

Why Regenerative Organic Agriculture (ROA)? CNGF's Mission to "Build 25" ROA Farms in Santa Clara County

Why is CNGF's mission for building 25 ROA farms in Silicon Valley urgent?

There are urgent problems at hand that affect our community and the world:

- Worldwide hunger for underserved populations, increased economic instability and refugee populations
- Shortage of highly nutritional foods worldwide
- Agro-petrochemical farming (Big Ag) methods destroy soil organic content, are unsustainable and increase GHG emissions by 30%
- ROA is a solution to reverse climate change and extreme weather events
- ROA will reduce the cost of food production and grow 7 to 10 times more food
- Using ROA, food sovereignty and food security is possible in Santa Clara County

Mission:

- Train college students in RAFT (Regenerative Agriculture Farm Training) methods so they can design, build and manage regenerative farms
- Create SULRI (Sustainable Urban Land-use Research Institute) to conduct studies comparing organic farming, Big Ag, and ROA techniques, while restoring local ecosystems
- Develop this information so that leaders and farmers can compare outcomes and expenses of existing farming methods with ROA methods

| Agro-petrochemical (Big Ag) farming methods... | Regenerative Organic Agriculture (ROA) farm methods... |
|--|---|
| Destroys organic soil content | Use no till system: increases soil organic content and doesn't cause erosion; higher nutrient content. |
| Produces CO2 emissions through fossil fuel-based chemicals, transportation costs, phosphate fertilizers and food waste | Restore the ecosystem and promote biodiversity that manage pests and other pathogens |
| Uses pesticides, phosphate fertilizers and food waste | Proven farming method that is 7-10x more productive than agro-petrochemical farming, or organic farming |
| Negatively impacts water, air and soil and is not sustainable | Sequester CO2 and capture GHG emissions simultaneously |
| Use tilling: creates erosion and loss of soil | Utilizes polyculture and extensive native hedgerows that replicate local ecosystems |

A Brief History of the California Native Garden Foundation:

1976: Alrie Middlebrook, founder of CNGF, started her career in interior landscape design

1980: Alrie Middlebrook became a small business owner and has employed 1k employees since

1993: Founding member of Our City Forest, a volunteer planting organization in San Jose, CA

1995-1999: Alrie Middlebrook, Chair for River Street Development Group- a private development to create a national historic district and gardens at the Guadalupe River Park in San Jose, CA.

2000: Created first ever ecovillage in San Jose centered around native gardens and regenerative farming on nearly a half-acre in San Jose; only certified site in Santa Clara County that has 200 sustainable urban land use benchmarks as recognized by the United States Green Building Council

2006: CNGF was established with the mission to inform and educate the public, particularly youth, about gardening with native plants; awarded garden grants to help more than 85 schools establish ecological teaching gardens

2008: Established college internship program; have since worked with 13 universities and 75+ student interns

2009: Created a garden laboratory model for outdoor eco-literacy education for children: Environmental Lab for Sustainability and Eco-Education (ELSEE)

Since 2010: CNGF is the recipient of over 22 awards from major corporations and donors

2013: CNGF created a regenerative farm model that grows abundant food using less resources, started a regen farm program in Ghana that is now, with multiple international partners, a teaching and training model for Ghana's youth.

2015: CNGF, with Alrie Middlebrook, served as the sustainable land use consultant for the first ecovillage in America, the Santa Clara Agrihood, to be built in 2019 in the city of Santa Clara; the CNGF team designed the regen farm model with multiple components

2017: Wrote a visioning statement, detailing the components of an urban ecovillage:

<http://cngf.org/wp-content/uploads/2016/10/Lifecycles-TotalPaperTKEEdit3.pdf>

Created Kalana Eco-Village Regenerative Farm Model:

<https://drive.google.com/file/d/0B4JvksUnukJMHrjWGtdtU5uTm8/view>

The Solution

- Build organic regenerative farms
- Train youth to design, run and manage the farms
- Document tandem study between organic regenerative farming and agro-petrochemical farming in regard to crop production, income, differences in labor, differences in resources used, nutritional value of crops, CO2 fixation in both types of crops.

Become part of a major change to reverse climate change!

Developers/ Sponsors/ Private Funders

We are inviting local developers and land owners to partner with us in a number of ways.

- work on sustainable projects that focus on the ecovillage model.
- consider opportunities for urban farms in your developments
- support Co2 reduction projects in our local community
- become a sponsor of CNGF
 - Partner with CNGF to create at least one farm as a part of your development project.
 - Sponsor at least one event in our Ecovillage gardens in Central San Jose.
 - Participate in one billboard promotion of your business at our ecovillage. Show your commitment to sustainability in SV and join our goal to lead in the creation of a method to reverse climate change.
 - If you'd like to learn the details of the steps you can take to make this happen, please respond to our email and we'll schedule a time to discuss how a sponsorship works. We'll also explain technically how by employing specific ecology-based principles, we can reduce emissions and sequester more carbon in an agricultural system. We know it works. We have projects that are producing high yields and educating youth. We have multiple global partners who are making giant contributions in carbon sequestration. Why not here? Why not now?

Moving Forward:

As CNGF works towards its goals, we have created a steering committee with different sectors of Silicon Valley in order to accomplish our mission. The members of this committee are as follows:

- 1) Nancy Smith, Councilwoman, City of Sunnyvale -- local government leader
- 2) Vince Cantore, Core Development -- developer
- 3) Donna Plunkett, Open Space Authority -- land owner
- 4) Jinny Rhee, Associate Dean of Engineering SJSU -- education partner
- 5) Serena Zhou, Sustainability Committee, Adobe Corporation
- 6) Xiaohua Wang Controlled Environment Agriculture -- CNGF technical committee
- 7) Paul and Elizabeth Kaiser Singing Frogs Farm -- regenerative farmer
- 8) Bart Dolmatch, Bain Investments -- investor
- 9) Karita Hummer FACTR: Mindful Aging Project -- local nonprofit
- 10) Alrie Middlebrook, Middlebrook Gardens/CNGF President
- 11) Vicki Moore, CNGF Board -- Planning Commission member
- 12) Brenna Bolger PRX Digital, Founder -- media leader
- 13) Regen Farm Steering Committee (see above proposed list)

Sources that support our views:

Regenerative Organic Agriculture and Climate Change: A Down To Earth Solution to Global Warming
<https://rodaleinstitute.org/assets/WhitePaper.pdf>

Trade and Environment Review 2013- Wake Up Before It's Too Late: Make Agriculture Truly Sustainable Now for Food Security In a Changing Climate
<https://reliefweb.int/report/world/trade-and-environment-review-2013-wake-it-too-late-make-agriculture-truly-sustainable>

The Value of Native Plants and Local Production in an Era of Global Agriculture
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5723411/>