

DRAFT

agroecology & urban farming

extracts from newoptimists.com/blog



scenario planning
Food Futures
Birmingham 2050

Who we are: The New Optimists

The New Optimists Forum brings together scientists from universities across the West Midlands to give their informed perspective on the challenges facing humanity in the 21st century.

We believe scientists have a vitally important, informed contribution to make in 'seeing' how we can build a sustainable future. Where those scientists are citizens of our region, it seems only right we should harness their knowledge in the service of the place we all call home.

Humanity is facing huge challenges — climate change, resource depletion, population pressures. These are challenges that all too often appear overwhelmingly difficult. Yet to quote Sir John Lawton in his 2006 Lunar Society Annual Lecture, *doing nothing is not an option*.

Here in Birmingham and its environs we have many scientists whose expertise ranges from stem cells to fuel cells, from nutrition to agricultural and horticultural practice to spatial planning, all able and willing to share their knowledge in helping us meet these challenges.

Hence The New Optimists Forum.

We design and host facilitated events with live social media reporting, where local scientists are bend their minds on a year-long scenario planning process considering food futures for Birmingham in 2050.

Scenario Planning: Food futures for Birmingham 2050

We're currently drawing together threads from the first, divergent phase of the scenario planning process. The blogposts below, and all the links within them, tell part of that story, all of them to do with agroecology and urban farming.

The selection is incomplete, as the analysis from our last Forum event on 1st March 2012, has yet to be added to the blog. Another, up-dated version of this draft report — with additional blogposts along with any suggested amendments or additional comments — will be published in May.

We're also hosting at least three more Forum events over the coming months, part of the second, convergent phase of the scenario planning:

- ❖ on the game-changer should Birmingham (and other cities) build [a distributed carbon-negative energy generation system](#),
- ❖ on the game-changer should [the semantic web radically change the food supply chain](#)
- ❖ on the challenges and their social implications, of feeding supercities.

Over the summer and autumn of 2012, a small team will be generating the scenarios. There will be 'live' reporting of our progress, and responses from our global audience will be taken into account.

In collaboration with young people from the Birmingham Leadership Foundation and with the generous support of the NEC Group, we are planning to deliver a large scale event in the spring of 2013 at the ICC in Birmingham when the scenarios created towards the end of this year will be put forward to a wide range of stakeholders for challenge, debate, expansion . . . and whatever else emerges.

What you can do

Please do comment and suggest improvements or additional materials to this draft. And, funding permitting, we'll be running a public event in early 2013 — come along!

Kate Cooper

April 2012

newoptimists.com; [@newoptimists](https://twitter.com/newoptimists); katecooper@newoptimists.com

The scenario planning: Who's already taken part

Our thanks to the following people who've already taken part in the New Optimists Forum events and gladly gave of their time and expertise through other meetings, email exchanges and more than a few telephone calls:

- ❖ [Dr Lucy Bastin](#), a population ecologist at Aston University.
- ❖ [Professor Robert Berry](#), Executive Dean of Aston's School of Engineering & Applied Science
- ❖ [Nick Booth of Podnosh](#), a business that helps people use social media for social good.
- ❖ [Jayne Bradley](#), Development Director of the CIC *Kitchen*, Project Director of EdibleEastside.
- ❖ [Dr Christopher Brewster](#) of Aston Business School, PI on the [EU Smart AgriFood](#) project.
- ❖ [Professor Vicky Buchanan-Wollaston](#) is a plant scientist in the Department of Life Science at Warwick University.
- ❖ [David Bull](#), development strategist at Birmingham City Council.
- ❖ [Dr Rosemary Collier](#), an entomologist and Director of the Warwick Crop Centre
- ❖ [Professor Liz Dowler](#), public health nutritionist at Warwick University.
- ❖ [Professor Peter Fryer](#), a chemical engineer at Birmingham University.
- ❖ [Professor Laura Green](#), a veterinary epidemiologist at Warwick University.
- ❖ [Dr Gareth Griffiths](#), a biochemist at Aston University.
- ❖ [Professor Helen Griffiths](#), a biomedical scientist at Aston University.
- ❖ [Dr Rob Lillywhite](#) an environmental scientist from the Warwick Crop Centre.
- ❖ [Parveen Mehta](#), Operations Director at Minor Weir and Willis.
- ❖ [Dr Lynsey Melville](#), an engineer leading BCU's Bioenergy Research Group.
- ❖ [Professor Ian Nabney](#), a mathematician and computer scientist at Aston University
- ❖ [Professor Jim Parle](#), from Birmingham Medical School, also a practising GP.
- ❖ [Professor David Pink](#), a plant scientist at Harper Adams University College.
- ❖ [Professor Ruth Reed](#) from Birmingham City University, also a practising architect.
- ❖ [Dr Mark Rutter](#), Head of Animal Health and Welfare at Harper Adams University College.
- ❖ [Dr Eugenio Sanchez](#), a plant scientist at Birmingham University.
- ❖ [Professor Alister Scott](#), a social scientist and human geographer from Birmingham City University
- ❖ [Professor Hanifa Shah](#), an IT strategist at Birmingham City University.
- ❖ [Sandy Taylor](#), Head of Climate Change and Sustainability at Birmingham City Council.
- ❖ [Professor Adam Tickell](#), an economic geographer and Pro-VC at Birmingham University.

We're also grateful to the following people:

- ❖ [Associate Professor Frances O'Brien](#) from Warwick Business School for her guidance on the scenario planning process.
- ❖ [Dr Maureen Meadows](#) of the Open University Business School who also helped with the scenario planning.
- ❖ [Norman Leet](#) for managing me (no mean feat!) and facilitating the Forum events.
- ❖ [Dr Nicci MacLeod](#) for her linguistic analysis of Forum conversations.
- ❖ Ellie Richards for her analyses of the content of the conversations.
- ❖ [The Podnosh team](#) for their organisation and delivery of social media reporting, in particular Nick Booth, Jon Bounds, Steph Jennings and Gavin Wray as well as their video crew.

- ❖ [Matthew Green](#) for his help in writing [The New Optimists response](#) to Birmingham City Council's draft SPD *Places for the Future*.
- ❖ [Simon Harper](#) for researching and writing some of the blogposts.

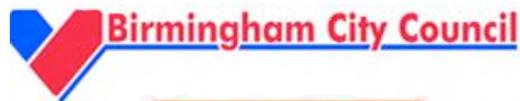
Last but by no means least on this list, our thanks to [Mark Barrow](#), Strategic Director of Development at Birmingham City Council for his support of the project; we're only sorry that owing to emergency dental treatment, he was unable to come as a participant to the New Optimists Forum event on 1st March.

What this document contains

What follows are three sections:

- ❖ Section I: Selected quotations from Forum events
- ❖ Section II: Selected blogposts from newoptimists.com/blog.
These are in chronological order, and were selected because they contain information and perspectives on agroecology and urban farming.

We are grateful for the sponsorship of these organisations, without whose support this project would not have happened:



Section I: Selected quotations from Forum events

Dr Gareth Griffiths:

"We waste a lot of food in this country. A lot of that is carbohydrate rich so can't we recover and recycle that – make bio-diesel from that. We need the right infrastructure to do that."

Dr Rosemary Collier:

"It amazes me that just south of Birmingham is the Vale of Evesham which used to be a wonderful food-basket but now it's fallen in to disuse."

Vicky Fitzgerald (in a comment on a blogpost):

"This week we are delivering food parcels to pregnant moms so they can eat enough for 3 days, do they need educating? They know a lot more than I do!"

Michelle Bluck (in a comment on a blogpost):

"The food bags we are currently passing onto clients are keeping pregnant women feed for between 3 – 5 days. Without a doubt if it was not for the Pregnancy Outreach Workers spending hours and hours accessing the above mentioned clients would be literally not eating any food."

Donna Evill (in a comment on a blogpost):

"Take a look around the local areas, especially the deprived areas of a city. For miles you will see a string of fast food shops, and possibly only one fruit and veg shop."

John Hilbourne (in a comment on a blogpost):

Food is not just an instrument or commodity or nourishment. It is a medium of social exchange. Food poverty involves not only malnutrition, but also has consequences for social interaction. e.g. reciprocity, hospitality, status, e.g. breadwinner; parent. power: e.g. matriarch. Therefore necessary to look at the role food plays in the social as well as the biological and economic spheres.

Ladybird (in a comment on a blogpost):

I lead an urban agriculture initiative in Sandwell, but I am of the view that more allotments/school gardens, etc, are very desirable and can be very powerful in the messages they convey, but are completely useless at the scale they are currently practised in tackling diet related ill health at population level.

David Pink:

It's a dichotomy — economies of scale — small can-do things (like crops localised for local conditions) and big can-do things. Assumptions that local is more sustainable isn't necessarily true."

Laura Green:

"In abattoirs, there's snobbery that 'small is beautiful' but conditions are better in the large EU certified ones. You could have a very large set up in Birmingham."

Robert Berry:

"The calories consumed are much greater than the local area's capacity to supply."

David Pink:

"In 40 years there will be DNA sequencing and we will understand what the idiom — what is the type of crop we want, so what genes do we need. There used to be very localised crops, suited to particular areas, and we may get that again."

Ruth Reed:

"Motivated communities can achieve things."

Jim Parle:

"Eating is social glue."

Section II: Selected blogposts from newoptimists.com/blog

Professorial muddy boots, vegans in the West Midlands and food security

Posted by Kate Cooper on 12th September 2011



Can you be a vegan and eat enough protein for a healthy life, living off food grown only in the West Midlands?

With all the angst about food miles, [Rosemary Collier](#), [entomologist and Director of the Warwick Crop Centre](#) at Wellesbourne, has pondered this question.

She told me during our thought-provoking conversation that she doubted it could ever be possible, but didn't actually know.

I'd arrived at the [Warwick Crop Centre](#) bearing gifts for her — a papaya, a mango, a very large purple plum, a pear and, yes, [one of those 2.5M avocados](#), part of a large box of fruits given to me by Parveen Mehta, the generous soul who's Ops Director at [Minor Weir and Willis](#) and who I'd met earlier in the day.

Generosity is catching.

Rosemary benefitted from its infectiousness, and it all made a neat if surprising introduction for her when we met face-to-face for the first time.

Here at Wellesbourne, Warwick researchers spend their time and efforts researching how to feed the world now, and the challenging task of feeding the estimated 9bn of us on the planet by 2050.

Despite what many think, research is a very practical affair.

Theories don't stay long in scientists' heads, they're tested in the real world, and sometimes overturned. The evidence of such practicalities was on Rosemary's boots. She'd just come in from the fields.

Like us, Rosemary had realised that the West Midlands, with its unique tightly-bound geography of cities and agriculture, had plenty to offer decision-makers on how we supply a population with food. She'd been thinking about how this could happen, and how to make it as multidisciplinary as it needs to be. So the notion of the [New Optimists Forum](#) was music to her ears.

As well as having the input of Warwick's established scientists and running a 'normal' Forum event at Wellesbourne, we discussed the possibility of having a session with postgrads on their new MSc in food security; the first intake is arriving in the next couple of weeks. The students come from all over the world, and from a variety of backgrounds. And it'd be great to have their diverse take on what we're doing.



Hydroponics: an experimental urban farm at Aston Cross

Posted by Kate Cooper on 14th September 2011

Hydroponics, the growing of terrestrial plants without soil, is a centuries-old idea.

According to the [wikipedia entry](#) on the subject, Frances Bacon's book about it, [Sylva Sylvarum](#) was published in 1627, a year after his death — and amazingly still in print.

The notion has been resurrected in this century as a means of feeding city populations. [Dickson Despommier](#) was perhaps the first to put forward the notion of vertical farms as a viable idea. His book, [The Vertical Farm: The World Grows Up](#) was published last year.

Here in Birmingham, [Tony Deep](#) is building something tangible with these ideas. Yup, I mean building as in construction.



He's Chairman of East End Foods, and the driving force behind an experimental urban farm, an integral part of the company's expansion being put up on the old HP Sauce site at Aston Cross (see left for an artist's impression of what it'll look like).

So it won't be your usual urban farm, the one you take young kids to visit, the ones with rabbits to stroke and goats to feed and hens' eggs to collect.

It will, sure, be open to the public. But without appealing fluffy animals. Instead, there'll be carefully designed hydroponics systems with a series of carefully designed experiments to demonstrate how vertical farming could really contribute to feeding a city.

I spent a fascinating few hours with Tony Deep a couple of weeks back. His enthusiasm is catching, and his desire to do something means this challenging experiment to inform how we might feed the world's growing population.

Along with the [other interesting places](#) I've visited, his soon-to-be built experimental urban farm will stimulate much thoughtful discussion, including that of the New Optimists scientists. We're grateful Tony has offered this place as [one of the venues](#) for the Forum.

note: For a Birmingham Post report on this East End venture, read [here](#). For more about Dickson Despommier's vertical farming ideas, [see this video](#).



Jim Parle — do you live in an urban food desert in Birmingham?

Posted by Nick Booth on 2nd November 2011

[Jim Parle](#) is a GP and Professor of Primary Care at Birmingham Medical School.

His experience is that too many of the poorest areas of Birmingham are what he calls “deserts” when it comes to good nutrition and good food – and that’s not mum’s fault – it’s the way we plan and structure out cities.

See his initial thoughts [\[in this Youtube video\]](#) as part of the New Optimist Forum...



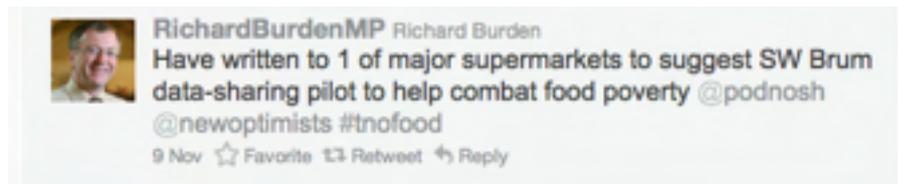
New Optimists Forum, #TNOfood & what's happened since 2nd November

Posted by Kate Cooper on 11th November 2011

We knew lots of interesting stuff would happen once we began the conversation about [food futures for Birmingham 2050](#).

So no surprise that the first New Optimists Forum event on 2nd November sparked just that.

Take medic [Jim Parle's video interview on food deserts in Birmingham](#), a podcast about the importance of [data by computer scientist Ian Nabney](#) and twitter at [#tnofood](#) and you'll understand what caught the curiosity of Richard Burden MP. On 9th November, he confirmed that he had done what he promised; i.e. written to Sainsbury's:



For a great summary of all of that, see [Nick Booth's Podnosh post](#).

[Simon Whitehouse at Digital Birmingham](#) and I have also had a conversation about mapping; i.e. what do we know/what could we know about the what and where in terms of fruit trees in parks and streets, allotments, garden produce, guerilla gardening, [@edibleeastside](#), that kind of thing.

Significant though it is, much more happened during the evening's conversations among the scientists on 2nd November. We've captured it all, one way or another. We're beginning to analyse it all, plus thinking about the next Forum meeting in the early spring 2012.

More in my next blogpost!



#TNOfood on 2nd November: drivers & trends, food issues & solutions

Posted on 6th March 2012 [this blogpost is placed out of date order as it's an analysis of the conversations held on 1st November]

Here is Ellie Richards' analysis of the content of the conversations that happened at the New Optimists Forum meeting on 2nd November: [Analysis_Forum2ndNov2011_EllieRichards](#)

Ellie has done a superb job in analysing the transcripts from over three hours of scientists talking, plus all the blogposts, interviews and tweets.

Her brief was "make something of all this", with the further instruction to put her thinking into not more than four pages — she did it in three!

She divided the conversational topics into three main categories: (1) Drivers and trends, (2) Food issues and (3) Solutions.

See what you make of it all — and please do comment below.

note: We didn't release this analysis before the Forum event on 1st March, as we didn't want any of the scientists who joined that conversation to be prejudiced by what had been said before.

Mapping food production in Birmingham?

Posted by Kate Cooper on 28th November 2011

After the first New Optimists Forum on 2nd November, Digital Birmingham's Simon Whitehouse and I talked about mapping food production in Birmingham, something I mentioned in a [blogpost at the time](#).

We've been thinking about this a tad more. What might a mapping project look like? Who'd be involved? And how would it make a difference to Birmingham and its citizens, i.e. thee and me?

Here are ten reasons I've come up with over the weekend — please comment, challenge, add to the list:

1 Fresh nutritious food is vital to the health of citizens

So knowing where it isn't easily available is useful information for planners, not just in the City Council, also in the NHS.

2 The growing of food, and the sharing of food, are social, live-enhancing activities

Finding out what food is produced locally and setting this data against other info about sociability and health factors would be interesting, to say the least.



Photo above is of the Hazelwell Allotments shindig, reproduced here with kind permission of Sarah-Jane Watkinson.

3 Food security

The last time city leaders thought long and hard about food supplies was during the Second World War; Dig for Victory was more than a slogan. [A 2009 WMRO report suggested, only slightly tongue in cheek, that we should think again](#) . . . Allotments, market gardens, small holdings; such secondary food sources are likely to be of growing importance with the recession hitting us so hard, let alone our responses to the huge global challenges of climate change, resource depletion and population pressures. But how significant are hyperlocal food supplies, or could they be? The New Optimists scientists can tell us about the population's dietary requirements. Combine that with what planners need to know; i.e. the actual and potential supplies — my uninformed view is 1% or less of the city's requirements. How wildly out is that figure?

4 Relationship with the shire counties

Brum, a comparatively new city, one born after the railways, has never had to rely on its immediate hinterlands for its food supplies — one of the reasons for the uneasy relationship between us and the shires, and between us and the older towns and cities in the region who have

grown alongside their relationships with close-by agricultural environs. Understanding our future food security issues will radically change our relationships with our neighbours.

5 Birmingham would be seen as a caring, fun, green place to be

A crowd-sourced food-mapping data project would be a statement to the outside world as well as to Brummies themselves that this is a green city, literally so. “Leafy Edgbaston” is but a small part of our green city, once a heathland plateau running into the ancient Arden Forest. A project such as this would give a public voice to lots of ventures, from solo heroic effort to larger scale social initiatives . . .

6 It'd put the productivity and social conviviality of our 115 sites and 7K allotments — and other places — slap bang into everyone's awareness

It's not just our thriving allotment communities that are growing food and having fun while they do so. For example, did you know about [Annie's Soho Urban Roots in the grounds of City Hospital](#)? No, nor did I. Were you aware, too, that there's the [Edible Eastside venture](#) slapbang in a seeming industrial wasteland in Digbeth? I wasn't until the Forum. There are two urban farms I know of, Sandwell and Woodgate — where else? There are lots of other surprising things going on, some in obvious places like schools and housing estates, and some in the most unlikely of places.

7 We'd find out what foraging potential there is in the city

Disused railtracks, the scrubber end of parks and hedgerows are home to brambles, nuts, plums, apples, wild herbs like garlic and sage, plus lots of other produce. And we'd need to know what lands had been contaminated during our heavy industry past.

8 Farmers Market survey

We could add data about food supplies from our hinterlands by discovering where the food that supplies the Farmers' Markets actually comes from.

9 Mappa Mercia

[Mappa Mercia](#) is a great Open Mapping project. This could be part of it . . . and more!

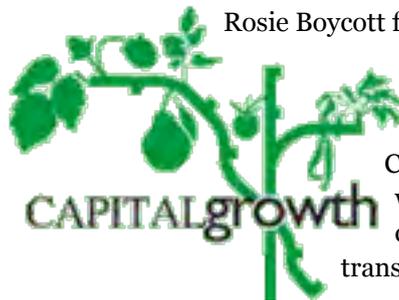
10 New Optimists Forum scenarios

And, of course, the information such a project would uncover would be a really useful basis for the scenarios we're generating for food futures for Birmingham 2050.

What do you think of this list? What's missing?

Rosie Boycott on London's Capital Growth

Posted by Kate Cooper on 7th December 2011



Rosie Boycott from [Capital Growth](#) was the first to kick off at the [All Party Parliamentary Group on Agroecology yesterday](#) (6th Dec).

Here's a summary of what she said:

Cities have never been designed to grow food, but to be supplied with food, hence food security is their concern. Growing food in cities is about transforming communities. It leads to lots of transformational activities, all positive.

City access to food growing is about changing attitudes about waste, about food now being just another commodity, about how we lead our lives, about how people think about food and about knowledge and resilience about food.

An example: When kids grow food, it has many beneficial effects. They learn they can do something, and do something that contributes to their own lives and the lives of people around them.

Three years ago, [Capital Growth](#) was set up. Adopting a similar scheme from Vancouver, they are creating 2012 spaces where — and here are the only two rules — a community grows food — and

that includes bee-keeping. Target: 2012 (obviously)! Allotments don't count. There are lots of examples, skips (as pop-up veg plot, they can be moved), the canalside, a neglected garden — one great story of a neighbour volunteering to cultivate the neglected garden of an elderly neighbour who couldn't cope any more led to other gardens being done which led to the whole street having veg planted along it which led to "let's plant an orchard".



Capital Growth have various sponsors, and will issue grants themselves for soil, seeds, etc. Usually the grants are £500-ish, usually less.

To date:

- ❖ 1460+ veg growing spaces in the capital
- ❖ 50K volunteers
- ❖ 50 hectares of land
- ❖ 21 London boroughs
- ❖ 10 housing association
- ❖ 10K school kids involved
- ❖ all ages from kids to OAPs

The spaces are never vandalised. Tangible, measurable benefits include better health, literacy rates go up, obesity rates drop, science curricula take-up in schools where there is veg growing, crime much lower (police have told them that a community veg space means fewer bobbies on the beat needed), attractive routes to work, and entrepreneurial impact (it's proved the best route [back] to work).

How much of London we can feed, just doesn't matter. What *does* matter is the activity.



Mary Clear on Todmorden's Incredible Edible

Posted by Kate Cooper on 7th December 2011



Gloriously plain-speaking grandmother of ten, Mary Clear of [Todmorden's Incredible Edible](#) was the second to speak at the [All Party Parliamentary Group on Agroecology yesterday](#) (6th Dec). Here's a summary of what she said:

Three and a half years ago, a few Todmorden people were discussing concerns about it all — climate change, people in some developing countries going hungry, everything . . . and how everyone blamed everyone else for what was going on. Let's see, they decided, if we could do something for Todmorden that'd make a difference.



Todmorden is in a deep valley, equidistant-ish from Burnley, Rochdale and Halifax, towns themselves that aren't doing too well. It's socially mixed, with high unemployment in the town, mostly back-to-backs. There are a few rich people, and they live up the sides of the valley. Industry, formerly cotton, has gone. There are five supermarkets in and around the town.

They hit on food as an agent for change. “If you eat, you’re in.”

Everyone has a lot to offer, including the jobless youngster. She presented a simple diagram, three circles for learning – cradle to cradle, business including farmers, and community – everyone.

Propaganda gardening. (A better term than guerilla gardening, she said, which smacked of machismo illegality). Making it beautiful. Help yourself, we want to help you.

They started with the main road, so everyone could see it.

Then they moved on to the estates with their difficult soil. (This is a Pennine town, remember, so think wind and rain as well as bright clear days.)

Then they heard the local PCT with its new building had £20K for landscaping . . . So they asked a local doctor if they could plant trees, apple, pear and plum on the site, plus [an apothecary garden](#) at the back.

They have pick-your-own herbs on the station. The police station then did some planting, and not to be outdone, the firemen also had to join in, didn’t they.

There was a Bengali bean-growing championship on raised beds on what was previously tennis courts.

They created a growing space even at the side of the local church graveyard.



There are six primary school and one secondary school in town; they joined in. There’s a need for “incredible parents” if schools join in, as during the holidays, they’re the ones that carry it.

Links with farmers were set up. A pop-up kitchen for cookery lessons in the streets. Bee keeping took off. In the three years, over a thousand fruit trees have been planted and anyone can help themselves to the produce. Trees are expensive to buy, so some of them have learned the art of grafting. Indeed, there are many lost arts which will die when the old generation pop their clogs, so they’ve set up a rolling programme of learning.

They needed a business. Eggs. They decided to increase the number of laying hens in the town. They then created a demand for locally produced eggs. There’s [an egg map of the town](#).

One guy gave up his day job and became a cheese maker. There are also rare breed pigs in the town. And the local [Bear Cafe Bar](#), committed to local produce, has bought itself a polytunnel.

A landowner gave them some [land to use in Walsden](#) (see right, and which required expensive fencing ‘cos, unknown to everyone, the place was a meeting ground for every rabbit and deer in northern England).

The next project is a training centre. Oh and another, an aquaponics investment to grow fish.

No doubt, if Mary is anyone to go by as a Todmorden person, there’ll be plenty more projects and activities that can’t be imagined yet. And will happen.

And, much to Mary’s surprise, particularly in a raw Pennine January, there are ‘vegetable tourists’, people coming from across the world to see what a townspeople can do. There’s even been a visit from a planner from earthquake-torn Christchurch in New Zealand. It’s a no brainer, he said, for the new town there to have food growing at its core.



Clare Deveraux on Food Matters

Posted by Kate Cooper on 7th December 2011



Clare Devereux of [Food Matters](#) from Brighton & Hove was the third and final speaker at the [All Party Parliamentary Group on Agroecology yesterday](#) (6th Dec).

Here's a summary of what she said:

Although the south east city of Brighton & Hove might appear affluent, in fact it isn't. It falls within the bottom 25% of deprived areas in the UK, 25% of their kids come from low income families, wages are below the national average, and there's lower than national average in various health stats, including mental health.

Between the South Downs and the sea, pretty close to London, it's an area with very high density building, and big health inequalities. 400 restaurants and cafes and eight million visitors a year. So they feed a lot of people. Interestingly, the City Council own over 11,000 acres of farmland.

Food Matters began in 2002 by people with a history of community food work. They've done [interesting activities](#), a mapping project, the first Spade To Spoon conference, work with the local PCT and strategic policy work, stuff on urban agriculture.

In realising the local community wasn't producing much food, they are now asking how they can have a sustainable food supply.

And they don't know how to do this. Nor do they know the risks in their food supply. Nor what can they do to mitigate these risks.

What's the biggest bang for their buck? What can they do? Who will do it? And how can they support behaviour change?

Interesting facts regarding How to Feed A [ie this] City: Local food produce is 0.14% — how much effort would it take to change this? There are 70K hectares of productive agricultural land in their area, mostly wheat . . . If they took the wheat grown on the Downs, it could be used for 36% of the bread consumed in the city — but there's no mill, nor enough bakers. There are 50K hectares of gardens and allotments growing 1.6% of fruit and veg consumed — but should they be investing time in increasing this?

If Brighton & Hove were to be self-sufficient in locally produced food, the area needed would stretch 80 miles in diameter and would include several populations who need food as much as they do.

She said the better question is *How will the UK feed itself* rather than concentrate on how a single city will feed itself.

Her conclusions:

- ❖ Every city should have a Food Policy Network (or equivalent).
- ❖ There needs to be national action.
- ❖ We need more research, especially regarding baseline data.
- ❖ A sustainable food policy translates into people's meals, what they actually eat.
- ❖ Working on food matters is a win-win, as it addresses lots of other issues.
- ❖ Austerity measures will impact on food, in particular on access to good food and food poverty.

e.

Interesting points in the Q&A: All Party Parliamentary Group for Agroecology

Posted by Kate Cooper on 7th December 2011

As well as summaries of what [Rosie Boycott of London's Capital Growth](#), [Todmorden's Incredible Edible Mary Clear](#) and [Food Matters Clare Devereux](#), said at yesterday's APPG on Agroecology, here are some interesting points raised at the Q&A afterwards, chaired by Bournville-lad-now-Stoke-South-MP, [Rob Fello](#):

- ❖ Question: The barrier to the market for local food stuff is distribution and all the infrastructure that means. So what to do about this?
- ❖ Clare Devereux: A possible start to building that infrastructure for community food growers, is to supply local restaurants. However, scale-up is a really big issue. Wholesale markets are disappearing and it's likely anything else set up will be destroyed.
- ❖ [Peter Boyce from City Farmers in Lambeth](#) made the point that no-one wants a food strategy that gathers dust. It has to be independent, and has to have delivery on the ground.
- ❖ Rose Boycott said there was a mismatch between local food and local growers. However, schools and libraries are buyers of produce . . . there is a need for larger scale initiatives.
- ❖ And she mentioned [Budgens](#) as a supermarket chain whose policy was to sell local produce. [The link is to the Wikipedia entry.]
- ❖ The London Food Policy already exists. [I could only find this [kind of thing on the web](#), which allegedly includes a London Food Strategy, but the links were broken . . .]
- ❖ Some local authorities have smallholding responsibilities under an Act of Parliament, and they have powers to create allotments.
- ❖ Farmers Markets and various box schemes were for farmers to be supported. But the big boys have expropriated the idea.
- ❖ [Charles Champion](#) from JTP, a planning consultancy made the point that 'towns have lost their way and people, especially the young, feel trapped — the potential of food is potential for the future'. He asked what the one thing is that Government or the Local Authority should do, and these were the responses:
 1. Lambeth has made it the default that permission is given to grow food on waste land, and to support people in doing some of the heavy work.
 2. Planning gain for a supermarket to provide a community growing plot?
 3. Do things in public places; e.g. the front of the police station, right at the heart of government, such as the Palace of Westminster
 4. The CE of York has made growing veg part of the city centre
 5. Brighton & Hove parks have now given permission for a veg plot in the biggest park in town — not an easy solution, it needs to be managed so looks good and is productive
 6. Remember the purpose of growing food is eating which is a fun thing to do. So local food picnics, pick and cook days, open air kitchens, people who eat together, stay together.
 7. Planning is critical. Ensure every new development has to have space for growing food.
 8. Don't be anti-polytunnels. Our climate needs them to grow a wide variety of food successfully.
 9. Get food growing into the Local Authority plan. Then there's no opportunity to say no.
 10. DEFRA has a task force to get food growing in schools. (If the focus is to achieve good locally grown food, we need to create an urban population that demands it — if this is so, then it's via our kids.)
- ❖ There's an important role for professional growers (e.g. farmers) in helping urban food growing. At the moment, there's a big disconnect.
- ❖ Composting in cities important. Community composting schemes are now allowed.

- ❖ There's a waste hierarchy that doesn't help; e.g. pigs are no longer allowed to eat food waste.
- ❖ Opportunities for apprenticeships in urban ecology/urban food growing.

Have I missed anything? There was a pretty technical and important exchange on legal responsibilities about small holdings that I didn't really follow — and it was, as I say, important . . . (I also know I've missed people's names, my apologies for that . . .)



Agroecology/urban farming: Opportunities for Birmingham

Posted by Kate Cooper on 9th December 2011

There are great advantages to being behind the curve, as Birmingham is, when it comes to a complex matter like how to feed a city. It means we can learn a lot from others.

There's bags of evidence that food planting, growing and harvesting has massively beneficial impact on citizens' health and wellbeing, plus surprisingly, on dramatically lowering crime rates, increasing kids' literacy, lowering truancy, all sorts. So putting How to Feed the City at the core of everything is a brilliant thing to do.

And here's what I learned about lots of opportunities Birmingham has from the [APPG Agroecology Group](#) meeting earlier this week:

- ❖ Put food and food issues at right bang slap as core of Birmingham's strategic planning. (There are already indications that this will be a-happening, of which more later.)
- ❖ As Lambeth has done, Birmingham could and should make it the default that permission is given to grow food on waste land, and to support people in doing some of the heavy work.
- ❖ Birmingham should set up a Food Network on some such, a focal space where everyone can see what's happening. (In fact, there's already quite a lot going on, just few know about it . . .)
- ❖ There should be a mapping project on what's grown where. (There's also interesting [BCU people doing interesting spatial planning](#), including [Mike Hardman's stuff on guerrilla gardening](#); s.a.interesting [health/diet mapping project at Staffordshire University](#), and s.a. [Food Vision](#).)
- ❖ The [Planning Department](#) to ensure developers every new development has space for growing food.
- ❖ Birmingham's superb [Parks Service](#) people to plant and tend veg, herbs and fruit growing in each park and, importantly, in the beds in the city centre and along the main arterial roads. Each plot to have a 'pick'n'eat' sign to encourage people to use the produce.
- ❖ Ditto [police stations](#), [fire stations](#), hospitals, PCTs and doctors' surgeries, social housing organisations, leisure centres, universities, colleges et al.
- ❖ Ditto schools — who I've listed separately as I learned they can get a lot of support from [this DEFRA task force](#) to achieve just this.
- ❖ Enlist the [Calthorpe Estate](#) to plant and grow food. Plus [Hortons](#). Who else?
- ❖ [Birmingham Refuse Collection](#) to have a composting collecting service — which some local authorities already have.
- ❖ Supermarkets having to provide a community growing plot on each site (a new form of planning gain?).
- ❖ Any big city, Birmingham included, has bulk buyers of fresh produce, some of whom could be informal starters for 10 in creating a local market (e.g. schools, works canteens, social housing communal eateries, hospital caterers, universities and colleges) . . . and there's a need to create larger scale initiatives.

- ❖ All [local authorities have powers to create allotments](#). Birmingham should have a target of n -allotments within, say, 10 years in wards where poor health including obesity is highest.
- ❖ Some [authorities have smallholding responsibilities under an Act of Parliament](#). Has Birmingham? Have any of the surrounding authorities? if so, what are they doing?
- ❖ Taking advice from farmers in the area, plus from all the expertise within various institutions — there are some great people at [University College Birmingham](#) and [Harper Adams University College](#) who immediately spring to mind.

And not to forget

- ❖ Growing food is about eating, the fun part for everyone not just those with green fingers. So pick'n'eat parties.

And here is the big challenge:

- ❖ Local food produce distribution has little infrastructure in most parts of the UK, and almost none here. What impact bottom-up initiatives could have is up for grabs — might be diddley-squat without tenaciously careful nurturing.

What's to remember, though, is that food planting, growing and harvesting is about far more than nutrition. It's about people and community and having fun and youngsters, even toddlers, being self-sufficient and trusted and caring and cared for. It's about eating and eating is social glue.



How self-sufficient can Birmingham be? Should we even bother trying?

Posted by Kate Cooper on 29th December 2011



Pam Warhurst of [Todmorden's Incredible Edible](#) was interviewed by [Radio 4's You and Yours](#) yesterday (38.35 minutes in).

She reckons that what they've done in Todmorden can be done anywhere. Hundreds of Tod people grow veg and fruit in their front gardens just for other townspeople to pick and eat.

Todmorden is a small place, only some 15K people. Pam doesn't think they'll achieve their self-sufficiency target in Tod by 2018, but it didn't seem too unrealistic for them to set it . . . In contrast, could Brum feed its citizens?

Not possible in the foreseeable future . . .

And here's the nub of it. According to Wikipedia, Birmingham is 267.77 km² and there are just over 1M of us, packed in at 3739/km².

For the sake of simple arithmetic in this argument, let's say the average person chomps their way through the produce from a thousand square metres or a tenth of a hectare (that's assuming, incidentally, damn good soil and pretty intensive farming).

Translated into feeding all of us million Brummies, we need 1000Mm² (1000km², so nearly four times an area of the city itself) under the plough to keep all of us going.

(It's calculations like this that leads me to think that Tod won't actually ever become self-sufficient as they'll need 1,500 hectares of fertile highly intensively farmed land to be so, which they don't have. (Yet?!) Plus, the Pennines might be great for growing lamb, eggs and some veg and fruit, but it ain't a paradise for, say, bananas, oranges or rice.)

Back to Brum. What could we do in self-sufficiency terms?

Allotments. We have more than any other city. Around 7K of them. [Assuming each is 253 square metres](#), our allotments total 1,771,000 square metres; i.e. 177.1 hectares. Each hectare can feed 10 people, so that's nearly two thousand of us sorted.

So only another 998,000 to feed . . . From gardens? Foraging? Incredible Edible-style propaganda gardening? Come on!

It's these kind of rough and ready calculations that tell us feeding a city population just won't happen through growing-your-own. And even with exciting technologies such as hydroponics, vertical farming and the like, we'll still need to bring in a lot of what we need.

So why bother at all?

Here are two sets of arguments. **The first** is the every-little-counts argument. [Clare Devereux of Brighton & Hove](#) reckons their allotments and gardens produce 0.14% of what they need.

What if that could be nudged upwards to, say, 1%? Add in vertical farming and nudge local supplies up a tad more to, say, 2% or even 3%?

What impact would that have on their economy? On the tastiness of their food? On society as a whole?



That leads me neatly to **the second** set of arguments, those to do with our psyche, our conviviality, wellbeing, our sense of rootedness, literal as well as metaphorical.

Planting, nurturing, harvesting are all great activities. And if they don't take your fancy, then preparing and sharing tasty fresh food is bloody fantastic.

The Todmorden Incredible Edible has blazed a brilliant trail, vividly demonstrating just how wonderfully dramatic an impact a light-touch, help-yourself, kind focus on food can have, and what [we can learn](#) from their generosity, enthusiasm and sheer hard work.

(The photo here is of [some of the people involved on Aston Villa's allotment](#).)

10 Responses to "How self-sufficient can Birmingham be? Should we even bother trying?"

Sustination says:

December 30, 2011 at 10:35 am

Great article! I was lured in by the contentious headline, too. Nice work!

It seems we can expect a great deal more Todmordens in 2012 as the external pressures which compel action grow greater and more pressing, and the internal pulls to more meaning and fulfilling livelihoods encourage more people to try this route.

Whilst urban agriculture is challenging (scarcity of land, toxins, water supply) it is fortunate that there are so very many quick wins. Water can be captured, unused space can be restored, soils can be nourished / imported / bypassed. It would seem that whilst (by your calculations) the current output of Birmingham could feed 2,000 people, that if we had more GROWERS this output could increase by order(s) or magnitude and fresh fruit, vegetables, eggs (and perhaps a little chicken and pork) could be in good supply.

So perhaps it's not the technical possibility of urban agriculture which provides the challenge, rather the desire for action and the mechanisms which facilitate it. I fear that's a point we may need to remember in the coming years as the local agriculture moves from being desirable to necessary.

Like Todmorden, like Brum's allotments, the sooner we can build up a base of knowledge, collaboration, and resources, the better. More quickly than almost anything else, working together to create what we need leads to a tremendous sense of belonging, confidence, and optimism: all characteristics which will help us navigate the coming changes.

For those who've not read it yet, there's another great (though now somewhat clichéd) article on the process or urban ag here: <http://www.cityfarmer.org/cuba.html>

Jim Parle says:

December 30, 2011 at 12:26 pm

self-sufficiency is undo-able but learning to grow really good tasty stuff espec easier stuff like raspberries will (1) be fun; (2) be relatively easy (with some sources of advice (allotment owners maybe) and (3) be attractive to kids as well as us oldies; coz nothing beats going into the garden and picking some fruit/herbs/salad/whatever . . . and it saves a bit of money too.

Jim Parle says:

December 30, 2011 at 1:36 pm

and further to my previous comment

substitute 'public land' for 'garden'

wouldnt it be great to pick apples in the park? or any other easiy reached space: outside the swimming pool, by the side of the road (prob not good in middle of road); why don't we have fruit trees instead/ as well as other kinds of public space trees?

Kate Cooper says:

December 30, 2011 at 1:55 pm

And . . . there's a third set of reasons why we should focus on food matters. All to do with how our ever-so-modern but still-small-scale minds can understand and do practical stuff in response to the huge challenges facing humanity in the 21st century, climate change, resource depletion and population pressures.

I wrote a blogpost about all this here: <http://newoptimists.com/2011/11/13/build-a-bunker-with-a-vegetable-plot-on-some-high-but-sheltered-ground/>

Felipe says:

December 31, 2011 at 9:21 pm

Thanks for this article. Its great (and important) to be thinking and discussing this sort of thing. For me regardless of whether the figures don't add up for Brum to be able to feed itself, it's about at least having a good go at it – using everything at our disposal and enjoying the many benefits that becoming more connected with our food supply brings.

There are so many tools (in the form of ideas, knowledge, movements, people's ingenuity and creativity) we can use. Be it permaculture, bio-intensive agriculture, green-roofs, agroecology, agroforestry, as well those Kate mentions and many many more. Unfortunately The scale at which these ideas are implemented can be limited by the will of those in control to put into practice. For something to happen on the scale of a large city we need good support for relevant infrastructure. Cuba survived peak oil and maintained its food security thanks to the government handing over land to communities and by supporting research on organic agriculture and permaculture. In Havana for example they grew food everywhere – even by turning over paving slabs.

In a city we can be creative in how we use space. Brum has a large amount of park space which as Jim Parle said can be used to grow fruit trees. You could also create green edible spaces on roofs. I was reading yesterday of actual farms in the US created on top of tower blocks and warehouses. Heat created from kitchens and ovens in the buildings was then channelled up to greenhouses in the roofs which can then be heated and creating food all year round. As the famous permaculture saying goes: "yield is only limited by the imagination"

It may be that all this may still not be enough to feed the 1 million of us. Let's give it a good go anyway (if not there's always takeaway!)

Sustaination says:

January 1, 2012 at 10:02 am

There are a wealth of new tools which are helping incubate and support this new infrastructure, too. From the likes of <http://www.buckybox.com> and food-nation.co.uk for vegbox schemes, and a wealth of food mapping tools.

If we're putting in effort it makes sense to push at the most effective points we can – the points in the system which generate the greatest change for the least effort. Since most food already goes via businesses (50% of all food used is in catering) then the more we can do to help businesses trade locally, the better.

[Starting an unashamed pitch, since there's no time to waste]

Services like ours at <http://www.sustaination.co> make it easier for local businesses to trade locally, which means local and sustainable start to become the default for menus and shelves everywhere.

We also actively seek to build resilience into the supply chain by highlighting opportunities for local distribution and aggregation hubs by doing automatic analysis of the local food web.

Find out more at <http://www.sustaination.co>, please sign up for our newsletter, follow us on <http://www.twitter.com/sustaination>, register your business (www.sustaination.co/register), and spread the word.

There's a necessary and desirable change coming our way fast, and we're doing all we can to make it a change for good. Please help.

Kate Cooper says:

January 1, 2012 at 10:13 am

Hi Felipe — I've just tweeted (@newoptimists) your comment; a great beginning to 2012. Thank you!

felipe says:

January 1, 2012 at 2:26 pm

Thanks Kate.

Thanks also sustaination. I'm actually involved in the South Birmingham Food Co-operative, and we're soon going to be opening a shop. Making links with local producers is exactly what we want to be doing. I'll be approaching you in the next few months to get your help with this.

Helena says:

January 6, 2012 at 10:33 pm

Felipe, I agree with you entirely...it's the 'having a go' that's important, it's the 'having a go' that helps to change people's mind-set..be inventive...one of the reasons that Todmorden works, is that we utilise what space we have... In the early days we were cheeky... we planted where we could... even in the pre-days of Incredible Edible Todmorden – when we were realising that it was ok to be doing what we were doing – we were doing such things as buying fruit trees from local supermarkets, then secretly planting them in their grounds ... we utilised the space that we had already ... take a look at [our website](#) to see what else we've been up to ... we are experimenting with land on the tops (it's hilly moorland round here) to see what crops grow ... we are looking into local history to see what was grown here in the past. We have land lent to us on which we are establishing a 'growing 'training centre in Walsden' – all our schools are growing – not for any main crops, but to teach the children what it means to grow your own food ... so our children grow up knowing how its done. We utilised patches of grass and planted community herb gardens, we spoke to our health centre and got permission to change all the 'prickly shrub' planting with edible trees, fruit bushes and herbs..any public building with grounds could be done like this ... we built raised beds in the grounds of the police station and grow veg in them, we did the same at our community college and our train station ... it is amazing what space you can find if you break the mind set of needing neat large rectangular flat fields! most importantly – when we started we did it with no money apart from us paying for packets of seeds..we held plant and seed swaps...as momentum picked up, we applied for grants or awards like

B&Q's one planet awards..they gave us a prize of £5000-worth of B&Q goods..we spent the whole lot on huge planks of wood – which we then used to build all the raised beds around town ... we have two paid 'Food Inspirers – funded by 'leader' money ... absolutely everyone else involved is a volunteer...some full-time, others part-time...if we can do what we do, then any town can do what we do...but it needs to come from grassroots level...that's what's worked for us...and a huge amount of commitment and belief from those involved..

Kate Cooper says:

January 6, 2012 at 11:37 pm

I'm simply thrilled to bits, Helena, that you've commented on this blogpost. I checked your email address, thinking is it really from you. Yay! It was! And such helpful, useful stuff too. Thank you!



Mapping food production in Birmingham: Part II

Posted by Kate Cooper on 15th January 2012



An outcome of the first New Optimists Forum event last November was the notion of [mapping local food production in Birmingham](#).

Hence on Friday I joined a meeting of four people, Dr Farida Vis (@flygirltwo), Andy Mabbett (@pigsonthewing), Andrew Mackenzie (@DJSoup) and Brian Prangle (community organiser for [OpenStreetMap](#) in Birmingham, aka [Mappa Mercia](#)).

Together, they know more than a tad about (a) mapping, (b) data and (c) allotments and growing local food.

Here's what I learned:

- ❖ Birmingham's allotments, thanks to Brian, are now literally on the Map.
- ❖ On the Map, there are Council allotments, private or charity allotments (e.g. at Bournville) community orchards and a few other other food sources.
- ❖ How to edit Open Street Maps myself. Evidence that even a nork like yours truly can do it, note this apple tree off Nursery Road in Harborne is now marked there.
- ❖ It'd be really useful to have data on the Map about who owns what sites, in particular unused brownfield sites.
(This data is held by the [Land Registry](#), but isn't opendata nor in the public domain, even when it's publicly owned land.)
- ❖ There's a dearth of data about allotments. (See this [Guardian article](#) by Farida and her colleague Yana Manyukhina last November; see also [allotmentdata.org](#))
- ❖ [Solihull](#) recently opened two new allotment sites, with great services — proof it can be done!
- ❖ It'd take a day of a coder's time to add a pop-up window so info about any item could be added by users.

Discussion also ranged around getting productive use from brownfield sites (for example, mobile allotments — containers plus a water supply, the big issue there is ownership, and knowing who owns where); green roofing, growing edible plants on disused railways, the canal system . . .

Might it be possible, too, to plant around Curzon Street and the old LDV site in Washwood Heath; the former will be the new station for HS2 (if it happens), the latter an engineering and maintenance depot for the trains, so both places will be lying with not-much happening in the short-term?



Will the lights go out?

Posted by Kate Cooper on 27th January 2012

Could Birmingham do an industrial-city version of what's been achieved on the [Isle of Eigg](#); i.e. become energy self-sufficient?

The islanders have achieved much through the demand side. Here in Birmingham, we're about to do something radical on the supply side.

[Aston's EBRI](#) looks set to be the beginning of a game-changer — and in the first instance for Birmingham.

Talk with Professor [Andreas Hornung](#), as I did on Wednesday, and you begin to get a glimmer of the exciting possibilities in having a distributed system to provide heat and power in a city such as ours.

Post-industrial cities like Birmingham have swathes of derelict land, plus the detritus of its people, in our case, about a million of us. This land and our waste are both resources which, with imagination and investment, can provide us with much of the heat and electricity we need — and by a carbon negative process.



The [EBRI power plant](#), under construction next to the Sack of Potatoes at Gosta Green, will go live this autumn.

It's a small building, and this will include both the power plant and some labs. The power plant itself will be roughly 10x12m, and about three storeys high, the size of a modest house

— you can't scale the process up much, so you need small-sized plant.

Plonk another 12-15 of them in a 'thermal ring' around the city which, technically, can easily be done by 2026. If this happens, the City Council's consumption of £25M/year worth of power is sorted, plus waste disposal costs of £40M are saved as this 'waste' is now valuable fuel for the power plants.

The city's total import of electricity is £1.6bn every year, a sufficiently large market to interest suppliers. The build-cost for an EBRI-style plant is currently around £24M, an amount that should drop to around £14M over the next decade or so — a modest investment for the likes of a power company.

There will also be the opportunity to build very small-scale power plants, coming in at around £1.5M (the [price of a posh home](#) in this city or a banker's bonus in London). These power plants would be particularly cost-efficient for sites that have biomass 'waste' of some kind or other.

But (and it may be a big "but"), this presupposes people would be happy to have a small power plant close by, perhaps literally at the bottom of the garden.

There's also an absolute limiting factor on Birmingham becoming heat and energy self-sufficient by a distributed system based on the EBRI carbon-negative process. It's fuel; i.e. how much biomass the million of us create.

Not enough . . . nonetheless, the million of us produce a great deal. The thermal ring itself could single-handedly achieve the [city's 2026 target](#) to reduce the city's carbon footprint by 60%. We could go far beyond it — and thereby keep our lights on.

Keeping the lights on? On a national level, there's a very different story.

Last night [Professor Martin Freer](#) engaged a [Lunar Society audience](#) in a interesting if sobering assessment of energy security; i.e. what's needed to keep UK citizens in the lifestyle to which we've become accustomed.

There are two main drivers: increasing energy use by consumers, and the [Climate Change Act 2008](#) which commits the UK to an 80% reduction in greenhouse gases from a 1990 baseline.

The supply side in a nutshell: To achieve carbon emission targets and keep the lights on, we need a substantial investment in nuclear power; coal and gas will have to be phased out and renewables just won't do it. But to date, no organisation will invest the £5bn a pop that's needed just to replace our existing aged nuclear power plants, let alone think about building more.



This is "the energy gap", a gap that'll first hit our pockets when much higher energy prices kick in and then, some say, it'll be lights-out from time to time.

Unacceptable?

Expect a change in the Climate Change Act 2008 sometime around 2015. Most of us won't notice the politico-manoeuvring of clause this and clause that. But it'd create a searingly difficult time for our children and grandchildren.

Even if Birmingham does become largely energy self-sufficient, the impact of the national energy gap would be felt hard here too, really hard.

I have no idea what the implications of all of the above would be on Birmingham's food futures in 2050. And that's exactly why I met with Andreas this week. In early summer, the New Optimists Forum will explore What It Could All Mean.

I'll be posting more info about the part Andreas and some of the other scientists will be playing as and when we do the detailed planning.

See also:

- ◆ [Martin Freer's presentation](#) (as a pdf)
- ◆ [Climate Change Committee Renewable Energy Review](#) published in May 2011
- ◆ [Sustainable Energy – Without the Hot Air](#) – the hugely informative book by David MacKay FRS. Or you can download a pdf version for free from [here](#).
- ◆ And you can hear from Andreas himself in this [Aston University video](#).



Birmingham 2050: Pathways to Famine, Pathways to Feast

Posted by Kate Cooper on 20th March 2012 [[this blogpost is placed out of date order as it's an analysis of the conversations held on 9th February]

Eight people sat round my kitchen table on [9th February](#). It was a meeting on the issue of food poverty/food deserts in Birmingham, raised by [Jim Parle in a video interview](#) at an earlier Forum event.

Ellie Richards had the brief to categorise what the guys said and, where possible, draw out causal links.

She's created two broad-brush possibilities, [Pathways to Famine](#), and [Pathways to Feast](#).

Both are written in the same format with the issues, trends and drivers listed in diagrammatic form, and each uses the same colour-coding.

This makes for a very interesting comparison of what-ifs when, for example, food sourcing changes. It also highlights the importance of local food supplies – which for us in Birmingham means changing our relationship with our hinterlands as well as looking to urban food growing.



As I write this [on 20th March], Mike Whitby is on BBC Radio 4 *Today* being interviewed by Evan Davis. He has just said that Birmingham owns 40% of the land in the city – and that conversation is all about economic development, inward investment, pension funds, HS2, the mix of opportunity . . .

It'd be interesting to hear the city leadership in 2030 being interviewed about what Birmingham has done with its considerable land bank which is, let's face it, mostly unsuitable for the growing of food . . .



If we're to have community-based food economies, do we need more clearly defined communities in our cities? Professor Ruth Reed

Posted by Nick Booth on 1st March 2012

[Professor Ruth Reed](#) had been involved in a table discussion about local food economies – which might include a whole range of carbon incentives and local energy produced from local waste.

But here she argues that if we want this to be part of how we feed Birmingham into 2050 then we should do something now about defining urban communities in a more concrete way – perhaps urban parish council – or more formalised neighbourhood forums – which of course fits with the localism bill and neighbourhood planning).



[Ruth teaches architectural practice at Birmingham City University](#) and was the first woman President of [RIBA](#).



Will the semantic web radically change our food supply system?

Posted by Kate Cooper on 22nd March 2012



Chris Brewster's spoke about the semantic web (see [YouTube video clip](#)) at the 1st March New Optimists Forum event.

Before I watched it, I'd hardly heard of the "semantic web" and had no idea of its potential impact on what we will be eating.

Intrigued by what he'd said, I had another conversation with him yesterday.

I want his take on how the semantic web might enable small-scale producers enter the current supply chain.

That ain't the half if it!

The semantic web might well radically change, even destroy the current supply chain — potentially generate as big a change as that we've seen in the book and music industries.

How might, for example, the semantic web change these two following situations?



The first: Last summer was a brilliant year for mirabelles. If you've never eaten one of these cherry-sized, yellow plums, you've missed one of the most delicious, more-ish fruits on the planet.

This summer, Harborne's M&S had a few 250gm packs at nearly a fiver a pop, the first time ever I'd seen them for sale in the UK.

I didn't buy any as a friend, a local allotment-holder, had a tree full of 'em, hundreds, perhaps a few thousand kilograms of 'em. He was frantically giving them away.

What if he could have done the equivalent an Amazon or an e-bay, and put this harvest for sale on-line, along with automated generation of metadata about all sorts of info about it from GPS to a photo? Who'd be interested in accessing that data via their own IT systems? M&S?

The second: For a fee, Urban Harvest (www.urbanharvestbham.org) will take the produce of your apple tree and turn it into apple juice, delicious stuff that tastes like nothing I've ever tasted before. You get *n*-bottles in exchange, and he sells the surplus to make their currently hand-to-mouth business exist.

At the moment, they depend on people with laden apple trees giving them a ring. And they depend word-of-mouth and on going round restaurants to sell the surplus they have. All very labour intensive, all very small-scale — and very few people get to even taste the sublime nectar they make.

What if someone with a laden apple tree in their garden could put this info, along with the relevant data on-line? What would be the impact on the Urban Harvest business if they could access this kind of data from everyone with a fruiting tree?

And a third idea from the consumer end of things: What if thee and me could buy local food produce — the mirabelle plum, the Urban Harvest apple juice (a valued-added part of the neighbour's apple tree), a couple of trout from the aquaponics system run by the local secondary school along with other supplies — as easily as we can now do all our grocery shopping on-line?



What kind of organisations would flourish? What new players would come in? How would the current big players react?



A productive green infrastructure: Our response to “Places for the Future”

Posted by Kate Cooper on 26th March 2012

The Sustainability Team at Birmingham City Council asked for a response to their supplementary planning document, [Places for the Future](#).

So we wrote one and this is it: [NewOptimists_Response_Places4TheFuture_SPDDoc](#). (By we, I mean the wonderfully insightful Matthew Green [@policyworks](#) wrote most of it, and yours truly tagged along.)

Today's city leaders in the UK have *never* had to think about food supplies in the way their forebears did, and in the way their successors must — and that might mean feel-good activities such as [wildflower meadows](#) on housing estates, artichokes and brassicas in Summerfield Park, [guerilla spud-growing](#) becoming mainstream, our allotments seen by everyone on the Council as a valuable resource not an obligation . . .

And ensuring infrastructures to allow the efficient logistics of a supply chain delivering a couple of million or so calories into our bellies every day . . .

And supporting emerging technologies such as the [semantic web](#), vertical farming and a zillion other things we can't begin to imagine . . .

Meanwhile, these are the recommendations we made — please add or comment upon them; the Council guys will take note!

- ❖ We make better use of the green infrastructure that exists within our city.
- ❖ We establish an expectation that green infrastructure should be productive and not passive.
- ❖ The planting of fruit bearing hedges and trees should be encouraged as part of the city's green infrastructure management strategy.
- ❖ We use communal agriculture and growing as an active policy to build community cohesion, to improve health and wellbeing and to spur community economic development.
- ❖ We explore opportunities to transfer unwanted publicly owned land into community land trusts with covenants to guarantee its use as productive green infrastructure.
- ❖ We map Birmingham's food flows so that we have an informed understanding of the food that comes into the city each day, and how it is distributed and consumed across the city.
- ❖ We identify, access and share data on local food supply chains to open up distribution networks so that locally produced food can make it into existing mainstream food supply chain, and enable Birmingham citizens to take advantage of any radical changes in food

supply systems when emerging or nascent technologies, such as the semantic web, create new opportunities for growers, distributors and consumers.

In addition:

- ❖ There is a compelling case — both productive and economic — to replacing annuals and hybrids in public planting with perennial edibles like artichokes, asparagus, rhubarb, brassicas and onions. Similarly replacing rye grass with ornamental pollinators and wild flowers offers a double dividend of reduced maintenance costs and a more productive ecosystem.
- ❖ There is scope to capitalise on the urban heat island effect by cultivating delicate high value crops such as herbs which at present are generally airfreighted into the UK and transported to Birmingham by road.

We add another point:

All of the ideas we have described are possible within our current techno-economic paradigm. Over the life of the SPD though, and certainly over the duration of the period up to 2050 that the New Optimists Forum are considering, new technologies will develop.

Some of them will be “game changers” as far as food production and localised food production are concerned. One such game-changer already on the horizon is bioenergy reactors such as the new £16.5m European Bioenergy Research Institute at Aston University.

The promise of this technology is a distributed carbon-negative energy generation system using biowaste to produce electricity and heat, with two useful by-products: hydrogen (for fuel cells) and biochar (a nitrogen and phosphate ‘fixer’ in some local soils).

Access to such a plentiful and clean source of energy would make food production systems which are currently prohibitively costly in energy terms, systems such as greenhouse cultivation and intensive hydroponic and aquaponic “vertical farming”, viable.

The viability of this type of energy generation at a small scale would also present significant opportunities for individuals, communities and businesses to become shareholders in their own power supply system.

The current draft SPD, whilst discussing future renewables in some detail, does not make any link between these renewables and the food production possibilities they offer.

It would seem to us to be very important to consider this from a planning perspective. Modifications to the planning policies will almost certainly be needed in order to permit such developments within the city boundaries.

And, of course, we responded to specific questions presented in this draft SPD; for those, download our response from this blogpost, or from the New Optimists publications page [here](#).

