

Living Energy Farm June-July 2012 Newsletter

Our Solar Well is Up and Running!

We are proud to announce that Living Energy Farm's solar powered water system is in operation and we are very pleased with its performance. Using a 1.4 kW solar array to power a submersible pump that runs directly off DC electricity, the system delivers over 20 gallons per minute of water to the house site and seeds fields. The pump runs directly off the panels without any batteries, so when the sun is shining the pump is running, when it is night or cloudy, it shuts off. We will be installing tanks and upland ponds to store the water for delivery when the sun is not shining.



Solar power is an energy source that is well suited to moving water because the bulk of water use on a farm is for irrigation. Irrigating fields of our size requires over ten times as much water as an average home! When your main need for water is irrigation, solar power is abundantly available when your needs are the highest. Irrigation needs are much lower during cloudy spells, when evaporation is low and it is likely to rain.

Having a water system that operates without any outside power, battery bank, or fossil fuels is large step towards self-reliance and resiliency in addition to being an environmental benefit. Many rural areas depend on wells powered by electricity for their water supply. When power outages occur, these folks have to run gas-guzzling generators or do without water. Our system can operate just the same if and when grid power goes down or fuel shortages occur. Solar panels can produce power for upwards of 50 years with very little maintenance, and the energy is stored in the water itself, eliminating the need for expensive, short-lived batteries made from toxic materials.



Seed Growing 2012

We're well into our second season of growing wholesale vegetable seeds at Living Energy Farm. Thanks to our interns and our Saturday work party volunteers, our fields are well tended and thriving.

For seed growing, our main agricultural business, busy seasons are planting in May and early June, and harvesting from late July to early October. All of our seeds are summer crops, planted after threat of frost has passed, and maturing through the course of the summer. This year these crops include cucumbers, watermelon, tomatoes, peppers, zinnias, peanuts, squash, muskmelons, cosmos, corn, and sweet potatoes.

It's now early July, and all our crops are planted, meaning we are happily into the mid-summer gap between planting and harvesting. All we have to do this time of the year is keep on top of weeding,

irrigation, and some random tasks like caging tomatoes. The bulk of the work is weeding. This year, cultivation started out easy when we took our small air-cooled tractor that we are working to convert to wood gas, and hooked it up to a little cultivator. This very old, very small tractor, which we affectionately refer to as Napoleon, has a worn out engine that finally died in early June. With our oxen team still not well trained enough to be trusted with the delicate job of cultivation, this leaves us to finish out the season with human power- hoes and wheel hoes. This once again demonstrates the importance of having a low-tech back up in place, even when your high-tech option is a rusty 1960's air-cooled tractor.



Emily practices yoking Lojki and Fiddle



Driving Red and Rusty, the little ones

Oxen Training Workshop a Big Success

In late May we welcomed back Luke Conner for our second oxen training workshop. It was great to see Calvin and Hobbes at work again, and meet his new team of young Milking Devons, Red and Rusty. Along with Living Energy Farm's team, Lojki and Fiddle, workshop participants had the opportunity to practice a

wide range of skills related to driving oxen teams of different ages and experience levels. Highlights included a discing demonstration in our newest field, and a spirited discussion of the pros and cons of different castration techniques. We're very grateful to have Luke as a local resource for all things related to the art of working oxen.



Calvin and Hobbes at work

More Weird Weather

When you're living on a farm, most conversations seem to revolve around the weather. But when they can't stop talking the weather on the mainstream news, that could mean a problem. First there was the wicked "derecho" wind storm of Friday June 29th. It did quite a lot of damage at LEF, knocking down trees and blowing over our newest shed (we had, admittedly, not finished the bracing). Our neighbors lost power for several days. We didn't notice that part.

Shortly following the derecho was a record heat wave that left us spending the days seeking refuge in our creeks and meager shade. It exacerbated the already dry conditions, leaving our crops and orchards thirsty and in need of irrigation. Good thing we just finished the well!

Climate change, it seems, has left the realm of scientific theory and entered the realm of our every day experience. It's frightening to think how much we have disrupted the planet to bring on changes such as these. But what's even more scary is the tipping points that might be reached if carbon emissions continue along as usual. At Living Energy Farm we are working to show that a fulfilling, comfortable life does not need to depend on burning fossil fuels. We feel that this work, along with work in the mainstream to reduce emissions, is essential to ensure that we leave a liveable planet for our children.

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 or 434 409 6006. Donations are tax deductible.