



New Member Profile: Green State Biochar

We asked new member Green State Biochar to introduce their business via a member questionnaire we sent to them. Please meet Green State Biochar below and we welcome them to the VNLA!

We are Green State Biochar, a company founded by Roger Pion and Luke Persons whose mission is to utilize local waste wood for the production of high-quality biochar (the conversion of organic waste materials into sequestered carbon in the form of biochar). When combined with manures, compost, and/or animal bedding, improves the availability of nutrients and increases plant uptake and crop production by improving soil structure, acting as a time release capsule for the nutrients, and providing an excellent environment for biota growth. Biochar is also used in filtration systems to capture storm water and agricultural runoff.

The business was founded 2 years ago when Roger and Luke realized if they wanted biochar, they would have to produce it. Transporting it long distances was not going to benefit the carbon footprint problem. To produce biochar you need a pyrolysis unit (kiln). With their combined skills of welding, inventing, engineering, and what Luke calls “smarts”, they set out to build the kiln.

Six months later, the kiln was operating efficiently (oxygen starved environment at 1200 degrees F) and producing 300 plus pounds a day of high quality, rich, biochar.

Green State Biochar was awarded a Vermont Phosphorus Innovation Grant this fall and will be adding biochar filtration systems to ditches at the lower edge of farm fields to capture 90% of

reusing, or to resell this product to local landscapers and food producers.

The biochar industry is growing at a rate of 20% a year, globally, over the past 5 years. We would like to see Vermont be a leader in this industry, keep things local, provide resources to farmers, and create jobs.

Please contact us to share your thoughts or let us know if there is any way we can help your business.

Why did you decide to join the VNLA/Green Works?

The networking opportunities are great for our business. We are also experimenting with biochar, cement, and other materials for the creation of stone pavers. The recipe was provided to me from a large biochar company in Finland. This same recipe is used as foundations for homes, no rebar needed, and 1/5 the weight of traditional ones. More to follow.

Green State Biochar will be featured on an upcoming VT PBS show - Center for an Agriculture Economy - Meet the Makers to be televised on February 14 at 7pm; February 17 and 2pm, February 18 at 9:30 pm, February 23 at 9:30 pm and February 28 at 10:30 pm.



From the left: Roger Pion, biochar filtration specialist, Donna Pion, general manager and Luke Persons, biochar filtration specialist.

phosphorus before entering streams. In late summer we will have 10,000 plus pounds of this nutrient rich material which can be added prior to the planting of fall trees or the laying of sod. It can also be dug into the ground which loosens the soil and releases bound nutrients. Interested landscapers should contact us if interested in obtaining this material.

We are encouraged to watch the biochar industry grow, particularly in Vermont, into an employee owned business whose mission is to keep local waste wood out of landfills or being transported long distances for others to turn into biochar and repackage in plastic bags and then sell back to big box stores. We want to help the farmers with a low cost remedy to keep their fertilizers from running into waterways by capturing them and

