbers and aubergines,

along with growing strawberries. We mainly sell our produce locally in the shops in Aberystwyth.

I'm a first-generation farmer. My dad was a grocer in Lancashire, so I've always been quite familiar with where food comes from. And I love my animals, really. That's a little bit why I went into farming. I did an HND in agriculture at college in Aberystwyth at the end of the '70s, and I learned that you couldn't grow grass unless you used chemical fertiliser. I then spent 10 years working on livestock farms, realising that it did not work. The people who made the money were the feed sales people and the fertiliser people. So I saved up some money and met my partner and we bought this land. And once I got my own little bit of land, the very last thing I was going to do was put any chemicals on to it.

By then I had realised that the problem is the whole economics of it. Food is expected to be cheap and you cannot grow quality food cheaply. We don't really get enough money for the food we produce. And we take no government subsidy. It's more trouble than it's worth for what we would get. We absolutely do make a living. We just work very hard at making it.



But to come back to human health, it's all to do with the aerobic composting. Any waste product whatsoever from the farm goes into a windrow composting system, where it is heated and turned to kill the pathogenic bacteria and leave behind the beneficials. It ends up as a product that smells and looks like floor-of-the-forest soil. It smells so nice you could almost eat it. We've analysed it, and it's full of beneficial bacteria and fungi. I think it's been shown that we have, and need, very similar bacteria and fungi in our gut. We are so connected, we just don't recognise how connected our gut biome is to the same microorganisms that make our whole planet tick.

I think intuitively people from many generations past have known that. It's why we've developed fermented foods, so that we can eat them. And it's true of our animals. Our cows have a rumen full of bacteria to digest their food and those bacteria have got to be fit, healthy and diverse.

When you start putting antibiotics in there, or adding this, that and the other, you're going to affect the ecosystem that lives inside the rumen, which the animal depends on for its health. Our sheep tidy up our veg field, graze the grass around the poultry paddocks, eat the docks. It all adds to a diverse diet. And it's the same for us, I feel. The bacteria and the fungi are the very roots of life. They're in everything that grows out of the soil.

Making compost is like making food in reverse. It's all one big cycle. We can so simply fix the whole climate change problem we have created on the planet, there's nothing difficult about it, it's about just going back to that cycle. We can lock carbon that we've put in the atmosphere back down into the soil if we manage it in the right way, with grazing livestock, with grass, with growing crops in a holistic way. And our health, most importantly our health. We can do away with the NHS, just about, when it comes to human health.

### **My message to policymakers**

I believe that poorer families should have something like food tokens or some means of spending money just on locally grown food, rather than imported food. When I say locally grown, I'm talking about UK-grown food. We can grow so many different foods here.

### **My message for the FFCC**

That we can fix all our problems with livestock farming. The vegan campaign worries me a lot. We need mixed farming systems – we can fix all the global problems with a mixed farming system.



## Bill Grayson

### Farm: Morecambe Bay Conservation Grazing Company

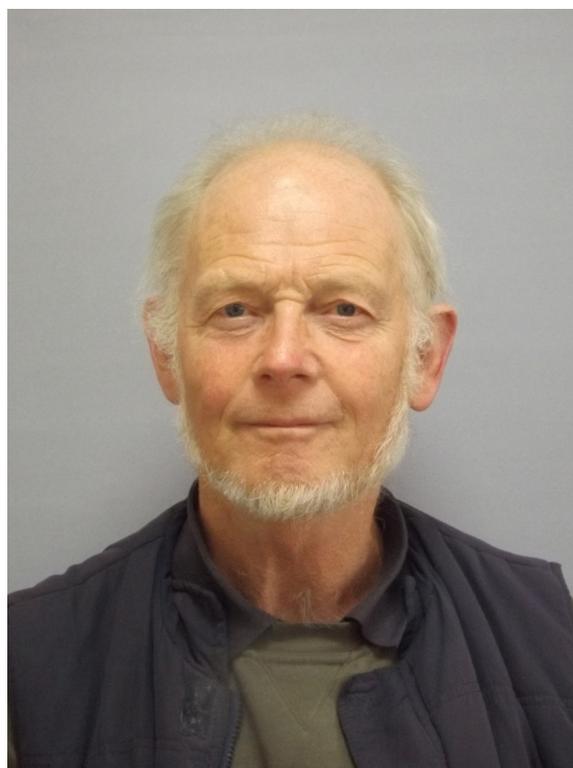
*Bill Grayson is an organic livestock farmer and conservation grazer, running mainly cattle over an area of about 1,100 hectares, with parcels of land scattered across Cumbria, North Lancashire and North Yorkshire. All of it is designated for its nature conservation value.*

We're all familiar with the phrase, 'you are what you eat'. I've subsequently amended it to say, with regard to livestock, 'you are what you eat has been eating'. Human health is the basis of what we do. Given the state of the world at the moment, we haven't as a species done a very good job of managing things. I'm hoping that as we discover more about the relationship between ourselves and our food and the environment, some of those mistakes might begin to rectify themselves. People will become more enlightened and healthier: the two go hand in hand.

What we do is called conservation grazing. The grazing regime is geared primarily to delivering nature conservation objectives, so there will inevitably be some constraints on the numbers of animals, the timing of animals going onto the site, and specific times when they are not required. It's about tailoring the grazing regime to maximise the benefits for whatever the specific wildlife objectives are. But what we do conforms to all the principles of farming: we breed our own cows, rear them, and they go off into the human food chain. I am an ecologist and a farmer: arguably all farmers should be both.

We started by managing grazing for the National Trust, and now do this for a range of other conservation organisations. They are responsible for managing nature reserves for their conservation value, but they don't farm in their own right, so they need farmers who can deliver the right kind

of grazing regimes to achieve their objectives. All this has made a successful business. The current system of farm support has worked well for us and our staff, and for the people we provide this grazing for.



The current argument against livestock farming is a major concern of mine. The Committee on Climate Change recently recommended that between a quarter and a third of all our upland pastures should be afforested to sequester carbon in timber production and reduce methane emissions from extensively grazed livestock. Personally, I feel it is wrong to reduce meat from agro-ecological systems whilst promoting more intensive forms of production that require greater inputs and cause soil degradation. The kind of system we have is really geared towards producing livestock in conjunction with trees. Many of the sites comprise areas of woodland, scrub and scattered trees. This mosaic of habitats allows us to produce meat and timber while enhancing biodiversity, minimising climate impacts and maximising human health benefits. That's the model I think is most relevant.

Higher concentrations of Omega-3s are probably the most notable example of the health benefits supplied by pasture-fed red meat, but there may be much more to it. When livestock have access to the variety of plants that you see in a semi-natural environment, they select a diet containing 'nutraceuticals', secondary compounds that wild plants contain, which appear to bring numerous health benefits. Another factor is the soil microbial community, which makes important minerals and trace elements available to the food chain.

When we started, the focus for the business was on delivering ecological benefits, and we were less concerned with the holistic perspective. But as a society we are in a state of transition in our thinking about a lot of things, for example, the respective roles of dietary fat and sugar for human

health. Another example is glyphosate, which recent independent studies show to be pervasive in the food chain. I remember how, when I began my career in conservation some 30 years ago, I was required to use this chemical to control weeds. The advice then was that glyphosate was completely safe because it quickly degraded on reaching soil or water and would not be able to accumulate along the food chain. It was a shock to learn that its residues were turning up in a wide range of food products and even in samples of human blood and hair. I can't predict how it will play out, but I strongly believe that when we have sufficient knowledge we will recognise that there is an underpinning link between our health, the health of the food we eat, and the environment that food was produced in. To think otherwise to me is nonsense.

#### **My message to policy makers**

Offer much more generous incentives for organic farming. Ensuring that public money only pays for the delivery of public goods must be the right course to take.

#### **My message to the FFCC**

Focus on agro-ecological approaches, the essence of which is that farming remains within the limits that nature sets. Until we reach that point, we will be causing more harm than good.

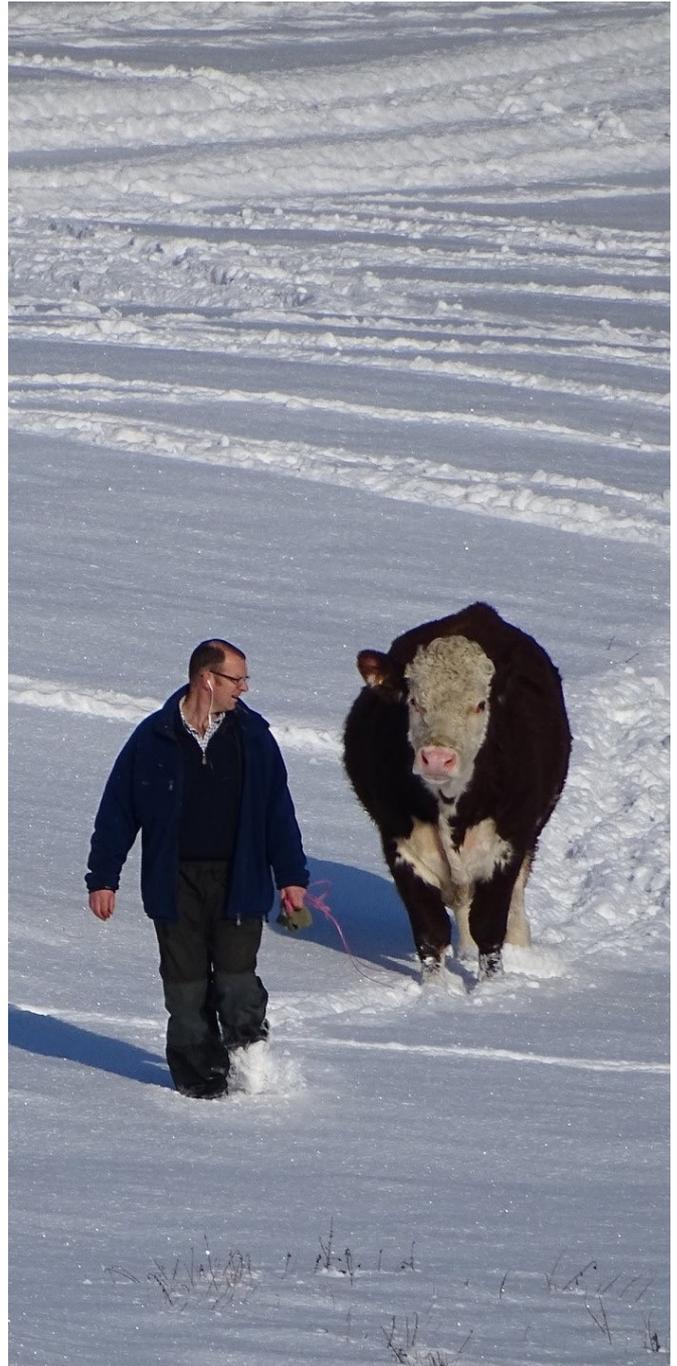
## George Hosier

### Farm: Wexcombe Manor Farm, Wiltshire

*Wexcombe Manor is a mixed, owner-occupied family farm. George Hosier grows wheat, barley, oilseed rape, peas and beans on around 625 hectares, and keeps a suckler herd of around 50 grass-fed cows plus progeny on 80 hectares of grazing land. He has recently transitioned to a no-till system.*

In terms of human health, it all started when I got interested in soil health, and the more I learned about soil health, the more I discovered there is an inexorable link between soil health and human health. It all revolves around the microbiomes of the soil and the microbiome of the gut, which are ultimately pretty similar. Everything we're doing is about trying to improve the health of the soil.

We started the transition to no-till around 2012. We were trying minimum-till, so we had stopped ploughing and were just tickling the surface, but the seed drill we had couldn't cope with the residues. While I was looking for a new drill I came across two people who were doing Nuffield scholarships investigating no-tillage systems. One of them put up a YouTube clip of his farm in Gloucestershire, where he was drilling winter wheat into a cover crop of mustard which was about four foot tall, and they were just going straight in with the seed drill. I went to visit these two guys. And then I was power-harrowing at 3 o'clock in the morning, because rain was forecast for the next afternoon and I had to get the field drilled before then. When you're sitting on a tractor at 3 am and the thing is steering itself, you have a lot of thinking time, and with GPS you can also trawl through YouTube and Twitter. And I thought, why am I doing this? The more I understood about no-till, the more I read around about soil health and that got me thinking about gut health.



**“Mentally, farming is a lot more interesting when you are doing something different, and people are interested in what you are doing. On that front, it’s very good for mental health”**

George Hosier

Physically, it all benefits my health, and my family's, because we only eat meat that we've produced on the farm, and we've stopped spraying insecticides, so we're not handling as many chemicals. Everyone who works and travels around here, their health is improved by less chemicals being used. And our customers benefit from eating our beef. Mentally, farming is a lot more interesting when you are doing something different, and people are interested in what you are doing. On that front, it's very good for mental health. What's less good is when it doesn't work brilliantly first time, which happens quite regularly. And then we were expecting yields to drop in the transition period, which they duly did, but that came at a time when we had borrowed to put a new grain store up. So my mental health has probably been affected in both directions.

The main reason why more farmers don't do this is because what they are doing works. Take away the Single Farm Payment and it might not work. Another big thing with the no-till is uncertainty over glyphosate, because our system falls very flat without a broad-spectrum herbicide,

and in this country glyphosate is the only one available. Organic farms use cultivation as their weed control – which means disturbing the soil with mechanical means. We don't cultivate at all, because it upsets the microbiome of the soil, so we spray a chemical instead. After long consultation with various entomologists I've come to the conclusion that one spray of glyphosate is significantly better for the soil than any form of tillage. One dose, once a year, just prior to planting a cash crop. I know the problems with glyphosate, and I would never use it on a cash crop, because that's where the residues can potentially come from.

I wouldn't have begun to make any of these changes if I hadn't been on Twitter. Twitter was the platform that put me in touch with the people who were doing this around the world. Twitter and YouTube were initially the two biggest learning tools, and since then I've started reading books. I still have a long way to go to improve the nutrient density of the food I produce, but I feel I am on the right path.

### **My message to policy makers**

You need to incentivise people to look after their soil, and I wish there was really good metric for soil health. I'd love to say, show you're not going to ban glyphosate, because I know farmers who would like to go down the route I'm going down, but they're not going to invest because who's to say whether 12 months' time glyphosate will still be available? And a tax on nitrogen fertiliser would be something I would bring in quickly. We all use far too much.

### **My message to the FFCC**

Soil health is the key to everything. Animal health is linked to soil health, just like human health is linked to soil health. I would really like to see us working towards improving all three, from soil to animal to human. And we need more investigations into how we can improve the carbon-capture ability of the soil. That is a massively untapped service that we could provide as farmers.

## Stephen Jones

**Farm: British Quinoa Company, Shropshire**

*Stephen Jones pioneered the cultivation of quinoa in the UK and founded the British Quinoa Company on the arable farm his family has worked for three generations.*

I am in the happy position of growing something that is widely associated, now, with healthy diets. That has been a great thing for us. We produce 500 tonnes of quinoa a year, mainly white, a little bit of red. We started growing it as a farm diversification, looking for ways to develop a new business. Health was a factor to the extent that I thought quinoa could be something we could grow, and the health properties would help it to sell. To be honest, a lot of the enjoyment was the challenge of figuring out how to grow it. The fact that it had really good nutritional properties was useful to build a market and find a niche.

I did my BSc dissertation on quinoa. I chose the topic because I wanted to combine getting a qualification with developing a business. We were one of the first British commercial quinoa enterprises. People had tried it before, but no one had grown it successfully as a food crop. That was because we didn't have the right varieties, you could only grow it as bird food. Once we got varieties that enabled us to grow a good quality crop in the UK, it started to take off. They were developed in the Netherlands.

My research coincided with the advent of quinoa as a fashionable food. We thought we would have to learn how to grow it and also educate people about it, but actually the education thing became secondary. It took off without us having to do a lot. We've been growing it for seven years commercially and probably 13 years from the first trials – quite a long process to learn how to grow it successfully. There was nothing definitive to go on, so we had to make it up as we went along, and there were a lot of intricacies that we didn't know about, so we had to amend and tweak. We now grow it as part of our rotation with wheat, barley and oilseed rape.



One of things I really do like about the crop is that you are doing something that is making people healthier. That is quite rewarding. I want to do something that I feel is having a benefit, so I would look to grow things like grains with different health properties, or sometimes it's grains that just look a bit different and will be appealing in a salad, and you know that if it's a whole grain it's going to be healthy.

But asking farmers to grow things purely on nutritional quality is hard. A good example would be barley or oats, where you can have beta glucan in them, which is supposed to be good for your heart. The problem is finding a market that pays for that property. If you can come up with a grain that looks different, people may pay a premium for the novelty. But if it's got higher beta glucan in it, you can put it on the packaging but it still feels very intangible. So that sort of thing is quite hard to market, and therefore to be able to produce with enough added margin to make it worth the hassle.

Again, with things like quinoa, it's exciting because you are doing something different. However, once you've grown it, it's a lot more faff to sell it, because even though this is a mainstream product now we still have to service the customers. It's not just a case of sending it off in bulk. We have to clean it, process it, market it, build a relationship with the customer, and it's actually quite a complex supply chain. Whereas growing things like standard wheat or oilseed rape is a relatively simple process, and wheat will be clean enough off the combine to sell. Anything you do that's different adds complexity.

What would make it easier, bluntly, would be grant funding. To be able to outsource some of the work, such as planting field trials, testing batches to see what nutrient levels were, or whether there was a genuine difference, that all takes money. The benefits for me doing my PhD was that I didn't have to make it pay. I couldn't do that now, I couldn't take the time off work. Whereas if you were able to have a grant, a bit like a PhD, where you maybe have two years of funding, so you can eat and live while you are working on something while it's not bringing any money in. Innovation Grants to farmers from the Government would really help.

And in practical terms, you would need access to new healthy varieties. Nobody is breeding for things that are different along health lines because it's not mainstream and not very profitable. So for the Government to fund research on new varieties which have points of difference in terms of nutrition would be really useful. You need to be paying for people on the ground to make new crossings of different plants that can be grown on a commercial basis.



### My message to policymakers

I think if you are looking for healthier crops, it probably needs to be legislated, that things like wheat should have a certain level of, say, selenium or whatever. Breeders would have to start breeding for nutrients into the new varieties. I feel nothing will change unless either there is a really good business case for doing it, which I don't think there is, or the Government sets targets that we have to work towards, to drive that change.

## Katie Jowett

**Farm: Manor Farm, Wiltshire**

*The Jowetts run two separate enterprises, 160 hectares of conventional arable crops and 80 hectares of organic grassland, over which Katie runs an extensive flock of Pasture for Life certified breeding ewes.*

I believe that as farming has become increasingly industrialised it is harder for farmers to prioritise or even consider the implications for human health in their farming methods. I do not think that many conventional farmers these days really consider their output as food. It is just a commodity at the bottom of a long value chain, and in order to make a living they must maximise output by any means. In my opinion this mentality has come about in response to the 'stack it high and flog it cheap' nature of the food markets that have evolved over the last 100 years. Consumers are often more concerned by price than quality of food, resulting in disproportionately low farmgate prices. Because they need to make a living with such low prices I feel that many farmers have forgotten that actually, their produce is 'food' and should be a healthy, nutritious substance as well as a source of income.

This is compounded by the fact that in my experience consumers are horribly fickle! I often chat to wealthy, educated local people about what

we're doing, and they're so enthusiastic about our farm and our production methods, particularly when you've got little lambs in fields of wild flowers. But I know full well, the minute they walk into the supermarket, they will lose the connection between what they've been looking at on the farm and what's in the plastic pots, full of water and additives. People want cheap food and farmers have had to respond to that. I understand the need for food to be affordable globally, but in the developed world, without paying a sensible price for food, consumers have no need to understand what it takes to produce that food, so there's a vicious cycle. The more I look at the food chain, the more I feel powerless to circumvent it.

My lambs grow slowly and graze exclusively on organic pasture. They do get antibiotics and wormers, but not on a routine basis. Without a doubt, these production methods are healthier for people and the land. However, we certainly couldn't make a living from our sheep alone. Currently they wipe their faces, but they would not support us as a family. In fact, I don't think the combined income of the arable and sheep enterprises would support the business at the moment. Over the last 10 years we have worked hard to achieve several diversified enterprises on the farm, including renewable energy, a substantial festival and various leisure outlets. These currently provide a large proportion of our income and allow us to maintain our production standards.



I believe that the meat we produce, employing a toolkit of conventional and agroecological methods on extensive herb-rich pastures, is a healthier and more nutritious product than the meat from animals finished intensively on a largely grain-based diet. It is, however, difficult to find a clear route to consumers who are interested. Ambiguous and overly complex regulation of the food chain often results in high-quality products such as ours being sold alongside inferior, intensively finished products. We increasingly take our lambs directly to the abattoir, to reduce the risk of the animals facing long journeys alive. Here we are paid the market price, which is better than at the Livestock Market as there is no middleman. But it then ends up in the industrial food chain, tenderised by chemical means, or electrically stimulated, in effect becoming a processed product, with its quality and provenance lost. I have now set up a website to start direct selling my lambs. It is satisfying but time-consuming. It is also tricky to meet people's demands, as they are used to having an unlimited choice of cuts and volume available whenever; I have been frequently asked for three legs in a half lamb box!

What would help? I feel that if food chains were shorter and maintained locally, you would start to unpack this disconnection between people and their food and encourage farmers to engage more with their end product. Or instead, try to encourage supermarkets to deal directly with local

farmer/marketing groups. It might be perceived as less efficient for them, but making use of local, seasonal produce must have benefits including cost savings.

Modern economics do not put a monetary value on natural resources, so my approach is seen as uncommercial. I have a degree in agriculture and a master's in rural land management and we are an efficient business, with our production statistics generally in the top third of the AHDB benchmarks for an outdoor lambing flock. Given this I am determined to continue improving our system, expanding our area of mob grazing into the arable rotation, thereby introducing a fertility-building phase and allowing us to finish more lambs without the need for concentrate feed.

More difficult will be finding a way to sell our product without recourse to the industrialised food chain. I will never be able to supply a supermarket a given number of uniform lambs throughout the year. Ours is a natural and seasonal product that does not fit that industrialised model, which as far as I am concerned is fundamentally detrimental to human health and our natural world as well as inefficient and wasteful. Food purveyors should be encouraged to re-educate consumers that food is not a uniform product that is always available, and to show them that for their diets to be healthy in every sense of the word, the food they consume needs to be sustainably grown, locally sourced and seasonal, wherever possible.

### **My message to policymakers**

First of all, I'd learn more about how all that middle section of the chain works, between me and the consumer. Then I'd give it quite a big shake. You can't treat meat as a uniform, manufacturable product. You want the diversity in it.

### **My message to the FFCC**

I'm really interested in pushing the principles of agroecological farming. In the UK, we don't need to keep increasing output. We need to improve our productivity while working to maintain our environment and encouraging farmers to move away from reliance on chemicals.

## Graham Macklin

### Farm: Hayes Meadow Farm, Devon

*Graham Macklin runs a 45-hectare organic, Pasture For Life certified livestock farm, with around 100 pedigree Devons plus some sheep.*

I'm a regenerative farmer. I farm to build biodiversity and my by-product is my cows, who are my agents of biodiversity. The end product is their meat, and because they are feeding entirely on biodiverse pasture, they have various higher quality thresholds for health associated with their meat, particularly fatty acids, omega-3s, etc. So I am developing a premium product, and because of my ecological farming I am looking to appeal to health-oriented meat consumers, who are looking to buy quality not quantity, and are eating for health, where the composition and provenance of the meat are prominent factors.

There are food trends at the moment which value this type of meat, and we plan to supply boxes tailored to people's needs. We also cater to the ketogenic diet or the paleo lifestyle. People following a keto diet would be looking for, say, mince with around 45% fat (compared with 20% or less in regular mince), bits of 'cod fat', which is the firmer fat from the animal that would be used for cooking and mixing into things, and fatty cuts like rolled brisket or short ribs. The paleo diet imitates the diet of our remote ancestors.

At the moment we are selling as a certified organic producer into the mainstream market, supplying a major supermarket. I am now moving to sell directly to butchers. But my business plan is to sell directly to individuals, and I am developing a retail site. The abattoir and butcher I work with will do the packing. I send the animal off to be slaughtered when I have got a certain amount of pre-orders, so the idea is you put a small deposit down on your box, which could be a couple's box or a family box or a keto box,

then when I reach a threshold, and the cattle are ready, they go off to be killed and packed and sent from there. The carcass is butchered to my specifications, as per order. The butcher will have a list of my boxes and their specifications and the carcass is cut accordingly. I am also developing a charcuterie business on the farm, so off-cuts will be put into salamis, sausages and bresaola, trying to use as much of the beast as possible.

I am relatively new to farming. I took over the farm because of a family bereavement – it was a sudden event, the farm methodology wasn't working and the land needed a lot of TLC. That's the journey I've been on. In order to be truly regenerative, and have that biodiverse profile, you have to plant a lot of seed. My goal is, if you came here it would just be buzzing with insects and brimming with life. But that takes time.

I farm with a vision which is shared by a lot of other farmers, which is that recent farming processes haven't worked. The rationalist and intensive form of farming has robbed us of organic matter and biodiversity, and we have an insect catastrophe on our hands, and I think it is farmers' responsibility to start rebuilding that. It's a matter of opinion, but I think that farming is the answer to carbon sequestration, and I don't think that's going to be done by the really big farmers, it's going to have to be a network of smaller farms, globally. It is already starting at the grassroots level, and I very much wanted to be part of that, but also make it commercially viable. I don't make a living yet, but that's planned, I've had to invest many thousands in drainage, seeds, etc, but I have a plan which I have no doubt will lead me towards profitability.

There have been challenges. Financial ones, mainly the investment, and also some environmental ones, such as the drought, things that apply to agriculture in general. If people want to follow the same path, they should read up about it, and subscribe to some of the certification bodies, like PFL. It might seem daunting for a conventional farmer to make the switch, but it

could be possible to start with small areas of the farm. You just need to go on the internet to see the problems we have with global warming. It's very exciting for someone who's new to farming, or who wants to change the way we farm, to see how they can play a part in tackling that.

I think what I do is definitely contributing to my customers' health, and also to my family's, not least because the children are very close to lots

of microbes, which I think is very important. For my customers, we always try to push the idea that meat is a treat, you should almost be prescribing yourself meat, rather than just going out and buying cheap meat. It's so easy to do that, to gorge on the stuff. That's not the right approach, you should be looking at meat in a more selective way, really picking what you want and eating it much more scarcely.

### My message to the FFCC

In my honest opinion, I think there's only one way to go, and that's the way that I'm going. Because the alternative has been proved to be a complete disaster, all our productive fields on red soil up and down the country have been totally depleted of organic matter. It makes no sense, does it, to kill in order to grow? That's been the common wisdom in farming, and it's bankrupt. I don't think any farmer can realistically continue to do that for much longer.

“...you should almost be prescribing yourself meat, rather than just going out and buying cheap meat. It's so easy to do that, to gorge on the stuff.”

Graham Macklin



## Ben Mead

### Farm: Pengreep Farm, Cornwall

*For many years Ben Mead operated as a dairy farmer, producing milk from grass-fed animals for the cheese business he had helped set up. He is now in the process of converting to beef, transitioning the animals to protect the genetics he has built up over the years.*

A lot of the way animals are raised now is not conducive to public health, and yet public health officials seem to know this but it doesn't get into the mainstream. Whether that's just too many vested interests, I don't know. The thing about food is that we assume if we're eating something that's bad for us, it will have an instant effect, you will get food poisoning or something. We don't really consider the long-term effects.

A lot is known about how milk composition varies with breed and diet, but that knowledge is not necessarily applied to human health. Different breeds of cow produce milk with different levels of protein and different types of lipids and protein structures. In terms of health, research has been done on the properties of milk from Channel Island cows and 'A2' milk, which contains some proteins but not others. And it has been known for a long time that if you feed cattle grain, it affects the Omega-3: Omega-6 balance, with potential health impacts.

I got interested in all this just about the time when I was turning 40, so starting to feel pangs of mortality. I inherited my mother's herd of pedigree Holstein-Friesians, geared to milk production, high-input, high-output and high-stress – that's the bit people don't usually add on the end. I had come home from London, where I was a journalist, and taken on the family farm, which had a lot of debt on it. I couldn't really see a way forward unless we made some radical changes. I didn't have much farming knowledge,

but I had the journalistic ability to keep asking questions. And I knew from my travels through New Zealand that they produced milk there at very low cost, so I kept wondering how they did it. The consultants said you couldn't do it here. Eventually I found some people over in Ireland who had made it work.



So I did a very radical shift of farming, and we started making reasonable amounts of money, because our costs went down rapidly through not feeding grain. And the cows became incredibly healthy. Because I didn't have a great deal of knowledge, I was involved in setting up discussion groups to tap into other farmers' technical knowledge. One of the things that always used to come up when people made the change to grass-fed was how much healthier their animals became.

But whereas before grass was just that stuff that grew, and you turned your cows in there, now the whole focus shifted to how you grew grass. I learned to use a rising plate metre, to measure grass and convert it to a feed value. It has a plate

on a walking stick and you walk through the field and it measures the height and density of the grass and convert it into a value, kilos of dry matter per hectare. You enter that data into a spreadsheet and it tells you how much feed value you have on your farm. You can ration it, and tell whether you are growing more feed than the cows could actually eat.

Once we'd got a grass-fed herd, I was thinking, I know this milk has a high nutritional quality, but it goes into a large pool of milk where it's diluted down by all the grain-fed milk. That was one of the reasons we set up the cheese business. Unless you can sell direct to wholesalers, or unless manufacturers and processors can see that there is an angle in it, your product becomes anonymous. It's a source of great frustration for the farmer.

Now I'm converting to beef, there's a similar situation. If you're producing it in the way I would like to, you have to direct-market it. Because the way the beef market is set up, it's very much dominated by the abattoirs, and nutrition is not something they are particularly interested in.

When the carcass is hung up, the graders assess it based on the amount of fat and so on, and you get paid accordingly.

I've found a lot of the people who are farming in this way, quite often there was a family tragedy, or a cancer scare, or maybe suddenly the penny dropped looking at all those bottles of spray that had a skull and crossbones on them. I also know farmers who say, it's alright for you, you can research all this stuff, but I need guidelines. They get very worried about going off-piste - they need advice and most of the information is coming from vested interests. These guys are scared to change, understandably. Margins are getting slimmer. It's treadmill and they can't get off it.

You have to have a level of conviction yourself to change the way you farm, and you need to gain a lot of knowledge, and it is almost subversive knowledge, against received wisdom. But agriculture's not working for us anymore and we can't keep on doing the same things. We have to do some sort of paradigm shift, and of course that's incredibly difficult.

### **My message to the FFCC**

Engage with farmers. An awful lot of what happens seems to be people in offices giving us directives but they have had no experience of the reality. There are farmers who are happy to give out strong opinions and they tend to be quite noisy – the quiet guys are important and they tend to get overlooked. So there's a lot of shy and retiring, but very intelligent people involved in farming and they don't get the audience they deserve.

## Marina and Mark O'Connell

**Farm:** The Apricot Centre, Huxhams Cross Farm, Devon

*Child psychotherapist (Mark) and horticulturalist (Marina) grow vegetables and provide therapy on and through a farm which they lease from the Biodynamic Land Trust.*

**Marina:** I used to have small produce farm in Essex and lecture at the local agriculture college. I took voluntary redundancy and we built a therapy room on the farm. We are also adoptive parents, and I noticed that having the girls on the farm helped them to calm down. As a child psychotherapist, Mark saw some clients on the farm, and found the environment helped the therapy, compared to when he saw them in an office. At the farm they could go for a walk or feed the chickens. He noticed that when the children could de-stress in this way first, it helped them engage in the therapeutic process.

**Mark:** We then approached the Biodynamic Land Trust, which was keen to integrate therapy into its farming activities, and we've been based here since 2015. We work with a range of young people, aged from nine to 22, some with quite a high degree of therapeutic need, and we do a range of things, from direct therapeutic work to wellbeing activities. We work in different sized groups – quite a lot of one-to-one, or we sometimes have the parent and the child together, or a whole family, or groups. But this is also a fully functioning farm, producing a wide range of fruit and vegetables, plus eggs. We have a box scheme delivering to about 50 families, do a weekly market in Totnes and supply local restaurants.

A lot of young people need to connect more with their bodies and connect their bodies and their minds together. They are not integrated in their

sensory experience – this commonly is associated with early attachment difficulties or trauma. By engaging in activities on the farm which are sense-oriented, and most activities on a farm are very much about using all of your senses and your body – smell, taste, eyes, etc – all of those activities have huge benefits to the young people. Just in their bodily experience, apart from anything else. The therapist might work with the young people on a particular activity, such as with the chickens, or preparing food for the cows, or doing rural crafts in the woods. Different young people respond to different activities, so we try to tailor the activity to the young person's abilities and needs.



**Marina:** One of the reasons why this is so effective is because research has shown that in a natural landscape, your heart rate and your blood pressure go down. Often one of the issues with children who have suffered early childhood trauma is that they have raised stress levels. In effect they are stressed all the time, so if they encounter an extra stress, like going to school or missing a meal, they get flooded with adrenaline. They aren't able to think they shouldn't kick the teacher or run out of the school gates, so these kids just get labelled as naughty. By bringing them to a farm, they walk into that landscape and their stress levels start to dissipate, and then the therapist takes them for a walk or to feed the cows, and that further dissipates the adrenaline. The fact that the farm is biodynamic is crucial, because if we were spraying chemicals around we couldn't have the kids here.

And also, because we don't spray, the farm is full of worms and butterflies and all those things that bring joy to kids.

**Mark:** As an example, we had a 10-year-old who was on her first visit, and she had collected an egg, which she was holding, but then she got excited and accidentally broke it. She began to go into quite a severe tantrum, and her mother said, that's the end of our visit. The girl ran down the field to the cows. Just having the space to have a tantrum and move away is already a big thing. I followed her and she asked whether the cows would hurt her. I said, just be a bit careful. She started to feed them grass and immediately regulated emotionally, and within minutes we walked back up to her mother, who was very surprised to see that her daughter had turned things around so quickly.

**Marina:** If you wanted to replicate what we do, you could approach organic farms looking for growers who would be interested to offer the health dividend. You need some facilities – an office, a therapy room, a waiting room, and a toilet. And you need the expertise, but you could employ someone to run the service. We have a team of therapists and we employ them on a bespoke basis. We say, 'we've got this child who needs 20 hours of this kind of therapy and it's going to take place on farm and we'll pay you this much money'. We did have to spend a long time getting the IT structure together, customer management software, an invoicing system, all the policies and insurance. So it is a lot of work. But it brings financial dividends into the farm, and of course it brings people in, so it's really nice from that point of view. It's also nice for the therapy team to work in this environment.

### **Our message to policymakers**

**Marina:** What we do could be adapted for other farms. When we came here, the Land Trust asked us be explicit that we have a mental health service on the farm. Before that I had never said it out loud in so many words. I think it helps people to know that somebody else has done it, and it works.

## Jane Oglesby

### Farm: Poole Hall Farm, Cheshire

*A former GP, Jane Oglesby now runs an 80-hectare beef farm, with around 21 grass-fed breeding cows plus their offspring, mainly Dexters with longhorn crosses, making around 70 animals, plus a handful of Shropshire sheep and Tamworth pigs.*

The health of my family was what got me into farming. The combination of being a GP and a mother started me thinking seriously about what I was eating. When my daughter was a baby, there was very little information about what was in food or how it had been raised. I started to read about hormone use in cattle. We had a friend who had a beef farm and all his cattle had permanent growth-hormone release things in their neck. I didn't want my children to be given growth hormones, plus there was the use of pesticides on the cattle feed. I was at the point where I thought I might become vegetarian. Then I thought, we've got three acres here, I could have a cow and my family meat that I've reared myself.

Initially it wasn't that much of a commitment, apart from the small amounts of time that one cow and its calf take. I've always been interested in animals, and my father's family farmed in the Yorkshire Dales, so it wasn't an unknown entity. After a while we bought more land, and we've had small numbers of beef animals to sell to family and friends for several years. Now we've increased the herd number and are starting to sell some of the beef commercially.

As I got older, I started researching cardiovascular disease, and the causes of arterial damage. I became convinced that it wasn't anything to do with eating animal fats, and was probably to do with fluctuations in insulin levels. I couldn't find any evidence of a direct correlation between eating animal fats and cardiovascular disease, or even with high cholesterol levels. Apart from,

I suspect, in people with a pre-disposition to not dealing with cholesterol. I carried on reading, and then I got into the 100% grass-fed idea.

At first it was just a thought about natural farming, and a deep belief that we were wrecking the planet by trying to reap more and more out of it. We often spend our holidays in the French Alps, where you have seriously mixed pastures. We'd see the cows mooching about and grazing, and we ate the cheese and beef from the cattle. I thought, hang on, I'm trying to get rid of thistles and dandelions, and these cows are eating it. I came home and decided to do less and less to the land that we'd got. My cousin, who is a conservation farmer in Yorkshire, came to visit. I started rather naively telling him about this idea I'd got, and he said, that's brilliant, and he put me onto the Pasture-Fed Livestock Association.

So then I started to read again and learned about the benefits of pasture-fed over grain-fed animals, with particular reference to the Omega 3 - Omega 6 ratio. We have very low stocking levels, spend very little on vet bills, because the animals are healthier, and we have stopped routinely worming. That obviously has benefits for all of us. The less medication we're putting into waterways, the better. The less you're using antibiotics, the less chances there are for the bacteria to acquire resistance to them. And for the consumer, I believe that if you've used chemicals of any kind to rear an animal, be it herbicides, fertilisers, antibiotics, then there will be traces in the meat.

But it's definitely harder for farmers to prioritise health, rather than, say, the environment, not least because I'm not sure the evidence base is really there. There is emerging evidence about the biochemical composition of 100% percent grass-fed animals, and obviously veterinary use of antibiotics impacts on human health. But I think those are probably the only two areas that anybody's got real data on. If you're asking people to pay more for the product, you need to have the proof that there's a good reason why they're doing that.

In terms of making a living, I am not representative because my husband's salary means we don't depend on my farm for subsistence. But I'm working on that, to try and prove that farming this way can actually work financially. I feel I have the opportunity to do that because I don't have the stress of having to make an income. I want to make the numbers add up so that I can show people that it is an option.

I think one of the reasons more farmers don't take this path is fear. A lot of farmers are trapped in what I call chasing the rainbow of, say, dairy farming. They constantly think, we need higher yields per animal, and they spend more and more money chasing that, but the cost to the environment, and financially to them, doesn't add up. I think we're now so far down the line that you've got to be brave to stop. It's a long time since farming was as natural as I think it needs to be, for the good of humans and the environment. It's a lot to ask of people who are just about scraping a living.

### **My message to policy makers**

The first thing I would do is put money into research to prove that this sort of farming has health and environmental benefits. And then, once you've proved it, put money into it, to help farmers to get their confidence up. You have to compensate them for not taking high yields in the short term. We can't keep saying it's not cost-effective. It's only in the long term that the real price of what we're doing is going to become obvious.



## Lydia Otter

**Farm: Pennyhooks Farm, Oxfordshire**

*Lydia Otter keeps a herd of beef cattle on her 40-hectare organic farm, and uses the farm to provide a unique experience for young people and adults with Autism Spectrum Condition.*

I was brought up here. I have a letter from my grandfather in 1943 saying he was thinking of buying a farm for his sons because he considered it to be a balanced and satisfying way of life. So the farm was actually bought, I now find out rather touchingly, as a lifestyle choice. My parents often had visitors and friends staying with us, to share the farm. So I think it's been natural for me to understand that farming is good for you.

When my mother died in the early '80s I came home to help dad. It coincided with a decline in dairying, so dad sold the milking herd and bought some Angus yearlings and began to build the herd we've got. They are suckled for nine months and we sell them finished at about two years old. I know them each by each, really. The beef is sold to retailers through the Organic Livestock Cooperative.

The farm is mostly permanent pasture, but a quarter of it is high-value conservation land. We've now made the decision to reduce the herd down to about 20 breeding cows, deliberately to look after that conservation land, which needs the cows to graze it. The decision is linked to our diversification into autism support. Just to give you some idea, our turnover is about £40,000 from the farm and about £400,000 from the diversification.

The cows also have a very central role with our young people, in that they provide that year-long cycle that seems to be so grounding for them. The reason why I started to introduce people with autism to the farm goes back to my experience as a child and the way that I felt so much that I belonged and was so comfortable here. When I

went off to boarding school I lost that sense and became very unhappy. The experience influenced my choice of career – I trained as a music teacher specialising in special needs.



When I started to meet people with autism and understand the worlds they live in, where they're so withdrawn and disconnected, I wondered whether coming to the farm would make a difference. I attended a conference in Barcelona where there was a session on farming and autism. I presented my ideas and the others said, go for it, you've got all you need to do it.

We had a young man here today, aged 22, unable to really centre himself or stop. His language wasn't very capable but he was trying to express himself, which was lovely, but he wasn't getting anywhere. When we took him out to feed to the cows, immediately the cows became his focus. He wanted to get them fed, the satisfaction of hearing them stop shouting and settle into the manger to eat, and he became a completely different person almost immediately. The only way I can put it is that the rhythms of the farm seem to really relate to the need for people with autism for predictability and routines.

It was his first visit. Usually we have people in groups of 10, some coming every day, some once a week, mainly men but increasingly women. They each come with a carer, and I employ 15 people, 10 of whom are experienced support workers, so everything is one-to-one. We have

two separate sessions a day, and we also develop special groups at the farm such as the mammal monitoring project, and groups to encourage sociability. We're increasingly approached for the more high-functioning people with autism, who've just finished college and have nowhere to go. This young man today was one.

You see remarkable progress, though it can be slow. At the very beginning, where their autism is in such ascendancy, when they walk in you see high anxiety, the movement disorders, the flapping, the shouting. They might be reluctant to help you carry a bucket of feed to the hens, then three weeks later you'd have a hand come out to take the bucket or lead the donkey. It's getting the body to be able to physical jobs, pushing wheelbarrows. Eventually they're learning to do woodwork, baking, horticulture, willow weaving. The dexterity is really what I'm talking about, the control. So now in woodwork they're able to use saws with assistance, power drills obviously with support, screw drivers. They can recognise tools. They can use a hammer.

We've just had an order for 50 of our bee houses, so we're about to encourage an increase in productivity from our students as the next stage of them learning to work. Because that's our basic remit. For them to have that equivalence to their peer group of being able to have a working life, a fulfilled life. They're always going to be too slow to be economic, they'll always need support, but you can see the importance.

They're extraordinary, our young people. They draw you on, you learn from them. The farm taught me to nurture. That's the connection between caring for the land and caring for the animals and caring for our young people. It's nurture and observation, listening to the land and listening to the young people.

I feel we've shown this works. I also think it's transferable to other farms. If we remained as a sort of a hub for training and an example of what can work, we could support other farmers. It's a matter of organising the activities, having the facilities, and understanding what's working.

### **My message to policymakers**

My biggest challenge is simply the finance of it. At the moment I fundraise for £100,000 a year. The statutory funding reaches nearly £300,000, but we need £400,000. I wake up every day thinking about it. But of course the challenge isn't actually the money, it's people's understanding that it's money worth spending. And that's a policy issue.

### **My message to the FFCC**

Please listen to our young people and to what their lives are saying. Come and visit us and see what they're capable of. When you take the complexity of autism and then you see what's happening here, it's completely impossible to say this shouldn't be taken notice of. This is about farms transforming lives. If you like, the product of our farm is useful, happy, healthy lives.

## Rosy Rapacova

### Farm: Meadowsweet Organics, Fife

*Rosy Rapacova runs an organic market garden of about 2.5 hectares, growing mostly organic vegetables but also cut flowers and medicinal herbs which, as a herbalist, she uses in to make infusions and tea blends.*

For me, health is really, really important. I didn't know what I wanted to do for a while and then I got involved in organic farming and it just seemed like the answer to so many different things. It's a form of activism, in a way, where you're doing something with your hands. I think one of the best things you can do is grow good quality food for people. So I really care about people's health. When we're selling the produce, we emphasise the healthy qualities. One of the things I go on about a lot, especially to my clients, is leafy greens. I think that's a huge missing part of our diet. Leafy greens like spinach and chard and kale are so important because they've got huge amount of vitamins and minerals. Even salad leaves.

This is our fifth season here. It's very hard work and I don't get much money from it, but I do enjoy it. I studied agriculture and permaculture, and worked on organic farms to get experience. We rent the land from the Falkland Estate and share a field with another group of young, organic farmers. A Canadian guy, Jean-Martin Fortier, wrote a book called *The Market Gardener* and created a system for intensive market-gardening on a small acreage for high production. As time goes on, we're moving towards that. If you have a smaller area you can be a better grower, just using hand tools and minimum machinery.

The link between organic farming and health is really massive, and people don't yet understand how important it is. I think we need a big push to recognise that –even just to understand how important food is and its effects on our health.

The land was already organic when we moved on to it, and I would describe our farm as being more than organic. We don't use any animal products. For fertility, we use green-waste compost, a liquid fertiliser made from comfrey, which I grow, and rock dust, which is quite popular in Scotland. It's the volcanic dust from the old quarries, very high in minerals. We've seen a big improvement in the crops we're growing, and in the quality of the land.

I've lost count of how many different vegetables we grow. I think we were quoting 50 different kinds, but it would be more if you count all the varieties. We're putting 10 different kinds of leaves in a salad bags. It's a huge diversity. Our main outlet is a community-supported agriculture scheme. People join our farm as a member, so they pay for their share in our harvest at the beginning of the season. That helps us, at the time of year when we have the least income but the most outgoing, to buy everything we need for the year. The shareholders have the opportunity to become involved with our farm, so they can volunteer and visit, and from June until November they get a veg box every week. We also sell a bit to other organic wholesalers, and we do farmers' markets.

Our biggest challenge has been the Scottish climate. We've two double-span polytunnels, and we'd like to get more in the future. Our other big challenge is that people just don't eat enough vegetables. Everyone loves the idea that you're an organic market gardener, but our customers can be daunted by the size of a whole cabbage or a salad bag. They think it's too much to eat. This is our second year running the CSA scheme. Most of our members from last year re-joined, but a lot of them opted for a half share instead of a full share. That means they get a veg box every second week, because they felt they couldn't eat all the vegetables.

The number one reward for me is that it's amazing being able to feed yourself, to have access to fresh, organic food all year round. And then, as well, having the feeling of feeding other people. Knowing

that there's 50 families eating the veg that you've grown is amazing.

For more people to be able to do this, the big issue is funding. We weren't eligible for any grants because we didn't have a big enough holding. If we had a grant there's so much we could invest in. We're running out of space in our packing shed, because we're operating at bigger capacity.

I'd like to be able to employ somebody, because we do so much work. We'd like more polytunnels and even to invest more in fertility for the land. We've always just scratched by because there isn't funding available to small-scale farms. It's really not recognised how incredibly productive they are.

### **My message to policymakers**

I always find it remarkable as an organic farmer that we have to pay for our certification, a big cost every year to have that label on our product. But I really think that there should be some kind of tax on conventional farming, because they're the ones using chemicals, or they should have to list them on the products.

### **My message to the FFCC**

Get people to recognise how productive, biodiverse and important small-scale farming is, compared to conventional farms. In the future I would like to see a food system where, for example here in Scotland, Edinburgh would be surrounded by market gardens or community-supported agriculture schemes that would feed directly back into the city.



**“...having the feeling of feeding other people. Knowing that there's 50 families eating the veg that you've grown is amazing.”**

Rosy Rapacova

## Abi Reader

### Farm: Goldsland Farm, Glamorgan

Abi Reader runs the dairy operation on her family's 240-hectare mixed, conventional farm. This means looking after 200 cows which are milked twice a day, calve all year round, and graze outside for eight months a year. For the past 11 years she has had an 'aligned contract' to sell all her milk to a major supermarket, which commits to paying her a living wage and in return requires her to meet its specifications, including 'Key Performance Indicators' (KPIs) on animal welfare.

Farming for human health means two different things to me. The first one is the healthy product, milk, which I believe to be extremely important, especially for young people and older people, so I feel it contributes to reducing the burden on the NHS.

The second thing is the impact the farm has on people's wellbeing. We have lots of veterinary and agricultural students who come out to the farm, and most of them these days have never been on a farm before. They come for about a fortnight, and it's surprising how they grow in confidence when they're out in the open air and hanging round the animals. Once they get over being afraid of them, being with the animals really brings them out of themselves. That's quite rewarding. And then there's visitors. There might sometimes be a clash, but for those people that come onto the farm and have a positive experience, that's great for them, and it's also great for me. There's nothing nicer than seeing someone enjoy something that you love.

When I came home from college, I was working with my father and he managed the herd in a particular way that often didn't compute with what I'd learned at college, but he was the boss.



Then about nine years ago, my father became ill and I took over the herd. I was so concerned that I might not be farming as well as my father, I started doing all sorts of training courses. We are quite lucky in Wales, there's lots of farming-related, free evening courses. Staff management, business management, getting your calving intervals down, improving milk quality, computer, anything. But now, as the only full-time person on the dairy side, it's 24/7. For information I go on the internet. I have a smart phone, I keep it with me all the time, and there's Twitter.

In terms of my own stress levels, having a single main customer is generally positive. We've always had an excellent relationship with the supermarket, I can pick up the phone and speak to the head of agriculture and they would know who I was, they've been on the farm, they understand the animals. It builds up trust. I have another contract with a company for my beef calves. There's ease of management there, and because I know the people, I know what happens to my calves.

I have KPIs on the supermarket contract for animal welfare, but not for the nutritional quality of the milk, which would be about human health. I think there are reasons for that. With animal welfare, if you have a sick animal and you make it better, you can see the results of your labour. If you're talking about human health, first there's no connection to the people who drink the milk, and do they really care? And then you can't see the results, and how would you measure it, so therefore how do you put a price on it, and how do you take pride in it? People will go to an agricultural show and show off their finest livestock, but you can't show a human health value.

The biggest difficulty for farmers is money. The high standards that we have to meet for our supermarket contract come at a cost. Mobility scoring, for example. Everybody watches their cows walk to check for lameness and so on. But with our supermarket, at least four times a year we are required to get a vet out to do the scoring with us. That costs me quite a bit. I don't mind because we have a good contract, but people generally can't afford extras like that.

### **My message to policy makers**

As farmers we always go on about the importance of food. The Welsh Government recently consulted about how they are going to support agriculture in the future. I remember sitting down with the consultation document, trying to count the number of times they mentioned food. Very little. It was all environment. I worry that they have no way of measuring an environmental benefit. If I plant a tree today I'll get paid x, but in two years' time – who is going to keep paying for that tree? So I don't understand how they are going to value these things and how, long-term, they are going to make it work. I feel that a lot of politicians are just chasms apart from us. They don't really understand that when you talk about farming you're talking about livelihood, it's not called a job, and they don't understand the difference. And we don't really know how to convey it without sounding like we're moaning.

### **My message to the FFCC**

As farmers we come as a community. I am not just myself, I am part of the farming community in Glamorgan. For instance, my neighbor has just rung me up because he heard we were running out of feed, and he's got some that he's offered me free of charge. We rely on each other, and we have to survive as a community. If more people leave the industry, the businesses that we deal with will also be finished. There'll be less support, and then you'll struggle, and you wonder then if you would start cutting corners. If more and more of us disappear, our communities are going to go into decline. I feel we are under threat.

## Ruth Tudor

### Farm: Trealy Farm, Monmouthshire

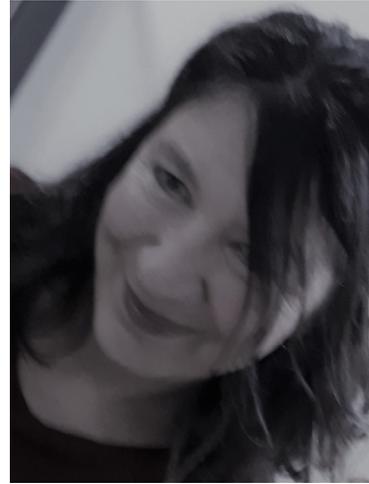
*Ruth Tudor is a psychotherapist who runs courses to help people re-connect with the wild and respond to the climate emergency. Her practice is grounded in the two farms she owns – the organic hill farm in Monmouthshire, where she lives, and the tenanted 670-hectare livestock farm in Snowdonia, which she inherited from her father and which has also recently been converted to organic.*

Farming is always in relationship with human health, whether we're aware of it or not. A farm near here uses a lot of herbicides and pesticides, and there is housing close by, and I am glad I'm not raising little children in those homes. I'm organic and so is my neighbour, so I think we are doing something very important in terms of contributing to human health. We are making a big difference but it's not very much in anyone's awareness.

And then there's the whole relationship between wildlife and human health. Wildlife, or nature as people call it, used to be seen as a nice thing that you did on a Sunday. But that's far from the reality, which is that insect life, birdlife, all other life, we're really bound up with it. We're absolutely interrelated. As an organic farmer, I would never have said, my motive is human health. My motive is, I just do what feels good to me, what feels right. I see myself as caring for a piece of land. It's a big responsibility.

I grew up on the farm in Snowdonia, helping and watching. My father was a vet and at that time didn't have a surgery, so people would bring animals to the house. I saw a lot of births and operations and it was all very primitive. I was quite a clever child and was sent to a boarding school, sadly, which changed my relationship with my home. Then I went to university and

studied history, and for the next 15 years I had quite an academic, urban type of career.



Then I got married to my now ex-husband and we decided to move out of London with our two small children, so we bought the farm in Monmouthshire. My husband started a charcuterie company, small-scale at first but it became very big. And together we ran something called the Meat Course, because we realised we had what I call 'landscape literacy'. When we looked over hedges, we were interested in what was going on and understood what we were seeing. I realised that hardly anybody I knew had a clue what they were looking at. And meat farming was particularly problematic, because people had such an emotional response. Through my husband, I had got to know about large-scale meat processing, but I had no idea what slaughterhouses were like. So I spent a bit of time in an abattoir, and I learned to slaughter on the farm from a trained slaughter man. And then we started the Meat Course, with a view to allowing people to be exposed to the whole process.

It was a two-day thing and we'd start off on the hill and I would do a bit of landscape literacy, asking why a field might be bright green, and where the fertiliser might have come from. Then we'd meet the animals and I'd talk about animal characteristics, and then I would slaughter a sheep, by stunning it with a captive bolt and then slitting its throat. Then the next day, my husband

would butcher the sheep that we had slaughtered, and then they would make all sorts of products, though not out of that sheep, because you can't let people eat meat you've slaughtered yourself. The course was very powerful but it was too difficult, too pressured.

At the same time, I was training to be a psychotherapist, which is what I now do most of the time. I also am researching climate change and its relationship with grief. So another connection between farming and human health is to do with mental health. I often work with groups in London, and when I tell them where I come from they say, oh, that must be really lovely. Well, it is, but it isn't how they imagine it. But what's important is to hear the longing and the feeling that something is missing from their lives. I think the more that I can do to meet that, the better. So now I have quite a bit of accommodation on the farm and I run workshops here and retreats.

And then there's the health value of the food. I am pulling back from farming, but I have a small herd of cattle which have never had any kind of chemical intervention except for one summer when I had to give them something for the flies. They're a native breed – we can now only consider breeds which can survive outside on pasture. We need to eat what we can grow. The Welsh government is tackling the idea that Wales is only a nation of lamb and beef. Actually, we can grow vegetables. I have two acres of organic asparagus, all paid for by government, and I get to keep the profits when I sell it, which won't be for three years if it survives. For me, health, the environment, climate all fit together.

### **My message to policymakers**

I think the keyword has to be local. How do you support localities and local authorities, rural and urban, to really look at their food networks. It makes sense in terms of reducing carbon, in terms of physical and mental health, and in terms of the seasonality and freshness of food.

Also, this is very radical but I think we need to look at rationing. We are in an enormous crisis. There's a lot of evidence that people are healthier in a system of rationing.

### **My message to the FFCC**

Be brave. Be bold.

## Harry Wilder

### Farm: Sefter Farm, West Sussex

*Harry Wilder is Head of Agronomy at Barfoots, an international, vertically integrated business that grows, imports, processes, packs and markets premium vegetables for the UK market, with farms in Spain, Senegal and Peru, as well as Britain. It began, and is still based, at the family farm in Sussex. The UK operations are LEAF certified, as, increasingly, are overseas suppliers, to meet UK retailer requirements.*

Almost all of all of the produce we grow is very healthy. Products like sweet potatoes, green beans and sweetcorn are right at the top of the list when it comes to health. Our focus is on those products and it's really the health agenda that is driving sales forward. Sweet potatoes have seen huge growth in the past few years, driven by the healthy-eating trend, with a lot of publicity and social media. It does us a huge amount of good and we're lucky to be in the right place for those campaigns. We do our own marketing as well, and we help steer the retailer agenda on these products.

We specialise in premium-quality vegetables, and we grow them in a number of locations – sweet corn in Spain, the UK and Senegal, asparagus in Peru and the UK. Peter Barfoot set up in the UK in 1976, and started growing courgettes for the first time in the UK, then picked up on sweetcorn and drove the market on that. And then products like butternut and sweet potatoes. He developed the market, based in part on the health benefit of those products.

We farm to LEAF standards. The ethos is to protect the environment and the soil, and to grow what people want to buy. There's a lot of people growing commodity vegetables on very thin margins, but if we can produce something that's more niche, we can then focus on expanding the market, and part of that is about marketing the health benefits.

We're different to other sectors within agriculture. When you're in fresh produce, you have to grow what people will buy, and in the right amount. We put a huge amount of resource into planning the right amount of crop for the market. Ideally we get to sell all of our produce and carve out a place in the market. The challenge is second-guessing the consumers and their buying habits. We have a team who spend a lot of time looking at what the next trend is going to be. Sometimes we get it wrong – we grow crop that we can't sell as much of as we like, or we don't have enough meet a consumer trend.



We grow for special health traits, but that's not easy, it's about looking at long-term breeding programmes. We link in with breeders to give them a steer as to what we're after. For example, with sweet potatoes, we're looking for higher Beta-carotene. Sweetcorn, there's some varietal work we're looking at to improve the ziaxanthin, a vitamin claimed to help eyesight.

I think it is a challenge for farmers to prioritise human health. Some are more innovative than others, and the ones who are really pushing the boundaries are coming up with the new, healthy crops. But is there a big enough reward for doing that? The market needs to be able to pay a premium for it.

Our soil health is variable, but for sure we've made improvements with the practices we've introduced. Cover cropping really protects the soil over winter, reduces erosion, improves organic matter and soil biology. Controlled traffic farming means we're not driving all over the fields. And we have an anaerobic digester, so our produce waste goes into that and the digestate helps fertilise the next crops.

I can understand why more farmers don't farm the way we do, because the economics don't drive it that way for them. And if you're talking about soil management, there maybe isn't the knowledge of the financial benefits. It might seem odd that some farmers don't value the soil, but the challenge is, how you put the numbers on it? And it may mean rethinking what you learned as a student. As a business we've had to relearn and adapt, it's a huge amount of trial and error, and we are still learning. Are all growers prepared to go through that process?



### **My message to policymakers**

Growers need to be growing what the public wants, not overproducing. I came into the fresh produce industry because it was unsupported by Government – at the time it was the one sector that stood on its own two feet. I grew up in the dairy industry, which the Government had interfered with, and it wasn't stacking up. Then there's the 'public good', whether it's biodiversity, soil quality, what the public wants from the countryside. Food security and pricing are essential for the country. It's balancing them that's important.

In addition. I spend a lot of my time visiting growers overseas and I think the UK is particularly bad at applying research. We spend huge amounts on it but I don't feel it's for the benefit of the farmer. There's a big gap between what the industry needs and where the research is actually happening.

### **My message to the FFCC**

Understanding the consumer and the market, that has to be the message. However, other factors are important. For example, growers have limitations on what their land can produce and we need to maintain the amenity value of our landscape. So whilst consumer health is important in decision-making, it's far more complex than this.

**FOOD RESEARCH COLLABORATION**  
VOICES FROM THE FIELD: CAN FARMERS CHAMPION HEALTH

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The Food Research Collaboration is an initiative of the [Centre for Food Policy](#), facilitating the joint working between academics and civil society organisations to improve the UK food system.

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The Food Research Collaboration conducted telephone interviews with farmers in March and April 2019. The 20 accounts presented here are abridged from the interview transcripts, with the interviewees' approval. The interviewees had responded to an email asking for expressions of interest circulated by various networks, including the Food Research Collaboration and the Food, Farming and Countryside Commission. They were selected for inclusion on the basis of availability, with efforts made to balance location and type of farming enterprise. The collection is not a representative sample of UK farmers. The FRC plans to publish a Policy Briefing based on the full set of interview data.

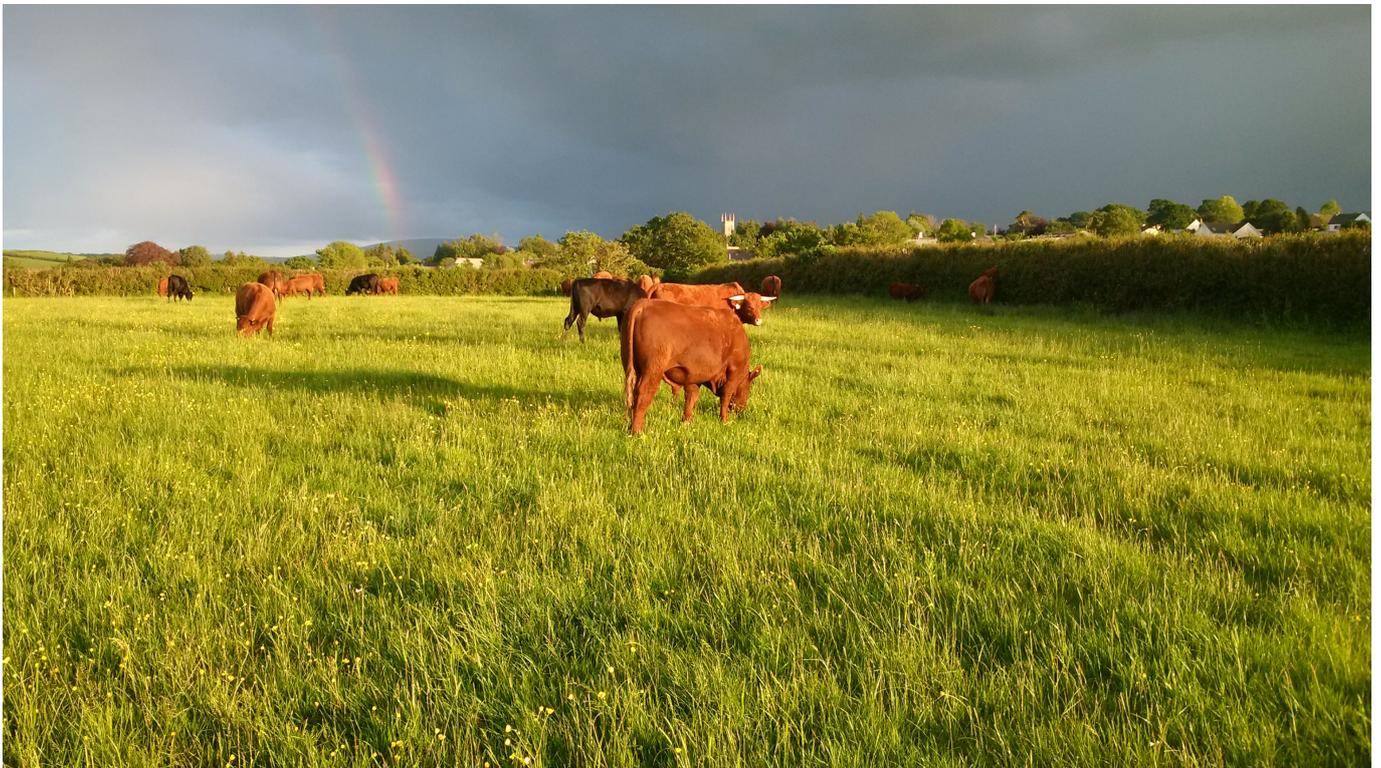
The FRC is very grateful to all the farmers who participated in this project.

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Voices from the field: Can farmers champion health?  
*Interviews by Rosalind Sharpe*  
A report by the Food Research Collaboration.



# Food Research Collaboration



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