

3-18-11 Smells Like Springtime

It is such a grubby time of year; especially this year. The leftover snow no longer sparkles, for it is a dull grey/brown. As this winter's abundance recedes, it reveals Christmas ornaments, sand and trash; lots of trash and more. I found the limp hat worn by my snowman for a record breaker time period. I still haven't found the scarf he wore. If you see a squirrel sporting a pink and red striped scarf, give me a call.

Although the crows and mice haven't been complaining, my compost pile was actually just a garbage heap this last winter. Not much chemistry happening there, as you get with the manures. I live in the country, so it's okay but in the suburban neighborhoods, garbage, manure and compost heaps are another matter. If it is unsightly and/or smelly and your neighbor can see it and smell it, the local board of health ends up hearing about it. It is a sensual occupation.

Boards of health do, in fact, receive a lot of calls on fecal matter. Why, only last week, I received follow-up calls on an on-going dog poop and dog pee situation. There was so much snow this winter, that some people, especially older people, did, in fact, have a difficult time getting their dogs very far away from the back door. So, the neighbors call me. Sometimes they call too quickly, though, and I explain that we have to give people a chance to clean up, because people usually do. If not, get back to me. In this particular situation, the parties live in condos, where there are the decks over and under each other. I bet that if the property managers could begin again, the location of decks would be designed differently.

Another call came from Central Massachusetts. It wasn't my town, so I wasn't obligated to talk to him but it was after hours and I thought, "Why not find out what's happening in other towns?" Well, more of the same stuff happens in other towns; that's what. In this case, the caller did not like the allegedly huge pile of rabbit droppings piled near his property line. I had many rabbits as a child and could recall that the droppings had little to no odor but the urine was pungent. I asked him to attempt to first deal directly with his neighbor. That is the best place to start, for people can surprise us with their cooperation when they realize that someone else is offended. Did she have room to pile it elsewhere? He said that, yes, she had lots of room. By the end of our chat, the caller seemed glad he had called and was going to put the issue aside for a bit and turn to it again when the weather was warmer.

I do feel badly that I suggested he could ask his neighbor to apply some lime, to neutralize odors. It is a suggestion that has often been given to me by horse owners and not something I know about, personally, other than warning people about the importance of not getting it on their skin or breathing in the clouds of dust from the powder. I feel badly because I decided to research the lime application and found a lot conflicting issues. The people wanting to compost were less in favor of the lime, as it neutralized the soil and decomposed more slowly. The hog famers liked to use lime for reduction of bacteria and viruses, and thus, a reduce diseases.

But then I found this great little study from 1995 at Cornell University, written by Everett D. Thomas, at the William H. Miner Agricultural Research Institute. While comparing “Progest”, a commercial manure inoculant, to hydrated lime, they decided to measure the results of the experiment with a “Snifforama”. (I kid you not! Isn’t this great?)

Employees of the Miner Institute were pre-tested for their ability to discern differences in manure odors by sniffing two manure samples that were different and two that were the same. These talented sniffers then applied their ability to manure with and without lime. Far more of the judges rated the lime-treated manure to be smellier, more offensive and more like ammonia than the untreated or the “Progest”-treated manure.

So, Mr. Anonymous from Central Massachusetts, I apologize for the overly-simplified suggestion of lime applications. I think I will have to start referring to it as a “personal choice”.

There were serious reasons for the research, though, noting that “Odor emissions from livestock facilities are of prime importance, with over 60 volatile compounds having been identified in gases emitted from animal wastes”. Reducing those compounds is not an easy problem to solve, with one chemical change creating another. While the lime-treated samples may have been smellier, methane was virtually nonexistent. That sounds good. But it also had greatly increased levels of methyl mercaptan, dimethyl sulfide, and dimethyl disulfide.

I need my chemistry-major daughter, Joanna, and my chemistry- major board member, Jeff, to help me on this one. In the meantime, I’ll keep encouraging people to be good neighbors. That sounds good to me and I hope it makes things smell better, too.

The Clancy brothers would sing:

Now Irishmen, forget the past!
And think of the time that's coming fast.
When we shall all be civilized,
Neat and clean and well-advised.
And won't Mother England be surprised?

Cathleen Drinan is the health agent for Halifax, MA. You can tell her your stories of smells at 781 293 6768 or cdrinan@town.halifax.ma.us