Living Energy Farm
March - April 2025 Newsletter

Easy Reaper Demonstration Day

One June 21 (June 28 rain date) we will have an afternoon event at LEF to demonstrate our Easy Reaper harvesting wheat, while also offering a tour of LEF's energy systems. This event is being organized with the support of the Common Grain Alliance. Please sign up for Field Day Exploring Small-Scale Organic Grain Farming Equipment & Renewable Energy Solutions.

2025 DC Solar Training: Applications Due May 20

If you're considering applying for this year's DC Solar Training, get your application in soon! The application window will close May 20. The program will take place July 18, 19 and 20 at Serenity Community, located a half hour from Albany NY. To apply, fill out the following form: https://form.jotform.com/250646742972061

LEF Partners with The Dogbane Movement Hub

We were pleased to be collaborating this year with the Dogbane Movement Hub, a climate resilience education space and small farm in Ashland VA, just north of Richmond. The Dogbane Movement Hub is part of The Climate Mobilization, which organizes climate survival programs for low-income communities and communities of color around the US. Their goal is to build resilient infrastructure and essential skills that can support these communities through the coming climate shocks.

Tim explains how to wire a solar pump at Dogbane Movement Hub.

The first such program offered at Dogbane Movement Hub was a Water Survival Training, which happened this April. Richmond's municipal water system has been in crisis for several months, so there is a clear need for autonomous water infrastructure. There were several experts at the training leading sessions on risk assessment, rainwater catchment and water purification. The LEF team led a session on solar water pumping, which included an installation of a solar water pump for the Hub's new rainwater catchment system. This system will provide water pressure for their kitchen and bathroom during future events and workshops.

Dorian and Amalia, who attended our training last year, install a panel for a direct drive fridge at Dirtbaby Farm.

It was very exciting to get connected to so many amazing activists and community organizers in Richmond. Several folks at the event represented community gardens. Urban farms have emerged as a popular spot for applying direct drive technologies in cities, particularly water systems and refrigeration. A few years ago we installed a DC system at an urban garden in Caguas, Puerto Rico; this spring, we installed one at Dirtbaby Farm in Philadelphia.

It's a logical fit- folks are already working towards community self sufficiency and self-determination, and often have both practical and idealogical motivation to keep their utilities separate from the city's. It seems that the urban farming movement will likely be the first to introduce direct drive technology to the Richmond area as well.

LEF Featured on Nate Hagen's *Great Simplification*

Living Energy Farm was featured on Nate Hagen's *Great Simplification* show. Links are here
Website: https://www.thegreatsimplification.com/episode/171-alexis-zeigler
Youtube: https://youtu.be/vTIaxj8gRRc
Substack: https://natehagens.substack.com/p/living-without-fossil-fuels-how-living
Linkedin: https://www.linkedin.com/feed/update/urn:li:activity:7315705104920190977/

We have known of Nate for many years. He does an excellent job of producing high quality content related to the changes we face in modern times. *We got more response from this show than any media ever produced in the last 15 years about LEF.* We have been doing our best to respond to the many people who have contacted us in response.

***Empowering Communities* Book Updated**

We have updated the book *Empowering Communities* very recently. It is at conev.org. It is less of a historical re-telling of how LEF was built but with more information about our technologies. Feel free to download a new copy, and to send us corrections/ suggestions.

Easy Reaper in Zambia

For about a year now, Kerry Clark from the University of Missouri has been promoting the Easy Reaper (the simplified combine harvester invented by Alexis) to agricultural equipment fabricators in Africa. Mostly her work has been funded by USAID. After USAID was downsized by you-know-who, Kerry was able to arrange some private funding to keep the project moving.

While these new funds are not enough to pay for the rapid expansion of Easy Reaper production in Africa as originally planned, we have continued to upgrade of the drawings and instructions for building the machine. We have supplied these plans to a small fabricator in Zambia who works with Kerry. We are hoping that the detailed plans will make it possible for Easy Reapers to be built in Africa without Alexis having to travel over there. Work has begun on making the machine in Zambia.

The current Easy Reaper is the fourth iteration of the design, and it works pretty well. It is dramatically simpler than a normal combine harvester. Build One of the Easy Reaper was a much simpler than Build Four, and an abysmal failure. We have learned a lot in the last 10 years of working on this project. We are now working on Build Five, which is quite a bit simpler than Build Four and similar the original Build One, but incorporating lots of lessons learned since then. At our children's insistence, the new machine is called the Grain Goblin. It would be sweet to have it running for a test with the upcoming grain harvest at the end of June, but we are pretty buried right now with spring farming and project management. Perhaps we will be able to harvest oats with the Goblin later in the summer.

Farm Update

We're getting into the thick of planting season at Living Energy Farm. This year we'll be growing the usual assortment of vegetables and grains for seed and food, while also expanding our orchards. We're excited that our new member, Chrissy, is taking on a lot of seed growing responsibilities. This will go a long way in allowing our community to continue to grow seeds for income in the future, since outreach projects have been growing quickly over the past few years, taking up more and more of Debbie's time.

Chrissy has two children, Harvey and Jenny. Having another family on the farm continues to make our lives more fun and interesting. Among other things, the kids have inspired an ambitious watermelon trial this year with 15 different varieties, including some representation from deep south watermelons that Alexis grew in his youth in Georgia. We're also doing an eggplant trial this year, but the kids are less excited about that.

Planting Seminole pumpkins at LEF

This spring we welcomed our newest member, Ian, who hails from just over the border in West Virginia. Ian brings a lot of diverse skills to our team, along with a love of mountain music and humor. He attended our training last year, thinking he might want to take his homestead off the grid. Instead, he decided to join ours. Aren't we lucky!

The Reach of Living Energy Farm

Folks often ask us for advice on how to integrate DC Microgrid technology into their lives while maintaining grid powered "backup." We usually tell them, if you're going to be on the grid, insulate your house and put windows on the south side for passive solar gain if you can. If you are using grid power, installing solar electricity in a grid supported house is a waste of time and resources. People like to think of solar electricity as inherently good. Photovoltaic panels are ecologically costly, and we have become accustomed to using massive amounts of energy. Adding more energy to current consumption patterns is kind of like finding a new source of beer for an alcoholic. It doesn't help.

There is a large and growing field of academic study that illuminates the futility of trying to meet modern energy demands from the supply side with "renewable" energy. Ozzie Zehner coined the term productivism in "*Green Illusions*" to describe this phenomena. A new book on the subject is *More and More and More: an All-Consuming History of Energy*, by Jean-Baptiste Fressoz. The book debunks the popular idea that "energy transitions" have happened in the past and will, presumably, happen in the future. It explains that this is a myth and that, in all of modern history, new energy sources have never made the old ones obselete. They simply increase overall energy consumption.

Take firewood, for example. There is a myth that "coal saved the forests," that the burning of fossil fuels has reduced the burning of wood for fuel. This is not true. Globally, wood consumption is higher than ever. In fact, in the UK the single largest carbon emitter is a wood-burning power plant that imports wood from the US and Canada. Shockingly, its emissions are absent from the country's carbon accounting because it is classified as "renewable."

Renewable energy in a growth based economy is simply that: more energy. The corporatist economy will swallow it up and continue to grow. The real work of our age is *not* finding new ways to feed our addiction, but learning to live well while consuming less resources. This is the work we are doing at Living Energy Farm. We have created an energy system that we call a Direct Drive DC Microgrid, or D3M for short. D3M can provide modern energy services with zero coal, nuclear, natural gas, or industrial "renewables." With 300 watts installed PV per capita, D3M has a far lower cost and resource footprint than conventional renewable energy systems. It's a tool that can enable low-income communities to "cut the cord" of energy addiction.

We do what we can to promote D3M, through media appearances, annual trainings, and various installation projects, some close to home and others abroad. Promoting D3M is exciting, and our project list keeps growing. But the reality is that very few D3M systems exist that haven't been built by

our team. If D3M works so well, why isn't it spreading on its own merits? We think there are several problems standing in the way of its adaptation. A big one is the persistent fantasy that a renewable energy "transition" can stop the modern economy's consumption of fossil fuels by adding energy sources.

Another big problem is the organization of the modern world around individuals (or couples) owning property. Both the rugged homesteader and the city dweller doesn't have the time or resources to build, maintain, or manage a solar thermal, D3M or biogas system. These systems require village-level cooperation. Not coincidentally, the focus on private property and private investment leaves us all dependent on powerful corporations who produce almost every material thing we need.

We have been attempting to overcome these impediments by taking the technology to people abroad who might appreciate it more, and who are organized in a manner to make better use of it. We have made some progress in the Caribbean. We are planning a scouting trip to Sub Saharan Africa, currently planned for October. On paper, the energy needs of African villages could be well served by D3M, and thus provide a model that could grow more quickly. We will have to see how that works out.

We also work with activist organizations in the US, and do what we can to enhance self determination in communities left out of the "American dream." We are often met with enthusiasm in communities of color. We sometimes get the cold shoulder from professionals who cannot enhance their careers with our technologies. We don't fit their funding categories, and they are often the gatekeepers of nonprofit and government funds.

So we keep trying. We have a better crew than we have ever had at LEF. We are all volunteers, and some days it feels like we are trying to do too much. We continue to develop technologies to fit D3M and the needs of small farmers, including biogas, a DC washing machine, a simplified combine harvester, and other projects. We are doing what we can to spread our ideas. We are always looking for help in doing that.

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 Living Energy Farm, 1022 Bibb Store Rd, Louisa VA, 23093. Donations to the Living Energy Farm Institute are tax deductible. ***Click here to make a*** tax deductible donation***. Make sure to designate your donation for Living Energy Institute.***

Articles, Videos, and Podcasts about LEF are
here.
https://livingenergyfarm.org/articles-and-videos/