

# Obelisk Farm

Traineeship Report



**Blaine and Marc**

August / September 2024

# Introduction

## Overview of the Farm

Obelisk Hemp Farm is a picturesque and sustainable hemp farm located in the rural heartland of Latvia, approximately 200 kilometers east of Riga. Nestled in a serene landscape surrounded by forests, the farm spans over 3 hectares and has been operational for over a decade. The farm is dedicated to the organic cultivation of industrial hemp, with a strong emphasis on eco-friendly practices and sustainable farming techniques. Its main activities include planting, cultivating, harvesting, and processing hemp, alongside running educational programs for visitors interested in sustainable agriculture, featuring their signature educational hemp museum.

## Purpose of the Visit

Our decision to visit Obelisk Hemp Farm was driven by a shared interest in exploring the intricacies of hemp cultivation and understanding its potential as a sustainable agricultural crop. We were particularly keen on learning about the entire process—from soil preparation and planting to harvesting and processing. Additionally, we wanted to gain hands-on experience with the sustainable farming practices employed at the farm, including product development and sustainable business practices.

## Objectives

During our 14-day stay at Obelisk Hemp Farm, we aimed to:

1. **Understand the full cycle of hemp cultivation:** From soil preparation and seed selection to planting, nurturing, and harvesting.
2. **Learn sustainable farming practices:** Including crop rotation and zero waste approaches.
3. **Participate in the processing of hemp:** From harvesting to transforming the raw hemp into usable products such as industrial hemp, hemp paper and consumable goods.
4. **Engage in educational sessions:** Covering the legal, economic, and environmental aspects of hemp farming.

# Weekly Log

## Week 1: 19th - 25th August

- Participated in an **orientation session on hemp cultivation**, gaining a foundational understanding of the growing process, including soil preparation, seed selection, and planting techniques. Additionally, we received a detailed explanation of the specific conditions—such as soil type, climate, and irrigation needs—required for optimal growth.

- Engaged in a hands-on workshop where we **learned how to make hemp paper from start to finish**. This included the processes of pulping, pressing, and drying, highlighting the versatility of hemp as a raw material.
- Acquired knowledge on **packaging and design**, focusing on sustainable packaging solutions and the importance of presenting hemp products in a market-ready form. We completed the packing process of the dried hemp tea leaves.
- Delved into the **business operations** aspect of hemp farming, including discussions on legal matters, financial management, and adherence to hygiene guidelines essential for running a successful hemp-based business.
- **Traveled to Preilu Market**, where we assisted Andris with setting up his market stall.. We observed firsthand how he manages customer interactions, sales, and product presentation, gaining insights into effective market communication.
- Visited the main city, **Rezekne**, to explore the urban environment and learn about the local culture. This was followed by a visit to another hemp farm owned by Edgars, where we inspected the fields and collaborated in using a **micro decorticator** to break down hemp into chips and fiber. This fiber was intended for use in eco-friendly construction, showcasing the practical applications of hemp in sustainable building practices. Throughout the week, Edgars served as a prime example of the DIY ethos, demonstrating how self-sufficiency and hands-on skills can drive innovation and sustainability in hemp farming.

## Week 2: 26th August - 2nd September

- During the second week, a significant portion of our time was dedicated to **farm maintenance**, particularly the harvesting of grass for This activity was crucial as the grass would be used to grow potatoes in the upcoming season. The timing of this task was strategic, as it was done at the end of the season to help preserve the diversity of plants growing in the field. This maintenance effort was part of the farm's broader commitment to sustainable farming practices, ensuring that the soil remains fertile and ready for the next planting cycle.
- We also had the opportunity to assist and participate in an educational hemp farm tour hosted by Andris. The tour was conducted in English, allowing us to engage with visitors and share our growing knowledge about hemp cultivation. This experience was particularly rewarding as it provided us with a chance to contribute to the farm's educational mission and interact with a diverse group of people interested in sustainable agriculture.
- One of the key activities this week involved **hemp seed production**. We observed and participated in the process where seeds were fed into a machine, followed by Andris using a series of pulses to sift through the hemp seeds by hand, ensuring only the best seeds were selected for further use. This precise sorting process was fascinating to watch and underscored the importance of quality control in hemp farming.
- We also observed the process of **oil extraction** using a cold press machine. Andris demonstrated how the seeds were inserted into the machine, which then released oil on one end while extracting green manure "cake" from the other. The green manure was an excellent example of the farm's sustainability practices, as it is reused as compost to enrich the soil for future crops. Witnessing this process highlighted the

farm's commitment to a zero-waste approach, where every part of the plant is utilized in some way.

- Towards the end of the week, we joined a group of volunteers to **harvest the hemp buds** from the fields. The harvested buds would later be used for various products, contributing to the farm's diverse range of hemp-based goods.

## Observations

This experience at Obelisk Hemp Farm was transformative, providing us with practical knowledge and a deeper understanding of hemp cultivation and sustainable farming practices. We departed not only with new skills but also with a renewed commitment to sustainability in agriculture.

# Hemp Farming Practices

## Cultivation Techniques

At Obelisk Hemp Farm, a range of advanced yet traditional farming methods are employed to ensure the health and productivity of the hemp crops. The cultivation process begins with thorough **soil preparation**, which is essential for hemp, a crop that thrives in well-aerated, nutrient-rich soil. The farm uses organic compost and green manure to enrich the soil, enhancing its fertility and structure. Before planting, soil tests are conducted to check pH levels and nutrient content, ensuring that the conditions are ideal for hemp growth.

**Planting** is carried out with precision. The seeds are selected based on their suitability to the local climate and soil conditions, and they are planted at a specific depth and spacing to optimize growth. The seeds are bought every year from a certified supplier, recently purchasing a French variety. The farm employs mechanical planting techniques, depending on the scale of the planting operation. Throughout the growth cycle, the farm depends on natural watering using rainfall and therefore each year the growth is different and irrigation is managed naturally.

**Pest control** at Obelisk Hemp Farm is managed organically, with a focus on environmentally friendly methods. The main pest issue faced by the farm comes from birds that feed on the hemp harvest. To address this, the farm uses **scarecrow techniques** rather than relying on synthetic pesticides. Traditional scarecrows are strategically placed around the fields to further discourage the birds from feeding on the plants. This dual approach effectively protects the harvest while maintaining the farm's commitment to organic and sustainable practices.

## Sustainability Efforts

Sustainability is at the core of Obelisk Hemp Farm's operations. The farm adheres strictly to **organic farming practices**, avoiding synthetic fertilizers, pesticides, and herbicides. This not only protects the environment but also ensures that the hemp produced is free from harmful residues, making it safer for consumers and the ecosystem.

Obelisk Hemp Farm is deeply committed to sustainability, integrating several eco-friendly practices into their farming methods:

- **Crop Rotation:** The farm employs a crop rotation system, alternating hemp with other crops to maintain soil fertility and reduce the risk of soil-borne diseases. This practice not only enhances the health of the soil but also promotes biodiversity, making the farm's ecosystem more resilient.
- **No Artificial Irrigation :** The farm does not rely on artificial irrigation systems. Instead, it utilizes natural rainfall and implements techniques like mulching to retain soil moisture. This approach conserves water resources and reduces the environmental impact associated with large-scale irrigation.
- **No artificial fertilizers:** Instead of artificial fertilizers, the farm uses **cow manure** and **hemp seed cake**. The hemp seed cake, a residue from the cold pressing of hemp seeds for oil, is rich in nutrients and serves as an excellent natural fertilizer. This approach not only recycles waste products back into the farming system but also ensures that the crops are grown in an eco-friendly manner, free from synthetic chemicals.
- **No Pesticides:** The farm strictly avoids the use of any pesticides, including herbicides to combat weeds. Instead, they manage weeds through manual weeding and by planting cover crops that naturally suppress weed growth. This ensures that the hemp remains free from chemical residues, maintaining the integrity of the crop and protecting the surrounding environment.

## Harvesting and Processing

**Harvesting** hemp at Obelisk Hemp Farm is a meticulous process that requires careful timing and technique. The harvest usually occurs when the hemp plants have reached their peak cannabinoid levels, which is critical for ensuring high-quality products. The farm uses both manual and mechanical methods for harvesting. Manual harvesting is often employed for smaller plots or for specific hemp varieties that require delicate handling to preserve the integrity of the plants. Mechanical harvesting is used for larger fields, where efficiency and speed are essential.

Once harvested, the hemp undergoes **post-harvest processing** to convert the raw material into usable products. The first step is drying the hemp, which is crucial to prevent mold and degradation of the plant's valuable compounds. The drying process is carefully controlled in well-ventilated areas to maintain the quality of the hemp. After drying, the hemp is processed to separate the fibers from the stalks.

For hemp cultivated for oil and cannabinoid extraction, the flowers and leaves are processed separately. This involves grinding seeds and using the cold-press extraction process, which is then pressed and purified to produce hemp oil and green "cake" manure. These practices not only ensure a high-quality yield but also align with the farm's commitment to sustainability and organic farming, making Obelisk Hemp Farm a model of eco-friendly agriculture in the region.

# Personal Reflections

## Skills Acquired

During our time at Obelisk Hemp Farm, we gained a wide range of practical skills and knowledge that have significantly deepened our understanding of hemp cultivation and sustainable farming. We learned the **entire process of hemp cultivation**—from understating soil preparation and seed selection, planting, harvesting and maintenance. We now understand how to break down hemp into fibers and chips for construction purposes, a skill that has broadened our view of hemp's potential beyond traditional uses.

Another key skill we acquired was **making hemp paper**, a process that required patience and precision. The sessions on **packaging and branding** equipped us with essential knowledge about sustainable packaging methods and the importance of presentation, which are crucial for anyone looking to bring agricultural products to market. Additionally, we gained insight into **business operations**, including the legal, financial, and hygiene aspects of running a hemp farm, which will be invaluable if we ever pursue a business in this sector.

## Personal Growth

This experience has profoundly shaped our views on agriculture and sustainability. We've developed a greater appreciation for the complexities of farming and the dedication required to maintain an organic, sustainable operation. Seeing how Obelisk farm epitomized the DIY approach to farming and construction made us realize the value of self-sufficiency and creativity in overcoming challenges. Our perspective on sustainability has expanded to include not just environmental considerations, but also the importance of community, innovation, and hands-on involvement in all aspects of life.

## Impact of the Experience

This experience has had a lasting impact on our future decisions, both personally and professionally. In terms of career, we would consider a path in **sustainable agriculture, eco-friendly business ventures or a wellness food brand**, areas we had not fully explored before this trip. The knowledge and skills We've acquired has given us the confidence to potentially start our own project or collaborate with others in the sustainable agriculture sector. On a personal level, this experience has reinforced our commitment to living a **sustainable lifestyle**—whether through the food we consume, the products we use, or the way we interact with the environment. It has also inspired us to continue learning and applying DIY techniques, fostering a greater sense of independence and resourcefulness in our daily life.

# Spotify Podcast

## Link

<https://open.spotify.com/episode/4ao42oCfizrDEqK0prM5gZ?si=Po2CmariSTWkae1CZcOt0w>

## Interview questions

### Episode 1

1. Can you share the origin story of Obelisk Hemp Farm? What inspired you to start this venture in Latvia, and how has the farm evolved since its inception? Hemp is known for its versatility.
2. Could you walk us through the different varieties of hemp you grow and the specific products they are used for, from food to fiber to industrial materials?
3. Sustainability is a big buzzword today, but how does Obelisk Hemp Farm embody sustainable farming practices, and what challenges do you face in maintaining these standards?
4. Your farm offers hands-on experiences for visitors. What do you hope participants take away from their time at Obelisk, and how does this interaction benefit both the farm and the community?
5. Looking to the future, what are your plans for Obelisk Hemp Farm? Are there any new projects, products, or initiatives on the horizon that you're particularly excited about?

### Episode 2

1. Can you tell us a little about yourself and what inspired you to join this training program, especially in the context of rural development?
2. What was your knowledge or experience with hemp before starting this training?
3. What has been the most surprising thing you've learned during this training?
4. Can you share a specific moment that you found particularly challenging or interesting?
5. How do you plan to apply what you've learned in the future?
6. What has been your proudest moment or achievement during the traineeship?
7. What message or piece of advice would you like to share with our listeners who are interested in hemp or this training program?

### Episode 3

HEMP AND RURAL DEVELOPMENT

1. How do you see the younger generation contributing to the development of rural areas? Do you have any examples of people doing so?
2. The younger generation is increasingly moving away from rural areas and agriculture. What innovative approaches do you think can attract and retain young people in rural industries, and how can we make these sectors more appealing and viable for them?
3. It is clear that farming is a male dominant industry, however we have met a female, mother of four who is now inspiring other women to enter this field. Could you share more about this and what you think the potential challenges could be?