



RICH EARTH VIRTUAL SUMMIT

Nov. 2 - 4, 2021

REGISTER

Rich Earth's annual Summit is right around the corner--[register today!](#) Admission is by donation: your contributions will help cover the costs of hosting. Additional funds raised will be donated to support the [Container Based Sanitation Alliance](#).

See our [Summit webpage](#) for full details, including presentation descriptions and speaker bios.

TUESDAY NOV 2	WEDNESDAY NOV 3	THURSDAY NOV 4
Welcome 9 - 9:15 AM	Welcome 9 - 9:10 AM	Welcome 9 - 9:10 AM
KEYNOTE: Lynn Broaddus 9:15 - 10:30 AM	Social Change 9:10 - 10:20 AM	Lifecycle Assessments & Environmental Impacts 9:10 - 10:10 AM
BREAK 10:30 - 10:40 AM	BREAK 10:20 - 10:30 AM	BREAK 10:10 - 10:20 AM
ROUNDTABLE DISCUSSION: Economics of Productive Sanitation 10:40 AM - 12:00 PM	Progress in Tech Research (Part 1) 10:30 - 11:30 AM	Agricultural Use 10:20 - 11:00 AM
INTERACTIVE BREAKOUT ROOMS 12:00 - 12:40	BREAK 11:30 - 11:40 AM	Gold Ribbon Commission 11:00 - 11:40 AM
The Places We Go: Implementation Projects Around the World 12:40 PM - 1:50 PM	Progress in Tech Research (Part 2) 11:40 - 12:45 PM	BREAK 11:40 - 11:50 AM
INTERACTIVE BREAKOUT ROOMS 12:45 - 1:45 PM	Global Partnerships for Urine Reclamation 11:50 - 12:30 PM	Golden Funnel Award
INTERACTIVE BREAKOUT ROOMS 12:45 - 1:45 PM	INTERACTIVE BREAKOUT ROOMS 12:45 - 1:45 PM	INTERACTIVE BREAKOUT ROOMS 12:45 - 1:45 PM

Times in Eastern Daylight Time, UTC -4

Keynote Speaker: Dr. Lynn Broaddus

Nov. 2, 9:00 -10:30 am EDT

Lynn Broaddus, Ph.D, M.B.A. is the 2020-21 president of the Water Environment Federation (WEF), an international organization of water quality professionals headquartered in Alexandria, Va. Lynn formed Broadview Collaborative Inc. in 2014 as a platform for advancing sustainable, resilient practices in the water sector. She serves as a strategic adviser and facilitator for private-sector, nonprofit and philanthropic clients throughout North America, and is known for bringing new ways of thinking to the crucial environmental challenges of our day.

Farm Field Day



We hosted a farm field day as part of our research project on trialing drip fertigation and other new application methods with different kinds of crops. The event was hosted at Hubbard, CBD, one of the farm partners for this project. With a backdrop of magnificent plants (some fertilized with urine) we shared what we've learned so far from our farmer collaborators and our lab research. We had a great group of both nutrient suppliers (urine donors) and nutrient users (farmer partners) at the event.



John Janisyzn, one of our farm partners in this study, surprised us at the end with a basket of urine-fertilized sweet corn! Taster-testers agree: this is the sweetest, most flavorful corn we've ever had (thanks, in part, to the nutrient contributions of Brattleboro's finest!)

The field day was part a project (subaward number ONE20-375-34268) supported by the USDA Northeast Sustainable Agriculture Research and Education program.

Community Urine Recycling Program Update

We are well on our way to setting a new record once again for the number of gallons collected in a calendar year. Stay tuned for the next newsletter to see exactly how we did compared to last year's record of 10,405 gallons. We have finished our applications for the season and are busily trying to pasteurize as much urine as we can before freezing temperatures set in. This way we'll be ready once spring is here and we have hay to fertilize again.



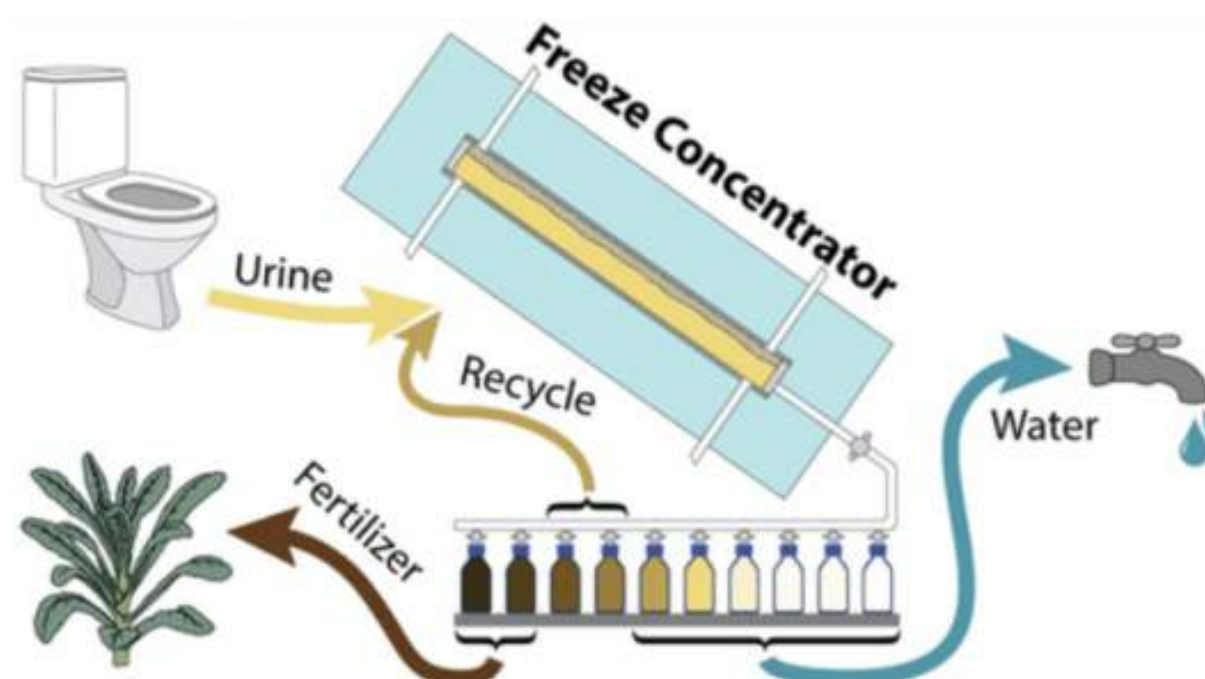
Arthur Davis works on our updated version of the pasteurizer, which the Rich Earth Tools, LLC spin-off aims to bring market for other communities to replicate what we do here in Brattleboro!

New Peer-Reviewed Publication!



Advancing the Design and Operating Conditions for Block Freeze Concentration of Urine-Derived Fertilizer

Abraham Noe-Hays*, Ryan John Homeyer, Arthur P. Davis, and Nancy G. Love



This is the first technical, peer-reviewed article Rich Earth has published with our team as lead authors! The paper details our freeze concentrator - a pivotal part of the building-scale treatment package that our spin-off business, Rich Earth Tools, LLC is developing. Freeze concentration is key to enabling the expansion of urine recycling at larger scales. By freezing and melting pee, we can remove water and concentrate the nutrients into a fertilizer product that is more efficient and cost-effective to transport. [Read the paper abstract here.](#)

Waste*d Portable Toilet Collaboration



Rich Earth has been helping a budding new business field test their urine-diverting composting portable toilet. [Waste*development](#) is a California-based start-up dedicated to "building a circular sanitation economy that transforms human waste into eco-fertilizer, sourcing input through reimagined portable toilets." Their portable toilet alpha unit uses a patented source separation technology. Try it out at the Brattleboro Farmer's Market this Saturday (October 30) and let us know what you think.

New ECO AmeriCorps Service Member



We are thrilled to be adding **Jamina Shupack** to our team for 2021-2022! Jamina joins us through Vermont's [ECO AmeriCorps](#) program, which sites service members at environmental organizations across the state. She will be helping us with a wide range of projects, including agriculture research, education, and community outreach.

Jamina is interested in any system that treats waste as a resource, especially when it comes to sanitation. She sees improving the sanitation systems in the United States and beyond as a vital component in the fight against climate change. She has been involved in a number of small scale compost toilet projects and is excited to be involved in larger scale operations. Jamina holds a Bachelors in Environmental Science with a minor in Biology from the University of Oregon. She comes to the world of circular sanitation after 12 years as an educator. In her spare time, she can often be found working on a sewing project, cooking for her community, embarking on a bike tour, or swimming in the closest body of water.

Please consider donating to the Rich Earth Institute. With your support, we can continue to forge new pathways for urine nutrient recycling!

[Donate](#)

