

Agrarian Elders & Youngers Gathering Summary Report

Prepared by Clara Coleman
Hosted by Esalen Institute's Center for Theory & Research
Big Sur, CA - January 25-29, 2016



DAY 1 - Gathering of Two Generations - Exactly two years after the first gathering of twenty-four of North America's elder organic farmers at Esalen Institute in January 2014, two generations of organic farmers, a group of fourteen elders and thirteen youngers, convened for a week at Esalen in January 2016. Agrarian wisdom was shared and insight was gained on a wide range of topics from sustainable soil fertility and creating the perpetual farm, to succession and transitions of family farms, to the

national emergency of the 2% problem and the lack of young farmers beginning and persevering with this critical work, to the more controversial issue of the emergence of CRISPR and gene editing and whether it has a place in organic agriculture.

The participants came from across North America, from large, mid-sized, and small-scale organic farms, and with a collective knowledge base of over half a millennia of farming experience. For the elders, the farmers included the original founders of the first gathering Michael Ableman of Foxglove Farm in B.C. and Eliot Coleman of Four Season Farm in ME, along with Barbara Damrosch of Four Season Farm in ME, Don Bustos of Santa Cruz Farm in NM, Frank Morton of Wild Garden Seed in OR, Jim Gerritsen of Wood Prairie Farm in ME, Nash & Patty Huber of Nash's Organic Produce in WA, Jack & Anne Lazor of Butterworks Farm in VT, Dru Rivers of Full Belly Farm in CA, Tom Willey of T&D Willey Farms in CA, Bob Cannard of Green String Institute in CA, and Anne Schwartz of Blue Heron Farm in WA. For the younger invited, the farmers included Josh Volk of Slow Hand Farm in OR, Zach Wolf of Locusts on Hudson Farm in NY, Pete Johnson of Pete's Greens in VT, Jack Algieri of Stone Barns in NY, Travis McKenzie of Grow the Future in NM, Andrew Still of Adaptive Seeds in OR, Carly DelSignore of Tide Mill Farm in ME, Zoe Bradbury of Valley Flora Farm in OR, Andrea Hazzard of Hazzard Free Farm in IL, Emily Oakley of Three Springs Farm in OK, Paul Kaiser of Singing Frogs Farm in CA, Kari Bernard of Green String Institute in CA, and Clara Coleman of ARC Farm in ME.

What are we doing? Why are we organic farmers? Inspiration? Motivation?

Long-term expectations? - After the morning introductions, the day continued with some big questions that ultimately set the tone for the week. With the discussion led by elder Anne Schwartz, younger Jack Algieri and younger Zoe Bradbury, the group responses shared many similarities and the variation was based more on different generational influences. Elder Anne Schwartz started off by sharing that she thinks "farming is captivating since it hones your powers of observation - you never stop learning and each year is a new opportunity to be better than the last." For motivation, a number of elders believed that organic farming was a last defense against a take over by corporate industrial agriculture, that a societal change was needed to view farming as a noble profession, and inspiration could be found through the act of nurturing their families and communities through healthy food, which could only be produced by working with Nature and supporting healthy soil. Many of the younger came to farming through a love of good food, a desire to protect the natural environment, an aspiration to promote social justice and develop resilient communities, and a belief that small farms and organic farming will feed the world in sustainable perpetuity. Younger Kari Bernard shared that she is "driven by

stewardship, by land preservation, by organic agriculture, and by wild lands, and to feel the connection to people by bringing them joy.”

But the question still remained, and was humorously yet seriously posed by elder Tom Willey, “Are we (as organic farmers) just a flea on the dog? Are we really going to make a difference, especially economically?” While the challenges are varied and the game is long, elder Frank Morton probably put it best when he replied, “Perhaps it’s like the Big Bang Theory and in the beginning there was compost... The elders of organic farming made the fundamentals of the organic movement and now it’s radiating out and expanding and soon everyone will see the light.” Younger Zoe Bradbury completed the thought by remarking that she has seen how “farming has achieved respect as a profession for young people and there has definitely been a ripple effect from the activities of the Elders.”

DAY 2 - Sustainable Soil Fertility - The next day began with the topic of sustainable soil fertility and the best practices for achieving it as organic farmers through a combination of mixed farming methods that promote sustainable perpetual fertility without the dependence on fertilizers, and what organic fertilizers are necessary, in what form, and at what scale. The discussion was led by elder Jack Lazor and younger Paul Kaiser - Jack focuses on pasture rotation using corn to legumes to grains for his dairy operation in Vermont and maintains soil organic matter between 8-9% at his farm, and believes in moving toward a no-till system and that we should be “Carbon Farmers first” and it is up to us to lead the way as carbon farmers. Younger Paul relayed that historically humans have managed fertility on long rotation systems - 5 years on/20 years off - but now land is highly limited and population is far too dense to continue this system. “Cities are like human-CAFO’s,” he said, “and it is imperative that we recycle biological wastes back onto surrounding farms in order to close the nutrient cycle and minimize externalities.”

Across the generations, there is a strong focus on protecting and managing the soil microbiology with the use of compost (either produced on-farm or purchased off-farm) and cover cropping, as well as a transition to more no-till or minimal tillage methods that are becoming widely appreciated and practiced by the majority, especially by those farmers who have been farming longer and have since expanded their original smaller-scale operations to include more acreage. Elder Dru Rivers widely practices cover cropping on her 400-acre farm in California to manage weeds and improve soil fertility, and she recently trialed a rolling/crimping down technique for hairy vetch. Younger Pete Johnson is trialing a technique on his 300-acre farm in Vermont by short-chopping high-legume baled hay into 2-inch chop and blowing it

horizontally across crops as a large-scale mulching method, and this approach has been shown to aid with erosion control, weed suppression, and increase soil organic matter. Organic fertility inputs were used unanimously across the farmers, with a reliance on purchased soil amendments and organic fertilizers, and all of the farms are able to maintain a decent percentage of organic matter in the soil, with reported ranges between 2% and 15% and an average of 5-6%.

The Soil Microbiome and The Perpetual Farm - The afternoon session focused on our role as carbon farmers, the soil microbiome, and how it is affected by mechanical tillage. Elder Nash Huber led the discussion on our role as carbon farmers and presented to the group an interesting formula to calculate the relationship between the atmospheric release of carbon and carbon sequestration into soil organic matter. Using this formula, he calculated that he needed to increase his organic matter by $1/10^{\text{th}}$ of 1% per year in order to cover the carbon he was adding to the atmosphere by burning diesel fuel with his farm tractors. Younger Carly DelSignore then presented on studies showing how microbial life and mycorrhizal fungi communicate through the root systems of all plants, and when soil is tilled, only yards of mycorrhizal fungi can be found in soil with 1% organic matter compared to miles of fungi in untilled soil with 6% organic matter.

Then the discussion shifted to the idea of the perpetual farm and elder Eliot Coleman highlighted the benefits of the English 'Ley Farming' or also known as a sod-based rotation system, and how studies have shown a 15% higher yield of crops from pasture previously grazed by livestock compared to just cover cropping. The goal of the perpetual farm is to create a perpetual build up of soil fertility through integration of livestock grazing, smart rotation, and gentler tillage (or a combo of no-till and tillage system), but the economics and lack of land (or the expense of acquiring land) appear to be a hindrance to adopting this approach to farming. Elder Michael Ableman summarized the challenge by saying, "Eternally there is this question of how to marry the natural system of farming with the market economy of today."

Day 3 - Succession and Transition - Day three began with the more personal yet critically important discussion of farm succession and transition, which was approached both from the perspective of farms being passed from one generation to the next, but also how to find strength and perseverance throughout the inevitable transitions during one's farming career. Led by elder Michael Ableman and younger Kari Bernard, they asked the elders what they are struggling with in regards to succession planning, and what the youngers need to help enable their future as farmers while still allowing the elders to comfortably and gracefully pass on the torch

to the youngers. Michael began the discussion by stating that, "a farm is only as good as whomever is there to steward the land," and even "the best legal models of succession do not ensure the guaranteed succession of the land in agriculture," since a healthy farm system is more dependent on the actual people who farm the land. He went on to say that, "A working farm is like an impermanent sand painting - it's only as good as it is found in that moment of time," and it can change depending on the person creating and managing it. He believes that farm succession is critically important since communities depend on farmers not only for providing good healthy food, but for maintaining the nuanced and essential connection to our natural environment.

Many of the elder farmers expressed the passion and love necessary to pursue this challenging profession, and quite often that is what carried them through life transitions and phases of burnout, but how are these positive qualities passed on to their children and reaffirmed in the next generation? Elder Jack Lazor expressed that the generational transition has been a struggle for him and due to concerns about finances and worries that the next generation may not be as prepared as they need to be, it has been particularly hard for him to let go of the farm and pass it on to his daughter. Younger Clara Coleman remarked, "The biggest gift that my father, elder Eliot Coleman, ever gave to me was raising me on a farm and the second was never putting pressure on me to farm or follow in his footsteps." She went on to say that it was his contagious passion and enthusiasm for farming and the space that he gave her to discover farming on her own and understand what is needed in today's agricultural landscape, and that perhaps this means following a farming path that is different from the traditional family farm model. Younger Jack Algieri, who is the farm director of Stone Barns Center for Food & Agriculture where he and his wife have raised their two boys, thinks that "our culture has a warped sense of inheritance that is too tied to things, money and grief" and he made the distinction that their family succession and their, "REAL estate is composed of what they have learned and received from the land" and ownership of a farm is not as important to him. The quality of the life he has created for himself and his family is his equity and legacy.

The topic of raising children on the farm was also explored with younger Emily Oakley sharing that after having a baby after ten years of farming, she experienced doubts about whether to continue farming while raising a small child since it was very tough to juggle both endeavors simultaneously, but she found that by going back to her "original passions and reasons for farming," this helped to anchor her through this transition. Elder Dru Rivers agreed that farming can take valuable time away from family life, but she was pleasantly surprised and very grateful that all of her children

came back to run their own enterprises at Full Belly Farm and are committed to leading it forward as the next generation. However, many hours of thoughtful intention and dedication were put into developing a business structure and farm succession plan that allowed for her children to seamlessly integrate their lives and interests into the complex fabric of the farm. She thinks their situation and succession plan is relatively rare and she believes we need to, “rethink outside the box of a traditional nuclear farm family.” She is fond of the example of the Amish always bringing seven families with them whenever they move to begin a new community and she wonders if there is a lesson to be learned for today’s farm families and how they can be more intentional and collaborative with planning farm enterprises.

Younger Andy Hazzard agreed that, “we need better resources and guidelines for agricultural estate planning,” as she has experienced multi-generational issues and complications within her family farm, especially with her father and brother who see things differently. From another younger perspective, Carly DeSignore feels tremendous gratitude to her husband’s 9th generation farm family who welcomed them back to the farm after having their first child and in the 16 years since, they have made their mark on the farm by creating new markets and the type of farm business and lifestyle they desire. She feels they have been teaching new ways of farming to the older generation and she is appreciative of their openness and willingness to try new things and structure the farm business to allow for innovative and value-added enterprises to be managed and operated by different members of the extended family. Elder Frank Morton summarized the session by acknowledging that no matter the succession plan of the farm and no matter your connection to the farm, whether you are an owner, a family member or an employee, “we all need clearly defined roles, we all need responsibilities, and we all need a sense of community in order to create meaningful work” and a lifestyle worth carrying on from one generation to the next.

The Two Percent Problem - A National Emergency - The afternoon session kicked off with the grim statistic that only 2% of the U.S. population are farmers and the eternally troubling question of where our new farmers are going to come from as the older generation continues to retire from farming at an increasing rate. The USDA Agricultural Census data continues to show the aging of the American farm population, with the average age of the farmer increasing from 57.1 in 2007 to 58.3 in 2012. Overall, the most recent 2012 Census reported that 33% of farmers were 65 years and older, 61% of farmers were 35 to 54, and only 6% were under 35 years old. What is more concerning however, is the slow rate at which new farmers are entering agriculture, and the much faster rate at which older farmers are retiring from farming.

The number of beginning farmers - on their own current operation less than 10 years - was down 20% from the 2007 Census report, and the pool of very new, beginning farmers on their own operation less than 5 years shrunk by 23.3%. On the whole, the U.S. farm population shrunk by roughly 4 percent from 2007 to 2012.

The discussion was led by elder Frank Morton and younger Andrew Still, and Frank was curious if these depressing numbers are true in all regions and states in the U.S. Younger Zach Wolf said that he thinks the young farming population is increasing where he lives in the Northeast, and Clara Coleman confirmed his assumption by referencing the statistic that Maine experienced a 13% increase in farmers from 2007 to 2012, according to the USDA Ag Census. Elder Dru Rivers believes that we need to increase the national percentage to 5% by directing resources toward farming educational opportunities in high schools in order to promote farming as an attractive profession, and elder Nash Huber believes "we have to get both the lifestyle and the reality of farm work back into our communities and perceived as a respectable profession." Younger Paul Kaiser conveyed that, "a recent UN study supports the 2-hectare (~5 acre) small family farm model as a solution to food production worldwide but we need to move the policy forward by being more vocal in our communities."

But one of the concerns from the youngers centered around the issue of economic challenges of small-scale farming and how it is not the most financially secure profession for the next generation. Younger Zach Wolf stated that, "farming income, or lack of, is an impediment to entry" and younger Kari Bernard added that having college debt is an enormous disadvantage to many young farmers. Elder Jim Gerritsen went on to say that "some of the best and brightest farmers are opting out after 8 to 10 years due to issues of financial security" and they are rightly concerned if they can save for retirement and raise children on such a limited farming income. The question was then posed that if 90% of all small businesses typically fail, is farming any different than other entrepreneurial pursuits? "Yes," Jim asserted, "it has to be, because farming is the foundation of civilization - farming is a public service" and must be treated and supported as such.

Labor - Labor was only briefly covered by the group and the primary topics included the future of farm labor, the conditions of migrant workers, and what changes should be made since labor is interconnected with every other issue in farming. Younger Travis McKenzie expressed a concern for the working environment of migrant workers and how to create better conditions where their rights are respected and their voices are heard. Young Andy Hazzard thinks the term 'Unskilled Labor' needs to be removed from farming vernacular and everyone wholeheartedly agreed.

Younger Emily Oakley suggested that food needs to cost more so that small-scale farmers are able to pay laborers livable wages. Elder Nash Huber believes we should focus on finding workers and employees within our own local communities in order to create stronger connections with people and build more resilience within our local economies.

DAY 4 - The Future - Peak Oil, Peak Water & Peak Phosphorous - The morning session was led by elder Bob Cannard and younger Zach Wolf on the strategies and techniques farmers can use to help navigate through the challenges of peak resources, and the creative ideas available that allow farmers to conserve, rethink, and regenerate these vital resources. Zach began by describing the relationship between phosphorous availability and the population of mycorrhizal fungi found in the soil and then highlighted some techniques for unlocking available phosphorous from the soil. Since “up to 80% of phosphorous comes through mycorrhizal activity,” Zach has been trialing some on-farm methods for inoculating soil with mycorrhizal fungi from a winter cover crop and then incorporating a portion of this inoculated soil into a potting soil mix for seed starting. Elder Don Bustos mentioned the work of Michael Melendrez of Soil Secrets in New Mexico and his development of mycorrhizal soil inoculant products which have shown great results for farmers. Then the topic shifted to water conservation and elder Bob Cannard described his water conservation work in California of “using the blessings of nature” and developing innovative dryland farming techniques and water catchment systems that in turn recharge the depleted aquifers. Elder Don Bustos added the example of the communal system of *acequias* (community ditches) that are used in New Mexico and their historical significance and cultural implications for supporting water management and conservation in agriculture.

The Emergence of CRISPR and Gene Editing - The topic then shifted to an engaging discussion on the controversy of the emergence of CRISPR (Clustered Regularly Interspersed Short Palindromic Repeat System) and gene editing in agriculture, and whether it has a place in organic farming. Led by elders Tom Willey and Jim Gerritsen, Tom offered the idea that compared to GMO technology, CRISPR is simplified and potentially more accessible to everyone as open source technology. He is fascinated with the attempts to marry good science with the best agrarian practices, but as elder Frank Morton reminded the group “this technology has broad applications compared to classical plant breeding and traditional selection techniques,” and these new technologies are more likely to increase unnecessary risks that could cause catastrophic and irreversible consequences for humanity. “Risk assessment is a balance between potential versus actual consequences,” commented

younger Josh Volk, “and in this situation, the potential risk may seem low but the consequences are very high.” Younger Zoe Bradbury added that she believes, “food sovereignty and agricultural resilience are threatened by CRISPR, and the imbalance of power is so extensive at present that we do not want to see it increase” through the development of this technology in farming. Younger Andrew Still remarked that, “the ‘dark side’ is trying to create a positive consensus for their ideas, but consensus without understanding is a recipe for disaster.” In an effort to better protect organic farmers and traditional seed breeding practices, elder Jim Gerritsen is developing a specific definition for organic seed breeding which includes four criteria - 1. Farm-centric breeding (not performed in a lab by corporations) 2. Commons (seeds always available to all) 3. Transparent (process to remain open) 4. Arenas (ag in general & organic specifically).

Getting the Message Out - The afternoon session was led by elder Dru Rivers and younger Emily Oakley with a discussion centering around the questions of how farmers define and maintain the integrity of their sustainable practices that customers have come to expect, and how farmers better communicate the message of organic farming to the public. The question of whether to certify or not to certify organic has always been a hotly debated topic among farmers. Of the farmers in attendance, all of whom follow sustainable and organic farming practices, approximately 75% are certified organic. The primary reasons for not seeking organic certification are based on philosophy, the smaller size and marketing reach of their farm, and the paperwork and costs associated with certifying. Younger Pete Johnson offered that he would not be certified organic if he was a smaller farming operation, but he “believes in supporting the idea of ‘power in numbers’ for certified organic growers.” For younger Emily Oakley as a small organic farm in Oklahoma where many people do not understand the nuanced issues, the organic certification label is increasingly important since “it offers protection against abuse and misuse of the word by other non-certified farmers” in her region. Younger Josh Volk is concerned about “large corporate growers who use organic certification solely as a marketing tool to make money.” Elder Barbara Damrosch shared the example of MOFGA’s current proposal to include ‘add-on’ words to organic certification, such as a family farmer add-on, in order to more clearly distinguish farm size and other beneficial social practices that are not necessarily specified under the USDA organic certification label.

But regardless of the issue of certification, all of the farmers agreed that the foundation of organic agriculture is deeply rooted in the positive tangible and intangible effects that sustainable and biological farming practices have on farmers, their communities, the environment, and human health. The ‘taste’ experience of

fresh organically grown produce and the physical exposure to farm environments where the positive effects can be experienced are two of the most important elements in helping to get the message of organic farming out to the public. Elder Anne Lazor shared that “hands-on experiences and involvement in farm activities” are the best tools for promoting understanding. Many of the farmers maintain an open door policy for farm visits, regularly invite school groups, host community events, and use social media to share this important message.

Marketing and Sales Numbers - The day ended with an evening session highlighting the marketing approach and annual revenue for each of the farms, and due to the diversity of farm size, production focus, seasonality, and maturity of business, the marketing strategies and sales numbers varied widely. For smaller-scale farms in the range of 1.5 acres to 7 acres, the trend reflected a more diversified marketing plan with typically two-thirds of sales allocated to retail outlets including CSA and Farmers Markets, and one-third to direct wholesale accounts including restaurants and grocery stores. The annual revenue for these smaller-scale farms ranged from \$68K to \$475K. For the mid-sized and larger-scaled farms, the acreage ranged from 75 acres to 400 acres with a larger percentage of production allocated to wholesale accounts (direct and distributors) and annual revenue ranged from \$500K to \$5.5M. Overall, there was a total combined annual revenue of \$21.6M for 24 organic farms in attendance.

DAY 5 - Closing - As the week wrapped up with closing statements from all of the farmers, the group was reminded of the collaborative effort it takes between farmers AND between generations to address these complex issues. In recognizing the strong foundation built by the agrarian elders, the agrarian youngers will carry the collective wisdom and insight forward with renewed energy and enthusiasm to benefit all future generations of organic farmers. As parting inspiration, younger Andy Hazzard shared the quote, “The nut that held his ground became the mighty oak.” Much gratitude was expressed for one another, for the sense of community, for the people and place of Esalen, for the organizers of the gathering, and for the circumstances that brought everyone together. Elder Patty Huber offered a wonderful image in closing - “Remember to embrace the blessings of the farm, of everyone here, and feel how this room of farmers hums like bees in a flowerbed.”