

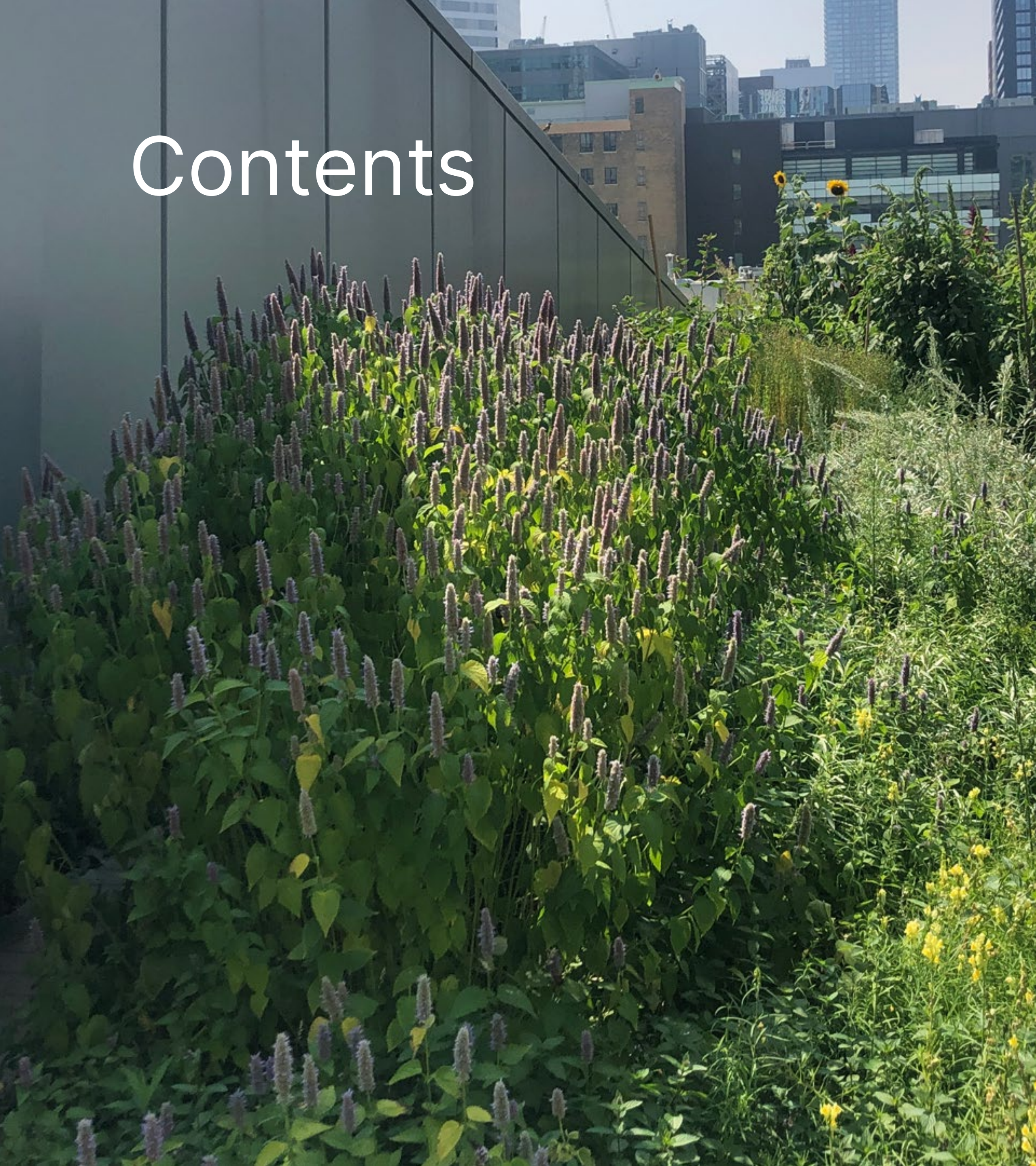
# Growing Cities

The urban agricultural revolution

Leanne Werner

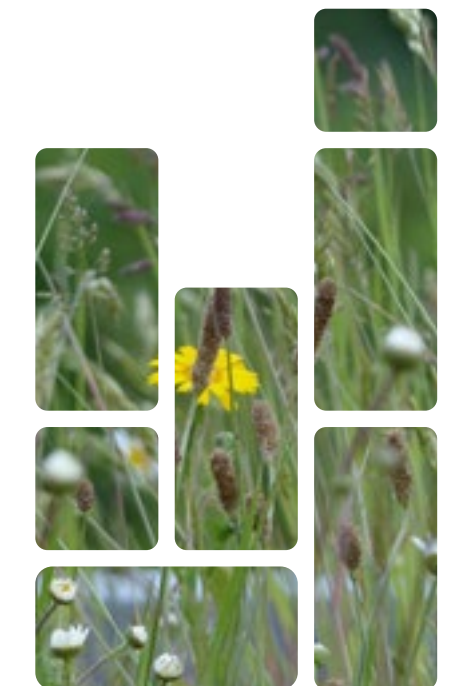


# Contents




Introduction	7
UK: our back yard	9
US/Canada policies	17
Space to grow	25
Biodiversity	31
Food sovereignty	33
Conclusion	43
Recommendations	45
Credits	47
About Leanne	51

**the**  
**CHURCHILL**  
**fellowship**



Copyright © 2024 by Leanne Werner. The moral right of the author has been asserted. The views and opinions expressed in this report and its content are those of the author and not of the Churchill Fellowship or its partners, which have no responsibility or liability for any part of the report.

A close-up photograph of several green leaves, likely from a plant in an urban agricultural setting. The leaves show significant damage from insect feeding, with numerous irregular holes and jagged edges. The background is a soft-focus green, suggesting a dense foliage. The text is overlaid in white, sans-serif font.

Urban agriculture incorporates a range of activities involved in growing, processing and distributing food within cities and towns. It can include practices such as animal husbandry, aquaculture, beekeeping and horticulture.

This report specifically focuses on the growing of fruit, vegetables and companion plants that help increase biodiversity.

Urban agriculture has the potential to transform how we live in cities and towns. Done in the right way it can improve our relationship with the local environment, how and what we eat, how we use spaces and even our relationship with each another.

Why is urban agriculture more important than ever?

Our food system is under pressure, with overuse of chemicals, monocultures and depleted soil in the countryside. One in six species are at risk of extinction. According to the [State of Nature report](#) since 1970 UK species have declined by about 19% on average, and nearly 1 in 6 species (16.1%) are now threatened with extinction. The way we manage our land for farming and climate change are some of the biggest causes of wildlife decline in the UK and that is why a shift to more wildlife-friendly farming is urgently needed.

The UK imports 44% of its vegetables and close to 84% of its fruit ([The United Kingdom market potential for fresh fruit and vegetables | CBI](#)). The IPCC warns that a global temperature rise above 1.5°C will result in climate-related risks to food security and increased mortality from disease and conflict from food scarcity. Creating more growing spaces in cities can help take the pressure off rural land and reduce carbon emissions associated with 'food miles'.

What are the benefits of urban agriculture?

At an environmental level, growing locally can provide enormous benefits for wildlife, air quality, water quality, flood mitigation and biodiversity. It can increase our food security and lead to healthy dietary shifts, providing public health benefits. Food growing projects can also increase meaningful interactions amongst residents, leading to better community relationships and improved nutritional and better mental health.

Why urban agriculture in North America?

Over an eight-week period I visited a wide range of food growing projects in cities across Canada and the US that are leading the way in urban agriculture. On my travels I was continuously reminded that we are facing a climate and ecological catastrophe, no more so than when my train through the Rockies to Vancouver was cancelled because of raging wildfires in the Northwest Territories. A Yellowknife resident in Calgary told me she was an environmental refugee, evacuated along with 20,000 others. The whole city had been forced to leave, including doctors, nurses and teachers. Just imagine if the whole of London had to be evacuated because of flooding.

Urban agriculture is not a silver bullet that can solve the whole climate and ecological crisis, but it has the potential to play an important part. It can help us reconnect with nature, decrease our carbon footprint, increase biodiversity and improve our health, wellbeing and sense of security.

My research

I wanted to develop a comprehensive and systematic understanding of urban food production by looking at:

- Innovative local food growing by-laws, policies and systems that can help shape local environmental and food growing policies in London.
- Suitable urban spaces for growing.
- Best practices in sustainable food production, particularly in ensuring urban food farming increases biodiversity.
- Systems ensuring that urban farming is inclusive and equitable.
- The role of civil society and how food growing can be more inclusive.

# UK: our backyard

Before diving into the deep and colourful tapestry of urban agriculture in North America, the following section looks at what the UK is doing to facilitate and increase urban agriculture at a national and local level, as well as how non-profit organisations are pushing for change in this area.

National level

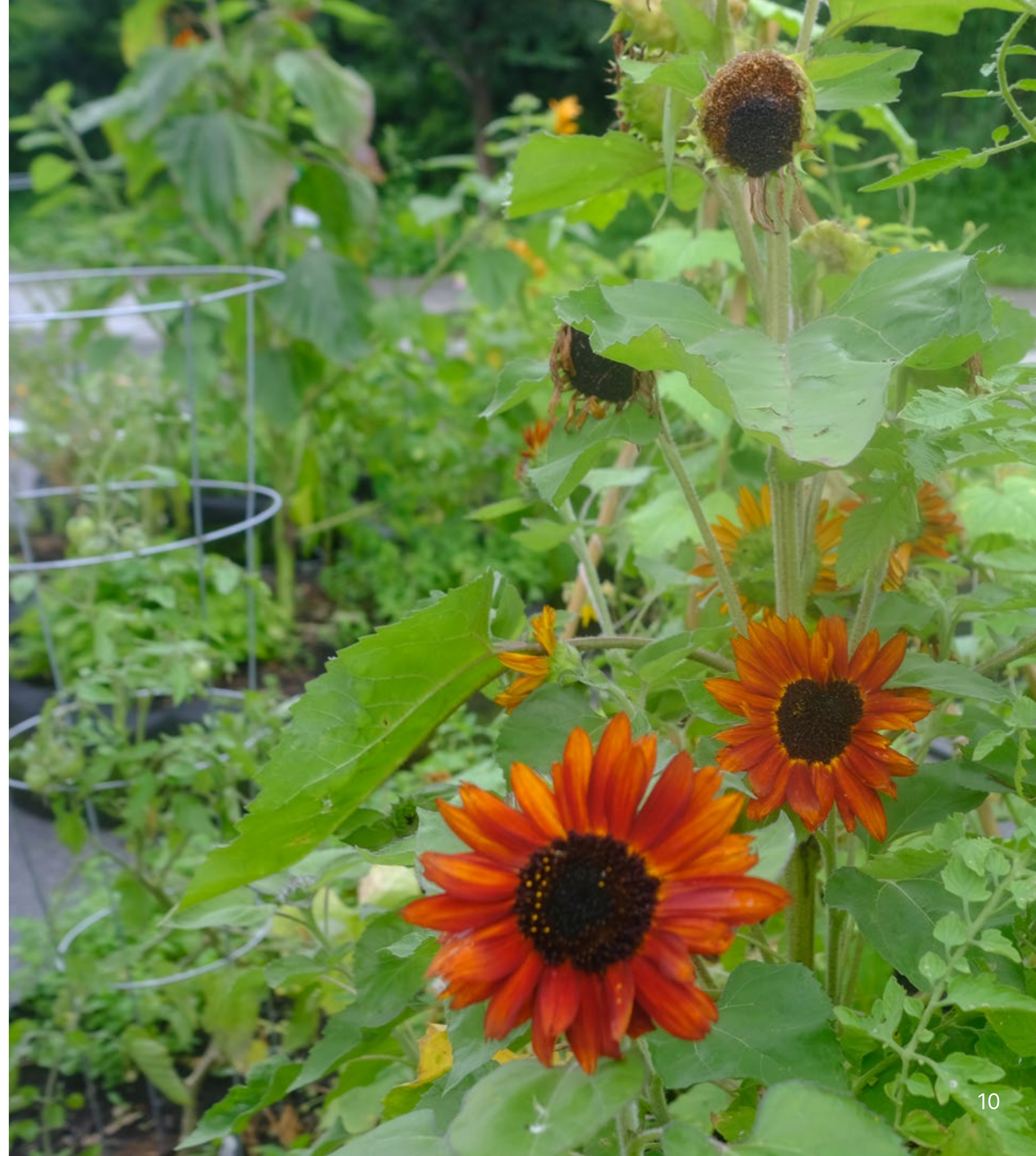
## [Biodiversity Net Gain](#)

Biodiversity Net Gain means developers must now deliver a biodiversity net gain of 10% on any new development. All projects consider factors like water usage, pesticide use and land management practices to ensure they have a positive impact on biodiversity. Increasing urban agriculture can be an effective way to achieve Biodiversity Net Gain in London by creating green spaces, supporting native species, improving soil health and raising awareness about the importance of biodiversity conservation.

[The Environment Act 2021](#) is a piece of legislation passed by the UK Parliament, aiming to address environmental protection and improvement. There are provisions in the Act to enhance biodiversity conservation and restoration efforts. It includes measures to protect and restore natural habitats, improve wildlife conservation and promote green infrastructure. There is no dedicated legislation for urban agriculture and the role it can play in increasing biodiversity in cities.

Greater London Authority level

[The GLA's London Food Strategy](#) was updated November 23 and details how the Mayor of London has incorporated a policy to promote food



growing in the [New London Plan](#). This is set under Policy G8 Food Growing and encourages all London boroughs to:

- Protect existing allotments and encourage space for urban agriculture, this includes community gardening and food growing within new developments and vacant and underutilised land.
- Identify sites for food growing.

Overall, the Mayor encourages growing more locally, using sustainable methods that will benefit all communities.

The Mayor endorses the [Capital Growth Network](#), London's most extensive network dedicated to food cultivation. Through this network, individuals cultivating their own food in London receive various forms of support, including discounted access to training, networking opportunities, assistance with commercial growing endeavours and discounted equipment purchases.

At London Borough Level

Local Authority Southwark case study

### [Southwark Council](#)

Southwark Council has fully committed to urban food growing and has two Community Gardening Coordinators who work with groups of residents to help plan, build and coordinate growing spaces on LBS land.

Through the [Allotment Expansion Guarantee](#) the Council is committed to creating more opportunities for community gardening and food growing.

There are now more than 200 new growing plots on Southwark Council housing estates, with more in development. There are 17 new gardens

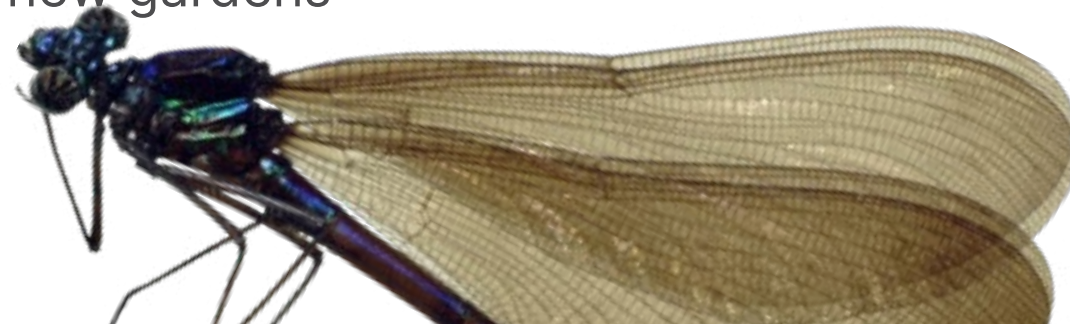
across the borough, from [Rouel Road](#) in Bermondsey in the north to Melford Court in East Dulwich.

[Right to Food](#) The London Borough of Southwark declared itself as a Right to Food Borough, working with local businesses, community groups and schools to ensure everyone in Southwark has access to healthy, affordable food within a short walk of their home. The designation of a 'Right to Food Borough' signifies a commitment by Southwark to prioritise food security and equity as essential elements of their governance agenda. It involves collaboration with community organisations, businesses and other stakeholders to develop comprehensive strategies for addressing food-related challenges and promoting a more sustainable and equitable food system within the borough.

[Southwark Nature Action Plan 2020](#) The Southwark Nature Action Plan 2020 (SNAP) currently identifies the strategic priorities for biodiversity and sets out actions to protect and enhance biodiversity in Southwark. There is no mention of food growing and how it can increase biodiversity, however in the updated Southwark Nature Action Plan & Tree Planting Progress (dated 27/06/23) some of the actions include developing a community garden plan which includes a new right for residents to have a community garden or food growing plots on their estates.

Climate Change and the natural environment are key priority areas in the council's adopted [Southwark's Climate Change Strategy](#), where they commit to a 'Thriving Natural Environment' in the borough. This commitment includes improving biodiversity, introducing new green corridors and making streets a green place to walk, play and relax. The Action Plan for the strategy includes an action to increase food growing in the borough, expanding allotments and community gardening.

There is also a plan to update planning policy for food retail to prioritise areas in the borough identified as food deserts. To put this into context,



it is estimated 75,000 of Southwark's residents are food insecure, meaning they struggle to buy food, have to skip meals or cut down on eating.

In July 2019 London became the first [National Park City](#), making London a National Park. This provides a framework to promote investment in London's natural capital and green infrastructure. One of the seven action areas of the National Park includes locally grown food and responsible consumption. Southwark Council has committed to work together with stakeholders to contribute to the charter for the London National Park City.

[Southwark's Land Commission](#) states 'one of the most inclusive and democratic ways in which Southwark can enable a just and more equitable environmental and ecological transition is to change its approach to land. At a time of an intense cost-of living crisis, there is a clear need and opportunity for environmentally focused land use and management decisions to help meet social and ecological objectives.' They use [Walworth Neighbourhood Food Model](#) as an example to be resourced and replicated to enhance food security for Southwark's diverse communities.

[Southwark Plan 2022](#) The plan states that development must contribute to net gains in biodiversity through, 'enhancing the nature conservation value of Sites of Importance for Nature Conservation (SINCs), Local Nature Reserves (LNRs), designated ancient woodland, populations of protected species and priority habitats/species identified in the United Kingdom, London or identified and monitored in the latest adopted Southwark Nature Action Plan; and protecting and avoiding damage to SINCs, LNRs, populations of protected species and priority habitats/species; and Including features such as green and brown roofs, green walls, soft landscaping, nest boxes, habitat restoration and expansion, improved green links and buffering of existing habitats. Any shortfall in net gains in biodiversity must be secured off site through planning obligations or as a financial contribution.'

Opportunities

#### [Our Vision – Old Kent Road](#)

In the plan for the regeneration of Old Kent Road there are plans for three new parks (increasing new green space by eight hectares), and the creation of new green links and spaces between these parks. There is potential to create growing spaces on each new roof top development as well as including spaces to grow within the new parks and green corridors.

UK organisations leading the way in urban growing

#### [Incredible Edible](#)

Incredible Edible transforms neglected urban spaces into vibrant, productive landscapes filled with edible plants. They encourage local residents to participate in gardening and learn about sustainable food production. By cultivating fruits, vegetables, herbs and other edible crops in public areas, projects not only increase access to fresh, nutritious food but also promote social interaction, community building and environmental sustainability. These initiatives beautify urban areas, foster ownership and pride, and contribute to overall well-being and resilience of communities.

Their [Right to Grow Campaign](#) requires local authorities to maintain a free, accessible map of all public land that is suitable for community cultivation or wildlife projects. They also aim to make it straightforward for community groups to secure free leases to cultivate the land, and allow those groups to bid for the land should the authority decide to sell it.

'Bigger, better, more joined up incredible edibles' refers to the idea of expanding and improving community-based initiatives focused on growing and sharing edible plants. This concept emphasises the importance of increasing the scale and impact of projects like Incredible Edible, which

promote urban agriculture, food sustainability and community cohesion. By connecting and integrating these initiatives on a larger scale, communities can enhance resilience, food security and environmental sustainability while fostering a sense of responsibility and cooperation.

### Summary

At the national level, the [Environment Act 2021](#) addresses environmental protection but lacks dedicated legislation for urban agriculture. Initiatives like Biodiversity Net Gain emphasise the importance of green spaces in cities for biodiversity, but there is no major emphasis on the role urban agriculture can play in increasing biodiversity.

At the Greater London Authority level, the Mayor of London's Food Strategy incorporates policies to promote food growing, with a focus on protecting existing allotments and creating new growing spaces.

At the local level, Southwark Council exemplifies commitment to urban agriculture through initiatives like Community Gardening Coordinators, the Allotment Expansion Guarantee and the designation of Southwark as a Right to Food Borough.

Southwark's efforts are aligned with broader strategies such as the Southwark Nature Action Plan, Climate Change Strategy and the London National Park City initiative, all of which recognise the importance of urban agriculture in enhancing biodiversity, addressing food insecurity and promoting environmental sustainability.

Additionally, grassroots organisations like Incredible Edible play a significant role in transforming urban spaces into productive landscapes, fostering community engagement, and promoting sustainable food production practices. The concept of 'Right to Grow' emphasises the importance of ensuring access to public land for community cultivation.





# US/Canada policies

My research focuses on cities in North America, as they have similar climates, demographics and social challenges to London but are pioneers in urban agriculture. The cities I selected to visit are leading in urban food growing.

For example, Toronto's bylaw makes it mandatory for new buildings to have green roofs; Montreal has the world's largest rooftop farm; Detroit's agrihoods are making urban food growing more inclusive; Vancouver has a long history of supporting and facilitating urban agriculture and the city incorporates urban agriculture into its planning and development processes; and Portland is home to a wide range of food growing projects and an organisation that is getting communities to depave vacant land themselves.

This report covers groundbreaking policies and strategies to increase urban agriculture in US cities; the multitude of spaces available and used to grow food; how urban agriculture plays an important role in increasing biodiversity in cities; how growing locally creates a deeper sense of community and security and is a form of political power; finally there are a list of recommendations on how the UK can embrace the urban agricultural revolution.

Having the right support from local government can make a significant difference in the success and longevity of local food growing projects. Here are some of the innovative ways that city councils in North America are helping residents become more self-sufficient, informed and motivated to grow local:

## Green Roof Bylaws [Toronto](#)

In 2009 Toronto became the first city in North America with a bylaw that requires green roofs and establishes construction standards for them. More specifically, if a new building is more than 2000 square metres then it has to have a green section: if developers don't or can't install a green roof they have to pay \$200 per square metre. Any resident or organisation can apply for funding to support the installation of green roofs and cool roofs on Toronto homes and buildings (green roofs use soil and vegetation as living insulation, while cool roofs reflect solar energy: both reduce building energy use for heating and/or cooling).

[Toronto's green roof bylaw](#) defines a green roof as an extension of an above grade roof, built on top of a human-made structure, which allows vegetation to be planted in a growing medium and which is designed, constructed and maintained in accordance with the Toronto Green Roof Construction Standard. A green roof assembly includes, as a minimum, a root repellent system, a drainage system, a filtering layer, a growing medium (soil) and plants, and it is installed on a waterproof membrane of an applicable roof. Green roof systems are most often installed on a flat roof but can be installed on a sloped roof with a few additional considerations. [Green roof systems](#) are generally classified as extensive, semi-intensive or intensive.

## [Detroit's land database](#)

Detroit's Land Based Project Team was established in 2018 to help give residents more direction on the land available and what is permitted. If people want to use a particular plot of land, they can purchase the side lot next to their home. If they want a lot in another area, a project plan is needed. A land-based project is defined as land for urban agriculture, gardening, beautification and other productive uses, whether for profit or as a community-based activity.

Eligible vacant lots must share a property line with a residential property they own. The house must be occupied, and the side lot must be 7,500 square feet or less to qualify.

Residents have the option of purchasing land at market rate (20 cents per square foot) so around \$500/600 (around £393/£467) for 3,000 square feet.

On [Detroit City's website](#) you see what land is free and look at a plot you might be interested in buying.

It is an easy-to-use map and lets people see development opportunities in Detroit. You can click on any area of the city, and it tells you who owns the land, the zone, council district, the last sale date, last sale price, parcel number, taxable status and total acreage.

It has only been a decade since farming was legalised in Detroit, despite residents farming in the city's backyards and abandoned lots since the 1970s, when then-mayor Coleman Young started the Farm-A-Lot



programme which subsidised urban farming on vacant land within city limits. There is pressure from developers, especially in mid-town and the west village, for land to be used for buildings instead of urban agriculture. The east has the most land available but sits on a floodplain. Detroit takes growing seriously, and the mayor's office are looking to recruit a Director of Urban Agriculture.

### [Vancouver's Greenest City Action Plan](#)

Vancouver has been thinking green for longer than most cities. Its Greenest City Action Plan set out specific targets and actions to become the greenest city in the world by 2020. The plan included strategies to promote urban agriculture, increasing the number of community gardens, expanding urban farming opportunities and supporting local food production.

Here are some the action plan's key initiatives:

The creation of a Food Policy Council that advises the city government on food-related issues and helps shape policies to promote a healthy, sustainable and equitable food system. The council collaborates with various stakeholders, including community organisations, farmers, businesses and residents, to develop and implement initiatives that support urban agriculture and food security.

Integration of Agriculture into Urban Planning: Vancouver incorporates urban agriculture into its planning and development processes to ensure that food production is integrated into the fabric of the city. This involves incorporating green spaces, food-producing landscapes, and agricultural infrastructure into urban design and development projects.

Local Food Procurement Policy: Vancouver has adopted a local food procurement policy that prioritises the purchase of locally grown and

produced food for city-run facilities, events and programmes. By supporting local farmers and producers, the city aims to strengthen the regional food system and reduce its environmental footprint.

**Green Infrastructure Strategy:** Vancouver's Green Infrastructure Strategy incorporates urban agriculture as a component of green infrastructure planning. The strategy aims to enhance the city's resilience to climate change, improve biodiversity and promote sustainable land use practices, including the integration of food-producing landscapes into urban environments.

**Urban Farming Incentives:** Vancouver offers incentives and support for urban farming initiatives, such as tax breaks, grants and low-cost lease agreements for city-owned land. These incentives help reduce barriers to entry for urban farmers and encourage the expansion of local food production within the city.

In Vancouver, developers discovered that turning their vacant lots into community gardens while they waited for the next project to be ready could save them hundreds of thousands of dollars in city taxes. Putting a garden on a commercially zoned site allows it to be reclassified as a public park or garden, resulting in an 80% tax saving.

Planning (known as zoning) amendments in Montreal

Zoning amendments in Montreal support and facilitate urban agriculture projects by providing clear guidelines and regulations that accommodate agricultural activities within the urban landscape. Here is how zoning amendments can help urban agriculture projects in Montreal:

**Designating Agricultural Zones:** Zoning amendments can designate specific areas within the city as agricultural zones where urban agriculture activities are permitted or even encouraged. These zones may include

vacant lots, under-utilised spaces or areas with suitable soil and sunlight conditions for food production. By designating agricultural zones, Montreal creates dedicated spaces for community gardens, urban farms, and other agricultural projects.

**Flexible Land Use Regulations:** Zoning amendments can introduce flexibility into land use regulations to accommodate diverse forms of urban agriculture. This involves a mix of residential, commercial and agricultural uses within certain zones, enabling property owners to engage in gardening or small-scale farming activities while still complying with zoning regulations. Flexible land use regulations accommodate innovative farming techniques, such as vertical farming, aquaponics and rooftop gardens.

**Setbacks and Building Height Restrictions:** Zoning amendments address setbacks from the road and building height restrictions to ensure that urban agriculture projects can effectively utilise available space. For example, setbacks from property lines and building height restrictions may be adjusted to allow for the construction of greenhouses or other structures used in agricultural production. By modifying these regulations, Montreal can maximize the use of land for food production while maintaining compatibility with surrounding land uses.

**Land Subdivision and Lot Consolidation:** Zoning amendments can streamline the process of land subdivision and lot consolidation to create larger parcels of land suitable for urban agriculture projects. This may involve relaxing subdivision requirements or providing incentives for property owners to combine adjacent lots into larger plots for farming or gardening purposes. By facilitating land consolidation, Montreal can address the challenge of fragmented land ownership and make it easier for urban farmers to access the land they need to scale up their operations.

**Public Engagement and Consultation:** Zoning amendments should be developed through a transparent and participatory process that involves

input from stakeholders, community members and experts in urban agriculture. Montreal can engage with residents, community organisations, and other stakeholders to gather feedback on proposed zoning changes and ensure that they reflect the needs and priorities of the local community. By incorporating public input into the zoning amendment process, the city can foster greater support for urban agriculture initiatives and promote inclusive and sustainable development.



## A mini guide to urban spaces

- Community gardens – shared spaces where individuals or groups can rent or volunteer to cultivate fruits, vegetables, herbs and flowers collectively.
- Rooftop gardens and farms – an excellent way to utilise the space on top of buildings for growing food. They can range from small-scale container gardens to larger, more complex systems.
- Urban farms – larger-scale operations located. They can take different forms and be located on vacant lots, rooftops, or repurposed industrial spaces.
- Educational institutions – schools, colleges and universities incorporate gardens into their campuses to educate students about food production, nutrition, and environmental stewardship.
- Edible landscapes – edible landscapes integrate food-producing plants into public or private landscaping designs and replace ornamental plants with edible varieties, such as fruit trees, berry bushes and edible perennials.
- Allotments – individual plots rented by residents for growing food.
- Vertical farms – involves growing crops indoors in stacked layers or vertically inclined surfaces. Vertical farms often utilise hydroponic or aeroponic systems for efficient water and nutrient management.

# Space to grow

Land in most cities is hotly contested and it often seems impossible to find suitable land for growing, especially with pressure to build more housing. However with a little imagination, persistence, and the right support there are endless places to grow food including: gardens, balconies, rooftops, schools, colleges, universities, libraries, office spaces and vacant spaces (basically any public or private space that is not being used!). Here are some examples:

## [University roofs in Toronto](#)

Benefiting from Toronto's green roof bylaw, Toronto Metropolitan University has two rooftop farms on campus that produce and distribute food, facilitate research and engage the community through ecological rooftop farming and food justice initiatives. The roof-top farm supplies around 2,500kg of food per year from its market garden section, producing around 100 different types of fruit and vegetable from April to October. The roof is a hotbed of research, with a number of PhD students currently looking at [capturing storm water](#) and recirculating water in drainage. They also have an apprentice market gardener programme, training gardeners of the future.

## A Sixth Form College in Toronto

[FoodShare](#) is a food justice organisation based in Toronto and one of their main projects is a three-acre organic farm on the site of Burmhampton High School, a further education college that specialises in hairdressing and engineering. The farm was conceived in 2010: it is about showing young people where food comes from and how to grow fruit and veg. It grows enough food to feed the local community and beyond.

## A Boxing Club in Detroit

Detroit Boxing Club (DBG) stands in a community where literacy challenges have been stark. Since they set up in 2007 they have achieved a 100% high school graduation rate over 15 years. In Spring 2023, their vision blossomed further with the launch of DBG Garden. It has become a community-focused haven led by gardener Shaquana Suggs. She comments, 'it is a testament to growth – of fruits, vegetables, and young aspirations. Our produce not only nourishes bodies but also fuels our innovative cooking classes, making farm-to-table concepts tangible for the youth. Coupled with our on-site chicken coup, we're painting a vivid picture of sustainable living. As they say DBG Garden is more than earth and water; it's a reaffirmation of DBG's dedication to holistic education, underscoring the pivotal role of gardening and self-sustenance. From this land, we're not just sowing crops, but dreams and possibilities for Detroit's emerging leaders.'

## [Laboratoire agriculture urbaine \(AU/LAB\)](#)

Eric Duchemin – president of AU/LAB, an environmental scientist and now a world leader in urban agriculture. AU/LAB is a non-profit and encourages the emergence of initiatives relating to the production, processing, distribution and marketing of urban agriculture. The ultimate aim is to develop a fully sustainable food system and a circular economy. Since it was set up in 2009, its team has been supporting and encouraging innovation in urban agriculture by working with many organisations around the city. Here Eric describes his vision: [VIDEO](#)

One of their green roof spaces is located on Palais des Congrès de Montréal. The aim of the space is to help reduce urban heat island effect and improve air quality, and encourage industry and property owners to green their rooftops. The space currently serves multiple purposes, including as a growing area used by refugees: it offers some respite from



the settling-in phase, and the opportunity to grow their home vegetables. There are vines growing grapes that will be turned into wine, and a wildflower bed brimming with life which is open all hours for the local honeybees. The space is fully circular reusing rainwater.

A school in Vancouver

[Fresh Roots](#) was founded in 2009 to create educational opportunities and food production initiatives that engage youth and community members in growing healthy food in urban environments. Alexa Pitoulis, Fresh Roots' Executive Director, explained how they are the first organisation in Canada to create urban farms in schools and their educational programme is integrated into the curriculum of local schools. She believes everyone should have access to healthy food land and community. Their hands-on learning programme reaches over 5,000 kids each year. They grow around 280 different crop varieties and sell their produce through veggie subscriptions and farmers markets.

Here Fresh Roots Executive Director Alexa Pitoulis explains more about their work at Vancouver Technical School: [VIDEO](#)

Gardens in Vancouver

[City Beet Farm](#) was founded in 2013 with the aim of transforming under-utilised urban spaces into productive organic vegetable gardens. The farm primarily operates in residential back gardens, using people's private spaces to grow a variety of vegetables, herbs and flowers. City Beet Farm help to install the garden, maintain it, and they run workshops to help residents convert their yards into productive food gardens. Liana and Duncan own and run the organisation. They explained how they sell their produce using a Community Supported Agriculture (CSA) model, whereby a farmer or a group of farmers partner with individuals from the local area who make an investment in the farm in advance of a growing season and

become members of the CSA. In this growing season there are four people in total tending to 14 yards that together make up half an acre – and feed 71 households in total.

Liana and Duncan who own and run City Beat Farm outline their project:

[VIDEO](#)

Hydroponic rooftop farm in Montreal

[Lufa Farms](#) was founded in 2009 by Mohamed Hage and his wife Lauren Rathmell – their ambition was to reinvent the food system. Since then, they have set up four farms around Montreal, the last one being pegged as the world’s largest commercial urban rooftop farm. It spans 160,000 square feet (the size of three football fields) and grows around 20,000 greens at any one time. Using a hydroponic system – they use peat moss and coconut husk to grow micro greens: fruits and water rather than soil is used to provide nutrition. Lufa sell directly to consumers and work with smaller farmers around the Montréal area. The green roof I visited has two temperature zones and is primarily heated by residual heat from the building below. Unfortunately, this kind of farm is extremely expensive to set up and a [recent article in the Guardian](#) details how many vertical and indoor farms are struggling with increasing energy costs.

[An edible walkway in Montreal](#)

Montreal has the largest edible pedestrian street in Canada. It was set up in 2022 in the Ste-Marie district of the city. Beccah Frasier, Codirectrice Générale, explained how Promenade des Saveurs has 1620 ft<sup>2</sup> of cultivable area; more than 500 kg of vegetables and fruits are produced and distributed to the community. During the growing season about 150 smart pots filled with over 80 species of edible plants. These pots hold a soil depth of 20cm which is enough to support a good yield of almost every vegetable and herb. Benefits of smart pots include good aeration, water

drainage and heat release, and they have drip irrigation system. Some 75% of the vegetables are harvested by passers-by.

Making spaces

De-paving in Portland

By depaving areas in urban environments, there is potential to create space for urban agriculture initiatives such as community gardens, rooftop gardens or food forests. These spaces can be used for growing fruits, vegetables, herbs, and other edible plants, providing local residents with access to fresh and nutritious produce.

[Depave](#) in Portland is an initiative aimed at removing unnecessary pavement from urban areas and replacing it with green spaces or permeable surfaces. They reclaim spaces by holding public events for the community such as art exhibitions and music concerts. I met Katherine Rose, Communications and Engagement Coordinator at one of their [Park\(ing\) Days](#). They were celebrating Parking Day by occupying a parking spot at the future 7th and Sandy Green Plaza site and displaying project design boards and creating a temporary parklike space. Art Heaux, a BIPOC-led art collective, occupied the onsite storage container/popup gallery space. These actions give the community a chance to reimagine how the space can be used and provide an incentive for them to help with the actual de-paving.

Here Ted Labbe - co-director of Depave – explains more about the project:

[VIDEO](#)



# Biodiversity

If done in the right way, urban farming can lead to an increase in biodiversity. Plant diversity in urban agricultural sites is consistently higher than other forms of green space (Lin & Fuller, 2013; Taylor & Lovell, 2013). Being mindful of how the earth is used and what is planted can lead to an increase in pollinators and therefore an increase in overall food production.

## FoodShare's Burmhampton High School

Burmhampton High School has a three-acre site divided into three areas: one acre for food, one acre for pollinators and the rest an orchard. Surprisingly it was only started in 2019: it felt and looked like it had always been there. The site is next to a busy road, and when the growers started farming, they had to improve the soil with organic matter as it is very heavy clay. They have done a brilliant job of bringing life to this site which now nurtures hundreds of pollinators.

Most of the plants and vegetables are grown from seeds or plug plants. There are 65–75 different crops and the type of crop grown is decided by the community. Each vegetable patch is divided by pollinators. It is a fully organic farm, and they use landscape fabric over cabbages to deter pests instead of using harmful pesticides.

## Toronto Metropolitan University

The roof is divided into various sections including a sacred medicine wheel-shaped planting area where they grow sage, tobacco and sweet grass to name just a few. They often get party crashers on roof spaces – otherwise known as volunteer plants – that just appear. They don't remove the plants, as they thrive on this rooftop environment.

The roof-top farm produces around 2,500kg of food per year from its market garden section, with around 100 different types of fruit and vegetable from April to October. The farm is fully organic, and they use crop rotation and a drip irrigation system.

## City Beet Farm

City Beet Farm follows organic and sustainable farming practices, focusing on soil health, biodiversity and community engagement. They help to install a garden, maintain it, and they run workshops to help residents convert their yards into productive food gardens. Through their efforts, City Beet Farm not only contribute to local food production but also promotes urban greening, biodiversity and neighborhood resilience.

## [Farmers on 57th](#)

Farmers on 57th is an urban farming initiative located in Vancouver. It operates on the grounds of the George Pearson Centre, and all residents are in wheelchairs and have complex care needs. Residents were keen to get back to growing as many had gardens in the past. Karen Ageson ran the urban farm, and also co-founded the Vancouver Urban Farming Society which does a lot of urban agriculture advocacy in the city. The farm produces a wide range of vegetables, herbs and flowers using organic and sustainable farming methods. Members of the CSA programme typically receive a weekly share of the harvest throughout the growing season, providing them with a direct connection to locally grown, seasonal produce. They run Horticulture therapy workshops and residents have wheelchair accessible raised beds. They can make their own smoothies: this helps people on straw diets. Farmers on 57th plays an important role in promoting urban agriculture, biodiversity and community resilience in Vancouver. Farmers on the 57th Karen Ageson explains more about the farm: [VIDEO](#)



# Food sovereignty

[Food sovereignty](#) was defined at the Forum for Food Sovereignty held in Nyéléni, Mali, in February 2007 as, 'the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems.'

[La Vía Campesina](#) is an umbrella movement bringing together organisations, small producers, landless people, indigenous people and rural workers from many different parts of the world. It was one of the main organisations promoting the framework of food sovereignty – with its seven principles. Recognising and honouring the cultural diversity within urban communities is essential for inclusive urban farming. This involves incorporating culturally relevant crops, traditional farming practices and community celebrations into urban agriculture projects.

## Black and Indigenous food sovereignty

One of Toronto Metropolitan University's growing projects is on top of the Daphne Cockell Building that hosts the city's newest urban roof-top farm, home to the [Black Food Sovereignty Alliance Programme](#). Nicole Austen leads the Black-centric programme development of the farm: she first became interested in growing when she started studying nutrition at the university in 2016.

Nicole Austen explains more about the programme: [VIDEO](#)

Nicole has been developing the [Harvest Collective and Learning Circle](#), piloted by the Black staff and community network at Toronto Metropolitan University. It is a community supported agricultural model: for 10 Canadian

## The seven pillars of food sovereignty

- Focuses on food for people: The primary purpose of food production and distribution should be to meet the nutritional needs and ensure the food security of people, rather than prioritising profits or export markets.
- Values food providers: Food sovereignty values and supports the rights and livelihoods of small-scale food producers, including family farmers, peasants, pastoralists, fisherfolk and indigenous peoples. It recognises their knowledge, skills, and contributions to food production.
- Localises food systems: Food sovereignty promotes decentralised food systems that prioritise local production, distribution, and consumption. It encourages communities to rely on locally adapted agricultural practices and traditional knowledge.
- Puts control locally: It advocates for democratic control over food systems, allowing communities and individuals to make decisions about food production and consumption that align with their needs, preferences, and cultural traditions.
- Builds knowledge and skills: Food sovereignty emphasises the importance of agroecological farming practices and traditional knowledge in building resilient and sustainable food systems. It promotes education and capacity-building to empower communities to produce their own food.
- Works with nature: It promotes environmentally sustainable agricultural practices that respect the ecological limits of the planet, conserve biodiversity, and mitigate climate change. Agroecology is a central component of food sovereignty, emphasising the integration of ecological principles into farming systems.
- Values food as culture and tradition: Food sovereignty recognises the cultural significance of food and the importance of preserving traditional foodways and culinary traditions. It seeks to protect food diversity and promote culturally appropriate diets.

dollars a week people can help harvest food and take it home. The second strand is a learning circle (the space itself) where this year they have grown a dozen culturally significant crops for the African diaspora including okra, garden egg, kalou and cerasee.

Nicole is clear that to help people understand what Black food sovereignty is it was important to create a framework, so she designed four key pillars of the programme: food literacy, food and social justice, environmental stewardship and community healing. All aspects are Black-led, Black-mandated and Black-serving.

The Urban Farm strives to support the health and well-being of the community and surrounding ecosystem by using practices that are ecologically, socially and financially just. This includes growing foods, medicines and plants that are culturally significant to communities by applying diverse knowledges, foodways and growing techniques.

#### Food distribution

Equitable distribution of food in urban areas involves addressing food deserts – neighborhoods with limited access to affordable and nutritious food. Strategies to combat food deserts include establishing community gardens, farmers' markets, mobile food markets and partnerships with local grocery stores to increase access to fresh produce.

Toronto Metropolitan University's roof-top farm produces around 2,500kg of food per year from its market garden section, with around 100 different types of fruit and vegetable from April to October. The farm is fully organic, and they use crop rotation and a drip irrigation system. They have a very equitable model for distributing the produce: a third is donated, a third is sold to students at a subsidised rate, and a third is sold at market rate. The donated food goes to beneficial organisations including the Native Women Services, Good Food services and outreach work in the city's food deserts.



#### Seed Library

[Village Vancouver](#) is a grassroots organisation based in Vancouver and run by Ross Moster. They are focused on building sustainable and resilient communities through various initiatives related to urban agriculture, food security, and community engagement. One of their key programmes for improving food security is running 26 seed libraries in several neighbourhoods around Vancouver. They also run seed saving workshops, convene seed saver clubs, hold seed packet parties, make seed donations to community and school gardens and other seed libraries, and support efforts to increase seed sovereignty.

#### Local ownership of food production/commons

Prominent historian Peter Linebaugh emphasises the importance of reclaiming and defending common resources, including land and food, from enclosure and privatisation. His analysis of historical struggles for the commons, such as the English peasant uprisings and the enclosures of common lands, sheds light on the connections between land use, property rights, and social justice.

In the context of urban agriculture, Linebaugh's ideas may relate to efforts to reclaim vacant lots, public spaces and rooftops for community gardens and food production. His emphasis on collective action, solidarity and grassroots resistance can inform strategies for organising and advocating for urban agriculture initiatives that promote food sovereignty, community self-reliance and environmental sustainability.

#### Detroit's agrihoods: food is power

In Detroit, historically marginalised groups have been working hard to mitigate against climate change. Community gardens are seen as political power. 'In Detroit, a lot of gardeners do it for political reasons – it's a slap in

the face of agri-business, and a way to control their own food security,' says Monica White, a sociology professor at Wayne State University' (p187, The Urban Revolution, Peter Ladner).

## Sitopia (food sacred)

Sitopia is a term coined by British author and philosopher Carolyn Steel in her book Sitopia: How Food Can Save the World. It is a portmanteau of the Greek words 'sitos,' meaning food, and 'topos,' meaning place or site. In essence, sitopia refers to the idea of 'food place' or 'food site.' Steel uses sitopia to explore the profound connections between food and place, and how these connections shape human societies, cultures and landscapes. She argues that food is not only a physical necessity but also a powerful force that influences how we organize our cities, communities, and lives.

In Sitopia, Steel advocates for a more mindful and sustainable approach to food production, distribution and consumption. She calls for reimagining our food systems to prioritize local, seasonal and culturally appropriate foods, and to foster a deeper appreciation for the connections between food, nature and human well-being.

The concept of sitopia encompasses the idea of food as sacred, highlighting the reverence and respect that many cultures have traditionally held for food and the natural world. By embracing sitopia, Steel suggests that we can create healthier, more equitable and more sustainable food systems that nourish both people and the planet.

A recent study by Michigan State University estimated that with the use of green houses, trained farmers, proper storage and bio-intensive techniques, in just 570 of Detroit's vacant 5,000 acres of city land 70% of the city's vegetables and 40% of its fruit could be produced. Researchers looking at Detroit estimated that if 20% of fresh food purchased came from local sources, more than 4,700 jobs would be created, along with \$20 million in tax revenues (p103, The Urban Revolution, Peter Ladner).

The University of Michigan is doing a study funded by the National Institutes of Health (NIH) on how different types of vacant lot reuse can cut firearm violence in Detroit. Examples include community gardens, pocket parks and green infrastructure. The study is looking at how more community engagement boosts the preventive effects of vacant lot reuse on firearm incidents. They are using site surveys and in-depth case studies of effective reuse strategies. The [study](#) is called "Firearm violence prevention through community-engaged vacant property reuse: Application of Busy Streets Theory in Detroit." It's by the Institute for Firearm Injury Prevention at the University of Michigan. They say, "A lot of evidence suggests that fixing up vacant lots is a good way to cut violent crime and firearm assaults."

### [Keep Growing Detroit](#)

Arriving in Detroit on the weekend of Keep Growing Detroit's (KGD) 26th annual bike tour of Detroit farms and gardens was a highlight of my trip. They have a 1.38-acre site in the heart of the Historic Eastern Market District. KGD is a mecca for all things green in the city. Their mission is to promote a food sovereign city; advocating for most fruits and vegetables eaten by Detroiters should be grown by residents within the city. They do this through their many educational programmes. These include the Garden Resource Program. It supports a network of over 2,000 urban gardens and farms in the city. They also run Grown in Detroit helping city

growers sell their fruits and vegetables they grow at local markets. The barriers to entry are low.

Their inclusive urban farming can create economic opportunities for local residents, including job training, employment and entrepreneurship in food-related industries. By providing pathways to economic empowerment, urban farming initiatives contribute to community resilience and self-sufficiency.

What follows is a list of the farms I toured in Detroit, part of the KGD network:

#### Black Dog Berries

William (Bill) Albrecht started Black Dog Berries in 2018, buying four lots on Fischer St. A grant from Selma Cafe and a gift from Bandhu Gardens helped him to plant 18 trees and hundreds of berry bushes. The vision is to create wealth for the neighbourhood in the form of food security and produce that can be sold. They are planning to host educational experiences for kids and adults. KGD have already held a pruning fruit tree workshop at the plot, and Bill and his family are a real part of the community. During his tour, he greeted a young boy chasing an old-fashioned ice-cream van and joked with him about preferring ice-cream to gardening. They were going to fence the garden but, after talking to a Libyan neighbour who had fond memories of open growing spaces, they decided to leave it. They harvested a lot of berries this summer, including four types of raspberries.

#### Gateway Community Gardens

Gateway Community Garden in the east of the city is on a floodplain. The garden was set up and is run by the very brilliant Pastor Glenda Fields. Pastor Fields has been providing food for families and a safe space for children since 2018. Gateway Community Gardens works with local organisations and churches. They serve the families of this neighborhood and beyond. The ground is contaminated so they have 13 raised beds filled with various vegetables and flowers. During the summer, Gateway Community Garden also hosts the Meet Up & Eat Up programme and it provides meals to children during summer breaks.





Pastor Glenda Fields explains more about her community garden: [VIDEO](#)

Fairer food prices

[Detroit Black Community Food Security Network](#) (DBCFSN), co-founded by Malik Kenyatta Yakini, operates a seven-acre urban farm and is spearheading the opening of the Detroit Food Commons, a cooperative grocery store and community hub in Detroit's North End. It is aimed at addressing food insecurity and promoting local economic development. The project was envisioned to be a worker-owned cooperative, providing healthy food options, supporting local farmers and food producers and offering educational programmes and community events. Yakini views the work of DBCFSN as part of the larger movement for building power, self-determination and justice. He has an intense interest in contributing to the development of an international food sovereignty movement that embraces Black communities in the Americas, the Caribbean and Africa.

### [Carrefour Solidaire](#)

In Montreal, Carrefour Solidaire is an organisation that 'cultivates a healthy community and social justice through the power of food.' It grows food at a number of locations in the city and all the food harvested goes back into the community. Carrefour Solidaire's [community kitchen](#) and shop has a system where people who shop at there can pay three different prices depending on their circumstances; after analysing their takings over a period of time the amount of money they make evens out.

FoodShare in Toronto has a similar model and sell their produce at the farmers market at a lower than market value. They are trying to shift the model, and growing and selling to the community they directly serve helps to reduce the price. They sell culturally appropriate produce that is accessible for everyone. Their vision – that everyone can feed themselves and their loved ones – is clearly in action.



# Conclusion

Urban farming stands as a beacon of hope amidst the challenges faced by our modern food systems and cities. Through initiatives like the ones explored in Detroit, Toronto, Vancouver, Portland and Montreal, urban farming showcases its transformative power on multiple fronts.

Living in cities we can often feel removed from nature and where our food comes from. Urban farming redefines our relationship with food, fostering a deeper connection between consumers and their sustenance while promoting healthier, more sustainable dietary habits. By reclaiming under-utilised spaces and integrating agriculture into the urban landscape, cities can significantly reduce their reliance on distant food sources, thereby mitigating environmental pressures and lowering carbon emissions associated with transportation.

Moreover, urban farming emerges as a catalyst for community empowerment and social cohesion. Projects such as Detroit's Black Community Food Security Network exemplify how marginalized communities can reclaim control over their food supply, fostering economic opportunities, and promoting self-sufficiency.

Innovative policies and initiatives, as demonstrated by Toronto's green roof bylaws and Vancouver's Greenest City Action Plan, provide crucial support for the growth of urban farming endeavors. By leveraging public resources and engaging stakeholders, cities can create an enabling environment for sustainable food production while enhancing both biodiversity and ecological resilience.

However, challenges persist, including the need for equitable access to resources and opportunities within the urban farming landscape. Efforts to

address food deserts and ensure fair distribution of produce underscore the importance of inclusivity and social justice in shaping urban agricultural initiatives.

Ultimately, the journey towards a more food-secure, resilient and equitable urban future relies on our collective commitment to harnessing the potential of urban farming. By embracing innovation, collaboration, and community-driven approaches, cities can cultivate thriving ecosystems of urban agriculture that nourish both people and the planet. As we continue to navigate the complexities of urbanisation and food security, urban farming stands as a beacon of resilience, offering a path towards a more sustainable and vibrant urban existence.



# Recommendations

## National level recommendations:

- Develop specific legislation that helps to increase urban agriculture as a way of tackling the ecological emergency.
- Amend the Environment Act 2021 with specific goals on improving and protecting the environment through urban agriculture.
- Highlight how urban agriculture can contribute to biodiversity net gain by creating green spaces, and support native species in the [Biodiversity Net Gain](#) guidance.
- Increase funding for research and innovation in agriculture, food production and environmental sustainability. Target this more at urban agriculture, including supporting research projects and pilot initiatives related to urban food production and sustainable agriculture practices.

## Local government recommendations:

- Provide financial incentives for residents and businesses to grow food, especially on roof spaces and underutilised spaces.
- Create an interactive land map showing spaces available for food growing projects, similar to the [Land Based Register](#) in Detroit.
- Create a multi-stakeholder Food Policy Council that can help shape policies to promote a healthy, sustainable and equitable food system.
- Rethink local Food Procurement Policy that prioritises the purchase of locally grown food for city-run facilities, events and programmes.

- Local government should strategically plan and promote agricultural development on vacant land to strengthen regional resilience and provide ecosystem services.
- Showcase on an interactive webpage the variety of different spaces that can be used for food growing.
- Through planning legislation offer incentives to create urban rooftop farms and growing spaces on new sites.
- In collaboration with tech firms create an audit of rooftops in London that are suitable for urban food growing.
- Create a London wide urban agricultural strategy.

## Southwark Council specific recommendations:

- Monitor and measure how food growing projects in Southwark are increasing biodiversity and helping to tackle the ecological emergency.
- Look at piloting a cooperative grocery store and community hub in collaboration with food growing projects in the area (using an equitable economic model).
- Create new food growing zones alongside new developments (roof tops, schools and new parks and green land). Old Kent Road would be a good test site for an integrated and inclusive food growing system.
- Update the SNAP, including development of a community garden plan, which includes the right for residents to have a garden or food growing plots on their estate to ensure integration, plus include detail on how Southwark can support urban agriculture to increase biodiversity.
- Include urban food growing targets in the Southwark Plan.

# Credits

Firstly, thank you to Churchill Fellowship for this life-changing experience. I would also like to thank the following people for sharing their knowledge and taking the time out of their busy schedules.

Montreal

[Laboratoire agriculture urbaine](#), Eric Duchemin, Directeur Scientifique

[Carrefour solidaire](#), Beccah Frasier, Codirectrice Générale

[Lufa Farms](#)

[La Centrale Agricole](#) LN Saint-Jacques, Director

Toronto

[City of Toronto](#) Emma Tamlin, Engagement Manager at Green Roofs for Healthy Cities and Co-chair of the Toronto Youth Food Policy Council

[Toronto Metropolitan University](#) Sharene Shafie, Research Coordinator at the Urban Farm; Nicole Austen, Black-centric Programme Lead

[FoodShare](#) Orlando Martin Lopez Gomez, Community Food Growing Senior Manager; Sarina Martins, Garden Assistant

Detroit

[City of Detroit](#) Sara Elbohy, Planner, East Region

[Keep Growing Detroit's](#) 26th annual bike tour of Detroit farms & gardens

[Keep Growing Detroit](#) Joyce Dallas, Volunteer

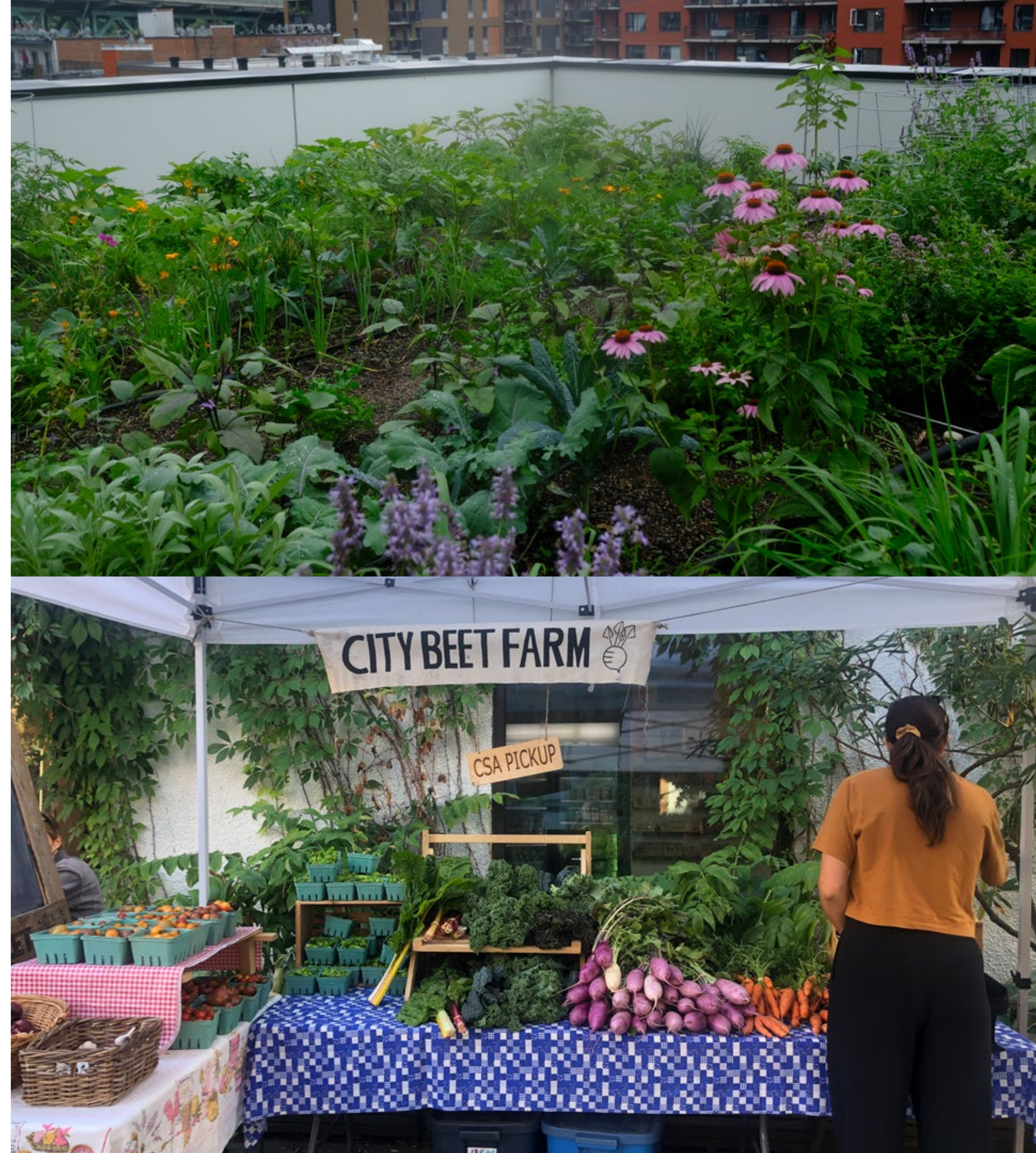
Black Dog Berries Farm, William (Bill) Albrecht

Wonder Farm, Lindsay and Myles Hamby

Gateway Community Garden, Pastor Glenda Fields

[Detroit Black Community Food Security Network](#) Malik Kenyatta Yakini,

Co-Founder and Executive Director





## Vancouver

[Village Vancouver](#) Ross Moster

[Farmers on 57th](#) Karen Ageson, Co-Founder of the Vancouver Urban Farming Society

[Fresh Roots](#) Alexa Pitoulis, Executive Director

[City Beet Farm](#) Liana & Duncan, owners and farmers

Patrick Moore, a Canadian industry consultant, former activist, an early member and past president of Greenpeace Canada

Peter Ladner, Former Vancouver councillor. Urban Food Revolution author

[The University of British Columbia](#) Peter Wood, Lecturer and Coordinator

## Calgary

[Urban Farm School](#) Carmen Lamoureux, owner and founder

[HighField Farm](#) Heather Ramshaw, Operations Manager

## Portland

[Outgrowing Hunger](#) Adam Kohl, Executive Director

[The Side Yard Farm & Kitchen](#), Stacey Givens and Hazel

[Depave](#) Katherine Rose, Communications and Engagement Coordinator; Ted Labbe, Co Director; Shawn Perez, President

Last but not least: Elizabeth May, leader of the Green Party of Canada, and her husband John Kidder. I met them on my long train journey across Canada and not only did they give me valuable insights about green policies in the country – they sang me happy birthday.

Saeida Rouass encouraged me to apply for a Churchill Fellowship and Helena Smith held the fort and designed and edited this report.

## Image credits

p1–2: Keep Growing Detroit's urban farm. Image: Leanne Werner

p3: View from Toronto Metropolitan University's urban rooftop farm.

Image: Leanne Werner

p4–6: Leaf. Image: Mikita Yo

p10: Plants growing in Canada's longest edible walkway in Montreal.

Image: Leanne Werner

p11: Dragonfly. Image: pngmart.com

p16: Apple trees planted by Wilder at King's campus, Strand, London

Image: Leanne Werner

p19: Screen shot from Detroit City's Land Register.

p23: Garden apprentices harvesting food at Toronto Metropolitan

University's urban rooftop farm. Image: Leanne Werner

p27: Both images on the AU/LAB's green roof, Palais des Congrès de Montréal: Eric Duchemin and Leanne Werner. Image: Leanne Werner

p30: Ladybird. Image: PixelSquid

p35: Bee. Image: stickpng.com

p39: Joyce Dallas, Keep Growing Detroit Volunteer. Image: Leanne Werner

p39: Gateway Community Garden with Pastor Glenda Fields, Sara Elbohy and Leanne Werner. Image: Leanne Werner

p41: Regulars at Carrefour Solidaire's community kitchen in Montreal.

Image: Leanne Werner

p41: Canada's longest edible walkway in Montreal. Image: Leanne Werner

p44: FoodShare's Orlando Martin Lopez Gomez and Leanne Werner at Burmhampton High School farm. Image: Leanne Werner

p48: Montreal rooftop farm, Carrefour Solidaire. Image: Leanne Werner

p48: City Beet Farm stall in Vancouver. Image: Leanne Werner

p51: Leanne Werner. Image: Helena Smith

# About Leanne



Leanne Werner is dedicated to transforming urban spaces into thriving havens for wildlife and communities. She is co-founder and director of Wilder, an environmental social enterprise based in London that creates spaces for wildlife and people in ultra-urban areas. One of Wilder's flagship projects is the Wilder Mile, a project to radically improve biodiversity in one square mile of Southwark by calling on organisations and individuals to commit to wildlife friendly interventions.

Some of Wilder's projects include de-paving and transforming concrete spaces into a lush wildlife-friendly gardens, working with universities such as King's College London to increase biodiversity on their campus on the Strand, advising Tate on actions to increase biodiversity on all their sites, as well as creating a wildflower meadow on the riverside of Tate Modern.

Leanne's background is rooted in advocacy and community. Her passion for increasing biodiversity was fuelled during her stint as a councillor in Southwark. Here, she championed the conversion of concrete jungles into green oases, catalysing projects like the transformation of polluted side-streets into vibrant pedestrian areas and the cultivation of community orchards. Her leadership extended to chairing a scrutiny commission on the climate emergency, which was instrumental in shaping Southwark's robust climate strategy, lauded as one of the nation's most formidable.

Beyond her commitments to Wilder, Leanne serves as a trustee of Trees for Bermondsey, a charity dedicated to preserving and expanding urban tree canopies. Through her passion and commitment to urban nature, she was awarded a Churchill Fellowship, allowing her to explore best practices in urban agriculture across the United States and Canada.

Now back in UK she plans to incorporate her findings into the work at Wilder and persuade policy holders and organisations to commit to joining the new urban agricultural revolution by investing in and supporting sustainable food-growing projects.