

COMPOST

the new "BLACK GOLD"

**THIS IS YOUR WORLD
DON'T TRASH IT!**



environmentERIE
education • restoration • revitalization

Welcome

Workshop on diverting food waste & recyclables
from our landfill

Sponsored by:

Environment Erie

Erie County Recycling Program

Millcreek Township



AGENDA

- Part 1: Waste Diversion County-wide
 - Waste in Erie County
 - Single Stream Recycling
 - Erie County Recycling Program
 - Municipal Composting
- Part 2: Waste Diversion and you!
 - Backyard Composting 101
 - Getting to Know Your New Compost Bin
- Bin Distribution

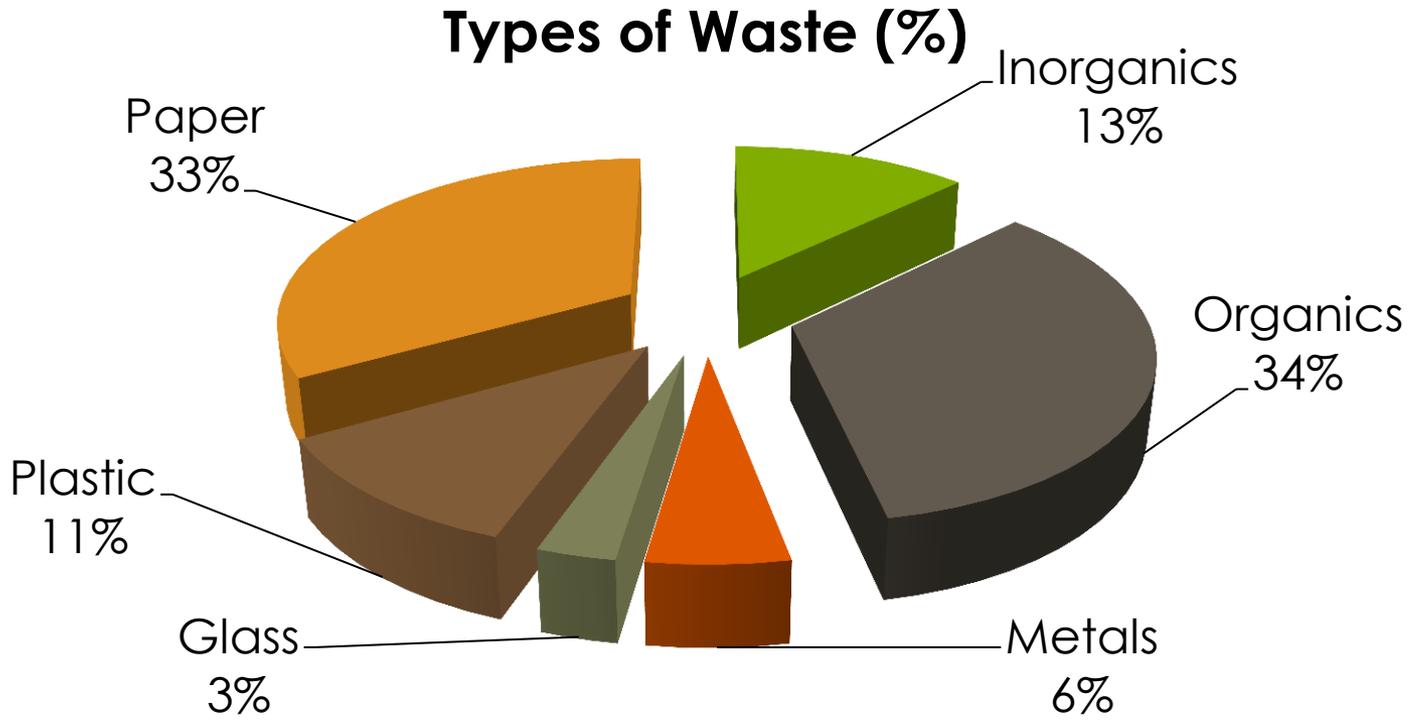


Waste in Erie County

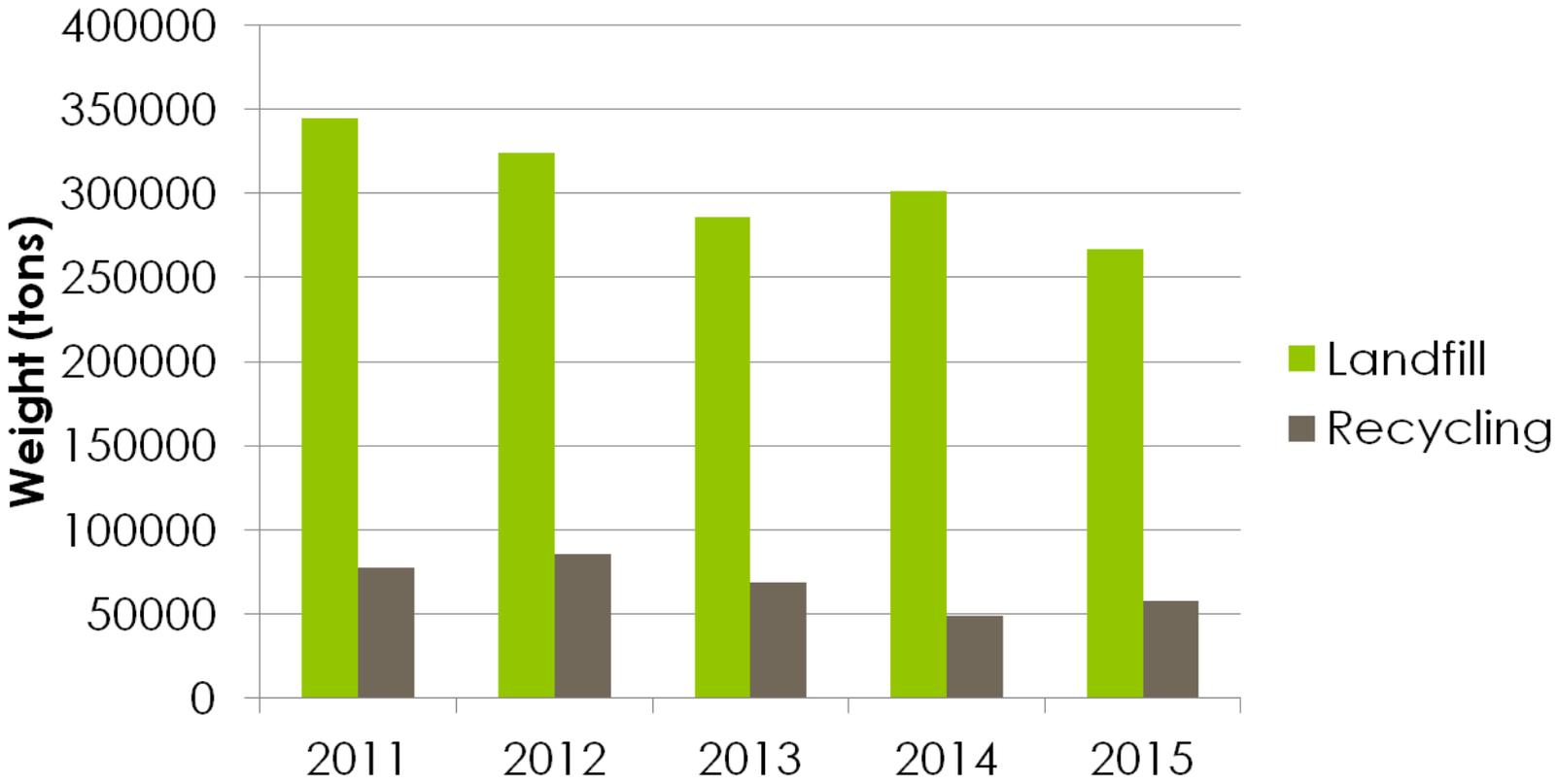
Brittany Prischak

*Erie County Sustainability
Coordinator*

Waste Stream



County-wide Waste



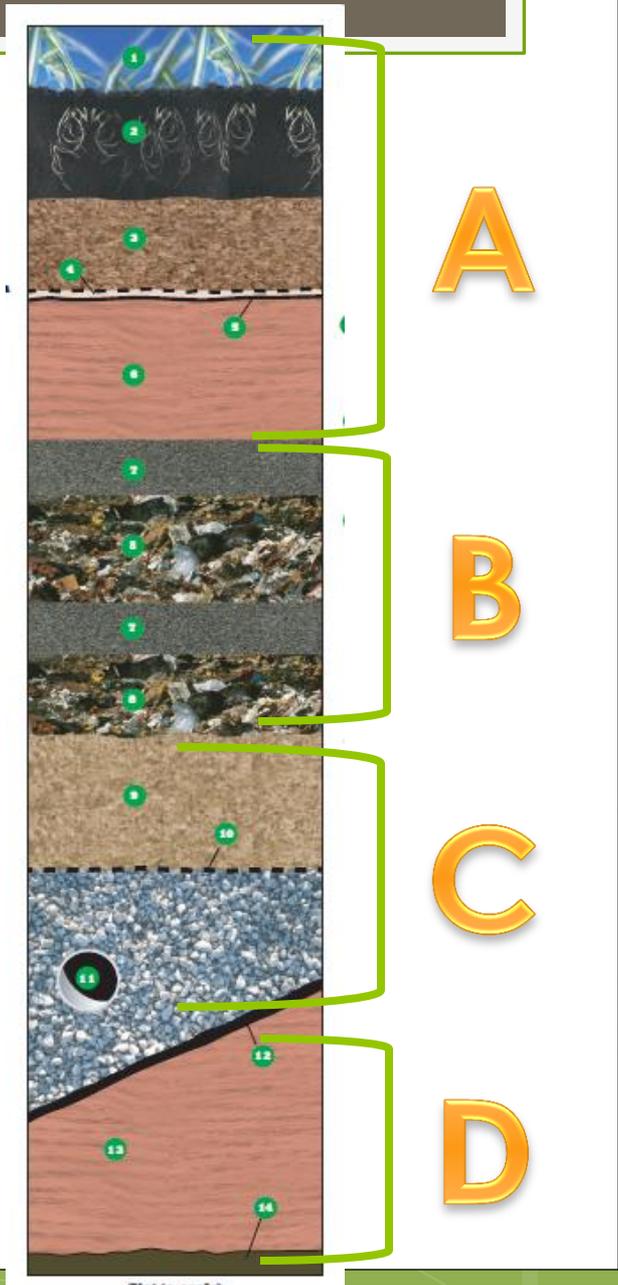
Lakeview Landfill

- 99% of our trash goes to the local landfill (266,000 tons/year)
Allure of the Sea
- 5.2lbs /day/ resident of Erie County
- Landfill life - 30 years



Lakeview Landfill

- Capped Landfill (A)
- Working Landfill
 - Daily Activities (B)
 - Leachate Collection (C)
 - Landfill Liner (D)



A

B

C

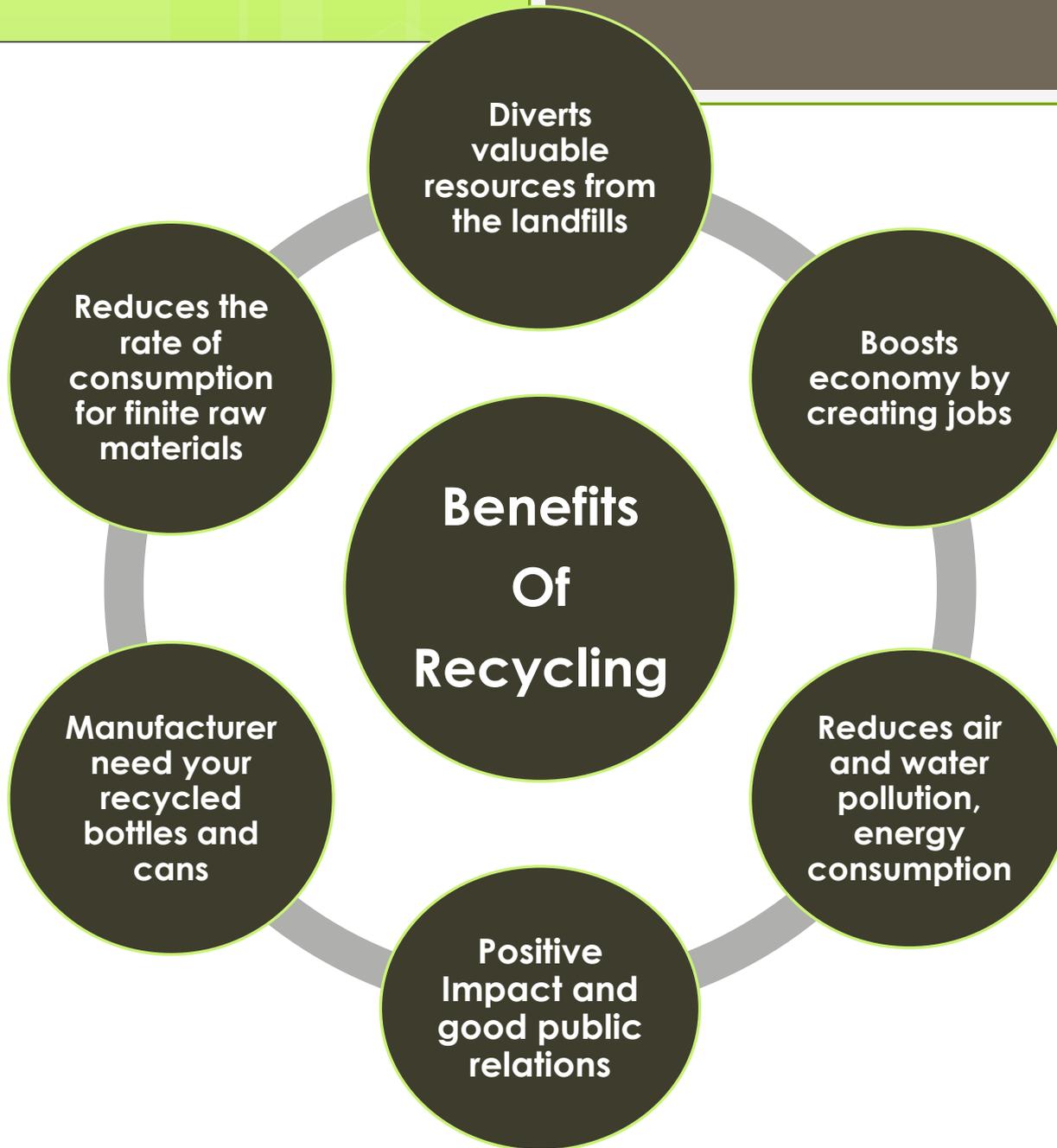
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Single Stream Recycling

Jessica James
*Millcreek Township Recycling
Coordinator*

Brittany Prischak
*Erie County Sustainability
Coordinator*





RECYCLE OFTEN:



Metal Cans

Steel, tin & aluminum soda, vegetable, fruit & tuna cans



Plastic Bottles & Containers #1-5 & 7



Paper

Brown paper bags, non-confidential office paper, newspaper, magazines



RECYCLE OFTEN.
RECYCLE RIGHT.™



Paper Cardboard, Dairy & Juice Containers



Flattened Cardboard & Paperboard



Glass Bottles & Jars

RECYCLE RIGHT:

Things you can do to ensure quality material is recycled:



DO NOT INCLUDE: Food waste, plastic bags, or polystyrene foam cups & containers

Paper and cardboard must be dry and free of food debris.

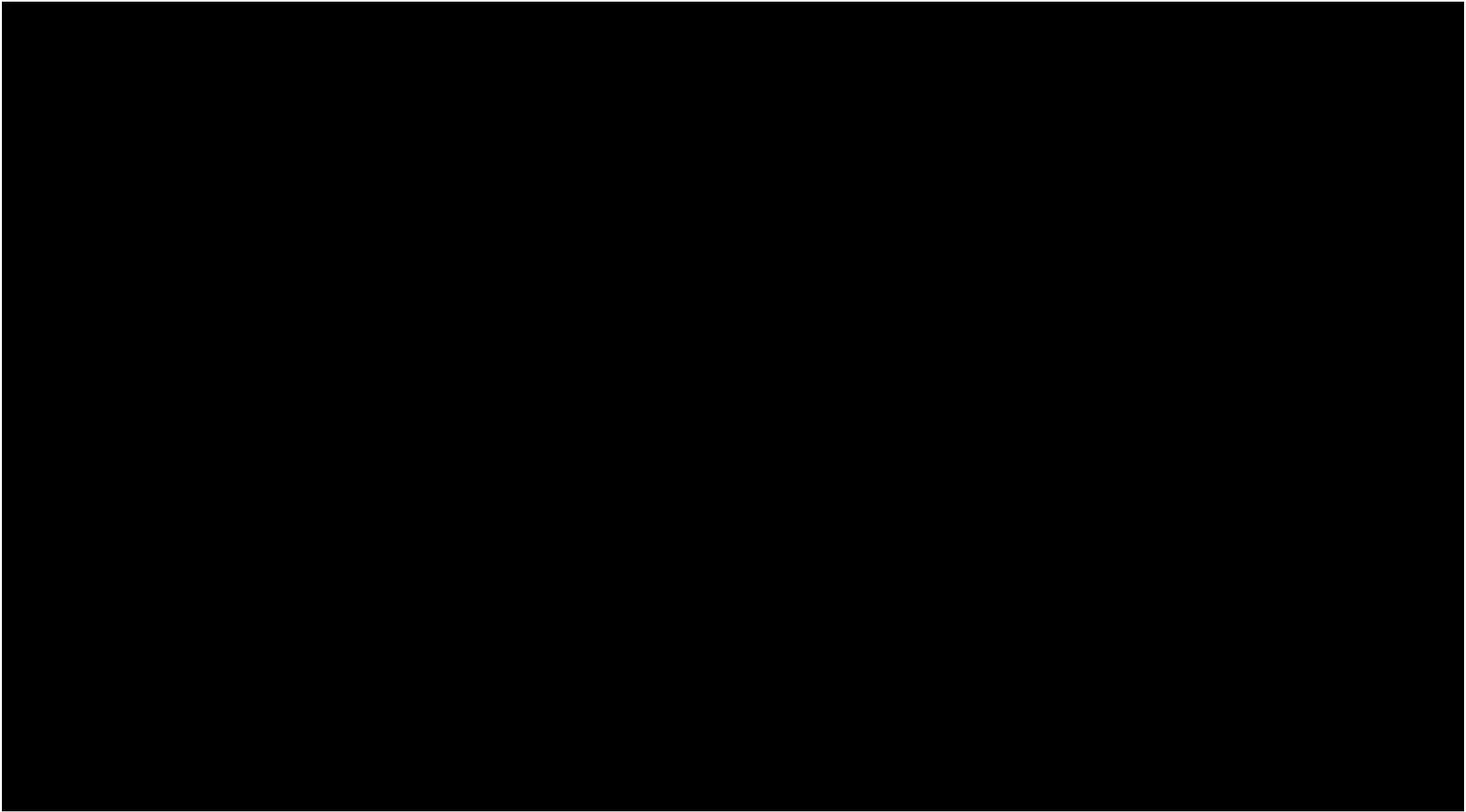
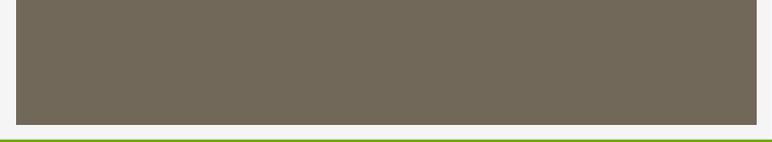
Paper food containers must be rinsed out, no caps.

Tissues, paper towels or other paper that has been in contact with food is not acceptable.

Make sure food contamination and caps are removed from cans and plastics and all containers are empty.

Separate plastic lids from plastic bottles (often made from different materials)

Keep medical waste (syringes, needles) out of recycling containers or place in safe disposal containers like Waste Management's MedWaste Tracker® box.

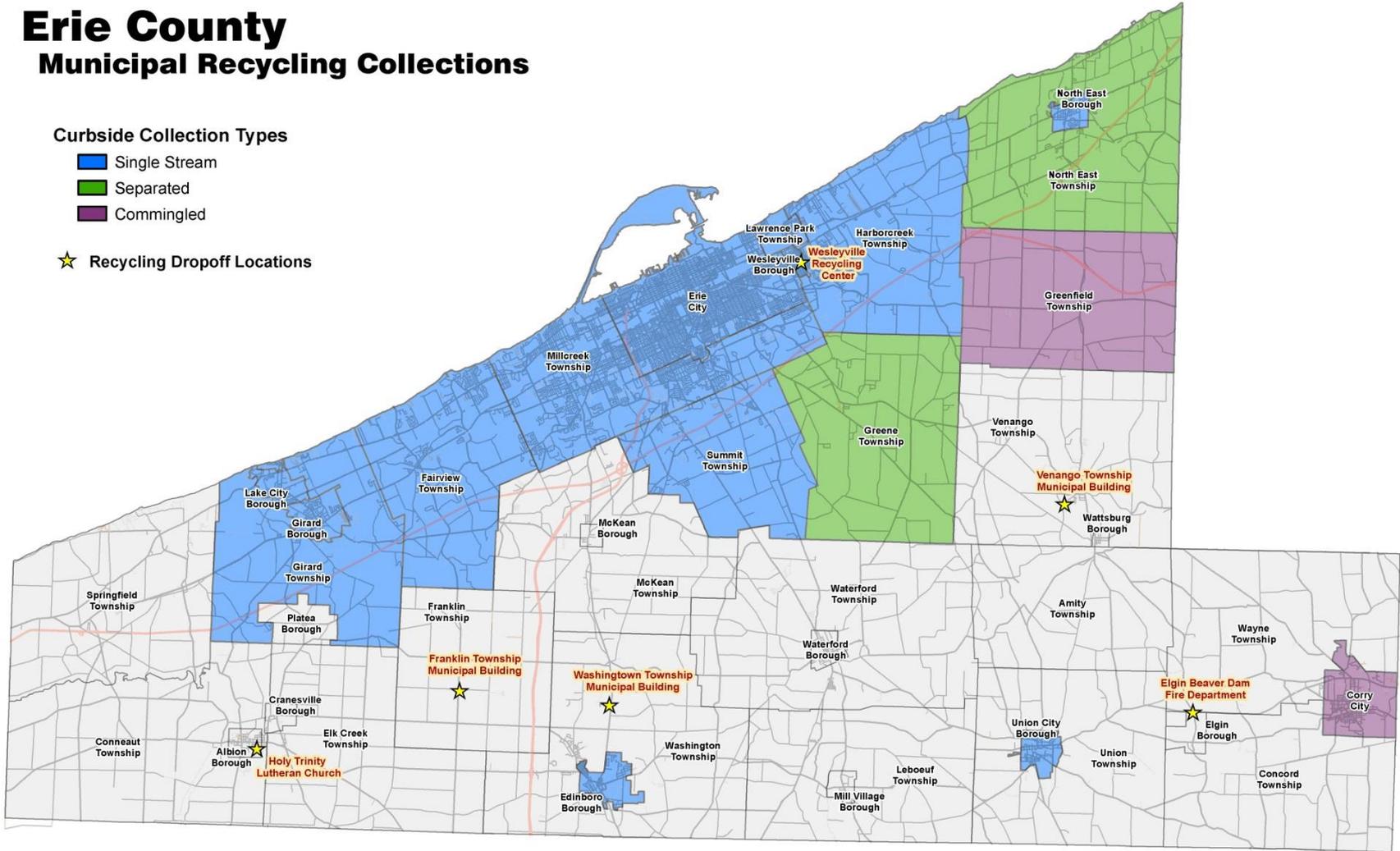


Erie County Municipal Recycling Collections

Curbside Collection Types

- Single Stream
- Separated
- Commingled

★ Recycling Dropoff Locations





RecyclErie

make it your business

is....

A positive-based incentive program that encourages Erie bars, restaurants and any business to begin recycling paper, plastic, aluminum, and glass within their establishment

SAVINGS!!



1. Decrease size of Dumpster (\$\$)
2. Decrease frequency of pick-ups (\$\$)

By decreasing the size of the trash dumpster and pick-up frequency, CREW MEMBERS have seen as much as \$300-400 in savings in a one-year time span.

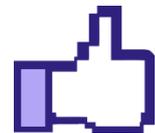


Perks

- Indoor recycle bins or desk side recycle bins
- Certification of Participation
- Window Decal
- **FREE** drink coasters
- **FREE** advertising



Like the "RecyclErie Program" on Facebook



Southern Tier Recycling Drop-offs



The sign is shaped like a house and features the Erie County Recycling Program logo at the top. Below the logo, it reads "FRANKLIN RECYCLING DEPOT" and "RESIDENTIAL SERVICES". It lists "RECYCLABLES ACCEPTED" and "NOT ACCEPTED" items, along with "PLEASE" and "DO NOT" instructions. At the bottom, it states "THIS SITE SPONSORED BY: FRANKLIN TOWNSHIP AND THE ERIE COUNTY RECYCLING PROGRAM." and provides the website "www.ErieCountyRecycling.com".

Erie County Recycling Program

FRANKLIN RECYCLING DEPOT

RESIDENTIAL SERVICES

RECYCLABLES ACCEPTED

- Plastic containers #1 through #7
- Aluminum cans
- Steel & Bi-metal cans
- Newspapers - including inserts
- Magazines
- Catalogs
- Junk mail
- Cardboard
- Cereal, Kleenex boxes
- Clear, green, brown glass bottles

PLEASE

- **CRUSH** all plastic bottles and aluminum cans
- **FLATTEN** all cardboard boxes
- **EMPTY** recyclables from all plastic and paper bags

NOT ACCEPTED

- Pyrex of any kind
- Dishes, drinking glasses
- Light bulbs, window glass
- Styrofoam cups, peanuts
- Auto parts
- Toys
- Electronics*

DO NOT

- Throw plastic bags in bins
- Leave any material on ground or top of bin
- Put any garbage, trash or junk in bins

THIS SITE SPONSORED BY:
FRANKLIN TOWNSHIP AND THE ERIE COUNTY RECYCLING PROGRAM.

www.ErieCountyRecycling.com

*Electronics and Hazardous Waste can be recycled at the Erie County Recycling Center during collection events. Call 419-4399 for information on dates and location.

- Holy Trinity Lutheran Church, 80 Third Avenue, Albion, PA
- Franklin Township, 10411 Pennsylvania 98, Edinboro, PA
- Washington Township, 11800 Edinboro Rd, Edinboro, PA
- Elgin Beaver Dam Fire Dept, 17920 N Main St, Corry, PA
- Summit Township, 851 E Robinson Road, Erie, PA

Southern Tier Recycling Drop-offs

- Purpose
 - Single Stream Recycling
 - NO Trash!
- Current Issues
 - Contamination
 - Messy



https://www.youtube.com/watch?v=LHnfTRGDez8&feature=em-upload_owner

Hazardous Waste and Electronics



Waste Management's At Your Door Special CollectionSM is a service that makes it easy for communities to recycle and dispose of their home generated special materials.



Household, automotive and garden products



Electronics



Universal Materials

- Boro of Edinboro
- Fairview Twp
- Girard Boro
- Girard Twp
- Harborcreek Twp
- Lake City Boro
- Millcreek Twp
- Platea Borough

Call toll free 1-800-449-7587
Email AtYourDoor@WM.com

<http://www.wmatyourdoor.com>

Recycling Center: HHW and E-Waste Collection

- 2nd Saturday of each Month
- Small fees
- Must Pre-register!
 - 1-866-815-0016





Municipal Composting

Jessica James

*Millcreek Township Recycling
Coordinator*

From a municipal standpoint ...

- Environmental benefits
- Improves soil composition of public and private properties
- Decreases air and water pollution (methane production)
- Reduces need for fertilizers
- Managing municipal curbside trash effectively
- State mandates and Municipal ordinances
- Builds healthy habits for a better tomorrow
- Cost savings for residents!

Cost Savings

- Are you the ultimate composter and recycler?
 - Take the PER BAG CHALLENGE!
 - Unlimited recycling
 - Leaf collection weeks included
- Millcreek Example
 - Unlimited Trash/Recycling/Leaves= **60.54/quarter**
 - Roughly \$20 per month (**\$242.16/year**)
 - Per Bag: EOW or 2x per month = **\$10 (\$120/year)**
 - Per Bag: 1x per month = **\$5 (\$60/year)**

Participating Municipalities

Township Outlets

- Fairview Township
- Harborcreek Township
- Lawrence Park Township
- Millcreek Township
- Summit Township



NON-TOWNSHIP OUTLETS

- Albion Shurfine
- Country Fair 12 (Waterford)
- Giant Eagle 4050 (Girard)
- Lavery's (Waterford)
- Tops (Union City)

History of Millfair Compost & Recycling Center

Then ...



... And Now!

Obtaining a FREE Permit



Drop off is **FREE** for residents of:

- **Millcreek Township**
- **Fairview Township**
- **West County**
 - Girard & Girard Borough
 - Lake City
 - Springfield
 - Albion
- **Commercial Businesses and landscapers** are charged a fee for both permits and drop offs

Open 2016: April 1 – Dec. 6

ACCEPTED MATERIAL

- Shrubbery
- Brush
- Tree Trimmings
- Non-Food Garden Residue
- Dead Flowers
- Christmas Trees
- Logs
- Wood Chips

UNACCEPTED MATERIAL

- **Grass &** Weeds
- Sod
- Bamboo
- Food/Food Garden Residue
- Hay/Straw or Cornstalks
- Wood with Nails and Metal
- Landscape Wood
- Painted/Processed Wood
- Dirt
- Concrete

PURCHASING

ANY RESIDENT or CONTRACTOR of Erie County may purchase products at the MILLFAIR COMPOST & RECYCLING CENTER!!!

Returning Customers Include:

- ***Neighborhood Garden Clubs***
- ***School Districts***
- ***Country Clubs***
- ***Golf Courses***
- ***Boy/Girl Scout Troops***
- ***Commercial Landscapers***
- ***Residents!***



FOR SALE

Coarse Mulch: \$15/yard



Fine Mulch: \$20/yard



Logs: \$20/pickup truck



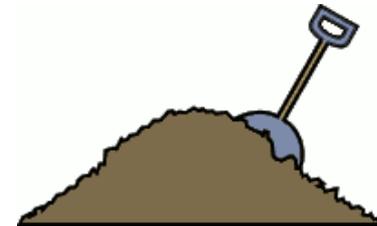
Leaf Compost: \$25/yard



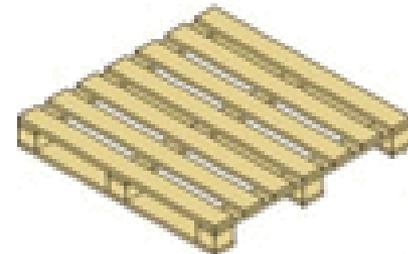
Wood Chips: FREE



Unscreened Topsoil: \$5/yard



Wooden Pallets: FREE



BEHIND THE SCENES



Curbside Leaf Collection



WWW.FACEBOOK.COM/MILLCREEKTOWNSHIPRECYCLING



JOIN US ON FACEBOOK!

CHRISTMAS TREE COLLECTIONS

COUNTY-WIDE COLLECTION

Millfair Compost &
Recycling Center
January 2017, Date TBD

*Donations benefit
Emmaus Soup Kitchen*





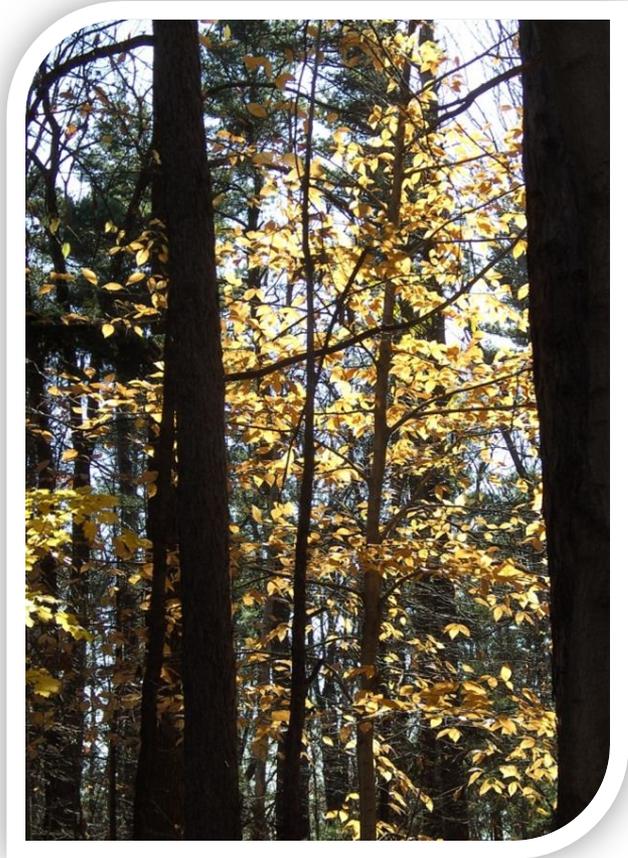
Composting 101

What Is Composting?

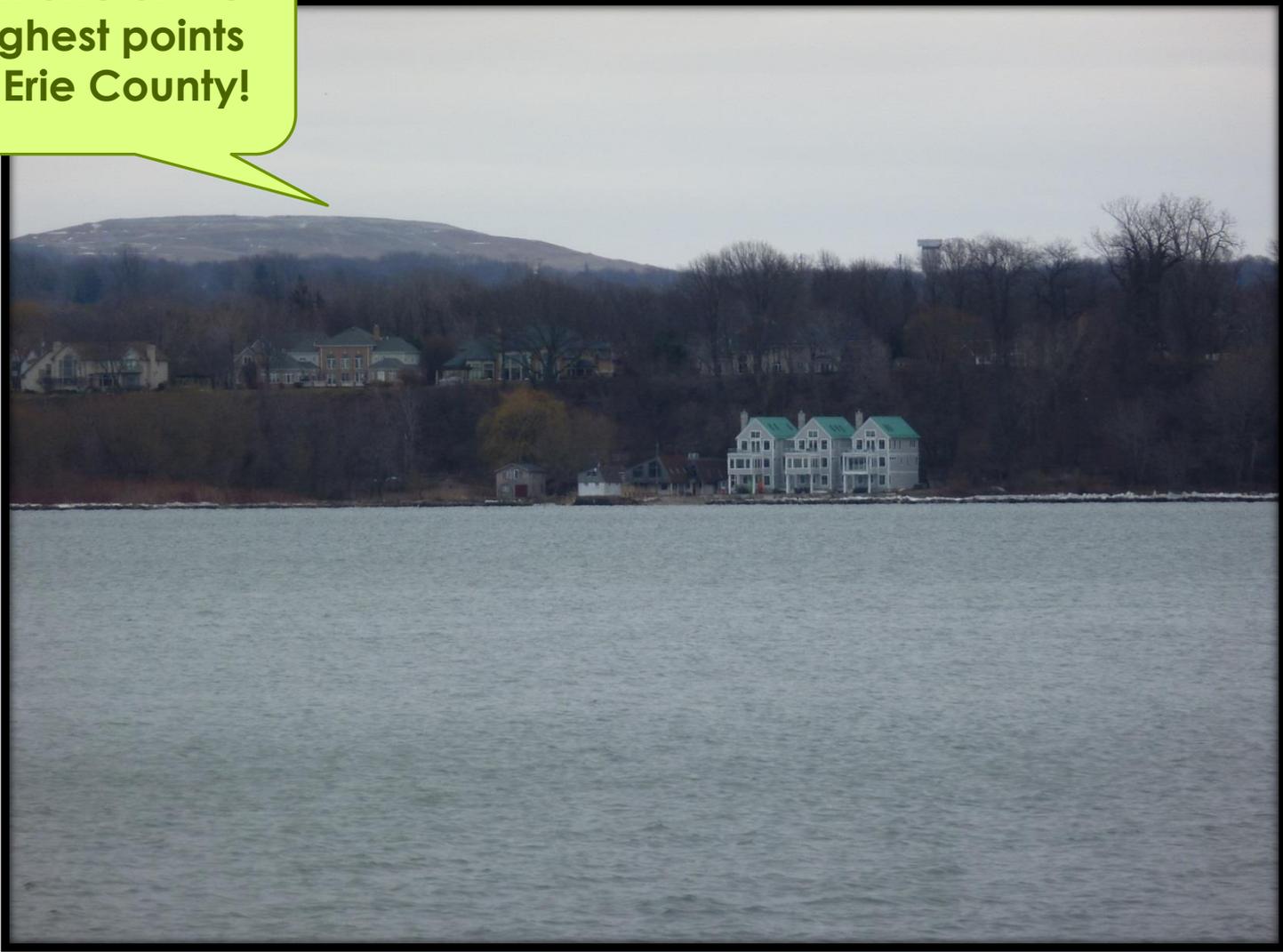
Composting is

Recycling

Naturally



**I'm one of the
highest points
in Erie County!**



Natural v. Chemical Nutrients



Chemical fertilizers contain phosphorus which promotes plant growth, both aquatic and on land

Compost Promotes Soil Health

- Supplies organic matter to soil
- Increases moisture and nutrient retention
- Improves soil drainage & loosens heavy clay soils
- Allows slow release of nutrients to plants so as not to “burn”.



Composting speeds up the natural decay process.

A compost pile or bin allows you to control

- Food
- Moisture
- Air (Oxygen)
- Temperature



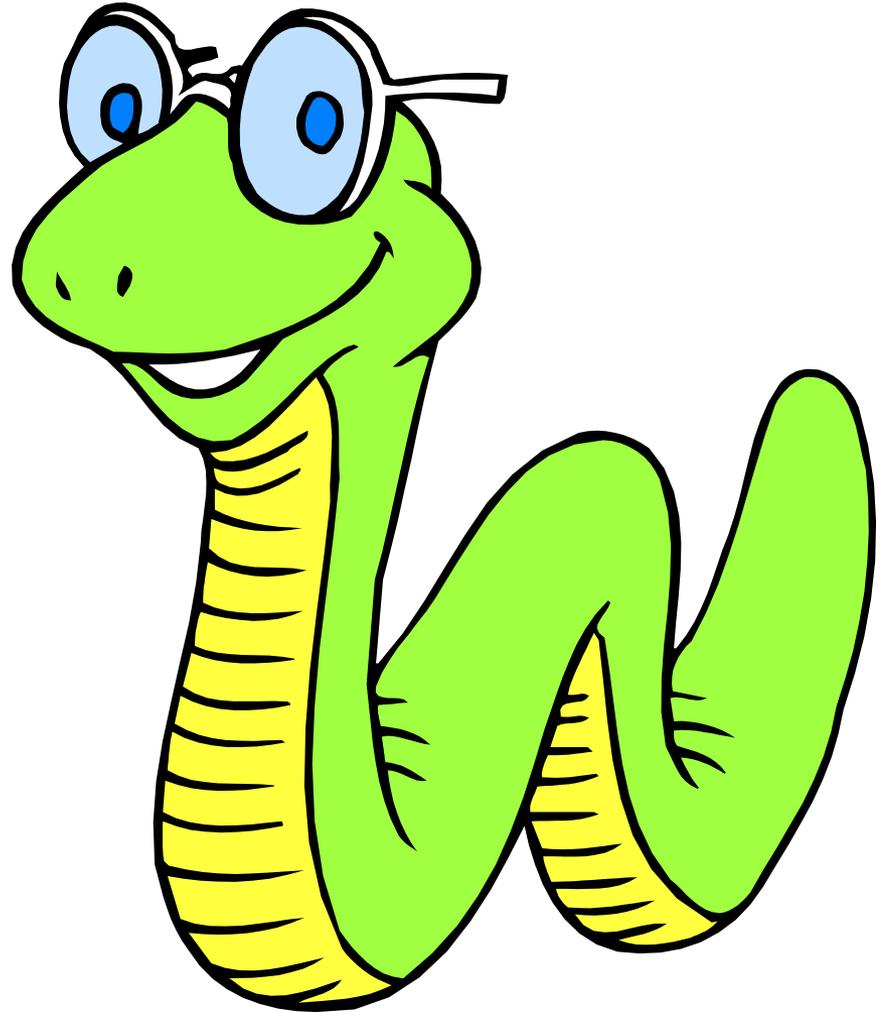
By managing these factors you can speed up the otherwise slow natural decay process.

Food Recipe

Ingredients

- Browns (Carbon)
 - 2 Parts
- Greens (Nitrogen)
 - 1 Part

Mix together and
turn regularly



Browns

- Decay very slowly
- Coarse browns can keep pile aerated
- Tend to accumulate in the fall
- Tie up nitrogen in soil if not fully composted
- May need to stockpile until can mix with greens



- Leaves
- Straw
- Paper
- Cardboard
- Newspaper
- Peanut Shells
- Cornstalks
- Wood Chips

Greens



- Decay rapidly
- Poor aeration – may have foul odors if composted alone
- Tend to accumulate in spring and summer
- Supply nitrogen for composting
- Best composting if mixed with browns

- Egg shells
- Kitchen scraps/
Vegetables
- Coffee grounds
and Tea bags
- Grass clippings
- Garden Waste
- Hay
- Livestock Manure

Material Size: *Smaller is better*



- Greater surface area per unit volume
- Allows microbes to get at more of the food
- Will speed up the rate at which they decompose



BUT Smaller particles ...

- *Will decrease airflow into the pile*
- *May lead to anaerobic conditions*
- *Pile may need to be turned more often*

Smaller particles decompose faster

Kitchen Storage & Indoor Pails

Plastic

Metal

Open

Glass

Ceramic

Closed



NOT IN THE BIN!!

Materials found Outdoors:

- Weeds, Seeds, Fertilizer
- Walnut Tree Remnants
- Grass that has been treated with chemicals
- Diseased plants



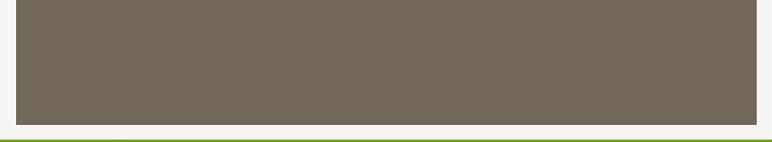
Materials found Indoors:

- Cat/Dog Litter
- Milk, Dairy, Ice Cream
- Oil, Butter, Grease, Salad Dressings
- Indoor Cleaning Supplies, Chemicals
- Meats
- Food with oil on it
- Wood ash (sparingly)



Moisture

- Adjust the moisture
- Too wet - add more browns
- Too dry - add water or wet greens



Does it ring out like a damp sponge??

- Crumble – Too dry
- Excess water – Too wet

Air (Oxygen)

- Turning adds air (once per week or when you empty the kitchen pail)
- Handles act as agitators
- Holes on side of bin
- Adding small Sticks will break up material inside
- Spin at least 5x



Temperature



- Optimal Temperatures range between **120 -140** degrees Fahrenheit
- Checking temperature with by hand or with a thermometer
- Fires?!?
- Temperatures controls & bin location

Where Should I Put My Compost Bin?

- Place in an easily accessible, sunny location
- Avoid areas that will interfere with lawn and garden activities



Compost Troubleshooting

Odors are one of the most frequent but easily avoidable composting problems.

- Rotten odor

- Usually results from not enough air, or excess moisture or too much compaction
- To fix rotten odor add browns and give the bin a turn

- Ammonia odor

- Too many greens
- To fix, add browns, turn bin

How to Tell When Compost Is Done

- The pile will be reduced 50%
- Compost should be dark, crumbly, soil like
- Has sweet, earthy smell

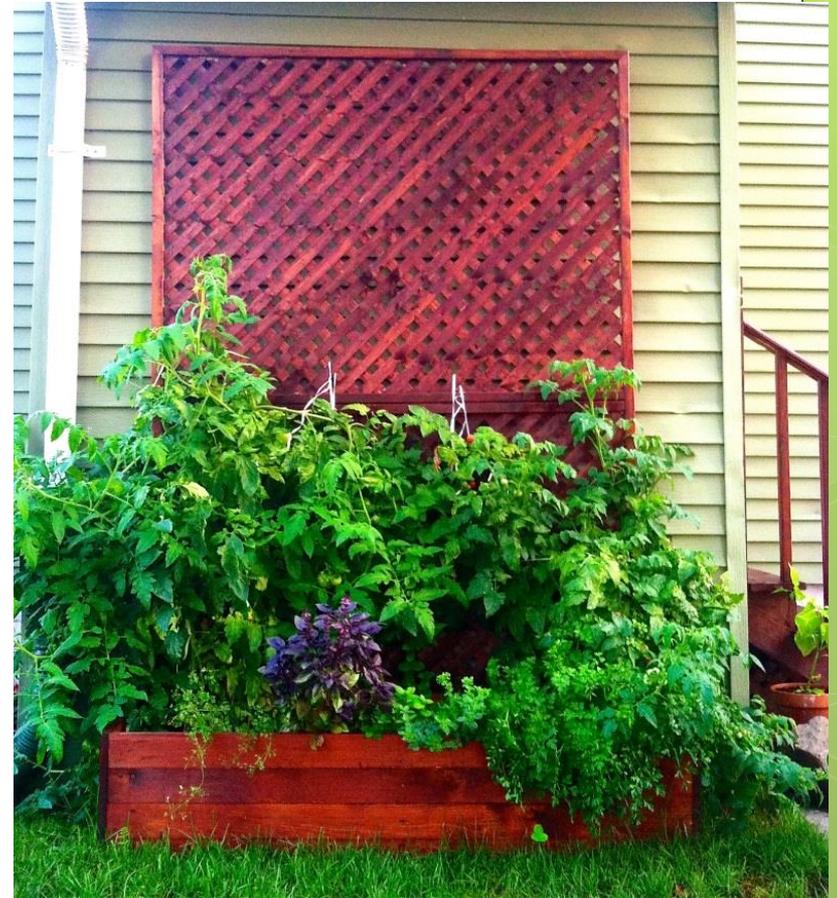


Bag test: sealing compost in a plastic bag for several days should produce no foul odor

Germination test: will seeds germinate in the compost? (good test to use if compost will be part of a potting mix)

Using Compost

- On your lawn
- In your garden
- As a surface mulch
- Promotes growth!



Set-up 1:

PASSIVE Composting

- **No Bin**
- **No Turning**
- **Natural**
- **Finished 1-2 yrs.**
- **Best for non-food**



Set-up 2:

ACTIVE Composting

- Single Batch
- Easy mixing
- Good airflow
- 6 months completion



Set-up 3:

ACTIVE Composting



Set-up 4:

ACTIVE Composting



BackYard Composting 101



Backyard Composting 101



Millcreek Township Government Channel

 **Subscribe** 45

36 views

 Add to  Share  More

 0  0

<https://www.youtube.com/watch?v=K8WXMbiSqZo>

Questions?

Erie County Recycling

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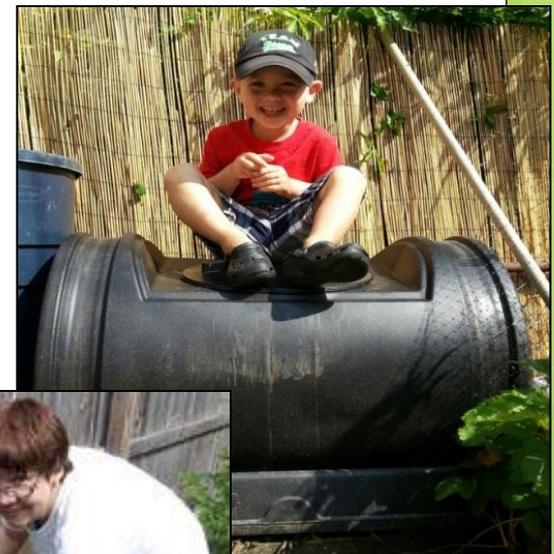


Millcreek Township

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Environment Erie

Nate Millet

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nmillet@environmenterie.org





Getting to Know Your New Compost Bin

Good Ideas, Inc

Compost Wizard Jr.



Background:

- Made Locally
- BPA Free
- Recycled Content

Features:

- Screw-On Lid
- Holes for aeration
- Handles for turning
- Wheels
- Easy removal off base

Recommendations:

- One Batch System
- Second Outdoor Container for Storage

<https://www.youtube.com/watch?v=-cvp0yBlbLU>