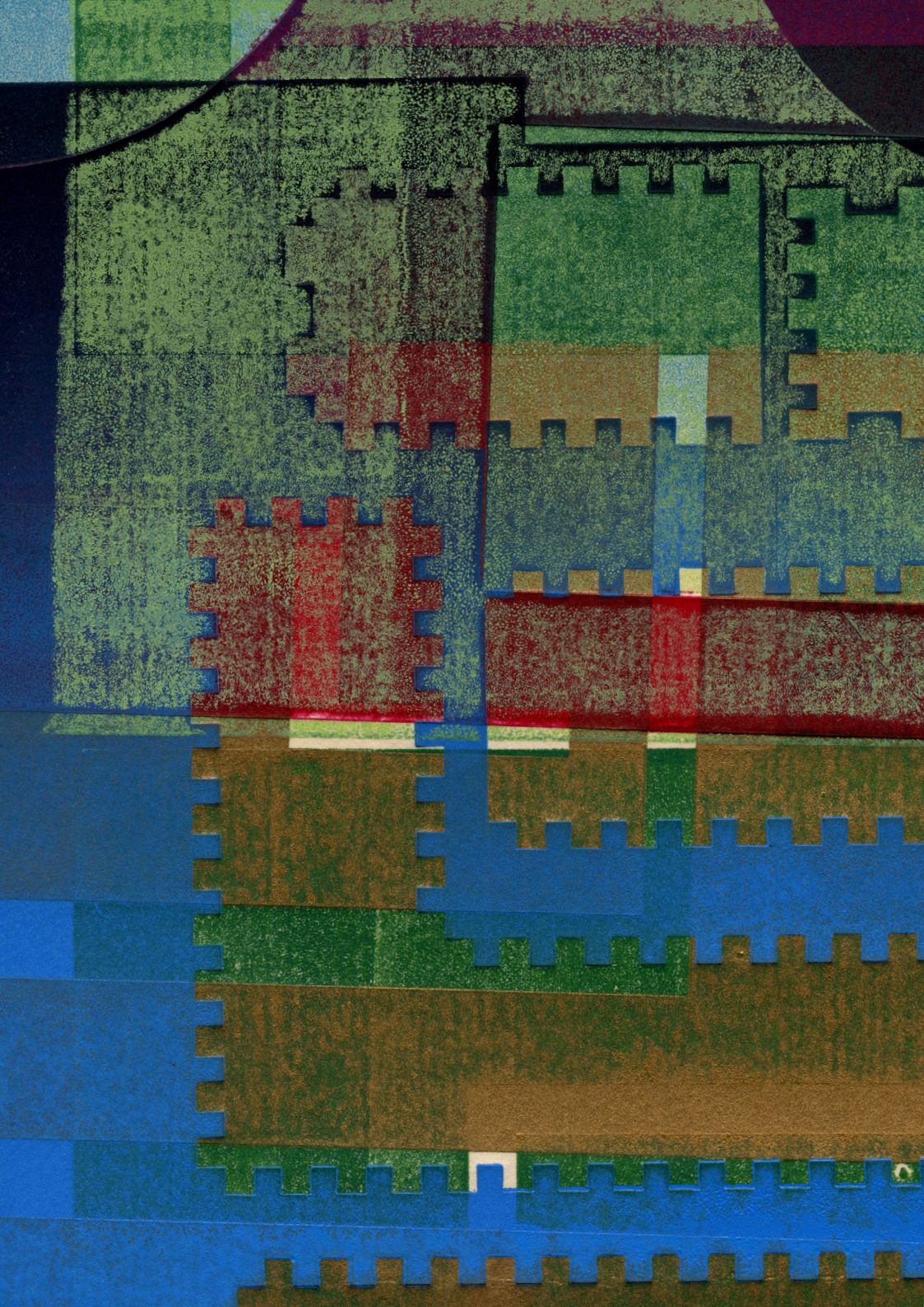


The People's Kitchen

Zine #1

Hot Compost





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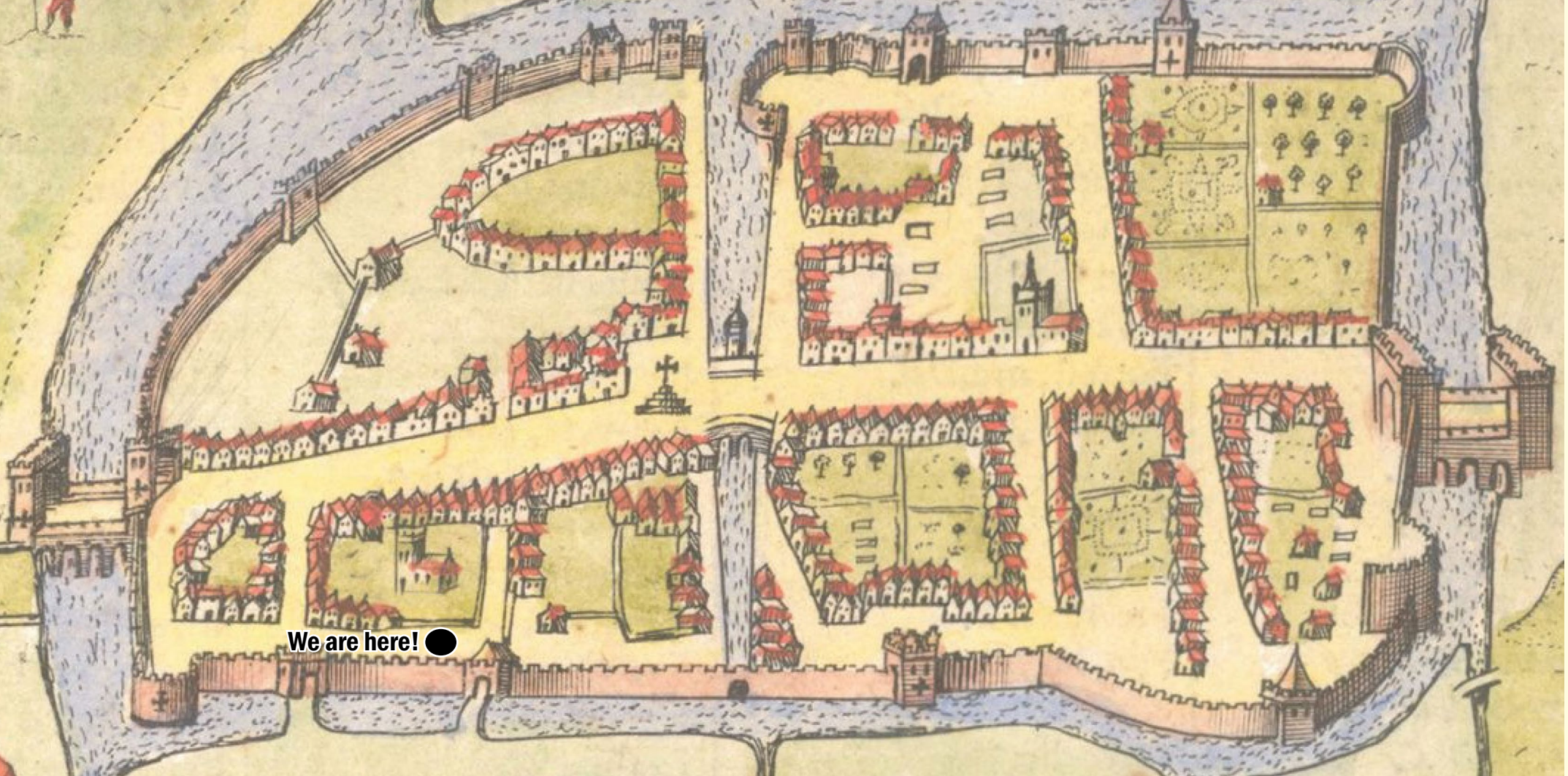
Kate O'Shea is an artist and organiser. In 2015, she co-founded The People's Kitchen, a space where people could come together to cook, eat, build community, and have a laugh as they shared ideas and formulated plans to address the challenges we face as communities today.

As the size of the events grew, the fun continued, but the underlying purpose—leading systems change from the ground up—got a bit lost in the mix. With the People's Kitchen North Main Street, the project returns to its roots. The People's Kitchen provides a framework for people passionate about systems change to literally sit around the kitchen table, share information and ideas from different perspectives, combine skills and knowledge, and formulate plans.

The People's Kitchen focuses on the energy of collaboration and mutualism—rather than individualism, isolation, and competition—to get things done. Connection and building relationships make work more enjoyable, more nurturing, and more productive. Link, exchange, imagine, do. And have fun doing it.

This series of The People's Kitchen—set in North Main Street, Cork City, Ireland—explores this approach through the lens of soil and food growing in an urban neighbourhood.





John Speed's 'Corke' from his Province of Munster c.1610-11

This series of the People's Kitchen takes place in Grattan Street, Cork, Ireland, just off the original medieval street of the city (North Main Street) and within the area previously enclosed by the city walls. This part of the city was urbanised almost 800 years ago.



ERIN lives just off North Main Street. She is an urban planner and is involved in community projects related to ecological regeneration.

KATE is the initiator of The People's Kitchen and is co-founder of Broken Fields collective with

AIDEEN, ENYA & LOUISE.

Broken Fields is a collective that breaks down silos between disciplines (in fields such as art, architecture, community work, activism, and research) in order to unlock the strengths of diverse practices and work toward systems change.

ANÚ is the hot compost pile built in Erin's back garden as part of this People's Kitchen. She is named after the Irish land goddess.





HEALTHY SOIL

WE LOVE SOIL

Understanding the importance of compost starts with understanding the importance of soil.

We don't give soil much thought, but it is fundamental to our lives: 95% of our food comes from soil. Healthy soil supports healthy trees and plants, which support biodiversity. Healthy soil filters water and helps prevent flooding. Soil can also capture greenhouse gases.

**HEALTHY SOIL=
HEALTHY PLANET**

WHAT IS SOIL?

Soil is a mix of very fine pieces of rock (sand, silt, and clay) and **organic matter**, which are the bits of anything that was once alive. Healthy soil also contains pockets of water and air. A lot of soil is degraded and lacks organic matter. Compost can help restore this.



↑
SAND



↑
SILT



↑
CLAY



↑
**ORGANIC
MATTER**



**'If you
don't like
bacteria,
you're
living on
the wrong
planet.'**

-Stewart Brand, Writer/Innovator

WE LOVE BACTERIA!

Organic matter in soil is important, because it is a key food source for the infinitesimal number of bacteria and other microscopic creatures called microbes that live in the soil. Eew, bacteria. Quick, grab the antibacterial wipes. But actually...don't. Not all bacteria are bad.

While some are parasitic and only use people for their own gain, many other bacteria are our closest allies. We are in a mutualistic relationship, where we and the bacteria benefit from the interaction. Humans provide bacteria with a place to live (on our skin and in our guts) and with food to eat. In exchange, bacteria help us digest our food and keep us safe from the bacteria that want to harm and exploit us. We could not live without our ally bacteria.

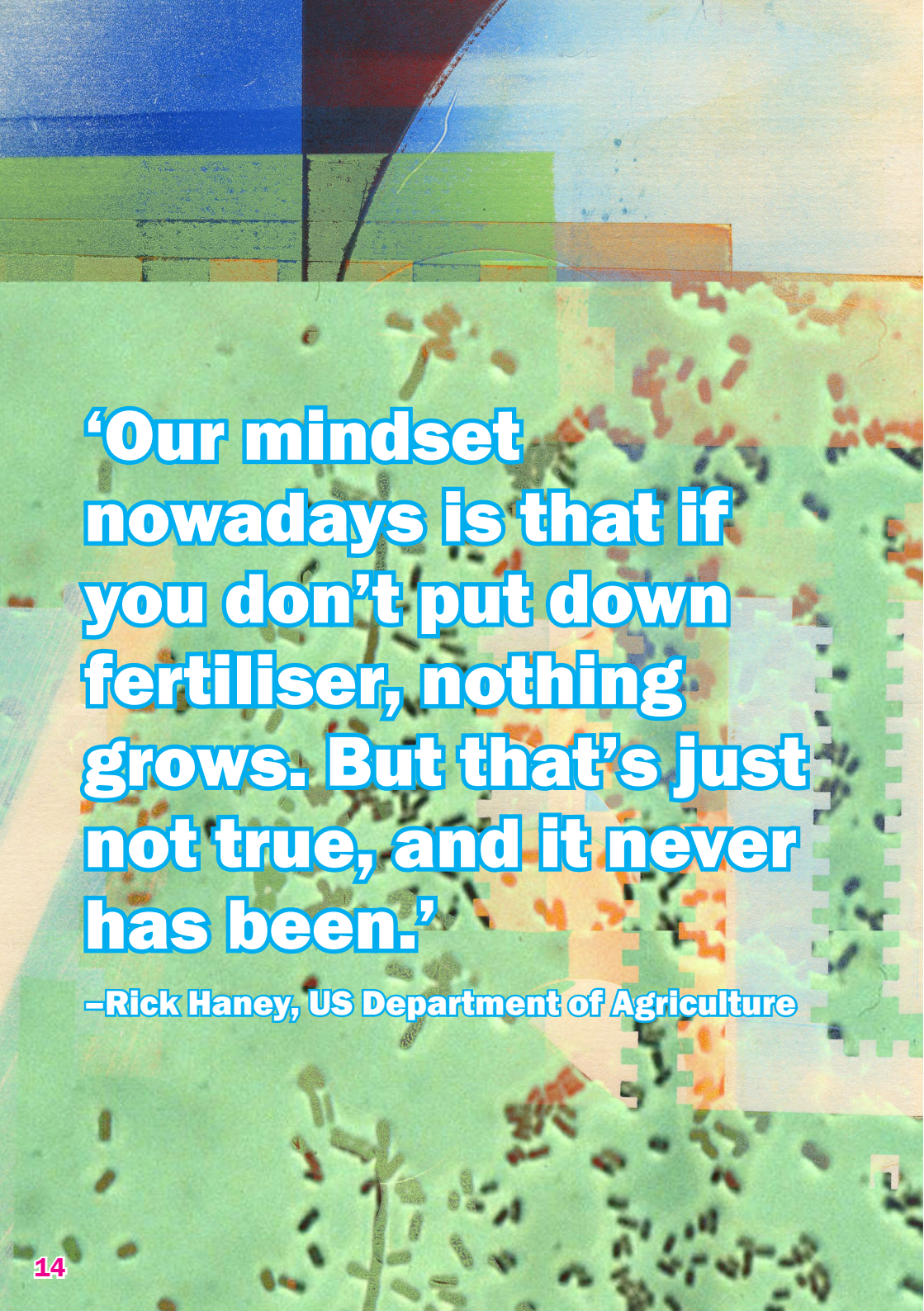
Bacteria and other creatures that live in soil are crucial for people, too. They help produce better-tasting and more nutrient-dense food. They are

A teaspoon of healthy soil contains up to 1 billion bacteria and other microscopic soil dwellers.

also what give soil the ability to absorb floodwater and capture greenhouse gases, due to the way that they structure the soil.

And we're not the only ones with this good thing going on. Plants have a mutualistic relationship with soil microbes as well. As with humans, microbes and plants help feed and protect each other. We're all in it together.

**BE MUTUALISTIC,
NOT PARASITIC**



‘Our mindset nowadays is that if you don’t put down fertiliser, nothing grows. But that’s just not true, and it never has been.’

–Rick Haney, US Department of Agriculture

THE SHORTCOMINGS OF FERTILISER

The main way soil microbes help plants is by breaking down organic matter and rocks into simpler compounds. This releases essential nutrients that plants can absorb. Fertiliser can perform the basic function of providing essential nutrients, too. However, fertiliser is a one-trick pony that can only help plants grow.

Fertiliser cannot protect plants from pests and diseases like mutualistic microbes do, which often leads to the use of pesticides along with fertiliser. Fertiliser cannot secrete proteins that help bind soil particles together like microbes do. This **aggregation** is what creates soil structure and enables it to retain flood water and capture greenhouse gases. Unlike microbes, fertiliser cannot provide a steady, gentle supply of nutrients when

plants need them. Which means a lot of fertiliser goes unused and runs off or seeps down, polluting rivers and groundwater.

Fertiliser cannot perform most of the jobs that microbes do, and, worse yet, it can seriously harm microbe communities. This means that the microbes are not around to do the other jobs, either. In addition, synthetic fertiliser is manufactured from mined minerals and extracted from nitrogen in the air. These processes use a lot of energy (natural gas).

If we want healthy plants, a healthy food supply, and a functioning ecosystem, we need to feed the soil microbes rather than just focusing on direct feeding plants with fertiliser.



COMPOSTING

Composting is the process of breaking down organic materials in a controlled fashion. It is a collaboration between people—who supply microbes with food like apple cores and hedge clippings—and our ally microbes.

'Hot' composting is what happens when a large volume of mixed compostable stuff (like a cubic metre or more) is piled up at once. In response to all this food, the microbes throw a bacchanal party and multiply rapidly. The pile heats up, the same way a crowded club does when everyone is dancing. At these high temperatures (around 55° C), the materials break down in only a few weeks.



**GETTING THE PARTY
STARTED AND KEEPING
IT LIT REQUIRES A BIT
OF PLANNING.**

FOOD: Similar to humans eating protein and carbs, microbes like a certain mix of nitrogen-rich materials (like vegetable peels & coffee grounds) for growth and carbon-rich materials (like cardboard and autumn leaves) for energy.

AIR: Composting microbes breathe air, just like us. The consistency of the pile needs to create decent air flow.

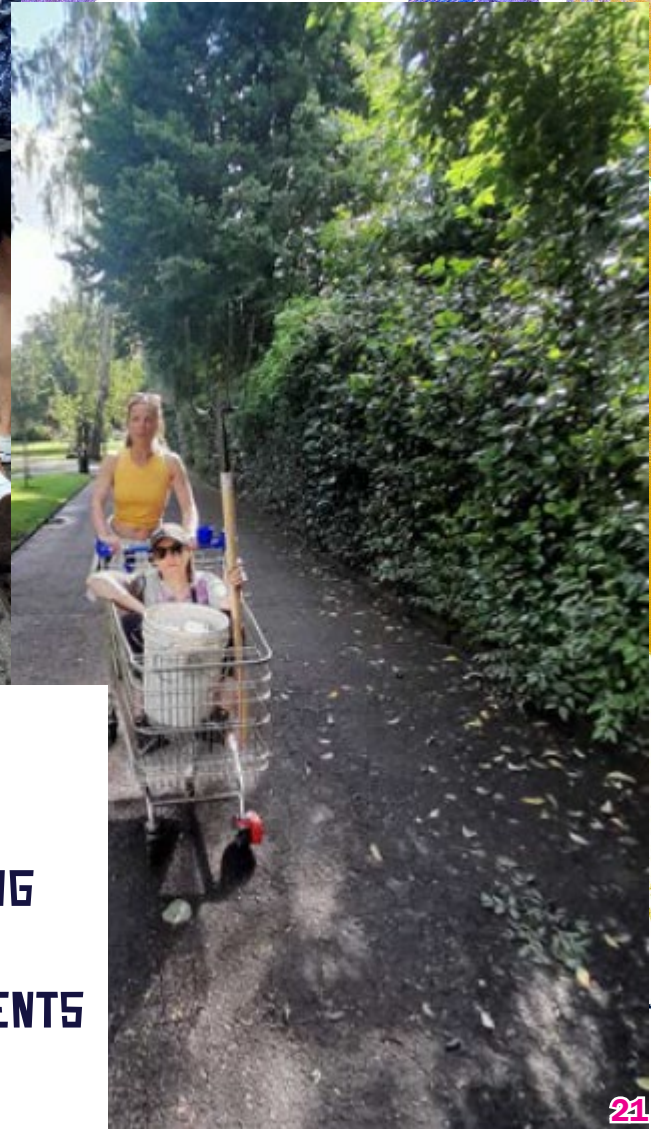
WATER: Microbes have no legs and instead move in a thin film of water. Moisture levels in a compost pile should be damp like a wrung-out sponge. Too dry-no party. Too wet-they drown and other bacteria that make things slimy and smelly move in.



Nitrogen – rich grass clippings



Carbon – rich autumn leaves



**AROUND
TOWN
SOURCING
LOCAL
INGREDIENTS**



GREENS

Nitrogen-rich materials are often called 'greens', because they are green and/or juicy. However, they are not always green in colour. All food scraps are nitrogen rich, including coffee grounds.

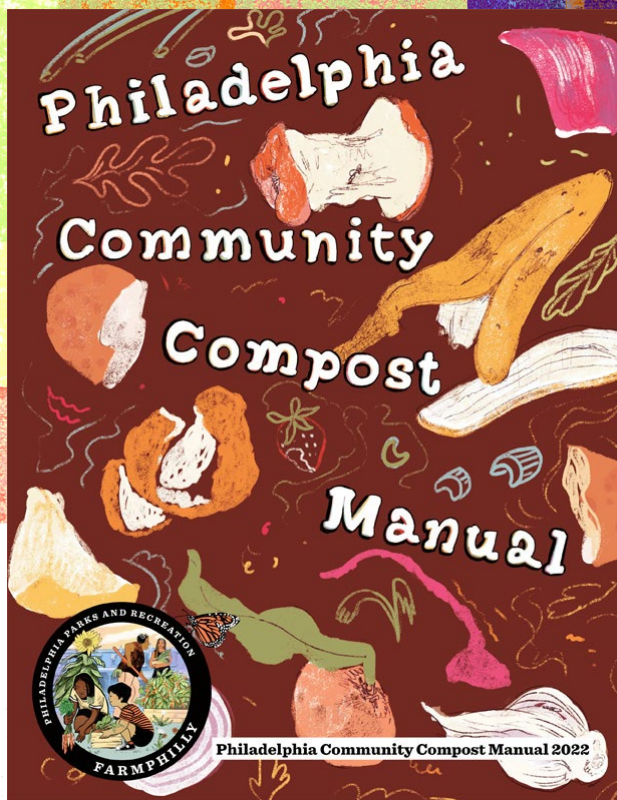
Cardboard
from
Bradley's



Cardboard from Liberty Grill, Washington St.

BROWNS

Carbon-rich materials are often called browns because they are fibrous, dry, and woody. Examples of browns are dried leaves, newspaper and cardboard.



COMMUNITY COMPOSTING DONE RIGHT

A Guide to Best Management Practices
by Linda Bilsens Brolis and Brenda Platt

**Neighborhood
Soil Rebuilders**
COMPOSTER TRAINING PROGRAM

ILSR INSTITUTE FOR
Local Self-Reliance

March 2019
ILSR.ORG







PREP

Like cutting a cake or carving a turkey, tearing materials into smaller pieces makes them easier for microbes to eat.

Materials that create pores in the compost pile allow air to circulate so the microbes can breathe.



Air Pockets. A total Must.



BUILDING THE PILE



KEEPING THE PARTY GOING

Four days after making Anú, we 'flipped' her, rebuilding the pile to move the outside layers to the centre and the central core materials to the external surface.

Flipping the pile fluffs up the materials, which ensures good air flow so that the microbes can breathe. It also ensures that all the materials spend some time in the hottest part of the pile to kill off any potential pathogens or weed seeds.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
						25 BUILT PILE
26	27 FLIP 1	28	29 48°	30 45°	1 50-55° HOTSPOT 60°	2 FLIP 2 45-55° MUSHROOMS!
3 55°	4	5	6 53° MUSHROOMS	7	8 MORE MUSHROOMS	9 FLIP 3 35-40°
10	11 UP TO 65°	12 UP TO 66°	13	14	15	16 45-50°





MUSHROOM BELT

Some hot compost gets flipped a lot, every other day for seven or more flips. While this speeds up the process, it can break fungal threads that may be spreading through the pile. We flipped Anú the minimal recommended amount, three times, to keep the party fungal friendly.





AFTER PARTY

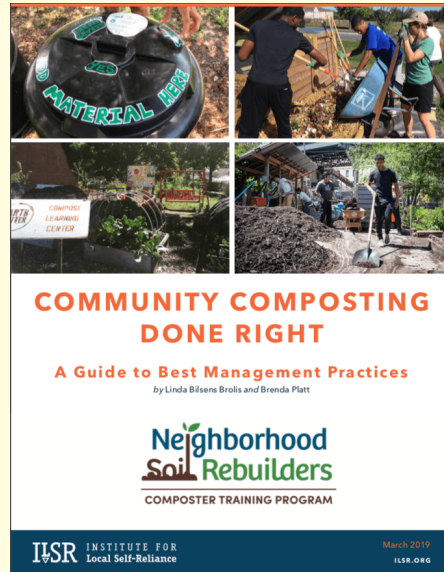
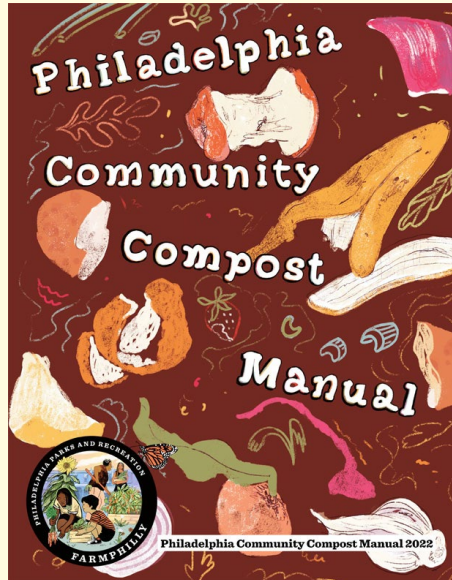
Once the temperatures drop, hot compost needs to sit and 'cure'—ideally for a few months—so the breakdown process can continue. Hot compost that is too fresh can damage sensitive plant roots.



ANÚ READY FOR USE IN COMMUNITY GROWING PROJECTS

Resources

Free online resources



www.ilsr.org

Institute for Local Self Reliance, Washington DC
(Composting for Community Section)

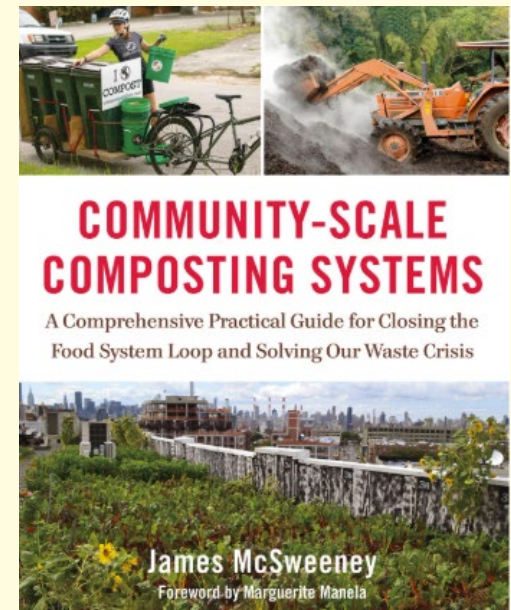
www.motherjones.com

A Brief History of Our Deadly Addiction to Nitrogen Fertilizer
(2013)

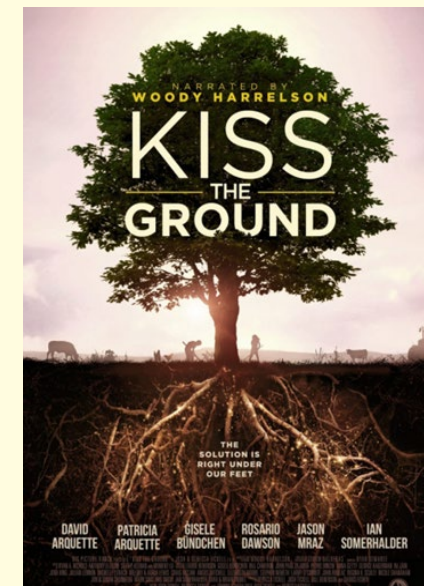
e360.yale.edu

Why It's Time to Stop Punishing Our Soils with Fertilizers
(2017)

Some useful books



Documentary



The Fine Print

Hot composting versus other methods:

There are many ways to break down organic materials, and each method has pros and cons.

Pros & Cons of Hot Compost

Pros	Cons
	
Breaks down materials quickly	Produces higher carbon dioxide emissions
Kills off potential pathogens (such as <i>E. coli</i> in food scraps)	Loses substantial material through conversion to heat and emissions
Kills off plant diseases and weed seeds in garden trimmings	Requires a large volume of material all at once

Consider what method may be best for you in each circumstance. *The Compost Coach* book outlines several methods (including hot, cold, worm, and bokashi). There are also many free resources on-line.

Cardboard shredding: While cardboard is an easily available urban resource that works well as a 'brown' (carbon-rich) material in compost, we have not discovered a fast way to shred it easily without investing in expensive equipment. For Anú and other projects, we have torn it by hand, cut it in strips, used an office paper shredder, and tried a chipper/mulcher. The experiments continue. Tips on which cardboard to use and not use in compost are addressed in *The Compost Coach* book and in other free resources on-line.

Regulations: Ireland's rules for composting are set out in the national Waste Management and Animal By-Products legislation. The rules establish that

- Household: Each household may compost its own organic materials in its own back garden/ at their home without needing any permission.
- Large Commercial Facility: Requires a permit or a licence and planning permission
- Community Composting: There are no specific rules or exemptions at present; this means that the complex and expensive permitting processes aimed at large-scale commercial operations may technically apply to such projects.

While safety (no spread of pathogens) and maintaining the amenity of the surrounding environment (preventing problems with odour and vermin) are important for every scale of composting, community composting requires its own set of rules, tailored to its small scale. Two resources that could provide inspiration for new Irish legislation include the Zero Waste Europe report *Community Composting: A Practical Guide for Local Management of Biowaste* (zerowasteurope.eu) and policy details available from the Institute for Local Self Reliance (Washington, DC; ilsr.org)



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create national development
agency for collaborative arts

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the arts

artscouncil.ie