Setting the Stage

Rally Maker Dean Caravelis never saw his investment in early-stage social entrepreneurs intersecting with worm castings ever - but here we are.

And it seems Floridians are better for it.

That’s because those worm castings serve as one of the key ingredients of WriggleBrew, an innovative, organic fertilizer hoping to aid in controlling Florida’s red tide issue. WriggleBrew’s CEO and Seminole County native, Sam Baker, joined Rally as a Fellow last summer to grow and scale his business in a sustainable way that creates a double-bottom line: social good and a profitable business model.

What is red tide, and why should we care?

A red tide, or harmful algal bloom, is a higher-than-normal concentration of a microscopic alga (plantlike organism). In Florida and the Gulf of Mexico, the species that causes most red tides is Karenia brevis, often abbreviated as K. brevis.

Red tide has caused many issues in Florida, including:
- Massive fish and other marine organism die-off
- Respiratory issues in humans

Red tide affects the community by:
- Closing beaches
- Restricting fishing
- Creating unsafe marine food sources
- Exacerbating respiratory illnesses

After attempting to go fishing with his grandfather in 2019 only to be turned away due fish dying en masse as a result of a dangerous red tide, Baker, a scientist and innovator at heart, knew he wanted to help fix this issue. A few years later, WriggleBrew was born.

The new product - an organic fertilizer that commercial farmers could use as both a growing agent and a natural pesticide - could be a catalyst for healthier Floridian waters, which also creates better healthier, safer fishing and seafood industries across the state.

But, here’s the thing. Sam was a scientist. And a college student scientist at that. He had an idea of how to curb red tide, but no idea how to make a profit or create a sustainable business.

Luckily, Central Florida is home to a solution for that very problem: Rally.
Rally Makers: Connectors, Mentors, Advisors

A Rally Maker since 2021, Caravelis was paired up with WriggleBrew during the Summer 2022 cohort.

A local business owner of promotional marketing agency Blezoo, he became a Rally Maker to give back to the city that gave so much to him. He graduated from University of Central Florida (UCF) and is also a proud alumni of Leadership Orlando, a program run by the City of Orlando; however, with deep family roots in Greece, and experience with global culture, Caravelis brings a unique worldly business sense to the Fellows he is set to mentor and advise through Rally.

“Rally creates a support system that I wish I had early on,” Caravelis said of why he joined Rally. Being a Rally Maker to him means he serves as “part mentor, part advisor, and part connector,” to Fellows, which provides a one-of-a-kind business-nurturing environment for entrepreneurs who also want to achieve social good.

But Rally Makers are busy people - and Caravelis is no exception. So, when he found it difficult to figure out a time to make an introductory meeting work, he decided to meet Baker in an untraditional way: at his own dinner table.

“I told him to come to my house at 6:30, my family will be there, and ‘do you have any dietary restrictions?’ and okay, you’re coming over to dinner with us. While it was a bit unorthodox, we chatted over cooking and dinner for a couple hours, and it actually was a great way to launch and get to know somebody.”

It Doesn't Always Have to Make Sense

It might not come as a surprise, however, that a CEO of a promotional marketing agency didn’t know much about the science of organic fertilizer and worm castings.

Turns out, that doesn’t matter very much when it comes to nurturing a social enterprise. Rally isn’t there to micromanage a Fellow’s expertise, but rather to help accelerate a business model.

“*The Fellow I’ve been matched up [for the Winter 2023 cohort] has an app for pregnant women of color. Now, I’m the first to admit I’m generally not the person who would be top of mind to help with that specific topic." However, the Fellow, Layo George with her venture Wolomi, requested to work with Caravelis after hearing the "grittiness" of what he had said during a cohort meeting.

"I wasn’t talking about product market fit or ROI; I was talking about survival," he said with a laugh.

Looking back to his match with WriggleBrew, Caravelis didn’t have to know about microbial ecosystems and various worm breeds - he just had to lend his own time and talent in the space he knew best, which is in marketing, sales, and business development.

So, even if a Rally Maker and Fellow partnership might not seem to make sense, it might actually be exactly what a budding social enterprise needs.
The Social Enterprise

WriggleBrew is a unique story in that it's a uniquely Florida story. Sam Baker, along with his team of three high school friends - Gabriel Degaglia, Colin Kruger, and Italo Rangel - are graduates of Crooms Academy of Information Technology, a high school in Sanford, with two recently graduating with degrees from University of Central Florida and two from Seminole State College. As native Floridians, they sought to solve an environmental problem that largely affects the state they called home.

The team would eventually launch a company that would win awards, large grants, competitions, and a spot in Rally’s Summer 2022 Cohort; but their innovative “worm tea” company wasn’t where it all began.

The Backstory

Hustling since high school and through college in science fairs and art shows (and winning many awards along the way), these four friends began working on and experimenting with biochar, a lightweight black residue used in capacitors, during their teen years. In fact, their research conducted in high school led two of the friends who went to the University of Central Florida - Baker and Degaglia - to be hired as undergraduate researchers, a job not readily given to freshman.

What served as the catalyst pivoting their work to worm castings as an organic fertilizer? Sam’s fishing trip with his grandfather in 2019 - and the mass of dead fish that greeting them due to red tide.

The end result was WriggleBrew, an organic fertilizer suited for commercial use that worked better than the current organic fertilizers on the market - and worked as a natural pesticide.

In 2022, WriggleBrew entered and won The Joust UCF’s New Venture Competition, which eventually led to introductions to people who knew and worked with Rally. Sam Baker applied for the Summer 2022 Cohort, and earned a spot alongside other early-stage social entrepreneurs, including ventures dealing with healthcare inequities, educational gaps, financial literacy, and attainable housing.

Baker knew his way around the science of organic fertilizer, but had no background whatsoever in marketing or branding, which was the space he was hoping to grow through his time at Rally.

The WormBrew Team winning the “Cool Product Award” at a 2022 Tradeshow

Worm castings as an organic fertilizer isn’t a new innovation, but it was an imperfect one that needed a few problems fixed. One problem: while organic fertilizer was great for backyard gardeners, it lacked key components that commercial farmers needed in order to use it. What’s more, organic fertilizers didn’t solve the problem of chemical pesticides, either. Therefore, commercial farmers didn’t have another viable option other than the traditional fertilizers and pesticides they were currently using - even if it did contribute to pollution.

Using the known “worm tea” fertilizer, Baker and his friends thought, “What if we make a hybrid?” A worm tea that did more, by adding in specific microbes to do certain things, like fight off pests, improve plant immune systems and absorb fix nutrients.

The two Rally Makers he says made an impact not only on him but the shape of his company were Dean Caravelis of Blezoo and John Rivers of 4R Restaurant Group and 4Roots Farm.

“[Dean] taught me a great deal about the importance of creating a unified, singular ‘brand,” Baker said, with help in designing graphics to creating clear messaging and cohesive labeling and packaging.

John Rivers offered him an opportunity to test Wrigglebrew at industry-scale at the 4Roots facility, while paving a new relationship.

“Our missions are so closely aligned and complimentary that I have no doubt the partnership we are forming will be incredibly beneficial to both parties,” Baker added.
Why Central Florida?

Rally is an international hub for social entrepreneurs. The question is, though: why Central Florida? What makes this region a place for social progress and business ideas to grow and prosper, ultimately making a stronger, better world for all?

The answer might seem too easy, but it’s true: the willingness to collaborate.

Rally is a piece of this collaboration, with a fusion of private and independent businesses tied in with philanthropic goals and the desire to make this world a better place than what it was yesterday. But it’s only one piece.

Mark Brewer, President/CEO of Central Florida Foundation, states that “when the private, public and independent sectors work together, they are actually a lot more powerful than going it alone.”

Rally has developed relationships with countless partners from all sectors, ensuring the baton gets passed and continues to be passed, as each social venture finds its footing through the program.

Collaboration Across Sectors

One important partner has been, and continues to be, from the public sector: the City of Orlando, specifically with its Future-Ready program. As the City states on its website, “while we cannot predict exactly what the future holds, having a well-planned, collaborative vision for the future of Orlando is key to advancing opportunities for all and ensures our city is in the best possible position to take advantage of the innovative and technological advances coming our way.”

Through this program, WriggleBrew was chosen for an organic fertilizer pilot program at Harry P. Leu Gardens in Orlando, a 50-acre botanical oasis minutes from Downtown Orlando.

“The City of Orlando has a long history of supporting a thriving small business environment and encouraging the use of sustainable products that enhance quality of life, generate diverse economic growth and create equitable access to resources and services for the entire Orlando community,” said Mayor Buddy Dyer. “Our partnership with the Central Florida Foundation’s Rally Social Enterprise Incubator program furthers our commitment to providing entrepreneurs with the support and assistance necessary to bring their ideas to life. From research students at UCF to home garden experts, we are proud to partner with WriggleBrew and utilize their state-of-the-art, eco-friendly fertilizer at Harry P. Leu Gardens to nurture the growth and longevity of the gardens and improve the outdoor experience for residents and visitors.”

The collaboration doesn’t stop there. WriggleBrew has partnered with Revival Gardening, an Orlando-based father and son duo that provides worm castings for the organic fertilizer, creating yet another Central Florida connection and infusion into the local economic landscape.

Where does the independent sector fit in? As a nonprofit, Rally and its Rally Makers are the philanthropic arm of this collaboration, being fueled by the head, hearts and wallets of community-minded business leaders who care about social progress.

“Innovation is king here,” Mark Brewer added. “And social enterprise is kind of the wrapper around all great innovation. Rally will help set that trend for the next decade.”

“With agriculture, fishing and marine ecosystems all playing vital roles in the Floridian way of life,” Sam Baker concludes, “we’re just letting Florida stay the Florida it wants to be.”
What is Rally

Social Enterprise Accelerator

WHAT IS SOCIAL ENTERPRISE?

It’s business - with heart.

Social enterprises are businesses, both non-profit and for-profit ventures, with a double-bottom line: to create a sustainable venture while also creating positive social change.

HOW DOES RALLY FIT IN?

Rally is an accelerator for social enterprise.

Rally is an international hub for social entrepreneurs to help access the required knowledge, resources, and people to transform their early-stage work into sustainable ventures that create positive social change. Being a social entrepreneur is a long-term commitment - and Rally helps navigate the journey.

HOW DOES RALLY DO THIS?

We plug in our Rally Makers.

Orlando’s leading problem solvers, Rally Makers are no longer content to perpetuate rote strategies addressing symptoms of serious problems. They’re ready to support innovative approaches which are reaching for sustainable solutions to the toughest social, environmental, and economic problems.

About Central Florida Foundation

Central Florida Foundation is the place for people who want to invest in their community. The Foundation serves as the region’s community foundation and is home to more than 400 charitable funds. The Foundation manages and invests funds, offers personalized service and expert giving advice, connects people, businesses, governments and organizations to local initiatives that build and inspire community, and empowers them to make informed decisions that make a difference now and in the future. Learn more at cffound.org.

About Rally

Rally is an international hub for social entrepreneurs to access the required knowledge, resources, and people to transform their early-stage work into sustainable ventures that create positive social change. An initiative of Central Florida Foundation, Rally is the first of its kind in the region and is poised to position Central Florida as a hub for social enterprise. Learn more at rallysea.com.