

2021

Sustainable Agriculture



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ABOUT ARCADIA

The Arcadia Center for Sustainable Food and Agriculture is dedicated to cultivating vibrant local food systems that prioritize health, equity, and sustainability, from the farm forward.

Arcadia is on a mission to ensure everyone has equitable access to high quality, affordable, nourishing food, the building block of human health.

We are on a mission to ensure that food is grown in a way that nourishes the soil, and protects the water and wild spaces, and the animals, insects, and plants that live there.

Arcadia's thoughtfully constructed programs increase the supply of locally and sustainably grown fresh foods; train military veterans to be farmers; stoke demand for nutritious food through on-farm and in-school and community experiential education programs; and provide access to fresh foods, at affordable prices, at convenient locations in neighborhoods that traditional healthy food retailers decline to serve.

Arcadia Theory of Change

Arcadia takes a holistic approach to reforming a fundamentally unhealthy and unjust food system to achieve not just public health benefits but environmental and economic benefits as well. We seek to fill the gaps and address root causes. In the food system, like so many American constructs, those root causes are institutional racism and poverty.

Our work repairs the frayed links between the urban and rural areas to the economic, environmental and health benefit of both. Our interlocking programs achieve strong results individually but maximize their impact when combined.

For instance, rather than just distribute free food, we expand the supply of wholesome food and the number of farmers who grow it. We make nourishing food more affordable and more convenient in neighborhoods that otherwise lack access via our Mobile Markets. We build appetites for healthy food among children and families who may not have developed a taste for it yet. While we are not technically an anti-hunger organization, if we do our work well there will be fewer hungry people.

We work hard to anticipate and avoid unintended consequences. For example, introducing children to healthy food via school gardens is a laudable effort with a proven impact on their willingness to consume fruits and vegetables, but it does not make a lasting impact if their families can't obtain, afford, or prepare the vegetables at home. Building demand among low-income families for healthy food does little if there is not also a steady and growing supply

of sustainably grown, affordable wholesome food produced on local farms by an increasing number of skilled farmers. We grow food and farmers to meet the demand. We grow the demand through our school programs. We satisfy and further stoke demand through our Mobile Markets, which in turn triggers the production of more food, and the training of more farmers. Our commitment to regenerative agricultural practices underlies all this work.

Our work to connect farmers to underserved markets via our Mobile Markets results in a stronger local and regional food economy for everyone. In 2019, the farmers who were once part of the shuttered Tuscarora Organic Cooperative contacted Arcadia: would our Mobile Market buy from them if they reformed as Franklin Sustainable Farms? Our answer was yes, of course. And then we learned that the Mobile Market – and that means the lowest income neighborhoods in Washington, D.C. who shop with us, – was TOG's single largest customer.

The devoted support of lowest income people in Washington, D.C., to healthy local food triggered the formation of Franklin Sustainable Farms, which now serves Virginia, Maryland, DC, and Pennsylvania, and provides income for scores of sustainable and organic farmers. It is a powerful reminder of the interconnectedness of our food system.

Arcadia's Mission Areas

Sustainable Agriculture: Growing the supply of responsibly grown, affordable food & the number of sustainable farmers

2021 Production by Numbers

Land under cultivation: 4.225 acres

Hilltop Farm: 0.25 acresDogue Farm: 2.3 acres

• Dogue Orchard: 0.5 acres (includes future blackberry patch)

Incubator Farm Plots: 1.675 acres

2021 Harvest

- Over 35,000 pounds of fruits and vegetables harvested
- 49 types of crops and over 80 different varieties grown
- ~141,000 fruit/vegetable servings harvested
- **~\$55,400** in wholesale value

Season Review

The close of 2021 marks the end of the 11th season for the Hilltop Farm and the sixth season for our production Dogue Farm. As a team, we are proud of what we were able to accomplish considering the constraints of the COVID-19 pandemic, which deeply impacted the farm's activities. The number of volunteers hosted was greatly diminished and new proto col had to be put in place to mitigate the risk of spreading COVID through the employee and volunteer community (face masks, social distancing, and more frequent hand washing). We planted natural windbreaks in the form of sunchokes, underplanted with sorrel; we established a new strawberry field for spring production for the Mobile Market. We continued our partnership with Veteran Compost to build our soil health.

By design, two thirds of our harvest was distributed and sold via the Mobile Markets. With on site children's educational programs still largely restricted by the pandemic, we donated the remaining third to local food pantries and community partners to support their COVID and economic relief efforts.

Community Partnerships:

Responding to increased food insecurity in our local community this year, the farm directed produce that might normally go to other Arcadia programming or wholesale outlets to food pantries and other pandemic emergency food relief efforts. We nearly doubled our donations over 2020, from 5,929 pounds to 15,000 pounds and counting, a third of our total harvest. We donated food regularly to United Community and Rising Hope UMC, DC Central Kitchen, the Katherine Haley Shelter, Stoneybrook Community Center, Gum Springs Community Center, Lorton Community Action Center, Arlington Food Assistance Center and with distribution help from Food Rescue US.

CSA Program:

17-member CSA program for 25 weeks of produce; proceeds supported farm operation costs.

On-farm Infrastructure:

We received several small grants to upgrade our solar panels and batteries; our production farm is entirely off the grid and all power used there is generated by solar. We are in the process of changing out the original batteries for our 12 panel system to batteries with higher storage efficiency.

Orchard:

Our orchard is one year old; it has been maintained by farm staff and volunteers and will begin to reach production in 2023. The orchard includes 15 Asian pears, 7 apples, 8 Asian persimmons (astringent and non-astringent), 18 pawpaws, 10 figs, one apricot and 36 blueberries. We

planted blackberries and more fig trees in the spring of 2021 to complete the plan. The orchard responds to two program imperatives: a new training unit for our veteran farmers, and more fruit for our Mobile Market, a product that is especially popular with WIC mothers and families.

Veteran Farmer Program: Growing the next wave of American farmers

The nation needs 700,000 new farmers to replace the farmers aging out of the profession over the next 20 years. The military produces 200,000 new veterans annually. This demographic is particularly well suited -- through their resourcefulness, grit, physical capabilities and entrepreneurialism -- to careers in agriculture if they have the opportunity to be retrained for it.

Arcadia trains military veterans to farm on land that George Washington once cultivated a few miles outside of the nation's capital. Through 2018, Arcadia has trained 125 military veterans, with nearly half already working on farms or starting their own.

There are three training tracks:

The Veteran Fellowship is a one-year, salaried on-farm apprenticeship for military veterans to learn and practice sustainable agricultural methods. It is approved by the Veteran Administration as an official OJT program, allowing participants to draw down GI Bill benefits while they train.

The Veteran Farmer Reserve program meets one weekend a month for 12 months for intensive cultivation, business, botany, and farming skills training, along with field visits to successful farms to explore the full range of agricultural businesses. The Reservists also work two weeks a year on Arcadia Farm to experience the challenges, rewards, and day-to-day rhythms of agriculture.

The Veteran Farm Incubator dismantles the primary barrier to new veteran farmers -- access to affordable land and infrastructure. Graduates of our training program may apply for farm pots on our vegetable farm, supported by our irrigation, power, greenhouse, farm equipment and market access. They establish their own farm businesses on our farm paying modest rent and adhering to sustainable agricultural practices. Arcadia offers a one-year wholesale buying contract so they can focus on building their business and cultivation skills. Three years on our low-cost, low-risk incubator qualifies our graduates for low-interest FSA loans as farm operators.

Since 2015, Arcadia has trained more than 125 military veterans, active duty service members, and family members to be farmers. More than half now have their own farm operations, with 2/3s reporting they are still engaged in agriculture in some form.

2020 posed challenges with in-person training for the Veteran Farmer Reserve program, which we overcame with the introduction of Zoom for academic instruction. This kind of training was found to be effective and impactful, allowing trainees to focus for four three-hour instructional blocks, while also allowing trainees to get to know one another through unstructured group

conversations and written chats. We continued Zoom training for the academic portions of our programming in 2021, finding it efficient and effective for our training class.

We front-loaded the season with academic training, and began meeting outside, in person -- masked and socially distanced -- for farm field trips and hands-on cultivation and farm walks in March.

A graduate of the 2020 program, Jim Miscenik, took over Mountain View Organic farm in Lovettsville, Va., a direct result of Arcadia's robust network in the local farm community. He is now producing poultry (and offering it for sale through our CSA) and vegetables.

Joel Fudge, one of our two 2021 veteran farm fellows, began a part-time farm job in Great Falls in addition to his farm fellowship, complementing the intensive vegetable training he receives at Arcadia with livestock experience at his other farm.

Incubator Farm:

2021 saw seven incubator farms on our Veteran Farm Incubator, including a flower & vegetable farm; a garlic farm; three mixed vegetable operations; a hops and honey operation, and a honey operation.

One farmer sold her products at the Delray Farmers Market with great success. Another became a good will ambassador for the Growing Kindness Program, distributing fresh flower bouquets every week at no cost to nursing homes and other community services. One incubator farmer donated his entire crop to a food pantry. Another used his plot as a training ground for young Black farmers.

Farmer Jennie Haskamp of Change of Plants Farm, an Arcadia incubator farm, won the Prince William County Fair "best in show" award for a pumpkin she grew on her plot, and a ribbon in all 13 categories in which she competed. Amanda Beard, a beekeeper in our incubator program, won a second place ribbon for her honey.

Bee mentor and Air Foce Veteran Rob McKinney established hives on our farm and trained our two veteran farm fellows weekly in beekeeping.

Fair Food Access: Building equitable access to nutritious food in underserved communities

Mobile Market:

Arcadia launched its Mobile Market in 2012, as a rolling farm stand stocked with locally, sustainably grown foods including fruits and vegetables, herbs, pastured eggs, grass-fed and pastured beef, pork, organic milk, cheese, handmade bread and honey.

The Mobile Market has since sold and distributed more than \$1.7 million in affordably priced, high-quality local fresh food in under-resourced neighborhoods in Washington, D.C. since 2012. The significance of this figure is not just the sales but what it represents: the growing and barely scratched surface of the demand for fresh healthy food in resource-constrained neighborhoods that suffer a disproportionate rate of chronic diseases that correlate strongly to the food to which these neighborhoods do -- and do not -- have regular access.

During the pandemic the Mobile Market makes regular weekly stops in low-food access neighborhoods and accepts and doubles the face value of food stamps (SNAP, WIC, and Senior FMNP). The neighborhoods we serve typically have high SNAP usage, low car ownership, and are at least a mile from a grocery store that can support a healthy diet.

In testament to the success of the model, SNAP customers increased the amount of food they take home from an average of \$4 per transaction in 2012 to \$12 per transaction in 2019 -- with Arcadia doubling the take home amount to \$24 on average. In 2020, during the pandemic markets, the average SNAP sale value was nearly \$25 per transaction, with our doubling program increasing the average value of SNAP transactions to \$50.

The Mobile Market is not just about food access. It also supports the local farm economy. Arcadia grows much of the food on the Mobile Market but we also purchase food at wholesale prices from other farmers to resell. This diversifies their businesses and gives them new customers in a market at no risk that they would not otherwise reach. The Mobile Market represents more than \$1.4 million in wholesale revenue for local farms. In fact, when a regional organic cooperative of farmers closed down, the farmers reached out to Arcadia as a group and asked if we would continue buying from them if they reorganized because Arcadia's customers — the lowest income neighborhoods in the city — were the single largest customer group for the organic cooperative. We enthusiastically agreed, and the Franklin Sustainable Farm cooperative was formed, with Arcadia as its anchor client.

The remarkable effectiveness of the Mobile Market is attributable to our high quality food, excellent customer service, affordable prices, and locations that are convenient to people with limited incomes.

Equally important, strong sales at the Mobile Market demonstrate the growing and unmet demand for healthy food in low-income neighborhoods. Year over year increases in sales subvert the pernicious idea that low-income people don't support healthy food retail. We have demonstrated every year since 2012 that if the food is high quality, conveniently available, and affordable, customers will flock to it regardless of income.

In 2021 Arcadia transitioned its first Mobile Market stop to a new provider -- Common Good City Farm. We have served the LeDroit neighborhood since 2012, partnering with Common Good in various ways -- buying their food, selling it for them on consignment, sponsoring their fruit and vegetable match -- while they built capacity to serve their neighborhood independently. They achieved that capacity in 2021. Arcadia provided them with 5 years of sales data from their location, and are assisting them in finding sources for the products they do not carry.

Every neighborhood is different, and we hope to support each location we serve in finding permanent, affordable sources of nutritious foods unique to their needs, be it a brick and mortar store, a neighborhood co-op, a full farmers market, or some other format. We will support those efforts, transition our customers, and move to new neighborhoods to bring local affordable food to new customers.

Arcadia Farmers Register: Using data to drive food policy and access

With software partner Perigee, Arcadia developed an elegant iPad-based mobile point of sale system for the Mobile Market. The Arcadia Farmers Register speeds customer transactions, tracks inventory, and expedites financial reporting. Because it associates every transaction with the form of tender used to purchase it, the location, time, and price, it also yields valuable data on the food purchasing patterns of our customers. Arcadia is now working with the city of Washington to use the data to inform and design food policies and interventions that encourage the purchase of nutrient-dense foods.

The Arcadia Farmers Register is a scalable solution to creating a national database of healthy food purchasing behaviors available free of charge to government policy makers and public health researchers. It can also be used to ascertain prices at farmers markets nationwide, and to improve the farm business valuation system used to determine capital lent to small farmers. Dozens of mobile market organizations around the country now use the Farmers Register

Farm and Nutrition Education: Building the demand for nutritious food

Field Trips: Suspended in 2020, 2021

Arcadia offers field trips to our sustainable farm for children pre-K through 5th grade. The field trips meet DC and Virginia standards of learning. The visits introduce children to food at its source, and the tenets of sustainable agriculture. The children harvest eggs from our flock of laying hens; dig in the compost pile; interact with worms and pollinators, harvest fresh vegetables and use them to prepare delicious, healthy snacks.

Nearly 10,000 children have been educated on Arcadia Field Trips since 2012. Based on pre-and post testing, we see 37.5 percent increase in the number of children who report liking to eat beets after their farm field trip than before they came.

Farm Camp: Suspended in 2020/21

More than 1,100 children have participated in Farm Camp since 2012. Under non-pandemic circumstances, Arcadia offers five weeks of summer day camp on our farm. We suspended camp in 2020 and replaced it with virtual farm camp, supported by activity kits and daily Zoom conference calls with campers. We launched once weekly farm workshops in 2021 for children, allowing children to enjoy the farm while giving plenty of time between visits to minimize exposure to the virus.

The children tend the chickens and compost pile; plant, weed, harvest; interact with visiting goats; create farm-based art; learn about pests and pollinators; make cheese; cook with professional chefs; and follow their own curiosity through independent farm exploration. Twenty-five percent of farm campers attend on full, needs-based scholarships funded by Arcadia donors. Eighty-five percent of campers reported trying a new food, and 75 percent reported looking forward to eating more fruits and vegetables with their families after their camp experience.

HyperLocal Salad Bar: suspended in 2020,2021

In partnership with Fairfax County Public Schools, Arcadia has provided fresh vegetables and fruits for three elementary schools close to our farm. These schools all attend field trips to our farm and meet with our farmers, and our farmers then conduct taste tests at the school to promote the new foods. These multiple touch points increase children's enthusiasm and willingness to eat fresh, healthy foods.

Live Eat Grow

In partnership with Northern Virginia Health Foundation, Arcadia headed a three-year school garden and nutrition intervention that includes a school garden, garden educator, nutrition educator, and food access projects including a Mobile Market stop and new in 2018 an experimental low-cost CSA.

In 2019, we launched the Live, Eat Grow program -- a nutrition intervention and school garden support program in elementary schools near our farm. We worked with area health providers and food pantries to conduct food insecurity screenings and connect those affected by hunger with resources. In 2020, we continued school & community garden support and launched a youth garden entrepreneur program. The Live Eat Grow program has also led our food security response to the pandemic crisis, financially supporting and distributing fresh food to more than 50 families who live near our farm, with food sourced from our farm, from school and community gardens, and from other local farmers.

In 2020, the Live, Eat, Grow program pivoted from its focus on farm and garden education to food access for the particularly vulnerable community around our farm.

To accomplish this we reached out to our community partners. Neighborhood and Community Services welcomed us at Gum Springs Community Center where for 17 weeks we distributed over 19k pounds of fresh produce alongside Food and Nutrition Services, which delivered prepared meals to school families. Fairfax County Health Department's Community Outreach connected us to two local volunteer groups who became the manpower to distribute 50 boxes of fresh produce for 8 weeks to families who had tested positive for COVID-19 and were home bound and needed to access food during quarantine. In the fall we expanded our food distribution to include Stoney Brook Community Center donating over 2k pounds of fresh produce every week since the month of August. Stoney Brook Community Center is a one of our community partners whose residents have suffered from job loss and food insecurity. Rising Hope Methodist Church is a local food pantry open twice a week and Arcadia has donated over 1k pounds of fresh produce. Arcadia is also donating 10 weekly shares of our CSA program to help families in need from Bryant High School.

Once schools were back in session, the Outreach Program contacted local schools to assess their needs and, starting in August 2020, assumed responsibility for two school gardens, turning them into food production (rather than educational) gardens. Working with volunteers and the school's Outdoor Educators we've grown over 550 pounds of produce at Stratford Landing Elementary School and Hollin Meadows Elementary School combined. This food is harvested and delivered, supplementing the rest of Arcadia's food relief efforts.

In 2021, Arcadia, in partnership with Rt 1 residents and community organizations, produced a report on the impact of COVID on food security in the corridor. Through interviews with community members, this highly human report highlights the complexity of food security; it is impacted not just by how much money people have or their proximity to a grocery store, but their employment, child care, health status, citizenship status, language and culture of origin. The report can be accessed here: http://arcadiafood.org/RT1Report

LIVE EAT GROW PANDEMIC FOOD RELIEF

Gum Springs Community Center Stony Brook Community Center - 41k raised for food distribution - 1071# of food donated from Arcadia - 17 weeks of food distribution - 900 boxes of food total of 17.100 # - 20 Virtual Farm Camp Scholarship - 1843.6 # of food from Arcadia Farm - Community Garden Maintenance - Arcadia will donate \$1000 and oversee the establishment of a community garden at this community Center **Bryant High School Emmanuelle Worship** - Social Worker receives 10 weekly shares for families for 26 weeks - Church partner helping with distribution Outreach and - Delivered 200 boxes of **School Gardens** Education produce for 8 week - Whitman Middle School: Garden Clean up and Maintenance. Garden Rising Hope Food Entrepreneur After School **Pantry** Program Rosas Blancas Group - Hollin Meadows ES: - Weekly deliveries of Produced over 250# of food produce from the Arcadia since August - Local Women's Group helping with distribution to COVID-19 positive - Stratford Landing ES: Farm Produced over 300# of food patients - 281 boxes for 8 weeks since August

The History of the Arcadia Center for Sustainable Food & Agriculture

Washington, D.C. restaurateur Michael Babin founded Arcadia to fix a problem he first came into contact with when trying to source local, responsibly grown fruits and vegetables for his restaurants: The supply was small and the price was high, putting it economically out of reach for restaurants trying to control food costs.

He asked himself: if this is so difficult for me, what does that mean for the rest of Washington? That question quickly led him to understand the public health crisis engendered by our food system, which is exceptionally effective at producing nutrition-free calories that are cheap at the point of sale but devastatingly expensive for public health.

With few nutritious choices, constrained resources, and limited transportation, low-income predominantly African-American communities suffer disproportionate rates of chronic disease that correlate directly with the low-quality food to which they have regular access – diabetes, hypertension, heart disease and obesity. The annual cost of this food system to health care in the United States is staggering – nearly half a trillion dollars, and growing.

Babin created Arcadia, a 501c3, in 2010 to innovate and implement solutions to the gaps he saw in the local food system with the mission of improving public health through good food – increasing the supply, the demand, and making distribution of it fair, equitable, affordable and convenient for those the prevailing food system declines to serve.

In partnership with the National Trust for Historic Preservation, he established Arcadia on the Woodlawn-Pope-Leighey site in Alexandria, Virginia, just 14 miles from the nation's capital. The historic land was once part of George Washington's Mount Vernon, which sits three miles due east, and it was the first property ever purchased for preservation by the Trust. But its significance for the local food movement goes well beyond the first president.

In 1846, two decades before the Civil War and the Emancipation Proclamation, timber merchants bought the then-2,000 acre-property from Washington's family. These merchants were, not insignificantly, Quakers and abolitionists, and they had a plan for the property: Woodlawn would be a slavery-free farming community that would prove to the rest of the South that slavery was not necessary for a farm to thrive. They sold plots to free African-Americans, Irish and German immigrants, and other Quakers. They established the mansion as an integrated school for the town's children and created an integrated militia to protect the citizens. As a "free labor zone," for the first time in Woodlawn's history, it was a profitable farming operation.

Arcadia, like the Quakers before it, is using food and agriculture to advance social justice. Arcadia continues the legacy of this land to foster a more equitable and sustainable food system through its three mission areas: sustainable agriculture, farm and nutrition education, and healthy food access.