



Edible Cities

Exploring the Need for Urban Agriculture

Dr Michael Hardman

Lecturer in Geography

University of Salford, UK

@DrMikeHardman / m.hardman@salford.ac.uk

Urban
Agriculture

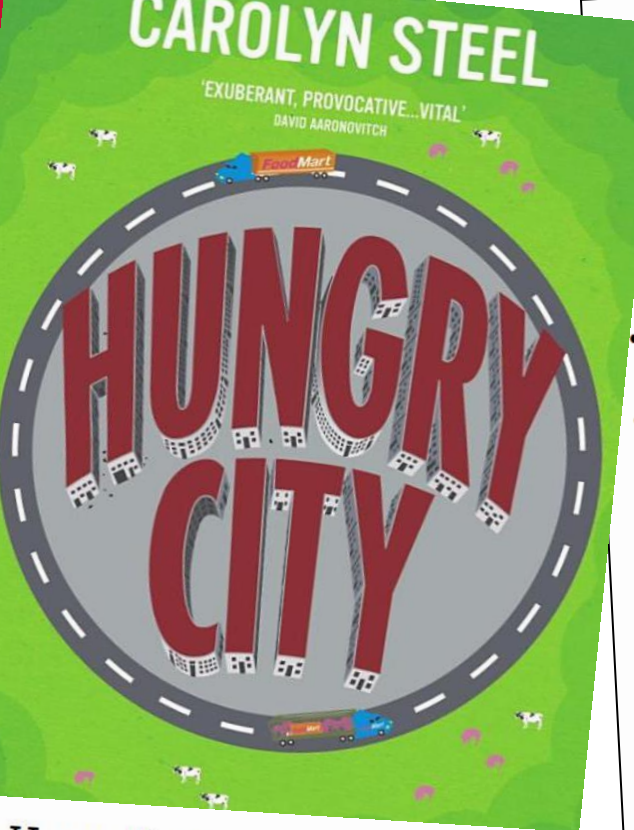
Edible
Cities?

Informality

Moving
Forward...



Urban Agriculture



Hong Kong Imports Over 90% of Its Food. Can It Learn to Grow?

By **Daniel Kong** on August 8, 2013
Photography by **Glenn Eugen Ellingsen**



Food Miles
Standard Note: SN/SC/49
Last updated: 14 June
Author: Christopher
Section: Science

- This note discusses whether consumers travelled before they buy it. A related
- The original food miles idea was that consumption was a good indicator of
- That idea has been seriously challenged as a small proportion of the CO2 emissions
- In some cases, carbon emissions rather than in temperate countries come from the most efficient sources
- Some people argue that food labels environmental impact of that it labels too complex and probably
- The Soil Association agreed, organic produce, but not to re

ELSEVIER

Disintegrated development at the rural-urban fringe: Re-connecting spatial planning theory and practice

A.J. Scott^{a,*}, C. Carter^a, M.R. Reed^a, P. Larkham^a, D. Adams^a, N. Morton^a, R. Waters^b, D. Collier^c, C. Crean^d, R. Curzon^a, R. Forster^e, P. Gibbs^f, N. Grayson^g, M. Hardman^a, A. Hearle^b, D. Jarvis^f, M. Kennet^h, K. Leach^d, M. Middletonⁱ, N. Schiessel^a, B. Stonyer^a, R. Coles^j

^aBirmingham City University, Birmingham School of the Built Environment, United Kingdom
^bNatural England, United Kingdom
^cNational Farmers Union, United Kingdom
^dLocalise West Midlands, United Kingdom
^eWest Midlands Rural Affairs Forum, United Kingdom
^fDavid Jarvis Associates, United Kingdom
^gBirmingham Environment Partnership, United Kingdom
^hGreen Economics, United Kingdom
ⁱWest Midlands Regional Assembly, United Kingdom
^jBirmingham City University, Birmingham Institute of Art and Design, United Kingdom

Abstract

The spaces where countryside meets the rural-urban fringe (RUF). A 'messy' confused and 'disintegrated' lacking its own right. This paper exposes the critical attention on the separate lenses of and built environment divide. Using research were identified within which improved thoughtpieces and workshops, together within which the RUF opportunity is re-discovering the paper challenges established economic ideas and approaches. One size-fits-all solutions champions multi-scalar and sectoral perspectives being through maintaining and enhancing eco

Oh what heaven to only eat food grown where you live! The disturbing truth about supermarket food - and QUENTIN LETTS' very simple solution

By **QUENTIN LETTS FOR THE DAILY MAIL**

PUBLISHED: 01:33, 23 July 2016 | UPDATED: 15:26, 23 July 2016

183 shares

Until last week, my teenage children thought 'food miles' was the distance we'd have to drive to our nearest fish and chip shop in Ross-on-Wye, a round-trip of 14 miles. Then we saw that actress Liz Hurley had set herself a food-miles challenge: to consume only produce that came from her (and our) county of Herefordshire. Liz did not go short of nosebag. She feasted like a Tudor monarch on everything from local meat and poultry to cheese, vegetables, fruit and even popcorn and vodka.

I reported here has secured information that do not reflect the views of the following Environment Partnership) and remain the sole author. Tel.: +44 1213317551. Email: alister.scott@bcu.ac.uk (A.J. Scott)

ELSEVIER journal homepage: www.elsevier.com/locate/jrurdev

Can cities become self-reliant in food?

Armanbir S. Grewal, Parwinder S. Grewal*

*for Urban Environment and Economic Development, The Ohio State University

ARTICLE INFO

Article history:
Received 30 November 2010
Received in revised form 29 April 2011
Accepted 12 June 2011
Available online xxx

Keywords:
Urbanization
Local self-reliance
Urban agriculture
Urban food production
Post-industrial cities

ABSTRACT

Modern cities almost exclusively rely on other essential materials and energy. Results in the emission of greenhouse gases and all future population growth for a typical post-industrial city. Available area, crop yields, a potential level of food self-reliance and resulting vacant land in urbanized neighborhoods. Six and 48% of Cleveland's demand for food production practice used (concrete and shell eggs, and 100% of the food produced in a typical residential lot, can generate



URBAN AGRICULTURE

Urban agriculture involves many different types of food-producing spaces, stakeholders, resources, and policies, and contributes to many benefits.

Benefits

Health

- Access to healthy food
- Food-health literacy
- Healthy eating
- Physical activity

Social

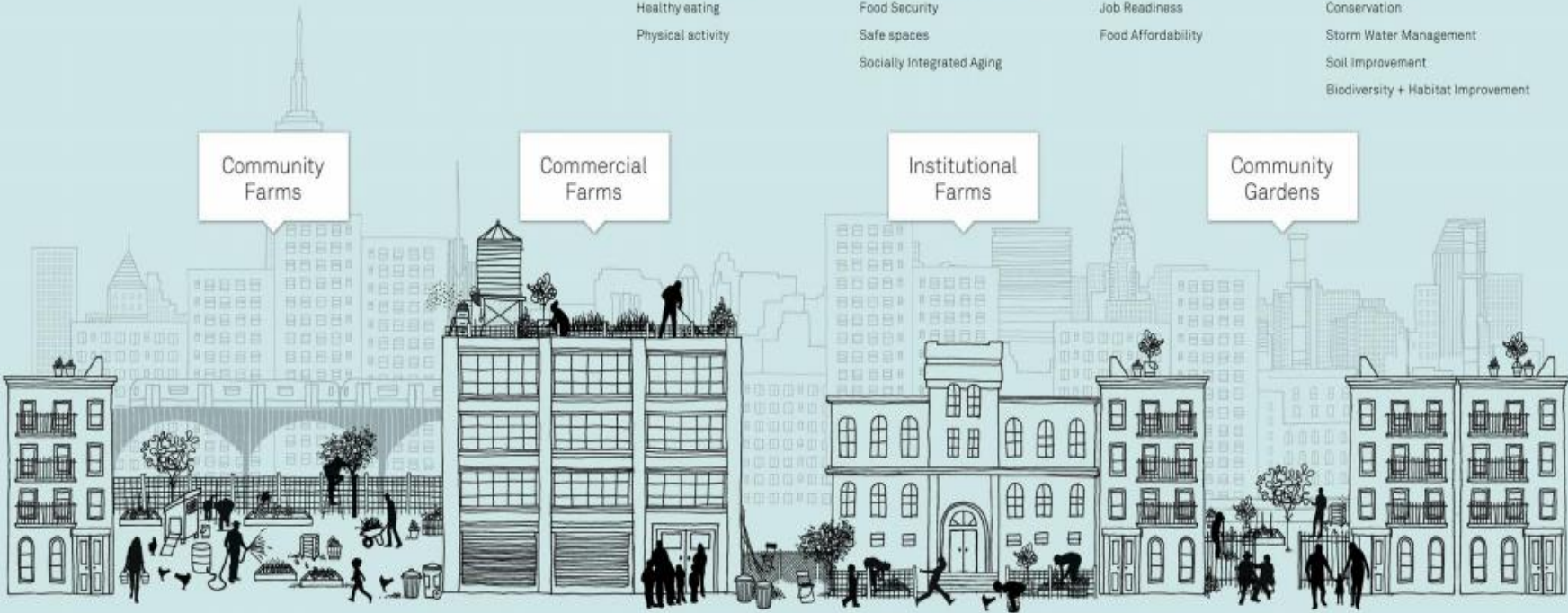
- Empowerment + Mobilization
- Youth Development & Education
- Food Security
- Safe spaces
- Socially Integrated Aging

Economic

- Local economic stimulation
- Job Growth
- Job Readiness
- Food Affordability

Ecological

- Awareness of Food Systems Ecology
- Stewardship
- Conservation
- Storm Water Management
- Soil Improvement
- Biodiversity + Habitat Improvement



Community Farms

Commercial Farms

Institutional Farms

Community Gardens

People

- Local residents
- Volunteers
- Community organizations
- Students
- Visitors
- Market customers

Soil & Compost

- Self-produced
- Purchased
- Donated

Supplies

- Seeds
- Fertilizer
- Tools
- Construction Materials
- Water
- Electricity

Key Stakeholders

- Farmers and Gardeners
- Government Officials
- Support Organizations
- Funders

Financial Resources

- Sales of produce
- Grants
- Donations
- Fees for services

Support Services

- Technical assistance
- Advocacy and policy work
- Environmental education
- Networking events

Access to land and rooftops

Spectrum of opportunity spaces



From the micro (i.e. grass verge)



To the macro (i.e. industrial site)



‘Given the current economic climate, stalled development spaces are a feature of our towns and cities and are likely to remain so for the foreseeable future.’

(Greenspace Scotland, 2010)











(Chipungu, 2016)



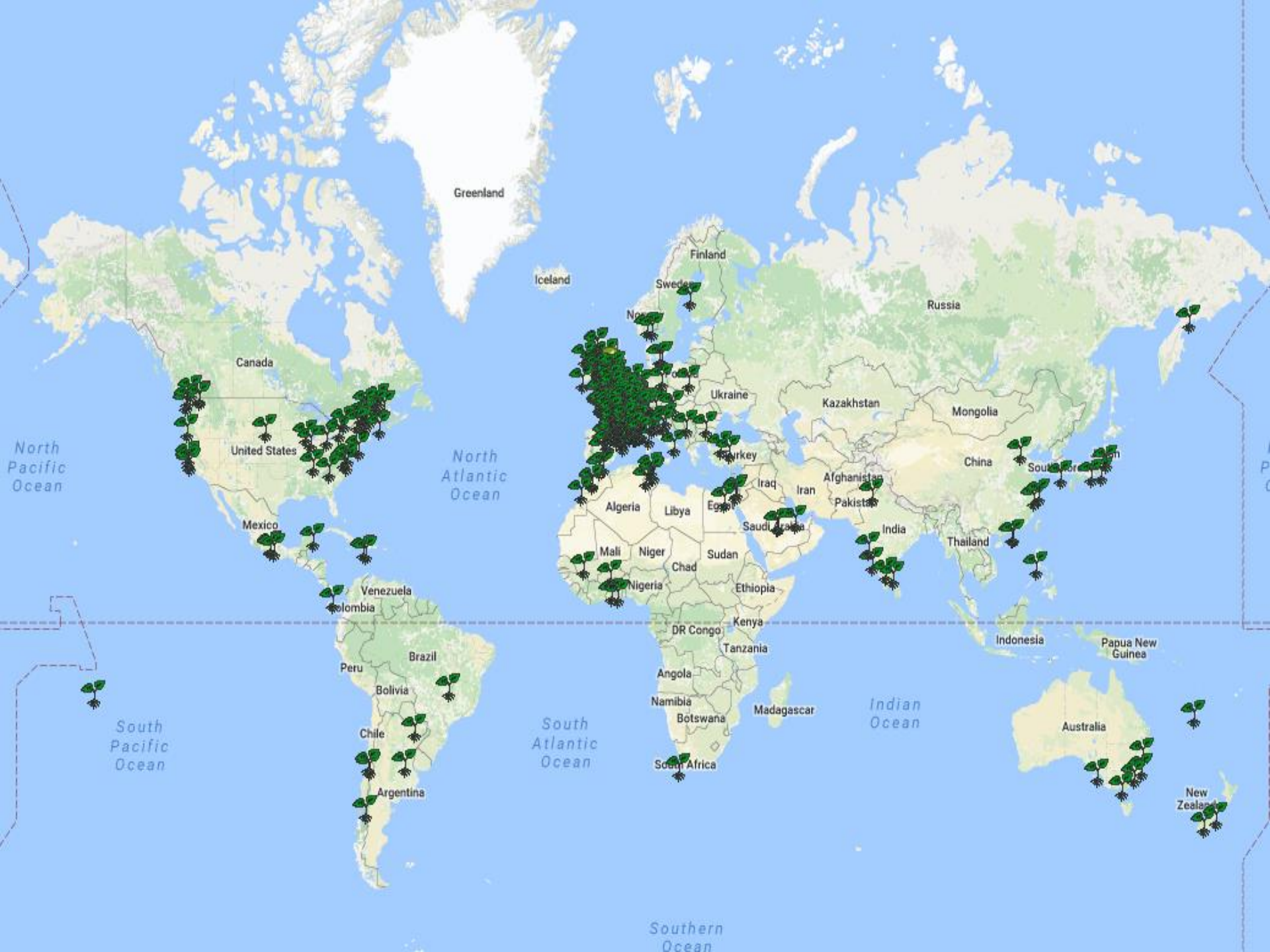


- Incredible Edible Todmorden - huge impact
>100 groups in the UK + more internationally
- Our research shows the network is making a positive impact
- Edible landscapes - free for everyone!



Incredible Edible
Oswestry







Carrot City Designing for Urban Agriculture

About ▾

News

Database ▾

Book

Archive ▾

Resources ▾



City
Community &
Knowledge

Housing
Rooftops
Components

Index

View over 100 Carrot City case studies! To explore the collection database select a category above.



You like this





Carrot City
www.carrotcity.org



E·S·R·C
ECONOMIC
& SOCIAL
RESEARCH
COUNCIL

CCOST



GROWING
Birmingham



EPSRC
Pioneering research
and skills

MISTRA
**URBAN
FUTURES**



Real Food. Wythenshawe.

UK National Ecosystem Assessment

Living With Environmental Change

Edible Cities?

PAN 06

Food Growing and Development

September 2011

Brighton & Hove City Council's Local Development Framework



Merton

FOOD CHARTER

The Merton Food Charter aims to create a healthy and sustainable food culture in Merton in order to positively impact of the health and well-being of individuals, the environment and the local economy. Anyone can sign up to the Charter, pledging to take action to work towards one or more of the local priorities set out here.

for further information and to sign up to the charter contact:
healthyfood@merton.gov.uk

Brighton & Hove
City Council

1 A joined up approach to healthy sustainable food

Work collaboratively and innovatively, sharing knowledge, resources, experiences and best practice across the food system.

- ★ Use partnership working to add value to existing and future food systems
- ★ Use procurement mechanisms to influence the local food system
- ★ Encourage the development of food enterprises and social enterprises
- ★ Make best use of local assets such as buildings, green spaces and community assets

2 Improving health and wellbeing

Take action to reduce levels of obesity and address diet to an affordable and nutritious diet for people across Merton.

- ★ Promote access to healthy and affordable food
- ★ Create diverse settings including high streets, schools, workplaces and community centres
- ★ Make better use of food surpluses to ensure 'waste' in society

3 Increasing knowledge and skills

Actively encourage opportunities for lifelong learning and sustainable food to individuals, families and communities.

Advocate the social, health and environmental benefits of food and practice both at an individual and population level.

- ★ Provide opportunities for people to learn about food and the benefits of a varied and well-balanced diet
- ★ Increase knowledge among local businesses about food waste and recycling

4 Encouraging the development of skills

Recognise the skills gap that exists in the food-based skills within the community.

Support and develop a wide range of food-related skills, including:

- ★ The growing of fresh food
- ★ Harvesting and storing
- ★ The preparation of food for consumption
- ★ The safeguarding of children



the essential role of green infrastructure: eco-towns green infrastructure worksheet

summary points

This Worksheet has been produced because it is recognised by the Government and a very wide range of bodies that green infrastructure is essential to both the environmental sustainability and the long-term social and economic success of eco-towns.

The Worksheet is designed to provide clear guidance on how to design, incorporate and operate green infrastructure that is fully 'fit for purpose'. This guidance is intended not just for eco-town developers and planners but also for those who will manage the new settlements and work with the new communities. It is also intended to support the emergence of green infrastructure networks that, in terms of their quality, extent and capacity to deliver the widest range of environmental, social and economic benefits, can exceed the targets and standards for green spaces pursued by the champions of new settlements in previous generations.

The Worksheet sets out the principles that should characterise an eco-town's green infrastructure and the process that needs to be gone through from inception to delivery and beyond. It places great emphasis on integrating green infrastructure completely within the detailed planning of the eco-town and on drawing a community of green infrastructure and related expertise into the planning and decision-making process. The Worksheet also gives guidance on issues such as management and funding, including long-term arrangements.

The main part of the Worksheet deals primarily with the practical aspects of green infrastructure provision and the standards to be achieved. This is complemented by Annexes which provide greater detail on individual components of green infrastructure networks and on the potential for green infrastructure to significantly underpin

'Brighton and Hove is using supplementary planning guidance to incorporate food into the planning system and encourage more food growing spaces in the city'

(Morgan, 2015: 22)



(Visit Salford, 2013)











- Phase 1 – desktop study on the key ingredients for success
Creation of typology and literature on urban farming
- Phase 2 – case study analysis of successful projects
Visits to urban farms identified in Phase 1 and soil testing
- Phase 3 – key stakeholder consultation and recommendations
Community consultation

'We rely on grants from charities... you never know where the next will come from'

(Salop Drive)

'Given the funding environment, a lot of organisations will do what they can to raise funds, it's a very challenging environment'

(Federation of City Farms and Community Gardens)

'Our income is below £25,000 a year... our income from supporters and community, which is the donations box generally and one-off donations people might give us, some people give a couple of hundred pound here and there'

(Woodgate Valley Urban Farm)

We are a
Registered
Charity



**We come to
Woodgate Valley
Urban Farm**

Visitor Opening Times
June to September 10.30am to .00pm
October to May 10.30am to 4.00pm
(Times may vary without prior notice. Entry by donation)

• No Dogs past here	• No Ball Games
• No Animal Feeding	• No Picnics
• Children under 14yrs must be supervised by an adult	
• No Chasing Poultry	• Cycles to be Parked

Enjoy your visit but respect the
livestock. This is their home. Thank You.

Approved by the Local Council. May 2018. Approved by the Local Council. May 2018.

Animals killed at Wythenshawe Park community farm after yobs went on rampage

18:49, 21 MAY 2016

UPDATED 21:56, 22 MAY 2016

BY TODD FITZGERALD

It is understood that four youths had hurled missiles at cows, kicked poultry cages and let dozens of birds out of their coops



4308
SHARES

29
COMMENTS

Enter your e-mail for our daily newsletter

Subscribe



Three geese and a chicken were killed after yobs went on the rampage at Wythenshawe Park community farm.

Recommended in Greater Manchester News



MANCHESTER

Watch as CCTV records brazen burglars breaking in to family home »

OLDHAM

Road blocked in Oldham after building collapses »

ROCHDALE

Staff turn up for work



- £1 million from a charity to enable UA
- Housing Association providing land - predominantly stalled sites for meanwhile developments
- Beyond food growing - recreate the Garden City feel to the space



(Urban Catch, 2013)



BRIGHT FARMS

SIEMENS

The logo for Gotham Greens Local Produce is a black shield-shaped emblem. At the top center of the shield is a green icon of two leaves. Below the leaves, the word "GOTHAM" is written in large, bold, white, sans-serif capital letters. Underneath "GOTHAM", the word "GREENS" is written in a smaller, bold, white, sans-serif font. Below the shield, the words "LOCAL PRODUCE" are written in a black, sans-serif font, with a thin black line arching over the text.The logo for Mondelēz International, featuring the brand name in a stylized purple font with red circular accents.

Informality




'Illicit cultivation of someone else's land' (Reynolds, 2008: 16)



Guerrillas either legitimise or decline (increasingly the former i.e. Incredible Edible Todmorden)



Evidence shows that many pursue the informal route to avoid what they deem 'over-bureaucracy'



"Guerrilla gardening revives spaces - creating noise and getting people engaged. It is fun, informal and a catalyst for bringing people together. There is an informal movement in Salford... we've seen things just 'pop-up' in places. Bez (from the Happy Mondays) is leading the creation of a guerrilla orchard."

(Project Officer, Salford City Council)





Moving
Forward...

'The local trap refers to the tendency of food activists and researchers to assume something inherent about the local scale. The local is assumed to be desirable; it is preferred a priori to larger scales. What is desired varies and can include ecological sustainability, social justice, democracy, better nutrition, and food security, freshness, and quality'

(Born and Purcell, 2006: 195)



- Cities need to realise the benefit of using stalled space - meanwhile UA sites should be encouraged

(Angotti, 2013; Hardman and Larkham, 2014; Wiskerke and Viljoen, 2012)

- More radical approaches i.e. embracing Guerrilla Gardening

'Ideally you will choose the time to seek legitimisation. Do this when you judge that you and your guerrilla garden will be more at risk if you continue illegally than if you try to go legit. Once you call a truce and offer to negotiate, it is crucial you do this from a strong position'

(Reynolds, 2008: 226)



- Opportunity space for key actors to seize on the global UA momentum
- UA will never make a city self-sufficient but can radically impact on health and wellbeing
- Planners need to look at exemplars - use tools to enable the practice in cities (like Brighton in the UK)

Urban Agriculture

Michael Hardman
Peter J. Larkham

Informal Urban Agriculture

The Secret Lives
of Guerrilla Gardeners

GUERRILLA WARFARE IN THE PLANNING SYSTEM: REVOLUTIONARY PROGRESS TOWARDS SUSTAINABILITY?

by
David Adams, Alister J. Scott and Michael Hardman

ADAMS, D., SCOTT, A. J. and HARDMAN, M. (2013). 'Guerrilla warfare in the planning system: revolutionary progress towards sustainability?', *Geografiska Annaler: Series B, Human Geography* 95 (4): 375–387.

ABSTRACT: This article extends Qviström's (2007; *Geografiska Annaler: Series B, Human Geography* 89 (3): 269–282) idea of re-imagining of spatial planning theory and practice. Taking the viewpoint that planners and decision-makers order and manage space in prescribed and constrained ways, order and management can deliver innovative practices and ways of doing things.

and Bullen 2004) and because the integration of spatial practice has largely rested on established forms of scalar governance, thus preventing successful integration of innovation (Taylor 2010; Inch 2011).

This article critically explores this disjuncture between spatial planning theory and practice, drawing on wider theoretical and geographical literatures.

gauging public views on the

and Peter Larkham*

Department, Birmingham City University, Millennium Point, Environment and Life Sciences, University of Salford.

October 2014)

garden is developing rapidly. The majority of these are in North America, with little academic exploration of them. They focus explicitly on the grass-roots gardeners and their focus on the action's location. Guerrilla gardeners are not seeking permission from authorities, but also with the permission of the landowner.

Understanding guerrilla garden cultivation in the UK

Michael Hardman

School of Property, Construction and Planning, Centre campus, Millennium Point, Curzon Street, Michael.hardman@bcu.ac.uk

The development of guerrilla gardening

Currently the main force behind this illegal growth of guerrilla gardeners are networks of volunteers; some more vicious than they really are. In the terminology of Asprey (2002); they are rebels who occupy a certain area (Caldwell et al. 2005). Guerrilla gardeners are 'military brothers'. Members, if they wish, are permitted to operate at night in order to avoid detection and the weapons, which includes the strikingly named 'see-saw' basic form, guerrilla gardening is the 'ILLICIT LSE'S LAND' (Reynolds, 2008, p. 16).

When exploring the concept of guerrilla gardening, it is Richard Reynolds, who is seen as the father of this practice (Hardman, 2009). Reynolds (2008) explains that the guerrilla gardeners are not operating guerrilla gardening as a means of change. Reynolds owns and operates guerrilla gardening. The guerrilla gardeners who use this website have a variety of reasons, ranging from a lack of land to political issues, such as the environment or the lack of maintenance by a local authority (Reynolds, 2008). One of the key misconceptions when referring to guerrilla gardening is that they are all the same, but groups vary in their aims (just for action), type of sites, their structure (hierarchical to anarchic) and transform (Hardman, 2009).

Reynolds' description of today's guerrilla conjures up the image of a guerrilla against authority. Reynolds persistently uses examples of guerrilla gardens that have been destroyed, such as when New York City demolished a 15,000 square foot garden to make way for a new building. Throughout Reynolds' book he uses these examples seeking to show that guerrilla gardening is not a way of life, but a way of fighting to change the way we live.

Charter': A mechanism to increase

Larkham*

ABSTRACT

Urban Studies
1–17, 2013

Article

Observing Guerrillas in the Wild: Reinterpreting Practices of Urban Guerrilla Gardening

David Adams and Michael Hardman

[Paper first received, November 2012; in final form, April 2013]

Abstract

Despite an emerging literature on guerrilla gardening as a political practice in public spaces, with few exceptions, these accounts theorise it as working against many corporate and bureaucratic forms of power. Using the example of 'E Troop'—a group of gardeners operating on a site in an English midland city—this paper focuses on the practices of urban guerrilla gardening in order to illustrate that these are perhaps not as 'resistant' or 'celebratory' as previous accounts have suggested. Rather, this paper draws on ethnographic data to focus attention on the micro politics of garden activism, arguing that the social backgrounds and motivations of those involved in guerrilla gardening and their relationship with other users of the space surrounding the dig site are also important—but largely underacknowledged—aspects of guerrilla gardening.

Keywords: built environment, guerrilla gardening, public space, resistance, transgression

Introduction

The act of 'guerrilla gardening' has received growing attention in recent years (see, for example, Crane et al., 2012; Hardman, 2011; McKay, 2011; Reynolds, 2008). Despite this interest, this paper argues that many existing accounts present a somewhat distanced and celebratory representation of guerrilla gardening groups, positioning their

activities as being largely resistant to 'mainstream' culture and somewhat disconnected from the context in which their actions are performed (Brace, 2011; Crane et al., 2012; Douglas, 2011; Hou, 2010; Lewis, 2012; Merker, 2010; Pudup, 2008; Reynolds, 2008; Ring, 2009; Tracey, 2007). Guerrilla gardeners are volunteers who, without permission,

David Adams is in the Birmingham School of the Built Environment, Birmingham City University, Millennium Point, Birmingham, B4 7XG, UK. Email: david.adams@bcu.ac.uk
Michael Hardman is in the School of Environment and Life Sciences, University of Salford, Salford, M5 4WT, UK. Email: m.hardman@salford.ac.uk

Angotti, T. (2013) *The New Century of the Metropolis: Urban Enclaves and Orientalism*, Abingdon: Routledge.

Born, B. and Purcell, M. (2006) Avoiding the Local Trap: Scale and Food Systems in Planning Research, *Journal of Planning Education and Research*, 26 (2): 195 - 207.

Hardman, M. and Larkham, P. (2014) *Informal Urban Agriculture: The Secret Lives of Guerrilla Gardeners*, London: Springer.

Incredible Edible Todmorden (2009) World Map [Online] Available at: <http://www.incredible-edible-todmorden.co.uk/blogs/incredible-edible-world-interest-map> [Accessed: 15/08/16]

Ioannou, B., Moran, N., Sondermann, M., Certoma, C. and Hardman, M. (2016) Grassroots Gardening Movements: Towards Cooperative Forms of Green Urban Development? In: Bell, S., Fox-Kamper, R., Keshavarz, N., Benson, M., Caputo, S., Noori, S. and Voigt, A. (Eds) *Urban Allotment Gardens in Europe*, Abingdon: Routledge.

Morgan, K. (2015) The New Urban Foodscape. In: Viljoen, A. and Bohn, K. (Eds) *Second Nature Urban Agriculture: Designing Productive Cities*, Abingdon: Routledge.

Reynolds, R. (2008) *On Guerrilla Gardening*, London: Bloomsbury.

Wiskerke J. S. C. and Viljoen, A. (2012) 'Sustainable Urban Food Provisioning: Challenges for Scientists, Policymakers, Planners and Designers', in: Viljoen, A. and Wiskerke J. S. C. (Eds) *Sustainable Food Planning: Evolving Theory and Practice*, Wageningen: Wageningen Academic Publishers.

@ m.hardman@salford.ac.uk

 0161 295 2201

 @DrMikeHardman