

## Vancouver Urban Farming Forum

### Land Utilization

#### Exercise 1:

- Proposed topics
  - o Applying principles of permaculture to urban farming
  - o Land quality
  - o Using perennial crops (vs. self seeding annuals)- crops suitability
  - o Soil building- what do you do with concrete- making soil better or bringing new soil in (because topsoil is so thin)

#### Discussed topics:

- Composting as a way of creating soil
- Food safety for urban lots (contamination, post-industrial uses)
  - o Soil testing is very expensive
  - o Interpretation is a big barrier for the average urban farmer
  - o How do you sample? You may have a site where something has been spilled. In this case you must know how to get an accurate sample
    - Needs: education, funding support, facilities
  - o There is soil analysis in the states that is more affordable (i.e. metal testing)
    - Seattle- guidelines are unclear because data is unclear. But it is easier to get testing done than it is in BC- there is no requirement, just recommendations
  - o When you test vapors, it's what's coming off the soil because there is something in it- vapor testing
  - o Difficult for Vancouver urban farmers to access information
  - o We need more information about vacant sites that have potential to be used for food production
  - o Currently there are restrictions in contaminated areas because it's not necessarily 100% safe, even with a raised bed
  - o Solutions

- Farmers would like to gain historical data access to sites that may have been contaminated
  - City could identify sites that need more or less work. What level of contamination are coming from different sites (i.e. gas stations)?
  - Environmental consulting company should come up with guidelines for identifying contaminated sites and land quality
  - Davie gardens- owned by client, permeable membrane- maybe we could get data with this?
  - Science supports the fact that plants will take up heavy metals even though they won't use them- would be beneficial to have guidelines/manual for land quality testing- scientific data to support
- Land remediation
  - o Native plant restoration: heal the land first and make a gradual transition (long term commitment), rather than a quick transition
  - o Apparently there are a lot of research papers on remediation but not many that stand up to policy-
  - o There is a lot of city (abandoned) land that is just sitting because it is not the right time to sell- just left to overgrow or is dug up
  - o There may not be financial incentives to get testing and sell off the land
  - o Problem: We don't know how many sites are contaminated in Vancouver.
  - o 4000 Brownsfield sites in BC
  - o We need soil testing ideas for safer food
  - o Vacant sites are sitting and becoming garbage sites
  - o Water accessibility is also a concern when acquiring land
- One solution: resource for farmer who wants to acquire a new piece of land
  - o How do you find information about remediation (which just means below certain levels)
  - o Who has owned it (historical data)?
  - o One hub where you can find out information about sites- one web page that you can refer to as an urban farmer seeking land

- What is the rationale?
  - o Beautification of the city
  - o Add to 2020 initiative, biodiversity, greening the city
- Reference to US practices :
  - o **Good agricultural practices (GAPS)**: new federal legislation in the US that looks at processing and safety steps in the handling (harvest) of produce
    - One requirement is to have water testing done- is it potable water? (Water sampling is easier to do than soil testing)
    - Note: Weather/climate patterns are changing- It's becoming drier
- What are different models for food production in the city that we are excited about?
  - o Animal husbandry in the city
    - Good to have regulations for bringing animals to farm lands- i.e. can we bring in pigs for a season to do fertility in urban farm? On a temporary basis?
    - Benefits: Protein source, soil fertility
    - Can we have a pig farm in the middle of a city?
      - What if we want to borrow pigs? Not for slaughter?
      - Space may be needed for good rotation and grazing
      - But 1 acre or so may have a lot of possibilities
      - Rotate pigs/chickens through 3 lots
    - Note: There are ruminant rental services in Seattle- for maintenance and mowing
    - We can use animal husbandry as part of a larger fertility plan
    - We can't sell eggs from chickens right now
    - Small scale abattoirs are not economically viable- many had to be shut down
    - Remediation using plants and/or livestock

- We need **longer leases** so you have time to break in your land and improve and get to know it before you start to make money on it
  - Solution: Financial incentive for land remediation
  - If farmer acquires piece of land, they need to account for in between time to adjust to land
  - Example: One participant has left project because couldn't get tenure- government owned site and enjoyed having the farm there but couldn't fit it in big picture- didn't provide stability
  - Issue: Insecure food sovereignty- when farmers can't rely on sustained land because private landowners may be selling it off
  - Example: Too much bureaucracy- no precedent for leasing city land in Seattle- pushing for municipality to make lease agreements
  - Conflicting bylaws around real estate with a for profit venture- farmers want land for food security- we contribute to fertility but can't do that in the short term- no incentive for you to put in time and effort when you will be kicked out shortly
  - Example: Seattle- light rail right away, public utility right away- cannot be developed- city should assess the benefit of it and to the greater community- not just individual profit- we need to put this in writing if someone does complain- why can this person make a living off of publicly owned land? – farmers could still pay leases
- o Suggestions:
  - Farmers will pay to maintain it if city can't afford to pay for it
  - Remediation time frame- stewardship programs
  - Longer leases- extending time frame so we can deal with contamination and have stability- is there opportunity to have more public lands available? – more stable relationships

## Exercise 2: Additional Refinement/Additions

- Temporary Use:
  - o Urban lots that are due for development for high rises. There are empty lots in city that are just sitting- this space can be used for urban agriculture

- o Portable/mobile aquaponic systems- use in shorter periods of time (if lease is short)
- o We can work with developers to help them with tax situations and give them incentive to allow for agricultural development – tax break potential
- o Unused spaces can temporarily be used for urban agriculture spaces- portable greenhouses, seedlings, or small animal husbandry spaces
- o Portable raised beds- PROBLEM: expensive for private farms to get into
- o Question: Do we have to go through permitting process for temporary structures?
- Issues for urban farmers:
  - o To get tax break you have to be a community garden instead of for profit
  - o Food production initiatives that rely on grants are unsustainable- should not be limited to nonprofits
  - o Commercial production not allowed on public lands
    - So we should allow commercial production on temporary spaces- remediation plots that will be redeveloped
  - o There is a lot of unused city land, but public perception may be that urban farmers are privatizing public land (city-owned/provincially-owned land)
  - o Water access & electricity- needed for hydroponics and aquaponics
  - o Example of land issue: Farmers on 57<sup>th</sup> is on Vancouver Coastal Health's land and there is no formal agreement- they have to tip toe around expanding because they don't have a business license- operating with the VCH regime- working on formalizing process so that they can grow soil right there and draw on immediate resources
- Ideas for helping urban farmers secure/use land more efficiently:
  - o City could offer microloans- free urban farming loans
  - o City should subsidize soil testing so that we can use land and see if it is usable
  - o Look at rooftop growing- land use and SPACE USE- aquaponics
- Soil building:
  - o Farmers want decentralization so that accessibility is better- would like to see City of Van support in facilitating development of neighborhood composting systems

- o Need a vehicle for compost transport- farmers proposed having something like four compost depots (central spots) around Vancouver (i.e. East Van, West Van, downtown, etc.)- better than driving to location out of the way
- o Onsite soil building would be very beneficial for urban farmers
- o Issue: right now we need to rent trucks to get soil to site- huge cost burden- we need to move resources around to where it is actually accessible
- o Closed container composting is allowed but outdoor/open composting business is PROBABLY not allowed (?)
- o Can we get financial support from COV for diverting from more expensive landfills?
  - Benefits: localize soil production and potentially save the city a lot of money
  - This is also a public service- utilizing city's waste and saving resources
- o Make more city friendly (anaerobic digestion)- closed compost
- o Biogas compost bin
- o When you get into flammable gas, you get a lot of codes to work around (regulation safety issues)
- Space utilization
  - o Example: Boston- number of vacant buildings from the industrial times- farmers are starting to take them over (illegal/legal- we don't know)- have aquaponics, greenhouses, farmers markets in the basement, growing mushrooms in the basement
  - o Rooftop farming makes sense because you can harvest heat from buildings- use hoop houses but subsidize with light from outside- will probably produce high yield of produce through winter months- would just be paying a bit for hydro- efficient use of space- divert rainwater as well- better for our water systems
  - o Vertical growing- more energy intensive- combinations with new developments-
  - o Convert landscape city land into edible landscaping so that we could have farmers on the payroll
    - Beautifying land

- No farmers currently on the payroll for City- farmers could make edible landscapes that go to food banks, hospitals, schools- generate revenue for the city

### Exercise 3: Clarifying

- Difficult to attain leases with private land owners. Are there more opportunities to utilizing land under municipalities? What can we do on a more temporary basis on land in the city in terms of food production?
  - o Portable greenhouses, aquaponics, mobile, productive and temporary spaces
- What are other spaces that we can use in the city?
- It is very important to deal with leasing out land on a **long term basis** in municipalities! We can grow way more efficiently in permanent spaces that we can in temporary ones.
  - o Long term/short term lease- you will farm very differently depending on the length of the lease
  - o One solution is to start using public lands
  - o Example: Farmers on 57<sup>th</sup>- private use of public space- tangible benefits
  - o SOLEFood- would obtain a piece of land but there is no precedent on what to do with a contaminated site- how can it be used safely without a huge expense to everyone?
- Solutions:
  - o Establish guidelines. What is safe? Raised beds? – formalizing process- no excavation and capping
  - o Partnership between city and academic community (Dept of engineering from City and UBC Science) – students aren't empowered to make safety calls on their own
  - o City has levels that are safe for growing- Protocol 11 (soil contamination guidelines)- language is difficult to understand- city needs to come through with something that says this is the soil test that you need to have done- **best practice for urban farmers to use land**

### Exercise 4: Priorities

- Best practices for dealing with soil contamination
- Building soil in the city (decentralized composting)
- Attaining longer term leases (accessing more municipal/government land)

- Temporary uses for food productions
- Capitalize on “other spaces”

\*Subsidize soil testing- what need to be done- supply a person to run tests

- Ensure that growing spaces and potential growing spaces in Vancouver are safe
- Environmental remediation company should give us guidelines and procedure for testing- create a working group

**Overarching theme: ENSURING GROWING SPACES AND POTENTIAL GROWING SPACES ARE SAFE**

- Remediation rather than restriction

Other big topics:

- Long leases on municipal land- will be difficult to get long lease on city land
- Capitalizing on other spaces
- Composting as community center

**FINAL TOP 3 PRIORITIES**

1. Ensuring growing spaces and potential growing spaces are safe. Create best practices on dealing with soil contamination. Clarify language. Create guidelines for dealing with contaminated sites. Have a soils working group that works as an advisory body. Should be a collective responsibility.
2. Supporting temporary use for food production
3. Capitalize on “other spaces”