Confessions of a Kimchi-Maker

Food Preservation on the Small Farm
By Jeff Aldrich

My grandfather’s prepared horseradish was legendary. I recall watching a hired hand choke on it when I was young. It was likely youthful machismo that inspired him to put a large dollop on his taco. He paused after taking a big bite, his face reddened, he couldn’t catch his breath. There may have been some question about whether or not emergency action needed to be taken to ensure he would be able to continue helping bale hay after lunch, but I don’t think any was required. {Continued on p. 8}

Elderberries Production finds a home in the Crow River Region

By Connie Carlson

About ten years ago, SFA member and Hutchinson-area farmer, Dan Moe, introduced me to elderberries. At the time, Dan was heavily involved in the development and leadership of the Midwest Elderberry Co-op (www.midwestelderberry.coop) and was active in sharing the nutritional benefits of elderberries with anyone who would listen. Fast forward to today, and I find myself active in the supply chain and market development of elderberry production in the Upper Midwest and, because of Dan’s work, am proud to share that the heart of that activity is happening right here in the Crow River region. {Continued on p. 3}
LETTER FROM THE EDITOR

Dear Crow River Chapter Members,

One recurring theme of the last couple years has been the need to adapt and be flexible in the face of changing and unpredictable circumstances. Successful farm operations or food businesses can maneuver through a landscape of challenges with an open mind and an ability to spot opportunities in the hardships. Both people and the land are resilient and can handle a lot of stress, but it is still important to recognize when an old way of doing things is no longer working. Everyone has their breaking point. Sometimes the path of least resistance can lead us in new and better directions—making use of produce bound for the compost pile to make value added products, finding a niche in Elderberries, improving farming practices such as adding perennial pathways, starting a new farm enterprise, growing different crops, or even closing up shop in some cases where farming is no longer the best option.

Our local food community offers an ever expanding definition of what it means to be a farmer, and the good news is that there is room for everyone to create products and be successful. Farmers and food business entrepreneurs can focus on their strengths and individual gifts to create a niche, and need not be pigeonholed into an existing model. Sometimes it is a matter of adapting a model that has been in practice for generations—this type of change can be difficult, but when it comes to saving the farm, it is worth being honest about what is and isn’t working.

By combining what you are good at and enjoy doing with what customers are looking for can lead to creative endeavors that will be fulfilling both emotionally and economically. Still, local producers face many challenges even when providing high quality and desirable products. With variables like supply chain difficulties, costs of inputs, weather, and others becoming more uncertain, business owners have to be thinking a few steps ahead at all times. New collaborative models, such as the Elderberry co-op, are popping up to help solve some of these problems. The resilience of the land itself holds so much promise. Even the most blighted field can be rebirthed in beautiful and innovative ways. Seeing the passion and hope of the next generation of farmers among us gives me the same hope that comes each spring: another chance to create something that the world desperately needs—authenticity, beauty, nourishment—that which honors each of our own unique gifts and reason for being on this earthly plane.

With Gratitude,

Sarah Lindblom

SFA Crow River Chapter President
Conservation Connector
Solar Fresh Produce

Thank you to this Issue’s Contributors:
Jeff Aldrich, Mana Gardens • Connie Carlson, RSDP, SFA State Board President • Elinor Opitz, New Vue Ayshires
Tim “Red” Kirkman, Fox and Fawn Farm • Chris Kudma, Plum Creek Garlic • Jolene Carlson, MaEd, MS, LN • Jerry Ford, Living Song Farm
For anyone reading who is unfamiliar with elderberries, a quick tutorial, via the Midwest Elderberry Coop (MEC):

“Wild canadensis elderberry plants are woody shrubs often found along roadsides, forest edges and abandoned fields. Their native range spans most of North America east of the Rocky Mountains. ... The ‘elder’ in elderberry comes from Old Saxon ‘ældær’, which means ‘fire’. The stunning, aromatic flower clusters and mildly sweet fruit of elderberry have been treasured for thousands of years. The dark purple berries are very high in vitamin C, and they are a great source of Vitamin A - up to ten times more than more popular berries. But elderberry is more noted for its high levels of antioxidants like flavonoids — mainly anthocyanins, as well as quercetin and rutin, which function as a cellular level anti-inflammatory agents.”

As a long-lived perennial, elderberries naturally provide soil health benefits via their root system, holding soil in place and improving water infiltration. Elderberries bloom in mid-summer, providing native pollinators and honeybees with an excellent food source. Some growers harvest and dry a portion of the starlike elderberry blossoms to sell to food and beverage makers.

Currently, most of the elderberry products you may find on store shelves at your local coop, grocery or health food store were made from elderberries imported from Europe. If you are interested in products that incorporate midwest-grown elderberries, look for River Hills Harvest. This Missouri-based company was launched by experienced elderberry producer and MEC cofounder, Terry Durham. Durham has deep connections with Minnesota growers, buying berries and flowers from them for his products. I have spotted his products on shelves across the state [not just Twin Cities co-ops].

Here in the Crow River region, efforts are underway to support the financing and construction of an elderberry processing hub. A major bottleneck in scaling elderberry production is efficient harvesting and processing. Elderberries are small, ranging in size from peppercorn to a pea. Harvesting elderberries is still mostly done by hand and usually consists of removing or cutting entire cymes and later removing berries from the stems (“destemming”). Growers recognize that this hand harvesting will be untenable as acres scale and are testing mechanical harvesting options. Destemming is also a laborious process, but mechanical options are available. Elderberries start breaking down quickly after harvest, so growers pack their harvest in food-grade pails and freeze them. Frozen berries are then transported to various end-buyers who process them for dried fruit, juices, syrups, jams, supplements, and beverages.

Growers in the Montrose area have been sustainably scaling their elderberry acreage and planning for future processing for a few years. One of the growers, Jon Jobes, will be speaking at the SFA Annual Conference on February 12th (St. Joseph, MN). He will be joined by MEC co-founder, Christopher Patton, and will be sharing insights on their production and market efforts.

What am I doing? Lately, I’ve been interviewing elderberry growers across the midwest and developing a report on midwest production on the current and potential acres of production, grower attitudes, and the opportunities and barriers to sustainable scaling of this beneficial crop. Release of the report is tentatively planned for late January. This work is funded by a value-added processors grant that was awarded to the MEC in 2019 and supported by the UMN Forever Green Initiative [my employer].

This article may be long, but I’ve barely touched the surface of the activity surrounding midwest elderberry production. If I’ve sparked your curiosity, I recommend investigating the MEC website and attending the SFA conference to meet other growers and make connections. You are also welcome to email me with additional questions or ideas: carl5114@umn.edu.

Connie Carlson is the co-director of the Sustainable Ag and Food Systems group for the UMN-Ext. Regional Sustainable Development Partnerships. She works on market and supply chain development of the Forever Green Initiative crops, including Kermiz®, hybrid hazelnuts and winter camelina. She is a board member of the Crow River SFA chapter and is the SFA State Board President. She lives in Buffalo with her family.
FROM THE STATE SFA

SFA Annual Conference Returns March 18, 2022

SFA is planning our Annual Conference as in-person event at College of St. Benedict in St. Joseph on the 3rd Friday in March, with sessions on climate change, meat processing, coping with drought, pastured poultry & hogs, garlic, Halal meat production, deep winter greenhouses and more. And, as always, there’s a night-before social and music jam, and an end-of-conference happy hour. Please note the change of date! www.sfa-mn.org/conference for more info.

Midwest Soil Health Summit in Elk River March 8 & 9, 2022

With separate days dedicated to soil health for vegetables & fruit (Tuesday, 3/8), and crops & livestock (Wednesday, 3/9), you’ll be able to register for one or both days. Held at Oliver Kelley Farm in Elk River, the Summit will feature for the fruit and vegetable growers the latest in soil health practices specific to them, food safety while incorporating livestock, perennial fruit/nut production and more. On the crop/livestock day, topics include a keynote by 7,000-acre farmer Rick Clark, seasonal grazing, wide-row corn, silvopasture and other subjects related to soil health practices. www.sfa-mn.org/midwest-soil-health-summit for more info.

Board of Directors Seeks Nominations

Sustainable Farming Association is now accepting nominations for an at-large position on the statewide board of directors. The term is three years, and this board meets four times a year.

The Board of Directors is composed of farmers, growers, professionals, educators and eaters from all corners of Minnesota. We welcome nominations for and from individuals who will bring their perspective, experience and curiosity to the board to serve the vision of advancing sustainable and equitable agriculture in Minnesota. SFA membership is a requirement to serve as a director.

If you would like to nominate yourself or another person, please email jerry@sfa-mn.org.
Conservation Connections

Are you working hard to use conservation practices at your farm but could use financial and technical support to reach your objectives? You may want to consider working with the Natural Resources Conservation Service (NRCS), an agency of the USDA. The newly expanded Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP) can assist with funding towards your conservation projects such as cover crops, fencing, high tunnels, hedgerow planting, and much more.

According to NRCS Chief Terry Cosby, “Climate change is happening, and America’s agricultural communities are on the frontlines. We have to continue to support and expand the adoption of conservation approaches to support producers in their work to address the climate crisis and build more resilient operations. We are continuously working to improve our programs to ensure we’re giving farmers and ranchers the best tools to conserve natural resources.”

Navigating these resources can however be a challenge and is a long term commitment to the health of your land. The process involves applying for a contract through your local FSA office for the projects to be carried out and cost sharing payments that are paid out once the contract is fulfilled. Having a solid plan is essential in successfully utilizing these programs. There are also advantages to enrolling in multiple programs at once including the Minnesota Ag Water Quality Certification program.

If you are in a historically underserved farmer category (veteran, beginning farmer, limited resource, or socially disadvantaged) you may qualify for advanced payments and higher payment rates for your projects. You can visit farmers.gov/service-locator to find your local office. You can also work with a Conservation Connector to help you through the process—contact jared@sfa-mn.org for more information.

‘Drink Crow’ Café Chats

The Crow River Chapter hosted a Drink Crow café chat at Cool Spot Java in Montrose on December 8th 2021 to network and ‘talk shop’ with fellow chapter members. Join us for two upcoming Drink Crow events—an opportunity for an informal meet up with your neighborhood farmers and foodies.

Next Meetups:

Wednesday, Feb. 9, 2022, 9:00 a.m. Gather, 200 Central Ave, Buffalo, MN 55313

Wednesday, Mar 09, 2022, 9:00 a.m. The Grounds, 15256 US-12, Cokato, MN 55321

Farmers gathering at Cool Spot Java Photo by Jerry Ford
Sheet Pan Chicken with Squash and Apples
Comfort food packed with healthy fats, protein and flavor!

Ingredients:

1 Tbsp ground cumin
1 Tbsp salt
1 Tbsp black pepper
1 rosemary sprig, stemmed and finely chopped
1 large onion, chopped into large pieces
1 small delicata squash (about 1 pound) halved lengthwise, seeded and cut in 1/4" half-moons (can substitute sweet potatoes, carrots, and/or root vegetables of choice)
1 medium crisp, tart apple, thinly sliced
2 Tbsp avocado oil
1 Tbsp maple syrup
8 skin-on, bone-in chicken thighs (about 2 pounds)

Directions:

Position rack in upper third of oven and preheat to 425°F.

Mix cumin, salt, pepper, and rosemary in a small bowl, set aside.

Toss the onion, squash, and apple with oil, maple syrup and half of spice mixture on an 8x13 rimmed baking sheet in a single layer.

Rub chicken thighs with remaining spice mixture and arrange skin side up, on top of fruit and vegetables. Roast until skin is browned and an instant-read thermometer inserted into the thickest part of chicken registers 165°F, about 35 minutes; if chicken skin or vegetables start to burn, move pan to a lower rack to finish cooking.

Divide chicken, fruit, and vegetables among 4 plates and serve. •

Recipe Submitted by Crow River Board Member Jolene Carlson

Source: www.weightandwellness.com
Winter Crossword Puzzle:  
Adaptability and Resilience

Across:
4 True ________
6 What you do with crops to help preserve nutrients
7 Not just a river in Egypt
8 Island location of Global Seed Vault
10 Neanderthal’s gave us some of this
12 English Peppered Moth changed color to do this
13 Virus Alphabet
14 Floating islands of this
15 Chilly pursuit in MN
17 Blanket the soil
18 The Beagle went here
19 T Rex hated this
20 Scopes Monkey Trial theory
21 Mother of necessity
23 The _____ Thief
24 Combines hate this: Palmer

Down:
1 Protected land
2 Peapod Friar

3 Rivers change this all the time
4 Location of 2021 UN Climate Change conference
5 Large-eyed butterfly scares predators
9 Back from the brink
11 Successor program to U of Minnesota Green Revolution
16 In your pants
22 Playing dead to survive
25 Black Krim and Ashmead Kernel

Clues by Chris Kudrna, et al.
For Solution, email sarah.a.lindblom@gmail.com
(Kimchi from p. 1) He recovered after several tense minutes and was much less generous with his future portions. The same grandfather was also known for his pickled corn. I vaguely remember the large, uncovered crocks fermenting in his garage: the sour and acrid smell, the mold surrounding the rock used to weigh down the plate that kept the corn below the surface. I am told he enjoyed the pickled corn fried in butter and that there was no better way to rid the house of unwanted guests than to dump a few big spoonfuls into a hot pan.

Sometimes family traditions skip a generation or two. My own parents did very little canning, certainly no fermenting, and only maintained a vegetable garden occasionally. We had an aging and somewhat neglected apple orchard, and the fruit of the crabapple trees sometimes made its way into the tart, sweet jelly that I remember enjoying. The old farmhouse where I spent the first thirteen years of my life had a dirt-floor basement that served as a root cellar and also accommodated a large population of Tiger Salamanders. The rough oak shelving that lined the fieldstone walls held an ad hoc collection of canning jars containing specimens of mostly unidentifiable fruits and vegetables likely put up on a hot July afternoon in the previous millennium. The contents of these jars served as the foundation for any number of potions that I concocted in my younger days. I apparently had the common sense to avoid ingesting any of them, as there is no history of salmonella or botulism poisoning in my childhood medical records—nor in those of my siblings. These childhood experiments likely served as my “how-not-to” introduction to food safety.

The beginnings of my own entry into the world of food canning and preserving began innocently enough as a desire to make my own salsa. The signature salsa recipe we are still using at Mana Gardens today was first discovered on a Usenet group in the 1990s, well before we had any plans to grow all the ingredients ourselves or make up to thirty-three cases (fifty-five gallons) of it in a single season. We’ve tweaked the recipe a bit and scaled it up to be able to make five gallons per batch, but part of the credit for our salsa’s popularity belongs to a now forgotten Usenet user who shared a recipe on a likely defunct text-based internet forum over twenty years ago. As much as I would like to do so, I cannot claim our signature product has its origins in a secret family recipe. Someone’s family, but not our own.

We’ve expanded and diversified our canning and preserving efforts significantly since those early batches of salsa. In addition to offering other canned goods such as pickles, dilly beans, chutneys, and jams, we have also found there is significant interest in our raw fermented foods, ready-to-eat options, and dried spices and herb blends among our farmers market customers. At this point our food preservation practices fall generally into the categories of canning, fresh processing, fermenting, and drying or dehydrating. Each of these methods have their own advantages and drawbacks but there are several reasons to use a variety of techniques for preserving food and developing a line of value-added products for your customers.

It may sound a bit counterintuitive, but perhaps the single most significant motivator for our food preservation efforts at Mana gardens over the years has been the reduction of waste. One could convincingly argue that adding bushels

Mixing up a batch of Mana Gardens’ Cucumber Kimchi Photo by Mary Sue Stevens
of bruised or blemished produce to the compost pile or the livestock pen is not necessarily wasteful, but there’s a good chance that repurposing that less perfect produce for human consumption will have greater financial benefits over the long term. Oversized cucumbers may not sell at the market, but when we turn them into cucumber kimchi they fly off the table. Sprouted onions may lack crowd appeal, but they can be dehydrated and turned into onion powder. And those doorstopper zucchini work great for zoodles (zucchini noodles) which have gained popularity as more customers come to the market in search of ready-to-eat options. The same applies to bagged, chopped kale which is a great way to market those kale leaves that have a bit too much pest damage to sell in a fresh bunch. Reducing waste through repurposing not only has environmental benefits but can also be good for the bottom line of a small farm.

Those of you who sell at farmers markets know that offerings can be sparse early and late in the season and, much like a high tunnel or greenhouse, preserved foods can serve as a type of season extension, ensuring that you still have an appealing variety of products to offer your customers when there’s less fresh produce available. Our final outdoor market is the last Saturday in October and this year we were pleasantly surprised to find that sales that day were among our all-time highs due largely to the volume of salsa, kimchi, sauerkraut, and jam we sold.

Food preservation on the small farm is a bit like exercising: if you don’t work it into your regular routine it is easy to skip doing it. Some produce like cabbage and root vegetables can be stored for an extended period of time in a cooler or root cellar until you have time for processing, but things like cucumbers and tomatoes typically need to be preserved fairly quickly. We’ve found that the peppers and tomatoes we use for salsa can be prepped and frozen for 2 to 3 months without a significant loss of flavor or freshness. Tomatoes may store even longer, but sweet peppers get a hint of that “freezer flavor” if frozen for more than a couple months. Freezing allows us to set aside time when things slow down to make several batches without interrupting the peak season schedule too much.

Drying or dehydrating is a good option for those foods that cannot be canned or fermented such as most herbs, garlic, onions, and peppers like cayenne, paprika, and aleppos which are best dried and ground for powders or mixed seasoning blends. One can use traditional drying methods or invest in a good electric dehydrator. We’ve found the dehydrator to be easier and more reliable, though we’ve also used low heat in the oven to quickly dry large quantities of herbs such as basil. Drying can take place throughout the season and does not require a significant time commitment. Once the various things are dried we’ll often bag them and put them into the freezer until it is convenient to finish processing and packaging them.
There seems to be a growing demand for raw fermented foods such as sauerkraut and kimchi. Eaters are catching on to the fact that “pasteurized” is often just a synonym for “dead” when it comes to fermented foods that, when properly prepared, are perfectly safe. Most of the canned sauerkrauts available in grocery stores, for example, have been heated to a temperature that kills off all of the beneficial probiotic bacteria generated in the lacto-fermentation process. I’ve found that many farmers market vendors too will process their fermented sauerkraut in a steam canner to make it “shelf-stable.” It may taste great but its dietary value has been greatly reduced. The caveat with raw ferments is that they need to be stored at a cool temperature to preserve freshness and slow the fermentation process, so a root cellar or cooler space is required to store them until they are consumed or sold. Under proper conditions, many ferments will maintain their quality for up to a year.

Fermentation can be a bit intimidating when you’re first getting started but once you have a few successful batches under your belt you’ll find that it’s a great-and nourishing-addition to your food preservation repertoire. Just about any vegetable can be fermented so there’s no reason to limit yourself to just sauerkraut or kimchi. We’ve also done a traditional beet kvass, fermented dill pickles, jalapeño en escabeche (a traditional Mexican pickled jalapeño recipe), butternut squash kimchi, and kombucha, to list just a few. And it is worth mentioning what I learned from the presenter at a University of Minnesota Extension Cottage Food training class: There has never been a reported case (as of a few years ago, at least) of food poisoning in the U.S. from ingesting a fermented food. So fermentation may actually be considered somewhat safer than conventional canning. After all, we humans have been doing it for a lot longer and, according to fermentation lore, if a ferment goes bad you’ll typically know right away from the smell alone.

A good understanding of food safety is key to successful canning and preserving. Whether you’re preserving just for yourself or to sell your products, it is critically important to familiarize yourself with current food safety practices. The University of Minnesota Extension’s cottage food safety and training web sites are a good place to start and I have provided links in the resources section below. I’ve also included two of our favorite fermentation books, and a web address for the comprehensive USDA canning guides.

It can be challenging to incorporate food preservation into an already overwhelming farm schedule, but the benefits to both your own health and your farm’s economic resilience can be well worth the additional effort.

Canning and Food Preservation Resources


Perennial Pathways Follow Up

By Tim Kirkman

About a year ago I laid out my plans for implementing perennially planted pathways in my garden, and I thought I’d take an opportunity to look back on them as we embrace the farming off-season and look back on the past year.

I had seeded micro clover in all of the pathways in the fall of 2020, and it overwintered very well. I added some extra seed to bare spots in the spring of 2021, but overall the success rate was very strong. The clover greened up early, held the shape of the raised beds all through the winter, and started flourishing right from the start of the season. It provided clear pathways for aisle traffic, kept my boots clean on the few days it rained, flowered and brought in pollinators, and prevented any annual weeds from coming up.

This white clover spreads vigorously, but I was able to keep it out of the garden beds themselves with the application of landscape fabric. Rolling it out over the clover for four weeks effectively killed it back to the aisles and left me a nice mulch of dead clover to plant into. It does not produce a lot of biomass, and by mowing it every week or two I kept it from getting too tall in the pathways.

Once I rolled back the landscape fabric and planted the beds, the clover would patiently wander its way back into the crop beds. By this time the plants had already formed a canopy and were well established, so there did not seem to be much competition between the clover and my plants. Because it was so dry this year, most of our plants’ water came from irrigation. So long as I watered thoroughly, the water would seep deeply into the soil and reach the plants, even though any competition from the clover.

The only downside with the perennial ground cover is that quack grass and Canada thistle also thrived in this system. With no soil disturbance and their aggressive nature, these vile weeds were able to outcompete the clover and spread throughout our garden. It would even lie dormant under the landscape fabric, only to bounce back to life as soon as I rolled it up to plant in the beds. Thus, in the end I probably spent as much time hand-picking quack grass and thistle as I would have spent hoeing annual weeds, so there was no labor savings.

If you are in a position where you don’t really have existing perennial weeds, I think the perennial pathway system with white clover would be an excellent way to go. For my part, my plan is to attempt to rid the gardens of quack grass via application of cardboard and landscape fabric. Once there is no longer a problem with perennial weeds in the garden, I aim to reseed the clover and try again. The benefits to pollinators, field ecosystem, soil health, and garden quality were all made clear this year. In the absence of noxious weeds, this seems like a great model for farming.
EVENTS CALENDAR

Drink Crow Café Chat Wednesday, Feb. 9, 2022, 9:00 a.m.
Gather, 200 Central Ave, Buffalo, MN 55313

Midwest Soil Health Summit Tuesday/Wednesday, March 8 & 9, 2022
sfa-mn.org/midwestsoilhealthsummit

SFA Annual Conference Friday, March 18, 2022 sfa-mn.org/conference

Drink Crow Café Chat Wednesday, Mar 09, 2022, 9:00 a.m.
The Grounds, 15256 US-12, Cokato, MN 55321

Crow River Chapter Annual Meeting Saturday, Mar. 12, 2022
sfa-mn.org/crowriver

Minnesota Garlic Festival Saturday, August 13, 2022 mngarlicfest.com

Contact Us

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