# Assessing and Addressing the Needs of Urban Agriculture in Copenhagen

# Supplementary Material

An Interactive Qualifying Project submitted to the faculty of Worcester Polytechnic Institute in partial fulfillment of the requirements for the Bachelor of Science degree

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# **Briefs and Questions**

**NOTE:** The following questions do not represent everything that was asked during each interview. Some of the questions that were asked do not appear below in the briefs. Other questions that do appear were not asked as they did not accurately reflect what was discussed during the interview.

#### Phie Ambo

School founder/documentarian Den Grønne Friskole Category: Education

Interview date: September 4, 2019

#### **BRIEF**

The Green Free School wants to educate future generations on green principles, guiding the next generation to a more sustainable future. They want children to think of nature in every context including, but not limited to, green jobs of the future. They have a circular farm, meaning they're able to make all the resources they need for the farm. Additionally, they've made all of their plants insect-friendly.

# **QUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# Background on Den Grønne Friskole

- On your website, you noted that you use snail-based learning. Can you explain to us what exactly this is?
  - Why do you think more schools haven't adopted a more natural approach to education? (could it be that they simply haven't caught on yet, or are they not willing to put in the resources that are required to adopt this plan)
- Are your students involved in a lot of community clubs or activities?
  - Do any of these involve farms or gardens?
- How does the school's circular farm make all of the required resources?
  - Does the school's food waste produce enough mulch to sustain the farm?
    - If there's extra what is done with that?
  - Do you have numbers on your farm?
    - How much mulch (kilos) you need each season for the size (square meters) of your farm? How much waste (kilos) is needed to make

that much mulch? How much rainwater (Liters) needs to be collected to keep the farm running?

# Questions involving networks and communication

- Are there any other farms, urban farms, or related groups that you collaborate with in relation to your farm?
  - Has this helped the sustainability of your farm?
  - Is there any organization, group, or people outside of farms that you collaborate?
    - What sorts of collaboration is being done? Is it a flow of resources, or simply helping each other out?
      - Do you consider this a network?
    - How about for the school?
      - What type of collaboration is being done here?
- Do you think being apart of a like-minded community (or a network) could help or does help your operations?
  - Do you think operating a circular farm decrease the benefits of joining a network would provide? (since it is circular and self-supplying)
- What would you look for in a potential network?
  - Resources, people, etc.
- Do you educate children about collaboration or working together towards common goals?
  - Have you found this to help with communication?
- Material use is noted on your website, how often are new buildings being constructed?
  - Would more farms be included/considered in the construction/design of a new building?

#### **Anders Blok**

Sociologisk Institut, University of Copenhagen Associate Professor

Category: Research

Interview date: September 10, 2019

#### BRIEF

Anders Blok is an associate professor in the Department of Sociology at the University of Copenhagen. His research focuses on environmental sociology, sociology of knowledge and science, urban sociology and pragmatic social theory. Currently, Anders is researching the sociological aspect of climate change and how new "climate risk communities" could appear as a result. He has co-authored an article titled "Picturing Urban Green Attachments: Civic Activists

Moving between Familiar and Public Engagements in the City" in which he explores the cultural tension and political tension that comes with urban ecology.

#### **QUESTIONS**

- Could you please tell us about your work and research specifically when it involves urban agriculture?
- I heard through Oleg Koefoed, our sponsor at Growing Pathways, that you have been doing research on creating a social map of green spaces in and around Copenhagen. Could you tell us about how you went about creating this map?
  - How did you determine connections?
    - Can this be done by simple observation, or do you have to ask someone who they are connected to?
  - When creating a social map, do you use an app on the computer?
    - If so, which one?
    - Does it specify different types of connections?
- Have you been involved in any type of urban gardening?
  - What is/was your role?
- How do most urban agriculture projects develop?
  - What could make this easier?
- In general, what are the largest obstacles that occur when new networks form?
  - What is the easiest part of a new connection between people?
- Have you noticed any important differences in the structure of urban agriculture compared with other communities?
  - Is this beneficial or detrimental?
- What have you learned about circular practices and how they relate to urban agriculture?
  - Are certain social structures more apt to succeed?
    - Why or why not?
- Can you describe the relationships you've studied between other farmers, people, or other groups/organizations that have been helpful to you in your research?
  - What would you say the main focus of these relationships are?
  - How do they communicate with each other? (Phone calls, in-person meetings, emails, social media, messaging services, etc.)
  - How frequently are they in contact with these people?
  - How and when did these relationships/connections develop during your research?
- Once the collaboration is established, what helps to keep the connections?
  - Is there a form of aid that you think could be beneficial in helping to fortify the relationships they now have?
  - Would you imagine the aid to be more communications based or data-based?
- Have you observed what happens to an urban farm when the main grower leaves?
  - How about if the location is taken away?

- Project loses funding?
- Would the farm be self-sustainable?
- Can you think of any resources, existing or non-existing, that would make this adaption easier?
- Do you have any other contacts that you would be willing to share with us so that we can reach out to them?

# Lyng Brøndum Dyrholm

Købehavns Kommune

Projektleder - Områdefornyelsen Nørrebro

Category: Government

Interview date: September 23, 2019

#### **BRIEF**

Lyng works with the city government and is currently project leader for the Nørrebro renewal process. More specifically he works with the Technology and Environmental Management sector of the city. This subdivision of the government deals with government tasks and services to citizens and businesses, including in the environmental area, local planning, urban renewal, construction management and the traffic area. They also deal with upkeep of municipality owned roads and green areas.

# **QUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent.

# Questions about working with the government

- Do you think the government would be more likely to support urban farms in the future?
  - Why or why not?
- The municipality owns a lot of land that is underproductive, particularly green lawns. Would the municipality be open to converting these areas to more natural landscapes or if they're willing urban farms?
  - Have there been any pushes from within the government to convert city-owned land into urban farms?
  - Has there been a lot of push from citizens?
    - If not, do you think a lot of them know about the issues associated with monocultures or underused land? What about the benefits with developing said underused land?

- o If this land is planned to be redeveloped in to buildings and complexes, are there any plans to add rooftop gardens in the design process?
- Is there any data on the fertility of the unused government land?
- Are there any restrictions working with the municipality, when compared to independent ventures?
  - How much control do you have over new projects involving land use?
    - Have you advocated for urban farms/greenspace in the past?
  - Have these restrictions stopped ambitious green projects in the past?

# Questions about networks

- What is the relationship between the city and ByOasen?
  - Does the city own and operate ByOasen?
  - Does ByOasen have any business model? (Do they sell something like eggs)
  - Is ByOasen operated by paid staff?
    - Is it operated by volunteers?
      - Are there any plans to change the business model of ByOasen to something more sustainable (in terms of business, not environment)?
- Is there a network of urban farms the city is involved with or operates?
  - Would Copenhagen allow any or all of its farms to join a network of urban farms if those farms/farmers were interested?
  - How do you communicate with others in the network?
    - What are your thoughts on a face-to-face tool to enable the creation of a more permanent urban farm community in Copenhagen?
    - Thoughts on a digital networking tool?
  - Are there any resources municipality operated farms have found difficult to supply?

#### Thomas Burg

Copenhagen Business School PhD Fellow

Category: Research

Interview date: September 2, 2019

#### BRIEF

Thomas is a Ph.D. fellow at the Copenhagen Business School (CBS). His research focuses on the organization of culture and art, Anarchist organization, Philosophy of science, particularly Pragmatism and Cultural Mapping methodologies. "Proudly researching ecologies of art and

culture, cultural sustainability and practices of aesthetic production. My work explores how cultural organizations interact with other cultural organizations in a regional setting and how such a system of interrelations makes a regional ecology of culture resilient" (LinkedIn).

#### **QUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Consent

# Making a Network

- Our goal is to be able to unite urban farmers, resource providers, and people involved in urban agriculture into one large network. In order to do this, we must be able to map out the social relations between people.
  - We were wondering what are some good strategies for mapping out relations within a network since your field of study directly applies to this?
    - Are there ways we can anticipate how connections may evolve?
      - Do you have knowledge of how the culture around urban agriculture developed in recent years?
        - Have you noticed more long-lasting installments of urban agriculture?
    - If not, are there things we can look for as an indication that connections within a community are changing?
- In order for this network to work, we are planning on implementing a networking tool. Currently, we are planning to organize the urban agriculture community.
  - What are some qualities that can ensure effective communication within the network?
  - What are some of the most effective forms of communication within a network that you have found?
- We want this communication tool within the network to ensure the longevity of urban farms within the network. We noticed that a lot of urban gardens seem to close down after a short period of time.
  - O you think that there should be a push from urban gardens (volunteer-based and grown for oneself) into urban farms (product-based and grown for being sold to the public)?
  - Is there an interest in the business community for urban agriculture?

# Anarchism and its applications to organizing/society

- How are anarchism and community organization related?
- In what ways do you think anarchism should be implemented into society?
  - How can a government decrease certain regulations allowing for more "anarcho-entrepreneurship?" → What would these regulations be?

- How are urban agriculture and the process of starting a farm-related to anarchism?
- Are there specific drawbacks you see with the current lack of anarchist principles in western culture?
  - Can a government apply aspects of anarchism by incentivizing individuals to create a service or organization in their community that previously didn't exist?

#### Jens Christian Elle

Brønshøj-Husum Local Committee Project Leader

Category: Social

Interview date: September 6, 2019

#### **BRIEF**

Jens Christian Elle is a project leader for the Brønshøj-Husum Local Committee. He has been involved with Naturbyen (Natural City), which is an ongoing project to create a nature oasis in the city. There will be gardening areas where people can grow what they want, places to experiment and learn new gardening methods, animal husbandry, and more. Brønshøj-Husum Local Committee acts as a link between Copenhagen Citizens' Representation and the citizens who live in Brønshøj, Husum and Tingbjerg. The Committee works to promote and ensure dialogue between citizens and politicians. With the Committee, Jens works to promote democracy, culture, and networking activities in the neighborhoods through an annual fund of DKK 1.7 million.

#### **OUESTIONS**

- What is it you do for the Brønshøj-Husum Local Committee?
- Can you give a brief overview of the work you have done with the Naurbyen project
  - What is your experience with urban farming projects?
  - How well-suited do you think communities are to develop urban agriculture?
- How did you first get involved with Naurbyen?
  - Are you still in contact with the project leaders?
  - In your opinion, what is Naurbyen's goal?
  - How successful and sustainable do you think Naurbyen is and will be?
- Tell me about the Visions for Voldparken Project
  - How did you reach out to the community?
  - Can you tell us how your relationship with Habitat started?
    - How do you keep a strong relationship with them?
  - The vision focuses on the importance of rainwater management, how about urban agriculture?

- Do you think there would be enough support to shift urban gardens to urban farms in copenhagen?
  - What would help this shift?
  - What knowledge/training and development would this require?
- How do you manage the projects you sponsor?
  - Do you feel you have good communication between the projects, the place, and the growers?
- Can you describe the relationships you have with other farmers, people, or other groups/organizations that have been helpful to you?
  - How do you establish connections in the beginning of a project?
  - What would you say the main focus of these relationships are?
  - How do you communicate with them? (Phone calls, in-person meetings, emails, social media, messaging services, etc.)
  - How frequently are you in contact with these people?
  - How and when did these relationships/connections develop?
- Now that you have networks established, what helps you to keep the connections?
  - Is there a tool or other form of aid that you think could be beneficial in helping to fortify the relationships you now have?
    - Would you imagine the tool to be more communications based or data-based?
- Would you be interested in participating in a pilot of a networking tool later on?

# Ditte Kathrine Engelstoftegård

HappyHumans (Founder, CEO)
Permaculture Designer, Sociologist, Ecoactivist

Category: Agriculture

Interview date: September 17, 2019

#### **BRIEF**

Ditte is founder of HappyHumans, an organization that designs outdoor spaces to both make the city beautiful and make it easier to live a more sustainable life. They design, build, and develop Forest Gardens in public and private areas of the city. HappyHumans is very interested in and focused on using permaculture in developments to promote sustainability. ValbyByhaver is a community garden, established in 2016 as an extension of the high beds developed by the Valby Environmental Group, with another 15 high beds focusing on the cultivation of edible plants, herbs and medicinal plants.

#### **QUESTIONS**

# Background

- What is an average workday like for you?
- How many projects do you manage? Participate in? Volunteer for?

# **HappyHumans**

- Describe the process of designing and developing a project.
  - How do people/places contact you?
  - How do they use the spaces following their completion?
  - How involved do you stay in the projects?
  - Have you developed any spaces specifically for urban agriculture (cultivation of crops?
- How is HappyHumans funded?
  - Any government funding?
  - o Fundraising?
- Who owns the land where you build the forests?
- Is HappyHumans supported by employees or volunteers?

# ValbyByhavr

- Describe the development of Valbyhaven from inception to where it is now.
  - How involved were you in that process?
  - What is your position within the garden? What work do you perform?
  - How was the development funded?
- Is Valbyhavn supported by volunteers?
- What do you do with your production? Do you sell anything?
- Does Valbyhavn have a business model?
- How is Valbyhavn funded?
- Who owns the land?

#### Network

- Are you a member of any official networks in Copenhagen concerning urban agriculture, farming, city greening, etc?
  - What are your opinions about being a member of those networks? Benefits?
  - How do they communicate?
- How do you communicate with the community when farming or when building a new forest?
- How do you communicate/interact informally with other urban farmers?
  - Are there any relationships that have been especially important or beneficial to your work?

#### Jais Hammerlund

KlimaTV

Sustainable media developer

Category: Business

Interview date: September 12, 2019

#### **BRIEF**

Jais is a sustainable media developer and has been a producer/director and KlimaTV since June 2009. He volunteers for Naturplanteskolen as a "developer, web, movie." Naturplanteskolen ("Natural Nursery") is a nursery founded in 2013 dedicated to being "ecological, sustainable, holistic and friends with nature in all the ways [it] can." It is run by a Board of Directors, consisting of 6 people (including Jais) and is supported by an association with 100+ members made up of volunteers and support members. It is possible to become a member for 200 DKK annually. The nursery holds tours, courses, workshops, and lectures. Books, seeds, membership, gift cards, courses, and events can be purchased online. Plants can be ordered by mail. Visitors are welcome.

#### **OUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# **Background**

- Please explain your involvement in Naturplanteskolen as a volunteer and specifically involving web/movie development
  - How did you become involved in Naturplanteskolen?
    - How did you become a member of the board?
  - How much manual work do you perform on the farm?

#### **Business Plan**

- How was the nursery established?
  - Who owns the land the farm is on?
- How has Naturplanteskolen grown as a business?
- How are volunteers recruited?
- Do members receive any share of the crop?
- How do you sell what you produce? Is it mostly online/mail orders? Do you have a stand/store?
  - What is your experience with your method of selling? Are you looking to expand?
- What would you say your geographic reach is?

# **Network/Relationships**

• What is your interaction with other urban farms like?

- Do you share resources, workshops, learning?
- How do you communicate with other people/organizations?
- Is there anything you can think of that might make this interaction easier?
- Do you interact with any markets/grocery stores?
- How do you communicate with your volunteers?

#### Mike Hollis

Services for the Underserved (S:US)

Urban Farming Director

Category: Social

Interview date: September 23, 2019

#### **BRIEF**

Mike Hollis works in New York City with the organization Services for the Underserved (S:US). S:US provides individuals in the program an opportunity to run a workshop if they have a unique piece of knowledge or interest. This opportunity is mutually beneficial for the participant and the organization. The participant is able to reach a greater audience with more support than they might have otherwise, and the organization is able to encourage member involvement and host interesting workshops to retain member interest and support.

# **QUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# **About Services for the Underserved's Urban Farms**

- How does Services for the Underserved work with urban farming in the city?
- Is the city pro urban farming?
  - Does the city or other levels of government incentivize the creation of urban farms?
    - What have they done to help farms?
    - If not, in what ways could they incentivize more urban farming?
  - Has this impacted the operation of your farms?
- Surface level farms in Copenhagen often operate for a few years and when their contract is up the landowner jumps on a more profitable offer to develop the land. Has access to land posed any issues in the New York real estate market?
  - If so how have you gotten around these issues?
- Are you a member of any networks related to urban farming? Others?

- How do you communicate with others in the network?
- Are there any challenges a network has helped you overcome in the past? (Land access, resources, finances, etc.)
  - Are there any flaws in the network's structure?
- Has the city's farmers' market system allowed for the growth of urban agriculture in the city?
- Do any of your farms have a sustainable business model?
- Are there any ways to get more vulnerable residents, who typically have less freetime, involved with urban farming?
  - How to get people who have the most potential to benefit involved?

# Michael Søgaard Jørgensen

Aalborg University Associate Professor Category: Research

Interview date: September 13, 2019

# **BRIEF**

Michael is an associate professor at Aalborg University in the Department of Development and Planning and a Ph.D. in technology assessment. A lot of his research has been done in sustainable innovation and transition. He has also completed some research into workspace development and democracy. Through this, he has studied environmental management and innovation within companies.

# **OUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# His work and how it applies to our project

- How are you connected to Oleg?
  - Has Oleg talked to you about this idea of creating a network of people in urban agriculture?
  - Have you worked on any projects together?
- Can you explain to us a little bit about your project on transformative social theory innovation?
  - Have you reached out to anyone in urban agriculture for this project?

- You had a project about "Enabling and governing transitions to a low-carbon society," do you think community-driven urban farms and community gardens can play a role in this?
  - Could urban farming make an impact on Copenhagen's goal of carbon neutrality?
  - Best way to promote urban farming
- Are you currently working on any projects related to urban agriculture?

#### **Networks**

- Our goal is to be able to unite urban farmers, resource providers, and people involved in urban agriculture into one large network. In order to do this, we must be able to map out the social relations between people.
  - With your experience, do you have any ideas of how we can go about investigating and then further mapping out current connections?
  - Do you think it is possible to predict how a network will evolve in the future?
  - Do you think diversity within the network will make it more resilient?
- What are some qualities in a network to ensure an open expression of ideas and effective communication between everyone?
- We have noticed that a lot of urban gardens seem to fall apart after a short span of time.
  - Do you think there should be a push from volunteer-based farming or gardening into a more product-based business model? This may cause less volunteer fatigue and allow some places to last longer.
  - A lot of this is also due to short contracts and land ownership problems. Do you think it is possible to get the municipality more interested in urban farming if it is more profit-driven development?
    - Do you know if there been any pushes from within the government to convert city-owned land into urban farms?

#### Shan Khan

Bioteket Volunteer

Category: Agriculture

Interview date: September 9, 2019

#### **BRIEF**

Bioteket is a small biotechnology company founded in 2016 that researches innovative ideas and technologies for farming. They have a live exhibition at their compound about green culture. The company is curated by young people and volunteers. They generally have meetings with the volunteers on Fridays at 17:00 (not currently because they are undergoing renovations). Every so often they have events throughout Copenhagen where anyone can join. A lot of these events help

bring together people with like-minded ideas about urban farming. Essentially, Bioteket is a place for people to visit and learn about new techniques and technologies in farming. A lot of their ideas are aimed at urban farming since they have their own small urban farm on their premises.

#### **QUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# **Background**

- How did their urban farm and organization originally develop?
- What is the goal or idea or goal behind your operation?
  - Why do you think your technology is important to urban farming? Or: Do you think improving technology is important for urban farming to move forward as an initiative?
  - How has new and current technology impacted farming in general?
  - Is there any new and innovative farming technology or techniques that they are particularly excited about?
- So on your facebook page, we saw that you are currently undergoing a renovation. What are your plans for the future with your current renovation that is happening?/ What is the purpose of this renovation?
- How often do you have events at Bioteket?
  - Do people who attend these events generally return and become returning customers?

# **Network/Community**

- Do they have any formal or informal relationships in place with other farms, organizations, groups, or people?
  - If so, how did these relationships originally develop?
- Do they consider themselves to be a part of a network/community?
  - o If so, how do they stay in contact with others a part of it?
  - How often do they reach out or get together with people within it?
  - How do they communicate to others within it?
    - Bring back to how our goal is to make sure people within a network can better communicate and collaborate.
  - What does being a volunteer at bioteket entail?
    - How do they communicate with their group of volunteers about events or times to help out?
  - On they think a network needs to be built upon face to face connections before transitioning into something more complex?

- Such as an online communication tool and expanding the network.
- What is needed within a community/network for the group to be both long-lasting and cohesive?
  - Do they think there needs to be a common goal within the collaboration, or is it something else that keeps the cohesion?

# Bioteket's Thoughts on Urban Farming and Gardening

- Do they think that urban farming is self-sustainable as it is currently?
  - If not, why and how can people set it on a trend to be self-sustainable?
    - From what we have seen, a lot of community gardens or small urban farms don't last that long. What do you think could be the reason behind this?
      - Their land is only contracted for a few years
      - Volunteer fatigue
      - Unsustainable farm (poor business model)
  - Do they think that the technology that they are providing helps to move urban farming into being self-sustainable?
- Do they think there needs to be a push from community gardens to urban farming?
  - Will this help with getting more people interested in urban agriculture?
    - People would be able to see local produce at stores or around them and buy food locally.
- What do you think is the best method to promote or gain more interest in urban farming?
  - Are people actively trying to promote urban farming on a large scale, or is it mostly word of mouth and self-motivation that causes people to get into it?

# Heidi Langkilde

Sydhavnscompagniet

Innovation and Volunteer Coordinator (since Aug 2007)

Category: Social

Interview date: September 5, 2019

#### **BRIEF**

Sydhavnscompagniet is a potential partner in Sydhavn. It is a fairly large urban garden focused on employing people outside of the labor market as a transition stage to returning to work. Oleg has had contact with Ane, Heidi's colleague. The organization was in 2000 with funds from the Ministry of Social Affairs. It was established as a self-owned NGO in 2004 with a related board of directors. In addition, volunteer representatives are elected at the annual meeting of the organization. Heidi is the Innovation and Volunteer Coordinator. We originally reached out to her boss, Brian Lentz, who recommended Heidi to us as an interviewee.

#### **OUESTIONS**

- Please describe the work that Sydhavnscompagniet does.
  - What is your daily work as a coordinator at Sydhavnscompagniet like?
  - What is the status of the land you use to farm? (ownership, etc.)
- How do you do most of your community outreach to volunteers, those looking for work, and companies and places you work at?
  - How do you communicate with them?
  - How do you establish new connections?
  - What would you say is the geographical reach of Sydhavnscompagniet?
    - How manageable is that?
- What level of time, energy, and motivation do your volunteers have? Your employees?
  - How long does someone typically work or volunteer at Sydhavnscompagniet?
  - Do you have strategies for retention and to combat volunteer fatigue?
- What do you do in the off-season?
- Can you describe the relationships you have with other farmers, people, or other groups/organizations that have been helpful to you?
  - What would you say the main focus of these relationships are?
  - How do you communicate with them? (Phone calls, in-person meetings, emails, social media, messaging services, etc.)
  - How frequently are you in contact with these people?
  - How and when did these relationships/connections develop?
    - Are the relationships beneficial for both ends?
  - What do you value most about the connections you have made?
  - Is there a form of aid that you think could be beneficial in helping to fortify the relationships you now have?

# **Oliver Maxwell**

Bybi

Manager

Category: Business

Interview date: September 16, 2019

#### **BRIEF**

Oliver took over being the manager at Bybi in 2010 and has been working passionately since. Oliver is an anthropologist and is interested in engaging people across communities about the vision and idea behind Bybi.

#### **OUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# **Operations of the Bee Keeping Farm**

- How did your farm begin operations?
  - Did anyone help you get started? Who?
  - How did you transition from a startup to selling products and actively reaching out for volunteers?
- You would classify this as an urban farm, yet many of your workers are volunteers. How do you combat volunteer fatigue?
  - Marketing, outreach? word of mouth?
- Are there any other plants you grow in your nursery or do you mainly stick to bees?
- Where do you sell your honey and other products?
  - Have you found buyers to be in urban areas?
- Are there any resources essential to be keeping you have limited access to?
  - What are these resources?
    - Are there potential paths of access you've found for these resources?
  - Are there resources you previously had limited access to that are now easily accessible to you?
    - How have you retained access to these resources?

# Relationships with other urban farmers and related groups in the city

- Have you worked with any other farms or related organizations in the city? Have you worked in any network?
  - Has this been beneficial to you? Did it cause any difficulties?
  - How have you communicated with these groups in the past?
    - Was this an effective means of communication? Were other parties responsive?

# **Bent Egberg Mikkelson**

University of Aalborg

Professor, Department of Culture & Learning, The Faculty of Humanities

Category: Research

Interview date: August 30, 2019

#### **BRIEF**

Professor Mikkelson works at Aalborg University in the Department of Culture and Learning. He has written papers on urban food strategies, as well as connecting more generations and creating social cohesion through gardening.

# **QUESTIONS**

- How are you involved in the World Food Summit?
  - Why is this beneficial to the urban agriculture community?
- Do you think this summit has any impacts on the urban gardeners in Copenhagen?
  - Do you think many urban gardeners attend this?
    - If not, do you think it would be beneficial for them to attend?
  - How well known is this summit in the urban agriculture community?
- With your background on urban food production, have you yourself been involved in any urban farms?
- Throughout your research have you thought of any tools that could ease the creation of new urban gardens?
  - How about increasing the resilience of existing urban gardens?
- What have you learned about urban foodscapes? Would you classify them differently than urban gardens?
- How can an urban farm be self-sufficient? (tie back to how we noticed a lot of urban gardens close down after a year or two)
  - How can urban gardens ensure stay self-sufficient?
  - Do you think communication and collaboration with other farms are needed for an urban farm to last?
- Can you describe the relationships you have with other people or groups that have been helpful to you?
  - What would you say the main focus of these relationships are?
  - How do you communicate with them? (Phone calls, in-person meetings, emails, social media, messaging services, etc.)
  - How frequently are you in contact with these people?
    - How responsive are they through their respective contact mediums?
  - How did these relationships/connections develop and how long have they lasted?
- Now that you have networks established, what helps you retain connections?
  - Is there a tool or other form of aid that you think could be beneficial in helping to fortify the relationships you now have?
  - Have you thought of a tool that could be helpful to those you work with based on what you have seen during your projects?
    - How do you imagine the tool would work? Communication-based? Data based? Resource-based? etc. A mixture of these?

# Jesper Mikkelsen

Haven I Tingbjerg Project leader

Category: Agriculture

Interview date: September 23, 2019

#### BRIEF

Haven I Tingbjerg, which operates as both an urban farm and community garden. Haven I Tingbjerg has a strong funding model, sourced from several different organizations. This funding allows the farm to operate with paid staff, significantly increasing the stability of the project. Additionally, the farm has an agreement with the local housing authority to operate on a plot of land. Following a series of changes in land ownership that had thrown the farm's longevity into question, the agreement is now stable.

# **OUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

#### **History of the Farm**

- How did their urban farm and organization originally develop?
  - Were there any obstacles that you had to overcome?
  - Are there any obstacles you face today?
- What is the goal or idea or goal behind your operation?
- How do you involve the local community and the community within the housing development?

# **Networks/Community**

- Is the farm a part of any network? Are there any informal connections you can think of?
  - Have you been involved with any networks in the past?
  - Have these connections been beneficial?
- Are you able to give us any contact info for people that may be interested in our project?
- Would you be interested in a face-to-face, community-based tool to bring the urban agriculture community together?
  - What do you think of an eventual digital tool after creating a community familiar with one another?
  - If not, what are your concerns?
  - How do you feel about an informal get together of urban farmers?
- Does your farm involve paying members, volunteers, something else? Can anyone join

the farm or just people from the nearby buildings?

# **Redesigning the Farm**

- What started the idea to create a restaurant connected to the farm?
- How do you find a balance between professional designers and community input during this transition?
  - Are you using any professionals to help with the process?
  - Do you think this farm has found that balance in its current redesign?
    - Are there any big differences between what the community wants and what a designer thinks is feasible?
- With the intention of opening a restaurant to create a more formal business model, how will benefit to the surrounding community be ensured?
  - Will the farm still be open to the public after the redesign?
  - Will people who contribute to the farm get discounts at the restaurant or have an opportunity to take produce home?
- What are some issues you have faced during the process of establishing a restaurant?
  - What could be done to mitigate these issues?

#### **Victor Olsen**

Byhumle Volunteer

Category: Agriculture

*Interview date: September 5, 2019* 

#### **BRIEF**

Byhumle is an urban farm and plant nursery in Nordvest. They're focused on growing and selling hops to breweries in Copenhagen. Brewers have the opportunity to use locally grown hops and advertise as such. According to Byhumle using freshly grown hops to brew beer is a Danish tradition, so there is a cultural aspect to their operation as well. The farm is mostly operated by volunteers and has open hours for anyone to come visit or work every Thursday from 1600 to 2000.

#### **OUESTIONS**

# Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

#### Operations of the urban farm

• How did your farm begin operations?

- Did anyone help you get started? Who?
- What/Who helped you transition from the recycling site in Sydhavn to here?
- You would classify this as an urban farm, yet many of your workers are volunteers. How do you combat volunteer fatigue?
  - Marketing, outreach? word of mouth?
- Are there any other plants you grow in your nursery?
  - Are these plants related to hops in any way?
- Do you sell hop plants/seedlings to other growers as a nursery?
  - Have you found buyers to be in urban areas?
- Are there any resources essential to the cultivation of hops you have limited access to?
  - What are these resources?
    - Are there potential paths of access you've found for these resources?
  - Are there resources you previously had limited access to that are now easily accessible to you?
    - How have you retained access to these resources?

# Relationships with other urban farmers and related groups in the city

- Have you worked with any other farms or related organizations in the city? Have you worked in any network?
  - Has this been beneficial to you? Did it cause any difficulties?
  - How have you communicated with these groups in the past?
    - Was this an effective means of communication? Were other parties responsive?

#### Work with breweries and beer production

- How many breweries do you work within the city?
  - Are you actively seeking to increase this number?
  - Have breweries in Copenhagen declined to work with you?
  - How have you kept in contact with these breweries? (Phone, Facebook, GroupMe, etc.)
- Do you work with any breweries outside Copenhagen?
  - Are there any logistical issues transporting to breweries outside the city?

# **Connections outside the beer industry**

- Do you have any connections with individuals and companies that are not related to the beer industry?
- Have you been able to foster important relationships with volunteers that have helped your business?
- Are there any government officials you have been in contact with? Any universities?

# Kristian Skaarup

ØsterGRO Co-Founder

Category: Agriculture

Interview date: September 24, 2019

#### **BRIEF**

ØsterGRO is a rooftop farm located in Østerbro. They remain operational through integration with a restaurant, Gro Spiseri which has seasonal meals. The restaurant does its best to source its food from ØsterGRO, but certain food items cannot be sourced there due to limitations of the farm. They operate with members and volunteers. Members, who pay annually, get to take home a share of the harvest each year. They have workshops and a variety of events outside to bring people into their space.

# **QUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# Questions about ØsterGRO

- Are there any paid employees at ØsterGRO?
- How much does membership cost?
  - Does this money go right back into the farm?
  - How long can a member stay a member continuously? Is there any process to get the waitlist moving?
- Do people need to sign up as volunteers in order to help, or can anyone show up and help?
- What are things the rooftop farm can't produce for the restaurant?
  - Who do you get these items from?
  - Do you have any plans to source these items yourself?
- Are there any plans for expansion?
  - Do these plans include different forms of production?
- How much of the building do you operate?
  - Have you considered creating an aquaponics system?
- Is this story about fictitious parking spots real?
  - Have these false claims had any adverse affects on ØsterGRO's operations?

#### **Questions about Networks/Community**

- Would you say ØsterGRO is a part of any formal networks?
  - Has involvement with these networks benefited you? How?
  - Has it been limiting?

- Are there any informal relationships that have benefited you in some way?
  - How do you communicate with these networks/individuals?
    - How frequently do you communicate?
    - Are there issues with these methods of communication?
- Would you be interested in a network tool that provides an opportunity to meet face-to-face with others in the urban agriculture field?
  - How would you feel about an informal get together with others involved in urban agriculture to share ideas and perspectives?
  - Have you ever used a digital tool when communicating with others for work?
    - Do you find this to be an effective means of communication?
      - If yes, why?
      - If no, do you think it would be useful once a community is established?
- Are there any groups or individuals you think would be interested in a networking tool?

# **Rasmus Steenberger**

Amager East Local Committee Vice Chair

Category: Government

Interview date: September 5, 2019

#### **BRIEF**

Rasmus is a 2019 parliament candidate with very strong beliefs about combating climate change. His political ideology centers around the idea that Denmark must become carbon neutral within the next twelve years, or else the future generations will greatly suffer. In order to do this, he wants to tax CO2 emissions so that people transition from flights and driving to taking high-speed trains or biking. Another part of his plan is to help transition people from eating meat into eating more vegetables since the meat industry is Denmark's largest CO2 producer. Rasmus wants to do this by removing VAT on fruits and vegetables and transitioning it to meat. Rasmus has helped start up a few urban greenspaces and will be able to provide some strong ideas on urban agriculture in Copenhagen.

#### **OUESTIONS**

# Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# Rasmus's thoughts on urban agriculture

- From what we understand, you have some very strong ideas on climate change and the steps needed to be taken to combat it.
  - What do you see as the role of urban agriculture in the overall picture of climate change and carbon neutrality?
    - What do you think are the most important actions that Urban farms/agriculture must take to achieve carbon neutrality?
  - Do you think future generations are going to be able to combat this problem?
- Do you have any affiliation with a community garden or urban farm?
  - What is your role?
- We noticed a lot of community gardens seem to close down after a year or two, why do you think this is and what can be done to stop this?
  - Would a governmental push to transition from community gardens into urban farms make urban agriculture more resilient?
- What's the nature of the greenspaces you've helped get started?
  - Are there any examples of urban agriculture incorporated into these green spaces?
  - Who did you work with in creating these greenspaces, and would you be willing to put us in contact with them?

# Rasmus's thoughts on networking and connections

- Since you are a politician and activist, you must have a lot of connections throughout Copenhagen.
  - How did you initially become connected with Oleg?
    - Have you worked on any projects together?
  - Are you a part of any network or community centered around urban agriculture?
    - Do you know how the community/network first started?
    - How do you stay connected?
  - What do you think is the most effective form of communication between connections in the network?
- We plan to build our network on person to person relations and then add complexity and structure from there. From this, we hope that people will be able to collaborate for common goals.
  - What are some qualities that you think make a network or community be long-lasting?
  - Do you think diversity within the network will help make it more resilient?
  - O you think that having an immediate common goal ensures that people will be more active within the network?
- Since you are connected to a lot of people, do you have any contacts that you think may be useful for us to interview?

#### **Lars Strand**

KAB Bolig

**Business Coordinator** 

Category: Business

Interview date: September 9, 2019

#### **BRIEF**

KAB Bolig is a resident managed housing organization with the goal of providing more accessible housing to Copenhagen's residents. They're owned in part by multiple housing organizations throughout the Copenhagen area. They provide housing to all types of residents with varying levels of income. Lars is an especially important contact to Growing Pathways. KAB owns a lot of land with the potential to host urban farms. Lars has been open to this discussion in the past.

# **QUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

#### General

- Can you discuss the general work you and KAB perform?
  - Explain the process of how renters are placed in homes.
  - Do you work with any business/office/etc renters?
    - If yes, what is that relationship like?
- What is the typical location like?
  - Green space? Community space?
- What are you focused on when building new projects?

# About KAB Bolig's interest in urban farming

- Is any space currently being used for urban agriculture?
  - How much space?
  - Are any of these gardens self-sufficient or circular?
    - Operational characteristics/business model?
- How much space is available for urban agriculture within KAB's holdings?
  - How would you describe these spaces?
    - Empty lots, underused part of an already developed piece of land, rooftops, balcones, other?

# **About KAB Bolig residents**

- Have any of your residents expressed interest in agriculture?
  - If so, in what respect?
  - Have you promoted/encouraged interest at all?

- Are any of your residents unemployed?
  - Would they be willing to work on an urban farm if the option was available?
- Does KAB have any relevant programs/policies?

#### **Networks and communication**

- Are you or KAB Bolig involved in any networks?
  - How do these networks communicate?
- Would you be interested in including KAB Bolig gardens in a network of urban farms?
  - Are you in contact with any urban farms already?
  - How similar are each of the current gardens?
  - What resources would your gardens need in order to be prosperous?
- What kinds of other people do they talk to? (who, what do they do)
  - How do they generally communicate with each other?
  - Are there any difficulties when trying to communicate?

#### Sabine Sørensen

Miljøpunkt Indre By and Christianshavn Project Leader

Category: Agriculture

*Interview date: September 3, 2019* 

#### **BRIEF**

Sabine is a horticulturist focused on geographical distribution, reproduction, genetic diversity and care measures. She works on planning and managing an urban green project in CPH. Through this, she has contact with municipal actors, volunteers, and regular citizens. She develops inspiration catalogs about the city's small green oases. She also works on planning green tours in Indre By and Christianshavn. She also looks into rainwater management using green roofs, integration of waste systems, and facade painting. Miljøpunkt Indre By and Christianshavn provides advice pertaining to nature, the environment, sustainability and climate to local citizens, businesses, institutions, and other organizations. The center is collaborating with Growing Pathways on NaTur i Byen.

#### **QUESTIONS**

- Can you give a brief overview of the work you have done at Miljøpunkt Indre By?
  - Will you walk us through a typical workday?
  - What is your experience with urban farming projects?
  - How well-suited do you think green roofs are to host productive urban agriculture?

- There are multiple Miljøpunkt all over Copenhagen, do you work with the other branches or are they separate?
  - What makes each one different from the others other than the area it works in?
- How do you manage the projects you sponsor?
  - Do you feel you have good communication between the projects, the place, and the growers?
- What is your involvement in NaTur i Byen?
  - In your opinion, what is NaTur I Byen's goal?
  - How successful and sustainable do you think NaTur i Byen is?
- Can you describe the relationships you have with other farmers, people, or other groups/organizations that have been helpful to you?
  - How do you establish connections in the beginning of a project?
  - What would you say the main focus of these relationships are?
  - How do you communicate with them? (Phone calls, in-person meetings, emails, social media, messaging services, etc.)
  - How frequently are you in contact with these people?
  - How and when did these relationships/connections develop?
- Now that you have networks established, what helps you to keep the connections?
  - Is there a tool or other form of aid that you think could be beneficial in helping to fortify the relationships you now have?
    - Would you imagine the tool to be more communications based or data-based?
- Would you be interested in participating in a pilot of a networking tool later on?

#### Elzélina van Melle

EVM Landscape Landscape architect Category: Agriculture

Interview date: September 6, 2019

#### BRIEF

Elzélina is a landscape architect and urban-nature agent for EVM Landscape. She's been a part of various projects with the company. Her experience involves both design and consultation. As a landscape architect her designs tend to focus on placemaking and green urban areas. She is focused on urban design with regard to the urban-nature relationship and how nature can be integrated into the urban fabric for a more sustainable future.

#### **OUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

# Questions on Elzélina and EVM Landscape

- Tell me about your job and what you do to incorporate nature in city planning.
- Do you try to integrate urban agriculture into your designs?
  - Do clients often ask for urban agriculture to be considered for their designs?
  - Do you often incorporate urban agriculture/gardening into your designs?
- Can you describe the process of getting a project from the early design phases to being physically built?
  - Who do you have to talk to and what different companies and policies must you contact?
  - Does the process of starting a project encourage incorporating green ideas?
- Were you involved in the Langelinie School garden project?
  - How did it get started? Is it still operating?
  - Why should younger generations get involved with urban farming/gardening?
    - Are there any ways you think an urban farm could appeal to young adults or families with children in order to involve them?
- What are some projects you're currently working on or plan to work on?
  - Do any of these involve urban agriculture? How?
    - How did the client get in touch with you?
    - Why did they choose your landscaping business?

# Questions about working with Growing Pathways, clients, and networks

- How have you and Oleg worked together?
  - Can you describe any projects you've collaborated on?
  - How did you two come into contact with one another?
  - Has the collaboration between the two companies who focus on green areas and sustainable practices had any issues? Conflicting ideas?
  - Have you learned anything applicable to your field working with Growing Pathways?
- Can you describe any relationships you have with groups/organizations connected to urban agriculture that have been helpful to you?
  - What would you say the main focus of these relationships are?
  - How do you communicate with them? (Phone calls, in-person meetings, emails, social media, messaging services, etc.)
  - How frequently are you in contact with these people?
  - How and when did these relationships/connections develop?

- Have you been involved with any formal networks related to urban farming?
- What kinds of people make up your client base?
  - When consulting, do you maintain contact with your clients after a project is complete?

#### Volunteer

Den Bemandede Legeplads ByOasen

Category: Agriculture

Interview date: September 12, 2019

#### **BRIEF**

Since 2008, ByOasen, once a project under Miljøpunkt Nørrebro, now under the municipality of Copenhagen, has been developing De Gamles By into a green oasis. ByOasen now consists of goats, chickens, rabbits, guinea pigs, mice, bees, wandering sticks, hissing cockroaches and various singing birds. The staff consists of 2 educators, 1 nature supervisor, 1 animal caretaker, 2 weekend staff, and 1 intern. ByOasen is also supported by many volunteers. The space is composed of the chicken farm, the goat fold, the orangery (- a 135 m2 heated greenhouse), 15 small indoor colony gardens, 35 m2 high beds, outdoor kitchen with campfire, cable car, swings and grassy areas, as well as the nature trail that goes around in the Gamles Town. ByOasen collaborates with several schools and nursing homes. The organization holds approximately 12 large free events a year as well as smaller activities, including campfires, cooking, work and play.

#### **OUESTIONS**

#### Introduction

- Explain who we are and who we are working with
- Explain the goal of our project
- Ask for consent

#### Origin

- Can you describe how ByOasen has grown/evolved into what it is today?
- Is anyone from Miljøpunkt Nørrebro still involved in the project?
- How did ByOasen transition to being managed by the municipality of Copenhagen?

#### **Business Plan**

- Does funding come directly from the municipality?
  - How are staff paid?
- Did you start with staff or were they added later into the farm's operations?
  - At what point was it clear you could support permanent staff?
- Does ByOasen sell any products? Animal products, produce, etc.

- o If so, how?
- Can individuals pay to have a share of the production? Can they pay to grow on the land?
  - Who owns the land?
- Are volunteers compensated in any way? (produce?)
- How are volunteers recruited? Retained?

#### **Events**

- How many people visit the farm weekly?
  - Are you looking to expand?
- What would you say ByOasen's geographical reach is?
  - Do you have visitors from outside the neighborhood?
  - What are the demographics of your visitors?
    - Do you have frequent returners?
- How do you publicize the events?
  - What has been your most successful event to date?
  - Do you have any paid events?
    - How do you fund the free events?

#### Network

- Do you interact with other urban farms/people involved in urban agriculture?
  - What are those relationships like?
    - What would you say the main purpose/focus is?
  - How frequently do you interact?
  - What would you say are the benefits of those relationships, if any?
  - Do you collaborate at all?
  - How do you communicate?
  - Do you feel these relationships could be strengthened in any way?
- Would you be interested in a more formalized interaction (if possible) through a common tool or face-to-face scheduled events with other urban farmers?
  - What are your opinions about a digital tool to facilitate this type of connection?

# **SWOT Analysis**

# **Categories of Response**

- 1. Mission, passion
- 2. Community involvement (events)
- 3. Product management/method of profit
- 4. Staff (+volunteers)
- 5. Land related (ex. security)
- 6. Network/collaboration
- 7. Funding
- 8. Expansion (physical, business, membership)
- 9. Policy

# **Frequency of Category**

Category	Strength	Weaknes s	Opportunity	Threa t
Mission, passion	1	1	0	0
Community involvement (events)	4	4	0	3
Product management/method of profit	4	4	0	1
Staff (+volunteers)	2	2	0	0
Land related (ex. security)	4	4	0	1
Network/collaboration	2	3	6	0
Funding	2	2	0	3
Expansion (physical, business, membership)	0	1	9	1
Policy	0	0	0	4

# Bioteket

SWOT	Response	Cat.
STRENGTH	Passion Variety of community events Strong volunteer base	1 2 4
WEAKNESS	No profit Lack of paid staff Renovation limits operations	3 4 2
OPPORTUNITY	Expansion (new kitchen) Increase collaboration with other farms	8 6
THREAT	Volunteer time commitment	2

# Bybi

SWOT	Response	Cat.
STRENGTH	Business model Network with land owners (connection for secure land) Land security	3 6 5
WEAKNESS	Dependant on funding (fragile) Profit (not from honey, get paid to use the land)	7 3
OPPORTUNITY	Potential for expansion, customers	8
THREAT	Eviction (remove land access) Pesticide regulation (not enough) Environmental threat (disease)	5 9 3

# Byhumle

SWOT	Response	Cat.
STRENGTH	Enjoyment of work (volunteers) Events Sell products (business model)	1 2 3
WEAKNESS	Small-scale production No eviction plan	3 5
OPPORTUNITY	Membership growth Produce more Partner with brewery	8 8 6
THREAT	Eviction from Garage Park (development)	8

# ByOasen

SWOT	Response	Cat.
STRENGTH	Community involvement Government Funded Full time employees	2 7 4
WEAKNESS	Capacity Location safety	5 5
OPPORTUNITY	Uses online platform for outreach (facebook) Space expansion (capacity too small)	6 8
THREAT	Loss of government funding Local homeless population	7 2

# HappyHumans

SWOT	Response	Cat.
STRENGTH	Successfully funded by customers Environmentally focused business model Permaculture (unique, one of the few in CPH)	7 3 3
WEAKNESS	Increase number of staff Lack of money for PR Lack of influencing community interest	4 7 2
OPPORTUNITY	Uses free online platform for client recruitment	6
THREAT	Government regulation, bureaucracy Government seizure of land	9

# Haven I Tingbjerg

SWOT	Response	Cat.
STRENGTH	Funding model, currently Land access Staff	7 5 4
WEAKNESS	Volunteers Connections through individual vs. farm Business model	2 6 3
OPPORTUNITY	Expansion (restaurant) Network (more ideas and collaboration) Connection between urban and rural farms (knowledge)	8 6 6
THREAT	Lack of community support Funding model could become unstable (loss of funders)	2 7

### ØsterGRO

SWOT	Response	Cat.
STRENGTH	Core employees, founders (persistence, commitment) Collaboration with other farms/places Resources on current roof	4 6 5
WEAKNESS	Expansion to another roof (resources) Limited space (cannot produce enough) Noise within networks (FaceBook)	8 5 6
OPPORTUNITY	Expansion with support from CSA members Restaurant growth	8
THREAT	Government regulation, bureaucracy	9

# SydhavnsCompagniet Bee Farm

SWOT	Response	Cat.
STRENGTH	Workforce (volunteers) Clear mission Well-known in their community Government funding	2 1 2 7
WEAKNESS	Not a priority for SydhavnsCompagniet (as a whole) Buy-in/attention from not targeted community members Lack of network with other farms for volunteering	1 2 6
OPPORTUNITY	Increase production	8
THREAT	Loss of funding	7

# **Resilience Graphs and Data**

### Land vs. Staff

# Graph



### Data

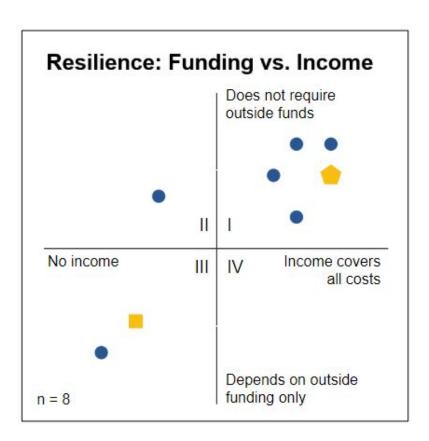
Staff	Land	Key
0	10	Bioteket
10	3	Bybi
-3	-5	Byhumle
3	-3	ByOasen
3	3	HappyHumans, Ditte
7	7	Haven I Tingbjerg
10	7	ØsterGRO
7	2	SydhavnsCompagniet, Bee Farm

### Scale

Staff		Land	
10	Able to pay numerous employees via product sales	10	Owns land and land is arable
7	Paid by outside funding - secure funding	7	Rents land - secure place
5	Able to pay few employees via product sales	5	Rents land - opportunity to renew
3	Paid by outside funding - could lose funding	3	Paid to grow on land
0	Strong volunteer force only	0	Rents land
-3	Casual/fluctuating volunteer force	-3	Rents land - unsure about renewal
-5	Weak/highly fluctuating volunteer force	-5	Rents land - lease terminating soon
-7	Lack of volunteers damages success	-7	Rents land - under threat of eviction
-10	No volunteers or paid staff	-10	Owns no land has no place to grow

### **Funding vs. Income**

# Graph



# Data

Income	Funding	Key
7	3	Bioteket
10	7	Bybi
5	7	Byhumle
-10	-10	ByOasen
7	10	HappyHumans, Ditte
-7	-7	Haven I Tingbjerg
10	10	ØsterGRO
-5	5	SydhavnCompagniet, Bee Farm

# Scale

Income		Funding	
10	Income covers all costs	10	Does not require any outside funds
7		7	
5	Income covers most costs	5	Requires some outside funding
3		3	
0	50/50	0	50/50
-3		-3	
-5	Income covers some costs	-5	Requires mostly outside funding
-7		-7	
-10	No income	-10	Only requires outside funding

### **Email Verification Instructions**

# For people who joined: Hello \_\_\_\_\_\_,

Thank you joining the Bydyrkerne server! We're following up to share a more detailed set of testing instructions. Please share in feedback if you had any difficulties with the sign-up instructions. See below for a list of instructions about testing various features on the server. See also the attached sign-up infographic for reference. If you have any questions in regards to joining or the instructions below please don't hesitate to ask, either by replying to this email or sending a message in Discord.

#### **Testing Instructions:**

#### 1. Verification:

Verify yourself on the server in the channel #verifikation-instruktioner. Are you an urban farmer, community gardener, etc.? Based on self-categorization, follow the instructions in the channel to send the correct message to automatically verify yourself in the correct category.

#### 2. Message:

Send a message in the #generel-chat channel. Say a simple hello, introduce yourself, ask a question, do whatever you are comfortable with! Make sure to abide by the rules and guidelines located in #retningslinier. Also, feel free to post any volunteer opportunities or requests you may have in #frivillige-muligheder

**3. Mapotic!:** (specific to those directly associated with a farm or garden) Map your location on the Mapotic map! Go to the #mapotic channel and follow the instructions on how to plot the location of your farm or garden.

#### 4. Send feedback in #tilbagemeldinger

Share feedback about ease of completion of testing steps, any difficulties with sign-up or verification, and overall structure. Feel free to respond to the following prompts:

How well can you navigate the Discord? Did you have any difficulties locating channels or understanding their purpose?

Do you have any suggestions for additional discussion topics or channels? Do you feel that the current organization within channels is useful?

*If applicable:* Did you have any problems logging into the mapotic and creating a location tag?

#### 5. Share the server if you are comfortable:

Invite other farmers, volunteers, or anyone you think may be interested. Part of the server's purpose is to facilitate discussion between the various actors involved with urban

agriculture in Copenhagen. Having these individuals in the server both connects the existing community and provides the opportunity to develop it further.

Thank you for your participation.
-----------------------------------

Best Regards,

\_\_\_\_

#### For people who didn't join:

Hello	,

We're following up about signing up for our urban agriculture networking tool. We have included a more detailed set on testing instructions in this email. Please see the attached sign-up infographic to join the server. Also, see below for a list of instructions about testing various features on the server. If you have any questions in regards to joining or the instructions below please don't hesitate to ask, either by replying to this email or sending a message in Discord.

### **Testing Instructions:**

#### 1. Verification:

Verify yourself on the server in the channel #verifikation-instruktioner. Are you an urban farmer, community gardener, etc.? Based on self-categorization, follow the instructions in the channel to send the correct message to automatically verify yourself in the correct category.

#### 2. Message:

Send a message in the #generel-chat channel. Say a simple hello, introduce yourself, ask a question, do whatever you are comfortable with! Make sure to abide by the rules and guidelines located in #retningslinier. Also, feel free to post any volunteer opportunities or requests you may have in #frivillige-muligheder

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Do you have any suggestions for additional discussion topics or channels? Do you feel that the current organization within channels is useful?

*If applicable:* Did you have any problems logging into the mapotic and creating a location tag?

#### 5. Share the server if you are comfortable:

Invite other farmers, volunteers, or anyone you think may be interested. Part of the server's purpose is to facilitate discussion between the various actors involved with urban agriculture in Copenhagen. Having these individuals in the server both connects the existing community and provides the opportunity to develop it further.

Thank you for your participation.

Best Regards,

#### For people not previously contacted:

Hello	,

We are contacting you about signing up for our urban agriculture networking tool. We have developed a Discord server designed to connect the community at large to increase interaction and stability. Please see the attached sign-up infographic to join the server. Also, see below for a list of instructions about testing various features on the server. If you have any questions in regards to joining or the instructions below please don't hesitate to ask, either by replying to this email or sending a message in Discord.

#### **Testing Instructions:**

#### 1. Verification:

Verify yourself on the server in the channel #verifikation-instruktioner. Are you an urban farmer, community gardener, etc.? Based on self-categorization, follow the instructions in the channel to send the correct message to automatically verify yourself in the correct category.

#### 2. Message:

Send a message in the #generel-chat channel. Say a simple hello, introduce yourself, ask a question, do whatever you are comfortable with! Make sure to abide by the rules and guidelines located in #retningslinier. Also, feel free to post any volunteer opportunities or requests you may have in #frivillige-muligheder

**3. Mapotic!:** (specific to those directly associated with a farm or garden) Map your location on the Mapotic map! Go to the #mapotic channel and follow the instructions on how to plot the location of your farm or garden.

#### 4. Send feedback in #tilbagemeldinger

Share feedback about ease of completion of testing steps, any difficulties with sign-up or verification, and overall structure. Feel free to respond to the following prompts:

How well can you navigate the Discord? Did you have any difficulties locating channels or understanding their purpose?

Do you have any suggestions for additional discussion topics or channels? Do you feel that the current organization within channels is useful?

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#### 5. Share the server if you are comfortable:

Invite other farmers, volunteers, or anyone you think may be interested. Part of the server's purpose is to facilitate discussion between the various actors involved with urban agriculture in Copenhagen. Having these individuals in the server both connects the existing community and provides the opportunity to develop it further.

CC1 1	0		. •	•	. •
Thank you	tor y	our	parti	cip	ation.

Best Regards,

\_\_\_\_

# Infographic for Joining the Discord

# HOW TO JOIN THE NETWORK

Step 1: Create an account



Step 2: Join the server





Step 3: Use the server





Step 4: Give your feedback



Use these URLs if the QR codes don't work!

Making an account: discordapp.com/register
Join the server: https://discord.gg/hFTFaxj

### **Sponsor Description**

**Sponsor Description: Growing Pathways** 



Growing Pathways is a Nordic Nature Relations agency that strives to work with entrepreneurs in the realm of human-nature interactions. Denmark wants to be a leader in environmental policy on the world stage. As a result of this, Denmark invests in renewable energy and focuses on energy efficient solutions independent of foreign oil (6). It is of utmost importance to the Danes to be as green as possible, thus many businesses and private citizens strive to pollute as little as possible by investing in green technologies for their homes, offices, and public buildings.

Growing Pathways works to encourage the environmentally conscious Danish culture. In the past, humanity's relationship with nature existed in the extreme: either completely ignored for the benefit of society or completely focused on while disregarding the opinion of the population. The approach of Growing Pathways works to integrate these two extremes by finding a middle ground beneficial to all. Their approach focuses on a process that finds the medium between sustainability and human ingenuity (1).

Growing Pathways was founded in 2015 by Oleg Koefoed and Kajsa Li Paludan. The co-founders share a common drive of shifting the idea of sustainability away from the implication of "'hippie' and 'salvation' and toward 'entrepreneurial,' 'creative' and 'solving planetary problems'" (1). Through these shared goals they were able to find a strong platform on which to build Growing Pathways as a sustainable and ecologically friendly company. According to Growing Pathways, these goals are "the blueprint to achieve a better and more sustainable future for all" (7).

Growing Pathways offers companies three sets of workshops with "customized strategy work and a designed process to strengthen and ground their sustainable development" (1). The first workshop they offer is called Cultural Mapping. The Cultural Mapping workshop aims to help their clients build trusting and working relationships with others outside of their personal connections. One goal of this approach is to encourage companies to change their mindset on the outside world, viewing it as a place for opportunities, collaboration, and growth instead of a place solely focused on competition. Through this, their clients will be able to engage in working relationships with others of common interests. Their second workshop is called Nature Relations, with the goal of tackling complex problems through creative nature-related avenues. This

workshop is organized to help clients have a new understanding of the human/nature bridge. Their final workshop is called Purposeful Strategic Approach and functions as a culmination of the other two workshops, focusing on finalizing clients understanding of the interconnection between nature, culture, and society. Through this, Growing Pathways intends to help their clients replace years of "stressful strategizing" with "purposeful strategic practice."

Growing Pathways works cooperatively with several organizations. Natur I Byen, a prominent partner of Growing Pathways, networks with multiple farms throughout Copenhagen. These farms are home to both livestock and vegetation (4). Natur I Byen demonstrates Growing Pathways ideals through their supplemental use of volunteer labor from the communities (4). One farm in Natur I Byen's network is ØsterGRO. The farm covers 600 square meters hosting, "fields of organic vegetables, herbs and edible flowers, a greenhouse,



henhouse, and three bee-hives" (5). Additionally, the farm operates with a restaurant, serving fresh and locally grown ingredients from their roof. ØsterGRO demonstrates Growing Pathways overall goal of integrating the principles of sustainability with progressive creativity.

By partnering with these organizations, Growing Pathways works to facilitate learning, increase collaboration, and kickstart development. Through the continued growth of these relationships, Growing Pathways hopes to create a more sustainable and resilient Copenhagen. Their direct impact may be minimal, but the collective impact of the organizations they partner with is far-reaching.

#### **Sponsor Description Bibliography**

- (1) Growing Pathways. (n.d.). Retrieved from <a href="https://www.growing-pathways.com/english/">https://www.growing-pathways.com/english/</a>
- (2) Ministry of Foreign Affairs of Denmark. (n.d.). Green country: Environment, energy and climate. Retrieved from <a href="http://kina.um.dk/en/about-denmark/climate-and-energy/">http://kina.um.dk/en/about-denmark/climate-and-energy/</a>
- (3) Ministry of Foreign Affairs of Denmark. (n.d.). Sustainability and the Danes. Retrieved from <a href="https://denmark.dk/innovation-and-design/sustainability">https://denmark.dk/innovation-and-design/sustainability</a>
- (4) Natur I Byen. (n.d.). Deltag i netværk. Retrieved from <a href="http://naturibyen.com/deltag-i-netvaerk/">http://naturibyen.com/deltag-i-netvaerk/</a>
- (5) ØsterGRO. (n.d.). About ØsterGRO. Retrieved from <a href="https://www.oestergro.dk/in-english">https://www.oestergro.dk/in-english</a>
- (6) Overgaard, S. (2017, July 12). Denmark Wants To Lead The World In Green Growth.

  Retrieved from

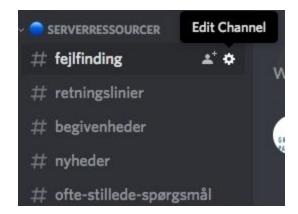
  <a href="https://www.npr.org/2017/07/12/536781995/denmark-wants-to-lead-the-world-in-green-growth">https://www.npr.org/2017/07/12/536781995/denmark-wants-to-lead-the-world-in-green-growth</a>
- (7) United Nations. (n.d.). Sustainable Development Goals. Retrieved from <a href="https://www.un.org/sustainabledevelopment/sustainable-development-goals/">https://www.un.org/sustainabledevelopment/sustainable-development-goals/</a>

### **Discord Instruction Manual**

#### **How to Manage the Server**

#### **Permissions**

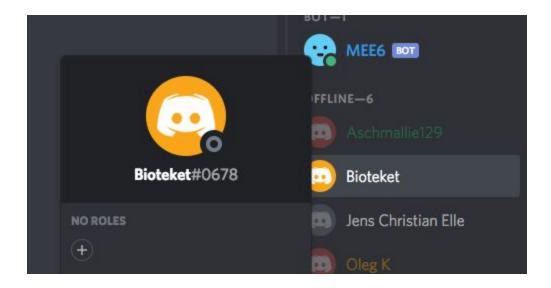
Permissions are what allows different roles to use designated commands or perform specific tasks. The permissions tab can be accessed through pressing the gear when hovering over a channel or channel category then going to the permissions tab.



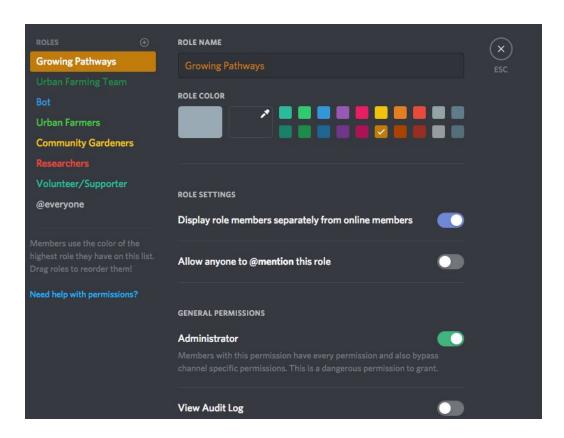
Once in this tab, you can set permissions for specific roles. For example, if you only want Growing Pathways to be able to post in a channel, then you can set Growing Pathways permissions to being able to post and then the "everyone" role to not being able to. This can be used in a variety of ways. You can use it for an update/news channel, a rules/guidelines channel, etc.

#### **Roles**

Roles go hand-in-hand with permissions. You can give specific permissions to certain roles and make some channels visible to certain roles. Through this, you can have your own administrative channel to talk about server management. Currently, the roles are split into Urban Farmer members, Community Garden members, Researchers, and Supporters/Volunteers. You are able to have multiple roles if you fit into more than one. To give someone a role, simply click on a name and press the plus button under roles (you can also take away roles here). Currently, the only way to add the roles Growing Pathways or Urban Farming Team is this method.



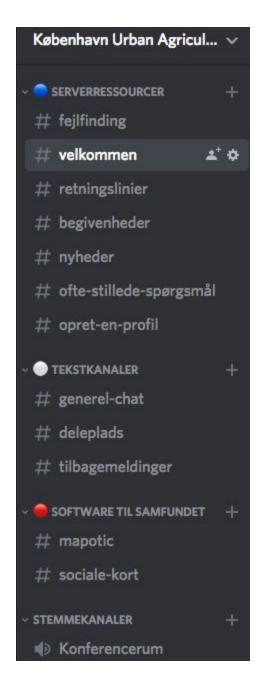
People in the server are able to self assign and take away roles through using the bot's verify command. To manage the permission of a role, go to the server settings by clicking on the top left of the server (where the server's name is), then go to roles. Once here, the page should look like the picture below.



From here, you can add roles, customize a role, and add permissions.

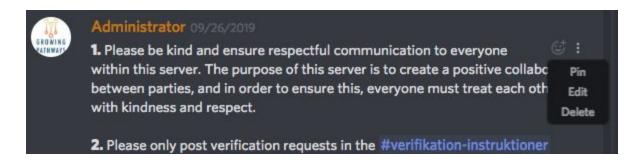
#### **Creating Channels/Categories**

Channels are subsections of the server where people can talk about the designated topics. Categories can be used to organize channels into categories to direct the flow of the server. The current channels and categories can be seen below.

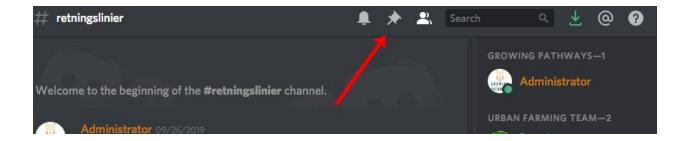


To add a channel to a category, press the plus button and it will create a channel for that category. To add a category, right-click one of the current categories and press "create category." Pinning and Deleting a Message

Pinning a message allows people to easily access an important message. To pin or delete a message, hover your mouse over a message and then press the three dots and press whichever action you want.



To access these messages, press the pin button on the top right of the channel as seen below (pinned messages are channel-specific)

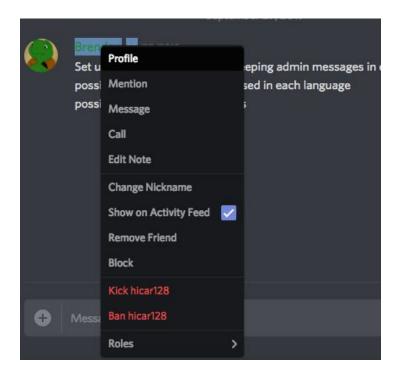


#### Sending Messages that "pings" people

If you want people to get a notification about a message, you can mention the role that you want notified. For example, if you want everyone on the server to be notified about the message, start the message with @everyone and then type the message. You can use this for any role in the server.

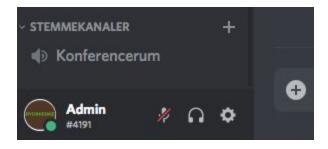
#### **Banning/Kicking People**

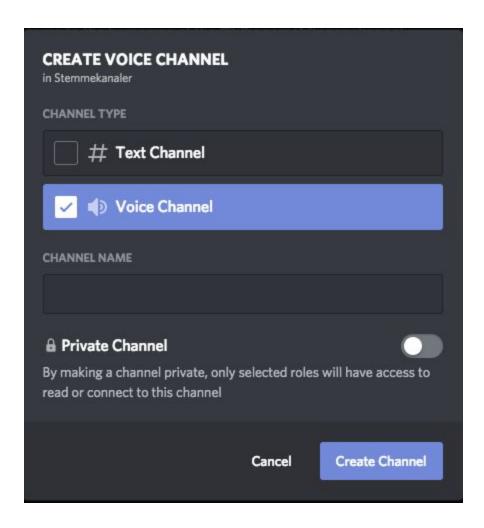
Banning a person from a server bans the IP address from joining the server. Meaning that even if they try to join the server, they won't be able to. Kicking someone from a server just boots them off once. They are able to rejoin the server if given a link. To ban or kick someone from the server, right-click their name and press the desired action.



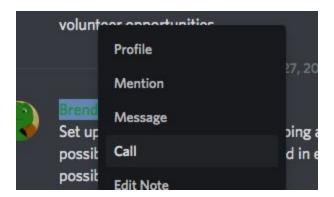
### **Voice Chat and Screen Sharing**

In Discord you are able to create voice calls with multiple people in them. These are useful when you want to be able to talk to someone, but you are not able to meet in person. Currently in the server there is a conference room voice chat made exactly for this purpose. If you want to create more voice channels, simply press the plus button over the voice channel and press new voice channel.

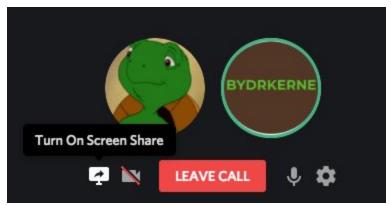


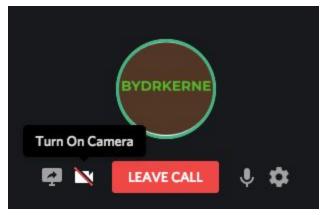


If you want to do a video chat or share your computer's screen, you must enter a personal group call, which is different from the voice channel. To enter a call, right click a person's name and press the call button (you are also able to add more people to the call.



Once in this call, you are able to either share your screen or turn it into a video chat. To share your screen, press the left screen sharing button. To enter a voice chat, press the button on the right.





#### **Formatting Messages**

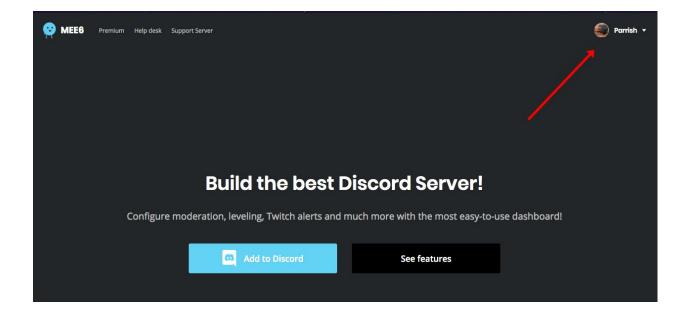
It is important to format a message when sending out important messages. I would recommend when writing an important message to write it in google docs so you can easily format it then pasting it into the Discord. This also allows you to have a document with all of your messages and it will be easier to directly edit them then paste them into the Discord. Shown below is how you can do some basic formatting in DIscord.

Italics	*italics* or _italics_	Underline italics	*underline italics*
Bold	**bold**	Underline bold	**underline bold**
<b>Bold Italics</b>	***bold italics***	underline bold italics	***underline bold italics***_
<u>Underline</u>	_underline_	Strikethrough	~~Strikethrough~~

#### **Managing the Bot**

#### Getting onto the Bot's Dashboard

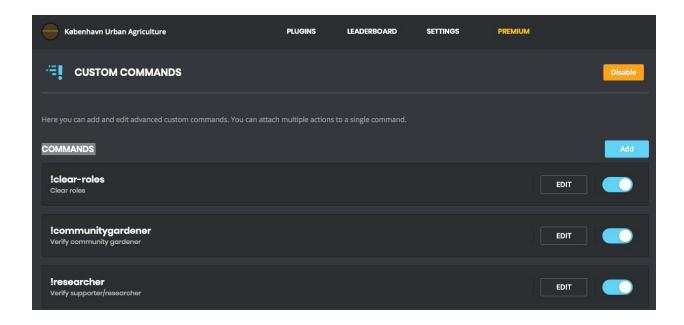
To further improve and customize the bot, you have to first access the bot's dashboard. To get to the dashboard, go to this website (<a href="https://mee6.xyz/">https://mee6.xyz/</a>) and then login to the admin discord. Once logged in, press "Admin" in the top right and go to my servers then press one you want to edit.



This will bring you to the bot's dashboard. Here you can access all the features and customize the bot

### Adding a new "Custom Command"

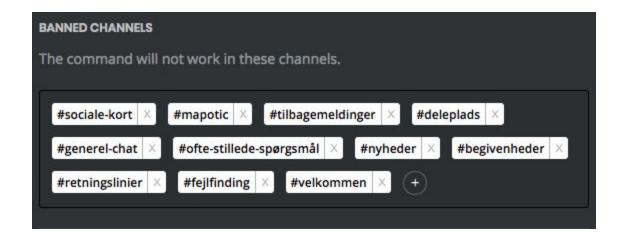
The verification system on the server is made through the bot's custom commands. To access the commands, click the custom commands button on the dashboard.

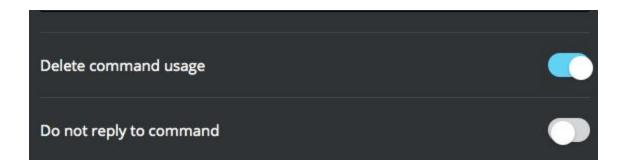


Here you can add new commands, edit commands, or take away commands. To learn more about adding commands and how they work watch this video: <a href="https://youtu.be/HuzHPpdEHUI?t=138">https://youtu.be/HuzHPpdEHUI?t=138</a> (watch from 2:18 to 4:28)

#### **Managing the Verification Process of the Bot**

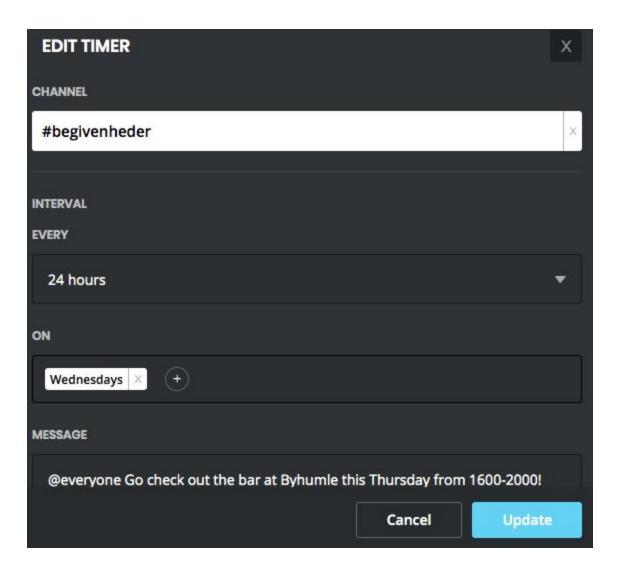
Currently the bot is able to give the roles of researcher, volunteer/supporter, urban farmer, and community gardener through the custom commands. These commands are limited to the channel #opret-en-profil. When adding a new verification role to the bot, make sure to have ban usage in other channels and to delete command usage turned on. To do this, press add when in custom commands, then scroll down and make sure that it looks like below.





#### Having the Bot Send Announcements on a Timer

If you want the bot to announce something on a timer, start by going to the dashboard and then pressing the "timers" plugin. Here you can add new timers for announcements on given days or intervals.



If you have a timer on a "24 hours" interval on a specified day, the announcement will send once that day. We recommend not having the bot spam the members so as to annoy them. If you want the announcement to notify a certain role or everyone then use the @ function (as explained above) in the message section of the time.

#### **Discord Messages**

#### **Poll for Languages**

@everyone \*\*Welcome to our Discord!\*\* We are currently debating on what language to use for both the channel names and the text within them. If you think the channel names should be in English react with :one:, or if the channel names should be Danish react with :two:. If you think the text within the channels should be English react with :regional\_indicator\_a:, Danish react with :regional\_indicator\_b:, or English + Danish translations react with :regional\_indicator\_c:.

#### Rules/Guidelines

- \*\*1.\*\* Please be kind and ensure respectful communication to everyone within this server. The purpose of this server is to create a positive collaboration between parties, and in order to ensure this, everyone must treat each other with kindness and respect.
- \*\*2.\*\* Please only post verification requests in the #verifikationsinstruktioner. This channel's purpose is only for verifying new members.
- \*\*3.\*\* Make sure that when you are adding a place to the mapotic map that the spot you are trying to add isn't already there. If it is already there, there is no need to add it a second time.
- \*\*4.\*\* If you have any volunteering opportunities, post them in #frivillige-muligheder. Make sure you include the date, time, location, and a short description of what it is.
- \*\*5.\*\* If you have any big events coming up for the public, message someone from Growing Pathways and they will post it in #begivenheder.

#### **FAQ**

\*\*What is the purpose of this Discord server?\*\*

The goal of this server is to further improve communication and collaboration between parties in urban agriculture.

\*\*How do I add my place on the mapotic map?\*\*

Follow the visual instructions in #mapotic, but if you are still confused, message a member of Growing Pathways or the Urban Farming Team.

#### **Verification Instructions**

\*\*Welcome to København Urban Agriculture!\*\*

\*\*1.\*\* One goal of this network is to be able to map out all of the current community gardens and urban farms in Copenhagen. If you are a part of one of these, please go to https://www.mapotic.com/urban-farming-in-copenhagen and place your location on the map (if you are having trouble doing this, then follow the instructions in #mapotic).

\*\*2.\*\* Once done, if you are an urban farmer, type !urbanfarmer. If you are a part of a community garden, type !communitygardener.

\*\*3.\*\* If you are not a part of either of these, simply type !researcher to get the researcher role or type !volunteer-supporter to get the volunteer/supporter role.

\*\*Note\*\* If you want to clear your roles, type !clear-roles. You can add your roles again once done.

#### Mapotic

To add your place to the Mapotic map, start by clicking this link (https://www.mapotic.com/urban-farming-in-copenhagen). This link will take you to the map's dashboard.

After at the dashboard, click "add place" in the top right of the page.

Next, you can either click on the map for a location or type in the location on the left.

Finally, fill out the descriptions on the left and press "add place" when finished.

#### **Welcome Message**

\*\*Welcome to København Urban Agriculture!\*\*

This server is dedicated to making communication and collaboration in Copenhagen's urban agriculture easier. If you have any questions, be sure to check the #ofte-stillede-spørgsmål or simply ask the question.

Make sure you verify your account so that you are able to use all the features! Simply go to the #opret-en-profil channel and follow the instructions. If you have any trouble, go over to the #fejlfinding channel.