

ITEM No ...6.....

REPORT TO: RECOVERY SUB COMMITTEE – 10 AUGUST 2020
REPORT ON: LOCAL FOOD GROWING STRATEGY
REPORT BY: EXECUTIVE DIRECTOR OF NEIGHBOURHOOD SERVICES
REPORT NO: 178-2020

1.0 PURPOSE OF REPORT

1.1 The report proposes the implementation of the Local Food Growing Strategy (2020-2025) as outlined within Appendix 1 and to progress the actions contained within the Plan.

2.0 RECOMMENDATIONS

2.1 Sub-Committee approval is sought for the draft Local Food Growing Strategy.

3.0 FINANCIAL IMPLICATIONS

3.1 There are no direct additional financial implications associated with the approval of this report. Any costs incurred in the implementation of the strategy will require to be contained within existing budgets. The Executive Director of Neighbourhood Services will seek to maximise the use of any external funding opportunities as they arise to ensure the strategy can be implemented successfully. Where appropriate to do so, details of any future investments will be submitted to Committee for approval in due course.

4.0 MAIN TEXT

4.1 Reference is made to Article II of the minute of the Neighbourhood Services Committee of 7th January 2019 which noted the current status of Dundee's Community Gardens / Allotments and the duty placed on Local Authorities by the Community Empowerment (Scotland) Act 2015 to produce a Local Food Growing Strategy by 1st April 2020

4.2 Part 9 of the Community Empowerment (Scotland) Act 2015 ('the Act') outlines communities' rights, and the corresponding duties and responsibilities of local authorities, in relation to allotments. Section 119 of the Act places a duty on every local authority to prepare a food growing strategy which must be published within two years of section 119 coming into force.

4.3 The local food growing strategy should include the identification of land for allotments and other community growing, in addition to a description on how the local authority will meet demand for such land. The Act also places a duty on Local Authorities to produce an annual allotments report. The strategy must be reviewed every 5 years.

4.4 For the purposes of the Act, an allotment is land owned or leased by a local authority for use by people to grow vegetables, fruit, herbs or flowers on a non-profit basis. Under section 111 of the Act, Dundee City Council is obligated to maintain waiting lists for all sites it owns. Under Section 112 of the Act Dundee City Council also has a duty to provide allotment sites so that:

- sufficient allotments are provided to keep the waiting list referred to in section 111 at no more than half of the authority's current number of allotments; and,
- a person entered on the waiting list does not remain on it for a continuous period of more than 5 years.

4.5 As of March 2020, there are 4 council managed and 7 leased allotment sites in Dundee. There are also 3 private allotment sites which are excluded from the legislation. Out of the 11 sites considered under the Act and Local Food Growing Strategy there are a total of 508 allotment sites with 121 people on waiting lists. At 24% this is well under the trigger of 50% as above. However, in the spirit

of the Act, the draft Local Food Growing Strategy (Appendix) does identify areas of potential for the expansion of food growing.

- 4.6 The draft Local Food Growing Strategy also recognises the contribution of community growing spaces to the production of fruit and vegetables in Dundee. A list of 24 community growing spaces is detailed in the strategy. All are based in local communities for local people. Some of the spaces have been developed by officers in Dundee City Council in partnership with communities, others have been initiated by third sector and religious organisations, as well as individuals. The majority of these growing spaces are located and encouraged in areas of deprivation, as it is also recognised that they have a role in reducing food insecurity.
- 4.7 In addition to the roles above, growing spaces and allotments can be an important part of the community, increasing cohesion, reducing isolation and contributing to good physical and mental wellbeing. The draft Local Food Growing Strategy also identifies the impact that initiatives have on environmental quality, and as such is an integral element of the Dundee Climate Action Plan.
- 4.8 Alongside the preparation of the Draft Local Food Growing Strategy, a screening exercise for Strategic Environmental Assessment was carried out. This concluded that a SEA was not needed.

5.0 POLICY IMPLICATIONS

This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. A copy of the Impact Assessment is available on the Council's website at www.dundee.gov.uk/ia

6.0 CONSULTATION

- 6.1 The Council Management Team have been consulted in the preparation of this report and agree with its contents.

7.0 BACKGROUND PAPERS

- 7.1 None.

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30 July 2020

APPENDIX 1

LOCAL FOOD GROWING STRATEGY DUNDEE

DRAFT

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Vision

Dundee will build on its enviable resource of community growing spaces and allotments, working with communities, local people and organisations to enable them to access 'grow your own' opportunities, whilst recognising the value of such growing spaces in reducing food insecurity.

Aims

- To consolidate and support existing growing spaces
- To work with partners and local people to develop existing growing spaces
- To work with partners and local people to share skills and resources
- To work with partners and local people to identify and develop additional spaces for growing
- To work with partners and communities to develop new local growing spaces
- To promote good environmental practice within growing spaces
- To support innovative solutions for encouraging grow your own, through development opportunities and existing infrastructure
- To integrate grow your own opportunities into existing strategic plans, processes and structures

Context

International

In 2015 Scotland was one of the first countries to sign up to the **United Nations 17 Sustainable Goals**. Since then, over 190 countries have followed suit. The goals are a call for action by all countries – poor, rich and middle-income – to promote prosperity while protecting the planet. They recognise that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.



Although the majority of the Goals are appropriate to this strategy, its implementation will resonate most closely with the following:

- No poverty
- Zero hunger
- Good health and wellbeing
- Reduced inequalities
- Climate Action
- Life on land
- Partnerships
- Quality Education

National

The Scottish Government's **National Performance Framework (NPF)** sets out 11 National Outcomes together with a suite of National Indicators and also includes the UN Sustainable Goals above.

The goals of each local authority's food strategy will help to underpin the achievement of some of the Government's National Outcomes as set out in the NPF, including:

We are healthy and active;
 We value, enjoy, protect and enhance the environment;
 We live in communities that are inclusive, empowered, resilient and safe.

Specific reference is made to Grow Your Own is made under the health outcome above;

*We implement a whole system approach to health and wellbeing which targets harmful health behaviours early on and from different angles. We have revolutionised our food culture and prioritise affordable, healthy food and **local food production**. (National Performance Framework)*

Local Food Growing strategies contribute to delivering the Scottish Government's aspiration to become a **Good Food Nation**. The Scottish Government have committed to bringing forward the Good Food Nation Bill to parliament during 2020. The Bill will build on the 2014 Becoming a Good Food Nation policy which set a new vision for Scotland: that by 2025 Scotland will be "a Good Food Nation, where people from every walk of life take pride and pleasure in, and benefit from, the food they produce, buy, cook, serve, and eat each day."

The Scottish Government embraces 'community food growing in all its forms. Grow-your-own food (GYO), be it on an allotment, community garden or elsewhere, can increase our access to affordable, healthy and environmentally sound food; the very essence of being a Good Food Nation.'

The **Community Empowerment (Scotland) Act 2015** (the Act) aims to empower communities across Scotland and for those wanting to GYO, it will improve access to land for food growing purposes, giving more people the opportunity to grow their own food and improving food security.

Section 119 of the Act places a duty on every local authority to prepare a food growing strategy, which must be published by 1st April 2020. It also requires local authorities to include the following in their strategies:

- land identified in the area that could be used for allotment sites;
- other land identified in the local authority area which could be used by a community to grow vegetables, fruit, herbs or flowers;
- a description of how the authority intends to increase the provision of allotments or other land for community growing, should the authority be required to take reasonable steps under section 112(1); and

- when detailing how the authority intends to increase the provision of allotment sites and community growing areas of land in its area as it is required to take reasonable steps under section 112(1), a description of whether and how this will apply to communities which experience socio-economic disadvantage

Section 112 above describes the trigger points at which the local authority must identify additional land for food growing. These trigger points are based on the allotment waiting lists for both directly managed and leased sites.

Section 120 requires the local authority to review the local food growing strategy every 5 years. The Act also places a duty on local authorities to produce an allotment report for its area each year.

Local

The **City Plan for Dundee 2017-2026** aligns the Scottish Government's NPF with local circumstances and promotes the long standing vision for the city framed around jobs, social inclusion and quality of life. The City Plan sets out 5 strategic priorities:

Strategic Priority	Dundee Outcome
 Fair Work and Enterprise	Raise regional productivity
	Close the jobs gap
	Reduce unemployment
 Children and Families	Improve early years outcomes
	Close the attainment gap
	Improve physical, mental and emotional health for children and young people
	Improve health and wellbeing outcomes for children and young people who experience inequalities
 Health, Care and Wellbeing	Increase safety and protection of young people
	Reduce obesity
	Reduce substance misuse
 Community Safety and Justice	Improve mental health and wellbeing
	Reduce levels of crime
	Reduce levels of domestic abuse
	Reduce levels of re-offending
	Reduce risk to life, property and fire
 Building Stronger Communities	Improve road safety
	Reduce levels of antisocial behaviour
	Improve quality of neighbourhoods
	Increase empowerment of local people
	Improve housing quality, choice and affordability
	Improve access to healthy green and open spaces
	Improve transport connections to communities

The food growing strategy will help to underpin a number of strategic priorities and Dundee outcomes including Health Care and Wellbeing and Building Stronger Communities.

Community Growing was highlighted as a priority by local people in all local wards during a community engagement exercise carried out in the preparation for the City Plan. This is borne out in the plan as

an action under the Building Stronger Communities theme by committing to expand Community Growing projects.

Under the strategic priority of Health, Care and Wellbeing, Dundee Healthy Weight Partnership have been identified by the Scottish Government as an early adopter of the whole system approach to Healthy Weight. The Local Food Growing Strategy will be an element in this.

The **Council Plan 2017 – 2022** focuses on the strategic delivery of Dundee City Council’s responsibilities under the City Plan. Its vision develops that of the City Plan into what can be achieved by the local authority. It reinforces the action included in the City Plan by identifying the expansion of community growing as a key strategic project.

Other key strategic documents identify community growing as important to the city. These include the Climate Action Plan, Physical Activity Strategy, Biodiversity Strategy and Green Network Guidance. The Local Development Plan seeks to protect allotment sites from development.

The Benefits of Grow Your Own

Locally-produced food has a multitude of benefits on many levels in addition to the obvious enjoyment and sense of achievement in ‘growing your own’. An MSc thesis by a Dundee University student recently sought to describe this through the figure below:



Urban Food-growing as a multi-solving practice (after Andre-Mai, 2017)

By ‘Growing Your Own’ less transport of food is needed resulting in less fossil fuel used for transport and for processing/packaging, and less food waste leading to lower carbon emissions. People are encouraged to consume more fresh food, leading to healthier diets and lifestyles for adults and children. Surplus produce is more likely to be shared and consumed, saving money and carbon emissions while improving community cohesion. Fresh food is more likely to be eaten, leading to healthier eating habits and less reliance on processed food. The variety of plants grown leads to benefits for insects and biodiversity as a whole. The physical appearance of the food-growing sites is rich and varied with plenty of aesthetic interest, improving the outlook for residents.

Social cohesion is improved by the use of growing spaces as community resources where neighbours can meet and spin-off projects for biodiversity and civic improvements promote engagement. Several Social Return on Investment studies have found that the payback value of such projects is between 4 and 9 times the input costs.

Current Provision

Dundee brings a wealth of experience and good practice to this Local Food Growing Strategy. For many years Dundee City Council has developed a system of leased allotment sites managed by independent Allotment Associations, as well as directly managing a number of allotment sites. There are also several privately run allotment sites. More recently, Dundee City Council established a Community Allotment Officer post in 2013 and identified capital funding of £200,000 to establish community growing spaces in areas of deprivation and regeneration.

A Dundee City Council report in 2019 drew the following conclusions from experience developing Community Growing Spaces:

Partnership, Support and Governance

- Each successful growing space depends on strong partnership working. Establishment of successful gardens has required initial work by Community Officers and the Community Allotment Officer to gauge interest and build capacity.
- Community Growing Spaces are unique. Despite a relatively common process, each growing space is a result of the community it serves. Partnerships differ, but recent experience has shown that input from local community workers and voluntary organisations is extremely beneficial.
- Governance of community growing spaces is not consistent, with models varying from lease of ground to communities (Douglas – Douglas Community Spaces Group/Ancrum Road Allotment – Lochee Community Gardeners) through to those with committee structures in place (Tayview), to others recently established and requiring significant support. This often depends on the maturity of the garden, but robust governing structures are encouraged and supported.
- Ongoing responsibility of spaces requires further development. There may be opportunity to consider Community Asset Transfer.
- There is opportunity for community growing spaces to link into other initiatives such as development of cooking skills.

Development of Community Growing Spaces

- Development of the gardens has been enabled by Dundee City Council's capital investment since 2014/15, successful grant applications and the practical assistance by the Criminal Justice Service – Unpaid Work Team (Ardler, St Mary's, Charleston, Whorterbank Tattie Patch).
- Working in partnership with the Criminal Justice Service – Unpaid Work Team and utilising a Council revenue stream dedicated to community growing, has enabled the purchase of materials to develop other spaces at Ardler, Balgarthno and Whorterbank Tattie Patch.

Community Engagement

- Most gardens have a mix of individuals and organisations working on plots. Most individuals grow for themselves and their families, clients or community cafes may benefit from organisation plots.

- Community Growing Spaces can have an impact on community cohesion reducing isolation, as well as enabling different cultures to come together under a common purpose, promoting integration and mutual understanding.
- Drug and alcohol addiction services have used parts of the gardens as therapeutic spaces, enhancing the efficacy of their interventions and helping to keep people on the road to recovery.
- Involvement from local schools has been patchy despite community growing spaces being useful as outdoor learning spaces.

Impact

- The greatest impact that the Dundee's Community Growing Spaces have is on the communities themselves. Tayview Community Garden won a national UK competition and the top prize of £5,000 in September 2018. The judges commented:
*'Derelict and uninspiring in August 2016, residents, artists and Dundee City Council have thrown everything at the site over the last two years to transform it into a beautiful and productive space that ties the whole community together!
The Cultivation Street judges were bowled over by the huge cross-section of locals that have been involved in bringing this community garden to life. It has brought people with mental health issues and learning disabilities, school children, refugees and recovering drug addicts together in a positive and rewarding project bursting with community spirit.
They also loved the many ways in which the garden is being put to good use for the benefit of local kids and adults alike. The Dundee City Council's Sensory Service uses the garden space as a therapeutic resource for children with impaired vision or hearing, schools use the biodiversity area as an educational resource, pedestrians and cyclists use it as a pleasant shortcut to avoid a dangerous junction, and the area has seen a reduction in litter and anti-social behaviour because of the project. Make no mistake, this project's impact on the local community has been nothing short of incredible.'*

In addition to the development of the Dundee City Council initiated community growing spaces, there are a number of similar and exemplar initiatives developed by third sector organisations and other bodies.

The distribution of allotments, community gardens and other food growing areas is shown in Appendix 1 on page 21.

Allotment Sites

Dundee City Council allotment sites:

Directly Managed Sites	Number of Plots	Waiting List (Mar 2020)
Ancrum Road	26	72
Arklay Terrace South	14	
MacAulay Street	16	
Magdalen Green	22	
Total	78	

Leased Sites	Number of Plots	Waiting List (Mar 2020)
City Road	63	25
Kinnaird	104	3

Murrayfield	40	4
Old Craigie Road	79	5
South Road	8	6
Stirling Park	49	6
West Law	87	0
Total	430	49

Private Allotment Sites:

Allotment Site	Number of Plots
Cleppington Working Mens	82
Gardner Street	31
Magdalen Green	13
Total	126

Waiting Lists

The waiting lists above provide information from September 2019. Under section 111 of the Act, Dundee City Council is obligated to maintain waiting lists for all sites it owns. Under Section 112 of the Act Dundee City Council also has a duty to provide allotment sites so that:

- sufficient allotments are provided to keep the waiting list referred to in section 111 at no more than half of the authority's current number of allotments; and,
- a person entered on the waiting list does not remain on it for a continuous period of more than 5 years.

If the above are not met, Dundee City Council would be duty bound to identify additional space for the development of allotments.

Although private sites are excluded from the legislation, the information above is included to provide an accurate reflection of allotment plot provision in Dundee.

Conclusions drawn from the analysis of the above figures and from consultation with Allotment Associations are that as of March 2020:

- 508 allotment plots are provided throughout Dundee
- 121 people are on waiting lists
- The waiting list represents 24% of the total plots available (well under the 50% described by the Act)
- The average waiting time for plots is approximately 2 years (well under the 5 years described by the Act)

Although the figures above do not distinguish between half and full plots, it is considered that the tolerances between the target and actual figures above suggest that no further information is required. However this information will be collated in the future.

Other legislative requirements

The Act also requires Dundee City Council to make Allotment regulations for all its sites and to produce an annual report, as well as making information readily available concerning the management and location of allotments.

The Act defines an allotment as being 250sq metres, a significant shift away from the traditional measurement in poles, and obligates local authorities to charge for allotments on this basis. However, as existing allotments vary considerably in square meterage, despite being half or full plots, it is proposed that this charging system is scaled.

Community Growing Spaces

In addition to the traditional allotment sites described above there is a wide and inspiring network of community growing spaces throughout Dundee, which have been developed by organisations, as well as Dundee City Council. A number of Council developed projects are now run by local communities. A list of current community growing projects are detailed below:

Site	Description	Organisation
Ancrum Road Allotment	Plot 8 in existing allotment site. DCC built with community involvement and run by Lochee Community Gardeners. Produce used by a community café. Consists of raised beds, polytunnel, greenhouse, growing in the ground and a shed.	Lochee Community Gardeners
Arklay Terrace	Surplus hard-core storage yard developed by DCC as community growing space with raised beds, orchard and polytunnel. Community shed.	Plot holder committee
Ardler Garden	Developed in 2016 by DCC with 16 raised beds either cultivated by local organisations or members of the public. A volunteer is on site one morning/week and facilitates a nursery group using one of the beds.	Local people / organisations
Balgarthno	Discussions with the new joint primary school campus at Balgarthno resulted in the installation of 16 raised beds, a storage shed/outdoor classroom and orchard planting at a location accessible to the surrounding community. This garden is used by school groups as well as local families	Primary school / parents / local people
Douglas Community Garden	Built by DCC in 2013/14. Leased to Douglas community Spaces group for 25 years. They have 20 raised beds (1m x 3.5m) and a communal orchard.	Douglas Community Spaces
Dudhope Community Garden	Small number of raised beds and orchard developed by Bharatiya Ashram. Charity community centre in the most deprived area of Dundee.	Bharatiya Ashram
Dundee Therapy Garden	The site is leased from DCC reusing a disused bowling green in Dudhope Park and is specifically for veterans and uniformed services. The project focuses on improving mental health and is run by a Dundee-based charity. It has many raised beds, a polytunnel and orchard.	Dundee Therapy Garden
Dundee University	Botanic Gardens has orchard and 8 raised beds for student growing. University Campus has 20 raised beds and fruit areas for students resident in University accommodation.	Dundee University
Duntrune Community Garden	DCC's demonstration garden is now managed by SAMH through an agreement. Other organisations such as Gowrie Care and Macmillan use it. Grow some vegetables and fruit.	Scottish Association for Mental Health
Every1's garden	The centre and garden are on land rented from the church. Four members of staff are associated with the garden space. They run a summer garden club involving 4 Primary Schools.	Maxwell Centre

	Funding from the Rank Foundation, Lloyds TSB, Big Lottery, Children in Need, People's postcode lottery, Dundee Partnership (see case study for more information).	
Fintry Community Garden	Early pilot project which is part of an aspirational initiative. Raised beds built by Criminal Justice Team.	Local community
Lochee Park Fruit Bowls	Disused bowling green developed by DCC as orchard, raised beds and polytunnel	DCC
Giving Garden - Menzieshill	Parish Church growing fresh vegetables for foodbank. Direct extension to church. The site has a polytunnel and it is also used by the local primary school.	Menzieshill Parish Church
Kerr Street	A local group of residents have taken a space over from DCC that once was a playpark/greenspace and have organised it themselves. Agreement with DCC for use. The site has raised beds, social space and biodiversity planting.	Local residents
Menzieshill Community Garden	Built by DCC with external funding next to new Primary School and community centre. 35 raised beds, Portakabin, polytunnel, and toilet.	DCC / Local community
Ninewells Community Garden	Therapeutic garden registered as a SCIO. Volunteer-led with focus on health improvement, encouraging use by patients from adjacent hospital. Member of staff. Developed with significant external funding. Leaf Room used as a meeting space	Ninewells Community Garden
Old Piggery	North East facing; currently under construction and orchard trees planted. Built by Community Justice Team for use by clients.	Criminal Justice Service
Overgate Community Garden (William Gardner Square)	Developed by Dundee and Angus College and Bonnie Dundee in partnership with the Overgate shopping centre. Some in ground growing and flowers established with herb garden	Bonnie Dundee
St. Mary's	Several raised beds and an orchard on church land and was built by the community justice team. The garden is run by a worker employed by the Rank Foundation and is used by local people and groups. Produce supplied to church community café. Possible expansion.	St Mary's Community Church
Tay View	Terraced space developed by DCC has ground level growing plots and an orchard. Plots vary in size depending on gardener's needs. Total area of cultivation excluding orchard area is about 1000 m2.	Plot holder committee
The Attic	Youth Diversionary Project that have a small garden at the back of their shop space. It has raised beds and an orchard. Rented shop and use of land at rear by agreement with DCC	The Attic
The Friary	Land and small polytunnel. Church owned, who host a few community groups e.g. The Reconnection Project	Friary Church
YMCA Community Garden	Has a small number of raised beds and fruit trees.	Broughty Ferry YMCA
Whorterbank Tattie Patch	Established by DCC and One Parent Families Scotland as a pilot for a larger community garden. Now run by The	St Mary's Primary School

	Laughter Club and St. Mary's PS who have installed raised beds	
Whorterbank Community Garden	15 raised beds that have been taken on by individual residents, young families and local organisations. Orchard space with nut trees as well as top fruit. Biodiversity a priority.	Local Community
Yusuf Youth Initiative (YYI)	Asset transfer to charity organisation interested in community food. Disused bowling green in Victoria Park developed as orchard, raised beds and polytunnel.	YYI

Whilst the table above captures the majority of community initiatives in Dundee, it is not an exhaustive list. Any projects which wish to be included in further iterations of the Food Growing Strategy are encouraged to make contact with Dundee City Council's Community Allotment Officer.

Many of the projects listed above have been fortunate to be supported by Dundee City Council's Community Allotment Officer and many continue to be. Dundee's well regarded standing as a leading community growing community is in part due to the foresightedness of the Council establishing a Community Allotment Officer post. Many of the projects also take advantage of Discovery Compost produced by DCC and supplied free to community growing spaces.

The Criminal Justice Team from Dundee City Council are also a valued and vital partner in the development of community growing spaces. Whilst all their work is detailed within the above table, they are an integral part in the construction of many of the growing sites across the City, as well as in schools and nurseries.

There are also 20 small scale orchard projects throughout the City developed by Dundee Urban Orchards in partnership with local people. Some are hosted by existing projects above and others by schools and community organisations.

Whilst schools do grow within their school grounds, their involvement by schools in community growing is currently limited, there are initiatives such as St Mary's involvement in the Tattie Patch, above, which provide good practice examples that could be replicated. The use of food growing as part of the curriculum is exemplified by St Francis' Primary School's The Patch, which is located in Murrayfield Allotments, Whitfield. Other examples of growing project in schools:

St Fergus Primary School
Craigowl Primary School
Downfield Primary School
Craigiebarns Primary School and Nursery
Kingspark School
Balgarthno Campus Community Garden - Camperdown and St Clements Primary School

Development of further Community Growing Spaces

The Act specifically requires local authorities to identify areas of land that could be used to provide additional allotment space if required. It should be noted that Dundee City Council currently provides ample allotment plots to comply with legislation (see waiting list section), but there is a recognition that this could change in the future.

Audit of land

Dundee City comprises 6226 hectares of land. Of that, 18 ha. (0.3%) is given over specifically to food growing in the form of allotments or community gardens. Of course, not all of Dundee's land is suitable for food growing, however 3991 ha. is unsealed open space, there are 1170 ha. of private gardens, 363 ha. of woodland and 259 ha. of golf course. Dundee's open spaces also contain sports pitches, formal gardens, play areas, ponds and burns, as well as areas for biodiversity. In addition to this, 374 ha is beach and foreshore. Many of the less formal areas provide informal foraging opportunities, such as blackberries and wild raspberries. The beach will also yield seaweed, a useful fertiliser.

A conservative estimate of the residual open space that could theoretically be cultivated within the city limits is 1500 ha. 0.1 ha. is the area considered to be sufficient to keep a family in fresh vegetables for a year. With a current population of 149,000, and assuming family size of 3 – 4 people, the available space in Dundee could feed about a third of the population; or provide the entire population with 35% of their needs. Realistically, the bulk of people's calorific intake will still come from arable farm production of staple grains and potatoes, which means that a significant part of everyone's fruit and vegetable needs could theoretically be grown within the city limits.

Although it is potentially possible to achieve the above, realising this aspiration / vision on the ground will entail the application of dedicated resources, skills development and awareness raising of local communities and decision makers. However, this and future revisions of the Local Food Growing Strategy will provide a basis for realising the ambition, as well as a concerted effort to make Local Food Growing a consistent learning experience within schools.

Identification of areas suitable for growing

The geographical spread of allotment sites and community growing spaces shows that there are gaps in provision. At a larger scale this is evident in, for example, both Linlathen and Whitfield. However, even at a smaller scale existing community growing spaces are at capacity and there is demand for additional plots.

Communal back greens and housing corners

Dundee has many traditional tenements and low rise blocks with communal greenspaces. In the past they were used as growing spaces, but over time they have become areas of mown grass punctuated by drying greens. In the public housing areas to the north of the Kingsway the area of this type of greenspace can be considerable.



The image shows that as gardens have developed, some open space areas in the midst of the housing have become inaccessible islands which are difficult and costly to maintain.

Encouraging the re-establishment of growing spaces in these areas is an integral part of the food growing strategy. However, experience has shown that there has to be demand from local people and neighbours.

The early work of the Community Allotment Officer identified areas of interest and despite local support initially, initiatives subsequently failed to materialise.

However, as the concept of community growing spaces has gained traction, especially in Dundee, there are opportunities to further explore potential sites. Contact with the Community Allotment Officer has already been made by residents. These locations could be used as pilot schemes for rejuvenating communal back areas to determine feasibility and potential uptake. Once a successful approach has been tested, it could be rolled out to other communal areas to encourage and support local residents to grow their own food and restore the traditional cultural contribution of the back greens to our communities. Apart from the community/dietary/health/carbon saving benefits, this may also lead to considerable savings in the maintenance mown grass.

'Housing corners' are found at street corners in traditional public housing areas. Often they are fenced and offer little amenity value or functional greenspace. They pose a maintenance burden and yet could potentially provide valuable growing space. Granton Community Gardeners in Edinburgh are an inspirational project who use these corners to grow local food. Events and community meals have been held and the community benefits have been manifold, not least in combating isolation and improving community cohesion, as well as impacting on mental and physical wellbeing.

Open Spaces

Disused bowling greens have proved to be successful and vibrant community growing spaces in Dundee. There are ongoing discussions to develop a further disused bowling green in Whitfield. Other areas of existing parks and open spaces also have potential, such as western Caird Park. This substantial area would provide an ideal location for additional allotment plots, if need and demand were evidenced, in addition to section 112 of the Act being triggered.

There is also a proposed large scale orchard development at Riverside Nature Park on a 1.5ha. site, by Dundee Urban Orchards and Friends of Riverside Nature Park.

The Camperdown project

A 4ha site which has been used as Dundee City Council's plant nursery is being assessed as a potential large scale community growing site. A feasibility study has been carried out by Dundee Social Enterprise Network with input from the Maxwell Centre and Dundee City Council. Community consultation has also been carried out and a range of potential partners identified.

Although existing community growing projects are well received by those who use them, food production is relatively small scale with produce supplying the families, individuals and organisations who garden them. To have any meaningful impact on relieving those in food poverty, local food production will require upscaling.

The feasibility study suggests recommendations for business models which support the distribution of fruit and vegetables to those most in need. The report also considers the opportunity for skills development and the establishment of plant production for Council projects. The feasibility study and any potential initiatives resulting from it will be considered by elected members once these are more developed.

Private Gardens

Another area of considerable potential is private gardens. At 1170ha. they make up approximately 20% of open space in Dundee. The Royal Horticultural Society's 'Greening Grey Britain' campaign has estimated that three times as many front gardens are now 100% paved over as compared to that of 10 years ago and one in four of UK front gardens is now completely paved over. This impacts on increased water runoff and reduced habitat for biodiversity. Yet these spaces and back gardens can provide opportunities for vegetable, fruit and herb growing.

Using private gardens can significantly increase food security, as well as having wider community benefit. Innovative schemes such as garden share, where large gardens are cultivated by others who have no gardens. Edinburgh Garden Share aims to link usually-younger people who do not have access to garden space with probably-older people who are struggling to use and maintain their gardens. By introducing potential gardeners to once-were gardeners they keep those patches covered in fruit and vegetables and alleviate social isolation in the process. Garden sharing helps to reduce loneliness in older, isolated people and is likely to effectively improve nutrition.

Community Consultation

Community consultation was carried out in November 2018 as part of an MSC thesis. The resulting report 'Creating An Ambitious Food-Growing Strategy - Recommendations and community generated ideas for Dundee City Council's Food-Growing Strategy' was published in March 2019.

Ideas for the Food Growing Strategy were collected through three participatory workshops, advertised publicly and held at three times and locations to allow a range of people with different schedules to attend. 55 people were involved in the workshops from different community groups, organisations and sectors. Participants included local people, managers of community centres, members of community gardens, allotments and other growing groups, mental health practitioners, academics, students, representatives from a local residents group, a researcher from a Scottish food think-tank, an agricultural expert, representatives from Dundee City Council, Dundee Foodbank and several people from local social enterprises.

The workshops were structured using the Three Horizons tool, which brings people together to create dialogue and stimulate action towards more desirable futures. The approach helps open up thinking beyond everyday current challenges and identifies the ideas needed for the transformational adaptation to climate change.

Through the Three Horizons, workshop participants were asked to answer the following three questions based on their experience:

1. What challenges do we currently face with Community Food Growing in Dundee?

2. If we create a successful food growing strategy, what would Community Food growing in Dundee be like in 2040?
3. How can we move from the current challenges to the future aspirations?

The research and workshop scope was set as anything related to Community Food Growing within the Dundee City Council boundary.

The results were analysed and two feedback and prioritisation meetings were held to identify key themes. In addition to the study above, further consultation took place at the annual Community and Therapeutic Gardens event delivered by Dundee City Council and Trellis. A workshop session engaged participants in the themes and ideas identified by the study. This gave an indication of their relative popularity and feasibility as well as an opportunity for additional ideas to be raised.

The table below summarises the consultation above.

<i>Key Theme</i>	<i>Potential Supporting Project</i>	<i>Popularity</i>
A range of learning opportunities	Growing food in work places Food growing in schools Intergenerational skill sharing	0 18 5
More partnership working	Prescribing food growing Growing skills with job seekers	5 5
Encourage more people to grow	Public Events Better integrate growing in communities	3 10
Different types of growing spaces	Re-cultivate communal back greens Edible planting and foraging	10 7
Enterprise ideas	Community food production system Public events to sell produce	7 5
Ways to increase access to healthy, affordable food	Berry bush signposting Free 'pick your own' patches	4 3

Other ideas generated from the Community and Therapeutic Gardens event included:

- app for berry picking, map, events
- Simple 'How to Grow', 'How to Cook' leaflets for use at community gardens / schools
- Set up garden sharing, mix of generations, share produce and experience.

The report referred to above, also made 9 recommendations which are intended to be far reaching and transformational. Further information on these are contained in Appendix 3.

Other supporting information

Three other recent MSc theses on the subject of the Local Food Growing in Dundee have produced supporting information and recommendations for this strategy.

A study by **Ehrlich (2017)**, using James Hutton Institute's proposed Tayberry initiative, concluded that targeted approaches using specific interventions could provide solutions to a variety of issues experienced by communities.

This conclusion was drawn from evidence including qualitative data from 25 participants in 22 semi-structured interviews. Further analysis generated four main themes: Education, Health, Environment and Society. As the study used the Tayberry initiative as a specific intervention, parallels were drawn between Dundee's past links with fruit production and jam, and a future where urban areas support community growing. "Urban food production may generate multiple benefits, working in interconnected ways to achieve transformative outcomes." The involvement of the planning system was seen to be a key driver to achieve this.

Andre-Mai's (2017) thesis (A Social and Spatial Analysis of Urban Food Cultivation in Dundee, barriers, solutions and amplification pathways). The study analysed the open space in specific areas to identify areas suitable for growing using GIS data (slope, greenspace function, size, maintenance). It related the availability of land with deprivation level and held workshops with communities in these areas to include local knowledge in area selection. The workshops were used to consult on future needs for urban growing to flourish. Key conclusions were a network of community growing champions, coupled with support from the council itself. Although the analysis only focused on two areas in Dundee, it does provide a useful method for determining potential growing spaces in the future.

Urban Food Growing and Food Security: a case study of Dundee by **Outterson (2019)** examined the development of the Food Growing Strategy and its importance in the context of local food security. Information from 13 semi-structured interviews was evaluated with the recommendation that food security targets should form a part of the Food Growing Strategy. Growers interviewed for Outterson's study identified that developing a network was seen as key to encouraging the best use of food, including developing markets for the produce.

The multiple health benefits of berries have been researched by the **James Hutton Institute**, locally based in the Carse of Gowrie. Berries have been shown to have positive impact on Type II Diabetes, heart disease and the progression of degenerative diseases such as Parkinson's.

Challenges to developing further community growing

Contamination considerations

Dundee's industrial past has inevitably led to contamination of the land in certain areas. Dundee City Council has a strong Contaminated Land team who are keen to support food-growing initiatives as part of the Food Growing Strategy. Some contamination information is held on file as data have been gathered over the years. If soil contamination is considered to be a significant risk, taking into account the previous use of the land and its current condition, soil testing may be necessary to ensure that the area is safe for food growing.

Funding and resources

Dundee has been extremely fortunate and has benefitted from the identification of Dundee City Council capital funding to develop community growing spaces as well as funding to assist Allotment Associations. However, due to budget constraints this is no longer available and will constrain the development of Council led developments.

Some community gardens have been successfully funded by the Climate Challenge Fund and this remains a potential avenue for funding. Others have benefitted from Lottery funding, in particular Awards for All. Local funding is also potentially available from the Dundee Community Regeneration Fund. Applications for this local funding are assessed by local forums against the needs of the communities they represent.

Despite the financial challenges facing the development of community growing spaces, there is considerable experience in attracting funding in Dundee. This can be found in well-established projects such as the Maxwell Centre and Ninewells Community Gardens as well as seeking assistance and support from the Community Allotment Officer and Dundee City Council.

Skills Development

The lack of experience and skills in growing is often cited and experienced as a barrier to the development of and involvement in community growing. However, there is now a network of spaces and experienced participants who could potentially provide support, as well as the Community Allotment Officer who will be able to help. In time, it is anticipated that if the Camperdown Project is developed, it will be a focus for skills development and 'hands on' learning.

Dundee and Angus College run horticultural courses and there is potential to develop a set of community learning and skills development opportunities.

Opportunities for developing further community growing

Schools involvement

Although a proportion of schools are involved in growing, there are a significant proportion that are not. Outdoor learning is a part of the National Curriculum for Excellence and is increasingly being recognised as an effective way to engage pupils in their learning and helping to close the poverty related attainment gap. Community growing can contribute to children's learning while fostering good mental health and embedding positive life skills and pastimes in children's everyday lives. Encouraging healthy eating habits with home grown produce will also have positive physical health benefits.

The Community Allotment Officer regularly participates in Continuing Professional Development events to pass on skills and ideas to teachers. There are also programmes such as One Seed Forward (<http://oneseedforward.co.uk/about>), based in Aberdeenshire and Food for Life (<https://www.foodforlife.org.uk/>) which offer inspiration for schools wanting to develop growing opportunities.

As the school terms and growing season do not necessarily coincide, Dundee has taken the approach of aiming to link schools with external community growing spaces. This has happened at Menzieshill, the Tattie Patch and Balgarthno. This ensures that during the summer holidays crops are cared for and produce is harvested. The concept of 365 schools, which is promoted in Dundee, will also enable opportunities to build links between the community and school growing projects.

A planned initiative adjacent to Rowantree Primary School will create opportunities for community growing alongside natural play and other features.

Partnership working

Although there are existing partnerships across the community growing sector, there are opportunities to strengthen them and develop new ones. The Criminal Justice Service is an integral partner to the delivery of new community growing spaces, however it is envisaged that the team may

become further involved with community growing, for instance in the collection of surplus and distribution of locally grown produce. The work of the Community Allotment Officer is greatly supported by council officers working in communities. This supporting work is vital to the sustainability of growing projects.

External partnerships are a valuable asset to the community growing network. Often these partners are from voluntary and third sector organisations, but others such as Dundee University, NHS Tayside and Leisure and Culture are also involved. Expanding these networks and involving others is also a key opportunity.

For some years Dundee City Council has worked with Trellis (Scotland's Network for Therapeutic Gardens) to deliver an annual event for community gardens. This networking and learning opportunity is available to all the community growing initiatives in Dundee and currently attracts over 60 participants.

Land use planning

The development of National Planning Framework 4 and the Planning (Scotland) Act 2019 presents further opportunity to embed community growing into land use planning. Supporting community growing through a new local development plan will also be explored. This process is likely to commence towards the end of 2020.

The Local Development Plan, added to a mandatory responsibility to produce an open space strategy will strengthen the future development of community growing.

Incredible Edibles - initially conceived in Todmorden, West Yorkshire, this initiative has grown into a network of 100 members. Edible and Tasty Spaces in Fife has taken on the model of using redundant and unloved civic spaces to grow food and edible crops.

Communication

Although Dundee has a well-developed network of community growing spaces there are opportunities to further develop communication links. Dissemination of information through awareness raising, promoting good practice, skill development and training is developed in the action plan.

Part 9 Allotment guidance from the Scottish Government details information that is to be made available to local communities. It is intended that information from managed, leased and private allotments is available in one place, so that local people are able to search for information easily both online, as well as using other communication methods. Dundee City Council has an existing welcome pack / good practice guide for allotments, which will form a basis for review.

Local Food Growing Action Plan

The following action plan is intended to be a working document. Brief summaries of potential projects are given and delivery of these will entail further development by lead partners. Resources to deliver the projects are also not identified, unless they have agreed funding or officer time in place.

Action Plan 2020 – 2025

Support Community Growing	Lead	Partners	Measure of success	Timescale
Establish a food growing group	DCC - ENV, CAO	Community Gardens Allotment Associations	Group established	2020
Annual community and therapeutic gardens event	CAO	Trellis	Number of groups participating	Annual
Promote funding opportunities and seek support from local business	CAO		Funding generated	Ongoing

Develop Community Growing	Lead	Partners	Measure of success	Timescale
Establish growing space at Lily Walker Centre	CAO	DCC - Housing	Growing space established	2020/21
Establish growing space in Fintry	CAO / Local community		Growing space established	2020/21
Work to embed Incredible Edible initiative in Dundee	CAO	DCC - CD	Establish growing in civic spaces, e.g. City Square	2022
Establish growing initiatives in care settings	CAO	DCC – ENV HSCP /NHST		2024
Upscale urban food growing	DCC – ENV, CAO	Maxwell Centre Dundee Social Enterprise Network	Seek to implement the recommendations of the Camperdown Growing feasibility study	2021 - 2025
Promote and develop a garden share scheme	CAO			2023
Establish pilot growing spaces in communal greenspaces / back greens	CAO	DCC - Housing Local community	Linlathen, Fairbairn Street, Caird Avenue	2020 - 2025
Identify suitable housing corners for growing spaces	CAO	DCC (CD, Housing) Local community	Number of corners developed as growing spaces	2020 - 2025
Work in partnership with Dundee Urban Orchards / Friends of Riverside Nature Park to develop an orchard project	DUO / FoRNP	CAO	Orchard established at Riverside Nature Park	2020 - 2023
Identify of opportunities for soft fruit and top fruit in greenspaces	CAO	DCC – ENV	Number of areas	2020 - 2025

Investigate feasibility of surplus food distribution with Criminal Justice Service	CAO / Criminal Justice Service	Allotment Associations / Community Growing		2023
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Developing skills, raising awareness and promoting good practice	Lead	Partners	Measure of success	
				Timescale
Promote the use of organic growing methods	CAO	Community Gardens / Allotment Associations		Ongoing
Promote the use of Discovery Compost	CAO	DCC - ENV	Locations using Discovery Compost	Ongoing
Explore links with Dundee and Angus College in the development of learning opportunities for community growers	CAO / Dundee and Angus College		Number of opportunities developed	2022
Build capacity in schools so they have the resources, and teachers and staff have the knowledge and skills to provide Food Growing learning experiences, e.g. by implementing One Seed Forward and Food for Life programmes.	DCC	DCC – Children and Families	Uptake of programmes / use of learning resources	2021
Provide training opportunities for local people	CAO	Third sector		
Review and update allotment information in accordance with Scottish Government guidance	DCC – ENV, CAO	Allotment Associations / Community Gardens	Information is available. DCC existing welcome pack reviewed	2020/21

Links to other policy areas	Lead	Partners	Measure of success	
				Timescale
Seek to incorporate other key priorities into growing initiatives e.g. action from Biodiversity Plan and Climate Action Plan	CAO	DCC – CD, ENV		Ongoing
Link Community Growing to food insecurity initiatives	CAO	Community Planning / Local communities		Ongoing
Develop network of Green Health Prescription referral opportunities	CAO	Dundee Green Health Partnership	Number of supported opportunities established	2020 onwards

Land management and planning	Lead	Partners		
				Timescale

Ensure that contamination is considered when developing new growing spaces	CAO	Contaminated Land Officer		Ongoing
Investigate policy support for growing spaces in new development	CAO	DCC - CD	Inclusion of appropriate policy in Local Development Plan	2023
Identify land for community growing / allotments e.g. vacant and derelict land	CAO	DCC – CD	Area of land identified	2023

Monitor and review				
				Timescale
Annual Allotment Report to Scottish Government	CAO		Annual report submitted	2021 >
Review Local Food Growing Strategy every 5 years	CAO		Refreshed Strategy 2025	2025
Set Allotment Regulations	DCC – ENV	Allotment Associations	Allotment Regulations published	Apr. 2020
Accurate assessment of half / full plots	Allotment Assocs.	DCC		
Maintain waiting lists / share vacant plot information with all waiting lists	DCC	Allotment Associations	Number of vacant plots reduced	Ongoing

CAO – Community Allotment Officer

DCC – ENV – Dundee City Council Environment Service

DCC – CD – Dundee City Council City Development

HSCP – Health and Social Care Partnership

NHST – NHS Tayside





Dundee CHANGING FOR THE FUTURE
City Council

Neighbourhood Services, Environment,
3 City Square, Dundee, DD1 3BA

Date: 15/01/2020





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Appendix 2

Case studies:**Tay View Community Garden**

This urban site is only 15 minutes' walk from the city centre and close to a busy junction. The extensive site is steeply sloping and prone to flooding at the bottom of the hill. This was developed as a Dundee City Council project with substantial input and collaboration with local residents. DCC's City Development service



identified the site as a parcel of vacant and derelict land and offered it as a possible community garden site. The design used terracing to compensate for the slope and this informed the layout of paths, preserving access across the site for residents to get to the bus stops. A group of interested gardeners was built up as the plans and build progressed so that, by the time the garden space was ready, the governance was in place to make decisions and allocate space.

Since the community garden was a council-driven project, the design and funding was generated in-house. DCC's landscape design team provided the terraced design, which was costed at approximately £60k, and the build was carried out by a DCC team. This injection of cash allowed a big garden project to proceed without the community group needing to apply for funding or wait years for their garden to appear. The downside of this is that the community can appear or feel sidelined and it is then difficult for them to take ownership of the garden once complete. This possibility was compensated for by the continuous involvement of the local residents by contributing to the design and building the governing group alongside the build. By the time the garden was ready, people felt included and part of the project.



The build attracted a lot of attention, with outside funding organisations encouraging applications. This generated enough money to provide a Portakabin for meetings and tool storage, as well as public art. The garden has featured on the Beechgrove Garden and is a Green Prescribing destination from the adjacent GP surgery. Froglife approached the council for suggestions after they received grant funding to build urban ponds, needing suitable locations. The low-lying, flood-prone area was the perfect location for a natural-looking pond and this was built in the winter of 2017/18. Dragonflies were seen over the water the following summer and nymphs found by pond-dipping with nursery groups. The biodiversity of this area has benefited hugely from the garden project and is greatly appreciated by local residents and gardeners. This project was nationally recognised when it won the top award of £5k in the national Cultivation Street competition.

The Maxwell Centre – Every1's Garden

The Maxwelltown Information Centre (<http://maxdundee.org.uk>) is an independent charity, which has been a part of the Hilltown community for over 20 years. Initially set up as a drop-in for help with benefits information etc, the organisation moved to larger premises in the St Salvador's church hall when the Alexander St multis were demolished in 2011. This gave them more scope for hosting classes, computer access and they had some outdoor space in the form of a derelict builder's yard. Major grant funding to the tune of £150,000 was obtained from the Climate Challenge Fund to rejuvenate the space for planting and employ staff to engage the local community. Five years on, the garden is part and parcel of the Hilltown community, with four primary schools visiting weekly and the highly popular summer garden club offering inner city kids a truly nourishing experience. They can enjoy good food and wholesome activities in a multi-layered green environment where they learn



and build friendships and resilience naturally. The centre caters for the whole community, with English as a Second Language, crafts, IT and cooking classes running alongside the garden. Food bank referrals are taken at the centre and this is an opportunity to offer users a visit to the garden and the chance to pick some fresh veg/fruit. This provides a destressing, destigmatising break that can help calm and restore people who arrive in crisis. A free cup of tea also helps! Menu for Change worked closely with the Maxwell Centre in developing their "Found Wanting" report and now have an embedded worker based there who can make food bank referrals while offering comprehensive advice to alleviate the food insecurity which they found to be so prevalent in Dundee.

The garden boasts several mini-allotment style ground level beds, a wall-trained orchard, polytunnel, several raised beds, fruit cage and an outdoor classroom building for activities and shelter. The site is unlocked and open so can be accessed at any time. Biodiversity is prioritised for the health of the garden and the human visitors; ladybirds abound. A pond has been a focus of interest with froglets and an adult newt found. The koi carp that mysteriously appeared is a less-welcome visitor as exotic fish will rapidly deplete native wildlife in a pond. Soft fruit is so abundant in the summer that anyone can help themselves. The MAXwell Centre garden is an example of how beneficial community gardens can be in deprived areas, having garnered multiple awards.

Whorterbank Community garden

Whorterbank is a local authority-owned, high-rise, residential neighbourhood ranked in the lowest 1% according to the Scottish Index of Multiple Deprivation. The idea for a community garden in Whorterbank was initiated in January 2015 by the local tenants' association: the Phoenix Group. Pilot food-growing areas were established to publicise the concept and attract attention. A key contact here was the Laughter Club: an activity group for primary-aged children in the area. A member of their staff had approached the MAXwell Centre to assess the local space for food-growing potential. Contact with local young people is vital for garden spaces to be protected and nurtured. The main pilot space was developed with the Laughter Club's staff and children and named the Tattie Patch.



The Tattie Patch is central to the area, overlooked by a tower block of flats and people constantly pass by, so it was ideal as a showcase for local residents to see. It did not always result in positive comment at first; residents suggested that such projects could not happen in Whorterbank as they would be 'trashed'. The children dug over the space with enthusiasm but not much strategic effort so the Council's Community Payback team were called in to finish the job. They laid a simple path down the middle of the 20 x 6 m space, with only the purchasing of basic materials required. The children planted potatoes, lettuce, beans, peas, carrots, broccoli, red cabbage, beetroot and soft fruit. By the end of the season, the Patch had been on the local TV news, residents had collected their share of the potatoes and everyone had enjoyed fresh local vegetables. No vandalism had occurred and the concierges even reported a reduction in anti-social behaviour.



Stage set for the bigger garden, responsibility passed to the council to move the project forward as the residents' association was depleted in numbers and struggling to orchestrate it. Design ideas were printed in both English and Polish, posted in the multis and on trees on site. All local residents were leafleted to come to consultation meetings. Design finalised and council budget was allocated to the development. The garden was built by the council team but planting was all done by local people including 16 orchard trees.

The Community Garden has revitalised the residents' association and established reciprocal contacts with the newly-opened Whorterbank food larder. Gardeners have initiated wildlife projects and astronomy nights as well as popular events throughout the year. The garden featured on the Beechgrove Garden and is a regular participant in the Eden Project's campaigns such as the Big Lunch. They have also been successful

in attracting grant funding for wildlife cameras, a shed, telescope and other essentials!

The Whorterbank Tattie Patch has now been taken over and redeveloped by St Mary's Primary School as part of their recognition of the value of Outdoor Learning. The Head Teacher and Deputy Head report tangible changes in behaviour, attainment and achievement amongst some of their most challenging pupils. Research is underway to evaluate and document these anecdotal benefits.

Ardler Community Garden

The Ardler garden is an example of what can be done in a tight space with hardly any existing soil. This was a paved 15 x 15 m quadrangle secured with razor-wire and padlocks; graffitied and over-shadowed with rank shrubs. The location in between the Community Centre and the Medical Centre highlights the importance of food-growing community projects and raises the profile of the garden. The recent reopening of the community café by MacMillan has opened up new possibilities for public engagement alongside health initiatives.



Raised beds made from local timber were constructed in the paved area and against the south-facing wall (painted white to cover the graffiti and bounce more light around). The limited, north-facing bed was planted up with soft fruit: raspberries, currants and strawberries. Grape vines and kiwis have been trained against the wall and a

bright, stripy canvas pergola offers shelter to lunchers. 16 raised beds are tended by various groups, families, individuals and organisations. A volunteer garden mentor helps to facilitate the groups and does much of the tidying/weeding etc. All of the raised beds were filled with Dundee's recycled green waste Discovery compost and this nourished a huge crop last in 2019.

Appendix 3

As part of an MSc thesis (N. Wright 2019), initial consultation on Dundee's Local Food Growing Strategy was carried out by inviting local people to 3 workshop sessions.

The workshops involved 55 people living in Dundee or working for a related organisation, and were structured using the 'The Three Horizons' tool for future thinking (Sharpe et al., 2016). Participants identified current challenges with food growing in Dundee, described how they would like things to be different in the future and developed ideas for the Food Growing Strategy that could help move from the current challenges to the desirable future.

The workshops were conducted as part of an MSc dissertation with a focus on transformational adaptation to climate change, which is needed to reduce the impacts of inevitable climate change (Pelling, 2011; Lonsdale et al., 2015). Global food security is predicted to be negatively impacted this century due to reduced crop yields caused by climate change and increasing demand from a growing global population (Endo et al., 2017; FAO, 2011). Many people in Dundee already face problems in accessing food, including 28% of children living in food poverty (Scottish Government, 2015). However, Dundee's land, history and current interest in food growing have potential for increased food production. Community food growing can also benefit mental and physical health, isolation, community cohesion and unemployment (Wakefield et al., 2007; Guitart et al., 2012; Twiss et al., 2003; Drake and Lawson, 2015). Therefore the Food-Growing Strategy presents a unique opportunity to interest more people in food growing, reduce hunger and improve health and well-being.

In addition to prioritised ideas for action (see page 13) the thesis identified 9 recommendations:

1. Recognise the value of the 12 ideas in the table above generated by interested individuals and organisations at the workshops. Work to include at least half of these in Dundee City Council's Food-Growing Strategy through further consultation with people and organisations not yet involved.
2. Address the perceived lack of political will and support for Community Food Growing. Build on current successes and high levels of interest by increasing funding and resources. Recognise the multiple benefits of growing activities, collect evaluation data to demonstrate the benefits and publicise success stories.
3. Focus on the changes needed at mindset level. These will have the greatest impact as everything else within a system conforms to the dominant mindsets (Meadows, 2008). Three key barriers to Community Food Growing were identified at mindset level, through academic analysis conducted after the workshops:
 - Perceptions of Community Food Growing, especially by those not yet involved
 - Concerns about the safety of food grown in a city compared to that sold in supermarkets
 - The prioritisation of money over health and environment within decision making
4. Define a goal for community food growing in Dundee in collaboration with other actors and individuals, in order to align efforts across the system. The current goal seems to be growing for small-scale recreation and leisure, however this does not produce enough food to seriously tackle food poverty. Several different goals were suggested by participants, all of which involve an increased scale of growing and the number of people involved.
5. Improve information and communication to maximise existing resources and activities. For example, access to growing spaces is hindered by a lack of information about where spaces are and how to join, rather than a lack of growing spaces.

6. Introduce new policy to improve access to space. For example, giving housing association tenants permission to cultivate land and including accessible growing spaces within new developments.
7. Strengthen interconnections and partnership working with related sectors such as healthcare, social care and education. Whilst there are some emerging examples, this is currently a missed opportunity to align efforts and budgets amongst organisations working towards the same outcomes. See Brighton and Hove Food Partnership.
8. Allow for multiple types of growing spaces in the Food-Growing Strategy to interest different people. From open access community gardens to 'pick your own' fruit and veg patches, foraging in parks, re-cultivating tenement back gardens and more high-tech options such as hydroponics.
9. Increase access to funding and resources for food growing, especially for people without disposable income. This can be done either by increasing funding or by reallocating existing funding. For example, through improved partnership working where budgets and resources are pooled to meet shared outcomes.

