Cultivating Urban Greenspace Day Symposium

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Introduction

The myriad benefits of urban greenspace are well documented. Green environments bring better self-perceived health, lower blood pressure, lower levels of overweight and obesity, and lower mortality risks. Even viewing greenspace can bring reduced healing times, restoration from stress/mental fatigue, reduced domestic violence, and a greater sense of well-being and neighbourhood satisfaction.

At a community-level, the presence of and shared activity in (well-maintained) greenspaces can increase perceptions of safety and reduce crime, lead to a change in social norms, assist in developing stronger socio-cultural networks and opportunities for inclusion, combat social isolation, and enhance community capacity and civic pride.

At an individual level, activities such as gardening can provide an often absent sense of effectiveness and/or control, increase physical fitness, reduce stress, and heighten one’s capacity to think clearly. Gardens themselves are valued for their tranquility, privacy, and ontological security, particularly when the surrounding local environment is poor, and are places of attachment and affection.

These factors have all been shown to be particularly important in deprived areas, which often have relatively few publicly accessible greenspaces, and for residents in high-rise or multi-unit housing where a lack of territorial control over shared space or opportunity for social interaction can impact negatively on mental health.

Yet, relatively little is known about the ways in which greenspace exerts these effects, the extent to which different types of greenspace matter, and whether greenspace disproportionately impacts specific socio-demographic groups.

This symposium, sponsored by the Human Geography Research Group in the School of GeoSciences at the University of Edinburgh provided an opportunity for a self-selected group of practitioners, policy makers and researchers interested, specifically, in the cultivation of urban greenspace to meet, and to listen to the experiences and insights of, colleagues working in this field. As well as providing a networking opportunity for these three groups, a key aim of the symposium was to stimulate the cross-pollination of ideas and to generate ideas for relevant future research.

This over-subscribed event was attended by 16 practitioners, 16 academics, and 1 policy-maker.

The format of the symposium included five speakers (three academic, two non-academics), followed by a small group break-out session and a final open discussion. This report documents the discussions and key themes raised by the event. Please note that, although detailed, the text aims to provide a summary rather than a verbatim account. At the end of the report I have compiled a list of prospective research themes identified by the participants.
Elaine’s presentation concerned community growing in Scotland and was based on a scoping study recently published by Greenspace Scotland entitled Community Growing in Scotland.

Elaine began by defining the term ‘community growing’ as the growing of vegetables, fruit and sometimes flowers on land which not the person’s own private garden. It usually involves a group of people growing on the same piece of land either individually or communally. It happens in a range of different ways and in a range of different places, the allotment being the most familiar but it can also include community gardens, land share, community orchards, community supported agriculture, and edible landscapes. It can take place on sites specifically set out for growing, school grounds, the backgreens and backcourts of tenements, to public land on housing estates, and even temporary spaces which might be developed in the future.

Demand and interest
In 2007 the Scottish Allotment and Gardens Society recorded that there were more than 3,000 people on the waiting list for allotments in Edinburgh alone and at that the time the total number of allotments in Scotland was 6,341 which suggests a need for at least a 50% increase in the number of allotment plots to meet that demand. A more recent survey in 2010 of the waiting lists in the principle cities of Scotland recorded nearly 6,000 on these. Although these figures are not directly comparable they do show a significant increase in demand for allotments and growing. This is just known demand, over the process of the scoping work conversations with community growing experts highlighted that demand is even higher than on the waiting lists. There is an unknown or latent demand which is not acknowledged, recognised or quantified at the present time.

Anecdotal evidence suggests that some people are not aware of the lengthy waiting lists (and that some local authorities do not collect information on demand for allotments) and that others are deterred by lengthy waiting lists. These experts also suggested that a lot of people want to get involved in growing but do not feel ready to take on the commitment of an allotment or they are not aware of different ways to get involved with growing. In some circumstances, particularly for those in disadvantaged areas, they do not even know that they have an option or that growing their own is a possibility. Yet, it was felt that with more support, information and awareness these communities would be keen to explore community growing.

Allotment waiting lists do provide a proxy for unmet demand, yet their size still does not fully represent demand and that demand is not fully being met by all or any of the forms of community growing in operation at this time. There have been leaps forward in our approach to community growing in Scotland but at the present time there is only a limited amount that can be done due to the lack of resources.

Greenspace Scotland have not looked extensively at the reasons behind the growth in ‘growing your own’ (GYO) but others have. They include lifestyle choice, the enjoyment of watching things grow, a desire to reduce food miles and reduce their impact on climate change, a desire to take part in a social activity (both community and family) and to get out of the house, to improve one’s health and increase physical activity, a stress relief, developing something new. Community growing is not just about food, there are a range of environmental, social, health and economic outcomes that can be realised through community growing.

There is a need to consider a range of different approaches to cultivating urban greenspace and accessing community growing. One model will not fit all, it would never be able to meet all the different demands and suit all the different capacities of the people involved.

Elaine looked at just some of the different forms of community growing occurring in Scotland at the present time.

Allotments are probably the most familiar and traditional form of community growing in Scotland. An allotment is an area of land divided into plots which lots of individual people garden. They are rented from allotment providers, usually a local authority but sometimes a private landowner or an allotment association. They tend to be associated with individual plots but frequently have communal areas and/or orchards. At the moment supply is simply not meeting demand. Landowners and sometimes the public still have negative perceptions of what sites might look like and concerns about giving up the land to the community if they worry that they might never get it back.
Individual groups, however, are making a lot of progress. For example, the Sunny Lochaber United Gardener (SLUGS) group have developed Cow Hill Allotments in Fort William on Forestry Commission land via the National Forest Land Scheme which gives communities the opportunity to buy or lease National Forest land for public benefit. Also Greendykes Organic Allotments (GOALS) in Craigmillar, Edinburgh, located on unused community amenity greenspace adjacent to the tower blocks. These allotments were organised through the Council’s Concierge service which was seeking to support and generate community action in the area. The creation of these allotments has strengthened the whole community fabric; neighbours have met each other for the first time and new tenants are welcomed in to the area through the project.

Community gardens are also used or developed wholly or in part as a mechanism for community growing purposes. These are locally managed pieces of land that are developed in response to, and to reflect the need of the communities in which they are based. Most of the growing that happens in these spaces is communal rather than individual plots and they are sometimes seen as an easier access point for people who want to get involved but do not want to commit to taking on a huge area of land. An example is the Girvan Community Garden in Ayrshire (just launched) which has brought to life a patch of land in the community which has lain dormant for 30 years. One of its main aims is to teach local parents how to grow food and to encourage their children to eat more healthily. Alongside this they have a Green Gym to help people get fitter, they run training and educational activities and they also plan to set up a shop.

Community Orchards are managed by communities and are open for community use at all times. The community share the harvest.

Community supported agriculture involves a partnership between farmers and the local community providing mutual benefits for both parties and reconnecting people with where their food comes from. The format varies widely and it is an area of emerging practice.

Community market gardens involve large areas of cultivated land often involving poly tunnels or similar infrastructure and under community lease. There are only a few examples of this in Scotland and they mainly operate on a social enterprise basis (e.g. vegetable boxes).

Edible landscapes is a catch all for growing on sites which are less formal or less associated with growing projects. In many cases it involves growing fruit and vegetables in civic spaces more regularly used for formal planting schemes and small incidental spaces.

Elaine highlighted that we also need to consider where we will do this as well as how we will do it. How are people thinking about this creatively given the constraints on land availability that we have in our towns and cities?

Tenement backgreens provide a major opportunity (semi-public communal spaces) in places like Edinburgh and Glasgow. In recent years there has been a surge of interest in regenerating these spaces to meet modern day needs, many of which have fallen into disuse. Edinburgh Community Backgreens Association (ECBA) have established 15 backgreens in Edinburgh to date and incorporate a range of different types of community growing.

Temporary spaces, vacant land, stalled spaces earmarked for long-term development are also being used. The economic downturn means that a lot of these spaces are being left vacant and could potentially fall into dereliction. Modular growing systems such as Sow and Grow Everywhere (SAGE) are a good example of this as the growing system can be moved to another site.

Land sharing schemes are another emerging area of access match potential growers to landowners who are unable to manage the land they have. Site owners might then receive a proportion of the produce. There are a number of schemes in Scotland typically involving websites where owners advertise their land and potential growers register their interest. There is action at the moment to develop a Scottish Land Bank Service.

**Constraints and barriers**

The main constraint for all types of grower is availability of land. Landowners are sometimes wary, unable or unwilling to make land available for long-term growing. It can be difficult for communities to go out and find land and, when they find it, it is difficult to find out who owns it. Different public sector organisations have different constraints, different rules and regulations on how whether they can make land available on a long or short-term basis. Yet, there are real opportunities to explore how public sector estate can be used for growing
and there is a willingness to support that (see for example the work of the NHS and Forestry Commission Scotland).

In terms of evidencing demand, a lot of evidence for the demand for community growing in Scotland falls back on the waiting lists but there is also anecdotal evidence out there too. In some areas demand is not recorded and there is a lack of confidence in level of demand recorded. As a result a lot of authorities are reluctant to invest in new sites and infrastructure. We need more robust evidence on demand in order to justify new policy practice and the allocation of resources.

Issues relating to the planning system include the lack of drivers for developers to include community growing in new housing or workplace developments. Some developers have found planning permission for change of use is difficult. In some areas there is resistance among local residents because of negative perceptions. The planning process itself is also difficult for local groups to navigate and engage with.

Land condition is also a real issue; many sites within our cities are thought to be contaminated and dealing with this is time consuming and complicated.

Access to funding is difficult for different forms of community growing. For example, some funding bodies view allotments as a ‘private facilities’ which benefit individual plot holders. Similarly, backgreen and backcourt areas are not seen as being publicly accessible. Other funding bodies are reluctant to invest in temporary growing spaces. Social enterprise activities are for some types of community growing; allotments, for example, are not allowed to sell their produce.

Gaps in guidance and skills support for communities are also an issue, particularly with the rise in emphasis on community management and ownership of these spaces. Some communities are daunted by the level of responsibility they will be expected to take on board particularly if they are new to growing.

Elaine noted that to the best of her knowledge, this symposium is the first event on urban cultivation to bring together an audience of practitioners and academics and provided an important opportunity to explore what might be generated from such a connection. There is a huge amount of activity going on in community growing across Scotland which is being supported by emerging policy frameworks (although not necessarily greenspace policy). For example, the Recipe for Success is our national food and drink policy and the Grow Your Own Working Group has come together to take forward the elements of the national food and drink policy related to growing food.

Elaine welcomed the symposium as the first event which has pulled together practitioners and academics.

**Q&A themes**

Q: Value or cost of community growing – can research be done on value of community growing in monetary terms? This is what the Government and Local Authorities want to see, the cost implications of providing land for community growing (e.g. summary of value per square meter). If we can do that then they will be able to use this as justification.

E: Greenspace Scotland have been looking at value in terms of different community growing spaces in Scotland but this is something they are keen to explore further in the future.

Q: Latent demand for allotments particularly in Edinburgh is significant so future research in this area would be useful for Local Authorities. The City of Edinburgh does an annual Household Survey of 5,000 households and something of that scale is required and would be greatly valued.

E: Part of this is an awareness raising exercise finding out what people think about allotments and what they actually know about other forms of community growing. Greenspace Scotland would be interested in taking part in discussions with academics about this.

Q: Are there any academic studies of the demographic profile of applicants for allotments? Is it a predominantly middle class or more affluent phenomenon now?

Q: What do we mean by the middle class? We all have or have had jobs so are we not all working class? Do we mean affluent and if so do we mean rich in terms of money or time? On allotments one can see a whole range of people.

E: There may be a gap in our knowledge here and it would be worth doing some investigation.

Q: A really good project would be to digitise these waiting lists because it would be great to give these people information about other opportunities? Is
Q: Perceptions of allotments – it is frustrating when people seem to think that allotments are ugly when in fact they are beautiful. There is work to be done on convincing people these areas are not messy. There is also a need for more action research, research that does not place a burden on the practitioners. Can research projects contribute to their costs as well as those of the researcher?

Q: Putting in raised beds is quite expensive and it requires a fairly long term commitment to a piece of ground. Orchards tend to be relatively cheap and cheerful to plant. Do we need to obsess about access to land? Some groups never look for a lease agreement they simply ask for permission to go and plant. Funding tends not to be an issue either as they tend to be public. Likewise, although it is difficult to assess demand we should not let this prohibit us from getting on and doing something as in Castlemilk in Glasgow where the act of planting fruit trees has kicked off subsequent actions. There is definitely a need for action research, researchers getting in and getting their hands dirty even if it is doing something fairly modest. It is important not to get too bogged down in planning decisions, people just need to get out there and start doing small things.

Q: Areas of deprivation or regeneration tend to have a lot of land available (and people with time on their hands). In more middle class areas land tends to be at a premium.

Q: When we are talking about availability of land we need to be really careful with our definitions of greenspace – what do we mean by this? Sometimes it is easier to think about it as open space. A recent audit of vacant and derelict land around Edinburgh highlighted a fantastic amount of space so it is difficult to say there is no available land; maybe it is about redifining when we mean when we try to think about land that is available.

Q: Is there an underlying assumption that community gardening is an alternative to allotment growing? Are we thinking about them in terms of a waiting room while people wait on the allotment list? Perhaps true but they are both equally valid just with different agendas.

E: No, community gardens are really set up with the needs of the local community in mind as opposed to what an individual wants.

Q: The Edinburgh Permaculture Network have a forest garden which is similar to a community garden with herbs and fruit trees and one issue which is important to them is that of food security. With the price of oil and then food going up in future there will be a lot of people who can not afford to buy food. So what about the food security issue? This is definitely an area of future research.

E: This is not an issue which Greenspace Scotland knows a lot about and it did not feature strongly in the scoping project but certainly there are a few communities, particularly the Transition Town movement, who are starting to think about this issue. This is definitely an area that we need to look at in the future.

Q: The list of the most common barriers was informative and illuminating. Local Authority community engagement teams can be a tremendous resource in terms of getting things done.

Q: Land audits in Edinburgh suggest there is total open urban space of 6,600ha but 2,964ha are private gardens. The danger of cultivating greenspace is that we always take from community spaces but we need parks and recreation space. So maybe we should be supporting research into why owners of private gardens are so reluctant to share their space or to use it productively. Unkempt gardens can turn into a dis-benefit; there are a lot of underused gardens which appear to be derelict space. There is very little information about attitudes.

E: This is emerging through the land share agenda but it is right that the impact of vacant and derelict land can have a negative impact on health and well-being but this can also include private gardens. There is a gap in the research here.
Liz talked about a study she undertook with Richard Mitchell at the University of Glasgow on the relationship between greenspace and health and whether gender matters in this relationship. The presentation did not focus on urban cultivation per se but the work was relevant in a more general sense.

Neighbourhoods and health have received a lot of academic interest on our health regardless of our individual characteristics. There is also research which shows that these effects vary according to gender. Studies have looked, for example at social capital and the effect of the social environment on health on residents and have found that the quality of the social environment has a particular impact on women’s health. In contrast, another study has shown that the physical environment is more beneficial for men’s health.

Neighbourhood greenspace has also attracted a lot of attention recently and many studies have shown that greener neighbourhoods have healthier people living in them. They have better self-reported health, lower levels of obesity and overweight, higher survival rates and lower mortality risks. A few possible mechanisms have been suggested for this including the restorative effects of nature and their effect on stress relief, the facilitation of social contacts, and the provision of opportunities for physical activity. There has been less explanation of how mechanisms vary for different social groups.

What recent research suggests is that if we increase greenspace availability then health benefits will follow for everyone. Yet, we must ask ourselves if the greenspace/health relationship varies across the population. If we rush into greening our cities then without exploring this issue we run the risk of designing our greening interventions in the wrong way and any health benefits might be distributed inequitably.

The study was ecological using area level greenspace and area aggregated health data. It was quantitative and cross-sectional; it just looked at a moment in time, a snapshot.

One of the main issues that had to be overcome was that there was no data set on greenspace availability for the UK that was sufficiently detailed. This problem was overcome by using two separate data sets: the Generalized Land Use Database (GLUD) which can identify greenspaces from 5m² upwards but which is only available for England and the CORIN data set which is coarser (25ha upwards) but is a UK wide data set. To get a data set which covered the UK but was also sensitive to smaller areas of greenspace they did land use data regression modelling using the European CORIN data and added in population density from the UK Census and then used this to see if they could reliably predict greenspace as measured by GLUD for England. For England, they found that this predicted the actual values extremely well. This data is available at the CRESH website.

The study looked at 6,432 wards or neighbourhoods which were an average of 5km² with an average population of just under 7,000. The total population for the study then was just under 30 million. They also obtained the relevant mortality data sets for the Registrar’s Offices in England, Wales, Scotland and Northern Ireland for adults aged 16-64 years old and extracted figures for Cardiovascular Disease (CVD), Respiratory Disease (RD) and Lung Cancer (LC) mortality. LC was used as a control outcome because there is no plausible link between greenspace and lung cancer. The study also controlled for other known factors including age, socio-economic status, country of residence, and air pollution.

The findings of the study were as follows. For males, as greenspace increases the risk of CVD mortality decreases. In fact there is a 5% reduction in risk which might not seem a lot but there are 2.2 million men in this group. For females, there was no significant relationship between CVD and greenspace; likewise for RD mortality. The lung
cancer mortality risk control group found no link between LC mortality and greenspace for men, but two of the groups showed a significant influence on female LC mortality. The researchers suspect that greenspace itself is not a significant factor in LC mortality amongst women but because they were unable to control for smoking behaviour in their models it is impossible to rule out smoking as an influence here.

In England there was a modest but significant decrease in risk of CVD mortality for men. In Wales there was a relationship but there was not a dose response trend. For Northern Ireland and Scotland there was no relationship at all between greenspace and CVD mortality. Similar findings were found for RD mortality. England had the lion’s share of the population (nearly 90%) which meant it dominated the models. When interpreting the findings then, it is clear that there is a protective association between ward level greenspace coverage with CVD and RD mortality for men but not for women. They found that the effects were relatively modest but because of the large populations exposed to these protective effects the implications are substantial.

In terms of the gender differences, there is a large amount of literature showing that men and women use greenspace in very different ways. Women tend to be under-represented in urban greenspace and when they are they are less likely to be engaged in physical activities. The literature also identifies a range of social, physical and psychological barriers to access to greenspace for women; the most important being those related to safety and quality. Women have a strong preference for areas with visible management and law enforcement, well-maintained areas that are not isolated or remote. Studies looking at quantity of greenspace are therefore adequate to look at the relationship between men’s health and greenspace but not necessarily for women. We need data sets that are more sensitive to quality.

Why is greenspace related to health in England and Wales (to some extent) but not Northern Ireland or Scotland? Perhaps a more favourable climate, maybe better quality of greenspace, this result needs more investigation.

Methodological issues that need to be borne in mind when interpreting this work include: the fact that it used area level data and there was potential that it might have involved exposure misclassification (e.g. it assumed that everyone in a neighbourhood had the same access to greenspace); there was a problem of confounding (e.g. smoking rates); because it was a cross-sectional study they can not infer any causative impacts (they can only say men in greener areas were healthier at this point in time).

The strengths of the study include: it was the first UK-wide study of greenspace and health; it had a very large sample; and the objective measures of health and environment used were robust.

It is really important that we do not assume uniform benefits of urban greenspace for all. We need to understand the greenspace and health relationship if we are to go about greener our cities to create equitably healthier environments.

**Q&A themes**

Q: How did the study control for air pollution?

E: Particulate matter was the air pollutant used and we had fine resolution neighbourhood estimates of air pollution derived from a previous study.

Q: It appears that greenspace has no effect on mortality rates in Scotland so why are we here today talking about it?

E: Greenspace quantity has no influence but if we were able to develop better measures of greenspace and explore the relationship between greenspace quality and health then we would find a different story.

Q: As the data is UK-wide, could greenspace in this study include a ploughed field next to a housing estate?

E: Yes, if it occurred in or next to the urban area.

Q: The quality of information from large-scale studies is an issue – how useful is information derived from these large scale projects?

E: It is interesting and telling that we can still find a relationship between greenspace and health regardless of the type of greenspace. You do not need to enter greenspace actively in order for it to be beneficial.

Q: As a local greenspace manager the difference between men’s and women’s gain of out greenspace is fascinating. Local Authorities are now required to do quality assessments now and this is the sort of information that we could use to defend the presence of parks and the management of parks. On the reverse side, there is pressure on Authorities
now to re-naturalise environments but in many cases this would be seen as being less visibly managed. Is there a potential conflict between these two agendas?

E: This is why qualitative studies talking to groups about why they do or do not use greenspaces are important.

Q: A practical thing would be to have information on how we can create more natural sites but which are designed in a manner to make them more attractive to women.

Q: Might some of the population covered by the study have been involved in commuting backwards and forwards to an area and does that need to be factored in? Some areas which are greener are arguably in the commuter belt. Also, can we have some discussion about the different groups that live in different parts of the city? Is it possible to dig down and actually find out how people are living or individual involvement with nature? Could travel to work and commuting be factored in?

E: A study like this is useless if it stands alone, you need to interpret it with other work that has dug down deeper. It would be very interesting to see how central urbanites use greenspace space differently.

Q: If you are looking to take this further and look at quality then there is an opportunity to look at what Local Authorities are doing across Scotland and their databases and many Local Authorities have their own GIS databases. Some are adding assessments of quality to these. It tends to be done differently by each Authority but you could look at it on an Authority-wide basis. The Green Flag award assessment process (e.g. Edinburgh City Council) might be useful as sites have been assessed on the ground and given a score.

Q: Has the possibility of using longitudinal data been scoped? It matters, for example, if interviews are done in winter!

E: For the UK the British Household Panel Survey does not have an activity measure as far as I know. It is not something we have explored in any depth.

Q: Aligning your research with things like Green Flag is very important in terms of the battle for resources. You are getting into the territory here of making an impact on the types of resources are useful and can advocate for them in times of threat (e.g. budget cuts).

Q: Is there any opportunity for a historic look at particular greenspaces and the impact they have had on the local population? Some authorities have used local historians and published the results.

E: I have looked into putting together a data set for greenspace changes over time but I have not got very far with that.

Q: Your research highlights what a discursive process research is and as a qualitative researcher who 'fills in the gaps' I rely on such studies. It is important to stress, however, that numbers are not all.

Q: Joining Local Authority datasets together is difficult because even though they are incredibly detailed they are all done in a different way. The same goes for the quality audits.

Q: There is further work to be done with different types of health indicators and outcomes, e.g. mental health indicators. There is information on the Outdoors Health Network website that might be useful.

Q: Do you think that the pattern you are not seeing for Scotland is due to the quality of your data (e.g. the absence of GLUD data for Scotland)?

E: Yes, it is a possibility.

Q: It would be really good to see a study which correlates the health and wellbeing outcomes with the actual level of involvement that people have with greenspace.
Caroline Brown (Heriot Watt University) *Garden cities: greenspace in urban England*

Caroline is interested in doing research that informs policy and looking at how bad or how well policy does in relation to greenspace and growing spaces.

Caroline introduced the *Urban Green Nation* (2010) report produced for CABE based on a research project undertaken at Heriot in 2008-09. This research for this report had three elements to it. It established a set of base line indicators for 154 areas in England using existing data. They wanted this base line data to give them information on trends in greenspace provision and quality. One of the first things they did then was to construct a national inventory working from existing databases. The second part of the work was to create 15 core indicators under a number of themes (including quality, quantity, use, proximity, management and value). The third element of the work was to analyse that data, those indicators, in relation to deprivation, regional variations, etc.

The big problem with data on greenspace is there is simply no data set for urban greenspace that is very robust. The GLUD dataset does not measure accessible greenspace; it only measures the greenness of a city. In order to make something manageable they put together a data set using existing data which incorporated more than 16,000 individual spaces. This one of the big achievements of this work and it is lodged with CABE and the Design Council.

The data set covers a variety of greenspaces: allotments, city farms, golf courses, grass ski slopes, etc. It is worth saying that this data set does not cover the green estate owned by social landlords or small incidental growing spaces. In terms of the reliability of the inventory it is not perfect but not bad and at the moment it is the only thing we have at a national level.

The study looked, for example, at the relationship between the quantity and type of greenspace and deprivation, and also black and minority ethnic populations. The findings revealed some significant disparities in greenspace provision particularly between the most and least affluent neighbourhoods (the least deprived having less greenspace). They were also able to show that it is not just quantity that has an impact but also quality – if you are poor you are likely to have less greenspace and that which you do have is likely to be of poor quality. This confirms the national picture for England.

The statistics show that most people use parks to some extent during the course of a year and that people value this access. About 15% of households have a natural greenspace of at least 2ha within 300m and a quarter of people have greenspace of some sort within 500m of where they live.

What does the inventory tell us about urban England at the moment? Parks only made up 11% of the 16,000 spaces but they cover about half of the area in the inventory. The growing spaces, the allotments and the city farms cover only 7.6% of sites.

This is curious because allotments have been around for a long time and legislation has accompanied this. They were about providing land for the urban poor who had a hard time providing for themselves. Allotment legislation is quite strong, there are duties for Local Authorities to provide allotments and their disposal must be approved by the Secretary of State. The rules around allotments can also be quite restrictive (e.g. selling produce, keeping animals). This might be why not many allotment sites are being created. That said one might have expected more allotments to have survived.

Highlighting Ebenezer Howard’s Garden City work in 1898 Caroline showed how growing is very firmly embedded within urban planning history, particularly in terms of the utopian ideal. It is not surprising that town planning and policy is interested in looking after allotments for such a long time but why have they done such a bad job of it? In London between 1996 and 2006 39 sites were lost.
and only 7 smaller ones were created and during this
time waiting lists for allotments in London tripled.
The 1949 Patrick Abercrombie Plan for Edinburgh
shows that there were 23 acres of agricultural and
allotment land per 1,000 population in the city but
we now only have 2.7 allotments per 1,000
residents. Even if only 10% of the 1949 land was
available that would still give us around 30
allotments per 1,000 residents. This is despite the
protection legislation.

It is unlikely that urban authorities will be able to
create new allotment sites in the future. The
pressure for development means bringing sites
forward for development is very difficult. The
answer has to come from social landlords and the
like. New models of thinking about greenspace are
needed because the existing policy model is one that
separates greenspaces into categories. This is useful
to some extent but tends to see greenspaces as
mono-dimensional. We need to move towards a
more mixed use policy for greenspace (e.g.
Incredible Edible Todmorden cemetery growing). We
need to think strategically about how we are going
to provide for demand – we have to do something.

Q&A themes
Q: Allotments are currently being closed down for
Olympics with the promise that they will build more
but will this actually happen? Building on the sites of
other landlords (e.g. universities) is a fantastic idea
and things like vertical growing.

C: Yes, why do we have street trees that are
ornamental rather than productive?

Q: Totness in Devon has become the biggest nut
growing town in the UK. I wonder if it might be
interesting to link up with the Transition people
within the universities to look at growing?

Q: People should read Peter Hall’s book Cities of
Tomorrow on the history of town planning because
it explains a lot about how we use our greenspace
now. We need to challenge those ideas.

Q: In the context of orchards, if you look at ancient
maps of Edinburgh, Glasgow or Perth a lot of fruit
growing was done when the abbeys and churches
were developed. In the Victorian period, a lot of
emphasis in terms of parks was placed on bringing in
plants from the colonies and there was a decline in
urban agriculture. The historic example is interesting
and there is an argument for fruit growing where
people live rather than commercial growing out of
town where they do not see it.

Q: Why were the rules governing allotments so
restrictive and has that changed in the modern
context?

C: I do not know. I do not think it has changed that
much. Maybe this is something that David Cameron
can do as part of his Big Society?

Q: How much do maintenance strategies feed into
what Councils will and will not allow? In terms of
management what sort of cultural shifts need to
happen?

C: It is the same with social landlords and the desire
to reduce maintenance costs. Allowing growing
projects or deviating from standard planting regimes
challenges that. Matthew Thriff formerly of the
Peabody Trust now at the London Wildlife Trust is
very vociferous about this.

Q: The big Allotment Acts came after the election of
1888 because the governments were terrified of
riots happening. There was no food available so that
began to allow the urban poor to grow food.
Allotments in Scotland have never had the same
statutory protection that they had in England. A lot
of the statutory protection in Scotland is devolved to
the Local Authority. Allotments have always tended
to be in the centre of cites and this land comes
under a lot of pressure from development. It is a
difficult balance between providing cheap housing
and growing space.

C: The context of urban development promoting
high density city centre living is producing a growing
number of people wanting access to an allotment.

Q: The idea of multiple use of space is interesting
particularly in terms of physical activity. If we could
change the legislation though what changes in terms
of culture and society do we then need? We need
mechanisms to help people to work together.

Q: Did the original legislation make allotments
available exclusively to the landless urban poor? Are
there records of how much was produced on
allotments when they first came into existence?

C: Walled gardens and private estates will have kept
records and perhaps to a lesser extent management
organisations and societies. The Edinburgh
Allotment Strategy has some interesting evidence on
carbon saving.
Q: If you want to get research about what was being grown then you could look at the records from walled gardens. It is also worth noting that growing has now become fashionable and we can learn a lot from other countries particularly in terms of permaculture. There is NOURISH and the Edinburgh Local Food Network which is actively involved in all the things we have been talking about here.

Q: How much is the loss of allotments wrapped up with the loss of greenbelt? We also need to think about the impact that social landlord owned land not being in the data sets has on the research.

C: Yes, the fact that these areas of land are not in the data set could impact upon provision.
The Royal Edinburgh Community Gardens Project was initiated by the NHS and Hillary spoke about the pilot as it has gone through its process and learning curve. It is very much a ‘from the ground perspective’.

In terms of background, in 2008 Richard Lockhead who was the Scottish Cabinet Secretary for the Environment said ‘I am asking a number of public bodies to consider how the land they manage for the Scottish Government could be made available to Local Authorities to increase the numbers of allotments available in Scotland’. Out of this in 2009 Dr Charles Winstanley who is the Chairman of NHS Lothian decided to initiate a pilot project to investigate what opportunities were available for community gardening on NHS land. NHS Lothian has a number of properties and parcels of land associated with them because of the history of hospitals in the UK and, for many years, hospitals were, to a large, degree self sufficient. The Royal Edinburgh Hospital has 15 acres of land which was used from everything from piggeries to chicken runs and the amount of food produced there was so significant they also sold it at market.

A third party charity was brought in to help manage the project and Edinburgh Cyrenians was selected to be that organisation. The underlying challenge of this project is that the hospital has a primary duty of care to its patients and they are under a lot of economic pressures and most of their land is earmarked for sale or development. So, this is not a project about asset transfer it is about meanwhile use.

The overriding goals of the pilot were: to look at health from a holistic approach; to provide environmental outputs. In the beginning, the land unused for a decade and was being used as a dump for the local community. A site was selected in the South West corner for a number of reasons: it was formerly a horticultural area, it had a lot of open areas and good hedging, a diversity of plant species, it was close to the Myreside Gate. The development of the site itself centred around the need for a place for people to meet, footpaths and facilities (electricity, water and toilets).

The original community that came together around this project were all fairly local groups (already established) in the most part. They did most of the work to get the land cleared and made the decision (influenced by the form of the land) to keep the land communal rather than separated out amongst different groups as originally planned. This modular nature has been very helpful because it means that different groups with different needs can work on it at the same time.

When they started work it soon became apparent that there was a lot of activity already going on. There was a group called Art Link, there was a ‘friends’ of the orchard group and there was quite a lot of community interest. So it was also a process of integrating with existing groups.

The amount of land being cultivated on this site has almost doubled in the course of the year. Developing the governance structure for this type of project, because it is bringing so many different stakeholders, is complex challenges in order to meet needs of stakeholders. We have heard about the need for greenspaces to be multi-purpose and this project is interested in that but we have to acknowledge that different groups have very different needs. When the governance structure was initially put together there was an interest in recognising that the different groups using the ground would have different interests. It was built around the understanding that there would be six different streams of engagement each catering to different needs: the Royal Edinburgh staff and patients, the volunteers, local health organisations (e.g. Carr Gomm), local community groups (e.g. the permaculture group), schools, etc.

Q: Could you say something about corporate involvement? The before and after photographs sometimes make it look easy but it takes a lot of hours/manpower to create something like this.
In the course of the year there have been approximately 20-21 corporate challenges which have taken place which have involved over 100 individual from different corporate groups who come along for the day to help with the more substantial tasks. That contribution of time and materials was very helpful in building the infrastructure.

Q: This model looks very top heavy, management heavy with lot of responsibility for Cyrenians. What if they decide to pull out? If you have not got a bottom up approach the structure is in danger of collapsing. What measure are in place to prevent that from happening?

The garden as an NHS initiative is governed by a steering group and at that point the steering group would have to reformulate the management structure. It is a fact of the model and it was evident form the start partly because this is an exploration but the NHS understandably want to ensure that health and safety, insurance and liability are all covered. There is now a community member on this steering group. There is a level of hierarchy but it is worth bearing in mind that in most organisations work on quite a rigid structure and are quite bureaucratic. Cyrenians have been acting as a buffer zone to align the needs of the community which have a less rigid structure with those of the NHS which has a very ridged structure; trying to find a balance between them. The idea is that this venture will be able to provide a template for others in the future.

Q: How much money has been put in and how much of a bearing does this have on how replicable the project is? Growing projects can be quite expensive.

The needs of different communities around NHS greenspaces will be different in different areas (e.g. elderly). Some groups may be able to do all the management themselves.

Q: What is the ballpark figure that has been spent on setting up the project?

Over the pilot year for just the narrow day to day workings of the project is about £25,000. In the long term a core part of the model has been to develop a social enterprise that would provide a portion of these running costs. Initially there was no funding attached, Cyrenians have generated some funds and the community groups were involved in that and then some seed corn funding was found by the NHS several months in.

Q: That sounds very low. The material costs are generally quite low, the costs that rise from that are usually the community development costs but this will depend on the community.

By blending the groups with low and high needs you can balance and bring the costs down a bit.

Q: The nature of your project is that it is a temporary project and at some point it will get built on and maybe that is why the community is not so involved in the governance.

There is community involvement in the decision making, the Development Partnership group does help make decisions on the day to day running of the project and a member of this is on the steering group. It is a learning process, nothing is set in stone. NHS Lothian want to roll this out across Lothian and is currently looking at options for long term projects.

Q: It will be interesting to see if there is a flat-pack model that you can take out of this because there is so much more available land.

Q: You said there was a development Partnership so can you say more about that?

They meet once a month. Over the course of the year the finalised documents that will go forward include those that deal with the lease agreement and the membership agreements. We have decided to go with an individual membership agreement and that document is quite formal and legally sound. The lease agreement is something that is still in progress.

Q&A themes
Q: I terms of the cost, I am trying really hard at the moment not to spend that sum on a security fence at one site (the landowner wants one). Each site is completely different.

Q: You also have to look at what an allotment is worth.

Q: Can you evaluate how many hours of participation are needed each we to benefit?

H: We keep records of participation by hour and individual but we do not have a great deal of time or capacity to keep records.
Anna Jorgensen (University of Sheffield)  

Cultivating wild urban spaces

Anna is interested in wild urban landscapes or marginal spaces; industrial ruins, derelict sites, wastelands, left over space, linear corridors and places where natural succession suggests that natural rather than human agencies are in control of shaping the land. In previous presentations, Anna has talked about revolting landscapes because the double meaning summaries how these places are perceived. First, there is something about these landscapes that seems deeply disturbing and offensive; they confound our aesthetic sensibilities concerning organisation and selection, and signs of care or human intervention in the landscape. They seem to be the antithesis of the landscape project which has so often been used to express social values including order, philanthropy, learning, wellbeing and community. Instead, these landscapes seem to express disorder and anarchy both vegetative and human actors opportunistically move in to occupy them.

The cultural and social history of wilderness in Europe and the New World contains many clues as to why wild urban spaces are regarded with such suspicion. At least from the early Medieval period and perhaps before, ‘unclaimed’ land, that is land unclaimed by Europeans was regarded as wilderness orterra nullius which justified its appropriation and justified is use for farming or the extraction of natural resources. Clearing land for cultivation was painstaking and labour intensive and might also be life-threatening. It was therefore seen as a sin to forsake or destitute a plantation once it had begun to progress and ruins came to be associated with misfortune or death.

Ruins and wilderness reconceived in the eighteenth century when they were strategically positioned within the landscape in order to sentimentalise the futility of human endeavour and wilderness became the landscape of the sublime. Yet, despite this rehabilitisation of ruins and wilderness in carefully controlled contexts the abandonment of land that has been brought into use and the spontaneous growth of vegetation are still association with human misfortune and a sort of moral duty to keep land under cultivation.

The vegetation that appears on derelict urban sites has a remarkable destructive power; the plants that take hold are the most aggressive pioneer species. The vegetative assemblages found in wild urban spaces flout horticultural planting convention and norms of nature conservation. Even the trees species are the wrong sort; willow, bog alder and white birch. These spaces are also associated with illicit human activity; fly-tipping, vandalism, rough sleeping, drug taking and deviant sexual activity. In the media and popular culture as well as in the realm of local politics and planning they are often depicted as the lair of the abject and evil and a threat to unwary users and their surroundings symbolising urban decay and economic stagnation.

Yet, wild urban spaces do have their positive side and as a first step in their rehabilitation Anna suggested a number of alternative interpretations and uses. These places are unique in that they are un-programmed, un-surveyed, and depending on their scale and context there are few restrictions on what one is able to do in them. They are perhaps one of the only spaces in the city where one can light fires, harvest or gather fruits and other objects, lie down, climb trees, make impromptu shelters and other installations, grow vegetables, dig holes on so on. They offer opportunities for interactively shaping one’s environment that are increasingly absent from many open urban spaces. The resulting signs of recent human occupation and use combined with the remnants of more historic buildings and structures along with the incoming vegetation provide a layered landscape, replete with meanings. Equally importantly these landscapes are liminal spaces, spaces outside the normal physical and social ordering which has historically provided a space for the enactment of rights of passage which we now sometimes refer to as transcendent experiences.

Away from the pressures of daily and the normative physical and social ordering that is present in other urban spaces we are free to think and act differently. Anna would go further though and suggest that the very existence of these places offers a kind of physical and mental breathing space which allows us to reflect on and take stock of our lives. Whilst wild urban spaces are often used by marginalised groups such as travellers or those seeking alternative lifestyles such as the Free State of Christiania in Sweden, there is plentiful evidence of their more general appeal. There are numerous instances of development being hotly and successfully contested by local residents who have become attached to their piece of wild urban nature. Urban wild spaces also have a special role for children and young people although their access is increasingly being
proscribed due to the perceived dangers. As much recent research has confirmed such spaces invite children to explore, to test the physical properties of the environment, and to develop their physical, psychological and social potential.

Whilst they may seem worthless for a traditional nature conservation view, urban sites can have rich and complex ecologies. Habitat hotspots often tend to be in urban areas. Despite human depredations it seems that nature has a remarkable capacity to recover.

Whilst we may be reluctant to admit it wild urban spaces are as much an aspect of our age and culture as more deliberative manifestations. Perhaps one of the most influential landscape projects in this respect is Peter Latz’s Landscape Park in Duisberg North which used the defunct buildings and former structures of the steel works together with the pioneer vegetation that had started to colonise the site as the basis for a new park.

Another aspect of urban wild spaces which has become both aestheticised and popularised is the street art and tagging that has become part of urban street culture. Yet despite these changes in the way urban wild spaces are perceived they are still regarded fundamentally as waste spaces with no intrinsic value except for development. Anna asserts that urban wild spaces have many intrinsic functions and values and rather than being seen as non-space or negative space they should have an essential place in urban greenscape typologies as a special types of urban green which offers users unique opportunities and experiences. Such spaces may require only minimal intervention to make them more accessible and useable by a much wider range of people. A good example is the Suedgelaende Nature Park in Berlin.

Anna would argue that allotments have many characteristics in common with urban wild spaces. Both are a form of commons, individuals do not own their allotments, they are rented from local authorities or associations who impose a set of obligations on allotment holders if these obligations are not observed then the allotment plot can be reclaimed and re-let, so while the allotment holder is free to use the plot for the time being they may become available to others should circumstances change. Conversely providing allotment holders observe the regulations they have considerable leeway to manage and cultivate their allotment as they choose. Thus allotments allow a medium for self expression within set parameters. In most urban open managed space users are prohibited from modifying their surroundings in any way. The ability to change ones surroundings is an important marker of the passage of time and human existence. Cultural landscapes are the palpable result of human interaction with the land over time. Allotments offer an opportunity to make one’s mark on the ground and to structure it according to personal values and requirements. Away form other conventional forms of social ordering people are free to form new allegiances and engage in fresh activities.

Lastly, and perhaps most importantly, allotments are themselves a cultural landscape in which users are involved directly with the landscape. There is no real dichotomy between regulated and wild urban spaces, rather there is a continuum ranging from wilderness to apparently ordered spaces. Wildness can be seen an idea rather than a closed category which can be spatially located. An acceptance of the idea of wild spaces as part of the city has some major implications for the planning and design of urban areas. They imply a celebration and acceptance of the materiality of the existing fabric of the city in all its diversity and imperfection. The idea of wild spaces as part of the city reasserts the idea of the value of the everyday make do and mend landscape that has been shaped by numerous different makers over time. They also reaffirm that urban areas are the product of numerous processes, globalising forces that make urban structure redundant or useful, human activities stimulated by the available opportunities, and non-human processes responding to the flux of human occupation. These things challenge us to find ways of working more collaboratively with these processes. They also force us to realise that change is inevitable and attempts to create stasis are mostly if not always doomed to failure and that we should be aiming to create urban spaces that accommodate change.

**Q&A themes**

Q: How can we get people to accept allotments as more and more plans are rejected?

A: This is a difficult question but if ever the zeitgeist was right for making allotments more acceptable the time is now. That kind of aesthetic is once again very chic.

Q: Given that more and more space is protected by purchasing it, how do you see spaces like waste land continuing to exist?
A: They will always continue to exist because as we are seeing now global capital is susceptible to great cycles and changes. We do have the phenomenon of shrinking cities, e.g. Detroit and Berlin. I am not arguing for artificially preserving wild spaces but if you look carefully at them there are aspects of them that you can use to inform the design, planning and management of other urban spaces. It is about creating spaces that are more flexible and finding new ways of inciting people back into urban spaces.

Q: Talking about liminal space the people who use them are often quite liminal too so you have got this hierarchy of voices that express ideas about aesthetics and they do not have the voice. So maybe allotments are the very type of space for that. When Bridgend allotments were set they were pristine with the same sheds etc. but within two weeks every plot was differently designed.

A: I do not think that every kind of urban space can be the same, of course we need formal more orderly space but there are more spaces than we imagine which are susceptible to this approach (e.g. cemeteries, school playgrounds). It is about pilot projects, seed corn, seeing if something works and then rolling it out.

Q: The work of Richard Mabey (Food for Free) looking at where we can get food along the way side and permaculture is about looking at what grows on the edge. A lot of people do not know what they can eat. In New York there is the Green Thumb project where they go around turning car parks into allotments basically. Foraging is now cool. We should harness that energy.

Q: I am interested in the idea of re-wilding childhoods, there is a link to creativity, but there is also a link to having less ordered spaces and less ordered lives to some extent. Councils are prepared to tolerate this kind of activity so long as it is ordered. The urge from the grass roots is a chaotic disorderly drive but if you give the kids their heads you get places like Summerhill where they are making up the rules; which is absolutely terrifying for the parents.

A: A lot of people say this is wholly impractical because we live in a risk-averse society and almost all agencies involved in land management often their primary driver of the way they manage the land. The consequence of protecting children from risk is unhealthy children who are unable to deal with risk should they unexpectedly have to deal with it. We need to get the research to show that.

Q: It is fascinating how parks have changed since my childhood. The park had ‘keep off the grass’ signs on it.

Q: It is important to recognise the widening policy context in the last few years with the Richard Rogers Task Force pushing people and development back into cities. This ignored that fact that these derelict spaces are often more biodiverse and used than rural areas. There is a need for those interested in habitat management to wake up to this.

A: Yes, I am sure there is room for more work on the policy in relation to these spaces and are there any mechanisms for protecting them and if not should there be.

Q: Has there any work been done on growing spaces in Green Corridors (e.g. branch railway lines), places that used to connect places within cities. Does any body know if anything is being done in Scotland? They are incredibly fertile.

Q: There are Guerrilla Gardening efforts but it is hard to say how organised they are. Other people are squatting on land.
Red group discussions

Public perception
Discussing the frequently negative public perception of urban wild spaces and allotments (which are often viewed as unkempt and messy) the group considered what sort of physical modifications might be made to these spaces to ‘bring people in’ and how best to highlight the benefits of their presence within the city. Tried and tested options include providing an orderly context for ‘wild’ space or letting people know that the wildness that is there is ‘intended’. The group wondered, however, if there might be more subtle ways of designing landscapes which are accessible and inclusive whilst at the same time retaining their ‘wildness’.

The group acknowledged that allotments are often perceived as ‘bad neighbours’. One member of the group cited the furore surrounding the proposed extension of the Blackford Hill allotments in Edinburgh as an example. This site is directly opposite an affluent residential area and residents vehemently opposed the allotment plans until there was a planning application for executive housing on the same site, at which point the allotments became a more attractive possibility. Other examples provided by the group included a potential community gardening site which had received strong opposition from local residents who wrote letters to the land owner. The latter was so shaken by this response that he eventually withdrew the offer of his land. It was acknowledged that such negative perceptions also make it hard to get funding to develop urban cultivation projects.

In discussing productivity and aesthetics the group noted that there are growing spaces which fall between these two extremes, for example, community gardens that have a productive element but also provide spaces for people just ‘to be’. They acknowledged, however, that legislation and the codes of conduct which govern allotment and community growing sites tend to inhibit creative explorations in this direction.

Allotments usually have rules about the type and size of shed that is allowed, barbeques are prohibited, sleeping on site is discouraged. People are not allowed to express themselves. In this respect we differ from the Continental model where someone might design a lovely hut for their plot and then go and stay there for the weekend. Some members of the group were cautious about making such connections though, stating that although these plots might be described as such, they were not allotments in the UK sense and any comparison would be problematic.

One member of the group noted that arts charity NVA, who are involved in the SAGE project had done a project on allotment shed design which celebrated the diverse nature of allotment spaces, but unless you are specifically looking for it you would not necessarily find it. Likewise, the group wondered who stands to gain from research like this; the profitability of gardening is increasing so would it just be retailers such as B&Q?

The group noted that many funding bodies (e.g. National Institute for Health Studies) want researchers to show causality; they want a clinical trail which basically shows that the intervention caused a change. There is still money in public health research but they tend to prefer randomised controlled trials and as a result it is very difficult to get qualitative research funded. Several members of the group felt that qualitative research could add depth to quantitative science but it is hard to get funding bodies to believe in it. Another problem with this type of research is that some funding bodies (those concerned with social or economic research) refuse to accept that health-oriented research falls within their remit. It was acknowledged by the group that progress was being made in this respect but that advances had been slow. One person suggested that the more ‘sexy’ or
Your research theme was (e.g. carbon reduction type research) the more likely it was to get funded.

The AHRC was cited a possible source of funding for qualitative research because they have funded people such as geographer David Crouch in the past and are proponents of the Big Society agenda.

**Big Society**

Discussing the potential impact of the Big Society agenda on urban cultivation, one member of the group noted that there is something peculiar about ‘growing’ as an activity in the sense that growers can often be quite selfish, they are reluctant to take on community leadership roles and tend not to be enthusiastic organisers. The very act of gardening is also very time-consuming. How then do we get people to come together and think about community growing, to share their harvest and develop mutual trust? Other members of the group disagreed with this view stating that this was not always the situation and, in any case, community growing does not always have to be about growing as a group. People can grow individually but then share certain site responsibilities like composting. The Edinburgh Community Backgeens Association is a good example of this type of set up. The group agreed, however, that it would be interesting to look at the ways in which allotments are managed and how well Community Gardens actually work.

The group acknowledged that the Big Society agenda is partly about the private sector being more involved and that the work being done by the National Trust (allotment sites) and NHS Lothian (community gardens) might be a useful route into looking at this. There are communities for which community growing would be very beneficial but they do need support to make it a reality. That said, the group also agreed that Big Society is not just about doing things for other people, it is also about people doing things for themselves.

One member of the group outlined a new project being developed in Edinburgh which is actively trying to take a neighbourhood approach, getting people to come together, giving them training and capacity building. The idea is to establish a community growing site, a small resource in one location, and then have the local residents manage it for themselves. After the initial set up period of a year or so responsibility for the site would be handed to the community growing association; this would then become a hub which would help to establish more growing spaces on that estate. The group agreed that this type of initiative would be a great thing to look at from a research point of view - people doing things for themselves and taking on greenspace management responsibility from the local authority or their landlord.

The Elmwood College allotments (started in 2010) were also highlighted as an example of this approach. Individuals can only access a plot if they go through a whole season with the organisers on the communal allotment. The idea is that after a few years the individual will move to an allotment site near their home or continue gardening in their own garden (in Fife the vast majority of people have a private garden) which would then become a space in which to teach one’s neighbours.

The group felt that a comparative study of different gardening groups (e.g. permaculture groups and community growing) would be very interesting. It might not be evidentially robust but there might be a tickle down effect if one was able to show people were, for example, doing more exercise, eating more vegetables, had lost weight. One might also look at the effectiveness of different organisations in terms of stimulating other activity, the effect on the individual, the knock on effects for the community, and public perceptions before and after the intervention. The group acknowledged that research in this area might only involve small groups of people and that this might not ‘cut the mustard’ with some stakeholders but realistically it might be all that is possible. The task is to persuade funding bodies that this type of research is valuable, highly rigorous and often advantageous.

As an aside to the above discussion, the group suggested that a study on people who do not participate would be interesting as these projects tend to be self-selecting and there is a bias in this selection.
The group also expressed confusion about what policy makers want and need in terms of research and/or evidence. Indeed, to them, the process of deciding whether or not to give over land to cultivation often appeared quite arbitrary with little prior research.

**Temporary spaces**

Discussing NHS and government owned land as spaces for urban cultivation one member of the group queried the logic behind such projects when these organisations have a duty to sell the land should they need to. Should we be encouraging people to use private garden space instead? Given that private gardens tend to be the largest single class of greenspace in cities such as Edinburgh, there is a striking lack of evidence about what happens in private gardens. People are undervaluing these spaces by not using them but then they do not allow access to other people either. The group agreed that research to look at the barriers to garden sharing is needed because this is a massive land resource which literally ‘on people’s doorsteps’. The BUGS projects at the University of Sheffield have done some research on biodiversity in urban gardens, but it would be useful to know culturally what people feel about their gardens; do they feel they have a duty to society to use them, do they see them as part of the greater good?

There is a lot of unhappiness surrounding gardens, a lot of older people say they are unable to manage their gardens and others complain that their street looks awful because their neighbours do not care for their space, but very little has been said about providing solutions for these problems. One example might be ‘garden buddy’ schemes like that in St Paul’s in Bristol. Another successful example is an organisation in Toronto called The Stop which runs a ‘green barn’ programme where local residents invite others to cultivate in their garden. It was acknowledge, however, that projects like this sometimes rely on people like Hugh Fearnley Whittingstall to make them ‘sexy’.

Other members of the group questioned whether it mattered if a space was only temporary? It should not be a question of either/or; even if land is only available for two years the thing we should be doing is developing flat-pack solutions to create growing spaces that can be moved at a moment’s notice. There are growing projects that have been done on hard-standing with tonne bags; you just have to make it clear to the participants that the project might only be temporary. Temporary sites can be an opportunity to explore more interesting and innovative ideas.

In discussing temporary spaces, the group also talked about the need for well-designed exit strategies for these temporary spaces. What is best practice? The ephemeral thing is definitely part of the whole ‘thing’ at SAGE, for example, so what are they doing?

**Skills development**

Several members of the group expressed an interesting skills development and the development of technical knowledge that arises from community growing. This is a resource that is not often recognised or utilised in any official capacity. Knowledge about growing food is still very technocratic but there are all these people who know how to grow food very well in particular ecosystems. This in itself could be a very interesting research direction; one could look at the different ways in which people self-evaluate the processes that are going on, the skills that they develop and the different outcomes of different approaches to gardening. This would not be a quantitative study; it would be more about social capital.

**Green group**

**Value of urban growing**

Discussing the worth or value of urban growing the practitioners in this group expressed a desire for research to support the arguments they were trying to make to policy makers and/or private developers, particularly ‘numbers’ even though they realised it was often a difficult and contentious issue to put a price on these things. Should we be scared of doing this? Can we take different models of growing and put them on an impact/cost grading system and see where they come out? There is always going to be an element of subjectivity involved in that be how does creating a new allotment compare with a community garden in terms of impact? Organisations like Greenspace Scotland can provide things like delivery costs, quantities, how much will it cost for everything but you do not necessarily get the whole picture. The group acknowledged that practitioners have their own concerns so it would be useful if an independent researcher (with a professional reputation to defend) could do this type of research. There have been some social return/investment studies done on outdoor health interventions (one example would be a hospital in
Perth who did the John Muir Award with their patients) but the guidance documents are huge and members of staff (e.g. in the NHS) or community group members often do not have the time or the expertise to do this type of evaluation. Are there other ways of going about this that practitioners could do in a participatory way?

In some locations ‘temporary’ can mean 25 plus years and often the land owners are private developers. They tend to want an economic return on their investment.

It also depends on what sort of impact you are looking for and the degree of impact. How do you measure that? How do you weight ‘making new friends’ against ‘growing food’ or ‘employability’ all of which are valid impacts. How do you put numbers on the cost of a friend? Do we need to be really specific with criteria and choosing one specific outcome and one greenspace type and really studying that in depth as a starting point? If we get too bogged down with numbers does it impede progress? Could perceptions be ranked along continuum lines?

Example of Lochend and Restalrig Community Growing Project consultation work, there are now about 120 people who want to be involved in this project. It would be really interesting to be there at the very beginning of a project like this and follow people through rather than always trying to look back. That said it is often only with hindsight that you are able to identify the key issues.

Measures of success
Discussing measures of success the group listed quantities of vegetables produced, numbers of people through the door, whether their experiences of the project were positive, if people had made connections through it, if they had tried new produce or cooked with the vegetables as positive impacts. Press, publicity and word of mouth were also thought to count, for example, how many times a project gets into the paper. The extent to which a project is embedded in the community is also important as is the degree to which local people are inspired to start their own growing activities.

The group acknowledged that, for one reason or another, community growing projects often have quite a high turnover of people. The interesting thing about urban cultivation and ‘growing’ in general though is that it brings people together; there are so many different levels on which you can think about this.

Legislation
Nationally we hear a lot about food policy and drink policy and healthy eating but how does that get turned around spatially on a local level? One member of the group noted that conversations about employability tend to strike chords with local councils; it is definitely something which drives things forward. Community growers do concentrate a huge amount of effort on legislation around the Allotments Act but one member of the group felt that this was not necessarily the most effective way to proceed; there is plenty of scope to get on and do stuff with the current structures that we are in. It is about being creative and creating a culture where urban cultivation is more accepted and getting people from local councils, the government, the health board to take the time to understand what it is we are all taking about. Going down the legislative route and being combative over rights is not the only way of doing it. The councils are always going to win the ‘who has got the moral high ground arguments’ because they have just got more muscle.

The group felt it would be worthwhile to find out what the barriers are to taking things forward. It is not just planning but health and safety, policies surrounding selling produce and hygiene; there is a whole raft of legislative problems that it might be worth exploring. Also when you get over-arching legislation like the Climate Change Act you just end up with people scratching their heads and the whole thing seizes up. The South East Structure Plan, for example, does not include food except for a couple of lines; planning for growing is not a priority. There is a need to prioritize because food is going to get very expensive. It would be interesting to see the figures for, say, how many community orchards there are and the amount of actual space available. Land share is often talked about but it is difficult to meet people who have ever done anything via land
share; are there successful land owner/grower partnerships?

*Multiple use of space*
Just because an area is zoned in a particular way does not mean it has to be used in that way. More good quality information is needed about the use of greenspace and how this maps out. For example there are a lot of hospitals and GP surgeries out there but how do they use their space? There is the [Vacant and Derelict Land Survey](#) so it might be interesting to overlay this with ownership maps.

For lots of different types of greenspace there is an issue about knowing what’s out there and how to get the information. Like the [Open Space Audit](#) not including brown field land. Do the NHS have their own land registry document?

The group all felt that the idea of multiple use of space was attractive; thinking about what we already have and what we can do about it. Golf courses were seen as being prime targets; how can we use this land more cleverly whilst still maintaining its use? Part of the problem is the number of pesticides that are used on golf courses. There is no reason why we can use parts of our existing parks; it would be very interesting to experiment with vegetable growing. One member of the group said that when he started planting fruit trees five years ago everyone thought he was mad but now things have gone full circle. You have to push things a bit. How many spaces could we fit in herbs? Local councils can be quite accommodating and supporting but you have to approach them.

The group acknowledge that the problems of toxic soil and contamination were real. Astley Ainsley hospital, for example, had plans for a therapeutic garden but the lead levels were very high due in part to the addition of ships’ ballast to the topsoil in the Victorian era. The uptake of heavy metals into different plants differs.

*Connections between researchers and practitioners*
One member of the group felt that here was a real danger that you end up with intermediaries who seek to talk on behalf of practitioners and the government would like the idea of a ‘tame’ group that they could go to who acted as ‘the representatives of the representatives’. It would therefore be preferable to have the minimum amount of ‘clutter’ in between. There is also a tendency to bureaucratize what should not be a bureaucratic process.

One member of the group wondered if there was an easy way for academics to access projects; a kind of ‘meet session’ like they have in industry. The academic might have a project starting and they can find a match with a project. This could be an online platform to connect people. Greenspace Scotland have a [project database](#). When you talk to people you change and adapt your research to be more responsive, you can come to conclusions together. The group felt that the Scottish Government might be a good hub for this kind of activity.

Another member of the group felt that academics ought to be a bit more involved in the sector if they actually want to research it. The idea that it is all ready to download at the click of a button is a bit aspirational when practitioners spend a lot of time getting around and talking to people. Why should academics not do the same job? This opinion was countered by another member who pointed out that it is very difficult for academics to find time and money to do talk to people outside of the specific job they are paid to do. Unfortunately they tend to end up ploughing quite a narrow groove. If there is more time it is usually taken up with trying to find more money for the next research project.
Blue group

Availability of, and access to, land
Discussing the availability of allotments the group noted that it always seemed necessary to have to justify the cost benefits to the people who own the land. William Bird’s work *Natural Fit* the RSPB only touches the surface in terms of physical exercise. Academic could really benefit the growing community by coming up with actual cost benefits. This is not the same as social benefits and if it was easy it would have been done already. Perhaps it will take more than one piece of research to deal with this.

Thinking about landownership is interesting; with allotments you are a tenant but if you do not keep up with your responsibilities this can be revoked. This goes back to bigger questions of land ownership and tenure and the idea that land has to have an economic investment value – but is this always the case? It ties in with the New Economics Foundation research on happiness and what constitutes quality of life; lot more research needs to be done on this because it might not be financial, it might be something like growing your own food and all the things that go with that. Has the symposium proved just that?

One member of the group felt the problem came down to lack of land but others disagreed. Perhaps availability might be a better term. If it could be proved to the NHS for example that if they gave over or provided the money for all 15ha of the land available at Hilary’s project site they would save money on heart attacks, etc. they might turn the money over tomorrow. There is also pressure for bodies to get rid of land quickly very profitably because they need money in the revenue account. They are becoming more aware though that just spending their money on acute care is expensive and becoming more expensive and if our lifestyles deteriorate this is going to get worse. This is a complex paradox.

Research
To come up with evidence to convince very powerful consultants that it is cost effective to plough several million pounds into greenspace on NHS land as opposed to giving the surgeons the money to do operations is not a simple exercise. There are personal politics involved as well. One member of the group noted that 50% of the people at the symposium were academics and if they want to get funding they have to come up with something which these people (landowners) will think ‘yeah let’s do that’. Or, maybe we should just get on with it without having all this needless research; what is the point of doing research if we know all this stuff anyway.

One member of the group suggested that something simple to research would be the latent demand; we do not even know what that is. Again, though, another member asked what the point of doing this type of research was when anecdotally we know there is demand. There is a need to do research on something that will actually benefit. There has been so much research done on the benefits of getting out into greenspace so why are we not seeing more opportunities for people?

There is an argument that the organisations dealing with policy have this inserted into their policy and way of thinking or remit. The problem is communicating these ideas in a way that will draw the funding into it. The evidence is there but sometime is it spread out and anecdotal, it takes a long time for this to be translated up to a national scale.

Several members of the group felt that the ‘figures’ were a critical missing piece in the evidence base. When discussing this issue with high level consultants you need to be able to say more than ‘this is good’, you need to be able to prove your case before you put in a million pounds and whatever it takes to create a resilient greenspace. One member of the group noted that it was very hard to prove to the ‘sceptics’ that improvement in someone’s health was not just a case of moving to a different area.

There is a need to remember how much growing goes on in this country. The UK as a whole is a nation of growers and this is how we are perceived by other countries. If you live in Spain, for example, you have
to have your pension before you can apply for an allotment. At times we need to pat ourselves on the back and say we are actually doing really well in this country.

One member of the group (a self-identified practitioner) noted that in terms of the information deficit the symposium had been interesting because a lot of the language was not accessible for those working on a project with a funding bid to write. A lot of the language, unless it is very readily accessible, makes very clear sense, and you do not have to go through reams of historical theory on planning, is fascinating but people working on the ground have a job to do. The pressure to provide the evidence is pushed down on the practitioners all the time and this is completely the wrong way round. One can see the sense in having to do your own monitoring and evaluation for your own purposes but perhaps Health Scotland would be a more appropriate body to be commissioning research that is appropriate to the services it provides.

In terms of academics, they have to be realistic about the impact of their work but it is important to recognise things like planning theory because it explains the way we are. There is perhaps a need to find brokers who will then help that knowledge filter down. There is a whole part of Edinburgh University which is about knowledge transfer.

One member of the group wondered how many people had read the Government’s Grow Your Own Working Group report. There is a planning section, an information section, and one on land availability – strategic support. Another member of the group asked, however, if it was written in a language that is accessible to academics? It is not an academic report; it is a list of recommendations. Practitioners and academics appear to be talking in different languages.

A lot of the Scottish Government information that has trickled down into organisations like the Forestry Commission has been academically based, things that were done 10-20 years ago. Academics provided the base information. What are the consequences though of this kind of time lag? There is some up to date information being provided by academics but how can we improve this situation? One member of the group felt that academics ‘lived up here’ and wondered if they were really in touch with the people, the ‘great unwashed’. Another countered that surely this was the reason that the academics attending the symposium were there. There are informal ways in which academics can engage with communities, if we follow the orthodox route where 20 years down the lines papers we have written might possibly inform policy then yes we are living in a dream world, but we can do things differently. We can take our information directly to the community groups and then let them try and inform the policy makers. On a practical level we have access to libraries, computers, GIS, all these tools.

Despite the interesting themes covered by the symposium, we need to ask ourselves ‘are we living in the clouds’ – it is debatable how many people have heard of ‘peak oil’. We have used 50% of the oil available in the world, we are at the tipping point and from now on oil is just going to get more and more expensive. It does not take a scientist or academic to realise that very soon the price of oil will be so high that we can no longer get food from the countryside or other countries to the city. Supermarkets have 2-3 days stock and if there is a rush we are all going to run out of food. Unless we have a bit of land to grow on we will have nothing. So all this research is very interesting but it is all just hot air because in the next 5-10 years everybody will be growing whether they like it or not. Places like Leith Links (Edinburgh), it is just grass, you can not eat grass. In the Second World War it was all allotments. People are sceptical but we are in this crisis and you can do as much research as you like and talk about it until the cows come home but something needs to be done soon.

Various members of the group stated that they needed evidence to make a case to the land owners/funding bodies to provide greenspace. The controversies around climate change and peak oil are endless and everyone has their own vested interests in not believing it. The argument has to be about health, this is the only way to get these places going. We can not speak about catastrophes; we do not function in that way, it will just put people off.
People are being educated and this symposium could be seen as an example of that.

Do we have targets? If you are going to argue about peak oil then you have to have a target. What about the amount of growing space available in the Second World War? What about the people who do not want to grow? How can we start getting people to talk to each other and share their skills? One member of the group felt that not everybody was in agreement over this issue; some people like to live the fast food lifestyle where they pick up provisions from the supermarket on their way home and turn on the television. This is where research is invaluable, around behaviour change and ways to engagement. Also, why does it always have to be about food, why can it not be about cultivating urban greenspace for cultivation’s sake. Food is a strong argument but we are all going to be fine, we will find a way round it, we live in a wealthy society, we are not going to have to dig up Leith Links.

**Land ownership**

How much is land ownership a real barrier? Land ownership is an obvious barrier and it is something we can do something about. A good example of this is the [Common Good Project](http://www.commongoodproject.com) in Glasgow which is a grass roots project trying to map common good property. The first task is to work out what land is common and it might sound easy but it is an arduous task. It has been sold off at a vast rate. A lot of derelict is space is actually common ground, it becomes almost invisible. The argument is that it needs to be managed better. There are success stories but it is predominantly in rural villages. What stimulates grass roots activity like this? A lot of things start off with community garden projects. Glasgow has in its collective imagination the ‘Glasgow Green’ being common grazing ground. The next step is trying to galvanise the community because often when the local community find out it is common land they tend to have the same attitude as the planners – ‘let’s sell it off’. Have similar common good projects been done in Edinburgh? The [Edinburgh Garden Partners](http://www.edinburghgardenpartners.co.uk) is an example of something like this but the focus there is on the social element – it is to help people stay in their own homes. It has been going for 2 years and has around 60 partners but they do not have much money at the moment. The [West End Time Bank](http://www.westendtimebank.org) is another example – they have lots of knitters but no gardeners, they are looking to do some cross city trading with the Inverleith Time Bank. The [Edinburgh Local Exchange Trading System (LETS)](http://www.edinburghlets.org) might also be a route into this.

**Engagement**

How can we engage the hard to engage? How can we stimulate and facilitate activity? Will some people never want to be involved and should we be trying to reach these people or not? We do not have a problem with the number of people who do want to use the land, in the future we might want to encourage more participation but at the moment there is more demand than supply.

Are there different ways in which we can grow? Perhaps have more communal gardens and growing spaces that do not have the same rules as allotments. Somewhere you can keep chickens or grow vertically. A lot of people have walls but not space and do not realise they can do this type of thing. How do we make this type of knowledge accessible?

In terms of meanwhile use, rather than having small cases which actually make up very a small growing area what you need is very, very long raised beds (in sections) with minimal path space. You could also get rid the ‘dirty’ (or uncultivated) plots on allotments and re-let them. That said, other members of the group warned that one needed to be very careful when using words like this as some weeds (e.g. nettles) could be very useful. Should we use words such as ‘you should grow in straight lines’ as this will put a lot of people off?

An allotment is a vast amount of space and many people just do not have the time to take them on. This is why smaller plots or shared allotments might make more sense.

**Land share**

There are schemes now which are putting people in touch with each other if a person can not manage their garden. [Edinburgh Garden Partners](http://www.edinburghgardenpartners.co.uk) is an example of something like this but the focus there is on the social element – it is to help people stay in their own homes. It has been going for 2 years and has around 60 partners but they do not have much money at the moment. The [West End Time Bank](http://www.westendtimebank.org) is another example – they have lots of knitters but no gardeners, they are looking to do some cross city trading with the Inverleith Time Bank. The [Edinburgh Local Exchange Trading System (LETS)](http://www.edinburghlets.org) might also be a route into this.
General discussion

One participant felt that action based research sounded interesting because symposiums such as this were overly academic and it is hard to justify how useful that is. How can we as academics, practitioners and policy makers go about working together and supporting each other? There is a role for everybody but for practitioners this idea of ‘come to us and get your hands dirty’ is quite pertinent. Language is a huge barrier, some people in academia are interested in knowledge for knowledge’s sake, some are interested in terms of knowledge for policy – how does that fit with people who are out there doing it?

Another participant noted that the idea that there such be information out there for time pressed academics to hook into should be resisted, again academics should spend a bit of time getting their hands dirty and learning by doing. Academics should not expect information to be nicely packaged in an academic friendly way and likewise they should not simply veer towards the nicely packaged projects.

On academic noted that their activity was constrained by the funding they can get. So, selling these ideas to the funding bodies is the key issue.

One practitioner asked if there was any way that the practitioners could give their information to the academics until such time as they have funding so it does not get ‘wasted’. Would this, however, deter academics from focusing on projects that were perhaps slightly experimental?

Is there a role for the Scottish Government in this to be a central information broker? Evaluation Sport Scotland’s work might be an example of this.
Summary

Overall, feedback from the day has been very positive with several participants stating that this was the first event of its kind that they knew of to bring together academics, practitioners and policy makers to talk about urban cultivation. The majority of the participants met at least one new contact or were made aware of the work of someone they had not previously known about. Some of the connections made at the symposium have already stimulated correspondence between individuals/groups working in similar areas. The presentations were well received stimulating some very thought-provoking questions, and participation in the break-out discussions was enthusiastic generating a wealth of suggestions for future research and collaboration.

Key amongst these were a need:

- to explore the latent demand for growing opportunities currently only evidenced by anecdotal information
- to uncover the demographic profile of current allotment waiting lists and look at ways of passing on information about other growing opportunities to these people
- to explore public perceptions (often negative) of allotments and other areas of urban cultivation in more depth
- to identify (in ways meaningful to Local Authorities, the Government, and funding bodies) the cost impacts of urban cultivation
- to explore policy relating to urban wild spaces and ways of designing these spaces in such a way that they become accessible/inclusive whilst still retaining their ‘wild’ qualities
- to look at the legislation relating to the zoning of greenspace (or ‘open space’) and the potential benefits of definitions which allow for ‘multiple use’
- to explore issues of land ownership, particularly in relation to private gardens and public/private areas such as tenement backgreens (for example, their use, peoples’ attitudes towards, barriers to land sharing)
- to look at the ways in which responsibility for the management of urban cultivation projects might be transferred from Local Authorities and landlords to local residents
- to explore the issue of environmental apathy and/or barriers to participation
- to conduct a comparative study of different types of urban cultivation (for example, their effectiveness, the potential for skills development, the extent to which knowledge is dispersed into the community)
- to map current sites of urban cultivation and other potentially ‘available’ and/or ‘accessible’ areas

Other notable areas of interest included: the factors which stimulate grass roots activity; the relationship between health and well-being and actual level of involvement with greenspace; issues surrounding ‘peak oil’ and food security; longitudinal/archival research on the impact of greenspace on health throughout history; and, the creation of data sets that are more sensitive to quality.

The participants were generally supportive of the need for and aware of the potential benefits of, academic research (particularly action-based research) into urban cultivation so long as it was done in meaningful collaboration with practitioners and those working at ground level. This should begin with the research project planning and, where possible, continue right through into the research dissemination phase. With this in mind, all the participants agreed that there is a need to look more closely at how Knowledge Transfer might work as a two-way process between academics and practitioners, and the role that policy-makers might play within this. Part of this is about making sure that the language academics use is ‘accessible’ and that our reporting methods are appropriate to the end user (although it was noted that practitioners and policy-makers also have their
own ‘languages’). Several participants also noted that, where possible, research project budgets should try to incorporate the time costs of the practitioner(s) in some way.

The symposium was successful in identifying areas for research which were of interest to the academics attending and would provide useful information for the practitioners and policy-makers. The next step, in the months following the symposium, is for interested parties to coalesce around one or more of these research themes and start working towards producing draft research funding applications/planning actions that will produce the types of data required. It is crucial that the practitioners and policy-makers are involved in this process. As noted at the symposium, participation can take many forms from being involved in brain-storming and writing the grant application to sitting on a project advisory panel or being the non-academic partner/supervisor in PhD studentship bid (e.g. these usually involve the student being based within the non-academic partner organisation for part of the three-year research period). As Co-ordinator of the symposium I will be happy to co-ordinate this ‘coming together’ if people want to highlight the topics that they would be interested in helping to take forward. Please contact me at N.Morris@ed.ac.uk.

Likewise, if you have any suggestions for, or know of any, future events concerned with cultivating urban greenspace, ways of keeping in touch, or simply keeping the momentum going please do not hesitate to get in touch.
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Useful links

Carr Gomm http://www.carr-gommscotland.org.uk
Centre for Research on Environment Society and Health http://cresh.org.uk/
Common Good (Glasgow) http://www.inthecommongood.org/start/where-are-you/glasgow/

Edinburgh Allotment Strategy http://www.edinburgh.gov.uk/info/497/allotments/1138/allotment_strategy_for_edinburgh/1
Edinburgh and Lothians Greenspace Trust http://wwwwelgt.org.uk
Edinburgh City Council Green Flag Scheme http://www.edinburgh.gov.uk/info/495/parks_gardens_and_open_spaces/765/green_flag_parks/1
Edinburgh Community Backgreens Association http://www.ecba.org.uk/home.aspx
Edinburgh Garden Partners http://www.edinburghgardenpartners.org.uk/
Edinburgh Local Food Network http://www.edinburghfood.org/
Elmwood College Allotments http://www.elmwood.ac.uk/news/about/plot-encourage-green-fingers

Federation of City Farms and Community Gardens http://www.farmgarden.org.uk

Glasgow and Clyde Valley Green Network Partnership http://www.gcvgreennetwork.gov.uk
Greendykes Allotment Project http://www.greenspacescotland.org.uk/default.asp?page=204&pid=2130
Greenspace Scotland http://www.greenspacescotland.org.uk/
Green Thumb (NYC) http://www.greenthumbnyc.org/

Incredible Edible Todmorden http://www.incredible-edible-todmorden.co.uk/

Lochend and Restalrig Community Growing Project http://lrcommunitygrowing.ning.com/

National Forest Land Scheme http://www.forestry.gov.uk/nfls
NOURISH http://www.edinburghfood.org/the-network/nourish/

PEDAL Portobello Transition Town http://pedal-proty.org.uk/
Possilpark Greenspace http://sites.google.com/site/possilgreenspace/

Royal Edinburgh Community Gardens http://royaledinburghcommunitygardens.wordpress.com/

Scottish Allotments and Gardens Society http://www.sags.org.uk/
Sow and Grow Everywhere http://www.nva.org.uk/current-projects/sage+sow+and+grow+everywhere+and+glasgow+harvest/
Sunny Lochaber United Gardeners (SLUGS) http://www.slugallotments.co.uk/index.asp

The Commonwealth Orchard http://www.commonwealthorchard.com/
The Stop (Toronto) http://www.thestop.org/
Transition Edinburgh http://transitionedinburgh.wordpress.com/
Transition Network http://www.transitionnetwork.org/
Trellis http://wwwtrellisscotland.irg.uk/
