BURLINGTON - Robert Barfield, a 100% service disabled veteran, is doing something unique and exciting right on his farm. With the guidance of the ND SBDC, he is making a difference in the Minot region with aquaponics.

Barfield Farm Fresh will operate an aquaponics system to grow fresh organic produce for Minot and the surrounding areas. An aquaponic system is the process of growing fish and plants in a combined system. The fish in the system fertilize the water, which runs through a series of filters and takes the sludge and waste out of the water. After this, microbes are left which feed on the plants, and the plants, in return, clean the water. The fish release carbon dioxide, which is what the plants need, and the plants release oxygen which is what the fish need. As one can infer, both the fish and plants work together well to provide necessary nutrition for an efficient and harmless recirculating system.

Currently, Robert is working on a prototype test system in a building on his property. He is building a series of three different systems used in aquaponics. Robert is planning to grow tomatoes, lettuce, cucumbers, peppers, leafy vegetables, and microgreens. Right now, he is going to start his system using goldfish because they adapt well to cooler temperatures. In the future, he plans to incorporate tilapia which will eventually become an additional consumable product offering.

After getting the system going and growing the produce, Robert plans to sell his produce locally, with one place in mind being the local public-school systems.

While his commercial greenhouse is being built, Robert is starting with a 300-gallon fish tank, connected to various filters. Plans are in place to build roughly a 100 ft long by 32 ft wide greenhouse after concrete is poured in the spring of 2023.

In addition to the produce and fish produced from the system, Robert is incorporating a see-through tank for his system, so visitors can see the process clearly. And, he plans to have the greenhouse open to the public for tourism. He hopes to provide learning opportunities to schools through the visiting of his greenhouse as well. This system is a great STEM learning opportunity, and he is excited to
teach more people about it.

Unfortunately there aren’t additional staff members, but Robert has plans. By helping on the farm, he’s hoping he can provide disabled veterans like himself a work opportunity and help them transition to civilian life. Robert also plans to hire a few student interns from Dakota College in Bottineau to assist him in getting his equipment put together and running. The Dakota College has a program that teaches aquaponics, and the instructor is also Robert’s business consultant.

Of course, starting a business, no matter who you are, comes with challenges. Being a disabled veteran hasn’t stopped Robert. He said, “The biggest challenge has been funding. Mary Beth, my ND SBDC advisor, has really done a good job helping me with this.” In addition to receiving assistance from the ND SBDC, Robert says the community of Minot has been supportive as well. “Mary Beth got me in contact with North Dakota Vocational Rehabilitation, from which I received a $8,500 grant, as well as giving me other contacts for grants.”

Robert also said, “I would definitely recommend the ND SBDC. Mary Beth has been really good. She gives suggestions but allows me to make a decision for my business.” In addition to receiving assistance from the ND SBDC, Robert also met Mary Beth, my ND SBDC advisor, after attending a Boots to Business training workshop in 2017. (Boots to Business is offered through our partner program VBOC of the Dakotas and is available to transitioning military members, veterans, and military spouses.) Mary Beth presented the module about business plans. Robert gave her a call after the training and has been working with her ever since. As Robert put his thoughts down on paper, Mary Beth worked with him to edit and refine his ideas into what eventually became a successful business plan.

Robert also said, “I would definitely recommend the ND SBDC. Mary Beth has been really good. She gives suggestions but allows me to make a decision for my business.” In addition to funding, Mary Beth provided Robert advice, guidance, and encouragement to keep moving forward. Even if you’re taking baby steps, keep moving forward.”

In addition to receiving assistance from the ND SBDC, Robert says the community of Minot has been supportive as well. “Mary Beth got me in contact with Minot State University’s Severson Entrepreneurial Center of Excellence. They were instrumental in getting me involved in the community.”

Robert has always had a hobby for gardening, growing things, and experimenting. He has four grandchildren, and he enjoys experimenting with aquaponics because it is something they can get involved with too. When his business is open and operating, he is most excited to get the opportunity to teach people about this system.

When asked if he has any advice for other small business owners he stated, “Be very very patient and always have a contingency plan. I was in the military for 32 years and they taught me very well to always be patient and have a second plan. If the first plan doesn’t work, don’t give up, just keep moving forward. Even if you’re taking baby steps, keep moving forward.”