# FARM HACK

# GUIDE

# CONTENTS

# 1. INTRODUCTION

## What's a Farm Hack? And why would anyone organise one?

In the past decade or so, many folks in various locations in the world have gathered for 'Farm Hacks': convivial gatherings at which people collaboratively develop their own designs, techniques, and 'hacks' for making agricultural technology more accessible and useful for smallholding farms.

Examples include:

- A pedal-powered root washer
- Open-source electronics for monitoring greenhouse temperatures
- A low-cost mobile polytunnel design

"The Farm Hack is like a jam session for farmers, techies, and engineers who are working on problems specific to farmers."

– Farm Hack Session Organiser

Farm Hacks have taken a wide variety of forms, but have generally shared some common themes and interests:

Technological sovereignty, and skill sharing. Farm Hacks are committed to the free and open sharing of tool designs -- along with a strong critique of proprietary farm tools that prevent the user from modifying (or even understanding) the underlying technologies. Most Farm Hacks have

involved collaborative tool building / hacking projects, as well as the sharing of useful farm skills, experience, knowledge.

Decentralised networking, diversity of participation, and political organising. No one 'owns' the Farm Hack network; it's open for anyone to join, or leverage, as they see fit. People participating in Farm Hacks are often explicitly trying to forge connections to the global peasant struggle, and the Campesino-a-Campesino movement, using practices associated with popular education and critical pedagogy.

Agroecology and food sovereignty. While the backgrounds and agricultural approaches of Farm Hack participants have been diverse, most Farm Hacks tend to have an agroecological approach,

with influences from regenerative agriculture, permaculture, and appropriate technology. Food sovereignty -- and the new (and old!) technologies and infrastructure required to support it -- is a strong Farm Hack theme, as well as ecological and epistemic justice; and political economy.

Fun! Farm Hacks tend to involve a bunch of folks bonding over food, great discussion, and deciding to work together on a 'hack' or build project that they share an interest in.
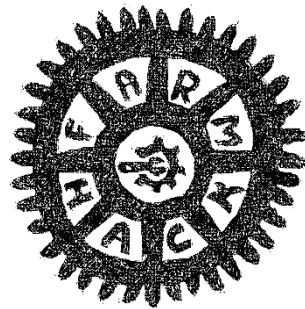
"Farm Hack brings a lot of the learning, philosophy, and capacity of the open-source movement into the agroecological farming space, and that whole political program of trying to create an alternative to the enclosures of ideas, and the commodification and creation of property out of things that can be freely reproduced. I also think the agroecological community have a huge amount to offer to the open-source technology movement in that it gives them an important mission, saving the fertility of our soil and our ecosystems for the future of humanity."

– Farm Hack Organiser

## A Brief History of Farm Hack

In the US. Farm Hack was established in around 2010 as 'a worldwide community of farmers that build and modify our own tools'. The primary aim of the early gatherings was to develop a grassroots response and counter to what were then seen as increasingly draconian and exclusionary intellectual property practices on the part of the major suppliers of farming technology. There is now a US-based non-profit organisation called Farm Hack (FarmHack.org.)

In the UK. The first UK Farm Hack likely occurred around 2015 in South-West England, and since then there have been several organised Farm Hack events throughout the UK, including Scotland (2016), Wales (2018), Thames Valley (2019), Scotland again (2019), and Leeds (2020).

# Some Previous Hacks

"IFarm" 2012. At Dorn Cox's farm in New Hampshire, about 12 people gathered to talk about / hack aerial and ground imagery techniques for small scale farms. Participants included local farmers, engineering students, coders, and reserachers. People gave demos of drones and how they can be used to capture imagery, and some hobby electronics cameras were also placed on helium balloons. Techniques for analysing near-infrared images in order to assess plant health were demonstrated and discussed, as well as some emerging 'machine learning' approaches to soil analysis using smartphone cameras and printed 'colour cards'.

"Culticycle presentation and demo" 2013. Meetup at Pedal Power HQ. The 'Culticycle' design for a pedal-powered tractor has involved a lot of collaborative tinkering and design in various parts of the US FarmHack community over many years; this was an opportunity to demonstrate the current state of the design, and also learn about welding and other techniques useful for modifying bicycle and tractor parts. PedalPower had a factory space at which they serviced their own modified "last mile" bicycle delivery trailers, so we were able to gather inside a large, warm space with lots of tools for the meetup.

"Greenhouse monitoring Yurt Meetup" 2015. Informal gathering in Maine. A few farmer / hackers brought laptops and beer and camped out over a weekend in a yurt on a farm in Maine to work on a remote, off-grid greenhouse temperature and humidity sensor system, and sketch out some DIY approaches to seedling incubator technology. They also had a long discussion over

dinner & beer around how to define agroecology, how it relates to folks who work on 'regenerative agriculture', and the historical origins of 'right to repair' and 'open source' culture.

"SoilHack" 27th/28th May 2017. Weekend gathering near Street in Somerset. Following sessions at the first two UK Farm Hack events SoilHack held its own gathering. SoilHack created a space for people to collaborate in research and sharing information to help both better understand soils and improve their health. The gathering was organised with a spirit of open collaboration including sessions exploring soil and compost from a practical, theoretical, scientific and cultural perspective. https://farmhack.org/wiki/soilhack-wiki

"Gathering for Open Agriculture Technology" 2018. Meet-up in upstate New York. This was a three-day conference at a retreat centre in upstate New York that brought together farmers, researchers, and technologists / hackers to focus on the development and use of open source technology in farming.  The gathering was primarily organised 'unconference' style -- only meals, 'lightning talk', and 'demo' sessions were fixed; otherwise, participants collectively brainstormed and scheduled their own topics, meeting up in various locations at the retreat centre.  Funding was found from various sources (primarily non-profit orgs) in order to pay for travel for participants internationally; there was an application process, and participants were selected in order to bring the most diverse group, with shared interests in open farm tech, together.

"Lady Hack / Feminista Farm Hack" 2019. At Fresh and Green near Exeter.This was a gathering of roughly 30 women and non-binary

people for a weekend of camping, skill-sharing, and conversation about food justice, sustainable agriculture, non-hierarchical organising and burning down the patriarchy. It was a DIY/self-generated event in a safe space, where everyone contributed to food, cooking, tidying up and workshops. We had workshops on carpentry/joinery, practical knots, seed-saving, felting and tractor-driving practice. A storyteller came to try out a new story about land with us and we sung lots of songs around the campfire. One afternoon was dedicated to splitting into groups to share information about how to organise as a worker coops/how to decentralise/ function non-hierarchically and how to make agroecology more accessible and diverse in terms of gender and ethnicity.

"Thames Valley Hack" 2019.  Hosted at Greenbroom Farm in Oxfordshire, this event was remarkable for a number of reasons. Firstly, this was a deliberately smaller and regionally focused Hack, compared to previous UK Hacks, aiming to draw on networks and build capacity in the local area. It also was focused primarily around three 'build projects' (pre-planned live builds on site), which were arranged beforehand via Goatech.org and which ran throughout the weekend, alongside other skills shares and workshops [for more on build projects see section 2 of the guide]. Finally, TV2019 was - as far as we know - the first 'off-grid' Hack, which led to workshops based around that theme, but also interesting planning constraints particularly in terms of tool use and availability. In this respect, the Hack was supported by the presence of the Travelling Toolbox, a mobile workshop intended to support community and environmental projects.
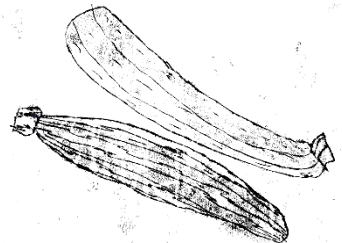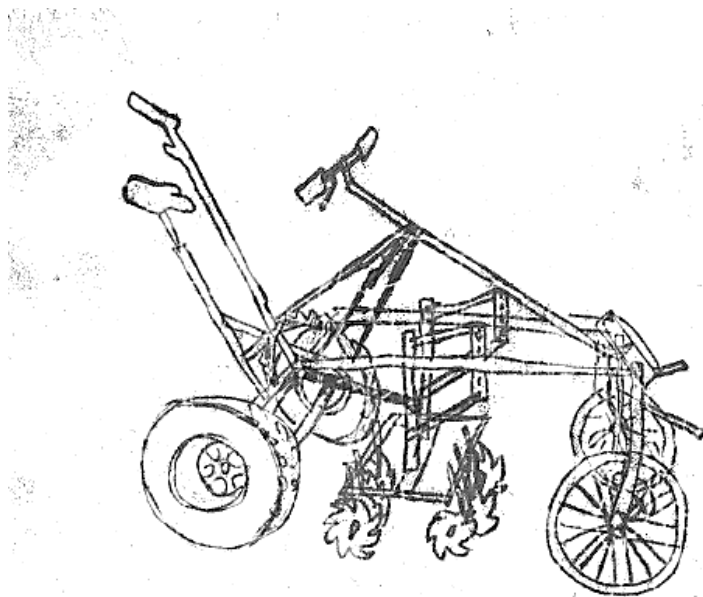
# Why this guide? Who is it for?

This guide is aimed at anyone who is interested in learning more about Farm Hacks and potentially being involved in organising a Farm Hack either on land they own/control or in conjunction with others. The objective is to provide a set of good practices, based on previous experiences, that can inform those just starting their Farm Hack journey.

Farm Hack is open source: you can take the ethos of bringing farmers and growers together to help each other solve their problems and apply it in any way you like. So far, we've seen sub-groups focused on Soil Health, Regional Farm Hacks, Hacks with a teaching focus, Hacks with a building/making focus.  There is no problem that can't be Hacked, there is no wrong way to do a Farm Hack! What follows is the product of a collaboration between previous Farm Hack organisers - it's very much a reflection of what we learned along the way. We hope you find it useful.

# 2. BEFORE: PLANNING A FH

In this section we've collected some suggestions for things that might be useful to think about and do before a Farm Hack event, based on the experience of others who've organised Farm Hacks. We've organised it in the following sequence:

**Building your organising team:** folks that will help one another to plan and host the event.

**Getting started with planning:** assessing available resources such as possible venue locations, likely financial support, project materials, tools, food donations, etc. and beginning promotion.

**Designing a programme:** collaboratively deciding what topics and projects to focus might be focused on during the hack -- with plenty of room left for day-of suggestions by participants.

**Design Triage:** process for collaboratively sourcing problems to work on.

**Choosing your build projects:** identifying suitable build projects and preparing for them.

"People, site, date (first three things to start organising). Get a group of people together, find a site and set a date. Then thinking about promotional material, clearly communicated, appealing design. Then think about finances and plan that. Other tasks then fall into place as you get closer to the event if you have the right team working together.''

– Farm Hack Organiser

# Building an organising team

The process of organising a Farm Hack can take a bit of work, but it can also be a fantastic opportunity to learn more about the communities with whom you're hoping to connect, and to develop and strengthen friendships and professional relationships. Here are some suggestions to make the process easier:

Bring in collaborators!  Reach out to folks with whom you share an affinity and who you think would be enthusiastic about putting energy and work into organising a Farm Hack event.  Talk through what goals you'd like to achieve by organising a Hack: the people and communities you'd hope to invite, the kind of 'vibe' you'd hope for at the event, the kinds of projects that might be fun to work on, and what activities you think would make the event fun.

Be flexible and open-minded in your planning.  We've found that Farm Hacks can use an exceedingly wide variety of different approaches, styles, activities, and topics and be considered a 'wild success' by participants.  You might have your own very clear ideas about what should be done and covered at the event, but it pays to be open to your co-organisers' ideas -- you might be surprised by what you find most engaging at the actual event!

Share the work, and form working groups when useful.  You might find that the scope of your event requires enough work that it's useful to form smaller 'working groups' to focus on particular issues or tasks:  meals, project supplies, promotion, ticket sales etc.  Working closely with a few other people in such groups can be a rewarding process in itself.

Have meetings; keep them regular; and be clear on your objectives. Here are some tips on how to do this:

- Set an agenda beforehand that people can add to and review at the start of the meeting - consider using an online

document editing platform for this (like etherpad, available at http://text.allmende.io).

- Suggest a purpose for the meeting that people can agree to or adapt.
- Agree on a time to finish and stick to it. Meetings that overrun are not as productive and reduce participants capacity/willingness to attend future meetings. If there are things you haven't covered, agree to talk about them first in the next meeting.
- Do 'check ins' and 'rounds' - ideally towards the start of the meeting, this allows everyone to arrive in the meeting and find their voice.
- Do 'updates' and 'next steps' - updates, collecting action points and who is going to do them useful for keeping track of preparations. This can be circulated following the meeting, in a reminder for the next meeting, and then people can quickly update on progress during the next meeting.
- Set a date for the next meeting - this is so much easier to do in the meeting compared to offline. It also brings a sense of continuity and finality to the meeting.

"What I would do differently is start from the outset with a team and, ideally, a local team, and starting the idea a long, long way in advance rather than a few months in advance. I kind of decided in December and it happened in March, so it was a pretty short turnaround.

So, I would set out with the idea, with a significant group of six people, at least, I think, to hold and grow and to do the development work. And it worked really well to have the support of the Landworkers' Alliance doing the admin for ticket sales and the sounding board and several people that I could call up and ask for ideas or contacts, and also people that had hosted Farm Hacks before." – Farm Hack Organiser

# Getting started with planning

Once you've assembled an organising team, and you've had some initial discussions around the topics, themes, activities, and projects you might like to focus on, it's then useful to take account of what resources you have available for your Hack as this will determine the scope and scale of your event.
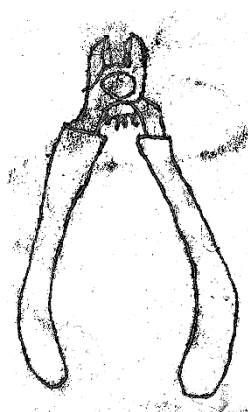
`Funding sources` Money isn't necessary for Farm Hack success! Farm Hacks often run on a low-cost model being volunteer-run and very DIY. This means they can be low-risk and low-maintenance, though this often relies on having a farm host for free. Sometimes money is useful or necessary to e.g. rent a venue, purchase food or other supplies, or help to cover travel costs.

It can be worthwhile spending some time trying to identify organisations in your orbit who might be willing to support the event (with donations of money, food, supplies, or venue space). If you find that your hoped-for plans do require funding you don't have, consider using a 'suggested donation' or sliding scale ticketing for the event, applying for a small grant, running a bar at the event to raise money, or using a crowd-funding platform. Farm Hacks usually break even financially but be aware that often the bulk of tickets are not sold until very close to the event or on the day so budget planning can be tricky!

`Venue` The choice of venue and spaces in it will have a big impact on the event. A lot of the following considerations will also be dependent on what time of year you are running the event.

What spaces (outdoor and/or indoor) are available for holding the event (e.g. a farm, barn, marquee or other venue)?  If you're

planning a several-day event, is there lodging / camping on site or nearby?  How many people do you think you might be able to comfortably accommodate? Are there enough toilets on site or do you need to make some DIY compost loos? Are there good covered and weatherproof spaces? Are there interesting projects and elements of the site which can be built into the programme? Is there enough access to water and electricity for all of your activities and the number of participants?

I decided a sliding scale was too complicated for me to get my head around. So, I just went for what I thought was cheapest viable option. I ran some scenarios on a spreadsheet of how many tickets we'd have to sell, what single day tickets or whole weekend tickets, and then I had to make a good guess at how many people would come.

Then I was allocating some budgets from that to pay some expenses for facilitators as there was the option to request some travel budget or material budget. The evening event was also ticketed a few pounds to get in. And beer had been donated and beer sales was a cash pot that helped cover the costs in the end.

– Farm Hack Organiser

The main shared space was a big open barn, and although it was at the start of October, it was absolutely bloody freezing! It is worth thinking about, like is there somewhere where people can be in a group that is actually reasonably warm because if you're all freezing it loses the atmosphere a bit.   – Farm Hack Participant

**Project materials and tools**  What sorts of 'hack' materials might you provide for the event?   Depending on the focus of your event, you might be able to source or borrow:  drawing and drafting materials, soldering irons and wires, hobby electronics kits, old bicycle parts, and various old, used

> The venue for that was good, a good-sized farm for hosting, a nice example of a coop, which also meant there were extra people around to help support the event when it happened.
>
> – Farm Hack Organiser

(or new!) farming equipment or parts that could be (temporarily, or permanently!) modified or retro-fitted during a hack. How will these and any material session organisers need be transported to the event?
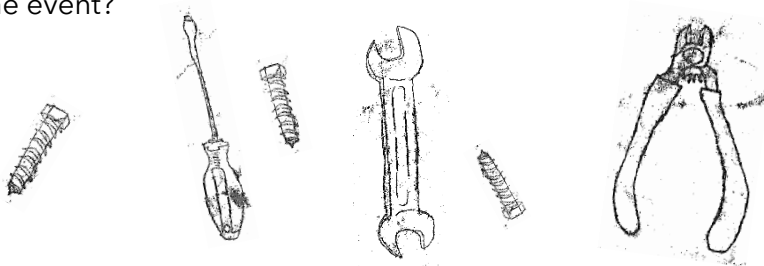
**Promotion**   It is good to get an early start on promotion and have several rounds of promotion as your planning develops. A first callout allows you to gather initial session proposals and engage more people to support organising. Subsequent callouts can then be focused on selling tickets and building interest in the Farm Hack. It can help to have a few really interesting sessions and session organisers lined up to include in your promotion. Be aware of where and how you are promoting and if that may exclude anyone you would like to involve.

The way we've done it for every event is to have an early shout out to see if there is any interest, especially from people who have got particular stuff they want to do. And then you can have a second shout out where you've got more information about what might be happening so it's easier or more exciting for people who might want to come along." – Farm Hack Organiser

There are multiple ways to promote:

- Online. social media, mailing lists and groups, online forums. Check for pre-existing Farm Hack mailing lists and online groups.
- Local networks. spread the word around local networks you are in or want to connect with.
- Other events. it can be useful to attend other events with a similar vibe and give out flyers or put up posters (toilet cubicles are often a great place!).

Think about any particular individuals or groups you would like to have involved to enrich the knowledge sharing in the space and who you are targeting the event at. You might want to involve other professions/skillsets, i.e. engineers, designers, computer programmers etc. and you might want to focus on one sector, such as horticulture, or get a range of participants and sessions representing different sectors.

Ticketing Depending on your financial resources and the scale of your hack, tickets can be free or you can charge for them. It is best to keep ticket prices as low as possible to keep the hack accessible. If it feels manageable, you can use a sliding scale pricing or pay what you can with a suggested price. With a sliding

scale it can be useful to provide guidance on the different levels and how they relate to different groups or levels of financial stability to help people choose. It is valuable to also have a bursary option available for those who cannot afford any ticket price. You can use various online platforms for ticketing as well as selling tickets 'on the door'.

`Accessibility` As well as having a sliding scale and bursary tickets, consider having a budget for travel and material expenses, particularly for session organisers. Try to be aware of the cultural dynamics of the space and how accessible the space will be to various minoritised groups. If you are wanting to reach out to or involve different minoritised groups then ensure this isn't tokenistic and you can ensure that they can feel safe and comfortable in the space. A 'safer spaces policy' (see section 8 for example) that is sent out beforehand and introduced from the outset of the event can be a good way to centre equity and justice.

Some useful things to think about:

- Children. Is there childcare or activities for children? Is it explicit that children are welcome?
- Disabilities. Is the site accessible for those with mobility impairments? Is there a way for attendees to easily inform you about an accessibility need so you can respond to it?
- Neurodiversities. Is there a quiet space where attendees can go if they are feeling overwhelmed? Is there awareness of neurodiversities in the facilitation?

It is good to ask questions about participant's accessibility needs when they register for a ticket so you know what to prepare for.

**Meal supplies and preparation** Eating communal meals during a Hack is not only enjoyable -- it's usually one of the key ways that folks at the event will connect and have fun.  A host farm might be able to provide some good, fresh farm food; outdoor barbeque, collective meal preparation, and potlucks can really make a Farm Hack a lot more enjoyable. You may want to ask participants to bring their own crockery but count on some forgetting. It is also probably better to overestimate the amount of food you'll need than risk having participants left without anything for dinner. And finally, don't forget, tea breaks are also really important! Set up a tea and coffee making station and make sure to have some biscuits or cakes.
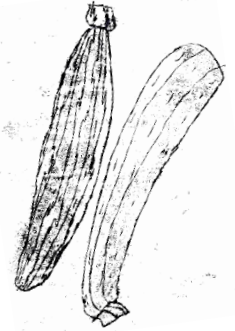
They were extremely accommodating to help me sort stuff out around my disabilities. The way they set things up in order to work around the limitations that I've got, the whole venue was actually wheelchair friendly and was really accessible, so that was great. And I brought along my personal assistant as my support worker, and he is an extremely good hardware technician.

– Farm Hack Session Organiser

**Evening fun** Just as with food, socialising and entertainment is a really important part of an event. Are you going to have a fire? Can you or perhaps a local brewery run a bar and/or have BYOB? Will you get musicians to play or have an open mic? Think about how to create a beautiful environment for people to relax and connect after a long day of making and knowledge sharing.

**`Health and Safety`** With a lot of people wandering around on a farm and tools being used, it's important to carry out a risk assessment (see Section 8 for example) of the site and the activities. You might also want to think about PAT testing for the electrical tools people are bringing and ensure you have suitable and sufficient protective equipment for different activities as well as a suitable environment.

## Designing the programme

A programme is at the heart of a Hack - it's the main tool for organising your various components, it's how you engage contributors, it can be a way to advertise what the Hack will contain. Most importantly, it can be an effective way to engage participants by leaving space for ad hoc sessions and workshops.

If you want to support people to bring and share their tools, ideas, and experience then keeping a fairly open programme is important. It also means there is space for continued conversations and session ideas that arise through interaction during the Farm Hack. The first session of the Farm Hack and the start of each day is a good time to gather people to co-create the timetable (see also section 4 'Collaborative scheduling on the day').

Do you want to start with a completely blank programme or already have a lot of workshops and projects timetabled in? The advantage of having a bit of preparation is that you can make sure you have all the resources needed and that session organisers have been prepped with conversations about facilitation or safety (see Facilitators mini-guide in the resources section). It also means you have some sessions pre-programmed to give people some idea of what will be on and make the event attractive. But this shouldn't stop spur of the moment contributions to the timetable!

Do you have a good variety of spaces and materials to host different types of sessions? For instance, build projects might take longer than planned or need to switch spaces, people might bring materials or ideas to demonstrate or collaborate on (e.g. tool sharpening, project presentations, self-watering plant pots). Have you let folks know that they can bring ideas and materials to share?

**In the Wales Farm Hack they prepared a pre-drawn grid on a large bit of plywood before the event - available work spaces along the top and times down the side - and then populated it together, a big time saver!**

"On the first morning, we had a big eight by four sheet of plywood with a grid on it and spaces along the top and time slots down the side, and then we got all the participants to volunteer workshops and courses that they would like to run.  And though we had organised some of the workshops in advance, we hadn't organised exactly when they were going to go; we just made sure we had people with a plan and appropriate materials and resources to be able to run those workshops.

So, we were able to get a lot of participant involvement in facilitating and hosting workshops, and then organised the program around trying to make sure that there weren't too many workshops that lots of people wanted to go to that clashed.  And that worked really well, I think that both reduced the burden of organising, but also gave a lot more of a sense of ownership of the whole event to the participants and meant that people could get a lot more value from the collective knowledge of all the participants."

- Farm Hack Organiser
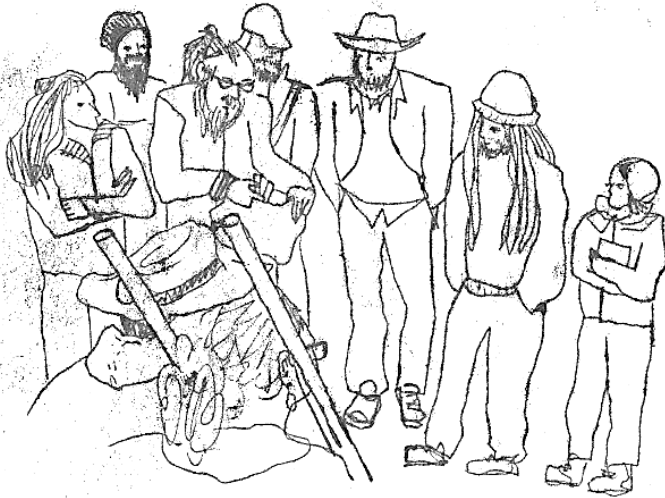
# Types of sessions

This is not an exhaustive or discrete list, some sessions will involve multiple components or could be defined under several labels. You can aim to have a mixture of different session types or focus on a few specific types such as build projects, for instance.

**Build projects** gathering people together to collaboratively design and build a specific technology, e.g. a carrot flame weeder or a ramp pump.

**Demonstrations** demonstrating a technology of some kind, e.g. a wormery system, biochar stove, human-powered cultivation tool, or a robot. While these are more led they can be held loosely and offer opportunities for others to ask questions, give input and share their own experience.

## Experience sharing

an opportunity for everyone in the group to share experience around a specific topic or share challenges for instance, e.g. 'gardeners roundtable' to share problems of the season, or a discussion around irrigation systems or community engagement.

## Farm or site tours

giving a guided tour around a farm or site, this could be a general tour or focusing on a specific topic or part of the site, e.g. weed walk, market garden, or farm tools and infrastructure tour. This could also be a field trip to a local project.

## Making or crafting

having the materials available and someone to lead in how to make a particular tool or craft, e.g. hand hoe making, rehandling tools, braiding.

## Movement and wellness

working hard on a build project, having interesting discussions all day, and sleeping in a tent can all impact our energy levels, minds, and bodies. Having some opportunities to acknowledge and care for this can be useful, e.g. yoga, stretches, games, and meditation or quiet spaces.

## Networking

one of the most important aspects of farming events is often the networking and socialising. It can be useful to have explicit activities to support networking and connection within the event. See also Section 4 'Meet & Greet'.

## Problem-solving

collaborative problem-solving focused around a specific problem or problems brought to the group. This can be done as a whole group or in smaller groups.

## Rituals

opportunities to connect with each other, the cultures we bring, spiritual aspects of farming, and the wider ecology, e.g. místicas (see La

Via Campesina), opening and closing ceremonies, grounding practices, intention setting, visioning, and hearths (a space for participants to bring and display objects that are important to them from their different work and cultural backgrounds). See also Section 4 'Closing Ceremony'.

## Show and tell

everyone brings an object (can be drawn and described if not possible to bring) and talks about it. The class Farm Hack example is 'Your Favourite HandTool' session.

## Skills shares

any session where session organisers or participants share their skills with other, e.g. scything, mushroom cultivation, or tractor maintenance.

## Talks

as well as more practical sessions it can be valuable to include talks to

showcase different projects and approaches, e.g. micro-dairying, community food projects, or business planning.

## Workshops

workshops often involve one or several of the above and are facilitated interactive sessions with a mixture of facilitator input and participation. They can be practical (e.g. seed saving) or more conceptual (e.g. food justice or group organising).

**One farm hack organiser reflects on the Leeds and Ruskin Mill farm hack which both had a real mixture of offerings - some that had been pre-planned and some that emerged throughout the weekend - including workshops, build projects, demonstrations, making and crafting, site tours, and talks.**

"Well, there was at the one in Leeds they were making copper tools, someone was showing people how to sharpen bits of copper and then shape it. Someone showing people how to scythe, somebody else doing a grafting session. Even just having a sit down and brainstorming with people is really good to like, 'oh, what's that problem you're trying to solve' and it's a fun time to get together and collaborate and to geek out on technical fixes for things with other people who also care about that.

At Ruskin Mill, I learnt about how to use an angle grinder, some tool-related things. Somebody made a little kind of biochar rocket stove thing and somebody else had made a vacuum seeder. And seeing tools being demonstrated is always interesting. There was a carrot weeder that had been set up on bicycle wheels, but you basically unwound it on a metal wire. Somebody showing horse drawn implements and how they cultivated with horses. Lots of practical seeing things in action and some interesting talks as well"

– Farm Hack Session and Event Organiser

Here's a run-down of key steps in developing your programme:

## Step 1 - Call out for contributions

In most cases, the type of Hack you do will be determined by the kind of contributors involved. You may have some people already in mind/involved but you will likely also want to put a call out [Goatech / FH facebook/LWA] to get greater diversity and reach. Try to get a sense of the following:

- What type of session they would like to run (i.e. talk, workshop, skillshare)
- What length of session do they have in mind? Are they up for repeating the session?
- How many people they would expect (minimum and maximum)
- Do they have any special requirements (access to tools, power, projector, etc.)

## Step 2 - survey and map your options

- How many days will the Hack last?
- Do you have any welcome events planned?
- Will there be a final gathering of all participants- if so when?
- How many weatherproof venues/workspaces do you have?
- What is the capacity of each one?
- Are they all suitable for tool-based work?
- Is there a space where all the participants can gather for general announcements/discussions?
- Where will you gather for meals?
- Where will you gather for socialising and/or entertainment

Once you have identified the time frame for your Hack as well as the number and capacity of your venues, map them out (maybe on

a spreadsheet or piece of paper). You are now ready to start thinking about content.

## Step 3 - Design collaboratively

Once you have a healthy set of proposed sessions try to meet with your team to start putting things together. Ideally try to use a format that can be edited collaboratively (for online open-source tools check out https://framasoft.org/). Try to meet often but for short periods to move things along. The following questions might be of use:

- How many of each kind of session do you have? - Talks? Build projects? Skillshares?
- Will sessions be organised in one 'pathway' or multiple pathways?
- Will sessions be one off or repeat?
- Have you left ample time for lunch and relaxation?
- Have you considered evening entertainments?
- Have you checked in regularly with your contributors - do they know when their slot is?

**Key tip**: don't overfill your programme! Not only do participants often really appreciate downtime to connect and chat with others, leave some open slots so that participants can suggest their own sessions, and so that follow-on sessions can emerge from other activities in the programme.

You may want to just create the basic outline of the programme with timings and spaces so you can add in sessions all together with participants and session organisers when they arrive.

## Step 4 - Implement and involve

During the Hack, use the programme as a focal point. If you can display it physically somewhere centrally and (ideally at the start of

the Hack) go through each item and solicit suggestions for open space sessions.

## Step 5 - revisit during the Hack

Keep returning to the programme during the Hack (at meal times and morning check ins) to update any changes and continue to solicit input.

- **Things to consider**: timing, allowing opportunities for co-creation to increase engagement. Allow extra time for everything: longer breaks allow catch up time. How many spaces can you use (this limits your concurrent activities)?
- **What is everyone doing** - how many people can you handle at each activity/in each space (this may have bearing on your overall ticket capacity)?
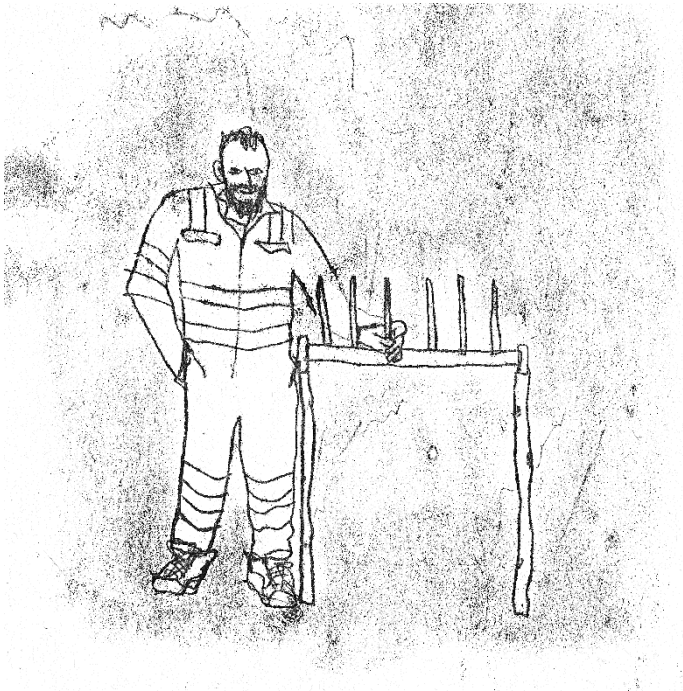
# Design Triage (Challenge Brainstorm)

Every project or tool that comes out of Farm Hack starts as a problem to be hacked. That is the nature of the "hacking" culture that Farm Hack originated from - the Design Triage process is a space to allow land workers to bring their problems and ask the community to collectively hold up a solution.

There are a few points to bear in mind when approaching this process. These should help to keep things pleasant, participatory, and productive:

Start with the problem: often people have a problem but they might already have thought of some solutions… it can be beneficial to spend a little time working back to what the problem is you want to solve, rather than how to help implement a fix.

> For Example:
>
> Ali states "I have a problem with my tined carrot weeder - I need it to get closer to the rows, how can I narrow it?" If we take a moment to consider the statement, it seems on the surface Ali is requesting support to modify an existing piece of equipment, perhaps to add some smaller, more delicate implements to allow closer row work (Jesse suggests: "Have you thought of adding finger weeders, they get right into the row. I've got some, they're great").

Source solutions: allow open contributions from the community, this is a real "brainstorm" so let people get their ideas out, however wacky they sound.

The design triage process is important for both community sourcing solutions & developing build projects for future hacks. It

can be done before, during, or at the end of a hack. Here is one possible way to facilitate it:

- Individuals write down challenges/problems they encounter in their work
- Pin them up on a washing line/board
- Group mingles to read all challenges
- Collective process of categorising challenges
- Proposals made to schedule conversations to develop ideas
- Challenges can become build projects at the next Farm Hack

## Choosing your build projects

Build projects are central to what Farm Hack aims to achieve. They create a peer-2-peer learning space where everyone can participate in solving real problems for actual farms. The legacy of these projects (in their open-source designs) helps to provide a future for agriculture that isn't owned by large corporations.

There are two key factors when thinking about how many Build Projects to include in your hack: space and people.

- **Space.** A build will (usually) require a physical space for construction, this could be outside but you probably need to have an indoor option (in case of bad weather), the space requirements may vary depending on the project (welding a new tractor implement together has requirements for space, power and possibly hard-standing that soldering and programming an Arduino weather station doesn't).
- **People.** It's worth thinking about how many people you want working on each project, how many people

you expect to be there, and if there are other activities happening during the Hack that might draw people away. Try to ensure a balance between having too many people working on each project (limiting active participation) and not enough people to get a useful amount of work done. This may vary from build to build, and you'll need to work closely with the Build Project Lead to ensure they have all the resources they'll need. A good rule of thumb is to have at least 1 build per 8-10 expected participants (it's hard to ensure everyone gets to participate in groups much larger than that).

## `Step 1 - Problem Statement`

Build projects should solve a problem, it should help make the lives of landworkers easier. It's better to approach this with a statement of that problem, rather than a potential solution as presenting a solution limits creative input and may lead to excluding potentially more efficient designs. See Challenge Brainstorm for more details.

## `Step 2 - Pre-Design`

Building a prototype tool in a weekend can be a challenge but designing one as well would be impossible. It's therefore crucial that you agree Build Projects ahead of time and allow some time and space to collaboratively create a design.

This will allow some pre-selection of tools and materials for the actual prototype build during the Hack. For Example - imagine you decide you want to build your tool on wheels, a participant has an old wheelbarrow bed on their farm, which would be perfect but it's 2 hours drive away. A little advance planning (especially if you're aware of the constraints of your site) can help ensure the

build progresses smoothly and participants feel a sense of achievement.

The design work can be carried out at a previous Farm Hack, online (using platforms such as forum.GOATech.org or some combination of these approaches. Try to consider accessibility of your community - the earlier you involve people in the process, the stronger sense of ownership they will feel towards the project.

## Step 3 - Physical Build

- Announce your idea to all attendees during opening plenary
- (Continue to ) co-develop a plan with your newly recruited team. It is usually desirable to have a small group for build projects so everyone can really get involved, so ensure there are other activities running concurrently.
- Regularly update the rest of the gathering on progress during plenary moments
- Make space for contributions - both conceptual and practical - from your team
- Find a way to summarise your experience during the final plenary
- Keep us all updated on tool development, post-event (i.e. by uploading complete plans and photos to Farm Hack website)
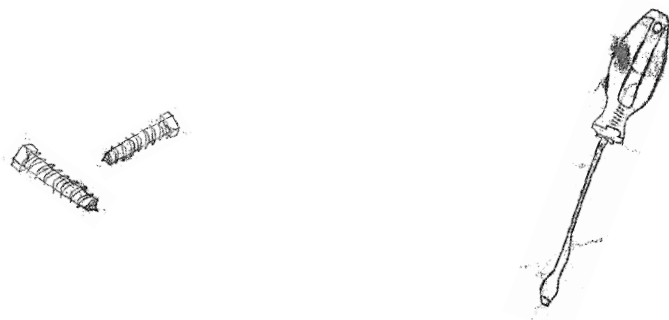
## Case study: Flame weeding wheelbarrow

The flame weeder project started when Becca from Five Acre Farm near Coventry saw a modified wheelbarrow flam weeder on a farm tour at a farm in Wales:

I already had a large tractor mounted flame weeder and a small single burner one, but both had challenges when weeding something like carrots. The tractor sank into the soil if it had been raining and the single burner took too long. The modified wheelbarrow version seemed to solve both problems as it was lightweight.

A few months later, I saw the callout for build projects for the Thames Valley Farm Hack 2019 and thought of the flame weeding wheelbarrow. I went to many meetings to collaboratively plan the hack and gathered material I thought would be useful. I am not an engineer or a designer, but I had a vision, and luckily for me Farm Hacks bring together folks who can design, build and fabricate all sorts of useful things. With lots of help I learnt how to use an angle grinder and drill metal, and after two days of work we got as far as a frame and wheels which I was very happy with. We had a first prototype but we realised that the bar at the front was too low to clear the ground once you were in a tractor wheeling.

That winter at the Landworkers' Alliance AGM a plan was hatched to host another Farm Hack, this time in Leeds. With lots of help and advice we modified the design over the weekend, raising the front bar and creating a holder for the gas bottle. The flame weeding wheelbarrow was really coming together, and the season was moving along. I finished the flame weeder with some help from members of our CSA. The flame weeding wheelbarrow did an excellent job with the parsnips, even after a wet weekend, saving us hours of extra hand weeding.

# 3. YOUR PREPARATION CHECKLIST

| Time before event | Milestone | Details | Useful links/ guide sections |
|---|---|---|---|
| 6 months | Call out for collaborators | • Form a team of at least three people<br><br>• Communicate your 'vision' while also signalling intent to co-create | See section 2 on 'Building an organising team' |
| 5 months | First planning meeting | • Call your team together to decide basic approach<br><br>• Aim to meet at least once a month thereafter | See section 2 on 'Building an organising team' |
| | Set date / venue | • Identify a suitable host farm<br><br>• Allow at least 5 months for preparation<br><br>• Consider time of year to favour landworkers | See section 2 on 'Getting started with planning' |

| 4 months | Set up ticketing system | • Based on venue and organising capacity set maximum attendees <br><br> • Set up your payment system (i.e. Flat rate? Tiered? Early bird?) <br><br> • Choose a suitable bank account to host funds (LWA can support with this) | See section 2 on 'Getting started with planning' |
|---|---|---|---|
| | Call out for contributors | • Using key FH forums (e.g. Goatech) and wider networks do an initial call out for contributors (organisers and sessions) | Goatech.org <br><br> See section 2 on 'Designing the programme' |
| 3 months | First draft of programme | • Identify session spaces and capacities <br><br> • Begin to fill in ideas for sessions (based on responses to call out) | See section 2 on 'Designing the programme' |
| | Recruitment drive | • Booking form <br><br> • Publicity materials | See section 2 on 'Getting |

| | | | |
|---|---|---|---|
| | | • Agree a publicity timetable (when and where to post) | started with planning' |
| 2 months | Catering | • Book caterer based on projected numbers<br><br>• Decide whether to charge per meal/include in ticket price | See section 2 on 'Getting started with planning' |
| 1 month | Final major planning meeting | • Check in on ticket sales, programmed sessions, transport logistics | |
| 3 weeks | Second recruitment drive | • Repost on all your networks | |
| 2 weeks | Risk assessment | • Onsite walk around | |
| 1 week | Finalise basic programme | • Send out to your guests<br><br>• Leave plenty of gaps! | See section 2 on 'Designing the programme ' |
| 1 day | Gather team onsite | • Review risk assessment<br><br>• Set up any venues/marquees | See section 2 on 'Getting started with planning' |

# 4. DURING: AT THE FARM HACK

## Meet & Greet

As people arrive on site it is useful to have at least one person to check they have a ticket (or sell them a ticket) and introduce them to the event. This can be done in shifts throughout the day.

Often a key motivation to come to events is to connect with like-minded people and socialise. It can be useful to include an activity at the start of the day to give people an opportunity to meet each other. Here are some suggestions:

`Whole group introductions:` For a hack of under 30, a quick go round (e.g. name, pronouns, where they're based, and one reason why they have come) can help everyone to get a sense who is there and create an early opportunity for every voice to be heard.

`Icebreakers and small group introductions:` This is especially useful for a larger group or in combination with a whole group introduction. It gives people an opportunity to bring a bit more of themselves and learn more about at least a couple of other participants.

`Name badges` can be very useful as well. You can do these with something as simple as a roll of masking tape and a marker.

# Assemblies, plenaries, and opening ceremonies

Beginning (and/or ending) the day as a whole group allows for collaborative and emergent programming and any announcements or feedback to be made. This can also be a useful space to discuss logistics and to go through and agree on ground rules and a safer spaces policy.

At the start of the event, an assembly or plenary gives you an opportunity to set the tone of the event, highlighting the values or motivations behind the hack and perhaps even a chance to

"It was really good to have a really big visual. It could be useful to have a great big rollout timetable grid, or even just a blank table to save all the drawing of lines which is a bit of an annoying job to do, to make a timetable look legible on the day. It's one of the things that you forget is actually quite a big job to do on the day. It's quite useful to have an adaptive, flexible timetable, whiteboard style. Perhaps printing out a laminated A0 bit of paper with a table on it that you could quite easily move from place to place. Or, you could do tape lines on to a whiteboard." – Farm Hack Organiser

As the organisers of Leeds Farm Hack highlights, collaborative programming is not just about gathering sessions, it is also important to consider practically how you are going to clearly display and update your programme as you go along. It is useful to have at least two people facilitating the collaborative programming, one to fill in and update the programme and one to facilitate the discussion of what should be in it.

introduce the idea of Farm Hacks to those who aren't familiar. In line with core Farm Hack values, the more collaborative and non-hierarchical these spaces are the better, the assembly is a space for anyone to raise logistical issues or requests for ground rules, for instance.

An initial assembly can also be scheduled as an opening ceremony and involve rituals as mentioned in section 3 that help people to arrive and connect to intentions, each other, and the space. A hearth can be a nice way for everyone to bring something of themselves to the space but requires reminders for participants to bring something to contribute to the hearth. These contributions, or contributions of produce towards collective meal preparation, can be integrated into the opening ceremony by giving everyone the chance to place what they have brought and give the option to explain its significance.

## Collaborative scheduling on the day

For proposed sessions you'll need to ask:

- How long is needed for the session?
- What kind of space and materials are needed?
- How many people would be interested in attending?

If there are too many session proposals for the number of spaces available or people there then this last question is good to get a quick hands-up indication of which sessions participants are actually interested in. It is often practical to have contrasting sessions in the same parallel slots to give different options for different interests.

Some types of sessions tend to involve more pre-planning to make sure you have the correct materials and session leads

have been prepped on facilitating peer-to-peer learning. Others can be done more on the fly. Here's a bit more information on a few types of sessions that can be easily planned emergently:

**`Lightning talks:`** Having a physical space and slots in the timetable for lightning talks can be a great way to make the most of the different experiences and projects that participants bring. Some of these can be pre-scheduled with extra slots for people to sign up to. Lightning talks can be as short as 5 minutes with an additional 5-10 minutes for questions and require a good facilitator to hold the space and keep things to time.

**`Problem-solving and topic discussions:`** Often participants will come with an issue they want input on from others or it can arise from discussion during the hack event. This doesn't have to just be problem-solving about a tool, it can also be about wider issues in farming, the food system, and political action, or meeting to organise around a particular project such as a new network or project. It can be useful to offer facilitation support if the people proposing the discussion don't feel as confident in facilitating discussion.

**`Demos:`** Participants may have brought tools or hacks they want to share with others. Short sessions for people to see these in action can be slotted into the programming.

## Check-ins and reporting back

You may want to schedule points in the day such as before, during, or after breaktimes to check-in as a larger group and allow people to report back from the different sessions and build projects as well as raise any logistical issues and check on timings in the programme.

This can also be an opportunity for people to propose new sessions that have emerged from discussions and garner interest or to ask for volunteers to help with logistical aspects of the hack such as helping to prepare dinner or moving equipment.

## Meals and downtime

Having plenty of time for relaxing and socialising outside of programmed sessions is really key to a successful and enjoyable event. As well as rest being necessary, the informal peer-to-peer learning that happens in downtime and meals, and beyond the event as a result of connections made, cannot be underestimated. Make sure to protect breaktimes and mealtimes by having clear ways to communicate when sessions end. Depending on the size of the space, you could use something like a bell to call people together or have some volunteer timekeepers who remind each session to end.

## Closing ceremony

You had a beautiful event full of different projects, activities, interesting discussions and fun! Now it is time to wrap things up and close the event with intention. Here are some things that are useful to include in a closing ceremony:

- Show and tell of all the build projects and any other hacks developed during the event.
- A chance for announcements of other events, networks, and projects.
- A short summary of some sessions, particularly if they involved useful information or decisions to be shared.
- A ritual to close the space, some kind of symbolic practice that brings people together, gives them a chance to reflect on what they will take away from the event, or provides a space to reflect on what will come next. This could involve singing, pair discussion, or silent reflection for instance.
- Feedback on the event itself, this could be done using a participatory exercise, in a whole group, or with anonymous feedback slips. It is much easier to get feedback from people while they are there than after an event!
- Collecting Contact Info: this can be done for the event as a whole, if people want to be put in contact afterwards or receive information following the event, and as a reminder for any projects to make sure they have exchanged contact information. Be clear about how you plan to use the information as not everyone wants to be added to very active WhatsApp groups or mailing lists.
- Celebration! This can also be covered in the ritual, but it is really important to celebrate what has happened in the event and everyone's contributions and finish the event on a high!

# Plans for following-up with projects and documentation

This is particularly important for build projects and is good to not leave to the last moment as some people may need to leave early. In your project team, decide collectively how you would like to follow up on the project after the event and how you would like to communicate with each other. Make sure someone is in charge of taking contact information and connecting with everyone following the event. You may even want to set a next date to meet.

Connected to this is the documentation for hacks and for the event itself. How will you document your build project? Have you managed to take plenty of photos of different stages? How will you share about the event itself? Will you write a blog or find some other way to share the hack with the wider community? And who will do it?
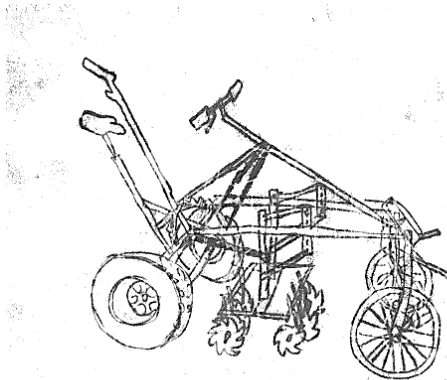


## Scheduling the next hack

While everyone is gathered it can be a good time to encourage a group of interested people to start planning the next hack and propose a date and/or location.

# 5. AFTER: POST HACK ACTIVITIES

## Documenting outcomes

Documenting and sharing the outcomes of build projects and the event itself is part of the Farm Hack ethos of developing a knowledge commons. It means other people can learn from and develop your ideas for tools and for organising hacks.

### Tools

It is useful to make sure at least one or two people are tasked with writing down notes on the build process and any other hacks immediately following the event and sharing with the wider Farm Hack community to get further input and make plans openly available, for instance on GoatTech.

### Reporting on the event

Similarly for the event organising - are there any organising documents or reflections on organising that could be shared with the wider community, for instance on GoatTech? It is useful to factor in time immediately after the event to take down notes on the event and any feedback from participants while it is still fresh.

## Networking and Following up

Farm Hacks manage to create a great sense of community in a short time and it is useful to think of ways to help people to stay connected to continue working on projects together, sharing

skills and knowledge, and to stay in loop about relating events. This can include:

- Mailing lists, forums: Setting up a mailing list or email group is a good way to stay in contact with each other. While an email group means everyone can email the whole group, long email chains can be hard to navigate. Setting up a group on a forum is another way to enable peer to peer exchange but might not work for everyone.
- Newsletters / blogs: How will you feed back about the event to attendees, including signposting to information, projects, and future events? How will you share with wider communities? Blogs and newsletters are a good way to keep people feeling connected to the event and involve others in future hacks.
- Meet-ups: You may want to schedule follow-up meet-ups online or in-person, depending on proximity of participants, to stay connected and continue working on different projects or planning for future hacks.
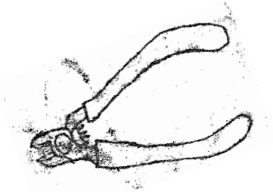


## Planning more Hacks

It is great to come out of a Farm Hack with enthusiasm and a seedling of an idea for another event, whether from the current organisers, others participating in the hack, or a mixture. Think about what you have learnt from this event - What would you do differently next time? What themes or challenges arose in discussions throughout the event which would make a good basis for a future event? Is there any money leftover from the event which could provide some seed funding?

# 6. NOTES ON FACILITATION AND LEARNING

## Pedagogical Considerations

"Tell me and I'll forget; show me and I may remember; involve me and I'll understand." – Chinese proverb

The pedagogical approach to Farm Hacks is inspired by both the open-source technology movement and popular education approaches (see further resources).

Some key elements of Farm Hack pedagogy are:

**Collaborative problem-solving:** Farm Hack is a learning community. It has a strong emphasis on horizontal (peer to peer) learning and organising which means making space for all participants to contribute their knowledge and experience. This not only leads to better, more creative, and more appropriate solutions but also means folks learn more in the process by being truly involved. Whether in a build project, discussing different approaches to managing a farm, or working out how to design the programme and run the Farm

Hack site, use it as an opportunity to exchange skills, knowledge, and experiences, while being aware of hierarchies and group dynamics which limit exchange.

"Peer to peer learning, is the simplest way to describe it. Another way to describe it is akin to agroecological education. The reason I like a Farm Hack is because of my previous experiences with organizing radical political events such as reclaim the fields and trying to organize at a grassroots sort of non-hierarchical facilitation level. I'd say it's a way to empower people through an education process in a deeply radical sense. So, when I say peer to peer learning it's recognising that as individuals, you all have a sort of innate power and an innate viewpoint to offer to a process of learning and transformation."
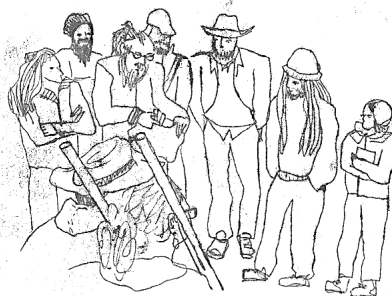
- Farm Hack Organiser

**Experiential:** Farm Hack is practical. It is about creating tangible solutions to real challenges, learning skills through actively practicing them, and learning by seeing things in action. While talks do have their place, the emphasis should be on sessions where folks can get involved or see things demonstrated.

"I am a big fan of the idea of praxis, learning through doing and reflecting on action. Learn through doing, teach through being is a phrase I really like. I guess with Farm Hack, I love inventing, I love making things. I feel like imparting physical, technical, hands-on stuff is best done in person." – Farm Hack Organiser

**Bringing together different knowledges**: Farm Hack brings together farmers and landworkers with techies, engineers, designers, researchers, carpenters and more. This combination of skillsets and backgrounds all being applied to agroecological farming is one of the real strengths of Farm Hack. It's useful to consider how your own background shapes your approach to an issue and think about how to actively engage the different ways of knowing and levels and types of experience in a group. Different experiences can also shape our politics and awareness of certain issues, so be careful not to make assumptions and be ready to navigate potential tensions or misunderstandings (see section 7).

"Basically, I'm not a designer, I had an idea and people there at Farm Hack were designers and knew what they were doing and so could sort of help facilitate this creation coming into being. I just brought enthusiasm and tools and bits of pipe and things."

– Farm Hack Build Project Facilitator

**Combining political and practical:** Farm Hack is a political project. As part of both the open-source movement and the food sovereignty movement it is about developing practical, openly accessible solutions and collectively developing skills to help create a more just and ecological food system. For some folks, their political values attract them to

learn more about farming, while for others, discussing practical solutions can be an access point to considering the wider political implications of what they are doing. The culture of organising in Farm Hacks is also political in itself, it shows a different way of being and can support folks to develop networks and connections for further political and practical action. Think about how to contextualise what you are working on and how you are doing it within wider social and political issues.

"Another thing is about combining social and political organising with real practical outcomes, of learning or going home with a piece of technology that's going to improve your work. But combining that with meeting loads of people that share your values or are involved in projects similar to yours and networking and relationship building with a real, tangible output." – Farm Hack Organiser

It can also be useful to think about different sessions in terms of the timescales they work on:

- **Short term:** a specific problem you want an immediate solution to, i.e. build projects, problem-solving sessions, hands-on workshops.
- **Medium term:** talks, skills exchange, and sharing experiences for improving things.
- **Long term:** connecting to wider social and political systems, thinking about what the missing technologies are, where things might be heading.

# Learning, teaching, facilitation

The collaborative and horizontal pedagogical approach means reframing the concept of "learning" and "teaching". Folks running sessions should attempt to be facilitators rather than seeing their role as a teacher with knowledge to transmit. Some sessions lend themselves far more to a very horizontal approach such as build projects and experience sharing. However, while workshops, demonstrations, talks, and site tours all involve session organisers bringing a certain amount of knowledge on a subject, it is important not to underestimate the depth and range of knowledge in the group and limit learning by not including it. Learning is far more powerful and empowering when everyone is actively involved in it and folks come to solutions collectively through deliberation and experimentation. Having a focal point such as an object or a visual to discuss can often generate more horizontal knowledge sharing.

A few things to consider:

- How can you find out the level and types of knowledge and experience on a topic in a group early on?
- In what ways can you facilitate others contributing their knowledge, skills and experience? Can this happen at several points or throughout the session?
- Does knowledge sharing still go through you as a session organiser (i.e. like a Q&A)? Is there a way to support horizontal discussion and de-centre yourself?
- How can you ensure that most people feel able to and have the opportunity to share their perspective? Where are the barriers to this?

- If you are sharing a practical skill, can you support others to become 'teachers' to multiply the number of people able to pass on that skill? Folks tend to learn more through showing others.
- Is there an opportunity for sharing reflections on an activity?

See also Additional Resources section 'Facilitation/Pedagogy'.

# Ground rules and agreements

Since this approach to facilitation and learning can be quite different to what folks are used to, it helps to discuss and collectively agree ground rules and group agreements at the start of a hack. You can then refer back to them at different times during the event. You can start these from scratch or begin with a set of base agreements to modify and add to.

This can include general principles for participating in learning spaces such as not talking over one another, being aware of whose voices are heard the most and whose haven't been heard, being encouraging and curious rather than negating others' experiences, and being considerate of difficulties some folks may have hearing. Group agreements can also relate to how the site is organised such as keeping noise down in certain areas late at night and collectively taking responsibility for site running and chipping in with cooking, timekeeping, cleaning etc.
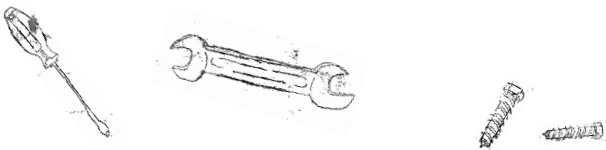
# 7. NOTES ON POLITICS

## Elephants in the Room

Farm Hacks are often able to cast a wide net -- lots of folks are interested in open source farm technology! -- and not everyone who shows up will have the same politics, or ideas about what Farm Hacks are, or should be. Further, some people are quite passionate about their views -- which can sometimes lead to tensions (and often to productive conversations).  It can therefore be helpful to develop a sense for what sorts of background theories and worldviews might be represented at the gathering and where tensions could arise.
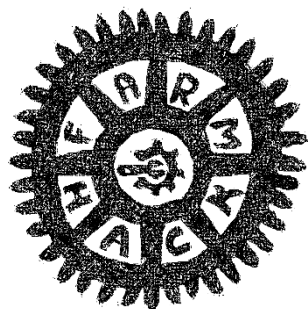
## Navigating Political Difference

There are many different approaches out there to draw upon when negotiating political differences, and ways of encouraging productive, respectful discussions across difference.  If you anticipate strong tensions at a gathering, you might build facilitated group discussion into the schedule; you can find some references in the "Further Reading" section below that offer some useful techniques and frameworks.  You might even bring in outside expertise to help -- there are folks with a lot of experience and skill with this sort of facilitation.

# Building Together Can Be a Great Facilitator

Alternatively (or in parallel), it's not unreasonable to simply focus on organising productive, collaborative build projects -- there's a strong argument to be made that focusing on the build process itself is a great way for folks from different political camps to discover and deepen shared interests in an 'apolitical' context.

# Waypoints, Themes, Tensions

Below, we offer some ideological 'waypoints' -- an incomplete snapshot of some of the different political 'camps' (some with more overlap than others) that we've noticed in this arena. Please note that the categories aren't meant to be taken too seriously -- perhaps they're most useful as an inspirational example, which should be modified or replaced completely by your own analysis!

- Economic Growth vs Degrowth
- Industrial vs Small-scale
- Centralized vs Decentralized
- Freedom vs Cooperation
- High Tech vs Low Tech
- Ecomodernist vs Regenerative Ag
- Solarpunk vs Salvagepunk
- Markets vs Mutual Aid
- Minimizing Cost vs Renewable Resources
- Short Term vs Long Term

# 8. ADDITIONAL READING AND RESOURCES

## Some Relevant Books

- Doris Sommer, The Work of Art in the World: Civic Agency and Public Humanities
- Kevin Carson, The Homebrew Industrial Revolution
- Bollier and Helfrich, Free, Fair, and Alive: the Insurgent Power of the Commons
- Chris Smaje, Small Farm Future
- Abigail Gehring, Back to Basics: A Complete Guide to Traditional Skills
- Michael Foley, Farming for the Long Haul

## Free and Open-Source Culture

- Free Software Foundation (fsf.org) - produces GNU, and created Open Source. See What is Free Software (gnu.org/philosophy)
- List of Free Software groups (libreplanet.org/wiki/Group_list)
- Community Tech Field Guide (communitytechnology.github.io/)

## Organizations

- L'Atelier Payson -- https://latelierpaysan.org/
- Farmhack -- https://farmhack.org/tools
- Greenhorns -- https://greenhorns.org/
- Farmhack UK -- https://www.facebook.com/groups/FarmHackUK
- Appropedia -- https://www.appropedia.org
- Landworkers' Alliance -- https://landworkersalliance.org.uk/

- La Via Campesina -- https://viacampesina.org/en/
- National Young Farmers Coalition -- https://www.youngfarmers.org/
- FAO Agroecology Knowledge Hub -- https://www.fao.org/agroecology/home/en/
- Gathering for Open Science Hardware (GOSH) -- https://openhardware.science/
- Gathering for Open Agriculture Technology (GOAT) -- https://goatech.org/
- Low-Tech Magazine -- https://www.lowtechmagazine.com

## Tools

- Matrix (https://matrix.org/try-matrix/) is an online meeting protocol, that can be useful for organising. Supports Jitsi videobridge (for Video Conferencing) and a variety of plugins, depending on your client.
- Open source event registration platform - Pretix.eu
- Open source survey platform (for pre/post surveys)
- Lime Survey (limesurvey.org) offers a free plan for up to 25 responses/month
- JD eSurvey (jdsoft.com) is completely Free (as in speech, not beer) Software - you can fork or deploy a pre-compiled release (only self-hosting available)
- Tellform (tellform.com) used to have a free hosted service, but may only be self-hosted now

## Facilitation/Pedagogy

- Pedagogy of the Oppressed by Paulo Freire and other resources on critical pedagogy
- Online facilitation resources/ideas – Training for Change (trainingforchange.org/tools/) and Seeds for Change (seedsforchange.org.uk/resources)
- For an accessible guide to participatory methods and approaches consider the following publication - Richard

Chambers - Participatory workshops: a sourcebook of 21 sets of ideas and activities
- Safer spaces policy example (from LWA) https://landworkersalliance.org.uk/wp-content/uploads/2021/12/LWA-AGM-2021-Safer-spaces-policy.docx.pdf
- Briefing for project leads (from Thames Valley Farm Hack) https://text.allmende.io/p/Farm_Hack__draft_briefing_for_project_leads

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The farm hack guide, mini guide, and a podcast based on the guide can be found online at:

https://resistinglearninggrowing.com/podcast-and-resources

The guide is also available as an online wiki here:

https://www.appropedia.org/w/index.php?title=Farm_Hack_Guide