Santa Fe Trail Farm Creates a Path to Soil Health

If Albert Swanson could see his homestead now, his son, Joe, says dad would be proud of the farming techniques, the yields and above all, the soil.

Joe Swanson, along with his daughter, Tove,’ and son-in-law, Darin Brunk, manage Santa Fe Trail Farm, south of Windom, Kan. The family team manages a scenic farmstead and its surrounding acreage with the kind of care most people only give their children. Thankfully the Swanson family gives this level of care to their soil.

“My dad would love to see it all now,” Swanson says.

In the mid-1970s, Swanson read an article about a Tennessee farmer who converted an Alice Chalmers planter to implement no-till seeding. This sparked his interest in no-till methods so Swanson scoped out his own equipment to make modifications. He chose his International 400 eight-row planter, added weights all over it then set out to tackle the fields.

“We had three sets of Acra-Plant shoes that we changed every other day and two-inch wavy coulters in front of the rows,” Swanson says. “We planted no-till milo with it and it worked well. At the end of two years the planter was pretty well destroyed because it was too light for what we were trying to accomplish.”

Swanson has always been concerned with soil erosion. In the 1980s he says the farmer mentality was to work the soil deep so he used his large four-wheel drive tractor with a deep ripper. In 1993, he says he worked the ground with a plains plow, making 30-inch sweeps with a riper shank behind each sweep. That night the farm had a three-inch rainfall. The next day Swanson witnessed ruts in the field and in that moment he vowed, “No more soil erosion.”

“After that rain event I drove by the field and saw a very disgusting sight,” Swanson says. “Every shank row had washed at least eight to ten-inches deep. That’s when I said, ‘Enough,’ and converted to no-till.”

When he became a no-till farmer, Swanson knew it was the right method but he also saw the funny looks, witnessed the eye-rolling and heard the heckles as he transitioned to the no-till planter.

In fact, Swanson used to hide his no-till equipment in the tree row so the neighbors couldn’t quite see it. A couple of years later he hosted the first of many no-till field days at Santa Fe Trail Farm, and Swanson says he knew members of the crowd were silently laughing behind his back. Twenty five years later, this past May, Swanson hosted a field day showcasing his John Deere tractor and planter, with a gushing crowd of 60 people who couldn’t stop asking questions.

A few years later, Swanson’s daughter, Tove,’ and Darin Brunk, Tove’s high school sweetheart, came into the picture. After they married, Darin made a career with FedEx and Tove’ worked in catering. The Brunks say they were always set to switch
gears and come back to the family farm as soon as the opportunity arose. They officially joined the Sante Fe Trail Farm accounts in 2011.

Today the farm raises cover crops, wheat, soybeans, milo, cattle, hair sheep and earthworms. Dig into the soil at Santa Fe Trail Farm and a person will see pencil-sized holes with earthworm casings at every two-foot marker. The root systems are strong. The soil is like a sponge. Swanson can form the soil into a ball in his hands, rolling it around tightly like chocolate cookie dough ready to go into the oven. This is the kind of soil health he’s worked for since the 1970s.

They manage the farm with purposeful livestock including cattle and sheep and make decisions based on health and sustainability. But the family has also come to realize that no-till by itself is not adequate. Santa Fe Trail Farms tries something new every growing season and use multi-species cover crops whenever possible.

“We are incorporating responsible livestock grazing into our system,” Swanson says. “We have added more than 1-percent organic matter to many of our farms over the past 25 years. That’s a big deal to us considering that’s at least 20 units of nitrogen plus much better water infiltration.”

Tove’ says her dad has always been open to change. She grew up knowing that if something didn’t work well he would modify it. This is why and how no-till, high carbon systems and livestock grazing has worked for Santa Fe Trail Farms. Being part of the farm was always an option for Darin and herself and they are both grateful to raise their own children now on the land near Windom.

Darin says Swanson Farms might be a living testimonial to all those who criticized behind the scenes 25 years ago. No-till was not popular then in the central Kansas area, but now Swanson says it accounts for about half of the region’s farming practices.

The family willingly pays attention to details and diversity. For example, when the Brunk’s daughter, Ashton, wanted to invest in hair sheep, they said, “Sure.”

The hair sheep, mostly Dorper and Katahdin breeds, are known for their meat and are becoming very popular in Kansas. Ashton added 16 sheep to the operation during her high school and FFA career and now has 90-head to raise. Taking on the financial responsibilities herself has allowed Ashton to grow her FFA Supervised Agriculture Experience (SAE) and also help the farm diversify.

The sheep run alongside the cows, as companions on the family’s no-till wheat field. Watching them graze is a favorite past-time for the Brunks. And now the family is looking for additional opportunities to grow their livestock segment.

Darin and Tove’s son, Eli, also raises 30 laying hens and sells the eggs to a special market. Next he is going to buy cattle and start his herd.

“It is a fantastic feeling to have my family involved in the farm,” Swanson says. “Especially because they understand the soil health system.”

Brunk himself says he is dedicated to being the operations manager at the farm. The big ideas come from Swanson, Brunk then asks questions and does the research to make the concept come to life.

“Once I understood the total destruction that was happening to the environment by the present agriculture production system, I can't keep quiet,” Swanson says. “We must take a regenerative path that functions in harmony with nature. We have already mined more than 50-percent of the organic matter out of our soils in 150 years. That is so alarming. There are no more farm frontiers left. Considering a population that will be 8 billion plus we can’t go on in the same way.”
Cover Crops Become Positive After Wildfire Tragedy

For nine days Jimmy and Ginger Emmons farm near Leedey, Okla. was ablaze. It was intense, scary and emotionally draining. But what did come from the wildfires was an opportunity for cover crops to emerge as the victor.

On April 12, a Thursday, the Emmons were in Oklahoma City, earning recognition for their conservation efforts. They received the first Leopold Conservation awarded in Oklahoma that day. Then at 2:30 p.m. the first fire started just two miles east of their home.

Jimmy Emmons says the wind was from the south and the fire missed them by a half mile. Jimmy says they thought they were in the clear.

The next day, Friday, a cold front came in and shifted the wind. As the front moved in it brought with it a tremendous south wind of 50 miles an hour. That fire came by the Emmon’s house then shifted again to go from west to north. Thanks to the forethought of fireman and bulldozers the wildfire once again missed the house but burned the Emmon’s northeastern property. Hired man, Karson, was helping move cows but couldn’t get one to cross the road. This cow and one other later died from smoke inhalation. The Emmons also lost a machine shed on Friday with equipment in it.

“We thought we were blessed that day but then the wind shifted again,” Emmons says.

On Sunday night fires came back and the Emmons continued to move cattle and pray. Every time they thought their cattle and home was safe the fires relit the next day.

By Tuesday, one week later, the fire was across the river from the Emmon’s. It jumped the river and burned another place where they’d put cattle the day before. Thank goodness they moved those cows.

“We had nine days of fire on different places and the same places,” Emmons says. “We didn’t know where to put them. At one point we realized we couldn’t move cows in time and they had put themselves in an area where we had just cleaned up trees. They hunkered down in there and survived.”

Dewey County Oklahoma lost 51-percent of its acres to fire that week. That was a hard realization but on the positives, Emmons says the county also lost 51-percent of its Eastern Red Cedar population, a long-term positive from the wildfires. Emmons themselves lost 3,000 of grass and 23-miles of fence. Jimmy still says they were blessed. When he looks back on the fire he is thankful for several strategic plans that will help re-grow their farm. The cover crops he planted long before the wildfires arrived have been a terrific resource for the soil.

For example, in a rush during the fire, Emmons put some of his cows on a no-till wheat field that had milo stubble in it. This field did not burn completely, saving the cows and some of his wheat crop, all thanks to soil health practices.

Immediately after the fires, Dewey County received a decent rain. Emmons witnessed .07 in his gauge and a few weeks later noted his plantings of multiple species of cover crops in his fields grew two to four inches. The soils not on his farm, with burned-out crops and no moisture, heartily blew away. One neighbor, Emmons says, who had just seeded covers into rangeland before the fires, stated the fire was so hot that his short-rooted grass was not going to come back. Emmons says now, those cover crops are starting to show up.

Jimmy has planted cover crop mixes for the past seven years, his warm season mix includes two or three sorghums, three millets, okra, sun hemp, and...
We are excited to announce the dates of the 23rd annual No-till on the Plains Winter Conference in Wichita, Kan. This year’s Conference will be on Tuesday and Wednesday, January 29 and 30 at the Century II Conference Center and Hyatt Regency Hotel. Keynote speakers are David Montgomery & Ann Bikle, and Jay Fuher. Other industry leading speakers include Christine Jones, Kris Nichols, David Johnson, and Australian producer Grant Sims with more to be added.

Similar to last year, we have a limited number of sponsorships available, but we have added an Exhibitor option to provide more opportunities for attendees to meet companies and organizations supporting soil health systems in agriculture. You will find all the specifics in the table below. You can reserve your booth and sponsorship space today by registering online at www.notill.org. Please call Becky with any questions at (785) 210-4525.

<table>
<thead>
<tr>
<th>Exhibit Space</th>
<th>Tier 1 Sponsor</th>
<th>Tier 2 Sponsor</th>
<th>Exhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any available booth space</td>
<td>Any available booth space, after Tier 1 Sponsors</td>
<td>Any available booth space, in Promenade Lobby</td>
<td></td>
</tr>
<tr>
<td>20x20 - 2-3, 8ft draped tables, 2 chairs, back and side drape, trash can.</td>
<td>20x10 - 1-3, 8ft draped tables, 2 chairs, back and side drape, trash can.</td>
<td>20x10 - 1-3, 8ft draped tables, 2 chairs, back and side drape, trash can.</td>
<td></td>
</tr>
<tr>
<td>Included</td>
<td>Included</td>
<td>Included</td>
<td></td>
</tr>
<tr>
<td>Included upon request</td>
<td>Included upon request</td>
<td>Included upon request</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibit Sizes</td>
<td>Electricity &amp; Internet</td>
<td>Booth Enhancements</td>
<td>Complimentary WC</td>
</tr>
<tr>
<td>8</td>
<td>Included</td>
<td>Included upon request</td>
<td>Included</td>
</tr>
<tr>
<td>4</td>
<td>Included</td>
<td>Included upon request</td>
<td>Included</td>
</tr>
<tr>
<td>2</td>
<td>Included</td>
<td>Included upon request</td>
<td>Included</td>
</tr>
</tbody>
</table>
### Tier 1 Sponsor
- Exclusive 60-minute session during conference
- Invitations for 8 to all events around Winter Conference
- Company listing in sponsor directory; Full-page color ad in proceedings.
- Recognition: *Showcase 1 year on website and all NTOP events.*
  - *Logo on Advertising*
  - *Listed in new releases - 5 Minumum*
  - *Logo on on-site signage*
  - *Featured slide at Keynote Session*
  - *1-minute commercial before Keynote Session*
  - *Reserved seating for 8 at Keynote Session*
  - *Sponsor Spotlight email*
  - *5 Social Media Mentions*
  - *One promo item in attendee packet*

### Tier 2 Sponsor
- Not Available
- Invitation for 4 to all events around Winter Conference
- Company listing in sponsor directory; 1/2 page color ad in proceedings.
- Recognition: *Logo on Advertising as time and space permits*
  - *Listed in new releases - 3 Minumum*
  - *Logo on on-site signage with Tier 2 sponsors*
  - *Logo on Tier 2 sponsor slide before breakout sessions*
  - *Reserved seating for 4 at Keynote Session*
  - *3 Social Media Mentions*
  - *One promo item in attendee packet*

### Exhibitor
- Not Available
- Invitation for 4 to all events around Winter Conference
- Company listing in sponsor directory; 1/4 page color ad in proceedings.
- Recognition: *Logo on Advertising*
  - *Listed in new releases - 1 Minumum*
  - *Logo on on-site signage with other exhibitors*
  - *Logo on exhibitor slide before breakout sessions*
  - *Reserved seating for 2 at Keynote Session*
  - *1 Social Media Mentions*
cow peas and mung beans, that fit his soil. Those fields are in the best shape possible now, after experiencing super-hot fire and a severe drought impacting western Oklahoma.

“With this extreme weather we’re having we are finding our mixes have enough diversity that nitrates and prussic acid is not an issue,” Emmons says. “Producers who are trying to plant hay grazer or forage in those burned-out fields are dealing with the limitations of a monoculture system. Everyone is trying something to recover from the fires and we have to do a better job of communicating the positives of diversity.”

The Noble Research Institute will be video documenting the recovery and repair on Emmons farm during the next year and a half. The intent of this coverage is to showcase the way cover crops and soil health methods help heal fragile ground, another positive to come from the wildfires in Dewey County.

Emmons says he’s had some help outside of covers crops too. Fellow no-till producer Tom Cannon, from Blackwell, Okla., took in some of Jimmy and Ginger’s cow calf pairs for 100 days to give the burned ground time to recover and allow Jimmy to plant his cool season mix.

It is also harvest time for cereal rye and wheat, this will be the Emmon’s focus in the short term. Then he and Ginger will rebuild fence. Without rain, there is no grass to graze and thus no immediate need for fencing. Thanks to the generosity of his fellow farmers and ranchers Emmons has hay to feed and fencing supplies on hand when that time comes.

“We will focus on four to five miles of fence that is burned down or flattened and if we get that accomplished we could lightly graze some grass in early fall,” Emmons says. “We don’t want to over graze and abuse it, we want to give the ground a chance to recover before winter. But with 300,000 acres burned in our area there is a big demand around here on everything from bulldozers to fencing materials.”

The emotional impact of the wildfires will be long-lasting. During the week of the wildfire Ginger was very worried about losing cows. But Jimmy says they were fortunate to have moved them to the right areas at the right time or the cows were smart enough to move on their own.

“Cows are a big part of our livelihood and cash flow,” Emmons says. “The anguish of them actually burning was too much for us to consider. We are currently in D4 drought designation, the worst category, that makes the recovery even more difficult. Now in the heat of the season, with 100-degree temperatures, it really hinders the recovery.”

No matter how little rainfall Dewey County Oklahoma might receive, the Emmons are at least comforted by the fact that the cover crops they put in right before the fires will make recovery efforts better and faster. Last fall Emmons planted rye and triticale, and even with no moisture during the winter months, the plants germinated 100-days later.

“By the grace of God that triticale was just up and grazing height when the fire came so we could move cows to that,” Emmons says. “That is a great resource and the system does work. We’ve had just enough rain at the right time to have something available. Everything has been at the right time and the right place. That is the big positive.”
Upcoming Events

Williams Farm Soil Heath Field Day
July 24, 2018 - Waverly, KS
Featuring: Darin Williams, Dave Brandt, Jacob Miller, Candy Thomas and Zack Louk. More details and full agenda online at www.notill.org.

Feikert Farm Companion Crop Field Day
July 31, 2018 - Bucklin, KS
Field tours to include:
Sorghum with companion crop plot,
Soybeans planted into cover crops, and
Soil pit demonstration
Lunch included!

Knopf Farms Companion Crop Field Day
August 7, 2018 - Gypsum, KS
Field tours to include:
Sorghum with companion crop plot,
Soybeans planted into cover crops, and
Soil pit demonstration
Lunch included!

Nebraska Soil Health Field Day
August 14, 2018 - Minden, NE
Farm tours examining cover crop / double crops
Industry leading speakers Dr. Ray Ward and Paul Jasa
Soil demonstrations
Lunch included!

visit www.Notill.org to register!

No-till On The Plains
Board of Directors

President: Lance Feikert, Bucklin, KS
Vice Pres.: Jimmy Emmons, Leedey, OK
Treasurer: Rodney Hern, Wakita, OK
Secretary: Rick Bieber, Trail City, SD

Dennis Hupe
Topeka, KS
Jody Saathoff
Franklin, NE

Paul Jasa
Greg Scott
Lincoln, NE
Tryon, OK

Mike McDonald
Ryan Speer
Palmyra, NE
Sedgwick, KS

Doug Palen
Joe Swanson
Glen Elder, KS
Windom, KS

Charles Rice
Candy Thomas
Manhattan, KS
Salina, KS

Contact No-till On The Plains:
Steve Swaffar
P.O. Box 81
Berryton, KS 66409
Call: (785) 210-4549
Email: swaffar@notill.org

SAVE THE DATE!
WICHITA, KS
Winter Conference - January 29-30, 2019
Beginners Workshop - January 28, 2019
AIM Symposium - January 31, 2019

Conference Keynote Speakers:
David Montgomery & Ann Bikle
and
Jay Fuhrer

Register now for early discount pricing!
www.notill.org

visit www.Notill.org to register!