

# SAVANNA INSTITUTE

PERENNIAL REPORT 2020





#### LETTER FROM THE CO-EXECUTIVE DIRECTOR

Dear Friends,

For many years, it has seemed as through agroforestry here in the Midwest flourished within a relatively small but dedicated community of early adopters. In 2020 that changed.

Over the past year - as you may have noticed your-self - conversations about soil health, land access, silvopasture, and more reached the national stage and even lesser-known tree crops like pawpaws were profiled in major newspapers. The pandemic has opened our eyes in a new way to the vulnerabilities of our farm and food systems. Alongside that, we have seen renewed focus on trees as green infrastructure that not only helps us remain resilient in the face of climate change, but stabilizes the climate by pulling carbon out of the atmosphere and holding it in the biosphere.

Above all, perhaps, in 2020 we have rediscovered our interconnectedness - to each other, to the health of the planet, and to the plants and animals that call it home.

For all these reasons, in the past year we have seen the movement for perennial agriculture take off. Here at Savanna Institute that means our field day participation increased 9 fold, the Perennial Farm Gathering doubled in size again, despite being held online, and the number of requests for support in transitioning to agroforestry dramatically increased.

To meet this demand, we:

- Hired new technical support staff to work oneon-one with farmers and landowners to create plans for adopting and managing agroforestry on their land
- Expanded our apprenticeship program to provide on-farm hands-on training for the next generation
- Created a series of online courses to teach the basics of agroforestry crops, financing, marketing, site design, and management

- Initiated research fellowships in landscape ecology and plant breeding to focus cutting edge research on agroforestry in the midwest
- Expanded our commercialization work to include a focus on chestnuts, elderberry, and black
- Established three demonstration farms in Illinois
- Purchased a Home Farm to give the movement roots

As you can imagine, growth on this scale was matched by substantial organizational growth. We added four new staff positions in 2020, and more than doubled our operating budget. This expansion was made possible through a combination of private foundations, visionary gifts, and multi-year grants. We're grateful for these funding partners who share our vision of a perennial agriculture, and who make our work possible.

Our work is also being propelled by a movement for perennial agriculture extending far beyond the Savanna Institute, and we have been honored to work with an inspiring group of farmers, nonprofits, and investors who envision a different way to farm. Some of these partnerships have helped us connect with individual communities to provide technical support, like our work with the Black Oak Center of Pembroke Township, IL. While other partnerships draw together groups from across the nation, such as Partnership for a Perennial Agriculture, a national alliance focused on advocacy for agroforestry,



Of course, at the core of our work are the partnerships we build with farmers. In 2020 we:

- Helped organize grower coops in the Driftless
- Expanded our apprenticeship program to provide 8 mentor farmers additional training in mentorship, diversity equity and inclusion training, and legal support for hiring
- Elevated farmer voices through webinars, nutshells, and field days
- Created opportunities and platforms for farmers to connect with each other
- Shared latest R&D on tree crops

It's been a year of activity, however this growth only underscores the urgency of this moment for agriculture and climate change. We have an unparalleled opportunity to transform agriculture in the Midwest and, by doing so, establish a model that can inspire farmers across the US and the globe. Together, we can bring trees back into agricultural landscapes.

Thank you, each of you who have been a part of the community that Savanna Institute is helping to grow, especially through the challenges of 2020. I'm hopeful, looking ahead, as we each do our part to bring to fruition our shared vision of ecological resilience, climate stability, economic prosperity, and vibrant communities.

With gratitude,

Keefe Keeley Co-Executive Director The Savanna Institute



#### OUR TEAM



KEEFE KEELEY, MS Co-Executive Director



KATE WERSAN, PHD Associate Director



KRISTY GRULEY, PHD Program Manager Education



BILL DAVISON, MS Program Manager Tree Crop Commercialization



KAITIE ADAMS, MS Community Agroforester



ERIK HAGAN, MS Farm Manager





MICHELE MANSKE Event Coordinator

New!



SCOTT BRAINARD, PHD Research Fellow - Breeding



KEVIN WOLZ, PHD Co-Executive Director



DAVID BRUCE, MS New!
Program Manager
Tree Crop Commercialization



JACOB GRACE MS Program Manager Grazing and Food Safety



SVEN PIHL Agroforester





WIL CROMBIE Communication Specialist



PATRICK MICHAELS
Business Analyst

New



MONIKA SHEA, PHD
Research Fellow - Landscape Ecology

New!

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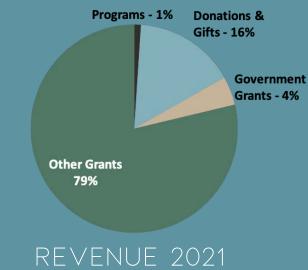
## **GRANT FUNDERS** Patagonia Clif Bar Family Foundation Lumpkin Family Foundation **USDA NCR SARE USDA NRCS** USDA National Agroforestry Center Single Step Foundation Maine Community Foundation WI Department of Agriculture Grantham Foundation Derek Nedveck Operations - 2% Staff Education/ 28% Outreach 36% **Fundraising** Research EXPENSES 2021

## FINANCIALS & LEAD SUPPORTERS

VISIONARY GIFTS Mary Burke

#### LEADERSHIP GIFTS

Plantra, Inc. Jim Chambers Dorothy Danforth Burlin Melba White John & Rebecca Hegner Charitable Fund Cathy Capel Nancy Duker Forest Agriculture Enterprises Forrest Keeling Nursery Linda Haas Daniel & Linda Marquardt Organic Valley Nathan & Lindsay Wolff Michael Murray Will & Karen Babler Amy Hartman Keri Jacobson Red Fern Farm Richard Wegman Diane Mayerfeld Laura Krouse Stephanie Coffman Dustin Enge



### TREE CROP COMMERCIALIZATION

What does it take to develop a tree crop industry from the ground up? In many ways, it requires forces similar to those which move water through a tree itself: a ready supply in the roots, a pressure-generating demand in the leaves, and the structures to move it there, against the force of gravity. At the Savanna Institute, we are working with our partners to catalyze new markets for Midwest agroforestry crops, particularly hazelnuts, chestnuts, elderberries, and black currants. These crops have been identified as having a strong demand and opportunities to rapidly scale up production.

New tree crop industries often face "chicken-andegg" problems: how to build demand for a crop that is already undersupplied? How to fund research and breeding efforts for crops that are relatively uncommon? In our Hazelnut Impact Investment Plan and forthcoming Chestnut Impact Investment Plan, we identify bottlenecks in these industries, as well as opportunities to overcome them through targeted investment in efforts such as breeding new tree crop varieties and developing more effective harvesting methods. Perennial tree crops like these, which may take more than a decade to begin producing, present serious challenges for market development. Yet they present opportunities as well - over the past 10 years, perennial crop income in the US averaged an annual return of 12.2%, compared to just 4.5% for annual crops.\* For crops such as these, expansion may be driven more by investors than by consumers.

Our elderberry and black currant efforts focus on expanding production through farmer education and training. In 2018, a Midwest elderberry supplier received requests for more than double their available supply, a clear indicator that the industry is not sufficiently developed. Black currants are one of the most nutritious fruits in the world, with up to four times more vitamin C than oranges and twice the antioxidant levels of blueberries, yet 90% of production is based in Europe. We are working to provide beginning growers with trainings, field days, and guidebooks for these crops, as well as materials for consumers, restaurants, and wineries.

By establishing new systems and structures through supply chain development, we intend to connect the "push" of production with the "pull" of consumer demand, generating the energy needed to rapidly scale up agroforestry production in the Midwest. If trees can use similar pressure to overcome the force of gravity, we hope that robust tree crop industries can help more farmers achieve the diverse, perennial farming systems we know are possible.

#### PROGRAM ACTIVITIES IN 2020

- Writing the Chestnut Impact Investment Plan and developing the associated relationships with partners.
- Focused attention around elderberries interviewing key players, making market and grower connections, and working to understand what is needed to increase cultivation of this important agroforestry crop.
- Organized and began hosting meetings of hazelnut growers in the Driftless region of Wisconsin.
- Procured promising black current genetics for propagation, cultivation, and research at the new SI Home Farm.

\*Equilibrium Capital (2013) The Opportunity in Permanent Crops.

## PUTTING DOWN NEW ROOTS



Thanks to a visionary donation from Mary Burke and support from the Grantham Foundation, the Savanna Institute was able to begin putting down new roots. In the fall of 2020, we purchased a farm in the Driftless area of southern Wisconsin. This 331-acre farm, nestled in a valley on the Lower Wisconsin River will demonstrate a range of agroforestry practices, especially alley cropping and silvopasture. It will be also be used for research and expanded educational programming.

As the Savanna Institute becomes responsible to the land and communities here, we are committed to being good neighbors within the

local communities of Spring Green, Troy
Township, and Sauk City. We also recognize
that this farm is located within the traditional
territory of the Ho-Chunk, Kickapoo, Sauk
and Meskwaki, Miami, and Oglala Sioux
Nations and carries the stories of their celebrations and struggles here, including with present day members of local communities. We
are working to learn and build relationships in
hopes that we can honor all the connections
to this place. We intend to use our privileged
position here to make this farm a community
resource stewarded by the Savanna Institute.

## APPRENTICESHIP PROGRAM

Apprentice-mentor matches got off to a slow start in 2020 because matches were happening in March, when the country shut down due to covid-19. However, with careful planning and precautions, 10 apprentices were able to complete 10 weeks of intensive on-farm training this year.

The apprentices received valuable lessons on daily, seasonal, and annual aspects of the agroforestry operation from their mentors. In addition to hands-on training with crop management (including, weed management, pruning, and harvesting), apprentices also learned about farm finances and business operations.

This year, we had a great group of people in the apprentice cohort. They enthusiastically joined in for monthly cohort calls and built a private Facebook group to foster community building within the cohort. Meanwhile, SI staff periodically checked in with each of the apprentices and mentors separately to get program feedback along the way.



Top Left: Rachel Henderson of Mary Dirty Face Farm was a mentor farmer in 2020
Left: ApprenticesEdgar
Durand spent 10 weeks at
Lily Springs Farm
learning from Farm Manager
Elle Sullivan [bottom left].





## DEMONSTRATION FARM NETWORK

In 2020, the Savanna Institute established a distributed network of Institute-operated demonstration farms to catalyze agroforestry adoption across the Midwest US. Located in Illinois and Wisconsin, these demonstration farms serve as accessible hubs to educate farmers and the public, conduct farm-scale research, provide tree crop germplasm repositories and variety trials, and foster adaptation of agroforestry practices to regional conditions. These farms are directly managed by the Institute to ensure robust, science-based design, fieldwork, and education and improve long-term economic and ecological monitoring. The dual-purpose nature of agroforestry practices can make them a win-win for farmers and landowners, allowing them to harvest multiple products from the same land area and access new sources of income.



## NEW WAYS TO GATHER & LEARN ONLINE

The 2020 Perennial Farm Gathering (PFG), held online in December, was the largest to date. Over 500 people from 34 states and 18 countries gathered virtually for four days of networking, presentations, and breakout sessions. The 5-minute "Nutshell Show & Tells" remained a highlight of the event, providing attendees with a chance to describe their current & upcoming work and share knowledge and questions.

Featured speakers included Olivia Watkins, Dr. Jifunza Wright-Carter, Kathy Dice, Reginaldo Haslett-Marroquín, and Eric Toensmeier. All sessions of the conference were recorded, and participants and members of the public can return to the conference website to watch speakers they may have missed during the conference. While gathering online lacks some of the depth of in-person gatherings, we were inspired by the way this new format made the gathering more accessible for a wider range of participants.

Just as the PFG moved online, our apprenticeship program also transitioned to offer more opportunities for remote education. With help from a grant from the Single Step Foundation, we created and launched a series of online courses for beginning farmers. These courses explore topics like the foundations of agroforestry, key tree crops, marketing and financing agroforestry, and site considerations. Some of the courses will be free to the public while others will be available for a slight fee. We created the first of these courses late in the year and will continue posting them throughout 2021. Watch the website for new courses as they become available!

# NEW PARTNERSHIPS TO BUILD THE MOVEMENT

Agroforestry requires partnerships to flourish. For this reason, in 2020 we focused on scaling up our efforts to lay the groundwork for widespread agroforesrty by following a partnership model. We refocused on what we can share with others - resources and experience in agroforestry - and began a series of conversations with organizations and communities across the Midwest to understand how we can support their vision for regenerative agriculture.

The partnerships that grew out of these conversations have taken many forms. In Illinois, for instance, we began a long-term partnership with the Black Oaks Center of Pembroke Township to provide technical support for their work. The center is working to remake the local economy through perennial agriculture, working through a 100-year vision for transformation. In Minnesota, we also began partnering with Dream of Wild Health, a Native-led youth organization dedicated to restoring health and well-being to the Native community. In this partnership, we are providing technical support for farm planning.

As our partnerships focused on technical support expand, we have been lucky to be able to increase the number of dedicated technical support professionals on-staff through a cooperative agreement with the Wisconsin NRCS. This new position will focus specifically on supporting Wisconsin farmers and landowners as they transition to agroforestry. In Iowa, grant funding allowed the Sustainable Iowa Land Trust (SILT) to hire an agroforestry professional advised by the Savanna Institute. This partnership allowed for a joint-hire for a new TSP whose work will focus on Iowa and Iowa agricultural policy.

The movement for perennializing agriculture is catching on across the country and beginning to make its way into state and federal policy. In order to support the movement and coordinate knowledge, Savanna Institute has joined several other organizations as part of the Partnership for a Perennial Agriculture. This group, which includes The Land Institute, Green Lands Blue Waters, the University of Wisconsin, the University of Minnesota, and the University of Missouri, focuses on examining the policy needs required for perennial agriculture.

Finally, while this has been a year of new growth, we have continued to nurture existing partnerships with farmers and organizations. Together, we can all transform agriculture in the Midwest.

## NEW EDUCATIONAL RESOURCES

## LAND ACCESS SPOTLIGHTS

With support from the National Agroforestry Center we created a series of infosheets profiling different paths to land access. These profiles explore the ways long-term lease agreements have been negotiated and what types of considerations farmers and landowners might take when estblishing partnerships.

#### ELDERBERRY SERIES

This year we created a series of webinars and field days centered around elderberries. This included four webinars focused on elderberry best management practices, a webinar and video on harvesting and handling, and a farmer-oriented video series with Terry Durham of River Hills Harvest and Chris Patton of the Midwest Elderberry Cooperative.

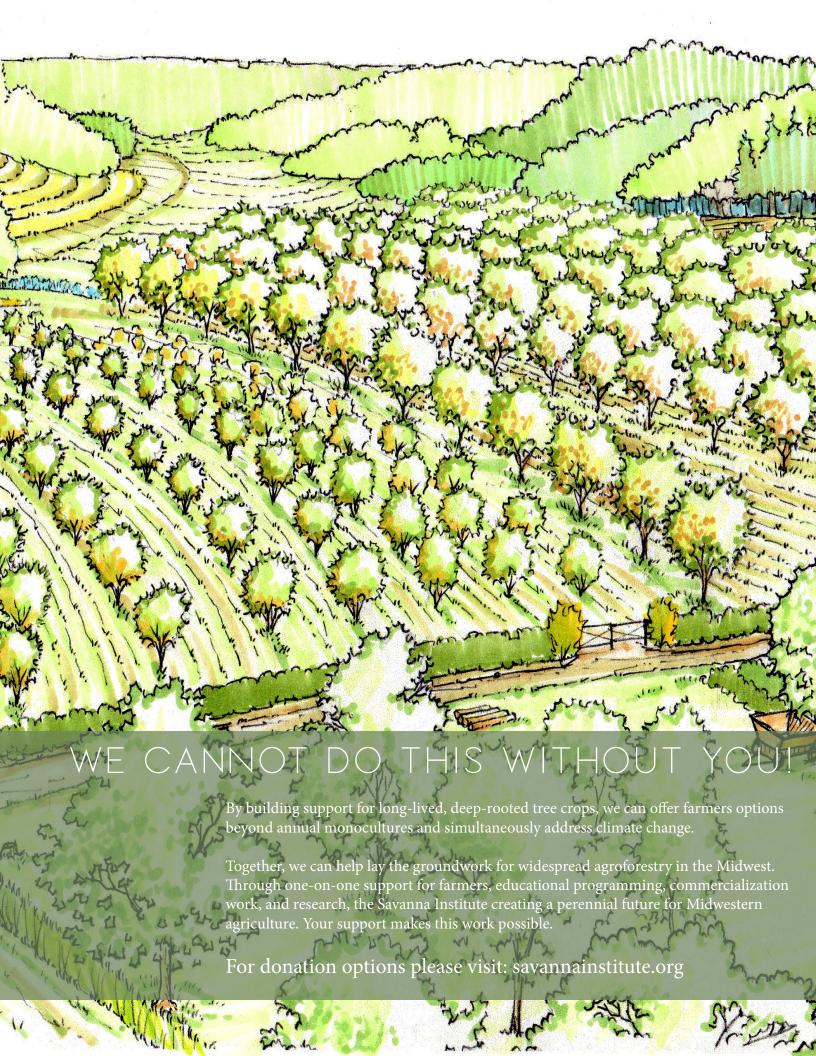
#### NUTSHELL WEBINARS

This year's Nutshell Webinars brought agroforestry experts into the living rooms of over 300 online participants. These free, live, online discussions gave participants a chance to learn from experts such as: "Knowledge of local perennial polycultures" with Maayan Kreitzman; "Inviting migratory birds" with Drew Slavin; and "Business planning for agroforestry" with Kelleen Wiseman.

#### VIRTUAL FIELD DAYS

With the pandemic making in-person gatherings impossible, we modified our field days to create virtual farm tours. While we all missed walking the fields, these virtual tours allowed participants to tour farms they may not have been able to visit in-person. These farm tours now live online and have been viewed by over 1,700 people and counting.





## AGRFORESTRY FOR CARBON DRAWDOWN

With even a modest level of adoption, agroforestry could sequester 2.2 gigatons of carbon per year. That's more than any other agricultural land management approach out there.

How much more carbon could we store if agroforestry were widely adopted?





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