

Living Energy Farm

December 2014 - January 2015 Newsletter

Commonwealth Seeds

Living Energy Farm is part owner of a cooperative seed company, Commonwealth Seed Growers. Our new catalog is out! See <http://commonwealthseeds.com/>

Upcoming Workshops

Further information about all workshops on our website, Livingenergyfarm.org

Organic Garden Planning

On February 14th at 1pm, master gardener Ira Wallace, and seed grower Debbie Piesen, will offer a workshop on organic garden planning. Sliding scale \$25-50. At 217 Fredericksburg Ave in Louisa VA, 23093.

Organic Orchard Planning and Pruning

Workshop will be led by Michael McConkey of Edible Landscaping and Alexis Zeigler of Living Energy Farm. When: Saturday, Feb 21, 9 AM to 3 PM, 912 Woodfolk Dr., Charlottesville Va, 22902
Cost: \$50 suggested donation, \$25 minimum.

Fruit Grafting and Propagation All Day Intensive

When: Saturday April 25 OR Sunday April 26, 9 AM to 5 PM, 217 Fredericksburg Ave, Louisa VA 23093. Cost: \$50.

Our Zero Fossil Fuel Kitchen is Almost Complete

Happy to take advantage of an excuse to work in a super-insulated, passive solar space, we've been spending these winter months putting the finishing touches on our zero fossil fuel kitchen. As concrete finishers are too expensive for our meager budget, our kitchen floor was less than glassy smooth. A ceramic tile floor is durable, good looking and cleanable, but tile is expensive, and has a



high embedded energy content. (Got any lying around? We would love it!) Luckily, we found a local salvage sale establishment that has been collecting floor tile for decades, and was happy to get rid of it for cheap. What happens when you put together every bad aesthetic idea since the 1960s on one floor? The Psychedelic Composting Toilet. Like, wow, man.

The kitchen floor looks great too. Reduce, recycle, RE-USE!

Don't forget the flame retardant windowsills - in a well insulated house with thick walls, window sills attract candles. We're prepared.



Farming in the Winter?

One of our favorite farming jobs is growing variety trials of various yummy vegetables. This year we are doing a trial to test 15 bulb onion varieties for their productivity, flavor, and keeping quality. In our climate bulb onions do best started indoors in November and transplanted in late February, before the fields dry out enough for the tractor. Thanks to our winter-hardy interns for slugging it out in the mud.

And how are the kids? Great! (Forgive us, we are parents.)



The Importance of Living Energy Farm

The entire environmental movement, particularly climate change activism, has been taken in by a misdirected ideology that Ozzie Zehner refers to as “productivism,” the idea that we can solve our

environmental problems by producing more “renewable” energy. (See Ozzie Zehner, *Green Illusions*, Also Ted Trainer, *Renewable Energy Cannot Sustain a Consumer Society*, and Alexis Zeigler, *Integrated Activism*, all of which address this issue.) We have been sold on the idea that producing more energy from windmills and grid-tie solar makes us more “sustainable.” It just isn't true. The voracious capacity for the modern industrial society to consume resources is not helped by adding more “renewable” energy. Renewable energy production is environmentally costly, and grid-tie systems do not detract from consumption of conventional energy.

What is the price of “productivism?” Bill McKibben is perhaps the most dedicated of modern climate change activists, the primary mover at 350.org. In their December 2014 fundraising newsletter, Bill mentions how you can “hear about how my dream of owning a Tesla almost came true.” I had to look that up. He's referring to an electric car that markets for \$71,000. There are at least a couple of studies that indicate that the total toxic footprint for hybrid cars is *higher* than SUVs because of the toxicity of the battery systems used. The environmental expenses of the automobile society are truly massive. But electric cars are justified within a productivist framework.

Naomi Klein's cutting-edge treatise on climate change, *This Changes Everything*, is equally taken in by productivism. She quotes a group of scientist who point argue that “100 percent of the world's energy, for *all* purposes, could be supplied by wind, water, and solar resources, by as early as 2030.” That seems like a benign statement, but it is not. Anyone who has worked on heating and refrigeration equipment, construction, and heavy machinery knows how wrong statements like that are. We have a massive infrastructure in place that consumes vast quantities of energy day and night. All of our thin-walled houses with their heat pumps chugging along at midnight -- renewable energy can't touch that kind of use. Not even close.

The climate change activist with the most integrity in these matters is, not coincidentally, the most scientifically informed. No one has studied climate change more thoroughly, or argued about its dangers more passionately, than James Hansen. He was the first climate scientist to testify before the U.S. Congress about climate change in the 1980s. He has been working hard before and since on this issue, both as a scientist and an advocate. He is also vehemently, passionately, pro-nuclear. Why? Because, he says, renewable energy cannot cover “base-load,” those heat pumps running at midnight. The problem is that most environmentalists aren't willing to cop to the mathematical realities of current energy demand.

The reality is that we could easily reduce, or even eliminate, our dependence on fossil fuel with two very simple, very powerful “technologies.” Those technologies are cooperation and modesty. In their absence, efforts at environmental protection are largely palliative. Renewable energy works -- really works, not just in some academic paper -- at the village level. In a village, one person can cook for many with a simple, cheap solar cooker while others work. In a village, biofuel in its many forms is literally an arm's reach between production and use, thus making it efficient and sustainable. Village scale buildings can be built combining solar energy, super-insulation, and shared use in a manner that achieves radical reductions in energy use, and *at a modest cost*.

If it's so simple, why don't we do it already? Because the village economy neither feeds corporate profit nor provides effective infrastructural support for the construction of heavy tanks and aircraft carriers. Thus the political and ecological cannot be separated.

Certainly, most of what McKibben, Klein, and Hansen do is valuable and useful. Having said that, productivism has so effectively neutered our ecological efforts that we cannot move forward without addressing it. Productivism precludes us from setting a direction that would actually take us away from fossil fuel use. We are focusing on the chimera of mass-scale renewable (or nuclear) energy production instead of the vital questions of how to restructure our lives and our economy so we don't need fossil fuel. Lots of people give lip service to the idea of conservation, but even adding a bit of insulation to an economy that is structured to voraciously consume massive amounts of energy does not help much.

Living Energy Farm in the Home Stretch

We want LEF to be something people can see, experience, tell other people about. That is far more compelling than words on paper. The economic foundation of Living Energy Farm has come together well. Our seed growing operation has expanded to a scale that can support the community. We didn't know when we first started this project whether or not we would be able to process and dry seeds using only solar heat and electricity. We have had some trials, and a few errors, but overall our seed growing and processing systems have worked well. Our sweet potato business has also done well. These businesses are modestly scaled and use an amount of energy that can reasonably be supplied by renewable energy on a farm scale.

Our solar water system works spectacularly well. Even on heavily overcast days, our 1400 watt photovoltaic rack puts out enough power to give us a reliable water supply to our house and farm. Our solar cookers, rocket stoves, and wood-fired canner have worked well. We have prototyped a biogas and woodgas systems.

The main kitchen is very close to finished. Before the next newsletter is out, we will have it complete, and will be able to test out unique solar heating design. (Grand opening party announcement soon!) The main house is “dried-in.” Most of the utilities are done. We have quite a bit of work to build the strawbale walls in the main house, drywall the ceilings, and do the finish work.

We will not have the cash flow to finish the house without some help. On our “do or die” list are some basic building materials that, even when are building “on the cheap,” are far from free. Because our buildings are super-insulated, we end up using a lot of cellulose. We think we will need about \$4,500 worth of it. The strawbales are not so bad, about \$1,800 for those. We want to build a strong solar hot water system, so we can take warm showers even in the cooler parts of the year without burning up gobs of firewood. We have the solar hot water panels, but all the pumps, pipes, and various hardware is going to cost about \$2,500. (That is not so much considering this is a community-sized hot water system.) We are going have to spend another \$500 on solar ducting for our heating system. We also have to build a septic system for the main house. Not so groovy, we know, but the powers that be insist. (Yes, we have composting toilets.) That is going to cost about \$10,000. There are also a LOT of minor expenses in building that add up over the course of the project.

There are two ways you can support Living Energy Farm financially. If you do not need a tax deduction, you can give money directly to us. If you need a tax deduction, you can donate to the Living Energy Farm Education Fund (through Virginia Organizing, see our website). That fund supports our workshops and other educational activities, which in turns helps support our farm and community. If you want to make earmarked donations to pay for cellulose, or solar plumbing, or strawbales, you can send the money to us. Or you can donate to the Education Fund and send us a letter/ email so we can make sure your money is spent for exactly what you want it spent for.

People are quite capable of ignoring good sense as much as they choose. There are, after all, a lot of sustainable villages all over the world already. But they look too poor and unappealing to convince Americans, even progressives. It is our hope that Living Energy Farm will provide a bridge, a recognizable, accessible embodiment of lifestyle choices that look not just possible, but appealing. Being a zero-fossil fuel community both compels and allows us to move beyond productivism to real, practical problem solving. If you can help, please do.

Living Energy Farm is a project to build a demonstration farm, community, and education center in Louisa County that uses no fossil fuels. For more information see our website www.livingenergyfarm.org, or contact us at livingenergyfarm@gmail.com. Donations to the Living Energy Farm Education Fund are tax deductible.