A report on the stay at Quinta da Fornalha

The 9th of December 2020 me and two classmates went to Algarve in Portugal to take an internship at Quinta da Fornalha for three months. Since we all share the same interrest in organic gardening, permaculture and rehabilitation of nature, we chose to find a place together. We see it as a strength to go outside Denmark as a group so that we can discuss and share the new information we get with each other, and thereby increase our understanding of the methods used at Quinta da Fornalha.

**About the motivations and ambitions for going abroad**

Our school has a rather conventional focus on gardening in which we do not always agree. Therefore we want to strengthen our practical experience in organic gardening and permaculture. Our motivation for going to Quinta da Fornalha for an internship has been to acquire knowledge within the scope of sustainability to take with us back to Denmark, where we hopefully get the chance to apply it and improve the agriculture in Denmark in a more environmental friendly direction. Since the outdoor gardening in Denmark usually stops in winter we saw it as a great opportunity to go to the south where the work is still plenty during winter.

**The farm by the sea**

Quinta da Fornalha is 30 hectares and has its main income from organic fig producing. Besides being a farm Quinta da Fornalha also has ecotourism, a restaurant and a salt mine. In the kitchen of the restaurant they also produce all kinds of delicasies such as dry figs, fig jam, fig balls, carob butter, salt and many others. The products vary a bit from year to year depending on how much the plants on the farm produce, but some of them they produce every year as the ones mentioned.

Quinta da Fornalha has been in the family since 1755. Rosa, the owner of the farm and our teacher, took over the farm from her father 10 years ago. Since then she has done a lot of improvements. She has increased the biodiversity on the land and has managed to apply the permaculture principle on having different sources of incomes to rely on. This means that if one year it goes bad in the tourism industry, as we saw last summer, the farm still has its fruits and products to rely on. This principle is also applicable when it comes to the ecosystem on the farm. The more diversified and manifold the plants within the ecosystem are, the higher the chance is that some of the plants will make a good harvest. If for example it is very dry one year, the plants that thrive in water scarcity will survive and if it one year rains a lot the thirsty plants will thrive.

Rosa has a lot of knowledge about the plants and the soil on the farm. She has a great understanding on how the climate is a factor in the plants behaviour. She sees the whole ecosystem as a living being that sweats in hot weather and freezes on cold winter nights. She knows almost every tree and every stone on the farm, and she has recognised the value of her ancestors expertise. On the website she says this:

“There is an emergency situation to attend. All this knowledge effortly saved through generations is now jeopardized because of this arrogant theory that science knows better. Technological development puts productivity at short term as goal thus forgetting that fragile interrelationships between ecosystems are the reason of fertility and long term existence.”

Besides being a place that creates work for locals based on sustainability and nature rehabilitation, it is also a place for your own rehabilitation and well-being. Being located in the southest part of Europe the sun is shining all year around giving life to a rich vegetation with flowers presenting all the coulours of the rainbow. Having the sea by its side you can always go for a swim and let the atlantic ocean, meeting with the mediterranean sea, clean your soul and body.

**The work on the farm**

Our work has mainly been in the gardens that produce vegetables to the farm and in the orchards. The main purpose of the vegetable gardens are for the farm to be more self-sufficient. Thus, the workers and tourists on the farm can harvest fresh vegetables for themselves, and also the resaurant strives to get more self-relient on vegetables. In the gardens we have been preparing the beds by rotating the soil, adding compost and mulch on top to give some nutrients to the plants and organisms living in the soil. We do the rotating because the soil mainly consists of minerals and is therefore very hard. By rotating the soil the air circulation in the soil improves and the roots get a chance to work their by trough it to get water and nutrients from its surroundings. Heavy mulching is therefore good because it adds organic material that by the time hopefully will increase the humus within the soil.

The climate in Algarve is very hot. In summer almost everything dries up, and therefore the plants need watering. The most efficient way to water the plants in a place of water scarcity is to have a drip system. The system works by having water tubes lying on the ground beside the plants. The tubes have small holes so when turned on it constantly releases a drop of water. By having the tubes on the ground the water goes directly into the ground and thus evaporation in minimized.

The pruning of the fig trees is of high importance. This work has a commercial interrest. The high quality figs they sell to the french market is one of the main incomes on the farm. Therefore the trees need to be taken care of every year. All Feburary we were pruning the trees. By cutting back the trees they will produce more and better fruits. We cut of the dead branches and the branches that point inwards to the canopy so that it creates an umbrella shape. The umbrella shape makes the fruit more reachable and thereby the harvesting gets easier. It is necessary to keep the tree “open” in the middle of the tree crown close to the main stem so that the sun reaches all the leaves and air circulation stays good. If the air circulation is bad it creates good circumstances for pests and fungis to attack the tree.

**Time flies when you are having fun**

Three months pass by very quick. With a high level of expertise in gardening and a good team work we felt that three months at Quinta da Fornalha was too little, so we decided to prolong our internship for three more months. Fornalha has given me a lot and still has lots to offer. I look forward to stay in Algarve until June and get some more knowledge about producing healthy and sustainable food for a local community. In true permaculture spirit I believe this is the way to feed the world, the world being populated by happy and healthy people.

Maria, Algarve March 2021