

# RECIPES OF R-URBAN



This publication collects together different recipes that have been explored at R-Urban Poplar over the last few years.

We've used the word recipe in the widest possible sense, with the book holding space for different techniques, principles and methods - for meals, for growing techniques, for technologies and for ideas.

Recipes of R-Urban was assembled slowly over 2024 and 2025, and paints a snapshot of the life of the project over the last four years. It will never be complete - we're sure that many more recipes will present themselves over time.

We hope, however, that this book captures the generous spirit of R-Urban, which is one of gathering, sharing and nurturing.

The publication of Recipes of R-Urban has been supported by Wen and the Just FACT programme. The impact of their work over the last few years can not be overstated. Many thanks to them and to the Just FACT partners.

Thanks also to the people who bring R-Urban to life on a weekly basis, and to our network of funders and supporters.

# CONTENTS

## Introduction

6	About R-Urban Poplar
8	Teviot People's Kitchen
10	R-Urban in Numbers
12	About Just FACT

## Recipes (and interludes)

18	Noore's Boroï Achar
20	Angharad's Hot Egg Bun
22	Katrina's Seed Bombs
24	Abu's Naan
28	A Soil Manifesto with Compost Mentis
34	Eka's Sauerkraut
38	Aleya's Khodu
42	Cameron's Oyster Mushroom BBQ wraps
46	Angharad's Cob Tandoor
54	Aleya's Veg Curry with Pilau Rice
56	Hussina's Recipe for a Healthy Partnership
60	Eka's Apple Cider Vinegar
64	Momota's Veg Pakoras
66	Katrina's Waulking Song
70	Andy's Pesto
76	Katrina's Tomatoes
82	Hester's Moss Musings
86	Angharad's Greywater System
92	Daniela's Special Place
96	Katrina's Peppers
102	Cameron's Butter
104	Andy's Recipe for R-Urban







# ABOUT R-URBAN POPLAR

R-Urban Poplar is an eco-civic hub located on the edge of the Teviot estate, in Poplar, London. The project aims to develop civic resilience in the face of climate change through a public programme of events, workshops and infrastructures. We have two main strands to our work, the first works towards prototyping a just food system which places circularity at its heart, the second focuses on resource re-use and repair.

The hub itself is a collection of prototype infrastructures which work towards developing resilient urban systems in Poplar. Composting and Anaerobic Digestion (AD) are central to producing nutrient rich fertilisers for our community food growers, demonstrating the potential for localised circular waste systems. An on-site workshop hosts regular repair and skill sessions, whilst supporting small enterprises with space to fabricate and share tools. At the heart of the project are the kitchen and classroom, which offer a welcoming space for events and bring people together.

R-Urban Poplar is part of a wider network of bottom-up strategies supporting the emergence of more collaborative resilient models of living, producing, and consuming in the city. It was initiated in collaboration with French group Atelier d'Architecture Autogérée, who have set up several R-Urban sites in Paris since 2008. R-Urban was brought to London in 2012 by public works and was originally located further down the Lea river in Hackney Wick.

R-Urban Wick was a mobile eco-civic hub, exploring local resilience before setting up a temporary recycling/re-use hub at the Mobile City Garden. In 2017, when the temporary use site in Hackney Wick was lost, we relocated our container infrastructure to Poplar. Since then, the project has grown incrementally and in response to emerging local needs of Teviot and the neighbourhood.

R-Urban Poplar is a collaborative project, involving multiple partners, stakeholders and citizens, collectively working towards the project goals.

In 2025, our site is home to a network of organisations and individuals working with sustainability and circularity:

- public works are a critical design practice working within the terrain of architecture, art and activism to bring about positive social and environmental change.
- MAD LEAP develop prototype systems for food waste recycling and circular food growing.
- SunnyJar run workshops which make low waste, sustainable living accessible for all.
- Katrina Wright is our R-Urban expert horticulturalist, also working with MAD LEAP.
- Ru Kenyon, known as London Wild Fruits, is a forager and explorer of edible landscapes.
- Zareen Islam is a playworker based at R-Urban and working with a number of organisations across London and beyond.
- The Teviot People's Kitchen (TPK) is a group working to deliver much of the food programming at R-Urban (see p.9).
- Billy Adams is a freelance designer and maker who works with community groups across London.
- We have also recently created a residency programme at R-Urban for artists, designers and creatives to spend time on site and contribute to the project.



# TEVIOT PEOPLE'S KITCHEN

The Teviot People's Kitchen, or TPK, is a cooperative formed by a group of R-Urban stakeholders in 2023, working to develop and grow elements of our food programming. It aims to test out models for developing a long-term sustainability strategy to ensure we can continue to develop and deliver plants, food growing, cooking workshops, meals, events and products.

The group is and has been Aleya Taher, Alani Shafiq, Katrina Wright, Noore Rahman, Eka Davies and Cameron Bray.

So far we've been coordinating the delivery of growing and cooking programmes at R-Urban, organising first aid and food hygiene training, and testing out a series of seasonal fairs.

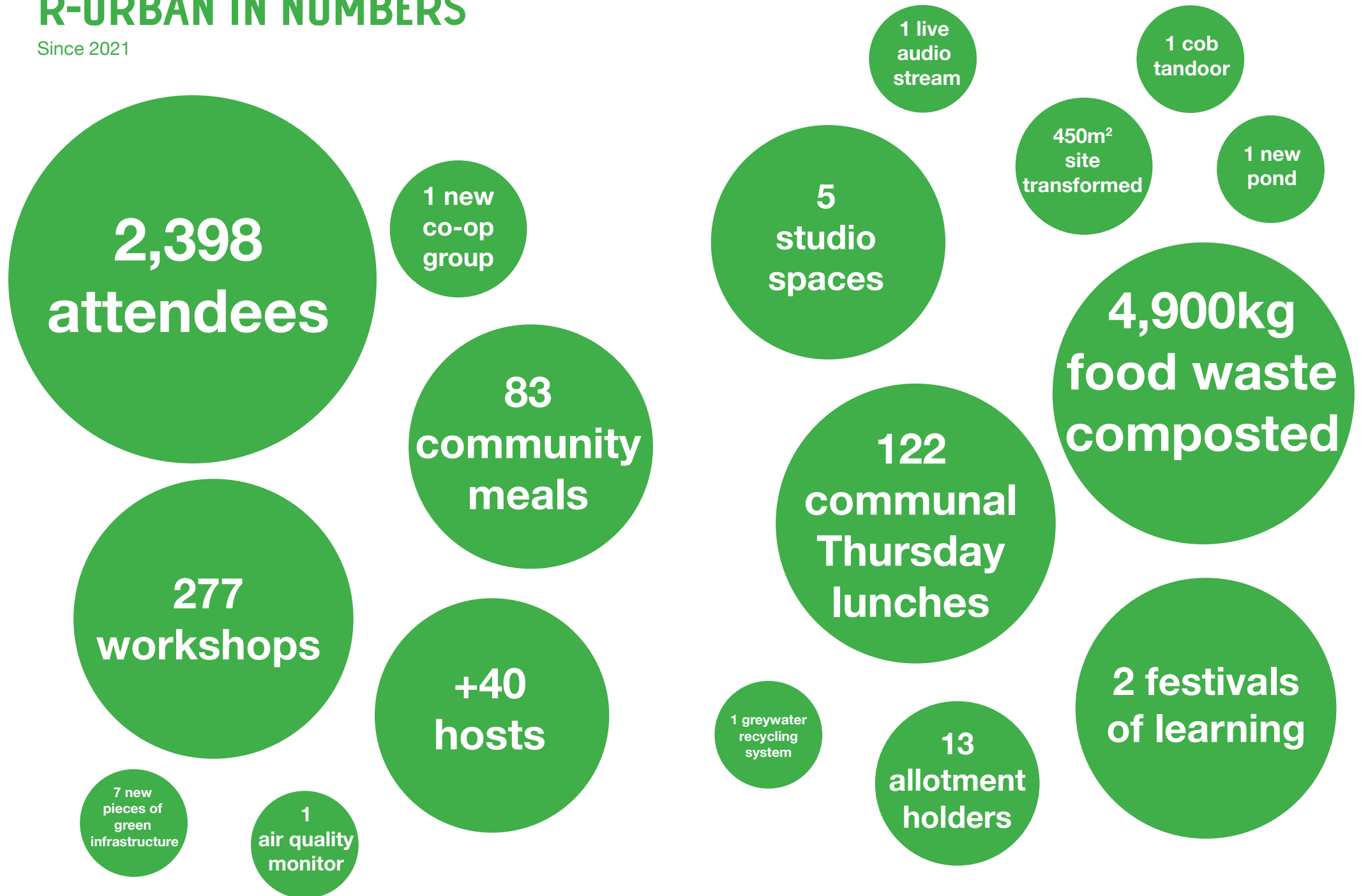


TPK launch in May 2024



# R-URBAN IN NUMBERS

Since 2021





# ABOUT JUST FACT

Just FACT is a 5 year partnership programme led by Women's Environmental Network (Wen) with research from Platform London. It is made up of a network of people and projects in Tower Hamlets, and is funded by The National Lottery Community Fund's Climate Action Fund.

The overall programme vision is to create an environmentally sustainable and socially just food system in Tower Hamlets. In other words, we want to see a food and land system that gives people the right to healthy, culturally appropriate food produced through socially just and ecologically sound methods.

The partnership is made up of organisations and groups delivering funded projects as part of Just FACT. Over the 5 years this has included: St Hildas East Community Centre, Sunny Jar Eco Hub, public works, Limehouse Town Hall, Leaders in Community, Cranbrook Community Food Garden, Rice Marketing, Stepney City Farm, Burdett Foundation, Mad LEAP, Mile End Community Garden/ Compost Mentis, Community Food Growers Network, Providence Row, Boil and Bubble, Misery, Oitijo-jo Collective, Limehouse Town Hall, Society Links, Seeds for Growth, House of Annetta, Folx Farm, Maya Productions, Somos Semillas. Lucy Harbor from CAG Consultants is the evaluation partner.

The Blueprint Architects group brings together a wider network of community leaders, organisations, activists and residents who are engaged in the food system of Tower Hamlet. The group is coordinated by Platform London, who leads on the research for the programme, making sure Just FACT stays informed by, accountable and responsive to those most affected by food injustices in the borough.

Just FACT sees change happening at different levels:

## **Personal empowerment**

Creating spaces for conversation, learning, and taking action together as a community or social group.

## **Building Alternatives**

Developing environmentally sustainable, resilient and socially just food systems within Tower Hamlets.

## **Policy Change**

Promoting changes in policy and ways of working by creating a Blueprint for such a food system, which can be used by communities and cities elsewhere and have a wider impact.

## **Communities in the Lead**

We will centre important local and cultural perspectives and experiences, and work to transfer power and ownership to local people and projects.

## **Diversity, Equity, Inclusion**

We will value different skill sets and appreciate that everyone has something to offer. We will address and seek to overcome any barriers.

## **Just Transition**

We will consider social justice alongside environmental issues, knowing that issues intersect and have the same root cause. We will take a holistic approach which considers all aspects of people's lives.

## **Care for the Environment**

We will respect and protect the environment in the way we deliver our projects. This includes moving from extractive to regenerative practices.

## **Joy and Friendship**

We will deliver activities that are joyful and engaging, that forge new friendships and work towards greater connection, wellbeing and shared purpose.







**RECIPES**



# NOORE'S BOROI ACHAR



Daniela and Marzia enjoying some Boroi Achar

Boroi achar - a dry plum chutney - is known as a popular Bangladeshi street food now, but back in the day it was one of the most precious and rare delicacies that used to arrive all wrapped in one's suitcase from Bangladesh.

The sweet and sour aroma of the achar used to fill the room, as children we used to wait patiently, while my mum unwrapped the achar carefully, ensuring nothing goes to waste.

This achar is one of my childhood favourites, my mum recreated my nan's and aunt's recipe. Here in the UK where we are so fortunate to have worldwide foods available now.

## Ingredients

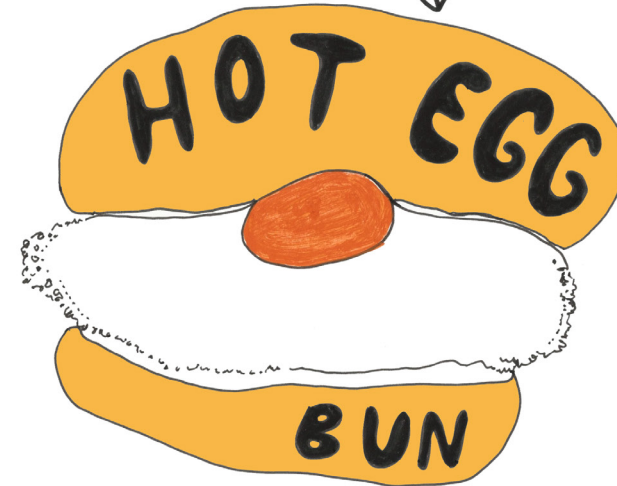
- 400gm boroi
- 250gm gur (date molasses)
- 4 cloves garlic crushed
- 1/2tsp chilli flakes or chilli powder
- 3tbl spoon white vinegar
- 1/2tsp tamarind sauce, depending on how tangy you like it
- Fresh coriander including stems
- Salt to taste

## Method

1. Wash the dry plum and place in a saucepan with ½ cup water.
2. Bring to boil and add all the ingredients except the vinegar, cook on low heat until it thickens.
3. Add the vinegar and boil for few minutes, once thickened place in sterile jars.
4. This can be stored in the fridge for 6 months.

# ANGHARAD'S HOT EGG BUN

The R-Urban Kitchen has a hot burner.  
Perfect for making



- ① Arrive when still darkish out
- ② Open up the kitchen container
- ③ Open up the office
- ④ Boil the kettle for coffee
- ⑤ Open the gas
- ⑥ Find lighter on a string
- ⑦ Light burner then place frying pan on top
- ⑧ Add olive oil (and a bit of butter if available)
- ⑨ Crack egg (bought from home in tiffin tin with bun as padding)  
into the hot fat
- ⑩ Cook until crispy at the edges
- ⑪ Plate open bun and place hot egg on base
- ⑫ Close and eat



# KATRINA'S SEED BOMBS



Wildflower seeds are a great way to help pollinators and insects, like bees and butterflies, to have food, shelter and places to breed. As well as helping to bring colour and life to bare patches of land or garden.

We first made these seed bombs at the first Climate Companions festival in September 2022. It was really fun making them together, and we distributed them around the R-Urban site and neighbourhood... as well as much further afield. We like to think that there are plants popping up this year that have been seeded from those first seed bombs!

## Ingredients

- Wildflower seeds or native seeds collected locally.
- Peat-free compost. Powdered clay (from a craft shop).
- Water.
- A mixing bowl.

## Method

In a mixing bowl, mix 5 cups of compost, 3 cups of clay and 1 cup of seeds.

Slowly add water, mix with your hands until everything starts to stick together.

Roll the mixture into small round balls.

Leave the balls to air-dry in the sun or on a sunny windowsill.

Once dry, find a bare patch of land or garden and throw the flower seed bombs.

Now wait to see what pops up!

# ABU'S NAAN



We regularly make naan in the cob tandoor at R-Urban. A tandoor is really hot, which helps the naan to cook fast and remain soft and chewy in the middle.

The naan goes perfectly with Aleya's veg curry and Noore's boroi achar.

## Ingredients

For the dough

- 1kg flour
- 4 spoons sugar
- half a litre of milk
- 1 teaspoon of yeast
- 1 teaspoon of salt
- 1 whole egg
- a pinch of nigella seeds

For making naan in a cob oven

- rolling pins
- board
- tea towel
- water
- fire gloves
- tinder
- wood
- lighter
- paper
- tongs



Hi Cameron, the recipe is the following:

- 1 kg flour
- 4 spoons of sugar
- half a litre of milk
- 1 spoon of yeast
- 1 spoon of salt
- 1 whole egg
- pinch of nigella seed

Keep the mix needs to be rested for at least 3/4 hours before cooking

4:05 am

Also don't put water when putting in the naan in the tandoor

4:06 am

## Method

1. Mix the naan ingredients into a dough and knead it for a few minutes. It should be quite wet at this point.
2. Leave the dough to sit for 3-4 hours.
1. An hour before you're ready to cook your naan, light a fire using paper, tinder and light. Keep stoking it until the coals are red and the flames have disappeared.
2. Take a ball of dough about the size of a large plum
3. Roll dough out on board so it flat and round and about 5mm thick
4. Put a fire glove on dominant hand
5. Bunch up the tea towel in the same hand to make a pad and place rolled dough on it
6. Press the dough against inside wall of tandoor
7. Watch it bubble
8. When it's crispy - remove your naan using tongs, brush it with oil or melted butter and eat

# A SOIL MANIFESTO WITH COMPOST MENTIS



Sensing the woodchip, Autumn 2022

Compost Mentis is a soil and alternative sanitation co-op working for ecological and social justice in everyday urban spaces. Over the last few years, they've run sessions at R-Urban exploring composting systems.

"We want the soil back!" A Manifesto (in Process)

Humans are part of the soil food web: with our fellow earthlings we have the capacity to shred, turn, digest, build, make, break down, terraform and care for soil and organic matter. Together we are soil, we are matter passing through.

As a workers' coop, we build compost piles, accessible toilets and recycling infrastructures which activate social and material change in the microcosms in which we work. We believe that through shifting intentions, practices and stories around how we manage and relate to our "waste", we can (in small ways) redistribute power and resource flows; increase cooperation; and build alternatives together. We aspire to be "radical plumbers", which is about making connections that, grow, decompose, redirect, challenge, transform and create new openings.

We take a lot of our inspiration from compost, applying it as a method, structure, material, ethic and resource for collaborating as humans, and across species in the ecosystems we are part of. Some of these inspirations include:

Slowness - the long, hot ferment of a compost pile - Recognising the different temporalities, rhythms and scales that we need to work at, and actively resourcing ourselves to work at a pace that is comfortable for each of us. Our ethic of slowness allows us to build trust and care, making time to gather, & reflect on our work, methods, values and decisions. For us, slowness supports accessibility and the long term sustainability of our work together.

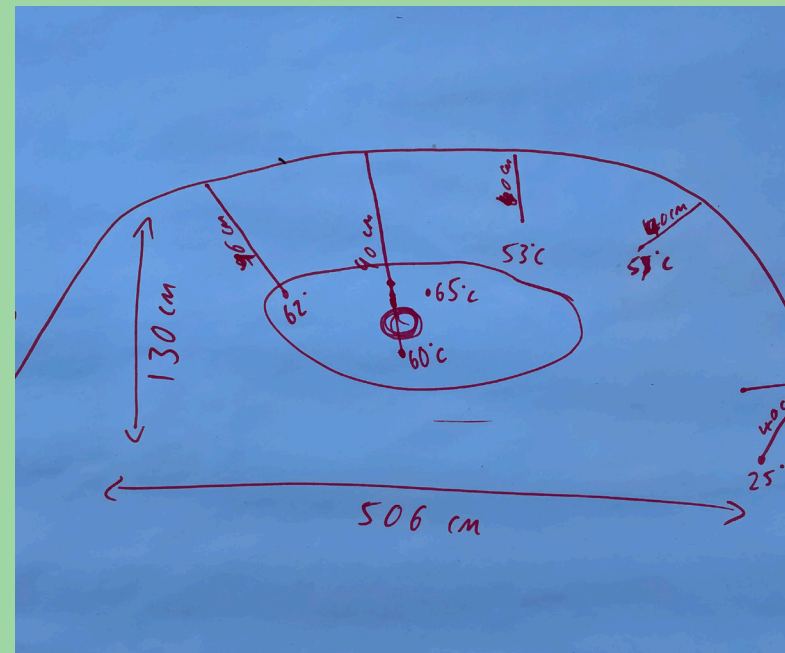
Interdependence and skillsharing - under and above ground networks living in symbiosis - A key part of our practice is about building and facilitating healthy relationships and exchanges with each other, our environments, the communities we work in, other collectives, networks and individuals. This includes the sharing of space, materials, knowledge, resources and a recognition of



the ways we are all interconnected. Our organisational systems and structures are the result of shared learning from other coops, and organisations we have been inspired by e.g. Navigate, the Community Food Growers' Network, Guerilla Translation, Concrete Action and Principle Six (amongst others).

Co-design and cooperation - we are multitudes, making together ~ We are passionate about practicing co-design, co-creation and cooperation in all our work, from developing organisational systems, to decision making, writing and building stuff together. Based on our collective learning and research we are committed to collaborating in an accessible, open, non-hierarchical and transparent way, with lots of space for ongoing reflection, learning, digesting, feedback and growth. We value the energy and ideas of members, associates and collaborators which nourishes us and our work.

Grounding in complexity, diversity and intersectionality - These dynamics are essential to all living systems - We each come to this work as complex and full beings, with different experiences of power, privilege, and marginality. We seek to acknowledge this in ourselves and others, particularly attending to the ways in which intersections of gender, race, disability, sexuality, class, religious and cultural background, impact the ways in which we relate to and access land, resources and power, in unequal and unjust ways. Our response to this is grounded in a commitment to racial justice, disability justice, land justice, environmental justice and soil justice, holding ourselves and others to account ongoingly. We each have different needs in this work, and our systems seek to respond to this complexity, making resources available which meet diverse needs. We come with a willingness to engage in difficult conversations, to hear when we don't get it right, and keep working to do better.



Temperature in a pile of woodchip, Autumn 2022



Hari from Compost Mentis explaining compost under the microscope  
September 2023

Centering care, joy, pleasure & nourishment in our work - have you ever watched a nematode dance? We get joy from making and co-authoring together, prioritising playfulness, creativity, friendship, and experimentation; making meetings pleasurable, supportive and something to look forward to. Using all our senses we share experiences of awe and wonder from working with soil & other ecologies; celebrating the unpredictability and delight that comes from working with natural materials and processes.

Resilient and robust systems and processes - A healthy composting system creates optimal conditions (oxygen, moisture, temperature, C:N ratios) for composting to take place - Likewise we are working to create good systems, and containers which hold our work and processes in a healthy way. These include; decision making; resource flows; information flows; communication; conflict management, support & care, and sharing feedback. We strongly believe that taking time to establish these systems will support our work to be more effective in the long term.

We are committed to grounding what we do in a desire for deep change, emergence, transformative politics and justice - the compost pile takes what no longer serves us and thoroughly, fundamentally changes it into something which has the potential to nourish and heal. This is a kind of alchemy.

In practice this means opening up multiple 'entry points' and everyday ways of connecting to the soil, through poetry, ecology, microbiology, art, storytelling, building, cleaning, zining, carpentry, caretaking, food growing, herbal medicine, and conversation. It also means properly resourcing our labour, and the labour we support others to do. It means practicing care, accountability and justice as we go about our work and lives together.



# EKA'S SAUERKRAUT



Sauerkraut, a beloved fermented cabbage dish similar to Curtido, has been cherished worldwide for its rich flavour and health benefits for centuries. Originating from Germany, sauerkraut earned its popularity for its extended shelf life and gut-friendly properties.

Fermentation, a natural preservation process, enhances the flavour and also promotes gut health by encouraging the growth of good bacteria.

Enjoy your homemade sauerkraut as a flavourful and probiotic-rich addition to sandwiches, salads, or as a side dish to your favourite meals. Get creative with spices and flavourings, like juniper berries or caraway seeds.

For a Curtido twist, add chilies, garlic, and oregano or Mexican mint to suit your taste!

Sauerkraut is closely associated with German cuisine, while Curtido is popular in Central American and Salvadoran cooking, notably in dishes like pupusas. Despite cultural variances, both dishes honour the tradition of fermenting veggies for preservation and flavour enhancement.

Sauerkraut and Curtido are crafted through lacto-fermentation, where cabbage and salt undergo natural fermentation. During this process, beneficial bacteria convert sugars into lactic acid, preserving the cabbage and infusing it with a delightful tanginess.



Sauerkraut workshop at R-Urban, 2022

## Ingredients

- 1 medium head of cabbage (green and/or red)
- 1 tablespoon of sea salt

## Method

1. Begin by chopping the cabbage (removing the core and outer leaf and set aside).
2. In a large bowl, sprinkle salt over the cabbage. With your hands, massage the salt into the cabbage for 5-10 minutes until it releases liquid.
3. Pack the cabbage tightly into a clean glass jar, pressing it down to submerge it in its juices.
4. Place a weight on top of the cabbage to keep it submerged, using the outer leaf and core.
5. Close the jar but not too tightly and place on a saucer as during the fermentation the liquids may spill over.
6. Store the jar in a cool, dark place, such as a pantry or cupboard, for 1-2 weeks, adjusting the fermentation time to your taste. Periodically taste the sauerkraut. Once it reaches your desired tanginess, transfer the jar to the refrigerator to slow down fermentation.



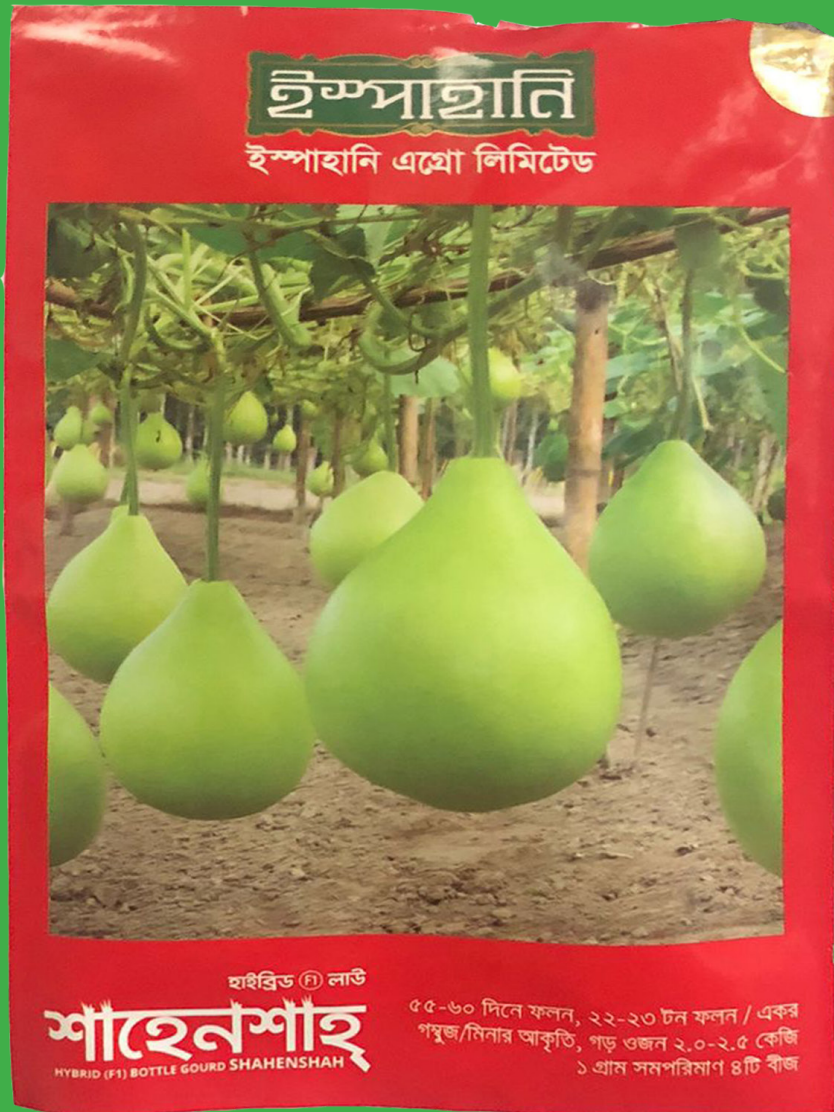
# ALEYA'S KHODU



I learned how to grow khodu from my mum. She used to grow it in Bangladesh. Normally people use a climbing frame, but she used to grow it behind our house, up the back walls and onto our flat roof. Usually khodu fruit grow long and thin, because they dangle, but my mum's always looked like watermelons. They tasted so fresh I can remember them to this day.

When we first moved here I thought the weather wouldn't be good enough. In 1987 we got a balcony and my mum started growing khodu again here in Britain. It turns out the weather is ok. It's been getting warmer too - now I grow khodu every summer.

At R-Urban we've had a really good few years of growing. Me and my friends go round to the garden in the afternoon. They come round and knock on my door, and we walk over together. We share plants, ideas, lessons and tips. It's a really important part of my community. We also cook big meals together



I normally start my seeds in February - they are very slow to germinate. so they are ready to go into the soil in April.

### Ingredients

- Khodu seeds (preferably saved from last year)
- Soil (R-Urban compost is best)

### Method

- Put your seeds in a tupperware box or small container, and put it next to your boiler. Wrap them in a plastic bag to make sure no outside air gets in.
- After 5 or 6 weeks, your seeds should be starting to germinate. Transfer your seedlings into a 1L pot of soil (you need good quality potting compost) and put it on a sunny windowsill.
- Once it's warm enough outside, usually by the end of May, your plant should be quite tall and fairly strong.
- Plant your khodu in a sunny spot, and build it a frame to climb up!
- Water and feed it (you can use a tomato feeder) regularly, and by the start of July you should see some pumpkins emerging.
- When your khodu is getting bigger, cover it up in a plastic bag - this keeps it warm and helps it to grow bigger, protecting it from the squirrels - like a mini greenhouse.
- By the end of August (sometimes sooner, depending on how sunny it is) you should be able to harvest your khodu. If you can't eat it all at once - you can cut it into chunks and freeze it.



# CAMERON'S OYSTER MUSHROOM BBQ WRAPS



This recipe celebrates the delicious oyster mushrooms grown by Alani in the MAD Leap mushroom farm on-site at R-Urban. They're mushrooms are chewy, packed with flavour and when grilled char really nicely. This is a great recipe if you want to convince someone that barbeques don't always need to be meaty!

At R-Urban, we use a Turkish Mangal for barbequing. It's lightweight, portable, and can fit lots of skewers on it. The word mangal is derived from the Arabic word manqal (مَنْقَل) meaning "portable" and originally referred to portable heaters used by the Bedouin to warm tents during the cold desert evenings.

In summer 2023 we fired up the R-Urban mangal, taking inspiration from Meera Sodha's recipe for oyster mushroom tacos.

## Ingredients (to feed 20)

- 5 dried ancho chillies
- 8 garlic cloves, peeled
- 2 red onions, peeled and roughly chopped
- 3 tsp ground allspice
- 3 tsp dried Mexican oregano, or dried regular oregano
- 600ml orange juice
- 3 tsp salt
- 5 tbsp tomato puree
- 2kg oyster mushrooms
- Corn tortilla wraps (it's important to use corn wraps if possible, as these are much tastier. You can buy them in bulk and freeze them, and there are lots of interesting varieties online, including tortillas made with blue corn!)
- Garden tomato salsa
- Yoghurt or mayo (vegan versions if desired)



Oyster mushroom production at R-Urban

## Method

Cut the stems off the chillies and roll them between your fingers and thumbs to shake out the seeds (either keep and plant the seeds, or compost them). Put the chillies in a small bowl, pour over enough hot water to cover and leave to soak for about five minutes. Drain, then put the chillies in a blender with the garlic cloves, onion, allspice, oregano, orange juice, salt and tomato puree, and blitz to a paste.

Make a tomato salsa with whatever is seasonal and to to hand. My favourite usually contains tomatoes, green chillies, lime juice and a generous dose of coriander.

Put the chilli paste in a bowl, add the oyster mushrooms, toss to coat each one, then put the mushrooms on skewers and grill over your barbecue.

While the mushrooms are grilling, dry fry some tortilla wraps until they are warm and let off a delicious corny aroma.

When we served these at R-Urban we had a plating competition to see who could assemble the most beautiful wrap. We picked some nasturtium and calendula flowers to add a dash of colour to our compositions.



# ANGHARAD'S COB TANDOOR



Cob is an ancient natural building material made from clay, sand and straw. A tandoor is a large vase-shaped oven, usually made from clay.

To make a cob tandoor you need to know:

1. How to make bricks from cob
2. How to mix a clay/sand plaster to render (and therefore protect) the cob

Knowing how to make cob bricks and plaster means you could also build a shelter.

I didn't know how to teach people to either of these things so we invited Jon Kalviac to R-Urban. I met Jon on an Earthship building course that he was helping to facilitate for the Brighton Permaculture Trust. Earthships emerged in the 1970s as passive solar earth shelters made of both natural and upcycled materials such as rammed tyres and cob. In summer 2023, Jon taught us how to make the latter and in turn build a cob oven. For this we needed lots of hands and feet.

## Making cob mix

### Ingredients

- clay
- sand
- bucket of water
- straw (shredded using strimmer)
- tarpaulin

### Method

1. Lay down tarp
2. Shovel sand onto tarp (3 spades full)
3. Lump an equal amount of wet clay onto sand
4. Use your feet to mix clay and sand
5. Add water (a bit at a time) to help with mixing
6. Stamp clay/sand into a flat pizza/pancake; it should hold together but not be super sticky
7. Sprinkle straw onto the clay, like cheese on a pizza base



8. Grab edge of tarp and lift clay/sand/straw mix so it rolls over on itself and creates a swiss roll
9. Jump on the swiss roll with your feet and stamp some more
10. Get more people involved
11. Repeat steps 6 to 9 at least three times
12. When it becomes really hard to mix you have cob

### Forming bricks

#### Ingredients

- Template of curve draw on wooden board (take measurement for arch of curve by measuring diameter of pot push 5cm)
- Cob (see above)

#### Method

1. Take 2-3 large handfuls of cob and place of wooden board
2. Slap / pat the cob into the shape of the curve make sure height and depth are ~8cm
3. When squared off it should look like a slightly curved brick
4. Leave bricks to dry in the sun

### Building the tandoor

#### Ingredients

- Two 30 litre terracotta pots
- Fire cement
- Aerated clay balls
- Many, many cob bricks
- Metal frame with wheels
- Ply wooden shelf fit to frame
- Metal sheet
- Metal for ash pipe
- Drill with 38mm drill bit
- Angle grinder with ceramic blade
- Mortar (clay, sand, water)





## Method

1. We inherited the metal frame from Abbey Gardens; essential for moving the tandoor
2. Cut plywood to fit frame and drill hole in centre for ash pipe
3. Place metal sheet on wood to protect it from the heat, cut ash pipe hole to match
4. Place one of the pots on the metal with drainage hole in line with ash pipe hole
5. Insert ash pipe
6. Using an angle grinder cut the bottom off the other pot ~8cm from the base
7. Smear fire cement onto rim of pot no.1, turn pot no.2 upside down and place onto of no.1 so the two rims meet
8. Apply more fire cement to seal rims together (when fired for the first time cement will set)
9. Apply mortar to base of first brick and place it on wooden board leaving a gap of 5cm from widest point of the pot
10. Apply mortar to base and sides of second brick and place short end next to short end of the first, keep adding bricks until you complete the circle
11. Apply mortar to base of another brick and start your second course (make sure you stagger the placement)
12. Continue until you reach three courses from top of the two pots
13. Fill the void between the pots and cob bricks with aerated pebbles
14. Complete the final three courses stepping them in half a brick's width each time until the inside edge of the brick meets the outside wall of the terracotta pot
15. Leave to dry out

## Render

### Ingredients

- Clay
- Sand
- Water
- Fine cut straw
- Bucket
- Trowel



### Method

1. Mix 2 parts clay to 1 part sand, add water if needed
2. For golden flecked effect add finely cut straw
3. Apply mortar to cob bricks
4. Cover the entirety of the cob walls
5. Whilst still wet you can make patterns

### Seasoning the oven

#### Ingredients

- Salt
- Water
- Brush or cloth
- Tinder
- Wood
- Lighter
- Paper

#### Method

- Mix salt in water until it tastes saltier than the sea
- Brush inside of tandoor with salty water solution
- Build fire using paper, tinder and light
- Keep stoking with wood until walls turn black

To cook in your tandoor, follow Abu's naan recipe in this book!



# ALEYA'S VEG CURRY WITH PILAU RICE



In the summer months, I often make lunch for everyone at R-Urban and this is one of my classics.

For a mixed veg curry, I normally choose any fresh seasonal vegetables - potatoes, cabbage, cauliflower, capsicum - you name it! I also keep chunks of khodu in the freezer which can be used all year round.

## Ingredients

- Onion
- Garlic
- Spices - cumin seeds, chili powder, coriander powder, turmeric, tej pata (Bangaldeshi bay leaf), mixed curry powder (we make this at home but you can also buy it from the shop)
- Cauliflower (cut into florets)
- Potatoes (cut into 3cm x 3cm chunks)
- Carrots (sliced)
- Peas
- Spinach
- Khodu chunks (cut into 3cm x 3cm chunks)
- Moong dal (yellow lentils) - (soaked for 10 mins)

## Method

- First fry onion and garlic in a little oil.
- When they're soft, add a pinch of Abu's special curry powder, chili powder, coriander powder, turmeric/
- Then add your harder, chunkier vegetables to the pot (cabbage, cauliflower, potato, khodu). Add a few leaves of tej pata. Add your lentils and cook everything down for around 30 minutes. If it's looking too dry, add a bit of water now to keep things loose.
- If you're adding Spinach and peas, add these 5 mins before finishing
- When it's finished cooking, top with some sliced naga chilli (watch out, they're very spicy!)
- Serve with pilau rice

# HUSSINA'S RECIPE FOR A HEALTHY PARTNERSHIP



A barbeque at R-Urban, Summer 2022

Just FACT is a coalition of people and projects dedicated to creating a sustainable food system in the borough of Tower Hamlets that has food justice and community wellbeing at the heart of it. It is led by the vision of the local community it aims to benefit. Two rounds of grants have been awarded to projects selected by local residents, and community experts.

The strength of the Just FACT programme has to be the diversity of those involved, the wide-ranging perspectives, and the privilege of having access to a wealth of knowledge, expertise and local skills. It's been enriching and exciting to see the projects test out their ideas, and make meaningful change. This has been through providing access to green spaces for growing, breaking bread over community meals cooked up by local residents, sharing tools and tips on how to create your own eco-products free of chemicals. We've had piloted innovations like an anaerobic digester that turns food waste from residents in tower blocks without access to food caddies into nutrient rich fertiliser for growers.

Change has also happened through campaigns like collaborating with market vendors to reduce plastic use in Chrisp Street market. These are just a few projects working in micro-ways with their local communities to address their impact on climate change. Watching these projects flourish is a proof for the need to invest in caring and working with your local community to create a better, healthier and fairer food system.

We hope the Just FACT programme can be a living example that illustrates the power of community organising.





Mushroom workshop with Alani, Autumn 2023

The impressive thing about R-Urban is how motivated and determined they have been in engaging with the local community on the Teviot estate. Starting with their door-knocking outreach during lockdown, not long after receiving the Just FACT grant, to testing out their idea of operating as an eco-civic hub for the local community to grow, learn, share and connect over food was just the start.

They now have a busy, thriving communal space with planter beds for communal growing, a programme of workshops ranging from; reducing food waste, repairs, developing new skills, to creating opportunities for participants to share their cooking skills and lead on community meals, as well as a shared tool station and spaces for small enterprises. It's with admiration that I think of R-Urban as truly dedicated to serving the needs of the community. Their work is a testament to centring the wellbeing of the people they are surrounded by.

What R-Urban has achieved in the space of a few years is admirable. To see a disused car park transformed into a space dedicated to engaging and serving the local community is exactly what Just FACT as a programme wants to support and fund.

As a partnership lead, we believe the ingredients for successful working relationships are those that operate from a place of trust and open dialogue. We give our partners free reign over the execution and delivery of their projects the best way they see fit. We like to act as a support system and sound board for our partners to troubleshoot, brainstorm and turn to for help.

# EKA'S APPLE CIDER VINEGAR



Apple cider vinegar (ACV) has been valued for centuries across cultures for its versatility and health benefits. Possibly originating from ancient Babylon.

ACV is made through a fermentation process that transforms apple cider into vinegar. Making your own ACV at home is easy and rewarding.

Use ACV as a salad dressing, marinade, or flavor enhancer in recipes.

Dilute with water and honey for a healthful tonic.

Employ as a natural household cleaner, hair rinse, or skin tonic due to its antibacterial properties.

SCOBY (Symbiotic Culture of Bacteria and Yeast): To use a SCOBY, add it to the apple mixture before fermenting for improved consistency. Obtain a SCOBY from a friend or buy online.





Learning about SCOBYs with Eka, 2023

## Ingredients

- 4-6 apples
- dechlorinated water (dechlorinated water = water left out overnight and covered with a cloth to evaporate the chlorine)
- Sugar (optional)
- SCOBY (optional)

## Method

Wash and chop 4-6 apples, including the core and peel. Place the chopped apples in a clean glass jar, filling it halfway.

Add enough water to fully cover the apples. Optionally, add a tablespoon of sugar to aid fermentation.

Cover the jar with a clean cloth and secure it with a rubber band. Store the jar in a warm, dark place for 3-4 weeks, stirring occasionally.

Once bubbles form, strain out the apple pieces and return the liquid to the jar.

Cover the jar and ferment for an additional 2-4 weeks. Transfer the vinegar to a clean bottle for storage.

# MOMOTA'S VEG PAKORAS



I made these veg pakoras for a delicious potluck dinner at R-Urban back in August 2023. They went down a treat!

## Ingredients

- 2 cups of besan (gram flour)
- 2 onions thinly sliced
- 5-6 medium potatoes very thinly sliced into quarters
- 3 tbs methi (Dried fenugreek leaves)
- 2 tbs cumin seeds
- 2 tbs coriander seeds
- 2 tbs red chilli flakes (adjust to taste)
- 1 1/2 tsp salt (adjust to taste)
- 1 tsp of stain
- 1 tsp baking powder
- handful of chopped coriander
- handful of chopped spinach or kale

## Method

In bowl add the gram flour, chilli flakes, cumin seeds, coriander seeds, stain, dried fenugreek (you need to rub this in the palm of your hands before adding), baking powder, salt. Mix everything together to combine all the dry ingredients.

Slowly add some water and using a whisk mix together until you have a thick batter. It shouldn't be really runny. You want it to stick to a spoon.

Then add the sliced potatoes, sliced onions, chopped coriander and spinach and mix everything together well. Heat a wok of oil.

Using a spoon drop small amounts of batter to the hot oil and fry on a medium heat until a lovely golden brown colour. Turn occasionally whilst frying. Remove and drain onto a tray without kitchen paper, this will help keep the pakoras crispy.



# KATRINA'S WAULKING SONG

The sun comes up, to grow the corn, to turn it  
yellow, and grow it tall.

There's the sun, it grows the corn, the corn so  
yellow, the corn so tall.

The sunflowers, lift their heads, and turn  
around, to feel the warmth.

They lift their heads, their big round heads, to  
turn around, and feel the warmth.

Come one come all, to gather round, pick the  
corn, and harvest seeds.

So many people, gather round, pick the corn,  
and harvest seeds.

Our robin comes, and bobs around, looking for  
worms, on the ground.

His head, bobs up and down, looking around,  
on the ground.

The children laugh, and run around, playing  
chase, with butterflies.

The children laugh, sounds like music, playing  
chase, with butterflies.

Everyone, picks the corn, harvest seeds, and  
chops the food.

Everyone, they all pick corn, they harvest  
seeds, and chop the food.

Aroma rises, noses in the air, the smell of  
home, brings others here.

The food delicious, and so sweet, smells of  
home, brings others near.

Swap free clothes, and swap your seeds,  
passing time, that top's so fine.

Hold up clothes, a dress so pretty, swap the  
seeds, a top so fine.

Children and toys, the adults chatter,  
everyone's hungry, let's make some tea.

Playing with buttons, laughing and talking, so  
very hungry, let's make some tea.

We gather flowers, cloth and twine, wrap up  
petals, steep the brew.

Lilac and yellow, fingers on petals, turning  
around, steep the brew.

The sun shines down, we take our seats, like  
family, and enjoy our meal.

We gather round, under the sun, like family,  
and enjoy our meal.



### The history of Waulking Songs

Waulking songs are a captivating aspect of Scottish cultural heritage, originating from the Gaelic-speaking regions, particularly the Outer Hebrides. These traditional folk songs were sung by communities during the labour-intensive process of waulking (or fulling) newly woven woollen cloth to soften and thicken it. The rhythmic pounding required to full the cloth was both physically demanding and monotonous, and singing helped to coordinate the workers' efforts, making the work more efficient and enjoyable. The songs are characterised by their call-and-response structure, allowing for a communal singing experience that strengthens social bonds. Beyond their practical purpose, waulking songs also served as a vital means of preserving and transmitting Gaelic language, culture, and history through generations, embedding local stories, emotions, and the daily life of the community into their melodies and lyrics.

### Poplar's Connection to Scotland

The Scottish naming of streets in Poplar, East London, has its roots in the early 19th century when a Scottish civil engineer named Hugh McIntosh came to London. McIntosh, who was involved in the construction of the city's docks, bought a significant portion of the area in Poplar in 1823. His influence and perhaps a sense of nostalgia or pride in his Scottish heritage likely led to the naming of streets after places in Scotland, such as Aberfeldy Street.

Poplar itself was a rapidly developing area from the early 19th century onwards, transitioning from farmland and market gardens into one of London's most densely populated suburbs. The transformation was spurred by industrial growth, including the construction of the East India Docks and the increase in riverside and canal-side manufacturing. This growth attracted a diverse population, including many workers and their families, who contributed to the area's vibrant community life.

The choice to name streets after Scottish locations, by McIntosh, reflects a common practice of the time, where developers and landowners would imprint their identity or affiliations on the urban landscape. In Poplar, this has left a lasting legacy of Scottish names, creating a unique aspect of the area's identity within the vast and diverse tapestry of London's East End.



# ANDY'S PESTO



Pesto for lunch! April 2025

## The versatility of pesto

I've probably cooked 30 lunches at R-Urban over the past few years and almost all involve pesto... a running joke with table regulars.

Pesto is easy. You can buy a jar at Nisa and add it almost any dish with little thought but confidence in its flavour enhancement. Pesto is lazy. Unlike other chefs who take the time to think about what they're going to cook during the lunch rota. I end up running to the shops at 12:05 to cook lunch for 13:00. Pesto is more than just with pasta (although it often is just pasta and pesto)

## Pistou Soup

If you have an hour to spare try pistou soup. Always hearty and filling on cold winter days on site.

### Ingredients

- Onions, Carrot, Celery, Garlic
- Kale or Cabbage
- White Beans, Cannellini beans or Butter Beans
- Stock
- Fennel seeds, Black Pepper, Salt, Oregano
- Parsley and Fresh Basil
- Lemon
- Pesto (Jar)

### Method

Make a hearty soup, starting with sweating onion, celery and carrot and garlic on medium burner. Add the fennel seeds, pepper and oregano (other herbal seasonings welcome)

Add the beans, stock, kale and simmer for 20 minutes

Season to taste with salt, lemon and fresh herbs

Serve with crusty bread and a dollop of Pesto to mix through



## Pasta and Pesto

If you have 15 minutes or are in a hurry, then make pasta and pesto. It always hits the spot.

### Ingredients

- Pasta (your favourite shape)
- Kale, Bag of frozen peas, Broccoli
- Pesto
- Lemon
- Serve with cheese

### Method

1. Boiling water, good pinch of salt and cook the pasta.
2. When 5 minutes remaining on the cooking time, add broccoli and kale
3. When 3 minutes cooking time remaining, add the peas
4. Once cooked, reserve a mug of pasta water, and drain the remaining into a greywater bed
5. Add back to the pan, stir through lots of olive oil, lemon juice and jar of pesto.
6. Serve with cheese.





## Homemade Pesto with Sweet Potato or Squash

If you have lots of time on your hands, there is nothing like fresh pesto.

### Ingredients

- Fresh basil (lots), Fresh Oregano if it's growing
- Garlic (Not too much)
- Cavolo Nero (remove the stalks)
- Pistachio nuts or Toasted pumpkin seeds
- Olive oil
- Salt

### Method

1. Using a stick blender or pestle and mortar blend/mash the ingredients together, it requires a lot of olive oil, and plenty of fresh basil. A squeeze of lemon on the Cavolo Nero can soften it up.
2. Serve with roasted or boiled sweet potato or butternut squash.

# KATRINA'S TOMATOES



Tomatoes are a great gateway plant to start gardening and is a firm favourite plant with many gardeners. It's relatively easy to grow, maintain, troubleshoot, and even take cuttings to make more tomato plants.

## When to sow

Sow seeds indoors (or greenhouse) late February to mid-March. Sow seeds outdoors late March to early April, after the risk of frost has passed.

## Method

Indoors: Small containers, such as a cleaned-out eggshell, yogurt pot, or seed starter tray can be used to get the seeds started. Starting the seeds in small containers is great for saving space and to help prevent the seed and seedling (baby plant), from getting too waterlogged.

Fill the small container with seed starter mix, or loose compost (not too heavy and should break apart easily when handled), or even damp paper towel can be used. Sow two or three seeds per pot. Seeds should be sown twice the width of the seed. For tomato seeds, that's about an 1/8 inch deep. The depth doesn't need to be exact, as tomato plants are very good at finding their way to the surface. But planting at this depth will mean there's less chances of the seeds rotting and having healthier seedling plants.

Outdoors: seeds can be sown directly where the tomato plant is going to stay, two to three seeds per hole 60-90cm apart. The pot needs to be large and deep. Or a 40lt bag of compost can be used, or Bag for Life shopping bag. Just make sure to make holes in the bottom for drainage.

Once the seeds are sown, dampen the soil. It should be wet to the touch, but not soggy, otherwise the seeds may rot. A spray or dropper bottle are great for moistening the soil lightly. Cover the pot with cling film, an old see-through plastic bag, or bottle with the bottom cut off. This traps in the moisture and keeps the soil damp.



The ideal temperature for most tomato seeds is 21°C, (room temperature is fine). The seeds will take 7 to 14 days to germinate (sprout), at this temperature. If the seeds take longer, they may be too cold, too damp, or too old. Once the seeds have germinated and show the first sign of green, remove the cover.

### Transplanting

Outdoors: Once the seedling has two, or four leaves, ('true leaves'), they can be 'thinned out'. This means to remove tomato seedlings, so there's one plant per hole. The seedlings that are removed, can be re-sown, or composted.

Indoors: Once the seedlings have two or four leaves, thin them out. The seedlings will need well-draining soil and regular watering. If the starter pot has no holes, either make holes, or transplant the seedling into a small pot with holes in the bottom. And then place the seedlings on a sunny windowsill. The seedlings can stay in their pots until they reach three times the height of their pot. They will then need to be transplanted into a bigger pot.

Once the weather is warmer and the risk of frost has passed, the tomato plant can gradually be taken outdoors over 5-7 days. Leave the plants outside for one hour on day one and gradually increase the hours each day. On the last day leave them out overnight and they can stay outside. This process is called 'hardening off' and helps prevent plants in general, going into shock.

Once hardened off, the plant can be potted in its permanent home. Ensure to remove lower leaves and any leaves that are near the ground.

### Support

The type of support needed depends on where the tomato plant has been planted and the type of tomato plant. If it is in a hanging basket, it won't need any support. If the tomato plant is determinate (bush) variety, a single cane can be used. If the tomato plant is indeterminate (vine), a cage, or canes and string, may work better. Determinate tomato plants will grow to a certain height, bloom, go to fruit and then usually die back. Indeterminate tomato plants are vine like and will keep growing and producing fruit, until there's a problem. Under the right conditions, indeterminate tomatoes will live 1-3 years.

### Increasing yields and troubleshooting

Aphids:

When the tomato plant is young, it may get infested with aphids. They can be removed by hand, or by rinsing, or spraying gently with water. It's much gentler than using chemicals. Do this early in the morning, so the plant has a chance to dry during the day and less likely to cause other issues. As the plant gets bigger, they're better able to defend against infestations.

Roots:

Tomato plants are unique, because they have lots of little hairs all the way up its stem and each one of these can become a root, if put in water or wet soil. When planting, lower leaves can be removed, and the long length of stem can be sunk deeper to create a bigger root system, which can improve growth and fruit production.

Pruning:

As the tomato plant grows, it will produce side shoots called 'suckers.' Removing these should help to put more energy back into the plant, improving growth with the main stem and fruit production. Also remove any leaves touching the ground, or that don't look healthy and green. When pruning, cuttings can be placed in water to clone the plant.



Tomato plants at the Teviot Centre in summer 2022

#### Airflow:

Tomato plants need good airflow to help them defend against infestation, infections, and disease, such as blight and powdery mildew. Pruning and making sure that leaves don't touch the ground and other tomato plants, is the best way to help with this.

#### Watering:

Tomato plants need regular watering and feeding. When the tomato plant is smaller, the plant will need watering every 5-7 days. But a bigger and more established tomato plant may need watering every 1-2 days. Sticking a finger into the soil and seeing how damp the soil is, is the best way to check if watering is needed. Overwatering will cause the plant to rot, or other issues. Underwatering can cause the plant stress or to die back. Inconsistent watering can cause splitting and warping of the plant and the tomatoes.

#### Feeding:

Fertilise every 1-2 weeks once flowers start to appear. Use a good quality tomato feed, or seaweed feed. Adding calcium to the soil before flowering, can reduce the risk of 'blossom end rot.'

#### Pollination:

Bees and other pollinators do a great job. But gently tapping, shaking, or using vibration, can increase the chances of pollination and produce a high yield (more tomatoes).



# HESTER'S MOSS MUSINGS



Moss walk for Climate Companions, Summer 2022

Often overlooked as a plant, we can find moss all around us, in the cracks of the pavement, around the base of a tree or weaving through a grassy lawn. The UK has the most species of moss in the world, which filters air, captures carbon, stores water, and provides a home for a host of biodiversity.

Yet there is little horticulture in the UK around how to cultivate moss and it is rarely used within urban green projects. To notice this abundance of moss we need to change our focus from the racing cars, towering trees and maze of housing which make up the city around us to see the tiny forest of green created by a patch of moss on the edge of the grey pavement.

Moss breathes, filtering air as it grows. It does not have a root system but takes its nutrients directly out of the air. Being a very simple plant it has leaves that are only one cell thick, with no waterproof protective coating and open pores that control the passage of water, gases, and other materials in and out of the leaf cells, by suction pressure.

This movement of gasses means moss can easily take up nitrogen oxides from the air. Nitrogen oxide is a harmful pollutant produced by diesel cars; in high levels it can cause asthma and other respiratory problems. This nitrogen dioxide helps the moss grow green while improving the local air quality.

The other main form of pollution is particulate matter, a fine dust suspended within the air by the movement of traffic, demolition of buildings or the burning of fuel within wood burners. The two main types of particulate matter are PM10 and PM2.5. The small-scale and densely packed stems and leaf structures of moss trap these very small particles from the air, filtering out PM2.5 and PM10, in a process called biofiltration. The process of biofiltration transforms the gasses into a solid, creating a thin layer of soil below the moss.

Moss is suited to growth in challenging spaces within the city, where other horticulture would not be possible. As moss doesn't need soil to grow, it can be cultivated along the surface of a pavement or vertically up walls, greening a grey area of a neighbourhood. Moss can grow in low light levels; it can be used to green dark areas of the city. These pockets of green can provide



Moss under a microscope

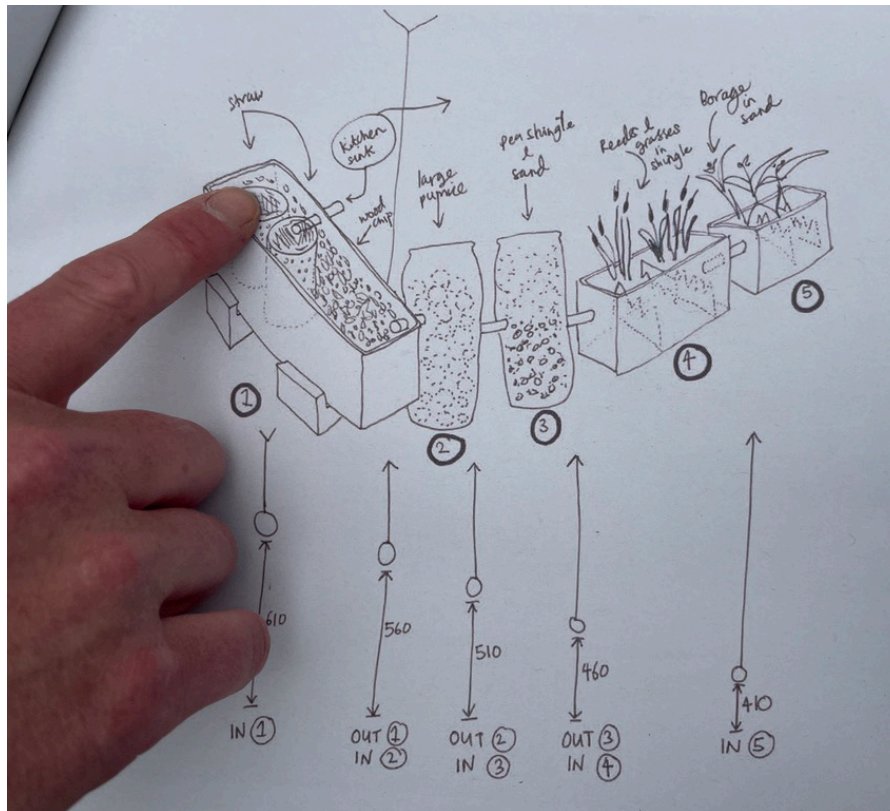
a micro habitat for wildlife. As part of the urban ecosystem, the moss's canopy shelters insects, which in turn provide food for larger wildlife, such as birds. The dense structure of the leaves, just one cell thick, rapidly capture carbon from the atmosphere.

The larger surface areas of densely packed moss means it can hold large volumes of water when it rains, slowing down its movement. Growing carpets of moss on house roofs, up the walls of buildings and below urban planting would absorb large amounts of water, reducing the pressure placed on our drainage systems during periods of heavy rain. However, moss can also survive for long periods of time without water, going dormant when there are not high enough levels of humidity within the air. Moss, unlike other plants, has a rigid vacuole within the centre of its cells which can empty and refill with water without damaging the plant. During dry periods, when the vacuole is emptied of water, the moss plant goes dormant, reanimating when there is a higher level of water at other times of the year.

When the moss goes dormant, due to a lack of water, it bleaches, turning a lighter brown colour. This reflects light away from this area, reducing the amount of heat which is absorbed from the sun, cooling the area down. This cooler atmosphere is likely to have higher levels of humidity, allowing the moss to re-animate and start to grow again. When this occurs over larger areas of moss-covered land such as sphagnum bogs, this process is called the Albian Effect. The bleaching of the moss during hotter periods of low humidity, and growth of the green moss during cooler period of high humidity, helps to regulate the global temperature.



# ANGHARAD'S GREYWATER SYSTEM



A working diagram for the new greywater system

## Greywaters run shallow

At R-Urban we have one drain. It sits outside the container classroom next to the seeding tables and holds all sorts of overspill from remnants; splash from Fred's terrazzo tiles, mushroom cultivation wash-out, AD digestate to the tandoor-insulating aerated clay balls that bob in the bilge.

The kitchen tap sits roughly 20m from this drain. On busy days the sink fills with many litres of water generated from the washes of hands and dishes.

In 2019 a greywater system was installed to process this water, but over the last three years the pipes - designed with drainage holes, became clogged with established, backing up the sink. So in Spring last year we ran a two day workshop to replace the existing system with a new fast flowing, higher capacity version 2. It was designed to be part of a larger water system with a series of demonstration beds that include a willow bed, pond, and two drought-tolerant-low-maintenance planters.

- Willow bed - small scale water loving mono-crop planted in woodchip for harvesting to make baskets or similar.
- Pond - for the life that lives in the shallows; passing bees and flies, water snails, and fish and all that they feed on alongside watermint, marsh marigold, papyrus among others.
- Drought, tolerant, low maintenance planter 1 - predominantly grasses
- Drought tolerant, low maintenance planter 2 - predominantly sedums



Dismantling the old grey water system

### Step 1 - things fall apart

First task was to disassemble the old system, this included battling the rose that had grown in the first bed, dividing and transplanting the yellow flag iris, removing and separating soil, stones, clay pebbles from each of the troughs, seeing what materials we could salvage for this build or another (a year on we used waste pebbles on the greenroof) and looking for new parts that matched the old ones.

### Step 2 - understanding why things fell apart

An important part of the process was to understand what had gone wrong with the old system. This involved looking at what we were dismantling and adapting the future design. Primary two problems presented themselves. (1) No food trap / gaps. Any food washed down the sink couldn't be accessed / plants to become too established, both clogged the pipes meaning that water wasn't moving through the system. (2) Lack of gradient on site; the plug hole in the sink sets the highest point and from this point there is limited distance for the water to drop (and therefore flow through the beds for processing) without mechanical intervention. An additional challenge was that we were reusing the old infrastructure made from metal troughs, so any new holes would potentially mean new leaks; where possible we worked with the holes we already had.

### Step 3 - setting the system

Greywater systems require the water to move continuously but gradual movement through a series of beds containing substrate of ever decreasing sizes. The substrates create a surface area over which microbes work to clean the water; the smaller the stone area the larger the number of the surface areas. We reused the 3 troughs from the old system and added in two water butts to increase capacity. We bought in 10 and 30 mm pea shingle and sand for our substrate and reused woodchop, aerated clay pebbles and pumice. The piping was recycled and we purchased (and were donated) connecting parts from Wolseley Plumbers.





A new system just installed in 2023

## Resources

*Reedbeds and Waste Water Management* 2 day course at Centre for Alternative Technology

*Permaculture Guide to Reed Beds* by Feidhlim Harty, 2018

*Create an Oasis with Greywater: Integrated Design for Water Conservation, Reuse, Rainwater Harvesting & Sustainable*

*Landscaping* by Art Ludwig, 2006

## Step 4 - putting things back together

Once cleaned we went about resetting the system. This involved lifting and sequencing the filtration beds - trough, butt, butt, trough - followed by setting the location and length of the pipes, using existing holes where appropriate, and where not, sealing old ones and drilling new. Mesh was placed over the holes to prevent substrate from being washed downstream. Once set and sealed the beds were filled and planted.

## Step 5 - how it flows

In our system waste water runs from the sink into a grease trap made from straw placed inside a perforated bucket. The straw can be removed and composted along with any food scraps. These buckets sit inside a trough filled with woodchip with a baffle (equivalent to an open dam made from reused corrugated plastic that slows flow) that separates the woodchip from 30mm pebbles. The water then moves through two water butts the first filled with larger pumice, the second with clay pebbles and stonechips on into the trough planted with native marginal plants including Norfolk Reed (*Phragmites australis*), Great Reed Mace (*Typha latifolia*) (often called Bulrush) and Bur Reed (*Sparganium erectum*). The reeds are planted in a pebbles / sand mix and feed off the nutrients in the greywater system. In the final trough we replanted some of the yellow flag iris from version 1.

## Step 6 - where next to go

As the site's capacity increases so will the greywater system. Currently we hand bail the processed water from the terminal trough onto the willow bed. Our next intervention is to add an additional holding tank to the system to allow us to use the processed greywater during the summer instead of the hose. Thank you to Eliza, Daniela and Katrina who helped with the build.

# DANIELA'S SPECIAL PLACE

At a training that I recently attended the participants were asked to do an icebreaker exercise and to think about a special place that they felt very connected to and why that was. I did not have to think long and my answer was clear: R-Urban!

Telling the others why I made this choice, a lot of things and very fond memories came to mind. On the one hand, I attended so many inspiring gardening sessions and workshops at R-Urban where I not only learned a lot but also had so much fun... from adults and children together kneading the clay for the tandoor oven with our bare feet, to standing in awe in Langdon Park tracking and observing bats dancing around us in the twilight, to braving the weather when building the willow bed and pond and still enjoying every moment of it.

On the other hand, I recall a lot of great communal meals there ... using the delicious vegetables grown on site, tasting and learning about delicious food from many different cultures and even new ways of jointly preparing food (who would have thought that you can prepare a delicious salad with 10 people tossing it up in the air?!). The interesting discussions and laughter around the table were definitely a highlight for me throughout the months.

But what makes R-Urban so unique and special to me are definitely the people! It is the energy, passion and friendliness of everyone there that always make me feel welcome and happy. It is also the curiosity and openness of everyone to share and contribute and the real sense of community that makes R-Urban a truly special place for me.







# KATRINA'S PEPPERS



Pepper plants are native to tropical America. They are a big favourite around the world, especially in Asian cuisines. They are an easy fruit to grow and vary from very sweet to extremely spicy. The spice or heat measurement of peppers is called Scoville Heat Units (SHU), which measures how much Capsaicin, (a natural chemical compound) is in peppers. The world's hottest chilli pepper is the Caroline Reaper, with 2.2 million SHU. Red bell peppers are the sweetest and surprisingly, yellow peppers contain the most Vitamin C.

In recent years, we've grown hundreds of peppers to be given away at workshops, planted at the Teviot Centre or onsite at R-Urban.

## When to sow

Sow pepper seeds indoors Mid-February to April.

Sow pepper seeds outdoors late March to April, after the risk of frost has gone.

## Method

Although it is possible to start pepper seeds outdoors in milder to warm weather, the best results happen with peppers that are started off indoors, or under cover in a warm environment outdoors (such as heated or glass greenhouse).

Small containers, such as a cleaned-out eggshell, yogurt pot, or seed starter tray can be used to get the seeds started. Starting the seeds in small containers is great for saving space and to help prevent the seed and seedling (baby plant), from getting too waterlogged.

Fill the small container with seed starter mix, or loose compost (not too heavy - it should break apart easily when handled).

Sow two or three seeds per pot. Seeds should be sown twice the width of the seed. For pepper seeds, that's about an 1/8 inch deep. The depth doesn't need to be exact, as pepper plants are very good at finding their way to the surface. But planting at this depth will mean there's less chance of the seeds rotting.



Pepper seeds like warm and consistent temperature. The ideal temperature for most pepper seeds is 18-24°C, (room temperature, warm kitchen, or sunny windowsills work well). The seeds will take 7 to 21 days to germinate (sprout), at this temperature. If the seeds take longer, they may be too cold, too warm, too damp, or too old. Once the seeds have germinated and show the first sign of green, remove the cover.

### Transplanting

If the seeds were sown 4 weeks before the last frost date, the ideal time to transplant outdoors, is 4 weeks after the last frost date, (8 weeks in total from seed to transplanting).

Indoors: Once the seedlings have two or four leaves, thin them out. The seedling plants will need well-draining soil and regular watering. If the starter pot has no holes, either make holes, or transplant the seedlings into a small pot with holes in the bottom. And then place the seedlings on a sunny windowsill. The seedlings can stay in their pots until they reach three times the height of their pot. They will then need to be transplanted into a bigger pot.

Once the weather is warmer and the risk of frost has passed, the pepper plant can gradually be taken outdoors over 5-7 days. Leave the plants outside for one hour on day one and gradually increase the hours each day. On the last day leave them out overnight and they can stay outside. This process is called 'hardening off' and helps prevent plants in general, going into shock. Once hardened off, the plant can be potted in its permanent home. Ensure to remove lower leaves and any leave

Outdoors: When the seedling plant has two, or four leaves, ('true leaves'), they can be 'thinned out'. This means to remove pepper seedling plants, so there's one plant per hole. The seedlings that are removed, can be re-sown, or composted.

### Support

The pepper plant may need some support when it reaches a big height, or when it starts to produce fruit. A single cane or garden stick can be used.

### Increasing yields and troubleshooting

Pests: They are mostly an issue when the plant is tender and young. Once the plant is older, pests may eat some of the leaves. Keeping peppers away from other members of the Nightshade family (such as tomatoes, potatoes, aubergine), can help to keep infestations down. If the pests are persistent, natural methods can be used to remove them. Such as removing them by hand, using water spray, diluted natural soap or and neem oil.

Pruning: Only prune leaves that don't look healthy or are touching the ground. Pepper plants don't really require pruning beyond that.

Airflow: Pepper plants need good airflow to help them defend against infestation, infections, and disease, such as blight and powdery mildew. Ensuring they're not overcrowded and that leaves don't touch the ground, is a good way to help with this.

Watering: Pepper plants need watering once a week. If there's a heat wave, then they may need watering once a day. Sticking a finger into the soil and seeing how damp the soil is, is the best way to check if watering is needed. Over watering will cause the plant to rot, or other issues. Underwatering can cause the plant stress or to die back. If a pepper plant is very thirsty, it will droop and recovers very quickly once watered. If it is in too small a pot, the pepper plant will use up the moisture in the compost too quickly. Repotting to a bigger pot will fix this.

Feeding: Fertilise every 1-2 weeks once flowers start to appear. Use a good quality tomato feed, or seaweed feed. Adding calcium to the soil before flowing, can reduce the risk of 'blossom end rot.'

Light: Peppers need 6-12 hours of bright direct sunlight.

Pollination: Bees and other pollinators do a great job. But gently tapping, or using vibration, can increase the chances of pollination and produce a high yield (more peppers).



Katrina and a pepper plant at R-Urban, summer 2022



# CAMERON'S BUTTER



Making butter is one of the things we've done again and again at R-Urban. It's incredibly simple, very satisfying and kids love it.

## Ingredients

- A pot or two of double cream (make sure it's double cream and not one of the artificial versions made from oils - looking at your Elmlea)
- A clean jar
- A pinch of salt
- Some fresh herbs if you have them
- Lots of energy

## Method

1. Empty the pot of cream into the jar, or distribute it between several jars if there are a few of you. Add some finely chopped herbs if you'd like - we often use rosemary, or sage, or chives, which we have plenty of in the garden at R-Urban
2. Shake the jar very vigorously
3. The contents of the jar will get quite fluffy
4. Keep shaking the jar
5. After 10 minutes or so, it'll feel like you're wasting your time and you might want to give up
6. Shake the jar for a bit longer
7. Suddenly, the contents of the jar will start to congeal into a yellow blob, with a white liquid sloshing about
8. Keep shaking - you're nearly there
9. Once the contents of the jar have properly separated, you'll be left with a soft, fluffy, herby butter as well as some buttermilk. Some people drink the buttermilk, but you can also stir it into food or use it to make dough for naan
10. Season the butter with a pinch of salt and serve

# ANDY'S RECIPE FOR R-URBAN



Over the past 4 years we've being proud to see the hub grow and expand in all manner of new directions. A huge part of that has been through our participation in the JustFACT project which has enabled the project to reach more people, run more workshops, to grow, eat and compost more food. This recipe book is testament to everyone's hard work and collective input into realising R-Urban as a place where people want to hang out and take action.

## But what makes R-Urban R-Urban?

1. A bit of chaos. Our workshops can sometimes be chaotic, multiple activities all happening at the same time; young children playing in the woodchip, un-prepared public workers, the noise from the A12 ... The chaos is part of the magic, especially on hot summer days.
2. Cups of tea and fresh lemonades. Hospitality and making all feel welcome is essential, you can always come and join us for a tea, coffee and during the warm summer months an ice-cold lemonade with fresh mint. Refreshment is non-negotiable.
3. An incredible breadth of facilitators and knowledge. One of the most rewarding aspects is the number of amazing session facilitators and workshop hosts who run our programme. We've shared knowledge on cooking, pickling, fermenting, foraging, repairing, darning, dyeing ... and much more, everyone brings a unique perspective and deeply situated knowledge to the project.



4. A place to try and fail. We often start projects from a position of ignorance or not knowing but with a desire to learn more or passion to make a change. R-Urban is a unique space which allows ideas to be tested, developed and in some cases fail (gloriously). The process is always one embedded in learning and aiming to work towards social and environmental change.
5. Caring with others. Joan Tronto and Bernice Fischer famously defined caring as,

“a species activity that includes everything that we do to maintain, continue, and repair our ‘world’ so that we can live in it as well as possible.”

R-Urban is a space that needs caring for. It is by a wide network of regular volunteers, and embedded organisations who help to make the project happen. A project of collective authorship and reflects the idea that we ‘care with’ rather than for others. In making R-Urban we hope that it is a small but significant contribution to repair our world and live in it joyfully.



# THANK YOU

Thank you to everyone who's contributed a recipe, and to the many people who bring R-Urban to life every single week.

Thank you to our funders, especially to Wen and Just FACT who supported the publication of this book, and who are behind so much amazing work that has been taking place in Tower Hamlets over the last few years.

Please keep sending us recipe ideas - we might have to make a second edition!





**A collection of recipes for meals, for growing techniques, for technologies, for approaches and for ideas, capturing four years of lessons from R-Urban Poplar**

**A public works publication  
Supported by Just FACT**



**Wen.**