

# The Germinator

SPRING 2021

VOL. 42 NO. 2

## SPRING'S PROMISE

See what's ahead  
for weather in 2021

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NORTHERN PLAINS  
FOOD & FARMING  
CONFERENCE

*Conference review inside*

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## Pasqueflowers are a symbol of hope

Pasqueflowers have a reputation of being the first flowers to arrive in the spring, a preciousness that inspired South Dakota's legislature to not only name it as the state flower in 1903 but to give it its own motto: "I Lead."

David J. Ode relates this history of the pasqueflower in *Dakota Flora: A Seasonal Sampler*, where he also tells this story:

The Plains Indians also thought highly of the pasqueflower. One Dakota legend recorded by ethnobotanist Melvin R. Gilmore in his book *Prairie Smoke* tells of an early age when the two-leggeds first walked upon the earth. All the pasqueflowers were eager to show their friendliness to those new creatures, and whenever any human beings would walk by, the pasqueflowers would turn their joyful blossoms to the people and cry, "Good Morning! Good Morning!" But the conceited humans passed them by without saying a word. The pasqueflowers were so embarrassed that from that day forth they became quiet and shy. They are still friendly to the two-leggeds, but nowadays they bashfully nod their heads to one side and whisper their greetings when humans walk by.

It almost makes you want to give an audible "Hello!" to every pasqueflower you find, doesn't it?

Pasqueflowers also go by the names prairie crocus and goslinweed, which refers to the fuzzy look of the buds, apparently resembling goslings.

Ode finishes his pasqueflower tales with this passage:

In his book *A Sand County Almanac*, wildlife ecologist Aldo Leopold wrote, "The chance to find a pasque-flower is a right as inalienable as free speech." We should all work to guarantee that our children's grandchildren will have native prairies in which to find pasqueflowers one hundred years from now.



The image on the cover was taken by Rick Hall. He and Verna Kragens planted pasqueflowers at the Comstock House in Moorhead, Minn., in a demonstration prairie garden.



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## Mission Statement

Northern Plains Sustainable Agriculture Society promotes sustainable food systems through education, advocacy, and research.

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# Farming roots yield wisdom for today's challenges

While perusing the history of NPSAS, I was surprised to see that we share some common origins.

Reuben Hummel, from Mott, N.D., was one of the founding members of our organization's predecessor (the North Dakota Natural Farming Association) and served as its first vice president.

My own start in life was just six miles east of Mott on a dairy and small grains farm. Though I wasn't particularly interested in the nuances of farming practices while growing up, as I reflect back, I think about all the ways that my family farm was practicing sustainable agriculture. I remember loops being closed as the manure pile from behind the barn was spread across the fields each fall, with a sizable heap put on Mom's gardens too. We didn't have a compost pile, but we did have a "chicken pail" under the kitchen sink where most food scraps ended up, to be carried up to the chicken coop on the next trip.

Our barn cats feasted daily on the freshest possible milk. Our dairy cows roamed the quarter of pasture all summer, and after harvest got to expand their grazing territory into the grain fields, where the lush green "waterways" snaking through the contour plowing section on the hill had been beckoning them all season long. We pulled hay out of ditches and from those waterways to feed the cows during the winter. The dairy cows also enjoyed grain grown on the farm, in a custom

mix that my dad milled on-site in his feed mill.

My dad didn't need many off-farm inputs in his operation, perhaps an expression of the innate thrift that all kids who grew up in the '30s had. Or more likely, in his own quiet way, he watched the farms around him get bigger and more complicated and decided a more natural, simple approach was the best for the land under his stewardship. I'm sure he and Rueben probably talked about all these things over the decades they farmed near each other.

Though our family farm has passed on to others now, the lessons of my childhood resonate deeply, and I look forward to the work ahead for Northern Plains Sustainable Agriculture Society as we meet the new challenges of this decade with the accumulated wisdom and ingenuity of our members.

I recently came across a 2010 Gene Lodgson article with a shout out to NPSAS that made me smile: "I also pay attention to the Northern Plains Sustainable Agriculture Society because it is located in North Dakota, South Dakota and Minnesota. When you see organic, sustainable, natural, small-scale, diversified food production growing vigorously in the very heart of large-scale grain farming, you know for sure we are on a roll."

So, fellow members, let's keep rolling. 🐾

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## Dakota Territory

I stand on land  
owned by three generations  
of my family,  
at least we think  
we owned it,  
if anyone can  
really own land.

I feel such a  
powerful bond  
to this land  
of my family,  
at home.

I think about  
the ones who  
walked this land  
before us  
never owning it,  
yet living with it  
in a harmony and balance  
we will never know.

We can't return  
to that bygone balance.  
Can we reconcile  
with the injustice  
that put us here?

—Terry C. Jacobson  
7/15/95

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## More people planting seeds of sustainability

I planted onion seedlings a few weeks ago. My husband wishes for one of those vacuum seeders that plants a whole flat all at once, but I savor the familiar task of holding the precious seed in my palm and carefully dropping them into rows neatly formed in the starting mix I have placed into a cedar box. Memories fill my mind as I work. I remember bringing the cedar boards to my brother's woodshop and how he swiftly and competently helped with constructing the boxes when we first moved back to Moorhead.

As I plant the seeds, I also think of my friends, who have grown them. My neighbor asked me this week "who do you order seeds from?" I do have a favorite list. In addition to seeds from NPSAS members through Prairie Road Organic Seed ([www.prairieroadorganic.co](http://www.prairieroadorganic.co)) and North Circle Seeds ([northcircleseeds.com](http://northcircleseeds.com)) I source from Beth and Nathan Corymb at Meadowlark Hearth in Nebraska and from the first seed company they established, Turtle Tree Seeds, in upstate New York at a Camphill Copake. The rest of my list includes High Mowing, Southern Exposure Seed Exchange, Johnny's Seed, and Baker Creek, and, of course, Seed Saver's Exchange. I watched Nathan carefully cleaning seeds using a set of screens he had brought with him from Europe when he came to live with us in Wisconsin for a couple of years before moving on to drier climates in Colorado and eventually Nebraska. I think of him again as I plant several of the varieties that I know that he has carefully tended for years.

This issue shares highlights from the conference. One of the gem quotes for me this year was when Walter Goldstein suggested we ask "who has lived with and loved these plants before?" as he described his approach called partnership breeding. Growing the seeds we need or supporting those who do acknowledges the role of the human being in agriculture as the "culture maker." My own point of view is that a creator God "made the earth" and then made human beings with hands to

continue expressing love and compassion through stewardship of the earth and all living beings.

We need machines, and with the work of skilled hands, we have many machines now to support agricultural work. We created business corporations too, to help us be more efficient with the flow of business activity and money. But just as we have seen recently that our democracy is more fragile than we would like or hope, an awareness is growing about the fragile nature of life on this earth. Central to discussions about and definitions of sustainability we need to recognize this challenging balancing point in both the role of corporations in our lives and markets and also wisely select the use and evaluate the impact of machines in our agricultural systems.

As I write this, I am looking forward to a strategic planning session with the board. The whole world seems to be waking up like spring around us with questions of sustainability. Increasingly, people are contemplating the reality of creating a world on a path to self-destruction that "no one wants" and recognize some farmers are "growing food no one wants to eat." With inspired hearts and informed heads, our hands can be guided to do the work differently. NPSAS has a rich history of guiding, informing, and inspiring, and I believe has so much to offer in a world that is seeking models and inspirations to move to a place of greater sustainability. 🌱



# We must see the system before taking action

*M*y dogs demand a constitutional every day, and most days I accommodate them with a two-mile jaunt down the gravel road. I play a podcast as I walk; I like the combination of breathing the air of my place in the world, the appreciation of the present moment that dogs live in, forward movement, letting my eyes stretch to a farther horizon, and hearing new ideas from far away. Those 35 or so minutes are medicine for my mental and physical health.

On my walk a few days ago, I was listening to a conversation between Ezra Klein, a thinker and podcast host who has recently moved to *The New York Times*, and Mark Bittman, who wrote *The Minimalist* cooking column at *The New York Times* for many years. Bittman has recently published a new book called *Animal, Vegetable, Junk*, which is, as Klein describes it, “a sweeping history and reinterpretation of humanity’s relationship with food.” Our food system “is poisoning us and poisoning the earth and inflicting cruelty to other creatures on a scale that breaks your mind if you try to contemplate it,” Klein said in his introduction. “And that is not to say that system does nothing good. It feeds billions of people with a variety that we never could have imagined at another point in human history. But it’s doing those other things, the poisoning things, too.”

I have not yet read the book, but I was interested to hear the conversation between these men who were confronting the food system from their viewpoint as consumers. I have heard and read many similar arguments over the years, including at NPSAS conferences, but they are often from farmers, or from people who are aligned with farmers. Klein and Bittman are both self-described “foodies.” I wanted to hear how they saw the system, far from the gravel road I was walking.

I took encouragement from most of what I heard. It’s nice to hear that people who aren’t living in the middle of farm country are seeing the costs of the dominant system of agriculture. As Bittman put it: “If you describe what food does to the United States, ... which is denude the soil, poison the soil, air, land and so on, torture animals, underpay people for their work ... if something other than the food system, say, an invading army were to do that, you would mobilize the troops and get to work fighting that.”

The part of the conversation I found most thought-provoking was when they seemed to disagree on the promise of technology. Klein asked: “What is your view of what our relationship to technology and nature is? And what should it be?” Bittman’s answer included this passage:

*Farming has historically been grueling work. But some of that technology could have been and still can be put to work making farming more dignified, less grueling, less back-breaking, more, dare I say it, fun, more rewarding, at least, for people who want to farm 50, 100, maybe even up to 500 acres of land, which is not insignificant.*

*These are not anti-technology arguments. They’re seeing technology as a tool.*

*I’m not particularly anti-genetic engineering. Genetic engineering is just an advanced form of hybridization. It hasn’t done much good, so far, because it’s been put strictly to work for chemical companies thus far.*

*When it’s put to work for producing better food for people, it might be able to do a good job. But it’s, like, who does technology work for is kind of the question here. How do you want to apply that technology? Where do you want to put your energies? ... I’m not saying we have to turn the whole thing on its head tomorrow, and tractors are evil, or hybridized seeds are bad, or any of that. I’m saying let’s try to use these things more wisely, with the goals of less damage to the environment, better public health, and so on.*

From there, Klein and Bittman have a discussion about whether the way to eliminate animal cruelty is through lab- and cell-based meat. Klein, who is a vegan, said he’s become a techno optimist on this issue: “I’m relying on technology to do the work because I don’t believe that people are going to accept eating less meat. And I don’t believe they’re going to, in the long run, accept eating worse meat and going back to sort of how this was traditionally, which is meat is a small part of the diet.”

Bittman said he encourages anyone to try to find meat substitutes that people like. But he also said that just because these meat substitutes potentially solve one problem doesn’t mean they won’t introduce another. “In a way you’re kind of assuming that cell-based meat doesn’t have externalities,” meaning hidden costs that are typically borne by someone other than the producer. “We don’t know that ... the information isn’t there yet.”

And this, I think, gets at the key to these big-picture conversations: The systems in which we live are big. It’s good to start seeing the problems, but it also gives us a potentially dangerous confidence to take action based on our limited view. Bittman gets at this with the John Muir quote he uses to start his book: “When we try to pick out anything by itself, we find it hitched to everything else in the universe.” Any potential solution—from tractors to GMOs to lab-based meats—tugs at parts of the system far from the problem we’re trying to solve.

The way forward, it seems to me, is with small but steady steps—testing the ground ahead of us, with a view to how those steps might affect the world on the far horizon. 🐾



## Summary of NPSAS board meetings

### Nov. 19, 2020, via Zoom conference:

- **Finance Committee:** The monthly financial report was reviewed. Budget comparisons for the new fiscal year are not available yet, and this month's report combined September and October. The Board requested that future monthly financials be provided in the previously approved format that includes previous year comparison, separate columns for each month, year-to-date totals and budget comparison. **Action: Motion made and approved to accept the finance report as presented.**
- Verna reported that the audit process has been initiated.
- **Personnel Committee:** The Executive Director review process is ongoing. The final review will be shared with the Board and presented to Verna after Thanksgiving.
- The board discussed potential candidates for the current and future board vacancies.
- **Executive Director's Report:** Verna gave an update on the Farm Breeding Club and ongoing work with Walter. She noted that information about the corn varieties was now publicly available and shared with the board via email. Work is ongoing in these areas:
  - Defining legal structures for a potential partnership in the Quality Crop Association
  - Complete the feed analysis work
  - Arrange for a grow-out of corn with a variety of crosses. This step may involve NDSU Research Foundation. As per the NPSAS Conflict of Interest Policy, Rich Horsely immediately noted that the corn germ plasm that may be used in this project would typically fall under his purview. He will recuse himself from any discussion of this on the NPSAS side. On the NDSU Research Foundation side, he will also recuse himself, and his colleague will be handling any involvement with the project.
- There are plans to reconvene the Farm Breeding Club Retreat participants to keep the conversation moving forward and address questions that were raised at the meeting,

but not yet addressed due to lack of time. That meeting is tentatively scheduled for Dec. 7.

- Walter is including NPSAS in an OREI grant proposal he is preparing. An early draft of an initial compensation proposal for seed royalties was shared, and the board requested more clarity about NPSAS's allocation. The complexities of corn royalties and hybrid plus parental inventory maintenance were briefly discussed, and the need for a solid business plan was noted.
- Verna updated the board on the Farmland Conservation Partners project she is working on with Ron McFall. There is ongoing discussion about potential land donation and some nuances with the corporate farming laws in ND.
- Beginning Farmer/New Roots will be keynote speakers on December 1 at an event hosted by the Minnesota Farmers Market Association.
- Verna reviewed the grant summary that was sent as part of the board packet, and the board reviewed the current grants.
- **Conference Planning Update:** Verna reviewed the conference planning spreadsheet and board offered input on sessions and ideas to complete the workshop lineups and ensure all areas of interest to our members had engaging content.
- Board member voting as part of the annual meeting was mentioned. Kaye will set up a virtual voting option.
- Verna also reminded the board about their responsibility to oversee the award process with Friend of the Farmer and Steward of the Year awards.
- **New Business:** Verna shared an idea for a new role for an NPSAS Farm Breeding Network Coordinator at Carrington Research Extension Center. The position would be grant funded and serve our members with research, education, and communications. This role would be capable of training farmers in on-farm breeding and provide leadership for developing additional breeding clubs and networks across the region. The board was supportive of the idea and noted the great visibility and representation that NPSAS would have for those visiting the site.

### Dec. 17, 2020, via Zoom conference:

- **Finance report:** There was no financial report this month due to Cathy's allotted available time being taken up by the audit. The auditor began working Dec. 7, and all things are going smoothly. Verna said that the monthly financial reports would be available after the first of the year.
- \$25,000 was awarded from West Central Initiative Fund for New Roots. This is the first grant in our calendar year from them aimed at meeting the budget for next summer's training costs for the farmers as well as \$5,000 for overhead and admin.
- So far we have received two gifts & one pledge from NPSAS board & staff toward goal of 100% participation for year-end appeal. The annual appeal letter is going out this week to the mailing list.
- **Personnel Committee Report:** Curt and Mike reported that they completed the Executive Director review with Verna sharing feedback from the full board 360 review input and integrating her self-assessment. The board and Verna talked about the importance of clear, concise communication for the board to do their work, and how helpful the weekly reports have been. The board discussed the need to formalize the ED job description prior to the strategic planning retreat and expressed appreciation for the work Verna has been doing for NPSAS for the past two years.
- More than 40 people renewed their membership, and we got two lifetime memberships in the past few months.
- The board discussed potential candidates to fill the empty seat and the vacancies coming in 2021. The Board Diversity document, which outlines the makeup of the board representing various sectors of our membership including producers, educational representatives, and other aspects of sustainable ag, was identified as a guiding tool for future board member recruitment.
- **Executive Director Report:** Verna reported on each of the programs.
  - **Farm Breeding Club:** NDSU Foundation has agreed to rework the materials transfer agreement with Walter so that it can



conform to what he has been proposing as the compensation plan for those engaged in the Quality Crop Association.

- After a productive meeting with Northern Crop Institute and AURI, AURI will convene a team and bring information re: what kind of research they could do on nutrient qualities for both human and animal nutrition.
- Farm Breeding Club meeting went well. A committee that will work to plan the conversation before the conference.
- Some test plot data is now available from Walter, more research is being done, but one variety is coming out strong in a couple of locations.
- **Farmland Conservation Partners (Ron McFall):** Some interest in land donations from several parties in ND. Next steps are for Ron McFall to determine ND structure for the partnership to comply with ND Corporate Farming Laws.
- **Beginning Farmer/New Roots –** Noelle Harden helped prepare a presentation to the ND Farmers Market Annual Meeting. Potential opportunity to expand the New Roots model to Pelican Rapids area, which has a large New American population.
- **Conference Planning Update:** There will be a kid's program centered on weather reporting and activities. We are 1/3 of the way to our budget goal for conference sponsorships. Cole was working to get the conference information into the system.
- **New Business:** The Strategic Planning Retreat was discussed with some potential dates in March for a virtual retreat.
- The Annual Meeting was discussed with potential award nominees identified, and a timeline for preparing the Annual Meeting Packet agreed upon.

#### Jan. 28, 2021, via Zoom conference:

- **Action:** The following officers were elected by unanimous ballot:
  - Kaye Kirsch - Chair
  - Krysti Mikkonen - Vice Chair
  - Randy Nelson - Secretary
  - Brad Wolbert - Treasurer
- **Action:** Motion made and approved to accept the minutes from the Dec.

#### 17 board meeting and the special conference planning meetings held on Dec. 29, Jan. 4 and 11.

- **Conflict of interest forms:** Kaye noted that the conflict of interest form needs to be completed by board members.
- **Finance Committee:** Preliminary financial reports for November and December were reviewed. The Board requested that final reports for November (2020), December (2020), and January (2021) be submitted for approval at the February meeting.
- An audit was conducted by Brady, Martz and Associates, P.C. for the fiscal year ended August 31, 2020. The audit report was shared with the Board.
- Verna reviewed the 2020 annual report with the Board.
- Cole reviewed a preliminary conference financial report with the Board and answered questions.
- **Executive Director's Report:** A letter of intent was submitted to McKnight Foundation as a first step in the two-step grant application process. A Minnesota Department of Agriculture Urban Farming grant was submitted and if funded will help with replication efforts of New Roots in Pelican Rapids, MN. A grant was submitted to USDA Organic Agriculture Research and Extension Initiative in cooperation with Walter Goldstein and other project supporters. Verna will resubmit the Beginning Farmer and Rancher Development Program grant through the USDA. The grant is due in March.
- Verna noted the New Roots farmer training will start next week using a virtual format.
- The Farm Breeding Club (FBC) grant submitted to Sustainable Agriculture Research and Education was turned down. The grant will be updated and submitted to National Institute of Food and Agriculture in May. Discussions during the annual conference about FBC has led to interest from Kathy Draeger, UMN Extension, to bring FBC work into Minnesota.
- **Old Business: Conference update:** A few technology glitches occurred, and it was noted some attendees had problems with videos playing and audio, but overall the conference went well. Technical

difficulties with the financial report presentation was also mentioned.

- Board noted that all speakers did a great job with presentations. It was noted that a virtual option would be a good idea for the 2022 conference. Interacting with vendors was not as convenient as if it were in person.
- Attendance was low for the conference, approximately 60 attendees. It was noted that some conference registrations were incomplete but the reason is unknown. Board noted that many of the sessions at the annual conference had low attendance.
- The Board noted that feedback from breakout/open space sessions was positive. Those that attended small groups noted the discussion was positive and engaging.
- OFARM will host the sessions they offered at the conference on their website and give credit to NPSAS.
- Board discussed options to archive the 2021 annual conference on NPSAS website and direct attendees there to view presentations. More information will follow.
- A survey will be sent out to all attendees.
- **Strategic Planning:** Strategic planning meetings will be held on March 7, 11, and 13. **Action: Motion made and approved to have Donna Rae Scheffert as the strategic planning facilitator.**
- **New Business:** Board meetings going forward will be held on the third Thursday of the month from 5-7 pm. The Board has room for one more board member. The Board extended its sincere gratitude to Curt Petrich and Lynn Brakke for their years of service and leadership on the Board of Directors of NPSAS.

#### Feb. 9-11, Electronic Action and Approval:

- **Action:** Motion made and approved to give approval for Verna, through Brady Martz to submit the attached Form 990 for 2019.
- **Action:** Motion made and approved to change the signers on the NPSAS bank accounts to reflect the new officers elected in the January meeting. Curt Petrich and Lynn Brakke will move off the account as signers and Kaye Kirsch and Brad Wolbert will be added to the accounts as signers. 🐾



## Conversation series brings members together

After the success of the Open Forum session during the Food & Farming Conference, in which participants could set their own breakout session topics, NPSAS staff hosted three more virtual conversation sessions in February and March.

The first session included sharing ideas on early-season planting, as well as discussion about the difficulty in accessing land for beginning farmers. The second session included a conversation about how distant landowners could find tenant farmers interested in sustainable practices, or other ways in which landowners could promote good farming.

Whether you attended or not, NPSAS staff would like feedback: Would you like us to hold more of these sessions? What do you like, and what could be improved? E-mail [editor@npsas.org](mailto:editor@npsas.org).

## New Roots farmer's eggplant gets notice

Amy Rose Thielen, a nationally known cook and food blogger, mentioned a New Roots farmer's variety on her Instagram: "Especially looking forward to growing the Congolese eggplants (that Zach of North Circle Seeds) sourced from grower Simeon Bakunda of Fargo."

Bakunda has been a part of the NPSAS-sponsored New Roots program for three years.



## SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

### Work aligns with Sustainable Development Goals

As NPSAS branches into new work and partnerships, the board and staff have noticed that NPSAS's mission—promoting sustainable food systems through education, advocacy, and research—and its programmatic goals fit under one of the 17 Sustainable Development Goals developed by the United Nations in 2015.

This is a good thing for NPSAS as it seeks financial support for its work. Many foundations are using these SDGs, as they are called, to measure an organization's effectiveness in addressing the urgent global challenges we face today, including poverty, inequality, climate change, environmental degradation, and injustice.

As the U.N. website describes, "The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all."

The SDG under which NPSAS's work most closely fits is SD Goal 2: "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture."

Here are the subgoals, as described by the United Nations:

**Sustainable Development Goal 2.3** – By 2030, double

the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers and ranchers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for adding value to products.

**Sustainable Development Goal 2.4** – Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.

**Sustainable Development Goal 2.5** – Maintain genetic diversity of seed, cultivated plants and farmed and domesticated animals.

To learn more about these goals and see the full list of 17, go to <https://www.un.org/sustainabledevelopment>.



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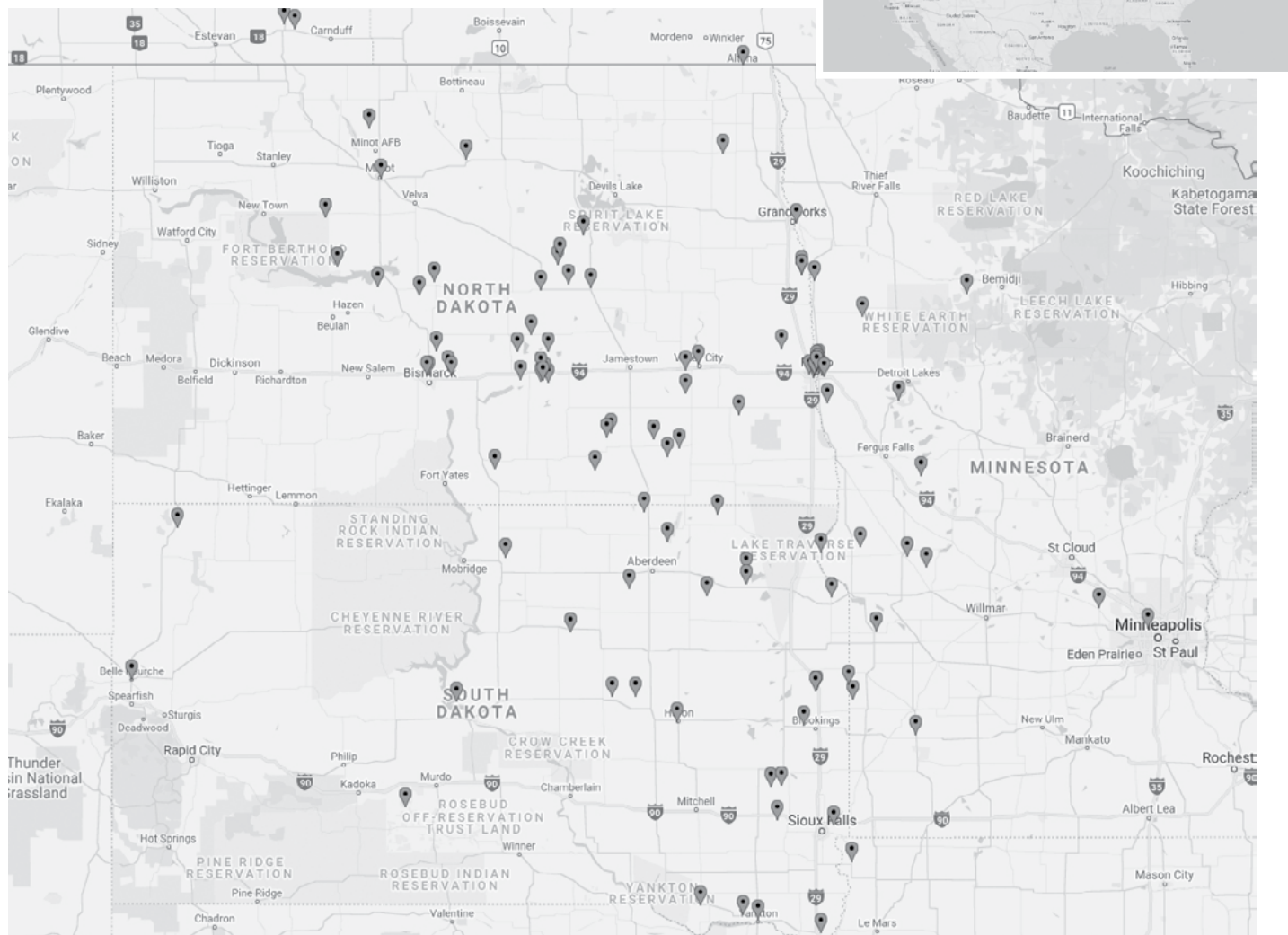
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## Our members cover a lot of territory!

NPSAS staff has been working on mapping NPSAS's current membership and updating our membership list. They hope to bring lapsed members back aboard and recruit new ones. If you know of someone who should be a member, please share this copy of *The Germinator* with them. Sign up to be a member here: [www.npsas.org/membership/](http://www.npsas.org/membership/)



## Kragnes speaks to USDA-AMS

Verna Kragnes of NPSAS was one of 276 speakers selected to present on March 22 for a 12-hour listening session hosted by the U.S. Department of Agriculture's Agricultural Marketing Service to provide prepared commentary on the Farmer to Family Food Box program.

Here is a summary of her presentation:

"My big message to you is: The contracting system as currently implemented continues the reinforcement of a large-scale industrial food system ....when the U.N. Sustainable

Development Goals and many other programs in USDA are calling for developing a smaller scale, more regionalized farm and food infrastructure. USDA should think of themselves as a values motivated CSA member/ consumer and "shop their values." Boxes could include a wider range of organic products, including NPSAS-member-grown beans, flax, oats & flour in small packages. Coordinate with other USDA programs and target purchases over time as this will help encourage efforts to organize local food hubs. Support additional

training needs and infrastructure for farmers in season extension.

"Food insecurity is not going to go away quickly, so the sense of urgency about this need should be strategically funneled to some emergency services while concurrently developing long-term strategies that support the emergence of the food system we all want in the future."

After speaking, Kragnes was encouraged to also provide written comments, due by March 31, and had supportive feedback on the chat from others.

# Pandemic aid includes support for farmers

Nearly a year since the coronavirus pandemic first swept across the country — shuttering businesses, restaurants, and schools alike — another round of COVID relief crossed the finish line. Congress passed the American Rescue Plan (ARP), which was signed by President Biden.

The ARP is one of the largest recovery and stimulus bills in history, passing Congress by the narrowest of margins. The \$1.9 trillion legislative package contains numerous provisions to help Americans recover from the coronavirus pandemic including resources for vaccination efforts and public health, extensions of unemployment insurance, \$1,400 stimulus checks to eligible individuals, a child care tax credit, aid to state and local governments to maintain services, housing assistance, support for school reopenings, and support for flagging pension funds to pay retirees. Many of these provisions were put forward in the Biden-Harris administration's pandemic response proposal while other elements were added during drafting and debate in Congress.

## Food and agriculture provisions

While the agriculture components are relatively small compared to the rest of the bill, amounting to \$16 billion, or less than one percent of total spending authorized in the Senate bill, they are significant and will provide the newly appointed Secretary of Agriculture with additional resources to help farmers mitigate the prolonged impacts of this pandemic, especially marginalized communities most impacted.

While many of the specifics regarding exactly how funding will be distributed is up to the Administration, the bill includes many provisions that reflect NSAC's top priorities and those championed by sustainable agriculture allies. These include:

**Direct Aid for Black, Indigenous, and Farmers of Color** – The largest portion of the ag-related funding in the bill will provide historic debt relief to Black, Indigenous, and farmers of color (BIPOC), as well as over \$1 billion to improve land access, address

heirs property issues, establish an equity commission, and create a legal center to provide legal advice and resources to BIPOC farmers. Under the debt forgiveness proposal, USDA would pay up to 120 percent of outstanding farm debt held by BIPOC farmers on farm loans made directly by USDA's Farm Service Agency (FSA) or through private lenders (i.e. Farm Credit, ag banks) with USDA guarantees. Farmers could use the additional relief funds to pay any taxes owed as a result of the debt relief. According to estimates from the Congressional Budget Office (CBO), approximately 15,000 BIPOC farmers will receive an average debt relief payment of \$20,000.

It is important to note that the Senate bill provides USDA with tremendous flexibility in how the additional relief is rolled out. We are heartened to see Agriculture Secretary Tom Vilsack issue a statement in support of these provisions and acknowledge the systemic racism and cycles of debt that have harmed so many BIPOC producers for so long.

**Purchase of Agriculture Commodities and Food Assistance** – The bill also provides billions in funding to purchase agricultural commodities from farmers and to support their delivery to families through non-profits, emergency feeding organizations, and restaurants. To maximize the impact of this investment, NSAC will be working with USDA to ensure they incorporate the recommendations contained in the Farmers to Families Food Box Program report recently published by NSAC and the Harvard Food Law Policy Clinic.

**Strengthening Supply Chains** – The bill also includes billions in funding to strengthen supply chains and build further resilience in response to the pandemic. This includes providing grants and loans for equipment and supplies (i.e. PPE, test kits) as well as infrastructure investments for food processors, farmers markets, food banks and producers to respond to the pandemic and protect workers in a manner similar to Senator Debbie Stabenow's (D-MI) The Food Supply

Protection Act, or Food and Farm Emergency Assistance Act, introduced by Rep. Kim Schrier (D-WA-8).

**Supporting Small Processors** – The bill provides \$100 million in financial assistance and reduces USDA overtime inspection fees that will help ensure livestock and poultry processing capacity for small meat plants that have been at maximum capacity during the pandemic. NSAC thanks Senators Jerry Moran (R-KS) and Michael Bennet (D-CO) and Representatives Angie Craig (D-MN-2) and Dusty Johnson (R-SD-AL) for leading efforts to address costly USDA fees in their Small Packer Overtime and Holiday Fee Relief COVID-19 Act.

**Food Assistance Benefits** – The Senate bill extends the 15 percent increase in the maximum SNAP benefit included in the December COVID response package from June 30, 2021 to September 30, 2021, as well as extending the Pandemic EBT program throughout the duration of the pandemic.

**Online SNAP Expansion** – The bill provides \$25 million to USDA to support the expansion of online SNAP through investments in technology modernization and increased technical assistance.

## Next Up: Infrastructure!

We anticipate that Congress will use the FY 2022 budget reconciliation bill as an opportunity to authorize additional funding for infrastructure-related projects over the coming months. However, it will take Congress some time to work through new political confirmations, annual appropriations, and the introduction of marker bills so it is unlikely that a bill will be taken up before the Summer. While it is uncertain the extent to which food and agriculture priorities might be included in an infrastructure package, NSAC and our allies will be pushing to ensure climate and small meat processing infrastructure are on the table during budget debates on Capitol Hill.

*NPSAS is a member of the National Sustainable Agriculture Coalition.*



## Study finds that one-third of Midwest's topsoil is gone

A team of scientists estimates that the most fertile topsoil is entirely gone from a third of all the land devoted to growing crops across the upper Midwest.

The new study emerged from a simple observation: The color of bare soil varies, and that variation is related to soil quality.

Soil scientists call the darkest layer the "A-horizon." It's the "black, organic, rich soil that's really good for growing crops," says Evan Thaler, a Ph.D. student at the University of Massachusetts, Amherst.

It's full of living microorganisms and decaying plant roots, also called organic carbon. When settlers first arrived in the Midwest, it was everywhere, created from centuries of accumulated prairie grass. Plowing, though, released much of the trapped carbon, and topsoil

was also lost to wind and water erosion. The soil that remains is often much lighter in color.

Thaler and his colleagues compared that color, as seen from satellites, with direct measurements of soil quality that the U.S. Department of Agriculture has carried out, and found that light brown soil contained so little organic carbon, it really wasn't A-horizon soil at all. The topsoil layer was gone. What's more, Thaler found that this was consistently the case on particular parts of the landscape. "The A-horizon was almost always gone on hilltops," he says.

Thaler believes that a century of plowing is to blame. The soil gradually fell down hillsides, a little bit each year, as farmers tilled the soil.

—npr.org

## Berry Center hosts Earth Day event

Dr. Leah Bayens of Sterling College will give a presentation entitled "The Liberal Arts Farmer" in honor of Earth Day at 7 p.m. Eastern (6 p.m. Central) April 22. The event is sponsored by The Berry Center.

Bayens is director of The Wendell Berry Farming Program. She will discuss the work of farming education and what

the liberal arts have to contribute to an educational model that historically has valued "how?" over "why?"

The presentation will be a Facebook Live event. A Facebook account is not required to view the presentation. You can watch the presentation here: <https://bit.ly/3sc4uFz>

—The Berry Center

## Organic Valley launches National Clean Energy Fund

Organic Valley is partnering with Clean Energy Credit Union to launch the Powering the Good Loan Fund to provide the best loan terms for farmers seeking to reduce their reliance on fossil fuels with renewable energy and efficiencies. The program is the first of its kind for both cooperatives, pioneering a unique clean energy loan fund for over 1,700 farmers across the country.

To accelerate energy improvements, Organic Valley and Clean Energy CU will roll out a \$1 million fund with plans to expand. As the nation's largest organic, farmer-owned cooperative, Organic Valley pulls carbon out of the air through regenerative practices like rotational grazing, while also working to reduce carbon emitted wherever possible.

Organic Valley says the company is focused on a whole systems approach to renewable energy. The company is providing farmers a means to reduce their energy costs and become more self-sufficient and sustainable. Farmers who participate in this loan fund contribute to a healthy, regenerative future for the next generation, Organic Valley says.

Loans supplied to Organic Valley farmers through Clean Energy CU will be used for:

- Solar electric systems to offset farm energy consumption.
- Farm energy efficiency improvements such as plate coolers, VFDs, LED lighting, insulation, ventilation and more.
- Geothermal systems and ground-source heat pumps for farm heating and cooling.

—environmentalleader.com

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## NORTHERN PLAINS FOOD & FARMING CONFERENCE

### Building Success Through Partnerships

The 2021 Food & Farming Conference did not look the same as previous winter gatherings of NPSAS members, but through patience and perseverance, many were still able to gather virtually in late January. Speakers on topics intended to spark the imagination and inform the work of those of us interested in sustainable agriculture gave their presentations via video conferencing software. We were all squares on a Zoom screen for a while—a format that had drawbacks, but also advantages for sharing information.

One advantage is that all the videos from the conference are still available on the conference website: <https://pheedloop.com/npsas2021conference/virtual/> Those who registered can view sessions they attended or those they missed.

A conference survey was sent to those who participated. If you haven't yet completed it and returned it, please do so. Your feedback is especially important as we consider whether and/or how to implement live-streaming of conferences in the future, when we will hopefully once again be able to gather in person.

## Respecting plants as partners results in better, more resilient crops

Walter Goldstein did his best to shake up some dominant paradigms in his keynote presentation during the Food & Farming Conference on Jan. 23.

Goldstein, the founder of the Mandaamin Institute, shared the mind-set-shifting ideas that he has learned through his work as a corn breeder practicing what he describes as partnership breeding. These ideas hold promise for creating better crops for organic producers, who are not well served by commercial seed developers, but these ideas are also gaining notice from conventional farmers, who see the potential to reduce input costs and produce more nutrient-dense and therefore higher-value crops.



Walter Goldstein gave his presentation from his home in Wisconsin.

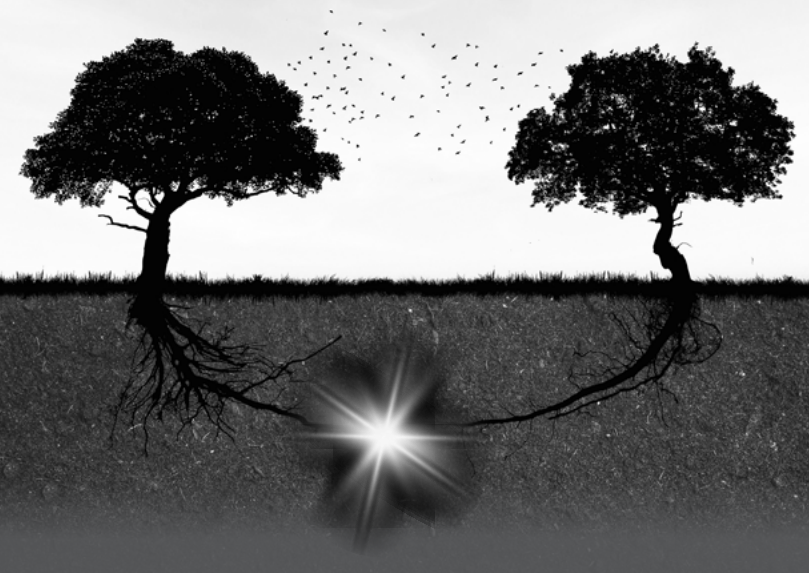
Here are some of the Goldstein's conclusions that challenge today's conventional wisdom:

#### **The values of most crop development programs today don't align with our current needs.**

Throughout most of human history, the crops we use were developed in relationship with humanity and are rooted in human cultures. "They were ... an expression of those cultures and what those people needed," Goldstein said.

That relationship is not valued by current crop development.

The development of crops has largely been left in the hands of corporations, government institutions, and universities that have values—short-term profitability, for example—that don't match our current needs. "The values of the past may not be what we need going into this new period where we're







becoming aware of the planetary needs that we are all facing in terms of sustainability,” Goldstein said.

The methods used also may not be ones that we trust: “They may be focused on expediency and efficiency, but we’re concerned about the quality of the food that we eat and our long-term health, and there’s insufficient information on these technologies before they’re pushed out to the public and utilized widely by organizations, possibly to our detriment,” Goldstein said.

**In contrast to most commercial breeding programs today, which aim to fix traits, breeding for plants that are more adaptable is a better goal for farmers that need to grow crops in changing conditions—especially for organic farmers that don’t use chemical “fixes” for the problems they face.**

Methods such as double haploid breeding, in which a plant is tricked into believing it has formed a pollinated seed, create a plant that is genetically fixed. The speed of developing these crops fascinates people, Goldstein said, but it’s a shortcut that yields a less resilient plant. “They haven’t been developing themselves in relationship to an environment,” he said. “We actually need to enhance the adaptation process, and the ability to respond to variable conditions and the ability to interact with microorganisms—all of which develop in time.”

**Plants are creative, engaging in “emergent evolution” in response to stressful conditions.**

Goldstein has heard many plant breeders use the terms “germplasm,” “genetic materials,” or “plant materials” with regularity. Those terms reduce a plant to its parts, ignoring how it can interact with its environment.

“Crop plant species are dynamic entities, and they constantly adapt their bodies and their inheritance,” Goldstein said.

It’s a pretty amazing trick: Plants can change their genetic codes.

“They do that in sync with the signals that they get from the environment,” Goldstein said. “They’re not cut off from their environment. They are constantly interacting with it and reshaping themselves.”

When humans are working with them, humans can see these plant variations and work to preserve these variations in a new variety. It’s a partnership between humans and plants, Goldstein explained.

Goldstein saw this emergent evolution—a term from Raoul Robinson, a plant scientist who wrote *Return to Resistance* and who spoke at NPSAS some decades ago,

### Paradigm change

- **Common paradigm in corporate and academic institutions:** Our crops are genetic material and mechanisms. They should be engineered by very clever people in corporations and institutions to make them, short-term, more profitable and controllable for certain groups of people, (and good for the masses, too). New technologies need to be fostered to further mechanize and make them efficient.
- **New Paradigm:** Our crops are precious, dynamic, biologically *creative* entities that embody partnerships with people and microbes and evolve in consonance with environments and human cultures. Potential to resolve global problems if humans apply appreciative/cooperative approaches and health-bringing technologies.
- **Social Platform needed:** For breeders, farmers, companies to evolve crops into a healthier future.

This slide from Goldstein’s presentation summarizes the big-picture change he hopes to see.

inspiring the founding of the Farm Breeding Club—in action in experiments he conducted in 2005 and 2006. In organic conditions, in which there was little added nitrogen but more weed pressure, “the plants of many different populations started throwing out all sorts of mutations,” Goldstein said. “The rate of mutation went up about 500 times.”

**Some of the most robust plants have well-developed relationships with microorganisms that live around their root systems, and so breeding for those desired traits is actually breeding for the plant-microorganism relationship, not just for the plant itself.**

The microbes in a plant’s rhizosphere—the area around the plant’s roots—often help the plants. “They give them services,” Goldstein explained, such as producing hormones or defending the plant. “The plants harness these microbes in order to grow more successfully, and the process of breeding is not only of selecting the plant, but the partnership between the plant and these microbes.”

Goldstein became aware of one of those interesting partnerships after what he described as a “Eureka experience” in 2009, when they noticed that a landrace called Mixeno from Oaxaca, Mexico, has weeping roots. Bacteria live on the exudates from those roots, and those bacteria can fix nitrogen.

They started breeding with that landrace, and the plants from these crosses were dark green. They looked as if they had been treated with nitrogen. Analysis showed that much of that nitrogen had come from the air. After they published their findings, they heard from

*Continued on page 16*



# COVID-19 brought needs, opportunities

A conversation about how local food systems have been affected by the COVID-19 pandemic evolved into a conversation about how systems could be improved to get more local food to those who want and need it for the rest the pandemic and beyond.

Participating in the session were Melissa Sobolik, President of the Great Plains Food Bank; Tanya Svec, a grower/owner of the Dakota Fresh Food Hub; Doug Goehring, North Dakota Agriculture Commissioner; and Verna Kragnes of NPSAS.

## Demand for food, especially local food, increased dramatically in spring 2020

The Great Plains Food Bank had a record-breaking year in 2019, distributing 15.3 million pounds of food to organizations serving people in need throughout North Dakota. Then the pandemic hit: They distributed more than 21 million pounds of food in 2020.

“Our distribution has increased by 40 percent, and we have sustained that distribution since (March 2020),” Sobolik said. Clientele increased 35-40 percent at food pantries. Donations also dropped dramatically.

They started purchasing food to meet the demand. The USDA’s Farm to Families Box Program, which aggregated food from local growers, contractors, and other vendors to give to those in need, also helped—they distributed 4



Panelists were Melissa Sobolik, Tanya Svec, and Doug Goehring.

million pounds of food from May to December in those boxes, serving about 90,000 households.

“When we were doing the distributions, the people that were sitting in line to get a food box shared with us that they used to volunteer or they used to donate to us or their local food pantry, and now for the first time in their life they needed food assistance,” Sobolik said.

Tanya Svec said the grower-owned Dakota Fresh Food Hub also saw a huge jump in demand. They were expecting an increase after a strong year in 2019. “It’s really just hard to know how our year would have gone without COVID, but we did really well last year,” Svec said, showing a slide that depicted sales roughly doubling from 2019 to 2020. “There was a big demand for local food.”

She also said the food hub applied to provide food to the USDA’s box program, but they didn’t get the contract.

## PLANTS, continued from page 15

a microbiology professor from Rutgers University, Dr. James White, who described the concept of rhizophagy: “The seed is like a Noah’s ark. It gets a whole set of microbes, adapted microbes specific to that species, from the mother plant.” These microbes act in concert with the plant, each benefiting the other.

## Good ‘social soil’ is also needed to change this paradigm.

So far, Goldstein says that Mandaamin’s partnership breeding program of corn has yielded:

- Improved varietal performance under nitrogen-limited conditions
- Varieties that fix nitrogen with the help of rhizopagic relationships
- Improved nutrient density (protein quality, carotene, more minerals)
- Denser rooting with less fusarium
- Advantages in not needing to fertilize and in

## competitiveness with weeds

These results are certainly of value for organic producers, but conventional operators are also taking notice, according to NPSAS members Steve Zwinger and Glenn Philbrick, who spoke after Goldstein’s presentation. Both of them had grown trials of some of Goldstein’s crosses. Philbrick said he’d mentioned that one of the varieties was nitrogen-fixing to a neighbor, a conventional farmer who had come to see his garden.

“That really caught his ear,” Philbrick said. “He wants to know more about that.”

Zwinger said he’d heard the same from an economist who had urged them to think “beyond organic” for this nitrogen-fixing corn. “He said, ‘If we could use half the nitrogen to produce our corn and get the other half from the air, that would be financially big for our farmers,’” Zwinger said.

To spread the practice of partnership breeding more broadly, Goldstein has been working to develop two



Their farmers were able to sell that produce elsewhere.

On her own farm, sales of grass-fed beef increased in 2020. "Because there were shortages of meat and because the price of meat was increasing a lot in grocery stores, I think people were looking at alternatives." The lack of capacity at local meat lockers stymied their plans, as it did for many others. "At one point my husband called I think every (USDA-inspected) locker within 500 miles of our farm," Svec said. "He was not able to find a slot within the next 12 months."

Ag Commissioner Goehring said addressing that lack of capacity for meat processing was one of his priorities early in the pandemic, and they put CARES Act money toward this effort. "The first (program) that we launched was the Cost-Share Food Processors Program, and that (helped) a lot of our meat facilities in North Dakota update or replace equipment," he said. More than \$6.2 million eventually went toward these upgrades. The program model was copied by 14 other states later in 2020. This increase in capacity will help those meat lockers serve more customers after the pandemic ends as well.

Kragnes brought the conversation back to the box program: By her math, the 192,000 boxes with at least \$25 worth of food in each could have brought \$4.8 million to local farmers if it had been sourced locally. She wondered whether there would be an opportunity to build connections for regional distribution of local food either through continuation of the box program or in other ways. The panelists hope to continue the conversation.

entities: Nokomis Gold Seed Company, which would market seeds developed through this practice, and Quality Crop Association, which works with farmers or companies and manages or leases cultivars. "It's a kind of cultural organization as well," he said.

The Mandaamin Institute and NPSAS have a memorandum of understanding to explore a partnership in the development of these two entities. Continued work on corn trials this summer will serve as a pilot project for how this partnership could work.

Verna Kragnes said she was intrigued by a phrase that Goldstein had used: "sustainable, coexistence-based relationship with all of life." She said that she thought this phrase might align with the values that motivated the NPSAS Farm Breeding Club.

Philbrick said it did.

"This is how Mother Nature functioned before humans touched it. And it functioned very well," he said. "We need to do that in our farming operations."

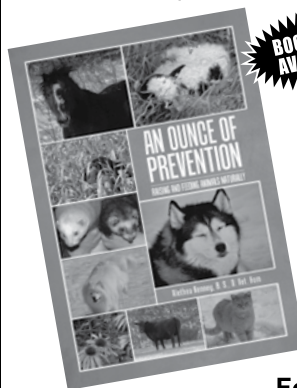
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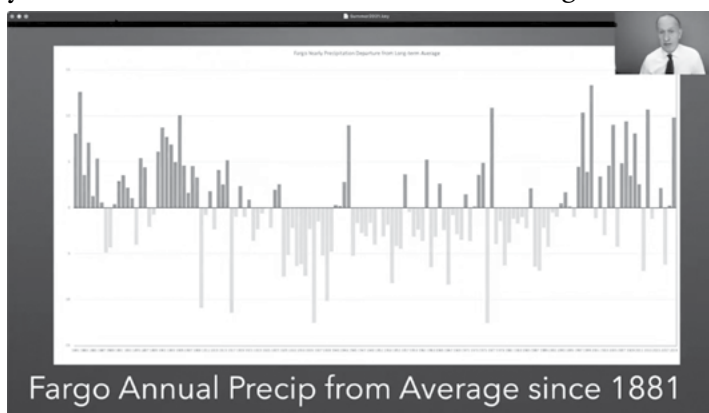


# Meteorologist predicts dry pattern in 2021

Meteorologist Daryl Ritchison shared the statistical methods he uses for weather predictions and what he sees coming for 2021 in his keynote on Jan. 22.

## There's reason to think the Dakotas will be more dry than wet.

Ritchison used several data points to come to this conclusion. One of them was this graph of Fargo's annual precipitation since 1881. The middle horizontal line is the overall average; the lines up are years that are above that overall average, and the lines going down are years in which rainfall was below that average.



"The first thing you have to notice on here is that most of these lines are not short," Ritchison said. "We are either well above average or well below average most years, and not too many years are you close to that average. It's just we're in a continental climate. Having extremes is the norm. Being close to average is abnormal in our climate."

Then he pointed out the last peak on this chart, which was from 2019.

"If you look at these peaks in history, what happened the next year? In almost every case, you have this huge drop-off in precipitation the following year," he said. "Just using this tool alone, you know the odds are that 2020 is going to be dry."

The dominant weather pattern this year is La Nina, and ocean temperatures look similar to what they did in 2012, which was a massive drought year in much of the United States. But Ritchison pointed out that some parts of the ocean temperature map that indicates La Nina are not the same as 2012, so he doesn't see a repeat of that severe drought coming this year.

## It's likely to be colder than average in March and April.

His analog comparison, or comparison with similar years in the past, suggests that March and April will be colder than average. "When we have warm winters, our winters tend to come late, and so you end up getting winter in March. ... Not necessarily wet those months, but colder than average."

## 2021 is likely to be a bit cooler than 2020 overall.

This doesn't mean below average—just cooler than 2020 overall. This especially applies to June, July, and August.

But better temps in September might help. In 2020, much of North Dakota had an early freeze around September 8-10.

"That was a very early freeze, even by our standards, last year," he said. "Two years in a row—you just can't really find that. So the odds favor we're going to get at least an extra couple weeks, which we may be able to catch up on some of those growing degree day units during that time."

## Decadal (long-term) changes are likely to affect the long-term precip mean.

"We're getting to the point where we're going to start seeing decadal changes to that long-term precipitation mean," he said. "Wet phases in history haven't lasted much beyond 20-25 years, and we're really 25 years into this one right now. The odds favor us trending a little bit drier as we go forward."

## How can farmers adapt to the challenges of unpredictable weather?

NPSAS member Carmen Fernholz provided this advice:

- **Have a more robust rotation.** "If you have an earlier spring, you have an opportunity to plant earlier crops such as small grains. If you have a late spring, there are some row crops—soybeans, corn, sunflowers," he said.
- **Understand how soil temperatures affect how the soil works, including on weed germination.** "A cold, wet spring means that a lot of weeds aren't going to start soon, but once it warms up, they're going to catch up. If you have a wet spring, you're going to have weed pressure early."
- **Incorporate livestock into your operation.** "(Then you have) other utilizations for the crop." Fernholz would have had poor harvests in 2018 and 2019, but he was able to use that grain as a forage crop.
- **Incorporate perennial crops.** These can provide forage, and it may also prove to be more resilient.



## Breeders, farmers, bakers: More conversations like this are recommended

The panel discussion on developing flavorful new varieties, guided by chef Dan Barber of Blue Hill Farm, included lots of specifics—what grains and varieties make a good loaf of bread and how to deal with specialized processing needs, for example. At the heart of the discussion was this sentiment: The more conversations we can have that involve all the people responsible for a creating a nourishing, delicious meal, from the seed to the plate, the better the resulting new varieties will be.

Here are some highlights from that conversation:

**Rich Horsley**, *Head of the Department of Plant Sciences at North Dakota State University*: “It’s got to be the breeder, the farmer, the end user, the chef—we’ve all got to be involved in identifying these new varieties.”

**Steve Zwinger**, *research specialist at the Carrington Research Center and Farm Breeding Club member*: “I see this as a fit, particularly for organic farmers because it’s niche marketing, as a way to bring more economics back to the farm and to keep more people on the farm. In other words, adding more diversity to the farm without adding more land ... (Getting flavorful new varieties into mainstream agriculture and food processing) would be a final goal ... We’re starting out on a smaller scale ... if we can get more exposure, more (of the product) out there, this can then allow that particular product to get in the hands of more people.”

**Noreen Thomas** of *Doubting Thomas Farm and Farm Breeding Club member*: “The bottom line of all of this is flavor. The big guys are interested in a lot of quantity, but when you really taste something, you’re willing to pay a little bit more for a really great tasting tomato ... and I think it’s the same with grain.”

**Senay Simsek**, *chemist at NDSU*: “Today’s customers, they just don’t want to eat to feel full. They want to eat for pleasure and also with health benefits. ... They are much more knowledgeable than many years ago.”

**Patrick Shaw-Kitch**, *baker at Blue Hill Farm*: “From a baker’s point of view, I think it’s somewhat similar to commodity farming, where bakers either get niche or they get huge. I would love to see more variety in the marketplace, because that’s really going to get the baker excited, and it’s going to get the customer excited. ... And I think once baking becomes more dynamic through ... accessibility to different grains ... it’s going to up the craft of baking.”

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## 2021 NSPAS Steward of the Year: Gabe Brown

**G**abe Brown farms and ranches at Brown's Ranch, located east of Bismarck, N.D. He and his wife, Shelly, purchased 1,760 acres from his in-laws in 1991 and farmed much the way the previous generation had: with tillage, fertilizers, pesticides, fungicides, and conventional grazing practices. In the late 1990s, he was hit with four years of hailstorms. His crops failed, and many of his cattle died. He was forced to reconsider how he was farming and find a regenerative path forward—a way to literally regenerate the fertility of the land.

Almost giving up in despair had brought a revelation: The soil fertility of some of the land that he'd left alone for a few years had actually improved in those years of so-called neglect. Leaving the biomass from the previous year's harvest to lie on the ground fed the soil.



In this way, and in many others, the land taught him lessons when he took the time to observe it.

Here's how Gabe describes his operation today:

*"We believe in and practice Holistic Management, a part of which is*

*farming and ranching in nature's image. We strive to solve problems in a natural and sustainable way. Improving soil health is a priority and no-till farming has been practiced since 1993. A diverse cropping strategy, which includes cover and companion crops are used. We have now eliminated the use of synthetic fertilizers, fungicides, and pesticides. We use minimal herbicide and are striving to eliminate it. We do not use GMOs or glyphosate. Our ever-evolving grazing strategy allows most of our pastures a recovery period of over 360 days. These strategies have allowed the health of the soil, the mineral and water cycles to greatly improve. In other words, the natural resources have benefited. This results in increased production, profit and a higher quality of life for us. We are moving towards sustainability for not only ours but future generations as well."*

## 2021 NSPAS Friend of the Farmer: Brad Brummond

**B**rad Brummond is a North Dakota State University Extension agriculture and natural resources agent in Walsh County, North Dakota.

Brummond joined NDSU Extension in 1982. Throughout his career, he has helped producers improve their crop production. That includes working to improve soil health, control weeds and identify new pesticide-resistant weeds, and providing training in the proper use of pesticides to keep farmers and the public safe. In addition, he has become an expert in organic crops and sustainable agriculture.

Brad has been a member of NPSAS since the early 1990s and has served NPSAS as President, Past President, Vice President and Secretary. He has also served as the Program Committee Chair for the annual conference for his many years on the board.

Brad began his journey in sustainable agriculture in 1988 when he



hosted a successful organic conference in Steele, North Dakota. He went on to become the organic contact for NDSU Extension, a position that he held for over 20 years. He also served as chair of the North Dakota Department of Agriculture's Organic Advisory Council and served through both as

democratic and republican commissioner of agriculture.

Brad served two terms on the North Central SARE Administrative Council and served as chair and past chair during his tenure. He focused on youth and native nations during his last term on the council.

Brad led efforts to build bridges between the organic community, NDSU, and conventional agriculture. His goal was to give sustainable agriculture a seat at the table when important issues like transgenic organisms were discussed.

Brad was the first North Dakotan selected to the Hall of Fame of the National Association of County Agricultural Agents in 2019. In a letter of recommendation for that award, Theresa Podoll of Prairie Road Organic Seed and NPSAS member and former executive director, wrote,

*"Brad's career has been one of weaving*





The operation has grown to 5,000 acres, including several thousand acres of native perennial rangeland. They grow a wide variety of cash crops, as well as multi-species cover crops. Brown's Ranch also includes grass-finished beef and lamb, as well as pastured laying hens, broilers, and swine.

His son, Paul, has become a partner in the operation, and his daughter, Kelly, lives and works in Fargo, N.D., and returns to help on the farm whenever possible.

Gabe Brown travels the world speaking about his farming practices, and the Brown family welcomes thousands of visitors from all over the world to their ranch every year. He has formed a consulting practice called Understanding Ag with several partners to provide guidance to other farmers and ranchers.

He has many world-changing projects in the works, and we are always excited to hear what he's up to next.

**To honor his commitment to and promotion to sustainable and regenerative farming practices, the Northern Plains Sustainable Agriculture Society's 2021 Steward of the Year Award goes to Gabe Brown.**

*together the resources of the for-profit, nonprofit, governmental, research and educational sectors to meet the evolving needs of agriculture. Early in his career, recognizing an underserved constituency, Brad worked hard to study the needs of sustainable and organic farmers by immersing himself in the few support organizations they had. He didn't just visit their farms to understand their production systems, issues, questions, research and marketing needs; he immersed himself. He saw the work that needed to be done, how he could serve as an Extension educator, and he stepped forward; no task was too small or too great. Our farm and organic farms throughout the state and region have greatly benefited from his knowledge, networking and support."*

He was made an NCR-SARE HERO for his lasting impacts on sustainable agriculture in 2016. He was awarded the NPSAS FRIEND OF THE FARMER AWARD in 2002.

Brad and his wife Susan live in Park River, North Dakota and are the proud parents of Jordan, Andrew and Gretchen Brummond.

**In recognition of his longtime support and advocacy for organic farmers, Northern Plains Sustainable Agriculture Society presents Brad Brummond his second NPSAS Friend of the Farmer Award, this time for 2021.**

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# Author: Meat industry due for reform

Chris Leonard started his presentation during the Big Ag & Antitrust Conference on Jan. 16 by giving an assessment about his 2014 book *The Meat Racket: The Secret Takeover of America's Food Business* that he said no author should ever give: "My book is in many ways now out of date," he said. "Everything has gotten much, much worse since I published it, which is surprising to me—honestly, I thought I was describing a pretty dire situation, but conditions on the ground have worsened dramatically."

On the other hand, he added, he sees momentum for change: "There's a discussion today around looking at monopolies and monopoly power that I have not seen in my 20 years of reporting in this space," Leonard said, or even since antitrust reform happened in the late 1930s.

## Accruing monopoly power

Leonard's book is an in-depth look at Tyson Foods as an example of the takeover of America's meat supply by a handful of companies. In the 1970s, when there was still anti-trust enforcement, 38 companies controlled half of the national market for chicken. Today, that number is down to two: Tyson Foods and Pilgrim's Pride, which is a division of JBS. "That's an unprecedented level of consolidation," Leonard said.

This monopoly—which includes vertical integration, or control of the pieces of the supply chain as well, from the hatchery to the feed mill to the trucking companies—allows Tyson to act, in essence, like a bully because consumers and farmers have no choice to buy from or work with anyone else, and government is not enforcing laws that would make it act more responsibly.

Tyson's contracts with farmers are one example that Leonard provided of Tyson's domineering behavior.

"Farmers who raise birds under contract for a company like Tyson Foods, they aren't paid a rate per pound like most farmers," Leonard



Chris Leonard, author of *The Meat Racket*, speaking during the Big Ag & Antitrust Conference

said. "They're paid under a tournament system, whereby Tyson ranks the farmers against one another, and the farmer who raises the fattest birds on the least amount of feed get a bonus payment—but critically, that bonus payment is taken

out of the paycheck of their neighbor, who might not have performed as well on a flock of chickens.

"So what the tournament system does is ingenious in its way: It systematically divides farmers from one another, and it shifts the financial risk of raising birds onto the farm level."

Leonard stumbled onto the opportunity to interview Don Tyson, the pioneering genius who built Tyson Foods. And from that interview, he learned that this mindset of cutthroat business came from the top.

"This guy was merciless," Leonard said. "He felt like he didn't owe anybody anything ... These corporations are going to operate in their self-interest to maximize profits for themselves and their shareholders."

Tyson had a saying: "Expand or expire." He acted aggressively to buy out his competitors, ushering in the consolidation of the meat industry in the 1980s and '90s. Anti-trust

enforcers allowed this consolidation because Tyson and others argued that by consolidating, they could make chicken cheaper than ever.

"Which they did—until they gained enough market power to act as a monopoly, which is what we see today," Leonard said.

Now is when the real shenanigans begin: "When you're a monopoly, you gain market power, and you use it to suppress what you pay your producers—*monopsony* power—and then you use it to raise prices on the people who buy your product. Or if you're not directly raising prices, you're cutting corners on quality, because you can, because the consumer doesn't have a choice," Leonard said.

## Acting with impunity

Leonard got a lot of push-back from the industry after his book was published, but he later learned about an interesting irony with those complaints.

"At the exact moment when Tyson Foods was saying our industry is more competitive than you could ever believe, and the idea we'd raise prices on consumers is insane—at that exact moment, Tyson Foods executives were sending text messages to their supposed competitors coordinating price hikes on some of the largest wholesalers of chicken in the country. They were actively colluding with one another," Leonard said.

He learned about this because those text messages came out in an indictment handed down last year.

"The behavior was frankly audacious. They're large enough to raise prices on consumers, and they also feel like they have enough impunity that they can criminally collude virtually without consequence, which for a long time was the case."

The answer to dealing with the Tysons of the world is not a boycott.

*Continued on page 25*

# Reclaiming our common home

Expand the commons to include everything we need.

The path to an ecological civilization is paved by reclaiming the commons—our common home, the Earth, and the commons of the Earth family, of which we are a part. Through reclaiming the commons, we can imagine possibility for our common future, and we can sow the seeds of abundance through “commoning.”

In the commons, we care and share—for the Earth and each other. We are conscious of nature’s ecological limits, which ensure her share of the gifts she creates goes back to her to sustain biodiversity and ecosystems. We are aware that all humans have a right to air, water, and food, and we feel responsible for the rights of future generations.

Enclosures of the commons, in contrast, are the root cause of the ecological crisis and the crises of poverty and hunger, dispossession and displacement. Extractivism commodifies for profit what is held in common for the sustenance of all life.

## The commons, defined

Air is a commons.

We share the air we breathe with all species, including plants and trees. Through photosynthesis, plants convert the carbon dioxide in the atmosphere and give us oxygen. “I can’t breathe” is the cry of the enclosure of the commons of air through the mining and burning of 600 million years’ worth of fossilized carbon.

Water is a commons.

The planet is 70% water. Our bodies are 70% water. Water is the ecological basis of all life, and in the commons, conservation creates abundance. The plastic water bottle is a symbol of the enclosures of the commons—first by privatizing water for extractivism, and then by destroying the land and oceans through the resulting plastic

pollution.

Food is a commons.

Food is the currency of life, from the soil food web, to the biodiversity of plants and animals, insects and microbes, to the trillions of organisms in our gut microbiomes. Hunger is a result of the enclosure of the food commons through fossil fuel-based, chemically intensive industrial agriculture.

## A history of enclosure

The enclosure transformation began in earnest in the 16th century. The rich and powerful privateer-landlords, supported by industrialists, merchants, and bankers, had a limitless hunger for profits. Their hunger fueled industrialism as a process of extraction of value from the land and peasants.

Colonialism was the enclosure of the commons on a global scale.

When the British East India Company began its de facto rule of India in the mid-1700s, it enclosed our land and forests, our food and water, even our salt from the sea. Over the course of 200 years, the British extracted an estimated \$45 trillion from India through the colonial enclosures of our agrarian economies, pushing tens of millions of peasants into famine and starvation.

Our freedom movement, from the mid-1800s to the mid-1900s, was in fact a movement for reclaiming the commons. When the British established a salt monopoly through the salt laws in 1930, making it illegal for Indians to make salt, Gandhi



Vandana Shiva. Illustration by Enkhbayar Munkh-Erdene/YES! Magazine.

started the Salt Satyagraha—the civil disobedience movement against the salt laws. He walked to the sea with thousands of people and harvested the salt from the sea, saying: Nature gives it for free; we need it for our survival; we will continue to make salt; we will not obey your laws.

## Expanding enclosures

While the enclosures began with the land, in our times, enclosures have expanded to cover lifeforms and biodiversity, our shared knowledge, and even relationships. The commons that are being enclosed today are our seeds and biodiversity, our information, our health and education, our energy, society and community, and the Earth herself.

The chemical industry is enclosing the commons of our seeds and biodiversity through “intellectual property rights.” Led by Monsanto (now Bayer) in the 1980s, our biodiversity was declared “raw material” for the biotechnology industry to create “intellectual property”—to own our seeds through patents, and to collect rents and royalties from the peasants

*Continued on page 25*



*MEAT continued from page 23*

The problem with a captured industry is that few people can make another choice—often because there isn't another choice available. Boycotts are therefore not very effective against monopolies and tend to hurt those who can least afford to suffer.

"We need a coordinated public policy approach to examine the structure of our industries and act in a way that restores competition, restores the ability of entrepreneurs in rural America to access what I call sort of a plug-and-play capitalism, where if you've got a great idea, you can enter a market, compete, win or lose—make money or leave," he said.

Despite some big talk, that public policy approach didn't happen in the Obama administration. There was a point when then- (and current) Secretary of Agriculture Tom Vilsack and Attorney General Eric Holder were in the same room talking about monopoly power.

Then, "the wheels fell off," he

"The behavior was frankly audacious. They're large enough to raise prices on consumers, and they also feel like they have enough impunity that they can criminally collude virtually without consequence, which for a long time was the case."



said. "The meat companies successfully painted antitrust reform as big government's fist crushing down prosperity ... There was a difficulty community the ways that antitrust reform could actually stimulate economic growth."

He now sees, however, that there is interest from both the public and private sectors to address the problem of monopolies. And he added that the laws and legal tools needed to restore competition already exist. They are just largely unused.

He encouraged any young lawyers to consider using them.

"Remember, we're not talking about socialism," he said. "We are talking about robust capitalism ... history has shown that robust

antitrust enforcement stokes competition, opportunity, capitalism, and widespread prosperity, which is exactly what we saw in rural America (a few generations ago)."

Leonard was the first speaker of a full day of panelists at the Big Ag & Antitrust Conference, which was sponsored by the Thurman Arnold Project at Yale and the Law, Ethics & Animals Program (LEAP) at Yale Law School. Panel topics included Meat & Dairy, Farmers & Workers, Systems, Animal Welfare, Intellectual Property, and Reforms.

You can read the conference agenda and abstracts, as well as access recorded conference presentations, here: <https://law.yale.edu/animals/events/big-ag-antitrust-conference>.

*COMMONS continued from page 24*  
who maintained the seed commons.

Reclaiming the commons of our seeds has been my life's work since 1987. Inspired by Gandhi, we started the Navdanya movement with a Seed Satyagraha. We declared, "Our seeds, our biodiversity, our indigenous knowledge is our common heritage. We receive our seeds from nature and our ancestors. We have a duty to save and share them, and hand them over to future generations in their richness, integrity, and diversity. Therefore we have a duty to disobey any law that makes it illegal for us to save and share our seeds."

I worked with our parliament to introduce Article 3(j) into India's Patent Law in 2005, which recognizes that plants, animals, and seeds are not human inventions, and therefore cannot be patented. Navdanya has since created 150 community seed banks in our movement to reclaim

the commons of seed. And our legal challenges to the biopiracy of neem, wheat, and basmati have been important contributions to reclaiming the commons of biodiversity and indigenous knowledge.

### **Partnership, not property**

So, too, with water. When French water and waste management company Suez tried to privatize the Ganga River in 2002, we built a water democracy movement to reclaim the Ganga as our commons. Through a Satyagraha against Coca-Cola in 2001, my sisters in Plachimada, Kerala, shut down the Coca-Cola plant and reclaimed water as a commons.

Ecological civilization is based on the consciousness that we are part of the Earth, not her masters, conquerors, or owners. That we are connected to all life, and that our life is dependent on others—from the air we breathe to the water we drink and the food we eat.

All beings have a right to live; that is why I have participated in preparing the draft "Declaration of the Rights of Mother Earth." The right to life of all beings is based on interconnectedness. The interconnectedness of life and the rights of Mother Earth, of all beings, including all human beings, is the ecological basis of the commons, and economies based on caring and sharing.

Reclaiming the commons and creating an ecological civilization go hand in hand.

*VANDANA SHIVA is an internationally renowned activist for biodiversity and against corporate globalization, and author of several books, including Stolen Harvest: The Hijacking of the Global Food Supply, Earth Democracy: Justice, Sustainability, and Peace, and Soil Not Oil; and Staying Alive. She is a YES! contributing editor.*

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# DOGGIE LANGUAGE

starring Boogie the Boston Terrier



ALERT



SUSPICIOUS



ANXIOUS



THREATENED



ANGRY



"PEACE!"  
look away/head turn



STRESSED  
yawn



STRESSED  
nose lick



"PEACE!"  
sniff ground



"RESPECT!"  
turn & walk away



"NEED SPACE"  
whale eye



STALKING



STRESSED  
scratching



STRESS RELEASE  
shake off



RELAXED  
soft ears, blinky eyes



"RESPECT!"  
offer his back



FRIENDLY & POLITE  
curved body



FRIENDLY



"PRETTY PLEASE"  
round puppy face



"I'M YOUR LOVEBUG"  
belly-rub pose



"HELLO I LOVE YOU!"  
greeting stretch



"I'M FRIENDLY!"  
play bow



"READY!"  
prey bow



"YOU WILL FEED ME"



CURIOUS  
head tilt



HAPPY  
(or hot)



OVERJOYED  
wiggly



"MMMM...."



"I LOVE YOU,  
DON'T STOP"

Is your family one of the many that adopted a dog during COVID times? If so, you may find this graphic helpful as you work to get to know and understand your new canine companion.

Here are a few interesting things to note:

- Dogs sometimes use the same body language as humans but use it to mean something different, according to the American Kennel Club. Note the yawn, for example—dogs yawn when they are stressed, not when they are tired. Other signs of canine stress are nose-licking and scratching.
- A dog that looks away isn't being disrespectful—and is often being the opposite, signaling respect for the human or other dog it is interacting with. It could also be uncomfortable or trying to diffuse a situation with another dog that might view it as a threat. (Similarly, you may be able to use this with a strange dog that views you as a threat: Don't look at a threatened dog in the eye. But also, don't turn away; back away instead.)
- Does your dog smile? A dog smiling and baring its teeth are not all that different if you just look at the mouth. Read the rest of the dog's body language to gauge the intent: A tense body and a growl might accompany a warning, while a loose body and perhaps a wagging tail go with a smile from a happy dog.



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# RHUBARB: The tart taste of spring

Early spring is an invigorating time of year, but for those of us aiming to eat as much as possible from our gardens, it has a tinge of deception to it: The world is greening up after months of monochrome, but there's still not much to eat. Not much, that is, except rhubarb.

For that alone we could give thanks for rhubarb. But it also provides a fresh, tart flavor to desserts that make it a delightful finish to a spring meal.

Here are a few recipes to help you savor a bountiful harvest of the pie plant.

## Rhubarb Bread Pudding

*This recipe is a great way to use up stale bread. It's from a book called The Joy of Rhubarb.*

### Filling

- 1 pound rhubarb cut into ½ inch pieces
- ¾ cup granulated sugar
- 12 slices of bread, crusts removed, buttered, using ¼ cup butter

### Custard

- 2 cups whipping cream.
- 1 cup whole milk
- 4 large eggs, lightly beaten.
- 1 teaspoon pure vanilla extract
- ¾ cup granulated sugar

### Topping

- 1 tablespoon granulated sugar mixed with 1/8 teaspoon cinnamon.

Mix rhubarb and sugar in a glass bowl; let stand at room temperature one hour. Place 4 buttered bread slices, buttered side down, in a buttered 13x9-inch baking dish. Sprinkle with half the rhubarb mixture. Repeat layering once. Top with remaining buttered bread, buttered side down. Custard: Mix all custard ingredients in a bowl to blend; pour over bread. Topping: Sprinkle with sugar cinnamon mixture. Cover and refrigerate at least two hours.

Preheat oven to 350 degrees.

Place baking dish in a larger baking pan filled with water halfway up. Bake 1 hour or until top is golden and crisp. Serve warm. Refrigerate leftovers. Makes 6 servings.

## Rhubarb Custard Pie

*This pie is a great dessert to take to potlucks—it's easy to make, and people love it. Don't skimp on chopping time: Big chunks of rhubarb are not what you want for this recipe.*

- 3 ¼ cups finely cut rhubarb
- 1 egg
- 1 ¼ cups sugar
- 2 T flour
- 1 tsp vanilla

Combine all ingredients.

Pour into 9-10 inch unbaked pie shell

Bake at 350 degrees for 35-40 minutes until golden on top (knife should come out clean, like any custard)

## Rhubarb Slush

*You may want to freeze some rhubarb for this recipe—it's really refreshing on a hot summer day. You can add alcohol if you like.*

- 2 cups chopped rhubarb
- 1 ½ cups of water
- 1 cup sugar
- 1 cups strawberries
- 1 tsp vanilla
- Ice

Cook the rhubarb and sugar in the water until the rhubarb is tender, about 5-8 minutes. You can strain this mixture to remove the pulp if you'd like. Let it cool. Fill blender about half-way with ice; add rhubarb mixture, strawberries, and vanilla. Pulse the blender to blend and chop the ice.



# In the flow of time, look back and ahead

The covid pandemic has created a kind of twilight zone: time seems to be neither now or then or yet.

The last year seems to have flown by in some sort of time warp. I often don't know what day it is. Weeks disappear. Months slip by. There are no regular time markers. I haven't gotten dressed up and gone to church in months. I do get dressed every day, just in case the UPS driver stops. Most days we don't go past the mailbox. As fast as the days vanish into the past, each hour sometimes seems to stand still. Events that happened twelve months ago seem gone for an eternity, but if I think something happened five years ago, it was in reality probably ten. Some of this is undoubtedly related to the altered time perception caused by my being closer to the end of my life than the beginning or even the middle. This time warp has caused me to look at time with renewed insight.

Like many farmers, I have tended to think in terms of my grandchildren and great grandchildren when I think about sustainability. I have thought about the future.

Our responsibility is not just to us  
and our family or community,  
but to all of creation.



Not so obvious is the need to pay heed to the wisdom of the past. Do we look behind us to see what worked for those who lived here before us or do we discount their experiences as outdated? Do we look back to the "good ol' days" with rose-colored glasses and only see the successes and remember only the positive experiences of our own history? Neither is reality, and neither informs how we live in the present. Do we adopt new technology just because it is new? Or do we hang on to old ways because they are comfortable? Do we fail to recognize the mistakes made by prior

*Continued on page 30*



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generations or by our own younger selves. Do we gloss over the historical injustices inflicted on others? If we do not know the past, we risk losing important understandings. We risk repeating wrongs in a new and perhaps even more destructive way.

We need to be respectful and honest about the past.

Our present behavior and practices may even be more difficult to judge honestly. We have justifiable and significant interest in continuing to do what we are doing. We have much invested financially in the tools and the information we use. We usually need to pay for them. We have expectations of what kind of lifestyle we want. We hate to admit we are wrong, that we need help or don't have the answers to every problem. Our mistakes haunt us. Our pride gets in the way of honest self-evaluation. Seeing the outcome of our actions takes time and patience. Often our immediate needs outweigh our ultimate goals. We need to be kind to ourselves and to our neighbors and our families. We are all flawed and make mistakes. Before we rush to make decisions we must consider how our actions affect other people, the land, the plants, the birds, the animals.

Our responsibility is not just to us and our family or community, but to all of creation.

Ultimately, our goal as sustainable, regenerative, organic farmers and consumers, is to consider how we are laying the groundwork for the next generations: our children, our grandchildren and our great grandchildren. If we're lucky, we will get to know each of these relatives. They may ask us why we have done what we have done. Have we lived ignoring the past and made the same mistakes? Have we thought only about our own comfort and financial success? Have we made some sacrifices and wise decisions along the way in an effort to leave a livable place in which they can live?

Do we consider the long term effects of our actions today?

The land we farm and the earth we share is only ours for a short time, and even in our lifetime our ownership is transient. It is up to us to care for it by respecting the past with honesty, to be careful with the gifts we have been entrusted with today, and to plan ahead for those who live here when we are gone.

The past, the present and the future all must define our efforts toward sustainability. 🐦

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