

# Let's Compost!

What are you waiting for?

**Milton Grows! \***

Tuesday, November 29, 2022

Milton Public Library

# Let's Compost!

What are you waiting for?

**Milton Grows! \***

**\* Year-long Gardening and Sustainability Focused Programming**

*For All Ages*

**Local partners**

Sustainable Milton / The Friends of the Milton Public Library



**Tucker Smith & Sita Cochran**

# What is COMPOST?



*aka* “BLACK GOLD”

**De.com.po.sition:**

(*noun*) the state or process of rotting, decay

[Oxford Dictionary]

It is ...

A process that turns organic material, such as food waste, leaf/yard waste, and waxed cardboard, into a soil enrichment amendment. It is...

- The result of decomposition of plant-based (organic) materials
  - A soil amendment full of nutrients
  - A soil texture “improver”
-

# Who are we?



We are . . .

## **SUSTAINABLE MILTON, Inc.**

- Respected sustainability advocacy group in Milton (2006)
- 501(c)3 Non-profit (2008)
- 100% Volunteer run and funded
- Passionate, Knowledgeable, Available, Supportive

**Tucker Smith** - Board Member

35+ year home composter; believer in "Black Gold"

**Sita Cochran** - Vice President

17+ year home composter; co-creator of Compost Pilot Program (Glover/Tucker)

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# Who are we?



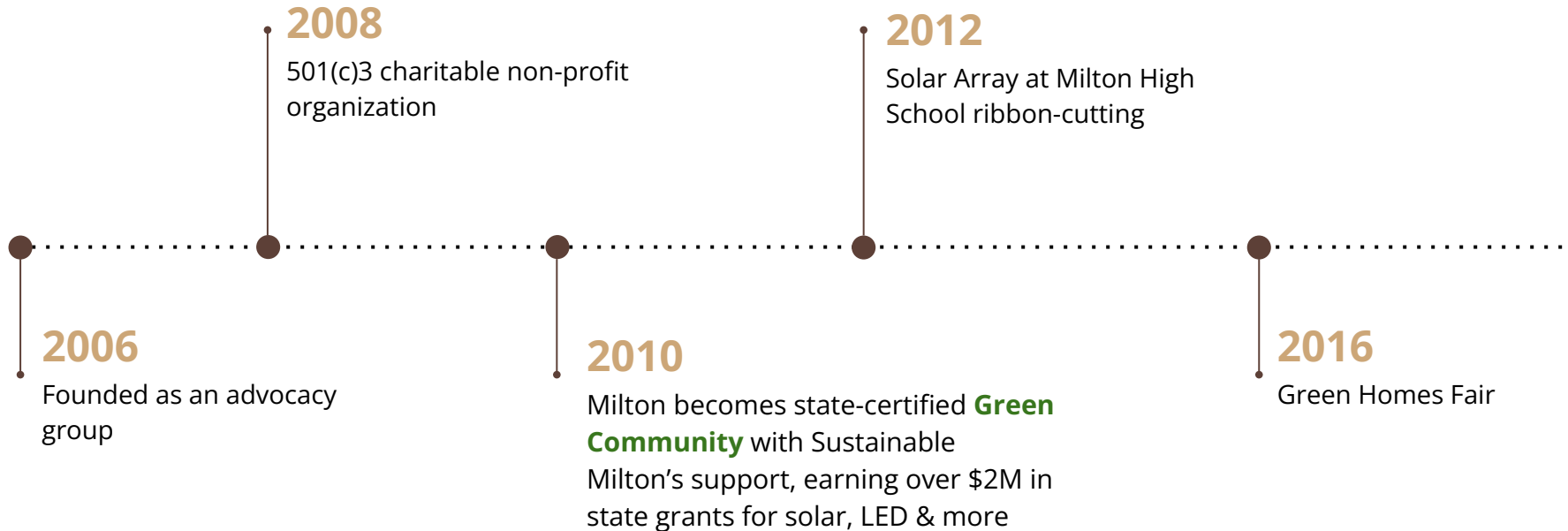
## Our Mission

We aim to create a community that preserves our whole ecosystem.

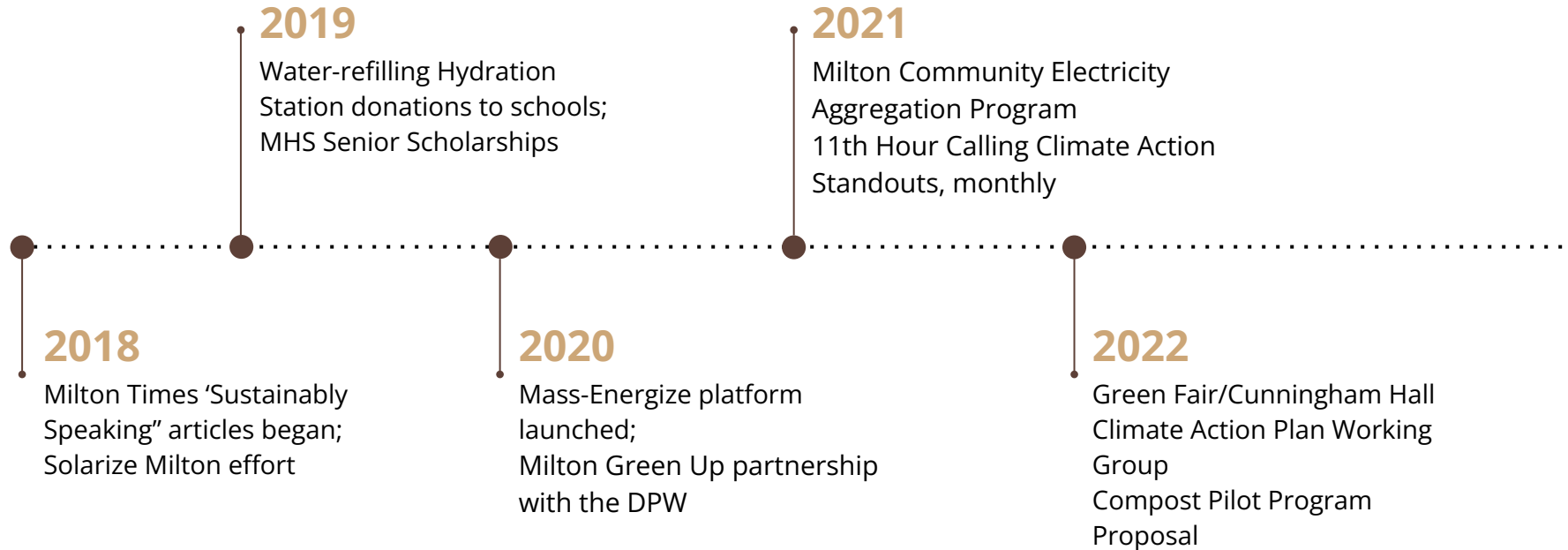
We raise awareness, educate and motivate residents, town government, and businesses to reduce waste in all forms and to create a healthy, vibrant future for all.

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# Sustainable Milton Mini Story



# Sustainable Milton Mini Story





# Who are YOU?

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## Apartment / Condo Multi-Unit Dweller

- Share a pickup service
- Group collection from residents using central toter or bucket

## Single Family Home & Neighborhood

- Backyard composter system per home
  - OR -
- Share a pickup service
- Central collection from neighbors

## Business / Workplace School/Institution

- Lunchrooms : cafeterias, food services
- Commercial kitchens:  
i.e. - Restaurants, Caterers
- Grocery / Convenience Stores

**ORGANIZE & EDUCATE**

# Why Compost?

It is one of the best things you can do  
for the health of your garden!



## Benefits

Improves soil structure  
or “tilth”

Enriches soil with  
organic matter / nutrients

Improves soil’s ability  
to hold moisture

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# Why Compost?

## Provides Generational Benefits



### Promotes Education & Stewardship of Land

Composting recycles kitchen/garden waste reducing the amount of waste going to landfills and incinerators thus reducing Greenhouse Gases (methane, CO<sub>2</sub>) and conserving natural resources for future generations!

Feels good to take simple actions that benefit the next generation

It's FREE (excluding optional equipment or supplies)

Nature does (most of) the work!

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# Why Compost?

It is a very good thing for our planet!



## Science

According to the [United States Environmental Protection Agency](#), a balance of "greens" and "browns" is needed to create the proper environment for composting to occur.

**Greens** are nitrogen-rich, and include items such as grass clippings, fruit and vegetable waste, and coffee grounds. **Browns** are the carbon-rich yard clippings, such as dead leaves, branches and twigs.

Add 3 parts **browns** to 1 part **greens**.

Microorganisms feed on both carbon and nitrogen. The carbon gives the microorganisms energy, much of which is released as carbon dioxide and heat, and the nitrogen provides additional nutrition to continue growing and reproducing.

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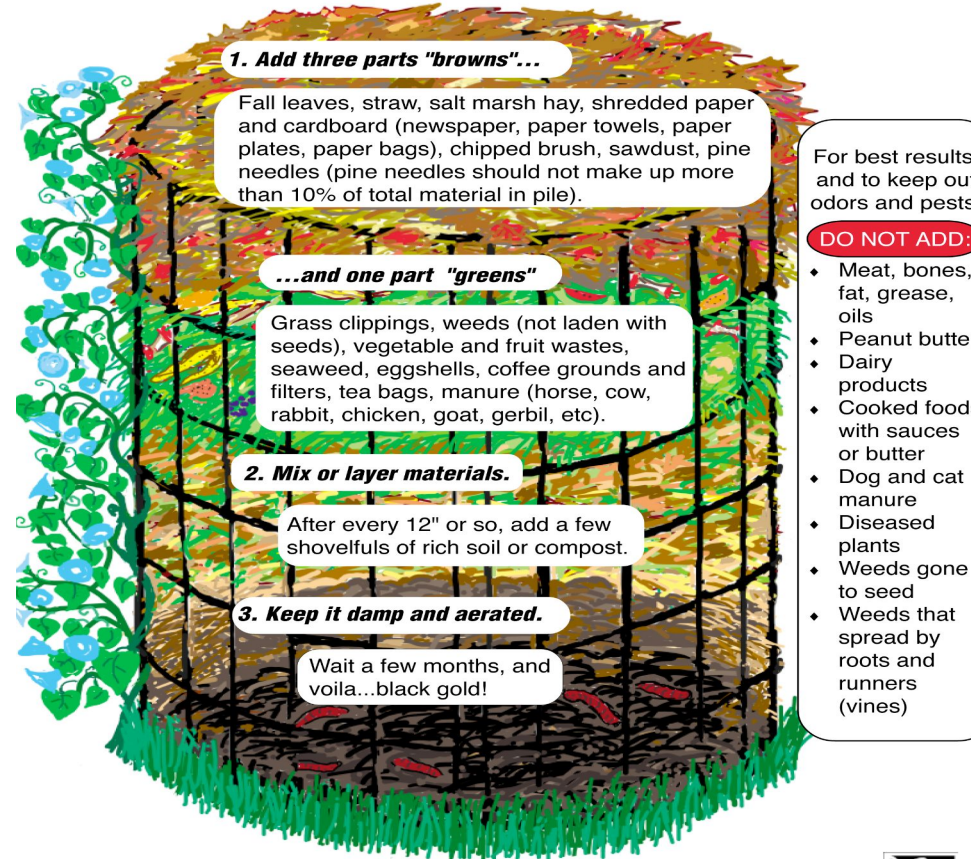
# Why Compost?

It is a very good thing for our planet!



# Composting is easy!

To make compost, just follow these simple steps:



# Why Compost in Milton?



## Food Waste in Massachusetts

The Massachusetts Department of Environmental Protection (MassDEP) estimates that food waste accounts for more than 25 percent of the waste stream in Massachusetts after recycling, or over **1 million tons per year.**

Sources of food waste generation include industrial facilities such as food processors and manufacturers; other commercial facilities such as supermarkets, restaurants, and institutions such as hospitals and colleges; and residents.

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# Why Compost in Milton?



## Solid Waste By the Numbers

Yard waste, leaves, wood, food, paper, and paperboard, all of which is compostable, makes up **70% of municipal solid waste**.

Currently Only 5%-10% of organic waste is composted.

Almost any home or business can successfully reduce organic waste. Businesses with effective food diversion programs are reducing their overall solid waste by 33% to 85%.

Chance to move away from sink disposals which contribute to waste sludge.

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# Why Compost in Milton?



## Opportunity

Milton's solid waste contains about 39% food and yard waste (2019). Compost is the heaviest/densest part of solid waste.

The cost of solid waste hauling per ton has risen significantly with higher fuel costs and further hauling.

### *Where does it go?*

Landfills, incinerators, most likely out of state - by 2040 will run out of landfill space in MA.

Diverting food from solid waste saves money, makes conventional waste more recyclable/reusable and pushes forward a zero waste initiative.

**Composting would reduce Milton's carbon footprint, lower solid waste costs, and create healthier soil.**

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# Industrial-Scale Composting

Waste Hauler/Processor  
“The wheels”

Municipal - Commercial - Institutional  
& Residential



**BOOTSTRAP  
COMPOST**

Participate in Full Circle Sustainability



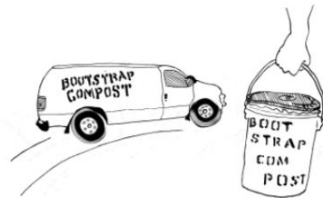
# SO HOW DOES IT WORK?

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1.

Fill out the sign-up form



2.

We deliver a 5-gallon bucket to  
your door



3.

You fill it up with scraps, we'll  
pick it up & replace it



4.

We compost for you & you get  
soil back

# Industrial - Scale Composting



# Examples of Impact

**BOOTSTRAP  
COMPOST**

9,585,900 LBS OF  
ORGANIC WASTE  
COMPOSTED

# Examples of Impact

**BOOTSTRAP  
COMPOST**

## MAKING A DIFFERENCE THROUGH COMPOSTING (SINCE JANUARY 2011)

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SCRAPS DIVERTED:



**8,338,920 lbs**

COMPOST CREATED:



**4,169,460 lbs**

GHGS OFFSET:



**11,591,098 lbs**

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# Examples of Impact

**BOOTSTRAP  
COMPOST**

EQUIVALENT TO:

PLANTING



**45,031**

NEW TREES

CREATING



**3,336**

NEW ACRES OF  
FORESTLAND

NOT BURNING



**3,010,440**

LBS OF COAL

NOT CONSUMING



**306,465**

GALLONS OF GASOLINE

# HOME COMPOSTING



## KEEP IT SIMPLE

A habit; a practice; a discipline

**Kitchen** - collect organic food waste

**Yard / Garden** - collect organic debris

**Compost Bin** - contains these materials outdoors

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# HOME COMPOSTING



## KEEP IT SIMPLE

- A process enabled by living organisms (worms, microbes, bacteria), weather, and YOU
  - Need not be expensive: equipment, supplies, tools
  - Reuse / Repurpose / Freecycle
  - Involve kids, Educate
-





# How to Compost?

**“Compost happens.”**  
[bumper sticker]

## 1. COLLECT INSIDE

- Kitchen countertop pail or “caddy” with a lid
- Tupperware > stainless steel [ceramic breaks]
- *Optional:*  
charcoal filters to help with odors;  
compostable / biodegradable liner bags

*Empty it outdoors often to minimize odors  
or flying pests*



# How to Compost?

**“To bin or not to bin.”**

## 2. COLLECT / CONTAIN MATERIAL OUTSIDE

- PILE - free form, uncontained
  - BIN - tidy (camouflaged), contained, a bit faster
  - Purchased (wide price range) or DIY
-

# “THE ROT STUFF”

## YES! YES! YES!

- vegetable/fruit peelings (N)
- eggshells (Ca) [no, if critter problems]
- bread/rolls/crusts
- tea bags/coffee grounds/paper filters
- grass clippings (N)
- soft plant waste (N)
- leaves (C-dry; N-fresh)

## NO! NO! NO!

- meat/bones
- oils/grease/fatty foods
- dairy (cheeses, milk products, etc.)
- pet feces (pathogens)
- seeds, sticks, weeds
- raw manures (too “hot”)

Ca = Calcium C = Carbon N = Nitrogen



# Backyard Options

Wide Price Range or FREE

**Milton DPW option:** EARTH MACHINE \$46



# How to Avoid Food Waste

**Food Waste is the main ingredient in most compost.**

To **avoid or reduce food waste** in the first place, a good practice is to *buy or grow only what you need* or share excess with others.

- **Meal Plan** using the fresh ingredients you have - try out new recipes!
- **Share** excess with others and/or **donate** to a food pantry before food spoils
- **Practice** canning/pickling/dehydrating/making stock/freezing (Be sure to label with date and what it is for future use)
- **Make** sauces, juices, breads, soups to give away or for future use. Be sure to label and store properly! Can make a great gift!



canning/pickling



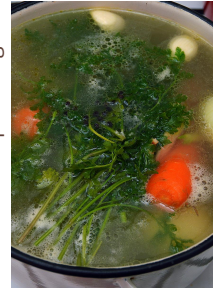
dehydrating



breadmaking



freezing



stock/soup making



juicing

# Troubleshooting

## STINKY ODORS

(Ammonia-like) - not enough air circulation  
“anaerobic” [turn compost often to aerate]; too  
wet [add more “brown”, like dry leaves or  
paper/cardboard]

## FRUIT FLIES/GNATS

Too wet or smelly [add dry leaves];  
late summer indoors [make a vinegar trap;  
empty caddy more often]

## SEEDLINGS

Avoid weed or fruit seeds

## WILD CRITTERS

Avoid “NO! NO!” items; cover food waste well  
with leaves or yard waste (or only compost  
those items); secure lid



# Resources

[Miltonlibrary.org](http://Miltonlibrary.org)

[Blackearthcompost.com](http://Blackearthcompost.com)

[Bootstrapcompost.com](http://Bootstrapcompost.com)

[www.townofmilton.org/trash-recycling-yard-waste/  
pages/composting](http://www.townofmilton.org/trash-recycling-yard-waste/pages/composting)

Related Short Video

[www.youtube.com/watch?v=fH8Lk0GRQtk](http://www.youtube.com/watch?v=fH8Lk0GRQtk)

## Note:

Generally seek [ .org .gov .edu ] sites for research



# What's Next for Milton Grows!

[miltonlibrary.org](http://miltonlibrary.org)

## Just a teaser...

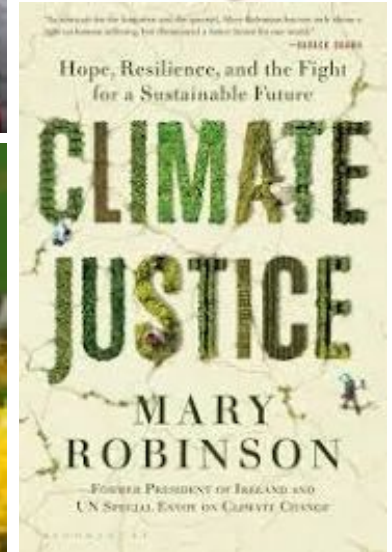
**December** - Topic:  
Cranberries

**January** - Book discussion:  
*Climate Justice* by Mary Robinson

**February** - Topic:  
Beekeeping & Planting for Pollinators

**March** - Book discussion:  
*Nature's Best Hope* by Doug Tallamy

**April or May** - Topic:  
Backyard Chickens







# Composting Questions?



# Gratitude for...

**Milton Public Library Staff Members,**

especially Sarah Truog (Asst. Dir.)

**The Friends of Milton Public Library,**

especially Connie Spiros

**Meera Patel, Town of Milton**

Environmental Coordinator, DPW

**Bootstrap Compost, Inc.**

Adam Chism & Penelope Hill

**Black Earth Compost**

Tom LeClair



[www.sustainablemilton.org](http://www.sustainablemilton.org)

[community.massenergize.org/  
sustainablemilton](http://community.massenergize.org/sustainablemilton)

# Stay Connected



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[Sustainable Milton Group](https://www.facebook.com/SustainableMiltonGroup)

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