

TOWN OF GORHAM  
CONSERVATION BOARD  
MINUTES  
October 7, 2020

The Town of Gorham Conservation Board met on Wednesday October 7, 2020 at 7:00 PM at the Gorham Town Hall.

Present were; Conservation Board Chairman, Brett Johnson. Conservation Board Members; Lynn Klotz, Keith Eddinger and Meg Brewin. Town Supervisor Fred Lightfoote, Town Board Liaison Brian S. Case, Highway Superintendent Zachary Eddinger and Town Clerk Darby Perrotte.

Councilmember Matt Bay was necessarily absent.

Chairman Johnson called the meeting to order, Meg Brewin led the pledge to the Flag.

Privilege of the Floor – none requested

Approval of Minutes - On the motion by Chairman Johnson, seconded by Councilmember Klotz, the 9/2/2020 meeting minutes were approved as submitted.

Business:

a. Solid Food Waste Collection Program –

Chairman Johnson said he still is asking for donations of buckets, even though the Town Board appropriated money for purchasing the buckets, he will still seek donations and grants.

The Board held a lengthy discussion in regards to the process of collecting the food waste.

There are many variables and obstacles regarding the trench for collecting the food waste. Chairman Johnson shared the specifics on the square footage of space for a trench. Councilmember Klotz said the dimensions are dependent on the width of the machinery the Transfer Station has.

Councilmembers talked about the time and material involved in processing the trench into a viable product.

Councilmember Brewin asked if the Town Board has numbers on the cost analysis for labor of maintaining the trench. She knows there is equipment available but asked if there are figures for the Town's cost compared to using a company that does it professionally and how do the numbers compare. Mrs. Brewin talked about the difference between vermiculture and just digging a hole to dump food waste into.

Supervisor Lightfoote said "When the Board started talking about this project, initially a two-step sort of trial, the first step being collection and how residents respond and participate. The second step would be where do we take the product once it is collected."

Supervisor Lightfoote said he decided to do both steps together. He talked with Highway Superintendent Eddinger about digging a simple trench for the Town to process the food waste.

The Conservation Board discussed the pros and cons of having a company provide a dumpster at the Transfer Station, to be hauled away each week, versus the Town processing the food waste itself.

Supervisor Lightfoote asked the Conservation Board for their opinion in regards to specifics for the trench and what would it take for our crew to deal with it so the Town can figure the cost.

The Conservation Board has done a tremendous amount of research pertaining to organic food waste recycling.

Councilmember Klotz said "It can be done, it just requires more than we thought it was going to require. (Draft Vermiculture Proposal attached.)

Councilmember Brewin said "If you're just going to try this for a couple months because you want to see how many people are interested and how much volume we're going to get, there is quite a science to it. Besides turning it you have to measure the heat, the humidity, the ph level, the moisture, the acidity and then be able to adjust it.

Councilmember Klotz said "If it's not humid enough, you keep it covered and add water. If it's too humid you would uncover it, if it's warm enough. You have to keep the temperature between forty and sixty degrees."

Councilmember Brewin said "In the wintertime you would mound the trenches and that stays dormant for the winter and then in March start again. From March until the end of October you are processing all of it. For vermiculture to truly work you have to have a warm climate. The trench has to be able to drain, to somehow get the liquid off. It has to be turned two to three times every four or five days. Someone has to be trained on how to

measure all the things and know what they need to put in for the worms to keep working.”

Councilmember Klotz said there are very few people around here who are doing this successfully and there is a reason for that. An example she gave is Wegman’s Organic Farm. It’s not an efficient endeavor for them.

Councilmember Brewin said “I would hate to put this on your shoulders it’s asking a lot of the Town, the Highway Department and the crew.”

Town Board Liason Brian Case said “Through this group, together, you have learned something. It’s a process however, the more you get into it the more cost and time is involved and right now costs are choking us and we have to be very careful. It’s an unknown process still but, if you want to do a trial basis, something in the spring would make sense.”

The Conservation Board is excited about getting this type of project underway but decided to table the project until next spring.

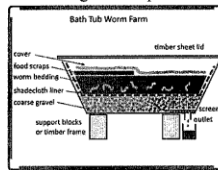
Councilmembers Klotz and Brewin suggested going to Vermi Green LLC in Palmyra to tour their facility and find out all they can over the winter.

**DRAFT: Vermiculture Proposal – Gorham Conservation Board (October 2020)**  
**Researched by Brett Johnson, Lynn Klotz, Meg Brewin**

- I. What is the GOAL for considering Vermiculture?
  - A. Town’s long-term goal?
    1. Producing an end-product (liquid tea/leachate and solid soil amendment)
      - a) *Free for municipality use?*
      - b) *Free to participating residents?*
    2. Waste reduction = save \$
      - a) *How much saved in tipping fees if reduce solid waste by 30%? (\$39.50/ton 2019 x*
    3. Other? (be first in the area to do so?)
  - B. Conservation Board’s short-term goal with Pilot Project?
- II. There are 3 local companies in the Vermiculture business
  - A. Organix Green Industries / Hi Zor Farms / 2257 County Rd 4, Seneca Castle 14547 / (585) 229-9369 / [hello@organicsoilamendment.com](mailto:hello@organicsoilamendment.com)
    1. Fred prefers not to work with Organix
    2. Their trenches are 12’W x 100’ L x 4’D
  - B. Ted @ Worm Power / 855-260-9676 / 1691 Jenks Road, Avon, NY 14414
    1. Privately held LLC, single-source organic waste (Coyne Dairy Farm), unable to accept other waste
    2. Use Pastured Digesters (not trenches, can’t safely remove end-product with worms on top layer)
    3. Requires 1 fulltime staff person to manage 6-18 digesters (raised beds), 8’W x 160’L x 2’D
  - C. Ryan @ Vermi-Green LLC / 744 Yellow Mills Road, Palmyra, NY 14522 / (585) 289-7267 / [office@vermigreen.com](mailto:office@vermigreen.com)
    1. Successful vermiculturist since 2008; works worms 6 months, then tills in un-finished materials during winter
    2. Willing to give Town Conservation Board (anyone else who is interested) a tour, normally charge but won’t
    3. Could provide 20 cu yard roll-off, charge \$40-60/ton in tipping fees (price depends on quality of organic waste)
- III. Who IS:
  - A. City of Geneva (started V program in 20\_\_, then discontinued), spending \$100,000 for new V Center
- IV. Who ISN’T:
  - A. Town of Canandaigua (started with collecting OW and sending out, no longer collecting?)
  - B. Wegmans Organic Farm (WHY NOT, no specific answer yet)
  - C. Other municipalities

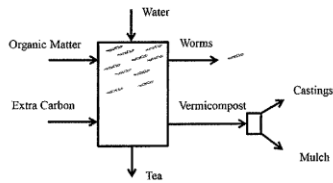
- V. Pros
  - A. State requiring municipalities to reduce waster by 30% by end of 2022 (so we need to do something)
  - B. Town Board approved \$750 to purchase of 50 buckets & bags (8/12/20)
  - C. 35-50 Transfer Station permit holders already voiced interest in collecting organic waste
- VI. Cons/challenges
  - A. Time in developing plan (2 years already)
  - B. Cost of / need for professional design
  - C. Hiring (finding & training) Vermiculture specialist
  - D. Costs for:
    1. building V system (1time cost)
    2. materials for maintaining system (annually)
    3. labor/training of V specialist (annually)
  - E. Lack of coordination/leadership from County or with other municipalities?
- VII. Big Questions
  - A. How do the costs of setting up trench compare with tipping fees?
  - B. If Canandaigua doesn't have their own trenches (or have OW hauled away), why would Gorham attempt this?
  - C. Would Gorham consider collecting OW and hiring another V to haul?
  - D. Could Gorham share V System expenses by opening project up to County or neighboring towns?
- VIII. Budget – what is town willing to spend?
- IX. Next Steps

Better design than square trenches



Maintenance	Above Conditions monitored every 3 days Aeration Contents turned 2-3x every 4-5 days Top layer removed after 15 days & moved to dry Tea/leachate collated and stored where	Parttime employee with specific training in above Conditions	?	?
Machinery	Shredder Back-hoe, small bulldozer? Sifter	?	?	?
Dimensions	Determined by: <ul style="list-style-type: none"> <li>• Machinery available</li> <li>• Amount of Solid Waste collected</li> <li>• Ability to maintain Conditions</li> </ul>	?	?	?

- \* Trench should be trough-shaped so liquid tea/leachate drips through to pipe, see figure below  
\*\* 1,000 Red Wigglers can covert 5 kg (~11 lbs) / day (under ideal conditions) and can double their mass every 60 days  
- can survive/work down to about 40 degrees, although not ideal



Resources:

- <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-9424/BAE-1528web.pdf>  
<https://www.biocycle.net/composting-roundup-32/>  
<https://imgur.com/r/Vermiculture/tEq9>  
[https://portal.ct.gov/-/media/DEEP/compost/compost\\_pdf/MiddletownVermicompostingFinalReportMay2010pdf.pdf](https://portal.ct.gov/-/media/DEEP/compost/compost_pdf/MiddletownVermicompostingFinalReportMay2010pdf.pdf)

Trench or Pit	Specs	Source	Person Responsible	Cost
Site Requirements	Level plot, trench situated North-South Running Water Electricity Accessible by equipment & supervisor Area to dry & sift composted material Shed (open sides, roof & back wall)	Town of Gorham	?	?
Construction Materials	Perforated pipe to drain tea/leachate Pipe sock/sleeve Leachate tank & tap/spigot Solid surface to line trench (concrete)* Removable cover (from rain & to retain heat) Pea gravel (over lined pipe)	?	?	?
Bed Materials	Shredded newspaper or cardboard Sand Solid Organic Waste Peat or cow/horse manure (or coir bricks) Worms (Red Wigglers) ** Soil/straw	Residents will separate? Who shred & Where?  Buckeyeorganics.net	\$50/1,000 worms	?
Conditions	Humidity 50-60 % Moisture 70-85 % Temperature 19-30 C (65-85 F) pH 7 Carbon:Nitrogen ratio = 50	4 Gauges needed to measure Conditions	?	?

b. Parcel Ranking –

Supervisor Lightfoote said there are a couple a properties in Town that will need to be ranked by our parcel scoring system.

Chairman Johnson said they will plan on doing that at the December meeting of the Conservation Board.

c. Executive Session –

On the motion by Chairman Johnson, seconded by Councilmember Eddinger, the Board entered into executive session at 8:09 pm to discuss acquisition, lease or sale of real property when publicity would substantially affect the value.

On the motion by Councilmember Eddinger, seconded by Councilmember Klotz, the Board returned to regular session at 8:18 pm. Both motions carried unanimously. No action was taken in executive session.

The Conservation Board will hold a meeting on Wednesday December 2<sup>nd</sup>, 2020 at 7:00pm at the Gorham Town Hall.

With no further business the meeting was adjourned at 8:27 pm.

Respectfully Submitted,

Darby L. Perrotte