

Organic Farm Specializing in Aquaponically Grown Produce



Spencer Curry - CEO

About FRESH Farm Aquaponics

FRESH Farm Aquaponics, LLC is a small organic farm in South Glastonbury, Connecticut that specializes in aquaponically grown produce. It is our goal and our help you Grow to Your Fullest Potential, Today. Our farm uses the latest techniques in Aquaponics to grow produce that use up to 90% less water than traditional agriculture and produce up to ten times the amount of crops in a given space than traditional agriculture methods. We do this is an ecologically sustainable aquaponic system to bring you the highest quality, freshest produce at reasonable prices. While our focus is local, we aim to provide you with the best produce in the world without having to leave your home town. For those of you not located near us please visit our blog page as we update you on how to grow your own aquaponics produce right in your back yard! Our digital review store features the industry's top products, including aquaponic system kits, diy aquaponics guides and online courses. Whether you're looking for desktop systems for fresh herbs, backyard aquaponics for your whole family, or are working with much bigger space we have the products and the know how to help you grow. And always, if you have any questions, concerns, comments or suggestions we love hearing from everyone so please visit our contact page for the various methods to get in contact with us. We can't wait to hear from you!

Interview conducted by: Lynn Fosse, Senior Editor, CEOCFO Magazine

CEOCFO: Mr. Curry, what is the concept at FRESH Farm Aquaponics?

Mr. Curry: FRESH Farm Aquaponics is, like you said, an aquaponics farm. What that means is that we raise fish and plants together in a sustainable ecosystem in order to produce both produce and fish protein.

CEOCFO: What is your approach?

Mr. Curry: It is an ancient style agriculture that has been used in China, by the Native Americans and all over the world for thousands of years. It is what I like to think of as the modern renaissance as we are starting to apply new technologies to this ancient form of agriculture. A good example of these new technologies that we are implementing would be data collection and sensor systems that are able to monitor nutrient levels to really optimize growth for both the fish and the plants.

CEOCFO: Tell us about the facility.

Mr. Curry: We have two gardens currently that are two different styles. One is what is known as a media bed, or flood and drain style system where it is essentially six grow beds, each about three feet by four feet. They are fed continuously water from a fish tank, which is separate. The fish tank holds all the fish, where they live their fishy lives, and in so doing they create fertilizer in the water. We pump that water continuously into our plant beds, which fill up and then drain. That is why it is called flood and drain. As the water rushes over the roots, they gather the nutrients out of the water, thereby filtering the water for the fish. That is how we are able to keep all our water. We never have to replace the water, except for evaporation, and we never empty the water either, so there is much less water waste.

CEOCFO: Are there certain types of fish that make a better fertilizer?

Mr. Curry: It is really just about anything that will work. We started with tropical fish right from the fish store, and we are now doing it with tilapia, which is industry standard. We are also using koi, which is a more localized fish and not for eating but for viewing pleasure. We have also caught local catfish in the stream nearby and put them in our systems. What we found is the more diversity that you add, the stronger the system becomes, just like any other ecosystem, which is really what aquaponics is. It is a self-contained or closed-loop ecosystem.

CEOCFO: What is the other type that you are doing?

Mr. Curry: We also have what is called a deep water culture, or raft bed system. This is essentially a series of troughs that are about a foot deep and four feet wide, and each one holds a body of water in which rafts float. These rafts are filled

with holes that we plant our plants in using what is called a net pot, which is like a pot with slits cut in it so that the roots can come out. These are standard practice for hydroponics, which is sort of the precursor evolutionarily to aquaponics as an industry. This deep water culture system is super efficient at producing specifically greens and herbs. It is almost like a conveyor belt, because you can start a new seed on one end of the raft and you will add a whole raft once a week, for example. By the time that raft reaches the end of the bed, it will have become full grown, and there you have it. You can harvest right out of the beds.

CEOCFO: *You make it sound so simple. What are the challenges in setting up and maintaining?*

Mr. Curry: Luckily one thing that I like to keep in mind with aquaponics is that nature is doing almost all the heavy lifting for you. Billions of years of evolution have led to microbes, fish and plants that all work together symbiotically. On our end, things that come up often both for us and other businesses in our industry, it would be the high cost of starting an aquaponics system. That is essentially the main road block we run into. It could cost a pretty penny to install a system, but luckily once it is installed, it is pretty cheap to run over the long term because the fertilizer is being produced in house and there is very little input toward the system.

CEOCFO: *How have you decided what to grow?*

Mr. Curry: Because we are still in early stages, both as a business and an industry, we have been testing the waters with all sorts of plants. Now that we have tested a wide range of plants, we are now narrowing that down due to market demand and other factors like that.

CEOCFO: *Who is buying what you produce?*

Mr. Curry: Right now, we are changing every week. We sell every week at our local farmers market, so it is people in town, people from just outside of town, and many locals. We are really trying to build a local food system that is sustainable and year round, which is rare in Connecticut.

“The benefits of aquaponics are so apparent. . . . It is simply because we tap into the nature itself, and we are using billions of years of evolution to our advantage rather than trying to reinvent the wheel... I truly believe that aquaponics and its similar technologies are actually able to provide a true solution to hunger worldwide, and that is a problem that everyone can relate to.”- Spencer Curry

CEOCFO: *Is it indoors?*

Mr. Curry: We are actually in greenhouses right now. There are other people growing in greenhouses, but they are not able to produce year-round except with major expenses. Due to the nature of the aquaponics system, we are actually able to grow year round for far less than your conventional agriculture.

CEOCFO: *Does sunshine play a part?*

Mr. Curry: Yes, that is pretty much the major nutrient that would go deficient in the winter, especially in Connecticut, which can be replaced with a certain spectrum of lights, something we are actually going to be implementing this winter, so we should see increased growth. We actually were able to grow all winter long last year without lights. We had a small herb CSA, which is a community supported agriculture program. Families and individuals are able to purchase a share of our produce for a season, and then they get weekly deliveries. It is great for the farmer, because we get many purchases up front. It is great for getting a nice chunk of change at the beginning of the season, and it is great for the customer because they end up getting way more produce than they actually paid for. It extends over the entire course of the season. We delivered one herb per week all winter long, and it was actually very long. It was a five-month CSA, and typically they are about three months.

CEOCFO: *What do you see two to four years down the line? What is the overall business plan?*

Mr. Curry: The way we see our business, and like I mentioned earlier, it is setting up a sustainable food ecosystem locally. What we are doing as a business is proving our model first in our hometown, which is Glastonbury, Connecticut, and once we have proved the model, we plan on expanding into a network of small farms around the state and eventually around the country or globe. We hope to expand through a crowd source by reaching out to like-minded people through social media and other online avenues. We are putting together what we call the aquapioneer team, which are like-minded individuals who are looking to provide sustainable food security for their loved ones and their communities. We hope to expand our food network that way. I also mentioned earlier about data collection and the ability to track nutrient levels and other important things. This is a new development in the last decade or two, so we hope to develop an aquaponic-specific data collection service so that we can help people grow into this new industry, which is in its nascent stages. We want to essentially utilize the network that we are creating to gather as much data from as many different places as possible so we can really help anyone in the world grow to their full potential.

CEOCFO: Do you see initially going into high-end communities or does the natural environmental concept transcend?

Mr. Curry: I think it definitely transcends. My hometown where we are located now, Glastonbury, Connecticut, is sort of an interesting little area. It is a high-end community, and we have the local Whole Foods and the locally conscious buyers, but we are also next to Hartford, and we have our fair share of kids who do not eat unless it is school lunches and that kind of situation. Food deserts are a big issue here in Hartford. We really are trying to approach aquaponics from an avenue that will make it affordable for those who need it and available for those who want to support that high-end local food. It lends itself to both worlds, and in a way, it unifies them with good food.

CEOCFO: Do most people understand the concept and the value? Is there skepticism at all?

Mr. Curry: There is a certain element of education that is necessary to produce a fully enlightened customer, but what we found is that it is such a natural concept that people are really quick to pick up on it. This goes anywhere from a six year old – we have taught classes at a local elementary school – all the way to my grandpa understanding it instantly. It is really kind of an idea that transcends age and intellect because it is so natural. A great example that I like to use to illustrate how it works and why it works is to look at any rivershed ecosystem. We are lucky we live right next to the Connecticut River, which is a very large river up in the Northeast here. The way we explain it is that all the best farms in Connecticut lie right along that rivershed ecosystem right next to the river. The reason for that is that as the waters rise and flood into those farms, they deposit the minerals and different nutrients that are left in the water by the fish and other decaying matter. It is that particular point that actually gives those farms such an advantage over a farm located on the top of a mountain, which is not getting new nutrients so often. That tends to light people up and they really start to understand almost instantaneously why the benefits of aquaponics are so apparent. It is simply because we tap into the nature itself, and we are using billions of years of evolution to our advantage rather than trying to reinvent the wheel.

CEOCFO: Do people come and look at your farm?

Mr. Curry: Yes, we love to host people. We have drop-bys and we always take appointments. We were just lucky enough to have our state senator, Steve Cassano come through, and he loved the system. We have had groups of home-schooled children and parents come through, and we are planning an adult education course for September. We have worked with local schools to help build systems in the classroom.

CEOCFO: Are you funded for the steps you would like to take or will you be seeking funding?

Mr. Curry: We were lucky enough to be the recipient of the Entrepreneur Innovation Award very recently, which is given by CTNext, which is an organization here in Connecticut that essentially holds a Shark Tank-style event where businesses present themselves. If they are deemed acceptable, they win this award. That was actually our first real outside source of funding. So far we have essentially bootstrapped every aspect of the farm. Moving to the future, we definitely are very passionate about bootstrapping ourselves up as far as possible. In order to reach as wide a network as we hope to and to develop our technologies like the data collection, sensor arrays and what not, we are entertaining the idea of going through a government grant or angel investing. Those are two avenues we have explored. Crowd funding is also probably next on our list as far as opportunities go.

CEOCFO: Is it easy to keep up with the new technologies?

Mr. Curry: We definitely unearth it for ourselves. We pride ourselves on drawing from a wide range of sources and inspirations to bring ideas to the aquaponics industry that might not have gotten there otherwise. We actually hope, out of our community that we are developing, to provide that one-stop shop that you mentioned that I said does not exist yet. We hope to help that come to be, and we are really hoping to provide the avenues for people like us. We basically asked ourselves, "What did we want when we first started?" and we are developing this community with that in mind.

CEOCFO: What surprised you as you have started to grow and develop the company?

Mr. Curry: Overall, I think the thing that most surprised me was how well the technology works. None of us had any experience growing anything, as weird as that sounds. When we started our farm, we had absolutely zero farming and gardening experience. Just due to the absolute power of the aquaponics technology, we are growing so much produce, and it is almost unstoppable. I can go away on vacation over the weekend if I want to, and the system will continue to work unabated. That was one of the most surprising things. The lack of experience was not a tough gate to get through.

CEOCFO: Put it all together for our readers. Why pay attention to FRESH Farm Aquaponics?

Mr. Curry: Your readers should pay attention to FRESH Farm Aquaponics because we are bringing to the world the future of food and agriculture. I truly believe that aquaponics and its similar technologies are actually able to provide a true solution to hunger worldwide, and that is a problem that everyone can relate to. Everyone has been hungry at some point or knows someone who has, and whether that is through lack of access to food or lack of proper nutrition, which is also a form of hunger. I believe that aquaponics can truly provide answers to that, and I think that is important for everyone.

BIO: Spencer Curry is CEO co-founder and co-operator of FRESH Farm Aquaponics llc of South Glastonbury, Connecticut. His passions for sustainability and quality food leads his quest to bring aquaponics to the world. His extensive experience has generated many aquaponics systems of all different styles and sizes, from desktop fish tanks to commercial greenhouses. He is also developing educational curricula using his past experience in education and new-employee training. To contact Spencer, email at spencer@freshfarmct.org or visit him online at www.freshfarmct.org



FRESH Farm Aquaponics

**338 Foote Road
South Glastonbury, CT 06073
860-531-2782
freshfarmct.org**