

## January 2010 newsletter from Building Diagnostics

Welcome to the 3rd issue of this newsletter. I really appreciate the feedback from earlier issues, even the corrections.

I decided to forgo the obligatory recap of the year or decade and just keep going with whatever attracts my short attention span.

Don't forget to send any ideas or announcements you would like to have included in future issues.

### ***This Month's Topic: Thinking of Planting.***

Outside it is ice cold and windy, the birds are alternately huddled in the evergreens or mobbing the feeders and the forecast includes a lot of snow. My plans for the day include feeding the birds and some gardening.

Yup, I've still got harvestable produce in the ground. This will be the end of the carrots, but the parsnips are just getting ready. After digging the rest of the carrots I will be getting my seed order together for the spring planting; and saving a lot of energy in the process.

It's always good to broaden your horizons, especially when it comes to saving energy. While I focus on buildings I like to be aware of the other parts of my life that impact energy consumption and the environment. I also like food fresh from the garden, especially in December and January.

How can a backyard garden save energy? I lifted a paragraph from the [Sustainable Table](#) website which covers the basics.

*Conventional food production and distribution requires a tremendous amount of energy—one study conducted in 2000 estimated that ten percent of the energy used annually in the United States was consumed by the food industry. Yet for all the energy we put into our food system, we don't get very much out. A 2002 study from the John Hopkins Bloomberg School of Public Health estimated that, using our current system, three calories of energy were needed to create one calorie of edible food. And that was on average. Some foods take far more, for instance grain-fed beef, which requires thirty-five calories for every calorie of beef produced. What's more, the John Hopkins study didn't include the energy used in processing and transporting food. Studies that do estimate that it takes an average of seven to ten calories of input energy to produce one calorie of food.*

(Note for the Nerd: 1 Btu equals 252 calories.)

If you bypass the supermarkets and food factories you can turn that formula around. Whether you plant a large scale garden or just grow a few herbs and vegetables in containers you can eliminate the bulk of the fossil fuel use and use one of the most efficient solar collectors available, leaves.

The net gain (food calories available/fossil fuel input) varies by crop, but using seeds you will save transportation energy (lighter, less bulky to transport) and if you use natural fertilizer and/or compost that you till in by hand you can easily get more calories of energy out than you put in. The sun supplies the balance.

The real bonus of course is the food, you get to select what you grow and the freshness makes the tastes sublime. You will never taste a better tomato than the one that you pull from the vine and eat still hot from the sun.

This time of year there is one additional benefit, dreaming and planning next summers garden. The garden I see at this time of year is always free of weeds and pests; pure fantasy.

If you're not inclined to garden there are other options to get fresh local foods. You can start by visiting The NH Department of Agriculture's [publications](#) page to find lists of farmers markets and farm stands. You might be surprised at what's just down the road.

You could buy a share in a CSA (Community Supported Agriculture) organization and get a weekly supply of fresh veggies throughout the growing season. There is even one CSA that is starting a winter group for locally produced baked goods and, I believe, some greenhouse grown crops. I'm not sure what the energy penalty is for greenhouse operation, but it could conceivably still be better than flying food in from South America.

One last point; there is a great deal of security in having a reliable supply of food in your area. So keeping local farmers in business and knowing how to raise your own crops (or chickens, pigs, cattle) should be as much of a priority as a secure energy supply. Keeping the lights on won't make you feel better if you're hungry.

### **Energy tips:**

Diversion time: I hope you noted my mention of a short attention span earlier.

It's winter again; I hope you noticed. That means it's the most magical time of the year for us unrepentant building geeks, icicle season! Send me pictures of icicles and interesting snowmelt patterns on buildings. I am going to be creating a separate picture section on my website for pictures of icicles, I'd love to have

some that you would share. I will include your photo credit of course. Email to [newsletters@buildingdiagnosticsnh.com](mailto:newsletters@buildingdiagnosticsnh.com).

### **Blatantly Commercial Content:**

I do have to justify the time spent on this effort, so I am charging myself an exorbitant fee to sponsor this newsletter. I get one ad per newsletter and free coffee refills in the kitchen.

Business update: I continue to do a mix of residential and commercial energy consulting work; I'm looking for more of both. Please visit my website, <http://www.buildingdiagnosticsnh.com/> for information on my capabilities and background.

**Special notice.** I'm looking for clients who are interested in deep energy retrofits. I am more convinced than ever that this is the best use of our resources. Given the lifespan of our buildings the costs associated with a major energy efficiency upgrade are trivial. If you hear of anyone who is looking for help in this process I'd like the chance to discuss it with them.

### **Closing thoughts:**

As mentioned above, I need feedback for this little venture to succeed. I would like to include notices for events that relate to energy, the environment and community building, so if you have any announcements please send them in to [newsletters@buildingdiagnosticsnh.com](mailto:newsletters@buildingdiagnosticsnh.com). I also welcome rebuttals and amplifications for anything I write.

Please forward this to anyone who you think would like it, if you don't like it use the email address above to unsubscribe.

Thank you, I'll see you next month.