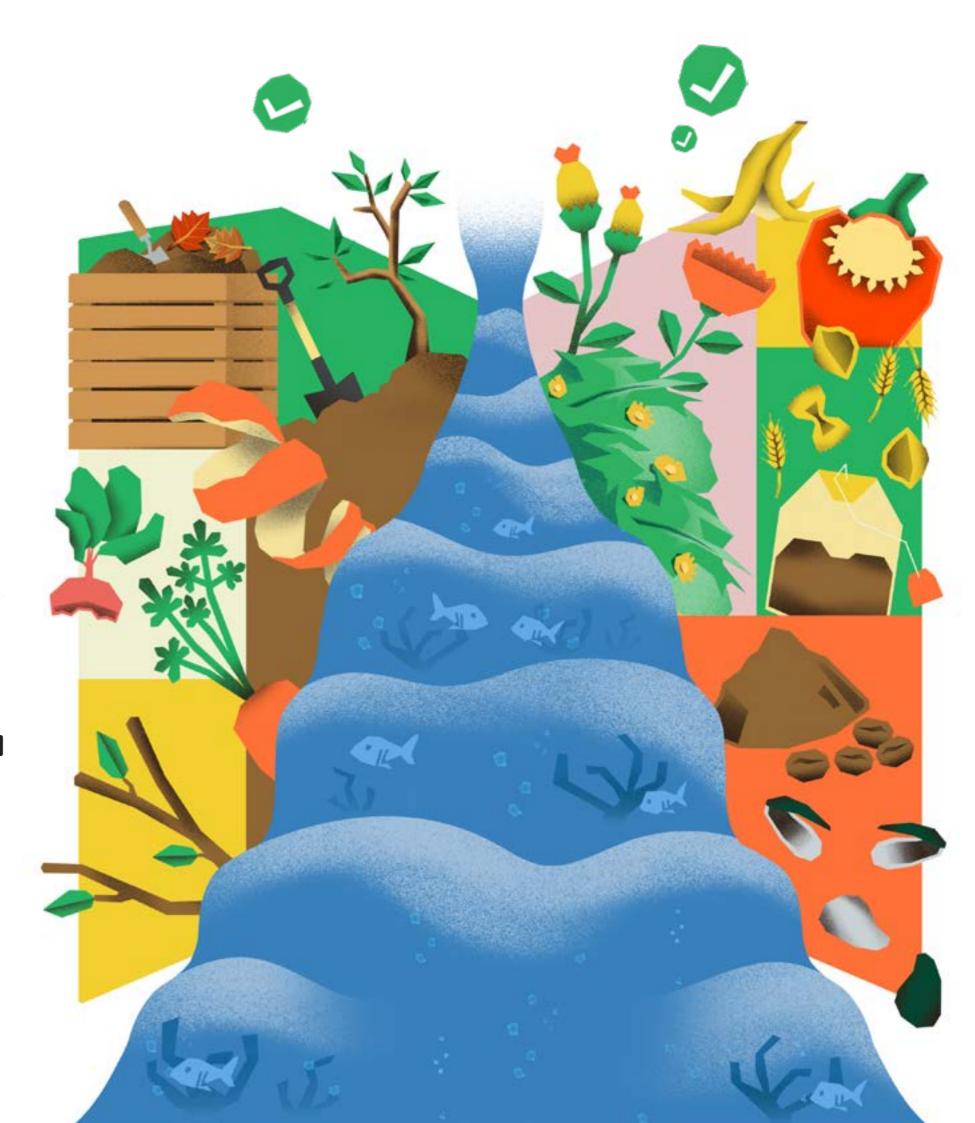
CCEAN LOVERS GUIDE TO COMPOST





WELCOME TO THE OCEAN LOVERS GUIDE TO COMPOST

Welcome to The Ocean Lovers Guide to Compost. Whether you're a complete beginner, an enthusiast applying compost tea to your lawn, or just curious about your neighbor's bin down the street, this guide has something for you. We'll show you why composting is such a powerful tool for the planet and our ocean, explain why home composting isn't your only option, and share helpful tips and tricks. Start by answering the questions on page four, and have fun discovering which part of this guide will benefit you most!



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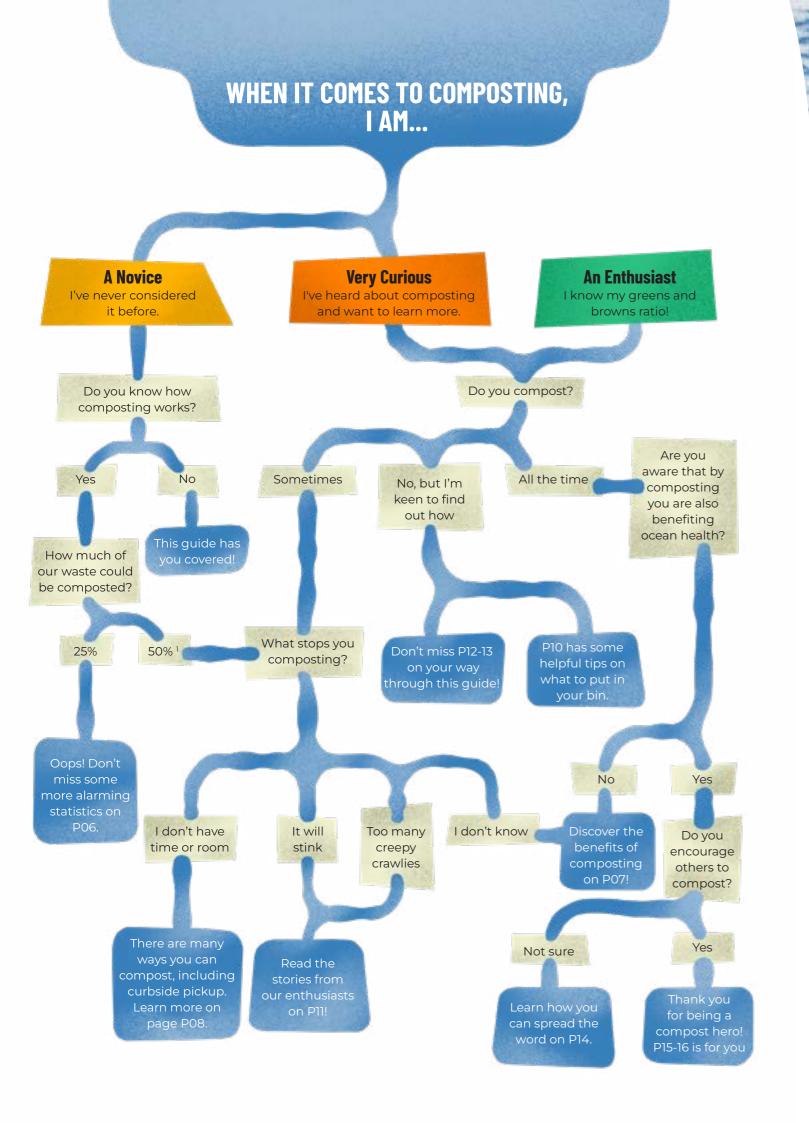
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INTRODUCTION

CHAMPION COMPOSTING

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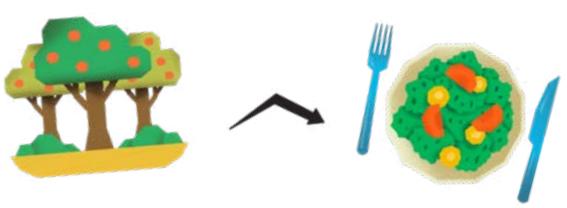


DISCOVER NATURE'S WAY OF RECYCLING

Composting is one of the simplest actions everyone can adopt to help mitigate the effects of climate change—and the best part? You can do it at home!

At its core, composting is a natural process where microorganisms break down organic materials, such as yard trimmings and food scraps, into nutrient-rich soil. The process not only creates healthy soil for plants, but also plays a vital role in storing carbon, reducing methane emissions from landfills, and enhancing ocean health, making it a win for both you and the planet.





Grow Plants & Food

The enriched soil grows healthier,



COMPOST CYCLE



Use Compost

When compost is added to soil it nourishes plants at home, in a garden, or on a farm. When compost replaces fertilizer, it reduces chemical runoff benefiting ocean health and the wider community.





Collect

Gather your food scraps and add them to a compost pile alongside yard trimmings or separate for curbside collection.



Consume

Prepare, cook, and enjoy

your fresh, healthy meals.

Breakdown

Over time, and with the right process, the materials decompose into a nutrient-rich soil amendment.

A TALE OF TWO BREAKDOWNS: THE IMPACT EXPLAINED

Composting Step-by-Step

- 1. Add materials
- 2. Flip the pile
- 3. Wait for decomposition
- 4. Apply to soil
- 5. Repeat the cycle

Top Tips

- Blend and cover food scraps with leaves and other "browns"
- Turning your pile occasionally speeds up the process
- Smaller materials will break down quicker (cut that baked potato skin in half!)

The material breaks down naturally with the

help of oxygen.

Embrace the bugs! They're going to work for you. You get up from the kitchen table and remember to clear your plate - great work!

Next, you dutifully scrape your uneaten food into the kitchen trash, a quick, helpful way to tidy up. This daily habit happens almost automatically. But have you ever thought about what happens to that uneaten food once it's out of sight?

Releases methane,

a potent greenhouse gas, into the

atmosphere.

The reality is that most food scraps end up in landfills, where valuable nutrients are wasted instead of going back into the soil. Without oxygen, food scraps decompose anaerobically (without oxygen) over decades, releasing methane—a potent greenhouse gas - into the atmosphere.

So, if we can change that habit and compost our uneaten food and yard trimmings naturally with the help of oxygen, moisture, and microorganisms, we will significantly reduce what ends up in our near-capacity landfills and even reduce our impact on the climate.

Food becomes waste when it is buried under plastics and other trash.

The nutrients in food scraps are lost forever, replacing them requires significant resources, and the soil suffers.

Landfills emit strong, unpleasant odors as organic waste breaks down.

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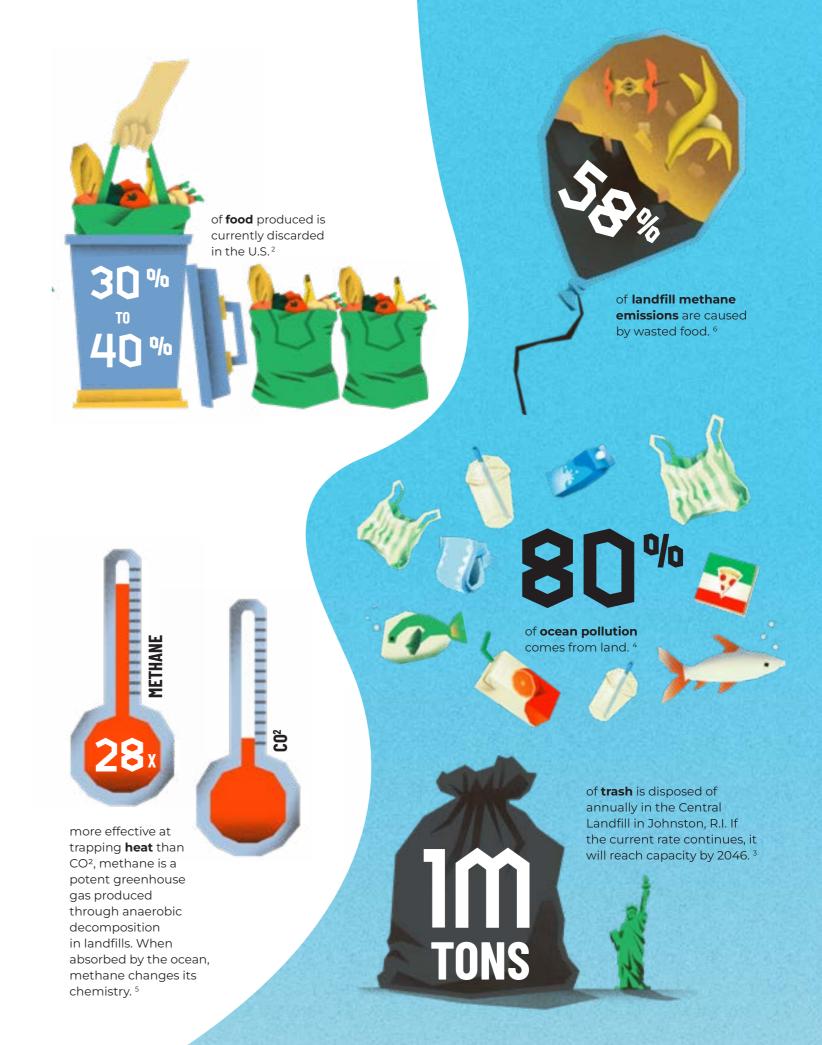
Nutrient-rich
compost, with living
micro-organisms,
can then be easily
applied to your
garden, adding life
to your soil.

COMPOST IS A CLIMATE SOLUTION. LET'S DIG IN.

Throughout this guide, we'll show why composting is a revolutionary act for the ocean and how something so simple can have a transformative impact. More people are feeling the environmental stresses of climate change every day, and waste is piling up faster than we can manage. But the solutions are in our hands, and composting addresses both issues. By rethinking how we manage waste we can reduce the harmful impact of landfills and protect our ocean.

The statistics paint an alarming picture that demands a global response. Composting is a solution that works anywhere in the world, and when done right, it brings communities together, creates collective action, and represents the systemic change needed to move us into a climate-resilient future.





FIGHTING CLIMATE CHANGE ONE COMPOST PILE AT A TIME

the atmosphere, varming our planet.

Landfills release methane, a powerful greenhouse gas.

Landfills are rapidly filling up.

The ocean absorbs 90% of excess heat from the atmosphere.

A warmer ocean disrupts marine ecosystems, impacting the food and protein sources that billions of people rely upon.

Human-generated CO² emissions—25% of which are absorbed by the ocean-lead to ocean acidification.

Lower runoff also helps reduce coastal erosion.

When we think about composting, the broader benefits to our planet might not be immediately clear. Yet, whether you live near the coast or far inland, embracing nature's recycling process has a transformative effect on our environment. As the illustration shows, these benefits extend beyond land and reach our ocean—and if the ocean thrives, so do we.

> The ocean provides half of the oxygen we breathe.

Healthy soil supports plant

Compost retains 5x its weight in water, minimizing runoff.

Soil stores CO², reducing atmospheric

Compost is a nutrient-rich, non-synthetic soil enhancer.

Compost eliminates the need for chemical fertilizers.

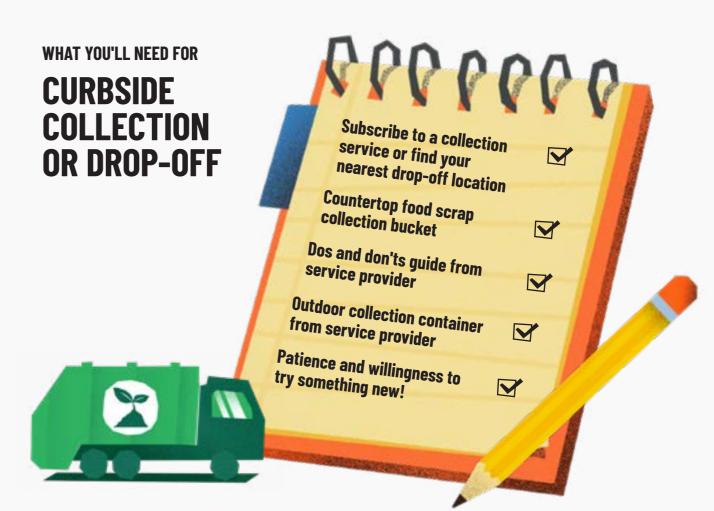
Less chemical runoff protects waterways from pollution and prevents toxic algal blooms.

ALL YOU NEED IS ENTHUSIASM, A BUCKET, AND A PLAN

Like all good things, making excellent compost requires effort. But whether you want to become an at-home expert, build your own business, or simply put your food scraps on the curb just like your recycling, there's a solution for you.

Check out the lists opposite to discover how to kickstart your compost adventure.









COMPOSTING BENEFITS THE **PLANET IN MANY** WAYS-INCLUDING **IMPROVING THE HEALTH OF OUR OCEAN FOR GENERATIONS** TO COME.

Michelle Carnevale

President, 11th Hour Racing



HOW TO MAKE YOUR BIN YOUR BEST FRIEND

Think you know what goes in your compost bin? Let's put your composting knowledge to the test! Whether you compost at home or use a collection service, what you toss in makes a difference. Are you ready to find out if your banana peel makes the cut?

4 reminders for GREAT home compost:

GREEN MATERIALS (NITROGEN-RICH) 1/3











Tips from the experts: Most backyard

BROWN MATERIALS (CARBON-RICH) 2/3









add enough brown materials—when in doubt, add more leaves!

GROW TOGETHER: REAL LIFE EXPERIENCES

Composting is a unique activity that everyone approaches in their own way. Whatever stage of the composting journey you're on, these tips, tricks, fails, and inspiring tales will give you food for thought.

> When I first tried composting at home, I struggled with the ratios - there were too many food scraps and not enough carbon, so it turned into a sludgy mess. I switched to drop-offs at the farmers market, and later, I was thrilled when Newport introduced curbside composting for added convenience.

Hilary Kotoun Newport, R.I.

I love that with residential pickup, I can compost all kinds of food-meat, fish bones, dairy-you name it. It's a total game-changer!

Alessandra Ghezzi Middletown, R.I.

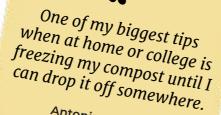


Nina Hastings Middletown, R.I



Composting is a natural process, and like all things in nature, it takes time. Don't be discouraged if your compost pile doesn't transform overnight. I certainly don't do it perfectly, but Mother Nature is pretty forgiving!

Michelle Carnevale Raynham, M.A.



Antonia Gomez Cohasset, M.A.



HELPING REDUCE METHANE EMISSIONS FROM YOUR OWN **HOME IS PRETTY** COOL, RIGHT?

Jamie Haines

11th Hour Racing Ambassador

ASK THE EXPERT: DOWN AND DIRTY WITH BRAD CHEEVER

We caught up with Brad Cheever, Ecosystems Manager at Ocean Hour Farm, to get his expert advice on compost application. From the best tools to use to the ideal timing and frequency of application, Brad's guidance and practical tips will help bring your soil to life with nutrient-rich compost.



When you use compost instead of chemical fertilizer on your lawn or garden, even if the recipe is not perfect, it can benefit your soil. Remember that any soil that's growing plants can be helped by well-made compost.

Brad Cheever Ocean Hour Farm

Brad! Can you tell us about the composting process at Ocean Hour Farm?

We have around 44 acres on the farm, so it's a large-scale operation. We predominantly do thermal composting, where you manage the composting process so that microbes generate heat, improving the decomposition process. We then use this compost on our land by applying finished compost and by making compost teas, which are an extraction that is rich in beneficial microbes. We apply compost to our soil in cooler temperatures to avoid shocking the microbes and give them time to adjust to their new environment. We generally apply compost tea three times in the spring and three times in the fall. We do this with a spray rig with booms, nozzles and a handy spray gun.



What should people keep in mind when applying compost to their lawn or garden?

The main point is that at the entry level, it's simple and easy for anyone. You don't need to buy expensive equipment, and you can start doing it if you have a little space in your backyard. Another important thing to remember is that any well-made compost you add, even if it's not perfect, is going to be beneficial to your soil.



How do you know when your compost pile is ready for application?

The best way to judge is to use your senses, such as touch, feel, and smell. You can gauge that earthy smell and feel if the compost has a good crumbly structure. It should smell like rich forest soil and shouldn't smell sour.

What tools do you recommend for applying compost in a garden?

For a home garden, you can apply compost straight from the pile. Simply transport it with a bucket or wheelbarrow and spread a thin layer on the surface with a shovel and rake or incorporate it into the soil before planting. You can also add water to your compost to make compost tea,

which can be applied using a watering can or a backpack sprayer.

Is any safety gear necessary when handling compost?

Finished compost isn't harmful and is much safer than using chemical products. Gloves are recommended if your compost pile isn't finished (or you don't want muddy fingers). If you've decided to include animal waste or byproducts in your compost system, you'll want to wear gloves. Additionally, if there are visible mold spores in the air, it's recommended that you wear a mask and add water to the pile.



When is the ideal time of year to apply compost?

It depends on your climate, but here on the East Coast, I'd target spring and fall for application because this is when it can thrive the most. If using straight compost, apply it once per season. If using compost tea, apply it twice per season, a few months apart, and then monitor results to make any amendments as needed. As your soil health improves, the frequency of compost application should reduce.

What are some practical ways to use compost around the garden?

Two common ways to use your compost are either as a

top dressing or when making a plant bed. Top dressing is just a light layer sprinkled on top of your lawn or around some plants in a bed. If you want to make a brand-new garden bed, it's best to work your compost into some native soil.

How often should you turn your compost pile to keep it healthy?

Assuming you are adding plenty of browns, backyard piles don't need to be turned that often, if at all. Turning will speed up the process and create a more uniform end product, but the most important thing is getting the initial ratio right. If the pile starts to smell or gets moist, that means it is lacking

oxygen. Turning the pile and adding brown material can help get it back on track.

Do you have any tips for maintaining lawn health after applying compost?

A simple tip is not to cut your lawn too short after applying compost. If you keep the length longer, the fresh, healthy soil won't dry out as much.





How long does it take to see results after using compost? It depends on many things, like the quality of the soil that

like the quality of the soil that you start with, but if you get a healthy compost, within a few seasons, you will see a big difference in the health of your soil, plants, and lawn. Beneficial microbes take a few seasons to increase populations and start cycling nutrients.

Is there a risk of overapplying compost?

At the home scale, not really! You'd have to really add a lot and properly bury your plants to do damage to or kill them. Like mulch, keep it away from the plant's stem to avoid trapping moisture around it.

Any final advice for people applying their compost?

The soil will always give you feedback. Once you get a starting point, you'll be able to keep adjusting your application method and frequency as you go. You'll see how it's responding and if it needs some changes.

Secondly, enjoy it! It's the best feeling when one day

you flip your pile, and it just looks healthy. An original pile of organic waste has transformed into this dark, rich, earthy, beneficial compost. It's always so cool seeing the before and after!





NOURISH THE HYPE, COMPOST-STYLE

Inspire action, one conversation at a time! Whether it's within your community, online presence, or with friends and family, via your circle of influence, you have the power to spread the word about composting. Together, small efforts can create lasting change for healthier soils and a healthier planet.

CONVERSATIONS WITH YOUR CIRCLE OF INFLUENCE

We all look to our family, friends, and coworkers for ideas. Start the conversation about composting and why it's important—it could be the spark that gets them started on their own composting journey.

1 KEEP IT LOCAL

Engaging with local vendors, clubs, schools, or businesses can encourage composting efforts. Farmers markets are fantastic for compost advocacy, often serving as food scrap drop-off sites. Another critical action is talking to your local government officials and asking them to support compost solutions. Every community needs compost champions!



COMMUNITY WORKSHOPS

Host a fun, hands-on workshop where people can get down and dirty and learn all about composting. Invite your neighbors, friends, or local groups—it's a great way to educate and grow your community's efforts.

1 JUST BY DOING IT!

Sometimes, the best way to spread the word is to lead by example. Maybe somebody notices your collection bin outside, the fresh soil in your yard, or the heap you're carefully crafting. Your actions can spark curiosity and conversation, and the next thing you know, you've got a new composter.

5 SOCIAL MEDIA POSTING

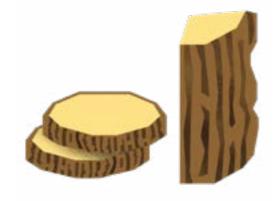
Compost needs a marketing team! Sometimes simple solutions get overlooked because they don't have a PR agency. A post or story on your favorite platform can inspire your followers to take action. Get creative, and have fun!





YOUR JOURNEY DOESN'T STOP HERE

There are many amazing organizations working on composting! If you'd like to dive deeper and continue learning, we've gathered a list of helpful resources to guide you. Explore these links to find your nearest compost collection services and pick up some additional tips, tools, and techniques.



I NEED A COMPOST PICKUP SERVICE

Rhode Island

Black Earth Compost
Bootstrap Compost
Earth Appliance Organics
Epic Renewal
Harvest Cycle Compost

Nationwide

11th Hour Racing's Compost Database
Composting for Community Map
Sustainable Packaging Coalition Compost Facilities Map

I WANT TO COMPOST AT HOME OR IN MY COMMUNITY

Institute for Local Self-Reliance – <u>Yes! In my backyard</u>
Institute for Local Self-Reliance – <u>Community</u>
Composter Coalition

I WANT MY LAWN & GARDEN TO CARE #FORTHEOCEAN

Groundworks RI – Groundcorp Landscape
Save The Bay – Bay-Friendly Living Guide
Surfrider – Ocean Friendly Gardens

I WANT TO LISTEN TO PODCASTS ABOUT COMPOST

Epic Gardening Podcast Network - In Search of Soil Institute for Local Self-Reliance - Composting for Community Podcast

I WANT TO PURCHASE COMPOST FOR MY GARDEN

Rhode Island

Charlestown: <u>EarthCare Farm</u>

Johnston: <u>Rhode Island Resource and Recovery</u>

Local Garden Centers: <u>Black Earth Compost</u>

Nationwide

US Composting Council - How do I Buy Quality Compost

I WANT TO START A COMPOSTING BUSINESS

James McSweeney – The 131 School of Composting
Institute for Local Self-Reliance – Composting
Funding Opportunity Resources

I WRITE POLICY OR WORK FOR THE GOVERNMENT

Institute for Local Self-Reliance – <u>Healthy Soils and</u> Compost Policy Guide

NRDC - <u>Model Municipal Zoning Ordinance</u> on Community Composting

Zero Food Waste Coalition - Achieving
Zero Food Waste: A State Policy Toolkit

I WORK ON A FARM AND WANT TO CREATE HEALTHY SOIL

Composting Association of Vermont –

The Farmer Toolkit

Dr. Elaine Ingham – Soil Food Web School

DATA CITATIONS

1. epa.gov/sustainable-management-food/composting

P06

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 3. eu.providencejournal.com/story/news/local/2024/10/01/
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 4. oceanservice.noaa.gov/facts/pollution.html

 5. epa.gov/gmi/importance-methane

 6. epa.gov/land-research/quantifying-methane-emissions-landfilled-food-waste





Get involved and start composting at 11thhourracing.org/compost



in action, and we know Rhode Island can be a leader in diverting food scraps from the landfill while creating healthy soil that leads to healthy seas. It takes many solutions to restore ocean health, but composting is easy for individuals to adopt today!

Our funding for compost started small and has grown as we witness success. We're proud to fund school compost programs with the goal of bringing compost to every school in the state. We're increasing access in historically marginalized communities and supporting BIPOC-led businesses and initiatives. We're also supporting new processing sites while increasing demand through community-led initiatives. At Ocean Hour Farm, a chemical fertilizer-free facility, we use compost to care for the pastures, strengthen our soil, and grow our food.

So, let's rewrite our vision for the future. A shimmering blue sea, free from fertilizer runoff, stretches out before you. A sloping lawn behind you blossoms with fertile soil, tall grasses and wildflowers. You take your last sip of Del's, drop the paper cup in the compost bin, and dive into a pristine ocean.

When we all work together, we can get climate solutions right! So, if you're unsure what to do, go back to page two - or visit 11thhourracing.org/compost.



THESID COMPOST AND E REPEAT®





