





The Barrett Centre of Innovation in Sustainable Urban Agriculture

Urban Farm Plan Make a proposal for where you think you could start an urban farm based on the best practices outlined by The Barrett Centre of Innovation in Sustainable Urban Agriculture. Resources from The Barrett Centre can be found here.

Proposed Site

Where would you like to	
start an urban farm?	
Why is this site suitable?	

Best Practices

Water Management What water is already at your site? What strategies will you use to keep the water levels ideal?	
Crop Choice What will your proposed urban farm grow and why?	
Soil Management How will you maintain the health of the soil on your urban farm?	
Sustainable Practices How will you minimize the environmental impact of your urban farm?	
Community Engagement What will you do to connect with the local community?	





.....



The Barrett Centre of Innovation in Sustainable Urban Agriculture

Urban Farm Plan

Мар

Draw a map of your proposed urban farm, labelling the best practices.







The Barrett Centre of Innovation in Sustainable Urban Agriculture

Un plan pour une ferme urbaine Créer une proposition de ferme urbaine basée sur les meilleures pratiques

décrites par le Centre d'innovation en agriculture urbaine durable de Barrett. Découvrez les ressources sur l'agriculture urbaine du Barrett Centre ici.

Le site proposé

Où installerez-vous	une	ferme
urbaine?		

Pourquoi ce site est-il approprié?

Les meilleures pratiques

La gestion de l'eau Quelle est la quantité d'eau sur votre site? Quelles stratégies utiliserez-vous pour maintenir les niveaux d'eau à un niveau idéal?	
Le choix des plantes Que cultiverez-vous dans votre ferme urbaine et pourquoi?	
La gestion des sols Comment allez-vous maintenir la santé du sol de votre ferme urbaine?	
Les pratiques durables Comment allez-vous minimiser l'impact environnemental de votre ferme urbaine?	
L'engagement de la communauté Comment allez-vous entrer en contact avec la communauté locale?	





The Barrett Centre of Innovation in Sustainable Urban Agriculture

Un plan pour une ferme urbaine

La carte

Dessinez une carte de votre projet de ferme urbaine, en indiquant les meilleures pratiques.

.....

.....



Best Practices – Farm Planning

2023

Craig Kelman

This resource and others are available through The Barrett Centre Urban Agriculture Community Portal.

Introduction

When planning an urban farm, it's important to consider a range of Best Management Practices (BMPs) to ensure that the farm is sustainable, efficient, and profitable. In this document, we will outline a number of BMPs that are relevant to urban farming, including site assessment, water management, crop selection, soil management, sustainable growing practices, community engagement, and business planning. By following these BMPs, urban farmers can establish and operate successful, environmentally friendly farms that contribute to the local community and economy.

Who is this for

This guide is for anyone who is actively starting or planning to start a farm or farm business.

Objective

To develop a comprehensive farm plan that utilizes best practices in sustainable agriculture, with the goal of maximizing crop yields, minimizing waste and resource consumption, and promoting the long-term health and viability of the farm ecosystem.



Index

- 1. **Site assessment**: Before starting an urban farm, it's important to assess the site to determine its suitability for agriculture. Factors to consider include the soil quality, access to water, sunlight, and drainage.
- 2. **Develop a water management plan**: Urban farms often face water shortages, so it's important to develop a plan for conserving and efficiently using water. This might include using drip irrigation or collecting rainwater.
- 3. **Crop Choice**: Not all crops are well-suited for urban farming. Choose crops that are well-adapted to the local climate and soil conditions, and consider factors such as the growing season, water requirements, and market demand.
- 4. **Soil management**: Urban soil can be contaminated or lacking in nutrients, so it's important to use organic fertilizers and soil amendments to improve its quality. It's also a good idea to use raised beds or containers to help improve drainage and reduce the risk of soil-borne diseases.
- 5. **Sustainable growing practices**: To minimize the environmental impact of the urban farm, it's important to use sustainable growing practices such as composting, cover cropping, and integrated pest management.
- 6. **Engage with the community**: Urban farms can be a great way to connect with the local community and promote sustainable agriculture. Consider hosting educational events, volunteering opportunities, or farm-to-table dinners to engage with the community and build support for the farm.
- 7. **Develop a business plan**: To ensure the long-term viability of the urban farm, it's important to develop a comprehensive business plan that outlines the farm's goals, target market, marketing and sales strategies, and financial projections.



Site Assessment

Conducting a thorough site assessment is an important step in planning an urban farm. A site assessment helps to identify the strengths and limitations of the site and allows the farmer to determine the most suitable crops to grow and the most effective methods of cultivation.

To conduct a site assessment, the farmer should start by collecting information about the site's location, including the climate, average temperatures, and weather patterns. The farmer should also assess the soil quality, including its pH level, nutrient content, and drainage. Access to water, sunlight, and other resources such as electricity should also be considered.

In addition to physical characteristics, it's important to assess the site's social and economic context. This might include the local market for fresh produce, the availability of labor, and the potential for partnerships or collaborations with local businesses or organizations.

By considering all of these factors, the farmer can make informed decisions about the best ways to use the site for urban farming.

Water Management

Developing a water management plan is an important step in planning an urban farm, as water shortages can be a common challenge for urban farmers. A water management plan helps to ensure that the farm has a reliable source of water and that it is used efficiently.

To develop a water management plan, the farmer should start by assessing the farm's water needs based on the crops being grown and the local climate. The farmer should also consider the availability of water from different sources, such as municipal water, rainwater, or grey water.

Once the farm's water needs have been determined, the farmer can implement strategies to conserve water and use it efficiently. This might include using drip irrigation or soaker hoses to deliver water directly to the roots of the plants or collecting and storing rainwater in barrels or cisterns. The farmer should also consider ways to reduce water loss through evaporation or runoff, such as using mulch or installing drip pans under containers.

By developing a water management plan, the urban farmer can ensure that the farm has an adequate and sustainable supply of water, which is essential for the growth and productivity of the crops.



Crop Choice

Choosing the right crops is an important step in planning an urban farm, as it helps to ensure that the farm is successful and profitable. When selecting crops, there are several factors to consider:

- 1. **Climate and soil conditions**: Choose crops that are well-suited to the local climate and soil conditions. This will help to ensure that the crops have the best chance of thriving and producing a good yield.
- 2. **Growing season**: Consider the length of the growing season in the area and choose crops that can be grown within that time frame.
- 3. Water requirements: Some crops require more water than others, so it's important to choose crops that are appropriate for the farm's water availability.
- 4. **Market demand**: Choose crops that are in high demand in the local market. This will help to ensure that the farm is able to sell its produce and generate a profit.
- 5. **Pest and disease resistance**: Choose crops that are resistant to pests and diseases that are common in the area. This will help to minimize the need for pesticides and other chemicals and reduce the risk of crop failure.

Soil Management

Implementing proper soil management is an important aspect of running a successful urban farm. Urban soil is often contaminated or lacking in nutrients, so it's important to use organic fertilizers and soil amendments to improve its quality.

One way to improve soil quality is to add compost to the soil. Compost is a rich, organic material that is made by decomposing plant matter and other organic materials. It adds nutrients and beneficial microorganisms to the soil, which can help to improve plant growth.

Other soil amendments that can be used to improve soil quality include lime, sulfur, and gypsum. These amendments can help to adjust the soil pH and improve the soil's structure and drainage.

In addition to adding amendments to the soil, it's important to use sustainable soil management practices such as cover cropping and crop rotation. Cover cropping involves planting a cover crop between growing seasons to help improve the soil structure and prevent erosion. Crop rotation involves planting different crops in the same location each year to help reduce soil-borne diseases and pests, and to improve soil fertility.



Sustainable Growing Practices

Using sustainable growing practices is an important aspect of running a successful and environmentally friendly urban farm. Sustainable growing practices help to minimize the environmental impact of agriculture and can also improve the productivity and profitability of the farm.

Some examples of sustainable growing practices include:

- 1. **Composting**: Composting is the process of decomposing organic matter and using it as a soil amendment. Composting helps to reduce waste, improve soil quality, and reduce the need for synthetic fertilizers.
- 2. **Integrated pest management**: Integrated pest management (IPM) is a holistic approach to pest control that focuses on using non-toxic methods to prevent pests and diseases. This might include using natural predators, such as ladybugs, to control pests, or using physical barriers like row covers to prevent pests from reaching the crops.
- 3. **Cover cropping**: Cover cropping involves planting a cover crop between growing seasons to help improve the soil structure and prevent erosion. Cover cropping also helps to suppress weeds and improve soil fertility.
- 4. **Crop rotation**: Crop rotation involves planting different crops in the same location each year to help reduce soil-borne diseases and pests, and to improve soil fertility.

Community Engagement

Engaging with the community is an important aspect of running a successful urban farm. Urban farms can be a great way to connect with the local community and promote sustainable agriculture, and there are a number of ways to engage with the community:

- 1. **Host educational events**: Consider hosting workshops, lectures, or tours of the farm to educate the community about urban agriculture and the benefits of locally grown produce.
- 2. **Offer volunteering opportunities**: Many people are interested in getting involved in urban agriculture, so consider offering volunteering opportunities at the farm. This can be a great way to engage with the community and build support for the farm.
- 3. **Participate in local events**: Look for opportunities to participate in local events, such as farmers markets or community festivals, to promote the farm and its products.
- 4. **Partner with local businesses**: Consider partnering with local restaurants or retailers to sell the farm's produce, or to offer farm-to-table dinners or other events.
- 5. **Communicate with the community**: Use social media and other channels to keep the community informed about the farm and its activities. This can help to build support and engagement with the farm.



Business Plan

A business plan helps to define the farm's goals, target market, and strategies for marketing and sales, and it also includes a financial projection to help the farmer understand the potential profitability of the farm.

Here are some key elements to include in a business plan for an urban farm:

- 1. **Executive summary**: This is a brief overview of the business plan, including the farm's mission, values, and goals.
- 2. **Market analysis**: This section should assess the local market for urban agriculture, including the demand for fresh produce and the competition from other urban farms or other sources of produce.
- 3. **Products and services**: This section should describe the types of produce that the urban farm will offer, as well as any value-added products or services (e.g. farm-to-table dinners, educational workshops, etc.).
- 4. **Target market**: This section should identify the specific customers that the urban farm will target, including demographic information and purchasing behavior.
- 5. **Marketing and sales strategy**: This section should outline the strategies that will be used to reach and engage with the target market, including social media, local events, and partnerships with restaurants or retailers.
- 6. **Financial plan**: This section should include a detailed financial projection for the urban farm, including projected revenue, expenses, and profit.
- 7. **Conclusion:** This section should summarize the key points of the business plan and provide any final thoughts or considerations.

Additional Resources

- 1. The Living Soil Handbook The No-Till Grower's Guide to Ecological Market Gardening. https://www.notillgrowers.com/
- The Lean Farm: How to Minimize Waste, Increase Efficiency, and Maximize Value and Profits with Less Work – Ben Hartman https://www.claybottomfarm.com/books
- 3. Starting a Farm in Ontario Business Information Bundle for New Farmers OMAFRA http://omafra.gov.on.ca/english/busdev/newentrant/newent.htm
- 4. The Market Gardener A Successful Grower's Handbook for Small-Scale Organic Farming JM Fortier <u>https://themarketgardener.com/books/the-market-gardener/</u>