ROOT: Re-earthing Organics on Thetis Project Overview

Like other Gulf Islands, Thetis does not have access to municipal organic waste collection services, nor does it have a community composting facility. Thetis Islanders must deal with their organic waste at a household level. Many Thetis Islanders already compost, but not everyone is in a situation to do so. These organics often find their way into the waste stream and are hauled off the island

in the form of garbage. Conversely, each spring, local farmers and gardeners have been importing finished compost by the truckload, and in the spring of 2021 more than \$10,000 worth of compost was brought to the island. This dichotomy presents a clear solution: local, on-island community composting, benefiting not only local gardeners and farmers, but the community as a whole. This solution however, is by no means a straightforward task and the complications have made the implementation of a community composting initiative on Thetis Island challenging.

After years of trying to establish a community composting system, in March 2021, Elisabeth Bond of Jollity Farm reached out to the Thetis Island Nature Conservancy (ThINC) to take over this challenge.

Over the summer, a small team working for ThINC, ThINCpod 2.0, in partnership with TIRRA, explored the potential for the creation of an on-island community composting system. One of the outputs was a report, *ROOT: Re-earthing Organics on Thetis*, which can be found on the ThINC website. The ROOT report outlines regulations concerning composting in BC, the state of composting on Thetis, and community members' interest in a community composting initiative. Finally, based on all of these, the report offers multiple scenarios for a community composting system.

In addition to the report, ThINCpod 2.0 created compost education materials, including a detailed presentation on what compost is and how to do it, as well as an infographic about why composting is important. Both the presentation and infographic can be found on the ThINC website. On Saturday, August 14th, the Pod also coordinated a 'Compost Crawl', showcasing diverse composting (and other forms of organic waste diversion) systems on the island.

In the CVRD, up to 30% of garbage in landfills is organic material, most of which is food waste. Contrary to popular belief, organic materials do not decompose in the anoxic environment of a landfill. Instead, organic materials break down anaerobically, releasing methane gas and leachate. These toxic byproducts are contributing toward climate change and the pollution of groundwater resources.



Key Findings from the ROOT Report

Community Composting Survey Results

The purpose of the survey was to identify the composting habits of Thetis Island residents as well as to gauge the level of interest for a community composting initiative.

- 85 responses total: 69 online; 16 in-person
- The vast majority of respondents (92.9%) compost
- Nearly 60% view composting as 'extremely important', only two respondents stated it was 'somewhat important', and no one stated that it was 'not at all important'
- Over 60% of participants are interested in a system that could process meat and/or dairy products
- 90% of respondents would like more compost education
- Nearly 72% of respondents would be interested in acquiring more compost on-island
- 89.4% of respondents garden (76.5%) or farm (12.9%)
- 94.1% expressed interest in a community composting initiative, either for their own benefit or for the benefit of the community
- 45% of respondents were in favour of a centralized system at Jollity Farm, 40% preferred a decentralized (distributed) system , and 41% a hybrid system
 - *More detailed results can be found on the full ROOT Report*

Community Composting Regulations

Another piece of the puzzle involved navigating the layers of governmental regulation related to composting, and figuring out what type of system was most feasible for Thetis Island. In BC, composting is regulated by multiple levels of government - provincial, regional, and municipal. These regulations interact in complex ways, often creating barriers that make community composting initiatives difficult if not impossible. Any system that collects food and yard waste from multiple residences triggers the provincial Organic Matter Recycling Regulation (OMRR), along with local governmental regulations. In a nutshell, for any (small) composting facility under 5,000 tonnes per year, the OMRR requires that a notification be submitted to the BC Ministry of Environment and Climate Change Strategy. The notification must include a number of plans (facility design and operating plan, closure plan, leachate plan, etc) prepared by a qualified professional. Once the facility is built, which can cost upwards of \$50,000 for a smaller facility, rigorous book-keeping must be maintained to ensure and demonstrate that the facility is managing the waste in a way that does not harm human health or the environment.

At the regional level, a composting facility on Thetis may be required to hold a facility licence. In the CVRD this includes a \$1000 application fee and similar requirements to that of the OMRR, as well as an annual fee of \$500. Although Thetis Island is not a part of a municipality, it does exist within the Islands Trust area. Land use planning on Thetis Island is governed by the Islands Trust Act (ITA-1974) and the land authority under the Thetis Local Trust Committee (TH-LTC). Under Thetis Island bylaws, composting facilities are only allowed on properties zoned S-2 (Public Utility), which on Thetis are in short supply.

Moving Forward!

In light of all these factors, implementing a community composting facility is no small feat. Several considerations need to be determined - including location, type of system and associated costs, management and/or responsibility, etc., and current Thetis Island bylaws may require amending. Irrespective of what type of system is implemented, if any, continued composting education is essential to redefining "organic waste" as a valuable resource rather than something to be thrown away.

ROOT represents a first step on a pathway towards a community composting solution that will help create resilient soils for a resilient community.