

Reflections and Resources on Transitioning to Organic Fruit (Aronia) Production
For Aronia Network List Serve
Drafted by Erin Schneider, Co Owner, Organic Farmer, Hilltop Community Farm, LLC

Hello Aronia List Serve Network Friends and Growers,

I have enjoyed learning more about your aronia projects and the momentum being built around product development and test marketing of aronia. I wanted to take a moment to share with you resources and lessons that we are learning as our adventures in aronia production evolve, especially in the areas of organic production, agroforestry design and ways to 'cross-pollinate', collaborate and merge with different viewpoints in the field of sustainable agriculture, conservation/land management and product development. The content is long for a list serve posting and I thank you advance for allowing me the space to share our aronia story and insights on organic production. It is my hope that you may be inspired to consider transitioning to organic production of aronia and other fruit/vegetable products, and offer you resources (people, funding sources, websites, journals, articles, etc...) that can help you transition with psychological ease. We are also looking to work with others in cooperative marketing, product development and organic production of aronia. In the spirit of this growing aronia network, I encourage you to build on the conversation and continue to share what is working, what you've learned, and what you aspire your orchard to be.

A brief overview on organic agriculture...

Organic agriculture is a production practice that focuses on building soil fertility—substituting inputs with knowledge and management. Farming organically means that growers are responding and actively managing for and with the site specific conditions of a farm by integrating cultural, biological, and mechanical practices that foster resource cycling, promote ecological balance and conserve biodiversity. It is based on a law passed by Congress in 1990 and is incorporated into the code of federal regulations under CFR 7 Part 205 (www.ams.usda.gov/nop). Organic is a production claim that refers to how food is produced and handled. Organic is not a content claim, it does not represent that a product is 'free' of something. Organic is neither a food safety claim nor a judgment about the quality and safety of any product.

There are inherent social, environmental, and economic benefits built into this for example, improved water and soil quality through enhanced management and reduction of synthetic chemicals. Increased profits due to reduced farm inputs. Yearly documentation of production activities provides a historical reference for your farm plan, and increased market premiums for organic growers (organic farmers tend to earn a minimum 25% more for their products as do conventional growers and there is strong growth in market demand for products). Studies also reveal that organic foods have a higher overall nutritional value.

Based on what we know and are learning about Aronia and it's potential as a local sustainable crop, I think makes the berry a prime candidate for organic production. Aronia is an outstanding local fruit crop in all areas of sustainability (economic- with potentially high return on investment; environmentally-with very low or even positive impact; and socially-with high nutritional value and potential to significantly increase local food options, (Carandale 2007.)

Is certification right for my farm and market?

This is an important question to ask. We do a mix at Hilltop CommunityFarm. Our CSA is not certified (we still embody organic and ecological agriculture practices and need to comply with all of the requirements of the National Organic Program (NOP)). We're also small, feeding 10 households through our CSA, and doing most of our work by hand. Therefore we fall under the NOP's exemption protocol as our vegetable sales are under \$5,000. It is a different story with our orchard project as we would like to obtain organic certification and have begun the transition process. One of the reasons for

organic certification with our fruit relates to processed products, such as the aronia products being developed and considered through this grower network. If you're an exempt operation, you may not use the organic label with processed products or products produced in cooperation with another operation. We also hope to earn more than \$5,000 in sales from our orchard site.

How you do it is what you get...What transitioning to organic aronia production on our farm looks like...

Our farm is located in LaValle Township along the eastern edge of Wisconsin's Driftless Region in northwestern Sauk County. Our farm consists of 59 acres of partially wooded land. Twenty-five acres were restored to native prairie in 2004 under the Conservation Reserve Program. We have been operating a small Community Supported Agriculture (CSA) and market-garden since 1993, with an emphasis on fruits including pears, hardy kiwi, and raspberries. We are expanding upon successful research conducted in a prior grant funded project by long-term orchardists, Dale and Cindy Secher. Their research tested forty uncommon, fruit varieties in Southern Wisconsin and found eight varieties suitable for sustainable production and processing. The varieties we are planting include: Aronia (*Aronia melanocarpa*), Russian Quince (*Cydonia oblonga*), European Black Currant (*Ribes uva-crispa*, *R. hirtellum*), White, Pink and Red Currants (*Ribes rubrum*, *R. sativum*, *R. petraeum*), Saskatoon (*Amelanchier alnifolia*), Sea Buckthorn (*Hippophae rhamnoides*), and American Elderberry (*Sambucus canadensis*). Little is known about growing these species together under different cultural practices. Our project will examine plant spacing needs and growth response to different soil mulches. Variables such as soil pH, weed suppression, and organic matter content will be measured and documented.

The plants won't be in the ground until spring of 2010. We will have to transplant the 15 Aronia plants (Viking variety) we obtained through Knight's Hollow Nursery to the orchard site in addition to the 25 plants will obtain this spring through the same source. We have been spending the last 2 years building soil fertility. This is critical, and ideally it is recommended that you allow for three years getting to know your orchard site, including getting soil samples analyzed and tested for both micro and macro-nutrients and adding mulch, compost, manure etc.. as needed. Given that we're never really allowed for our ideal situation in farming, most farmers I've talked to through the Midwest Organic Tree Fruit Grower Network (another great grower-to grower resource and list-serve) have allowed for at least 1 year for transition before you plant your orchard. Our first approach was to do no till. So Rob and I burned the site this past spring and direct seeded a cover crop of oats and buckwheat. Our results were mixed. I would not recommend buckwheat as a cover crop when transitioning, the plant does poorly in competition with cool season perennial grasses such as perennial wild rye, timothy, brome, and orchard grass all present in our orchard site. Oats held their own, we also intuitively think that the burning (while fun) actually invigorated the seed bed with many a hardy grass emerging. We adapted to plan B, and rented equipment (in the past we have done everything by hand as our CSA is small and do not own a tractor, mower, tiller, which we have found is essential) this fall, mowing the site, tilling, and planting with an annual winter rye mix. In the interim we managed to break the PTO (power take off) shaft on the rental equipment (I recommend getting the damage waiver when renting) and fortunately were able to call on plan B convincing our neighbor to help finish the job. You could say that we have spent the summer/fall meeting our rural neighbors through fire, tractors, and manure (we also found a few great sources of manure and compost as a result from a nearby pasture raised beef operation and elephant dung from the Circus World museum in nearby Baraboo.

Agro-forestry, education and outreach, are important features of our farm practice and we think essential to building the social and natural capital needed for aronia production and sustainable agriculture in general. While not specifically in our immediate orchard plot, other unique aspects of our orchard are the sustainability practices inherent in our overall design. False indigo plants, prairie clover, and lead plant will be scattered between the planting strips to promote nitrogen fixation, based on recommendations from the NRCS and U.S. Fish and Wildlife Service Private Lands Office. At the

edge of each planting strip, native prairie species such as coneflowers, bergamot, indiangrass, and prairie dropseed will be established to attract beneficial insects and enhance pollinator and grassland nesting bird species habitat. A 20' long by 100' wide windbreak of osage orange, white spruce, hawthorne, and american hazelnut will be installed 200' from the site, to further reduce erosion. You can also plant giant sunflower in your windbreak especially when you're establishing your tree species. Windbreaks protect the orchard from wind and water, provide wildlife food and cover, and attract beneficial insect populations. Another demonstration of a sustainable agriculture practice is the utilization of natural field runoff that will be distributed through our plantings with supplementation from soaker hoses, and roof runoff captured on-site with a cistern. Irrigation will be manually controlled based on rainfall and assessment of soil moisture. Runoff potential from an uphill area will be funneled down a swale in the middle of the test plot, allowing water to be diverted along contours throughout the site. Natural Resource Conservation Service Soil Conservationists, Midwest Permaculture Network, UW Madison Arboretum and volunteers are involved with elements of site preparation and management. We have received cost share funding from the NRCS's Wildlife Habitat Incentives Program to implement these practices adjacent to our research plot.

Wherever you are at in your whole farm planning practice, I would consider a few standards regarding certification to see if it is right for your farm. In order to sell a certified organic crop, the land on which it was grown must be free of prohibited substances for 36 months prior to the harvest of the first organic crop. Farmers will have their first organic inspection during the growing season when they plant to sell their organic crop. In general, for non-livestock operations certification costs will be between \$400 - \$1,000/year. Cost sharing is also available (see resource list). The Midwest Organic and Sustainable Education Service (MOSES) is one of the most comprehensive resource hubs for questions, trainings, resources, and fact sheets on organic production. They also host an annual organic farming conference in La Crosse the last weekend of February. It's a great place to learn from other growers and network. MOSES also provides workshops around the state to help growers with the organic application process as well as a mentorship program. In the past two years there have been more talks on organic fruit production, it would be great to have an aronia grower featured there as a presenter if not this year then perhaps next year.

The following are resources/handouts that I would recommend to help you get started.

One of the key sources and inspiration for our project is the work done by the Secher's and Dale & Cindy's mentorship support as well as support from the Center for Integrated Agricultural Systems and Juneau County Natural Resource Conservation Service. If you haven't already done so, download the Secher's fact sheets...

- Carandale Farm Fact Sheet on 'Fruits with Sustainability Potential' includes snapshots for currants, saskatoons, aronia, sea berry, quince, and gooseberry
- Aronia Berry Fruit with potential
- Great Lakes Foods at Risk – Publication of essays put out by Slow Food USA. I wrote an essay on our project, there's also other insightful stories from various place-based foods of the upper midwest. The booklet file is quite large, but you can access on their website at: http://www.slowfoodusa.org/downloads/Great_Lakes_Food_At_Risk_Booklet.pdf.
- A brief annotated bibliography on transitioning to organic production & agro-forestry resources that I have put together.
- Mapping the Minnesota Food System, a comprehensive analysis of emergent local food systems trends prepared by Ken Meter of the Crossroads Resource Center.
- Building Sustainable Places – Federal Programs for Sustainable Agriculture Forestry,

Entrepreneurship, Conservation, and Community Development – Comprehensive list of federal grant and loan programs, including cost sharing programs such as the Conservation Stewardship Program, and Organic Certification Cost Share program, which covers 75% of certification and inspection costs (big incentive for us). You can obtain an electronic copy at ATTRA's website at <http://www.attra.org/> or request a hard copy through ATTRA.

- We are in our first year of our NC SARE grant project and we will have more detailed budget and project information to share for our project update in March 2010.

Please let me know if you have any questions or issues downloading the files. We also want to extend the invitation to you to visit our farm next time you're in the area (La Valle is about an hour and a half NW from Madison), and we will keep you in the loop in attending our 2010 farm workshops as we finalize the events next season. Our goal is to have one field day focused on orchard design and installation (great for those of you just getting started) and the second field day focused on collaborative marketing strategies, with the hope of putting together a product development team (Dale, you have done much work already with this, perhaps we can work together in co-hosting, as I have some funds available through SARE and the Organic Crop Improvement Association International that will cover refreshments, printing of handouts/resources).

Good luck with your adventures in aronia production and organic, sustainable agriculture. We look forward to staying connected and continuing to learn from each other's work. Thanks again for all that you do!

With gratitude,
yours in hardy kiwi,
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