

Presented by: Matt Rose, Environmental Planner

Created by: Paige Wilson *Waste Reduction & Diversion Planner*

Food Waste Composting at Home

Using your Jora composter.



NEW HAMPSHIRE
DEPARTMENT OF
**Environmental
Services**

Thank you project partners!



Participating Lakes Region Communities

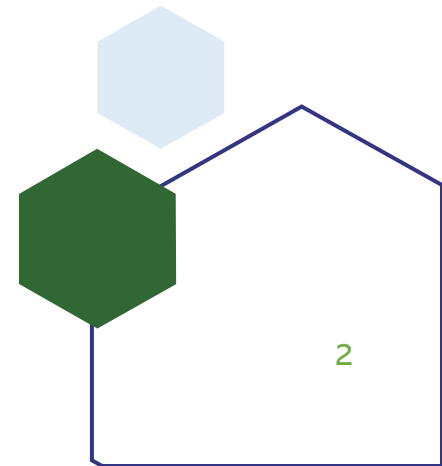
Ashland

Moultonborough

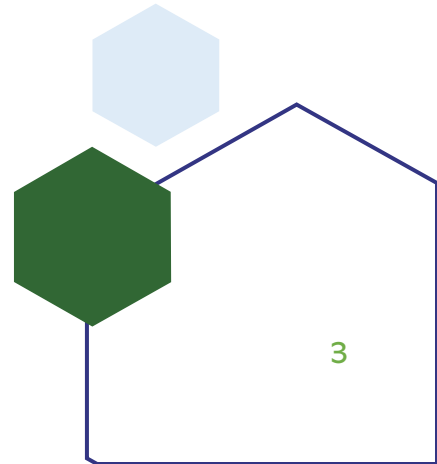
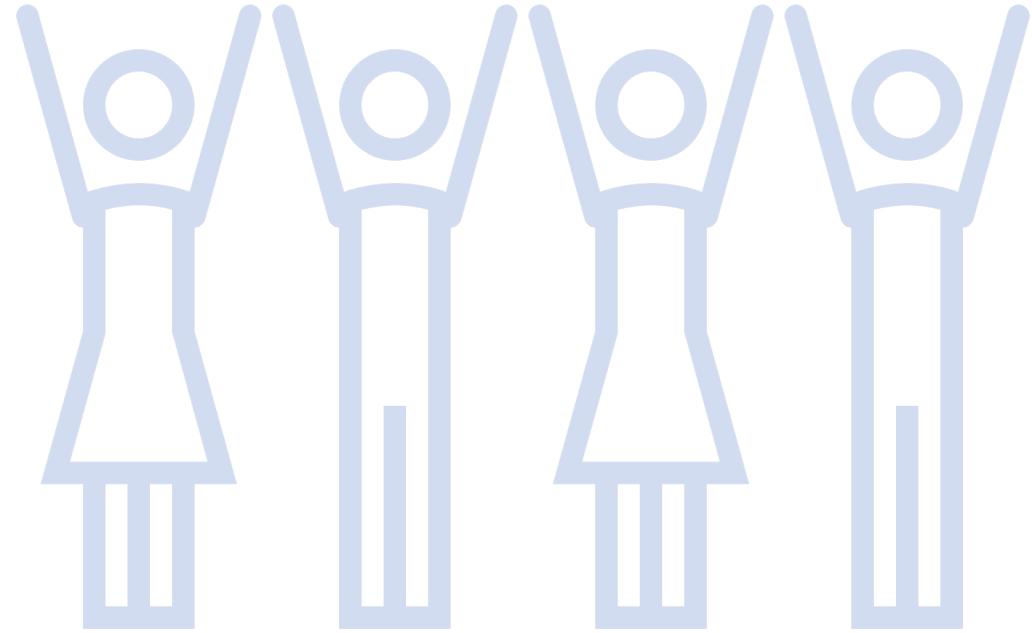
Bristol

Wolfeboro

Gilford



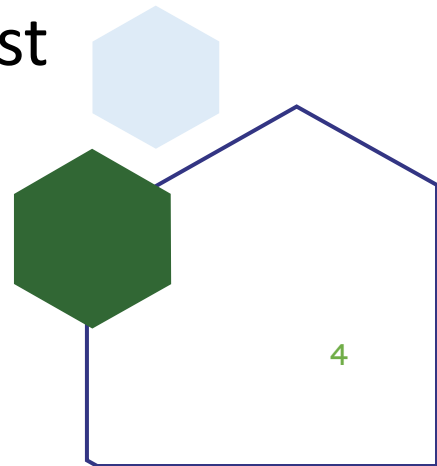
Thank **YOU**
for joining us!





PRESENTATION OVERVIEW

- Why is food waste an issue?
- What is composting?
- Benefits
- The Basics
 - Build your recipe
 - Using your Jora
- Using your finished compost
- Q&A Discussion



Why is food waste an issue?





A snippet of the problem...

- **1/3** of food produced in U.S (each year) is **never eaten**.
- Widespread hunger and food insecurity.
- Food makes up **24% of our trash**.
- Wasted food is responsible for 58% of landfill **methane emissions**.



What is composting?

Got food waste? Compost it!

Raw materials

ORGANIC MATERIAL:

- GREENS
- BROWNS

AIR

Water

Microorganisms

Process

water

heat

CO₂

Compost system

It's all about the Decomposers!

Product

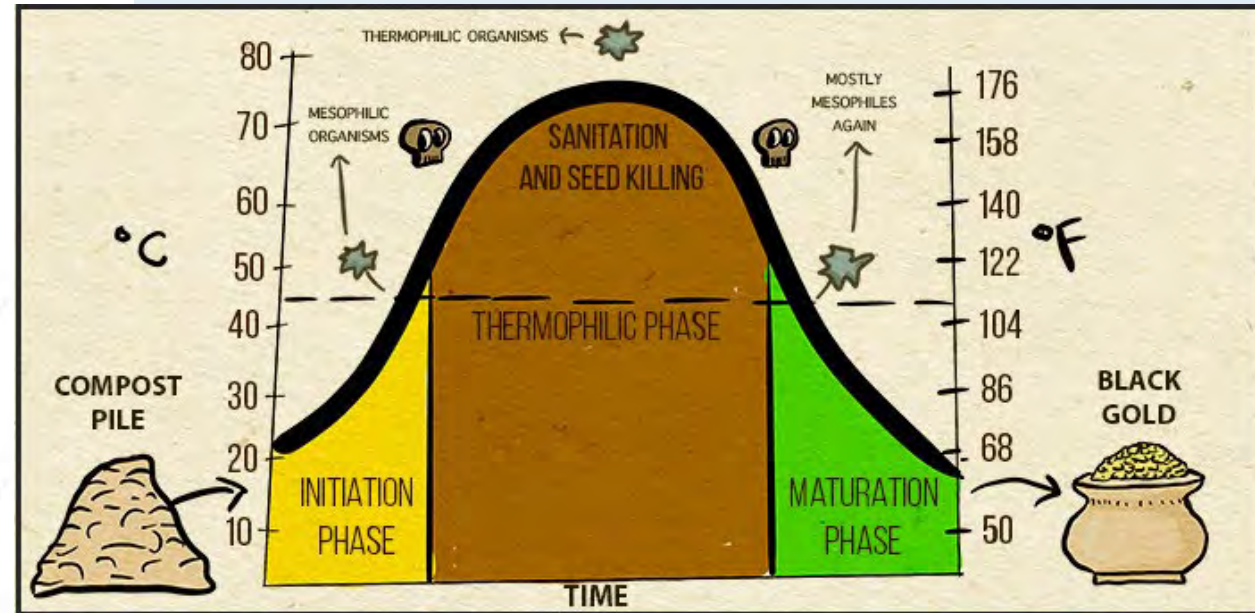
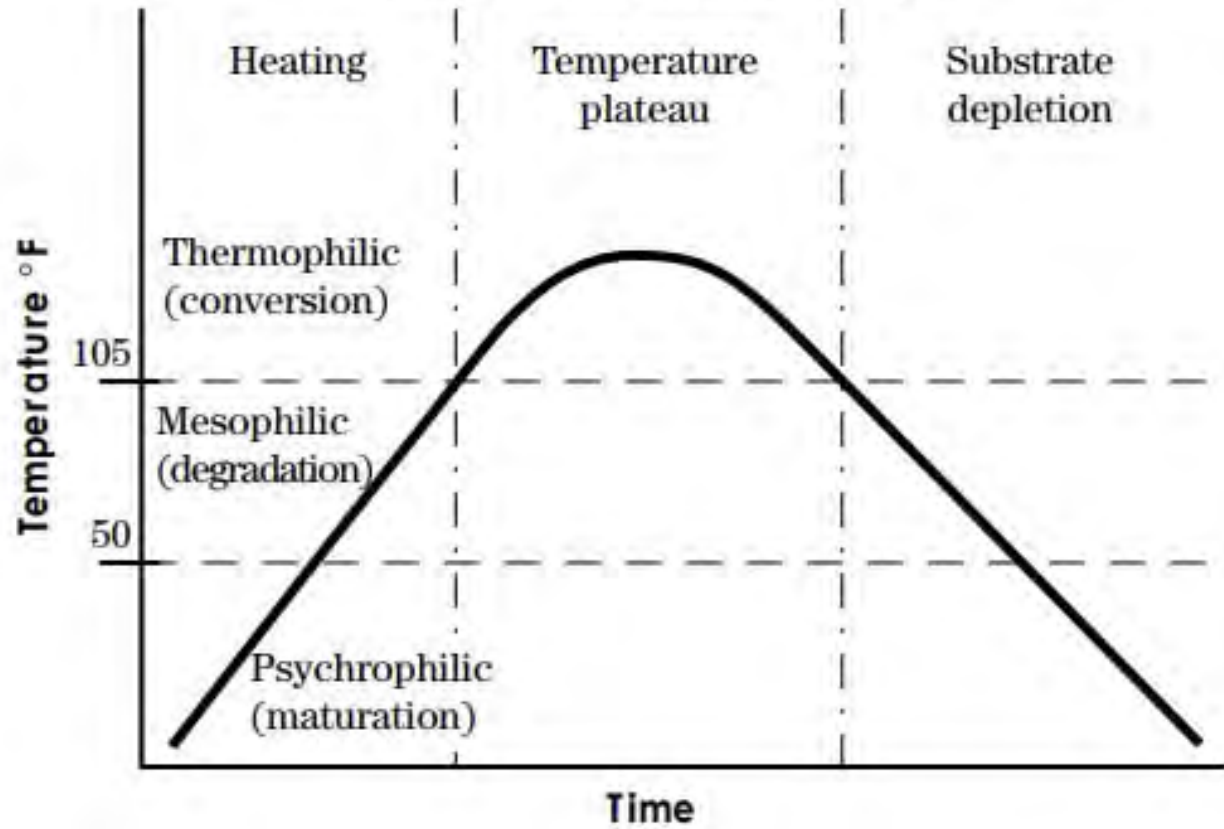


Finished compost containing organic matter - including carbon, chemical energy, nitrogen, protein, humus, mineral nutrients, water and microorganisms

O₂

TEMPERATURE FLUCTUATIONS

Compost temperature ranges



What are the benefits of composting?



Benefits of Composting

- ✓ Removing food waste = fewer trash pickups
- ✓ Town will avoid expensive hauling fees (\$/trip) which saves tax dollars!
- ✓ Save landfill capacity
- ✓ Reduce greenhouse gases
- ✓ Captures the time, energy, and resources put into growing, processing, transporting our food!



Benefits of Composting

Finished compost:

- Reduces need for synthetic fertilizers
- Helps control erosion, improve soil stability
- ✓ Support your garden, flowers, trees, lawn!
- ✓ Composting can help you feel better about your waste habits...

BUT waste *prevention* is always best.



The Basics: How to Compost at Home



Keep your decomposers happy!

Setting up the right environment and conditions is KEY



1. Carbon: “**Brown**” materials (dry ingredients)

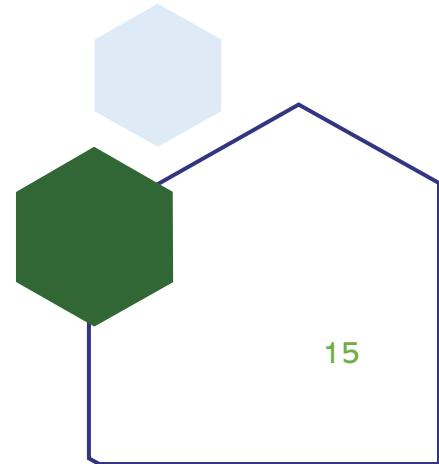
2. Nitrogen: “**Green**” materials (wet ingredients)

> **Keep the material small:** chopping, mowing, chipping, shredding

3. Moisture: like a damp sponge, required to keep microorganisms alive & active

4. Air pockets (oxygen flow): your decomposers need to breathe!

The warmer the temperature, the happier your decomposers!



What GOES?

“Greens” – wet, nitrogen ingredients



- Fruit & vegetable scraps
- Egg shells
- Rice, bread, grains
- “Soft” plant waste



- Coffee grounds & filters
- Tea bags (**no staples**)
- Fresh cut grass

What GOES?

“Browns” – dry, carbon ingredients



sawdust/wood shavings



Horse bedding pellets



shredded newspaper



dried leaves



Create a mix of browns creates air pockets and feeding spaces (“tables”)

Suitable for composting

- Food Scraps (raw, cooked, fried and smoked)
- Meat and Bones (Bones will be cleaned but not composted)
- Fish and Bones (Bones will compost)
- Seafood (shrimp, lobster, crab etc)
- Vegetables (raw and cooked)
- Eggs and Shells
- Bread (fresh dried or moldy)
- Fruit (all kinds including citrus fruits)
- Coffee grounds and filters
- Teabags and tealeaves
- Paper (shredded paper, the smaller the better)
- Egg Cartons (torn up into small pieces)
- Bedding from hamster/guinea pig cages
- Wood pellet cat litter (used or unused)
- Soft plant waste (dead flowers, grass clippings, leaves, weeds etc.)

Good rule of thumb for
STARTING/BEGINNERS...

“If it grows, it goes.”

Kep
It
Simple
Smarties

Materials you can graduate to LATER...

CAUTION

Requires high, consistent temperatures (over 131^oF for 5+ days)

- **Large quantities** of meat, fish, dairy
- Meat bones
- **Excessive** oils, fats, grease



-
- Pet waste
 - 100% biodegradable cat litters

When in doubt, throw it out.

Unsuitable for composting

- Cigarette butts and cigarette ashes
- Chewing gums Tinfoil and other metals
- Rubber and plastic items
- Vacuum cleaner bags
- Milk or juice cartons, cling film
- Sawdust from treated wood
- Liquids, Milk soup etc
- Disposable nappies / Diapers
- Non wood pellet based cat litter
- Hard wood plant stems (even if shredded)

ALWAYS AVOID:

X FRUIT STICKERS

X Treated/painted wood

X Diseased or invasive plants

X “Compostable” foodware/bags

X Plastic-coated paper





Using Your Jora Composter

Assembled Tumbler at the Ashland Transfer Station

Dual chambers for continuous composting



Maturing.

Cooling down.

Do not add
food scraps.

**Actively
composting.**

Heating up!

Keep adding
food scraps.

Insulated. Rodent proof. Tight fitting latches. Padlock if needed.
Liquid may seep through the cracks. That's OK!

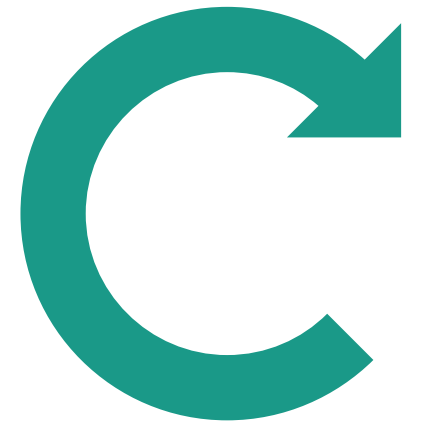
Rotate! Rotate! Rotate!

Rotate your tumbler every other day, and at least every time you add waste.

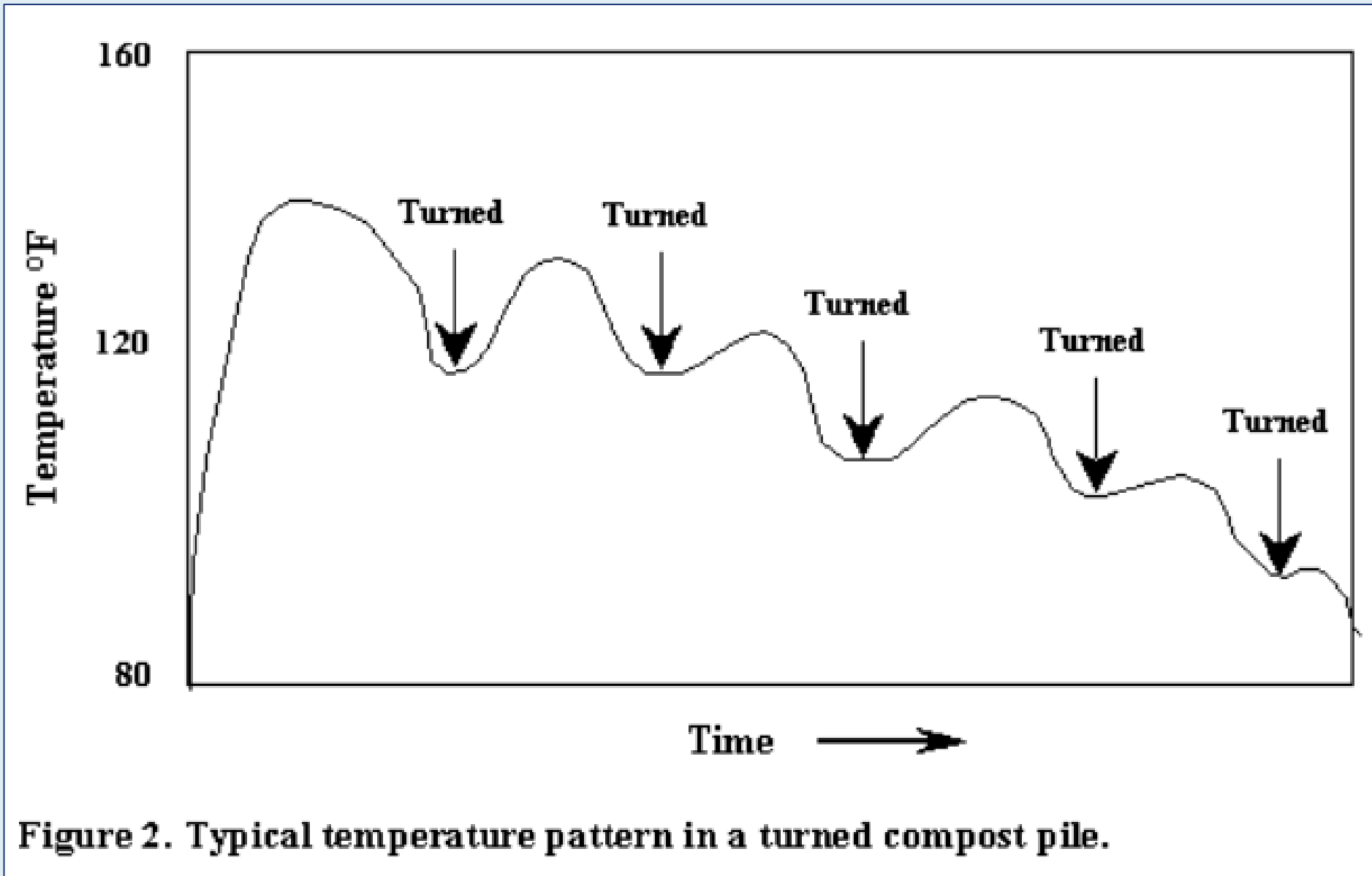
Keep oxygen flowing through the mixture.

Check air vents regularly to make sure holes are not clogged.

Smell ammonia? Too wet and compacted. Add sawdust, shavings, or wood pellets to the mix.



ROTATING YOUR JORA PRODUCES HEAT



For the best results...

- Add kitchen food scraps on a continuous basis in small quantities, every day or two.
- Chop up waste into small pieces.
- Avocado or peach pits, corn cobs/husks, watermelon rinds... will take a minute.
- Add only what you are certain is compostable.



Jora Compost Tumbler 270

Capacity: 6-8 gal/week

Volume: 9.5 cubic feet (70 gal)

Weight: Approx 86 lbs

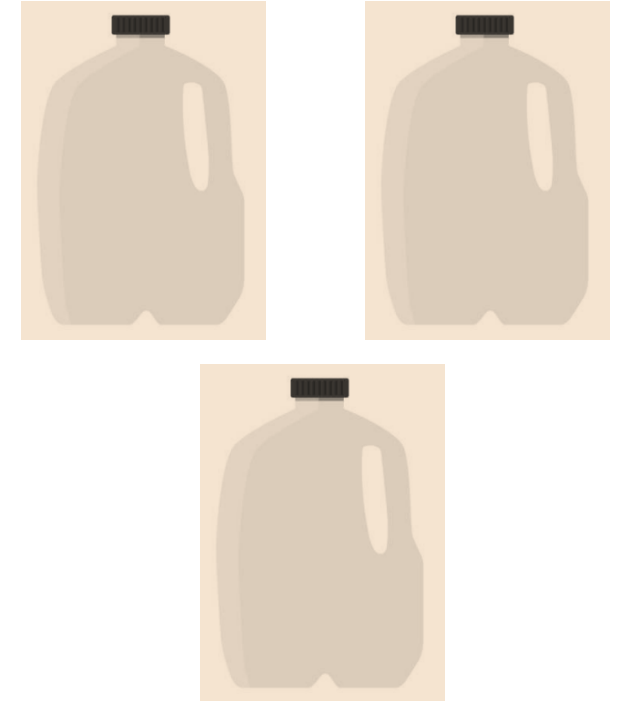
Suitable for: Larger households (4 and more People, B&B, Small restaurants, kindergartens, care home etc.

Basic Home Compost Recipe – “Easy as 1 : 3”

“Greens” (Nitrogen)
1 volume



“Browns” (Carbon)
3 volumes



ALWAYS ROTATE your
Jora after adding food
scrap and carbon material



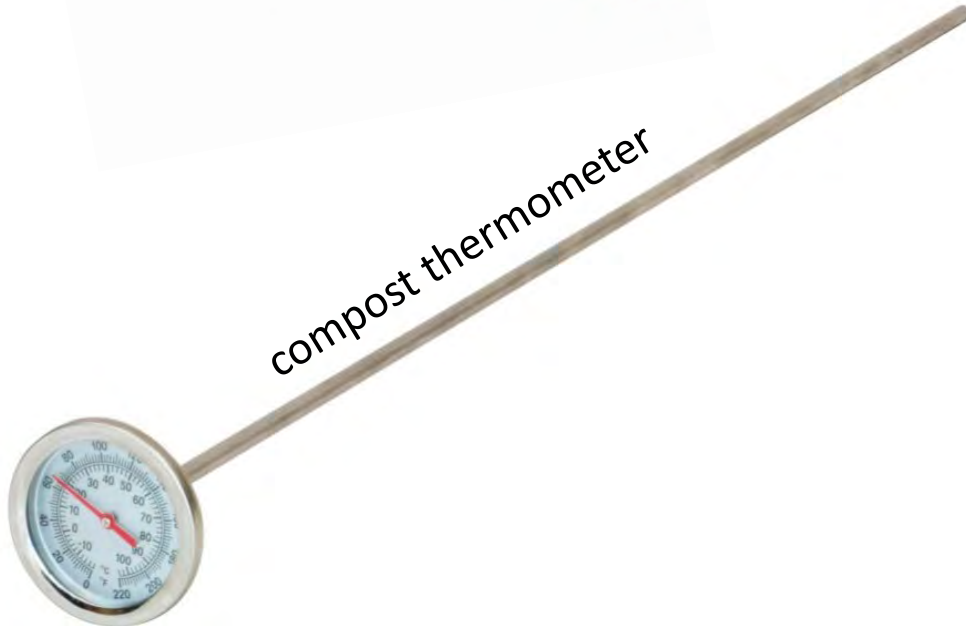


The finished product...

**NO visible
food scraps**

**Compost is
dark, crumbly,
earthy smelling**

Helpful tools



compost thermometer



compost turner

OK...what do I do with the finished compost?



Questions?

Paige Wilson

Waste Reduction & Diversion Planner

paige.a.wilson@des.nh.gov

(603) 271-0964

Need help troubleshooting?

www.joracomposters.com



Scan the QR CODE

Program
Materials &
Information

Helpful
Composting
Tips

Coordinator
contact
information



Know your local coordinators
in case you need help!

Matt Rose

LRPC Environmental Planner

(603) 279-5336

mrose@lakesrpc.nh.gov

LRPC Food Waste
Composting Pilot Program
Landing Page





USDA Composting and Food Waste Reduction Cooperative Agreements

This material is based upon work supported under a grant by the **Office of Urban Agriculture and Innovation Production (OUAIP), United States Department of Agriculture**. Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the authors and do not necessarily represent the official views of the OUAIP.

