

## South Dakota Chapter Chatter June 2020

Tyler Tran, Editor

### Letter from the President

By Arlene Brandt-Jenson

Gardening is good therapy, and you get tomatoes. You may have seen that phrase as you're scrolling through your news feed.

During the grips of the pandemic in March, I had to start growing something, so I planted some spinach seeds in a pot. It felt so good to see the cotyledons poke through the potting mix. Now my husband Bob and I are



gardening on a slightly bigger scale – two 4' x 8' raised beds in our new backyard in Sioux Falls.

We used two stacked 2 x 10s for the side walls (18" high), so if you do the math, that's about 96 cu ft. of fill. Being the 'frugal' homeowners that we are, we made 4 trips to the Sioux Falls regional landfill for free nutrient-rich compost. We finally got our beds planted and seeds are sprouting. We also have an 8' x 20' garden spot at our church. Isn't it amazing how seeds can suddenly 'come alive' when placed in soil, watered and allowed to be warmed by the sun?

Another thing we are growing in our

backyard is our perennial flower bed. Or I should say, the lawn is shrinking. We carefully



applied glyphosate to about one-third of the backyard and will be tilling in the organic matter. We will be planting perennials that provide bird, butterfly, and pollinator habitat, such as joe-pye weed, bee-balm, Rudbeckia, and Echinacea. The ground will then be covered with cedar mulch.

Did you know that there are more than 40 million acres of green lawns in the U.S.? That makes turfgrass the largest irrigated crop in the country, according to a recent Fast Company article by Adelle Peters. A new book suggests that landowners repurpose some of their landscaping for another purpose: creating a "Homegrown National Park," a connected network of more natural gardens that could help stave off the insect apocalypse and the collapse of broader ecosystems. Douglas Tallamy is a professor of entomology and wildlife ecology at the University of Delaware and the author of the new book *Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard*. Dr. Tallamy says "Things are disappearing on a regular basis and those are the things that run the ecosystems that support us." The article states that a recent U.S. report on biodiversity found one million plant and animal species at risk of extinction, and insects are at a high risk. We know that when one part of an ecosystem is threatened, it has a far-reaching ripple effect. Some of you remember how DDT, a US-banned insecticide, threatened our nation's bald eagle population. Many threats exist to insect populations and habitat loss is one part of the problem. If landowners repurpose some of their landscaping to native plantings, water would be conserved, runoff would be cleaner, and habitat for species at risk would be created.



## Member Spotlight

This month we are highlighting Maddy Rabenhorst. Maddy is the South Dakota and North Dakota Field Manager for the Soil Health Partnership. Maddy and her husband, Bryce, are proud parents of Halsten Daniel, born May 10. She is originally from Bristol, SD and now lives in Salem where she and her husband farm. Her hobbies include running, hiking, gardening, and being outdoors in general. Her love for running was established in the last few years, and she has run two half marathons. She would like to visit Australia to tour farms and view their agricultural production and watch Aussie sprint car racing.

## SDSU Students Receive Registration Fee Awards

The SD Chapter will provide four \$75 awards to four students who submitted abstracts for oral or poster presentations at the virtual annual conference. The award was originally two \$250 Travel Awards to attend the conference and pay for the student registration fee. The \$75 award will cover the registration fee for the virtual conference. Four outstanding SDSU graduate students applied and will receive this award: Arun Bawa, Jashanjeet Kaur Dhaliwal, Jasdeep Singh, and Navdeep Singh. The applications were independently reviewed by Dr. Tom Schumacher and Dr. Douglas Malo. Each application package included his or her research statement, an unofficial transcript of most recent degree, a CV (curriculum vitae), one letter of support, and the abstract

submitted to SWCS. All application packages were very impressive and were 10 – 15 pages in length. Each graduate student had already received numerous accolades and awards. SD SWCS members are encouraged to participate in the conference and view their online presentations.

## Did you know??

...that you can login to your SWCS account and see who the SD members are? You can actually search by any chapter in the country. Enter the state or chapter in the advanced search section and click search. Are you looking for ideas for speakers for a conference you're hosting? This may be a great place to start. Are you looking for a colleague in another state to compare research projects or solve similar problems? Use your SWCS membership as a commonality to reach out and expand your professional network.

## Help Wanted

The Chapter Chatter wants to hear from you! This is an open, perpetual call for future articles, ideas, or events to feature. Local conservation efforts, research, outreach events, conferences, member news, and photographs are a few examples of the kind of information that could be featured. Any ideas or inquiries can be directed to Editor Tyler Tran at [tyler.tran@usda.gov](mailto:tyler.tran@usda.gov) or [sdswcs@gmail.com](mailto:sdswcs@gmail.com). We look forward to hearing from you.

# Summer Research at Blue Dasher Farm, Estelline, SD

By Dr. Jonathan Lundgren

We are gearing up for an ambitious year of conducting research on cropland, bees, and rangelands. These projects will bring us north, south, east, and west. And they will document some exciting farms and operations. This element – combining cutting edge science with practice in regenerative agriculture – really separates us from everything else that is out there right now.

Dr. Mike Bredeson oversees our cropland



**BLUE DASHER**  
FARM

project: we study how conversion to regenerative cash grain production (oats, wheat, canola, peas, soybeans, etc.)

affects nearly every element of the farm. We are conducting complete bioinventories (counting all the species) in the soil and on the foliage on more than 80 farms from Kansas to Saskatchewan.

But more than this, we are also looking at what insects do on these farms. Alex Michels, one of our MSc students leads this aspect of the work. She is pursuing her master's in Wildlife and Fisheries Science at SDSU. We are applying new tools for studying things like pollination of croplands by bees, predation of crop pests, how insects eat weed seeds, etc. And we will combine this with all kinds of social and economic data for each farm, as well as the information on soils, birds, plants that our collaborators are working on. Our team is even helping to develop new artificial intelligence techniques for measuring insect communities and identifying them in ways that will advance this field of science. It is a huge project that could really help transform the

lion's share of agriculture's footprint in North America.

For more info: [www.bluedasher.farm](http://www.bluedasher.farm) and [www.ecdysis.bio](http://www.ecdysis.bio)

*SWCS member Dr. Jonathan Lundgren is the founder and director of the Ecdysis Foundation, and CEO of Blue Dasher Farm. He earned his PhD from the University of Illinois in 2004 and was a top scientist with USDA-ARS for 11 years. Blue Dasher Farm is located at the Brandt exit (#157) on I-29 in Deuel County.*

## New Display Resources



While many of our outreach events have been cancelled or postponed, there are new display materials for use including a tabletop banner and a table runner. Contact the executive committee about using these for outreach events.

## Annual Conference News

Many of us have had the opportunity to start using teleconferencing software due to Covid-19, and the SWCS Annual Conference is following suit. This years annual conference, from July 27—29, is completely online. There will be a virtual exhibition hall, games and prizes, breakout question and answer sessions, and more!

Stay up to date at: [www.swcs.org/20AC](http://www.swcs.org/20AC)



# 2020 SWCS Internship Winner

## Dalton Howe

By Michelle Burke

Congratulations to our internship winner for 2020: Dalton Howe from Redfield, SD, who is attending SDSU. This exceptional



student will receive \$1000 toward his higher education expenses upon completion of 40 hours of internship time with professionals and practitioners in natural resources.

Dalton Howe is pursuing a major in Agronomy with a minor

in Ag Business from SDSU, and holds a 3.4 GPA. He is involved with numerous organizations at SDSU, holding leadership roles with Agronomy Club as Prexy Council Representative/Reporter and with Little International as Agronomy Judging Superintendent. He has participated in numerous National 4-H and National FFA judging events including: 4-H Land & Homesite Judging, 4-H Range Judging, FFA Job Interview, FFA Natural Resource CDE, FFA Meats Judging CDE, and FFA Agronomy Judging CDE. In 2019, he received the National FFA American Degree. Dalton also serves as an Ambassador for the SDSU College of Ag, Food & Environmental Sciences.

In her reference letter, Bonnie Tonsager with Millborn Seeds writes: "I have the opportunity to work with many college students, and he is one that stands out because he has an understanding of how he can impact the future of the Ag Industry and Conservation efforts. His passion and his servant heart are virtues that you will notice from the moment you meet him."

Congratulations to Dalton Howe, an accomplished student with a bright future in conserving our precious natural resources.



## Save the Date

"Human physical and mental health face new challenges that are reshaping our society, and agriculture is the solution to these problems. The concept of food as medicine is gaining new life as we realize how important the soil is for increasing the nutrient diversity of our food. Learn how regenerative farming can help with the health of your family."

This event will be sponsored in part by SD SWCS. There will be featured speakers, a catered supper, and a guided Prairie Walk.

Directions to Blue Dasher Farm:  
46958 188th Street, Estelline, SD, 57234  
On the Northeast Corner of exit 157 on I-29  
(the Brandt exit; wood house with a purple roof).

South Dakota Soil and Water  
Conservation Society

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