

BLACK GOLD

COMPOSTING WORKSHOP SERIES

Harvesting

The moment we have all been waiting for...



August 18, 2020

MEET YOUR PRESENTERS



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Keep Morrow County Beautiful
Director



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OSU Extension – Agriculture/Natural
Resource Educator / Master Gardener
Instructor

REVIEW WORKSHOPS #1-4

- Composting 101
- Vermicomposting
- Backyard Composting
- Composting Animal Manure

www.MorrowCountyOhio.gov

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-> Featured Programs:

-> Agriculture & Natural Resources

-> Composting Series

Compost 101 Workshop - 1st Session

[PowerPoint for review](#)

[Rewatch the Webinar](#)

[Link to Survey](#)

Vermicompost Workshop - 2nd Session

[PowerPoint for review](#)

[Rewatch the Webinar](#) Use the following password: 2u&jS.H2

[Link to Survey](#)

Backyard Composting Workshop - 3rd Session

[PowerPoint for review](#)

[Rewatch the Webinar](#) Use the following password: 3r?3w+0e

[Link to Survey](#)

Composting Animal Waste Workshop - 4th Session

[Link to Join](#) - July 7, 2020 @ 6:00 PM

[PowerPoint for review](#)

[Rewatch the Webinar](#) (Access Password: 6V=*0nr+)

[Link to Survey](#)

COMPOST = BLACK GOLD

A dark, crumbly, earthy-smelling material produced by the natural decomposition of organic materials.



- compost is a living soil amendment
It is NOT SOIL

USEFULNESS

- The compost itself is beneficial for the land in many ways, including as a soil conditioner, a fertilizer, addition of vital humus, and a natural pesticide for soil.
 - Increases organic matter – improves texture, drainage, fertility and it's ability to anchor plant roots
 - Invigorates the soil's food web – providing nutrients, moisture, and habitat for a huge range of beneficial life forms
 - Enhances plant's resistance to pests and disease

HARVEST DEPENDS ON WHAT STYLE OF COMPOST BIN YOU USED.

- Vermicomposting
- Open Compost Pile
- Compost Bin style
- Tumblers
- Trench Composting
- Animal



How you harvest your mature compost will be dependent on what style of compost bin you use.

NO MATTER....

The Method:

- Open Compost Pile
- Compost Bin style
- Tumblers
- Layer Composting
- Vermicomposting
- Trench Composting

You still had to use these six key factors
To break down the materials into compost:

1. Heat
2. Nutrient Mix
3. Oxygen
4. Moisture
5. Decomposers
6. Time



CAUTIONS OF HARVESTING

- Wash your food
 - Remember compost is rich in fungi and bacteria
- Farmer's Lung
 - Pneumona-like illness caused by breathing in the type of bacteria and fungal spores present in rotted material
 - Use a face covering when you dig into your pile
- Paronychia
 - Painful infection of the deep-skin crevices at the edge of a fingernail
 - Develops when bacteria enters openings in the skin – avoid worn out gloves that are wet, dirty and have holes in the fingertips.
 - Wash your hands after working in your compost bin

CAUTIONS

■ Histoplasmosis

- A respiratory infection caused by a yeast-like fungus that grows in bird droppings.
 - Use a face covering when you dig into your pile

■ Legionnaire's Disease

- Another respiratory type infection – rather uncommon
- can be found in damp air conditions – typically found in air conditioners but the second common place is in potting soil
 - Use a face covering when you dig into your pile
 - Dampen dry or very dry compost/potting soil to reduce inhalation of airborne spores.

■ Tetanus

- Targets the central nervous system – aka lockjaw
- Bacteria that produces a toxin widely present in soil and manure
 - Make sure your tetanus immunization is up to date – booster every 10 years

HARVEST TIME!

- Is it ready yet?

It typically takes between 3-8 months to establish good quality compost, but it could take up to a year or more.

- Finished product should look uniformly dark with no recognizable food waste in it.

- It should smell like rich soil, nothing more

- It should feel crumbly and moist, as if you mixed damp soil and mulch.

- If you can't identify what the material started as, it's time to harvest!

HARVEST TIME!

- Not quite ready ?
Give it a few more weeks and check it again.
- If it looks ready but you still have twigs and other hard materials like fruit pits it can still be considered finished. You may however need to screen it before using it, depending on what you intend to use it for. Screened compost makes a great top dressing



Vermicomposting

Harvesting



Step 1: A couple weeks before you plan to harvest, start migrating your worms to one side of your bin.

Step 2: Open your bin, remove any loose bedding from the top. Place the bin under a light for approximately 10 minutes

Step 3: Scrape away and/or pile finished compost. Sift through these piles to remove any undesirable finished compost, worms and worm eggs.

Vermicomposting

Harvesting



Step 1: Add a new tray with fresh bedding and food.
- This will encourage your worms to migrate upward.

Step 2-3: Repeat.....Add a new tray with fresh bedding and food.
- This will encourage your worms to migrate upward.
Do not disturb tray 1.



Step 4: Scrape away and/or pile finished compost from tray 1.
- Sift through to remove any undesirable finished compost, worms and worm eggs. * It should be worm free...but make sure!

Vermicomposting Harvesting Tips & Restart

- Put it under the light!
 - Make sure to remove any worms
- Remove any worm eggs you may see!
- Remember to place your compost in the freezer for one week before incorporating it into your garden.
 - The worms can be invasive species so we don't want to introduce them to our natural area.



Vermicomposting

Harvesting Tips & Restart

- Next Step: Restart your bin so you can make more Black Gold!
- Use your finished product indoors and outdoors
- Remember, finished vermicompost is much richer than outdoor compost, so a little can go a long way
- Don't forget your very valuable compost tea!
 - a natural fertilizer
 - *can* suppress leaf disease when sprayed directly on the plant leaf
 - Full of microbes and micronutrients



Open Compost Pile Harvesting



- The finished product is at the bottom of the pile.
- Use tools to remove the top portion
- Start digging into the lower center to lower portion.
- The deeper you go.... The better the compost
- Once you create a large cavity.... Large enough space to add new leaves, food matter, etc. to start your compost pile over.

Open Compost Pile

Harvesting Tips & Restart

- Generally it is recommended to harvest in the fall
- If compost is used before it has fully matured, the microorganisms may rob the soil and plants of nitrogen in order to finish the process.
- Spreading your compost in the fall will ensure that by spring any issues related to compost maturity will be eliminated.
- IT CAN be incorporated all year long
(every season, 365 days/year)

Compost Bin Style

Harvesting, Tips, & Restart



- If you have a single compost bin, you will have to remove the top portion of the pile to get to the material that is ready for harvesting (it falls to the bottom).
- Once you have harvested the finished compost from the lower portion of your pile, you can then shovel the contents back into the bin and start adding new material on top.



Tumbler System Harvesting



- Stop adding new material. The time - the promised two to three weeks to convert that stuff to compost - starts when you stop adding stuff.
- Storing Stuff While Batch Bakes or start another bin
- Hardly anyone gets finished compost in two or three weeks. At the two week period the compost might broken down enough to move out of the tumbler and either mulched around your garden or left to cure for a few months.

Tumbler System

Harvesting Tips & Restart



- Meanwhile the kitchen wastes keep coming. What to do?
- Try these options to solve this problem:
 - Buy two compost tumblers and fill one while the other bakes.
 - Buy one of the dual compartment (as the one in the picture).
 - Get a lidded bucket and layer your waste with some sawdust or shredded paper. Then add the whole bucket to the tumbler right after you empty the tumbler.

Multi-bin Pallet System Harvesting



- One of the simplest form of harvesting
- Use one section or bin to let compost fully mature
- Add new materials to the other(s)
- Once your one bin's final compost is stable, you can simply empty out the entire bin and apply as needed

Trench Composting

A Simple Method To
Add Organic Matter
To Your Garden

www.ourstoneycres.com



Trench Composting Harvesting

- The simplest form of harvesting compost
- Use a system to mark where you have buried your scraps so you do not dig them up accidentally.
- You should wait several months before planting into a trench.
- Best or ideal to allow trench composting to work well into the late fall to ensure your soil is ready for heavy spring and summer plantings.
- Incorporate and plant your next crop or flower bed over the trenched area



Animal Compost Harvesting

- Stop adding new material to the pile at least 2-3 weeks ahead of harvest date
- Turn off the air system (if you added one)
- Work on drying out the pile – cover when it is going to rain and uncover during the hot summer day
 - Goal = Moist - damp sponge
- Dig to center to collect your rich compost
- Incorporate into your garden or field

TESTING



- Monitor temperature
 - Place a small amount of compost in bucket with thermometer
 - See if temperature changes over a period of three to four days
- Smell Test
 - Place a small amount of compost in a sealed plastic bag
 - Open after a day or two and take a sniff
 - Compost not quite stable will give off faint ammonia or other yucky smells
- Test a few plants and see how it behaves when you use it
- OSU Extension can assist in any testing needs
 - Samples can be sent to a soil lab

HOW MUCH TO USE?

INDOORS:

- You can use up to about 25% compost mixed into your preferred potting mix
- Just apply liberally to the top of existing plants.
- If you are worried about bugs from you compost invading your home, simply bake or freeze to make it bug free.

HOW MUCH TO USE?

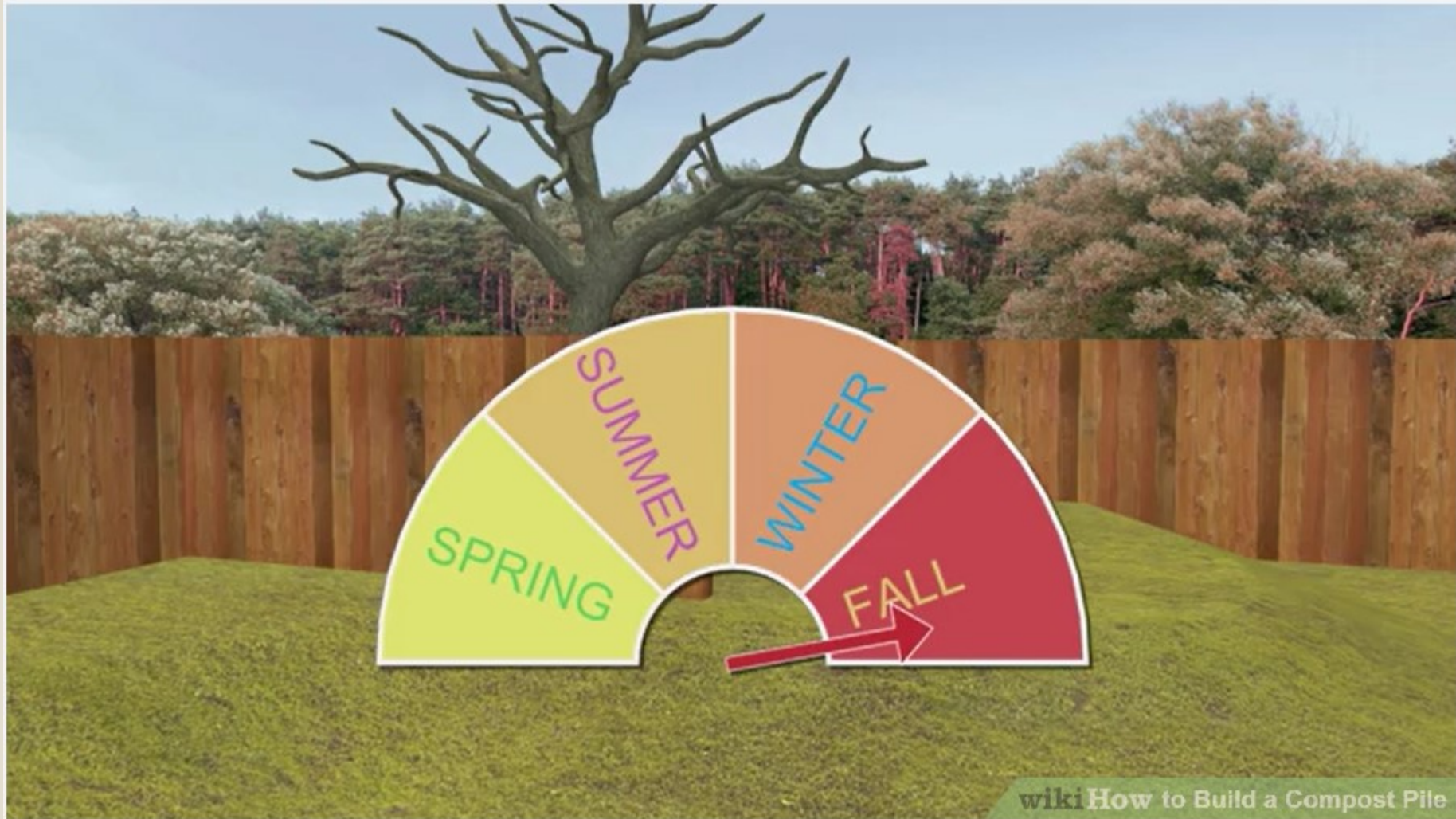
OUTDOOR

- You generally don't have to worry about adding too much compost to your garden, in fact most people have the opposite problem, they don't have as much as they need.
 - Keep in mind what types of plants you are going to grow and their preferred growing conditions
- Place one to three inches of compost over the garden area in the fall and then incorporate it into the top 4 to 8 inches of the soil.

STORING CURED COMPOST

- Sift through a screen (recommended but not a requirement)
- Make sure to dry your cured compost
 - 35% moisture content for short term storage
 - 15% moisture content for long term storage (6 months or more)
- Gather your containers – buckets, bins or bags (with a lid or tie-off)
- Leave a little headroom before closing the containers,
 - Give the containers a good shake, roll, or jiggle from time to time to aerate
- Keep the closed containers in a cool place, protected from sun and moisture

WHEN TO BUILD A COMPOST PILE



LOCAL OPTIONS TO COMPOST OUTSIDE OF YOUR HOME.



Mount Gilead Yard Waste Facility
273 South Street
Mount Gilead, Ohio 43338
419-946-9101

HOURS OF OPERATION
Mon-Fri 9am-3pm, Sat 8am-10am
(weather permitting)

Yard Waste

Morrow County offers local residents to utilize the Yard Waste Compost Facility located next to the Mt. Gilead Water Treatment Plant located near the back entrance of the fairgrounds.

The facility accommodates all yard waste: leaves, grass clippings, trees, shrubs and branches.

Self-service and no machines on site

No commercial use allowed.

NO TRASH! No food scraps, barn or animal waste, or household items are to be dropped off.

Violators will be prosecuted.

Check each spring for free mulch!



4838 Warrensburg Rd. Delaware, Ohio 43015

phone: 740-369-1000 email: pfo@pricefarms.org

- **Encouraging residential food scrap composting** at our site.
- **Small fee associated with drop-off.**
The cost is \$2.00 per 5 gallon bucket or equivalent (buckets may also be purchased for \$2). The charge is for processing.
- **Your items will be sorted on site, violators will be turned away.**
We have to make sure the program is not bringing in trash or non-compostable material, so we have to sort through everything that is brought in.
- **Accepting any sort of food scraps including fruits, vegetables. and even meat.**
- **Avoid any type of trash including the compostable bags, plates, silverware etc.**
Even though many of those products compost great, it is very difficult to differentiate compostable material from plastic.



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Follow us both on Facebook!

TAKE OUR SURVEY



Thank you for helping us continue to obtain funding in the future!

March 18, 2020

COMPOSTING 101

COMPOSTING MADE EASY AND WORTH IT!



April 21, 2020



VERMICOMPOSTING

Black Gold- Black Gold:

*Composting Series
2020*

Cost is **FREE**

May 19, 2020

HOW TO SET UP BACKYARD COMPOSTING



July 7, 2020



Composting
Animal Waste!

Aug 18, 2020



*How to
Harvest your
Black Gold
Compost!*

Participants who attend at least two of the six workshops, will be entered in a drawing to receive a compost bin (various types to choose from). Make plans to attend the last workshop on Aug 18, 2020 as you must be present to win.