



photo by Jack Kittredge

The layers have been let into the bin to pick through the food scraps.

not only produce eggs, but add manure to the scraps and start it along the path to becoming compost. That compost then can be sold bulk to local growers, or used as feedstock for processing by worms into castings that can be sold. The heat and carbon dioxide given off when making compost, as well as the compost itself, can be used in hoophouses in the winter to grow crops for sale.

Tom is only two years into this plan so different parts of the operation are in different stages, economically.

"We make a profit on the hauling of food scraps," he says. "Some of that we are using to get other pieces up. The egg piece covers itself at 30 dozen a week, but doesn't generate net cash income. We sell them at the farm for \$4.50, or the co-op charges \$4.75 and we get \$3.75. But that yields me all the compost the hens have made. If you would be buying compost at \$50 a yard for your greenhouse, that starts adding up. We also sell maybe 100 yards a year bulk to neighbors and we bag and sell the worm castings."

"We also raise 150 meat birds at \$6.00 per pound, 15 turkeys at \$5.00, and hay," he continues, "and log with our horses for custom cut timbers or lumber sold direct to customer at \$1.00 per board foot, or for on-farm use. Our birds and horses are rotationally-grazed, with the meat birds following the horses through the pasture. We are setting up to board a small number of horses to use our hay on farm, and therefore retain nutrients and add manure to our system."

Right now Black Dirt Farm broiler sales fall under the \$5000 organic threshold, but they are fed organic grain and Tom plans to certify them when sales increase.

"We have a couple of enterprises," he laughs, "which are our 'girl scout cookies'. They make this place work financially and provide a secure income -- compost pickup, worm castings, and logging in the winter."

"The trouble with logging with horses," he continues, "is that normally you are competing with people with huge skidders who can pull out ten times what you can in a day. But if we can go direct to the consumer then we can find a small market where people value logging with horses. We want to just cut off of our land. We have 175 acres of woods. We think we can develop a market among timber framers to sell through them to their customers. We think there is a market that will pay more to know where their lumber comes from."

On Tuesdays Gilbert's food scrap collection equipment is on the road picking up material. He does about 22 tons a week and of that he delivers about 15 tons to another farm and bring 7 back to Black Dirt Farm. He is working with a couple of other farms right now to deliver to them as well.

"Most of what we collect, tonnage wise," he says, "is from 50 or so larger commercial and institutional producers of food, 50% from grocery stores and then hospitals are big and we get stuff from a maple syrup processor -- the diatomaceous earth that they use for filtering which is caked with sugar and minerals. They all pay us a fee to pick it up. But we do have 14 to 16 drop off points where residents can drop off their materials. There is one here, on the farm. Residents just stop in the driveway and tip their container in. We also pick up from a recycling center nearby where a hundred families drop their food scraps off. The food scraps brought back to the farm are blended with other materials into a compost mix that we feed our laying hens on."

The equipment Tom uses is what he developed at High Fields -- a truck mounted with a generator, a pressure washer, and a large supply of wash water. The trailer has dump hydraulics also run by the generator, a mechanized garbage can "candy cane" that lifts and dumps the can, and a deck to stand on while running the washer and the hydraulics.

"This is all custom," explains Gilbert. "You can't go out and buy this. You can buy the trailer as a 10 yard dump trailer. But we put on the candy cane tipper, the shelf on the back for carrying empties (we also supply sawdust to people for covering their container scraps inside so they don't stink), the platform for standing on while cleaning out, the water tank and the pressure washer and pump. Once we dump a can we spray it out, that wastewater goes into the load, and we put the can back clean. That way we don't have to carry around clean cans to exchange, which is a common practice. The water makes for a pretty moist load, though."



photo courtesy Tom Gilbert

The "candy cane" device on the side of the trailer dumps food scrap cans effortlessly.

Tom spent about ten years working on Vermont legislation that passed about three years ago. It is called the Universal Recycling Act and deals with all sorts of materials besides organics. It mandates the recycling of organic material over a seven-year period -- phasing in generators from the largest to the smallest. The law has some provisions to encourage recycling. If you are within 25 miles of a composting or recycling facility, for instance, and if you produce over a certain tonnage in waste, then you have to use that facility. The further away the base of operations is the bigger the business, basically. Gilbert says he could grow the hauling side of his business by five times right now as he is the only player in the area.

"Before the Vermont law was in place," he recalls, "we were finding a way to fight for elbow room in the market. But then we had to price the service the same as trash, because landfilling was a competitive option, and there was zero profit. Most of that hauling was done by municipalities because they didn't need a profit. But after the law was passed we could get a better price and make a living."

"For the last six or seven years," he continues, "Vermont has been struggling to achieve regulatory clarity around handling organic materials. They are stuck in a model of having these definitions between solid waste and agriculture that leave a pretty big band of grey right in the middle. The facility I used to run was a composting facility because we didn't have livestock involved. We had the same nutrient load as I do now. But now we have livestock involved here. So this is a farm operation. But we also deliver food scraps to other operators while we are on the pick-up route. So if they are not feeding these food scraps to livestock they have to be certified as composters."

The farmer that Tom brings the 15 tons of food scraps to is not feeding it, just making compost. So he has to be a regulated composter. Of course he also farms, milking 60 dairy cows. But he uses that organic material to make compost, which is not agricultural, so he is regulated as a composter. Right now if you sell any compost you make, according to the state, you are regulated as a composter.

Also, depending on where you are, regulations change. If your town has local zoning in Vermont, there is an opportunity for the town to determine whether your operation is a farm or not if some material is sold. If your town doesn't have local zoning, then the state applies its zoning regulations. Stannard is a town of 176 people, but it has zoning bylaws, which enable Gilbert to sell some compost and stand a farm!

In feeding food scraps to his chickens, Tom wants to achieve the final compost recipe in the bin while the chickens are eating.

"The thing about composting," he stresses, "is the microbial growth. We want to get it actively composting while the hens are still eating it. The food