The background features a light-colored, textured paper surface. At the top center, there is a faint blue pencil sketch of a traditional building with a tiled roof and a grid-like facade. Below this, the text is centered. The main title is in a large, bold, black serif font. Below it, the dates and location are also in a bold, black serif font. The bottom right corner contains the organizer's name in a smaller, bold, black sans-serif font. The entire page is overlaid with various colorful, semi-transparent pencil sketches of abstract shapes, including circles, ovals, and elongated forms in shades of red, orange, yellow, green, and blue.

“Rural SustainABILITY”
12th – 23rd June 2023, Halle (Saale) Germany

**A 10 day hands-on training on
Permaculture, Natural Building,
Renewable Energies within the conext of
Socio-Cultural Centers.**

2023 Jonglirium e.V.



introduction

The world is rapidly changing, and often not for the better. Little islands like sociocultural centers can spread the vibes of a sustainable future and pass it on to the young generation. That's why we've come up with this training – combining permaculture theory & thinking with hand-on experience in natural building, renewable energies, gardening, sociocracy & green project management. We aimed to create a training group with trustful connection & mutual support and ask everyone involved to take part as much as possible to support each other in each session. Together we created a daily schedule that incorporated the interests and needs of the participants. The training sessions were led by people from inside and outside the training group.

The training was designed for youth workers, volunteers, activists and other people who work with people.

There were participants from the following countries: Germany, France, Spain, Slovenia, Italy, Sweden and Poland.



The training course was led by **Mohammad Al-Saffar, Felix Fischer, Rakesh & Lily Malich** who guided the group into exploration of the project's topics.

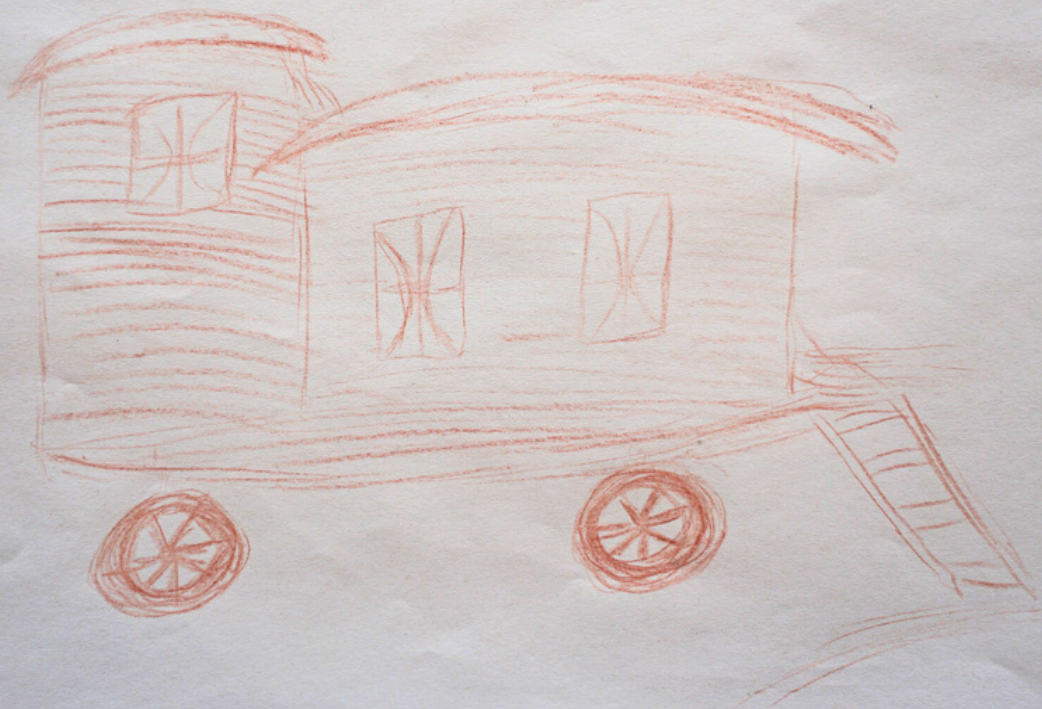


about this booklet

This e-book was created by the participants and the Jonglirium team to collect tools, methods and impressions of this project. We hope it gives you inspiration to apply some of them in your work. You might notice that we've included lots of creative expressions by the participants in this booklet that were inspired by our surroundings and activities in the outdoor space.









DAY 1: NAME GAMES **(to get to know each other)**

“Mysterious Mo”

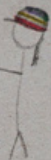
Find an adjective with the same starting letter as your name. We form a circle. The first person (i.e. “Mysterious Mo”) presents his*her name together with their signature movement, and everyone repeats the name and movement together, at the same time.

“Zombie with names”

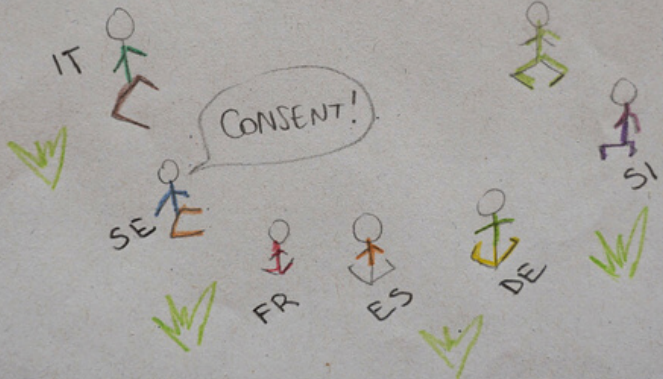
In a circle, one person moves “like a zombie” towards a person. This person has to say another name before the zombie catches them. Then the zombie goes towards the new person. If you get caught before saying a name you become the zombie yourself!



SOCIO CRAZY
- CONSENT
- CONSENT WITH
 CONCERN
- OBJECTION



GOOD ENOUGH FOR NOW
SAFE TO TRY!





“Zombie with eye contact”

In a circle, one person moves like a zombie towards a person and that person has to make eye contact with someone and that person has to say their name before the zombie catches them. Then, the zombie goes towards the new person. If you get caught before saying a name you become the zombie.

“Evolution game”

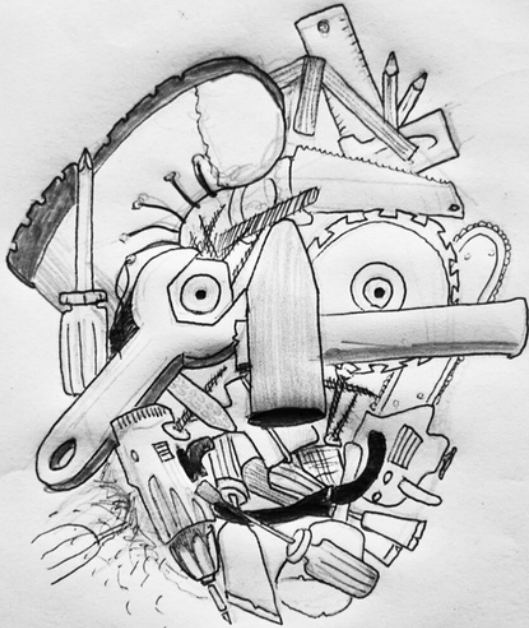
Everyone starts as a Ameba, with Ameba sound and gesture. Amebas meet, chat, exchange names and play rock, paper, scissors. The winner evolves, the loser stays the same. Evolution: Ameba, fly, rabbit, monkey and human. Humans go to the outside circle, and watch the evolution process. If there is one person in an evolution stage left, he/she spontaneously evolves.



“Limbs game”

Walk around, increase the speed. Keep walking, until someone says "5 elbows". In this moment >>5 elbows<< have to come together. Repeat with different numbers and body parts.

It's a great tool to create a group of certain size, which is random. That enables to connect people who don't know each other, and integrate the group.



DAY 1: MAPPING

Simple, and useful exercise to see who is where in terms of experience, knowledge, nationality, or interests! etc. etc.

Examples:

Imagine a place as a map and stand where you are born.

Imagine a place as a range. For example: "yes", "no", "little" or "a lot" of experience. Then, participants map themselves according to the question asked.

Precise example:

Do you have experience in eco building?

Point A: I'm an expert builder

Point B: What is a house ?



DAY 1: Group Division; Share & Care system

In order to keep up with the necessary tasks to make the space clean and habitable and keep the community functioning, we introduced a rotating responsibility system. Through the “evolution game” we ended up dividing in groups. This way the groups were randomly allocated and we had the chance to work with new people, we didn’t meet so far. Each team had some time to think of a group name and a signature move. This move would be a short action or pose that represents the group and its name. We presented our signature moves, and it was a lot of fun!

For this training we were divided in 5 groups.

DAY 1: Group Division; Share & Care system

Each group wrote their name on a post-it paper, and we placed them on the “share and care” wheel and turned it daily. At that point the share and care system was introduced.

Each group rotates to a different task every day and most tasks are performed from 9:30 am to 10:15 am, however « dishes », « documentation » and possibly « group care » are daylong tasks.

Share & Care system consists of five different tasks:

1. Cleaning
2. Dishes
3. Group & Self Care
4. Documentaiton
5. Cutting (Kitchen Help)

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5. Cutting (Kitchen Help)



DAY 1: Vision & Mission

Collectively we mentioned what we would like to experience during the coming week. Out of this we created a vision to describe what we want to reach during the week in order to make our hearts sing. Everybody consented to the following vision:

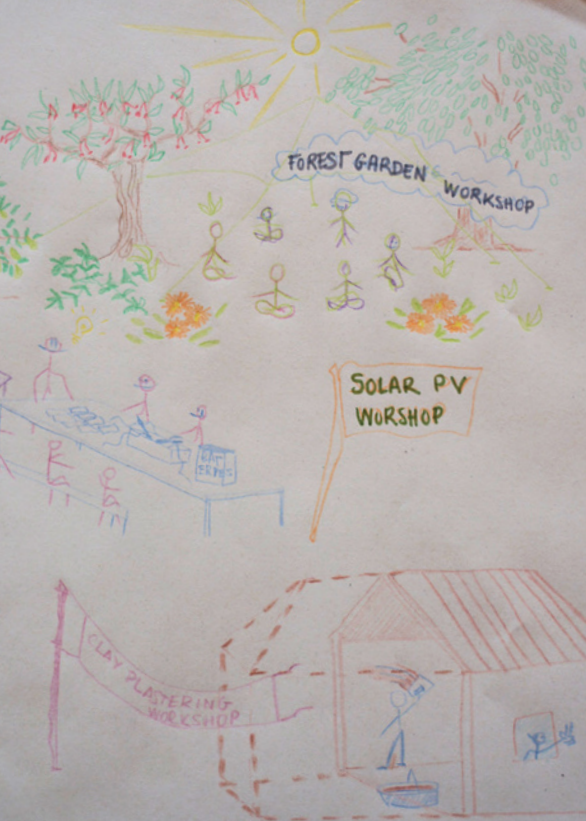
We are a group empowering each other, sharing to live in harmony for the best of ourselves and every being.

All our wishes and interests were the base to create a mission which should describe how we are gonna reach this.

Everybody consented to the following mission:

We are learning and facilitating each others learning consciously on sustainability and community wellbeing by putting ideas into action.

We considered the single wishes and interests our aims which could potentially be worked out in more detail to fulfill the SMART rules.



DAY 2: CONNECTING TO ONESELF AND OTHERS

We began with “the input sessions” and the input about forest gardening and Photovoltaik systems.

Projects of insulating an existing house with clay, recycling old lithium ion batteries to build a solar system.

Group building exercises: Acro Yoga and massage, traditional European dances.



Morning Session

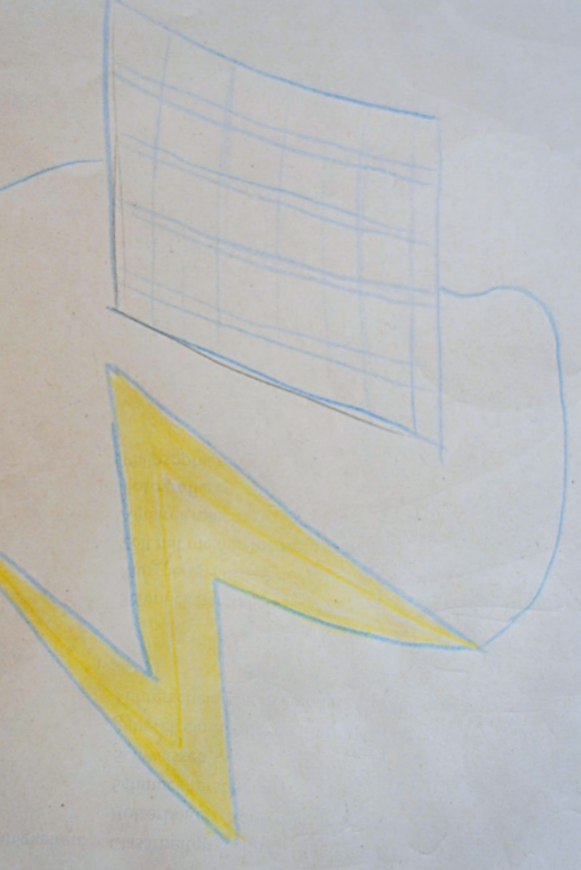
Workshop 1: Forest gardening

- overview of what a forest garden is
- understanding about “closed loop cycles” in such a system
- the multidimensional structure of a forest garden
- benefits and transformative potential

Workshop 2: Clay plastering

- replacing insulation of a house with clay plastering for water vapour purposes

in between, working out :) - carrying straw bales!



Afternoon Session

Workshop 3: Acro Yoga and Massage

- exercises for strength in arms and core, doing stretches
- individual exercises, partner exercises and group exercises
- acrobatic balancing group poses

What did it give us? --> empowering, strengthening the trust within the group

Workshop 4: Solar PV systems

- basic understanding about installing solar panels and where and how to use them
- introduction to the solar water heating system that was under construction at the time
- starting a project: recycle used lithium ion batteries, and building a solar system with them



DAY 3: WORKSHOP DAY

Visit to organic farm/market garden, workshops: pottery, beekeeping, shoe making, continuing project of insulating an existing house with clay; introduction to permaculture.





Visit to a local organic farm:

- overview of what a small scale organic farm is
- exploring the farm's structures: green houses, open air fields, tool room
- harvesting and weeding
- questions to the farmer



How to harvest honey

When the main space has been filled with all the essential elements, bees can produce extra honey.

To do so, add a few layers:

1. A grid anti-queen



holes are small enough to let bees pass, except for the queen.

2. honey layer



frames with only nylon threads so bees can create their own wax & pattern for honey

you can put up to two layers.

→ wait until they are full, to check, always use smoke (bees remain calm because they are attentive to fire hazard).

When the day has come, put a last layer under the 2 honey layers & over the main hive.

3. labyrinth



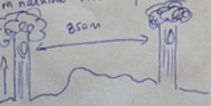
bees will smell the queen & go down again in the main hive, but then will get lost when trying to go back to the honey layers

This is to remove any left bees before honey extraction

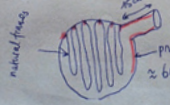
→ for the last part a centrifuge machine is required (spinning force will eject honey) Collect just one a year + feed bees with honey in winter if necessary.

Why all of that?

in natural habitat, bees live mainly in trees or at height:



They enter tree holes & build circular-ish hives:



properties to protect & glue elements (against fungus, virus, bacteria, ...)

We had a workshop on **natural beekeeping** and the differences between keeping bees according to their nature *and* the conventional beekeeping for maximising profits.

For more resources on how bees live in the wild check:

- Seeley, Thomas:
https://en.wikipedia.org/wiki/Thomas_Dyer_Seely

Also see:

- More than Honey, Bee Documentary:
https://www.youtube.com/watch?v=Wh_IrRBeu-o
- A post on the gutalaune website:
<https://gutalaune.de/en/2021/02/17/keeping-bees-according-to-their-nature/>



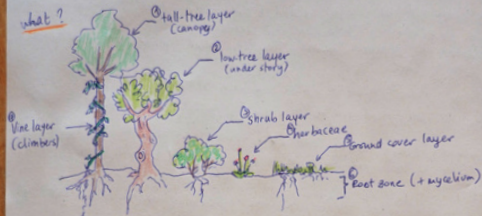
Introduction to Permaculture

- overview of what is permaculture
- historical background of the permaculture concept
- ethics and principles of permaculture



Forest Garden

what?



the forest garden has 7 layers that allow biodiversity to thrive & soil regeneration.

1. Canopy
 - better to plant fruits that will fall down: chestnut, oak trees, nuts...
 - Nitrogen fixing trees: alnus, rubiac, pseudoacaceae
2. Under story
 - fruit trees: cherries, apples, apricot, malberries...
3. Good for wood & nutrients
- 4.
5. it covers the land (can also be herbaceous):
 - strawberries (great for the health of the ground), nepalesse raspberries, mint, carrots (that concentrate energy in their roots to then grow seeds), potatoes, dandelions...
6. Some plants dig really deep to bring minerals to others, different length of roots are important: alfalfa (30m) + mycelium unanchoring plants, tree and break kitchen
7. Plants such as: vines, sweet peas (perennial), legumes, kiwif, schizandra or deeps plant (once to put under the pillow to sleep well).

→ the forest garden is functional on its own, it doesn't need much watering because trees are offering nice shadows, sweating water, retaining it in the atmosphere. moreover, the diversity of plants bring all the needed nutrients.

Plants to attract insects/bees:

- * asteraceae family
- * apiaceae (umbelliferae) family
- * snowdrops, early bloomers...
- * allium family (onions, garlic...)
- * lamiaceae (mint)
- * brassicaceae (mustard)
- * burraiche (lots of pollen)

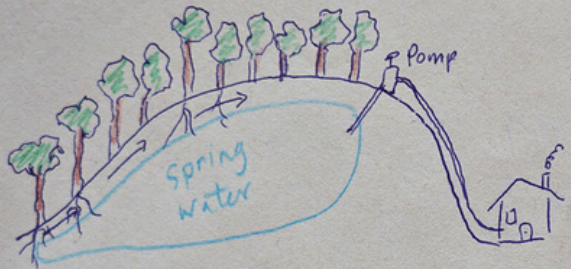
DAY 4: ESTABLISHING THE GROUP AND DEEPENING THE KNOWLEDGE

Second session of Forest Gardening, introduction to Mycology, continuing work on clay plastering, tour around GutAlaune to see the tiny houses and yurt constructions.

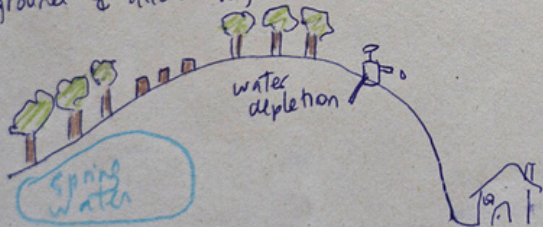
The group visited the different tiny houses in the community - wagons, yurts, wooden houses and straw/clay wall buildings. The methods of building were demonstrated, also discussed were the pros and cons of every house, the different types of insulation. Lots of knowledge was shared about problem solving, building from recycled materials, and building according to the needs of the inhabitants, and the local climate.

Permaculture session in the evening.

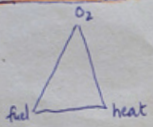
Trees are good to create water tables (especially from 6 to 13m height) & distribute it between them. You'll find Spring water near trees (best place to dig a well)



→ if you cut tree, spring water will collapse, the first trees pump the water down the ground & allow higher trees to benefit from it.



basis for a good fire

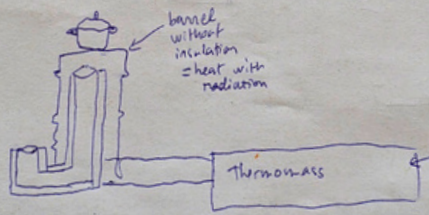
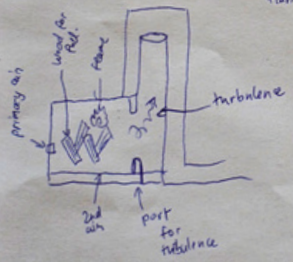
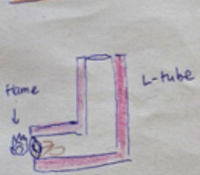


→ a complete & perfect combustion doesn't release smoke!
 rocket stove burns the extra smoke to release clean gas, hence being more ecofriendly.

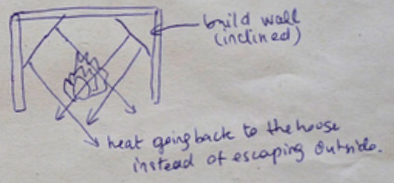
Types of heat:

- radiation (waves)
- convection (in fluids or air)
- conduction (through contact & exchange of molecules → transmission of heat)

Simpler stoves:



Tips for old chimney (fire place)



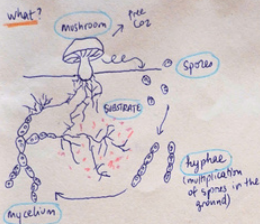
could be water, stone + cow poo + clay ---
 → to diffuse warmth

website for plans = batchrocket.eu

insulation material: mineral wool or calcium silicate

Fungi

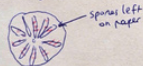
What?



How to grow them?

- water + oxygen
- different substrates: (nutrients)
 - * wooden material (chips, cardboard, ...)
 - * compost / guano
 - * coffee grounds
 - * straw
 - * coconut husk
- spawn (ready to go mycelium)
- shade (to extend mycelium) + soft floor

You can also do everything from scratch by cutting the head of a mushroom & living it on a paper (in contact with the spores) for 24h.



1. take a brush & collect the spores
 2. put them on an agar agar + melt extract plate test
- everything should be sterile to avoid growing other fungus.

Conditions for an instant fruiting:

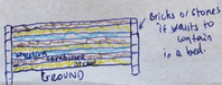
- ⚡: lightning
- ☁: lots of oxygen
- ☔: moister (rain)
- ☀: light exposure
- 👉: loss of nutrients
- 🦠: bacteria
- 🌡: T°C

⇒ conditions depends on the type of fungus substrate

in practice:

★ **Kino Stropharia**: can grow pretty big

- needs: ground + straw + cardboard (both soaked in water to allow mycelium to spread both use in tiny pieces)
- method: lasagna

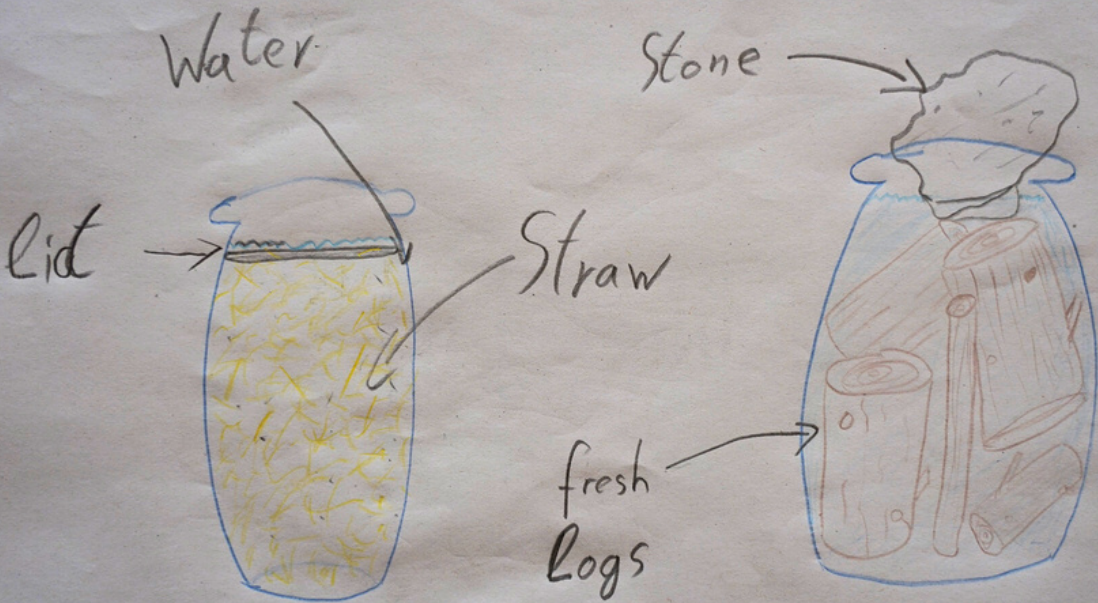


do the layers a few times, not too thin, not too thick (mycelium not on top) + shade

Mycology workshop with Lily:

Lily explained the basics of how fungus grow and reproduce, and introduced different ways of how to grow mushrooms. She demonstrated different types of spawn – the material in which mycelium is already reproduced. The last part of the workshop was a practical session where we prepared different substrates for growing mushroom by cutting straw, shredding cardboard and soaking them in water. Some big tree logs were also soaked for the same purpose.









DAY 5: Mycology, Forest Gardening, Rocket Stoves, Biochar, Permaculture

Morning Warm-up:

Groupe size: ca 20 and in pairs

Time: 20 min

Materials used: only humans :)

Stretching, walking in space. Then we start a competition game in pairs – two people in front of each other, clapping on the legs and point up, left or right synchronously. If they point to the same direction, they must clap together (a high five) after clapping again on the legs.

After the competition game, there was a check-in where every participant had to describe how they are feeling by symbolising their state of being as a pizza.



Mycology workshop

The group continued with creating beds for mushrooms to grow. Working with straw, logs, scissors and spawn :) We collected some coffee grains and fertilizers, created an area to cultivate mushrooms and began the process!

Forest gardening maintenance workshop

Rakesh continued to talk about ecological succession, how to classify plants and elements of a forest garden in different layers or dimensions.

He introduced a method of design for a forest garden. The first basic questions we ask ourselves are: *in what state is my land at the moment, what are the needs of the land, what do I want from my forest garden in terms of output (food, materials – soap, fibers etc., shade).*

He also introduced a concept of dividing the land into smaller compartments, and planning them one by one, to facilitate the implementation and allowing us to learn from small rather than big mistakes.

4. Pink oyster mushrooms: grows on vertical surfaces (logs)

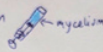
→ needs: log + coffee ground or cardboard (coffee must be fresh!)


→ methods: on a log or in jars



on logs:

1. use a syringe to collect mycelium
- drill some good holes in a log that was soaked for 24h in water
- push the mycelium into holes
- close holes with wax or clay
- leave the bag in a shady place, mister if necessary both log & mushrooms



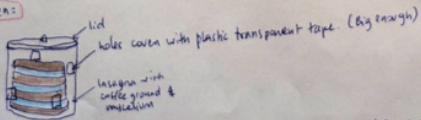
2. - Boil with a high pressure pot wood nails to sterilize them
- Drain the nails & wait for them to cool down
- Sterilize jars & their lids
- Drill a few small holes in the lids → 
- sterilize space & put gloves
- cut gas tissue to cover the holes on top on the lids
- Tape (paper tape) the gas on the lid while letting holes breathe out
- Put woodnails in jars with fresh ground coffee or/ cardboard
- Close the lids & wait at least 2 weeks at shade.
- When the mycelium is reading, get the nails, drill the log soaked 24h in water & hammer the nails into the log. (you can close it with clay or wax)
- leave the log in a shady place, mister if necessary both log & mushrooms



at home:

Same process with the jars, after 2 weeks you can decide to multiply mycelium but separating the jars in other jars with different substrates so the fungus didn't die from mono food.

Then:



↳ after 3 to 4 weeks remove tape to let oyster mushrooms grow + keep it moist!

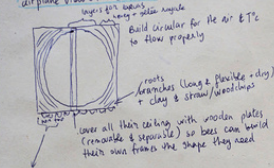
⚠ when growing them in your garden, don't put concrete path or bamboo, it will break mycelium progression, use cardboard & woodchips (that absorb water & are sources of nutrients) with lock end.

Bee Keeping

ref: "Thomas D. Seeley" - Bees documentary: "more than honey"

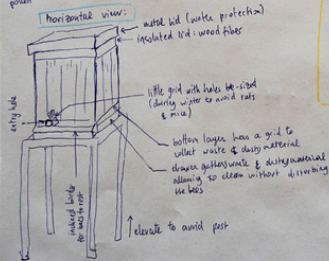
How to be as ethical as possible?

airplane view of the hive!

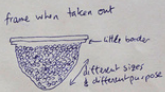


find lapses are usually used for pollen

horizontal view:



⚠ take wild swarms instead of buying queen bees in the market because swarms are looking for a place to build the hive (swarms happen when hives are too busy or the queen don't produce anymore, part of the hive leave with the former queen or a new princess)

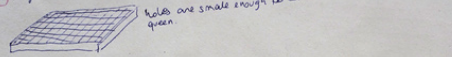


Tips: separate beehives as much as possible (> 50m) with different direction from water points & obstacles in the way → it avoids bees from different hives to enter & bring pest & diseases

How to harvest honey:

when the main space has been filled with all the essential elements, bees can produce extra honey
to do so, add a few layers:

1. A grid anti-queen



2. honey layers



→ wait until they are full, so check, always use smoke (bees remain calm because they are attentive to fire hazard).
when the clay has some, put a last layer under the 2 honey layers & over the main hive.

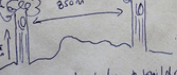
3. labyrinth



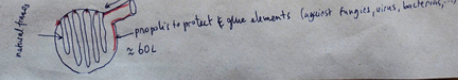
This is too remove any left bees before honey extraction from the frame.

⚠ for the last part a centrifuge machine is required (spinning force will eject honey).
Collect just one a year + feed bees with honey in winter, if necessary.

Why all of that?



They enter tree holes & build circular-ish hives:





Afternoon Session

Warm-Up:

Move around in space at different speeds, looking each other in the eyes. On a given signal, everybody stops and close their eyes. The facilitator asks the group to point to a specific person, still with their eyes closed. This tests the spatial awareness of the participants. Second exercise was the Samurai game, to further raise the energy of the group.





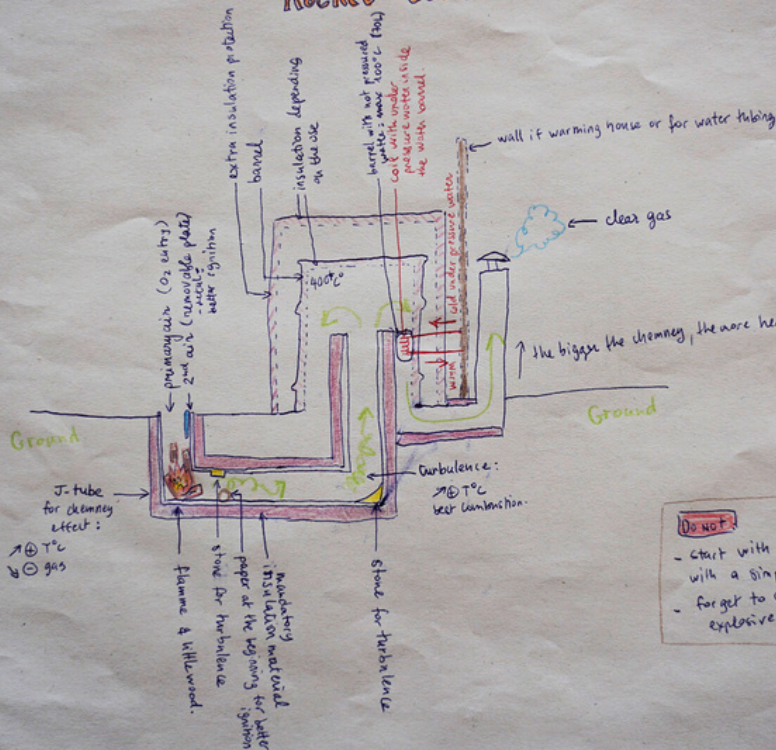


Rocket Stoves workshop

Warm-Up:

We explored the concepts of traditional stoves, rocket stoves, “L” tubes, “J” tubes and showed a few stoves in the area that they made before. We discussed about them and asked questions.

Rocket Stove



Do not!

- start with innovative heating, but with a simple J-tube or L-tube
- forget to clean your chimney = explosive hazard.



Permaculture session

Rakesh gave a discourse about strategies for growing food in a Forest garden. He introduced different tricks for growing annual vegetables in a forest garden. The concept of **Biochar** was introduced.

During this session, the participants were encouraged to test their knowledge in permaculture principles by helping Rakesh to explain the different stages of succession and needs of the land in the different stages of the process.



Rest Day

In the morning, after the morning circle, we went for an excursion to Brachwitzer Alpen, stopped by the river for a refreshing swim, played a collaborating game called “jigger”, facilitated by Mike. In the evening Rakesh prepared fermented dosa and showed us how to cook it. After the dinner we had a mid training sharing circle at the bonfire. Every participant had an opportunity to express how they have been feeling during the project and what they are looking forward to in the coming week. Afterward we sang a song facilitated by Rakesh.



Day 8 – Eco Building

The day's focus was on eco-building and preparing tools and equipment for all work processes. After the afternoon's session all participants enjoyed a free evening playing games, as well as singing and guitar playing.

All participants were divided in groups of 4 or 5, and were working in different project stations such as: building compost containers, building a straw bale house, preparing and building tools in the workshops (working with metal and wood), insulating the roof, building a tiny house facade, cutting wood, screwing it into the house, building and hanging a door for the solar water system and clay plastering.







Day 9 – Eco Building Part 2

Continuing with all the projects from day before. As a follow up of the mycology workshop a small group started working on new mushrooms bed building recycling materials deriving from the other working stations.

Afternoon energizer game: Police and Drivers

The participants are in a circle.

Roles: 20 drivers, 5 police officers.

The drivers start driving their cars and the police try to prevent or solve the occurred crashes.

Day 10 – Relaxing Day



SHARE AND CARE SYSTEM

In order to keep up with the necessary tasks to make the space clean and habitable and keep the community functioning we introduced a rotating responsibility system. Through a set of games of games we ended up dividing in groups. In the game we would all run around and the game moderator says "5 elbows", 5 elbows have to come together, repeat with different numbers and body parts. Finally you can create a group in the size you want with an number and bodypart. The last round of the game would actually be our final group. This way the groups were randomly allocated and we had the chance to work with new people, we didn't meet so far. Each team had some time to think of a group name, logo and a small choreography. This choreography would be a short action or pose that represents the group and its name. We were divided in 5 groups and the following names were chosen.

Each group wrote their name on a colored paper and we placed them on the share and care wheel and turned it hazardously. At that point the share and care system was introduced. (The System is explained on www.jonglirium.com under « Into the wild »)

The A5 papers of every group are placed on the task-board besides the groups task for that day. Each group rotates to a different task every day and most tasks are performed from 9 am to 10 am , however « dishes », « documentation » and possibly « group care » are daylong tasks. Share & Care System consists of five different tasks to take care of the community:

1. Cleaning
2. Dishes
3. Group and self care
4. Documentation
5. Cutting (help for the cook)




**why we
created
this
booklet?**



this booklet was created for everyone who is interested in creative way of getting to know each other and working with groups in a creative, mind-opening way.

Please share it with everyone who might benefit from it and let us know what are your reflections on it!

A photograph of two young women laughing and talking outdoors. The woman on the right is wearing a green hoodie and glasses, gesturing with her hand. The woman on the left is wearing a white hoodie with a blue collar. They are standing in front of a background of green trees and a bicycle rack with several bicycles.

“The more clearly we can focus our attention on the wonders, and realities of the universe about us, the less taste we shall have for destruction.”

— Rachel Carson

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Drawings, text, photos: All of us together



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