

FEEDING

Laramie Valley



THIS MONTH'S NEWS FROM FEEDING LARAMIE VALLEY

Edited by Rachel Surratt, Feeding Laramie Valley AmeriCorps VISTA



Bren Liske's chickens. Photo by Reece Owens.



Lettuce in aeroponic barrel. Photo by Rachel Surratt.



Bren Liske's Garden. Photo by Reece Owens.

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Bren Liske and her goats. Photo taken by Reece Owens. 2012.

FOOD CHRONICLES

RACHEL SURRETT - FLV AMERICORPS VISTA

Despite it being the least populous state in the United States, Wyoming is still home to many different faces. When Feeding Laramie Valley was in its beginning stages, Gayle Woodsum knew that recording not just the faces, but the experiences and motivations of local farmers, ranchers, gardeners, activists, and visionaries was something that could make an impact on the way the community views their own food systems.

The main issue with making this project a reality was an issue that comes up at any small non-profit: this project needed funding. In addition to funding, it needed paid employees with time to carry out the work. Fortunately for the fate of this project, in 2010, Feeding Laramie Valley was approached by academics from the local university to join the Food Dignity Project, an expansive \$5 million collaborative project that was USDA grant-funded, spanned across five funded years, several states, involved both non-profit organizations and academic institutions, and produced irreplaceable knowledge and connections.

The decision to blend community-based activism and academic research was not an easy one to make, due to traditional structures of power that tend to favor the voices of the academy rather than the voices of the community. However, despite a few pitfalls and a healthy amount of skepticism from the organization's perspective, in the end, the Food Dignity project's funding helped launch some of FLV's programs and created bridges between grassroots organizers, the academy, and the community. To learn more about the decision to join this project, click [here](#).

"...recording not just the faces, but the motivations and experiences...could make an impact."

Soon after the Food Dignity project began, FLV's opportunity to document the lives and experiences of those involved with food became reality. Food Chronicles was brought to life through the lens of Reece Owens. While he is the Food Production Coordinator now, he began as the Community Voice Journalist, taking photos and videos, as well as conducting interviews with the help of fellow FLV staff member Lina Dunning. The now ongoing series, Food Chronicles, is comprised of photos, narratives, and videos that capture historic and innovative community food systems accomplishments.

Many contributors of this project have been community elders, due to the vast life experiences they possess, and because it is through their stories that we can learn what growing in Laramie was like in the past. There is a pervasive myth that food cannot be grown in Laramie, but as Owens explains in his narration of the Food Chronicles video [Feeding Laramie Valley: West to East](#), "Community elders remind us that families grew successful gardens all over town. Now they help us do it again."

The stories documented by FLV highlight the creativity of growers in Laramie, such as Bren Liske, who moved here for the fresh air, and ended up staying out of love for the land. During a Food Chronicles interview with her, she explains that she has been a gardener her entire life, but used pesticides heavily and feels her health was affected. She moved to Wyoming because she had severe allergies, and needed a place to live that had "clean air."

"The stories documented by FLV highlight the creativity of growers in Laramie."



Bren Liske holding a bunny. Photo by Reece Owens. 2012.



Bren Liske in her garden. Photo by Reece Owens. 2012.

Once she and her husband moved to Wyoming, a series of experiences led to them learning how to live off the land, and enjoy it in the process. She reflected, “We were kinda prepared to live in the country... it’s hard. We’ve seen so many people buy these acreages up here, and they build their house and then they move the next year ‘cause of the wind and all that. Yeah, we’re just crazy enough to enjoy it.”

The resourcefulness of Wyoming gardeners is emphasized throughout Bren’s interview as she recalls, “When we moved out here it was really hard to grow things. We lived in Centennial for a year, and I cultivated a little garden using coffee grounds from Murf’s, and whatever I could make soil [with]...” This soil was moved to the ranch they were living at, and then eventually moved to the home they’re at now.

After years of growing and composting, Bren’s soil and skills have only gotten better, and all of the vegetables she eats through the summer are grown by her. She even says that she grows and freezes enough greens to last through the entire winter.

To Learn More...

While Bren’s story is remarkable, there are more stories to hear! Follow these links to learn more about Food Chronicles and the Food Dignity Project.

Food Chronicles:

<https://www.feedinglaramievalley.org/food-chronicles>

Food Dignity:

<https://portal.nifa.usda.gov/web/crisprojectpages/0224245-food-dignity-action-research-on-engaging-food-insecure-communities-and-universities-in-building-sustainable-community-food-systems.html>



Aeroponic growing systems, FLV grow tent. Photo by Rachel Surratt. March 2020.

HOMEGROWN AEROPONICS

Written by Dom Frausto - FLV AmeriCorps Member

Finding sustainable ways to extend the growing season is a long-term goal of Feeding Laramie Valley, so this winter our Shares Team constructed an aeroponics system. Aeroponics is a soil-less growing method that involves suspending plant roots in the air and then misting the roots with nutrient-treated water.

Why did we specifically construct an aeroponics system? We did this because aeroponics allows roots to hang in the air, which stimulates growth and guarantees a plentiful amount of oxygen to your plants. Because of the way we built it, we can also grow vertically, conserving our space.

This method might sound relatively simple, but depending on the set-up you choose, it can become quite complex. Fortunately, since there are several different ways to set up an aeroponics system, you can choose what works best for you. In addition, many of the necessary supplies can be easily sourced from recyclable materials.

In our case, we decided to build a barrel aeroponics system. We were able to recycle a majority of the materials from an old hoop house we deconstructed last year and a barrel that wasn't being used. In the simple aeroponic system we've built, water is pumped from a reservoir to the sprayer inside the barrel, and the water is then diverted back into the reservoir to repeat the process, meaning nothing is wasted.

Building the aeroponics system was incredibly fun, but no walk in the park. The build came with its share of trial and error to figure out what worked the best. Our first mistake was in the design.

Originally our setup was going to have two water sprayers (made of PVC pipe) come up from the bottom of the barrel. Our hope was that the distance from the water to the sprayers would be shorter so it would be easier on the pump, and would use less PVC.

The problem with the sprayers connecting from the bottom was finding a way to efficiently redirect the excess water back into the reservoir without most of it spilling onto the floor.

FIVE REASONS TO TRY AEROPONIC GARDENING



SAVE WATER

Aeroponic garden systems save more water than traditional soil gardening, and the system recirculates the same water so there's not as much waste.



SAVE RESOURCES

Traditional soil gardening usually requires large amounts of soil, fertilizer, and water. Much of this is avoided while using a system like the one we have put together.



EXTENDED GROWING SEASON

The growing season in Laramie is only around 56 days every year, growing indoors can be a good solution to provide fresh food year-round.



NO PESTICIDES

While FLV does not use any form of pesticide in our gardens, this aeroponic system provides a sterile and pest-free environment.



NO NEED FOR LAND

Aeroponic garden systems can be set up anywhere there is free space, especially with the use of grow lights. Land is not a requirement for growing.

Source: https://www.nasa.gov/vision/earth/technologies/aeroponic_plants.html



Building process for aeroponic barrel. Photos by Rachel Surratt. Dec 2019.

To remedy this, we tried redirecting the water through the top of the barrel via two sprayers and used the bottom holes for draining. However, with this new change came new problems with the two sprayer set up.

Since we needed the water to enter from the top of the barrel, we needed a lot more water pressure to get it there. In addition, having two sprayers meant that the pressure was distributed unevenly, and not all of the plant roots were getting misted with the water.

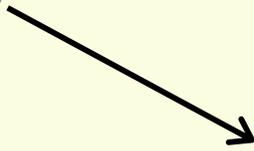
After first changing the sprayer layout, and then trying to shorten the distance from the reservoir to the sprayers, we eventually found that removing one sprayer was the best solution. Simply redirecting all the water to a singular sprayer wouldn't require purchasing stronger pump, or reconstructing the entire barrel, so that is what we are trying out for now.

Our aeroponics system is up and running with plants growing and water flowing. We've learned through these mistakes and successes that while setting up a system like this takes time and patience, the payoff can be worth it.



Aeroponic barrel. Photo by Rachel Surratt. Feb 2020.

Aeroponic Barrel: How are the Plants Watered?



Inside view: The inside of the barrel is outfitted with a small pipe. The pipe has been strategically drilled so that water evenly mists each plant in the barrel. The pipe connects to a separate tub of water with a pump inside (we used a fish tank pump) to create pressure and circulate the water. The water has been treated with liquid nutrients.



We started our plants in rockwool cubes under a grow light before putting them in cups with clay gravel.



This is a special clay gravel that absorbs water and traps nutrients for the plant roots.



The plant, still inside the rockwool, is surrounded by gravel in this cup. The cut-outs allow the roots to grow freely and get misted by water.



We cut recycled PVC pipe and attached them to the holes we drilled in the barrel with caulk in order to hold the plants and cups in place.

Updates in a Changing World

...and an invitation to be a part of the important food security work needed during this challenging time.

Services and programs from our Laramie, Wyoming headquarters continue to expand as guided by ongoing community needs and those emerging in response to the COVID-19 epidemic. Volunteers are needed, and [paid summer job positions](#) are now open for applications.

New Building Hours

For the time being, the Feeding Laramie Valley office is closed to the general public and most of our staff is working from home. We are open for Shares participant pick-up only.

Shares Pick-Up

Thursday: 1:00 PM-6:00 PM

Friday: 1:00 PM-6:00 PM



Kiwanis Park Community Garden in West Laramie had a successful first growing season and we want to continue that success with some new plot stewards!

There are plots available for year-long reservation now, with multiple size options. To learn more about KPCG, click [here](#).

Plots have been filling up fast, so be sure to reach out as quickly as possible!

Contact our Garden Coordinator, Katherine Case, for additional information, or to inquire about reserving a plot.

Email: katherine@feedinglaramievalley.org

Announcements



If there are any announcements you would like to spread the word about, please contact the editor:

rachel@feedinglaramievalley.org

