



PHOTO COURTESY OF SETH FORD

School lunches with locally grown beef are served up at Centennial every week.

COURTESY PHOTO

LEFT: Tri County FFA alumni volunteered to cook burgers for a Farm to Fork Day event.

Schools serve up locally-sourced meals

State schools participating in Farm to School movement have increased dramatically

BY HANNA CHRISTENSEN
scireporter@sewardindependent.com

School lunches across Nebraska are getting homegrown makeovers.

The Farm to School movement has exploded over the past several years and now reaches millions of students across the United States. Any time a school serves locally produced food, it participates in Farm to School, said Taylor Schorsch, coordinator for the Local Food for Schools Program.

Seward Public Schools, Milford Public Schools, Friend Public Schools, Dorchester Public Schools, Crete Public Schools, Centennial Public Schools, St. Paul Lutheran School in Utica, Tri County Public Schools, St. James Catholic School in Crete and McCool Junction Public Schools all participate in the Local Food for Schools program.

Schools in Seward and Saline counties spent more than \$15,000 through the Local Food for Schools program from July of 2023 to June of 2024.

Farm to School's Local Food for Schools program makes participating in Farm to School easier and more cost-effective because it offers grants that reimburse the cost of locally sourced foods, Schorsch said.

"Too many people think their food here comes from the grocery store or from the fast food restaurant that their parents take them to, so we're trying to implement that so that we know the difference between high-quality food and where it actually comes from."

Brandon Esau, president of Tri County's Farm to School program, called Farm to Fork

The U.S. Department of Agriculture funds the grant, and schools can apply for the money to cover the purchase of unprocessed or minimally processed foods within 400 miles of their building.

Schorsch said Nebraska schools' participation in Farm to School has increased dramatically over the past year. Getting locally sourced food helps children make healthier choices while benefiting local producers who may otherwise struggle to compete with large corporations.

"Students might see that they're having local beef or local corn and they happen to know the producer or the farmer is their neighbor or something along those lines," she said. "Kids are a little bit more engaged and interested in trying new products when they know where exactly the food is coming from."

Centennial Superintendent Seth Ford said many local farmers and producers donate

to Centennial's Farm to School program, called Centennial Choice, which has been going on for more than five years.

"We're super proud of it," he said. "It's a really active program, and I know it saves the patrons and saves the families quite a bit of money, because all that beef and pork is free to the school, and it's high-quality stuff that's raised locally, so it's fantastic."

Brandon Esau is the president of Tri County's Farm to School program, called Farm to Fork. The nonprofit program is composed of volunteers and does not charge the school or any of the items it provides.

Esau, who lives between Plymouth and Beatrice, donates beef from cattle he raises to the program. Many local producers of meat, honey, eggs, vegetables and fruit donate.

Smithfield in Crete also donates meat, and several kids who show market hogs through FFA or 4-H donate their hogs to the school.

All of the beef and pork the school serves – including sausage, bacon, spaghetti, tacos, lasagna, nachos and more – comes locally through the program.

Farm to Fork purchased hydroponic grow towers so the FFA students can grow lettuce and herbs for the program. Then, the elementary students observe the greens as they grow as a learning opportunity.

"Too many people think their food here comes from the grocery store or from the fast food restaurant that their parents take them to, so we're trying to implement that so that we know the difference between high-quality food and where it actually comes from," Esau said.

Ford said about one out of every three meals Centennial serves contains locally raised beef or pork. The school also incorporates some locally raised produce into the meals, especially during the fall. One local donor brings in eggs.

"It's a lot better than anything that's processed or frozen that we could have shipped in," he said. "It's high quality, locally raised beef, so it is healthier for the kids and definitely supports our local ag, too."

Three years ago, Tri County FFA students made a charcoal grill in shop class, and Farm to Fork volunteers now use it once a month to grill 450 burgers for kids at lunchtime as part of Farm to Fork Day. Esau said volunteers from various organizations and businesses in the area come together to make the day successful.

Esau said he enjoys seeing students, and even teachers, excited to have fresh grilled burgers that day. Many of them also wear Farm to Fork Day shirts and sweatshirts that the program sells.

"It's amazing how excited they get and how many clean plates they have on Farm to Fork Days," he said.

Although the meat is donated to the program, Farm to Fork still has to pay to have it processed, which costs about \$24,000 annually. However, Esau said that it has never had to ask the school to pay for anything, thanks to the generosity of the community.

"This is an organization in a school that benefits every single

see LOCAL, page 2B

Recycling wind turbine blades: A farmer's ingenuity

BY TOD BOWMAN
Center for Rural Affairs

Wind turbine blades play a crucial part in clean energy generation, but their disposal poses a growing challenge. Luckily, innovative solutions provide new ways to keep them out of landfills.

As the wind industry grows, there is an increasing need for replacement of older wind turbine blades with larger, more efficient ones. With a lifespan of approximately 25 years, the sheer number of blades and other components that will



Tod Bowman

eventually need to be decommissioned will strain current repurposing and

OPINION

recycling capabilities, leading to increased landfill waste if new solutions are not developed.

To address the challenge, developers and rural communities have explored various recycling initiatives. One approach, mechanical recycling, typically uses a shredding facility to break down turbine parts. Companies, like REGEN Fiber in Iowa, use the resulting product to create construction materials such

as concrete by mixing fiberglass with rock or plastic.

Greg Birkhofer, an Iowan with a passion for conservation, has taken blade recycling a step further by repurposing the most challenging section – the eight-foot base – into fence posts for agricultural use.

According to Greg, the recycled posts are stronger and more durable than traditional fence posts, and they are fully

insulated. His innovation eliminates the need for constant maintenance, including replacing insulators.

If they can be mass produced, Greg believes the blades will prove less expensive than current fencing materials. His vision extends beyond fence posts alone; he believes recycled blades have the

potential to be used for a wider range of products, such as dock posts.

Pioneers like Greg lead the way in finding new life for decommissioned wind turbine blades. Distinctive vision and creativity will be crucial in shaping the future of wind energy and responsible waste management.

ROCKIN' L VETERINARY SERVICE

Dr. Amber Lubbers
rockinlvet.com
402-641-7896
rockinlvet@gmail.com

PROUD MEMBER OF AMERICAN VETERINARY MEDICAL ASSOCIATION

The Auctioneers that Make the Difference

For All Upcoming Auctions Log Onto novakauctionservice.com

Novak Auction Service

Col. Troy Novak - Real Estate Salesperson
402-641-1526
Office - (402)826-5302

AuctionTime.com

NEBRASKA REAL ESTATE BROKERS ASSOCIATION

NEBRASKA AUCTIONEERS ASSOCIATION

NEBRASKA FIRST STATE REALTY

IT'S YOUR NOZZLE-BY-NOZZLE ADVANTAGE.

It's RightSpot™

Nozzle-by-nozzle control.
Consistent coverage across any terrain.
Increased productivity and speed.
Industry leading visibility.

402.643.4785
1503 317th Road
Seward, NE

FULLFIELD Ag LLC

FullFieldAg.com



Byron Weimer grills up some burgers for Centennial students.

COURTESY PHOTO

Local

Continued from 1B
kid, every single day there's meat on the menu," he said.

When Esau was a child at Tri County, about 75% to 90% of the students were involved in agriculture. Now, about 20% of students participate in agriculture activities. As a producer, Esau said he feels it is his duty to help educate children about where their food comes from.

Every year, producers in the area read to students and answer their questions about farming and agriculture during Ag Literacy Week. Farm to Fork has also brought in experts from the University of Nebraska to do agriculture-related demonstrations.

"Having a better understanding of agriculture



Betsy Baade and her Tri County classmates pet a goat brought in by Farm to Fork volunteers.

COURTESY PHOTOS

and with Nebraska being such a big agriculture state, I think it's good to

just kind of get that on their radar for kids in terms of where their food is coming from," Schorsch said.

"We're super proud of it. It's a really active program, and I know it saves the patrons and saves the families quite a bit of money, because all that beef and pork is free to the school, and it's high-quality stuff that's raised locally, so it's fantastic."

Centennial Superintendent Seth Ford on why local farmers and producers donate to Centennial's Farm to School program, called Centennial Choice

Central Valley Ag returns profits to members

Central Valley Ag Cooperative continues to exemplify the cooperative spirit by giving back to its member-owners.

Recently, the CVA Board of Directors approved a total payout of \$20.8 million in patronage refunds for fiscal year 2024, demonstrating the cooperative's dedication to its members' success and the strength of its business model.

Of the approved amount, 60% (\$12.4 million) will be distributed in cash, while the remaining \$8.4 million will be allocated as non-qualified deferred patronage. This structure allows member-owners to pay taxes only on the cash portion received now, deferring taxes on the non-qualified equity until it is redeemed in future years.

"We could not provide this payout to our patrons without the incredible sup-

port of our member-owners and the outstanding efforts of our employees," said Carl Dickinson, President and CEO of CVA. "I am incredibly proud of CVA's performance over the past year. This success reflects the loyalty of our members and their commitment to the cooperative model. We are excited to share these achievements with those who make it possible."

Patronage refunds are calculated based on member volume during CVA's fiscal year, which ran from Sept. 1, 2023, to Aug. 31, 2024. Refund checks were mailed to member-owners on Nov. 26, 2024.

"The cooperative model has never been more relevant," said Dickinson. "We will continue working to ensure long-term sustainability and success for our member-owners while delivering on the CVA promise."

Beginning farmers sought for program

Applications are now being accepted for the fourth cohort of the Center for Rural Affairs' Beginning Farmer Conservation Fellowship program.

Beginning farmers who want to deepen their conservation knowledge are invited to apply. Fellows will complete coursework in conservation programs and practices, climate change adaptation and impacts, racial equity and leadership.

Diverse applicants are encouraged to apply.

"Across Nebraska, farmers and ranchers are working to imple-

ment working lands conservation practices, such as cover crops, rotational grazing and pollinator habitats," said Cait Caughey, beginning farmer and market associate with the Center. "These practices are vital to the health of our soil and environment while producing healthy food."

"Beginning farmer fellows will benefit from the curriculum we've developed with partners and experts on on-farm conservation practices, climate science, and climate change mitigation strategies."

Fellows will attend program classes and field

days, design and implement a conservation project on the farm with technical assistance from Center staff, and have opportunities to present at local conferences and give an on-farm tour. The program runs from Jan. 30, 2025, to August 2026.

Eligible beginning farmers must be actively farming in Nebraska and engaged in farming for fewer than 10 years.

The deadline to apply is Jan. 4, 2025. For more information on requirements and to apply, visit cfra.org/beginning-farmer-conservation-fellowship-program.

GREEN REALTY & AUCTION

AUCTIONS by the GREEN TEAM

Reserve your date today!

- ★ Farmland ★ Equipment ★ Antiques ★ Collectibles
- ★ Farm Machinery ★ Vehicles & More

greensells.com • 402.362.5595

AuctionTime.com

GREEN REALTY & AUCTION
EST. 1972

Ross Ronne
Auctioneer, Realtor
402-366-7818

Member FDIC

Thank You Farmers!

We are committed to the communities we serve and helping farmers succeed!

CONTACT MIKE, KELLY OR DEREK FOR ALL YOUR AG LOAN NEEDS!

888-562-3602 | jonesbank.com

Member FDIC

SWEET TEA MARKETING

Branding solutions to help your business thrive.

Call to get started!
Sweet Success. Starts Here. 402-643-3678

The best thing to happen to crops

SINCE RAIN

Reinke
MORE RIGHT THAN RAIN

Here for your agriculture needs
402.947.2681

Friend Fertilizer, Inc.
102 Chestnut • Friend, NE
www.friendfert.com

We're the Bank.

MAKING AG LENDING EFFICIENT

At Security First, we understand agriculture, because that's where we started. More than a century ago, nine western Nebraska ranchers founded our bank, and our roots are still in the country to this day. Our experienced ag lenders are here to help you run your ranching and farming operations more efficiently with ag banking and lending.

Security First Bank
A relationship you can count on.

160 Washington St | Clatonia, NE
402-989-4455

security1stbank.com

Member FDIC

Youth to prep for fair show season with YQCA training

BY HANNA CHRISTENSEN
scireporter@sewardindependent.com

Behind every livestock ribbon earned at state and county fairs is a young exhibitor armed with the knowledge required to care for an animal.

For Nebraska 4-H and FFA members, the Youth for the Quality Care of Animals program ensures this.

All 4-H members ages 8-18 and all FFA members must complete YQCA certification every year if they plan to show beef, goats, rabbits, poultry, sheep or swine at the county or state fair.

Saline County 4-H Extension assistant

“We want to be sure that they have excessive training in animal safety and well-being, how to handle and treat animals humanely. And, we want to just ensure that the youth are understanding the well-being of animals that they're producing, and then also to ensure a safe food supply to the consumers.”

Seward County 4-H Extension assistant Cindy Wolverton

Maddie Werner said the program is not for people who do not fall under either of those descriptions.

The training hones in on three aspects – food safety, animal well-being and character development. Werner

said the YQCA directors and board create a new curriculum for all local 4-H and FFA organizations to disburse on the subjects each year.

The curriculum is evidence-based, tailored to age groups and may include lessons such

as animal identification, daily animal care, administering animal health products, creating herd health plans, providing quality feed, creating goals, sharing the story of agriculture and ethics in the show ring.

“We want to be sure that they have excessive training in animal safety and well-being, how to handle and treat animals humanely,” said Seward County 4-H Extension assistant Cindy Wolverton. “And we want to just ensure that the youth are understanding the well-being of animals that they're producing, and then also to ensure a safe food supply to the consumers.”

In addition to ensuring the safety of animals and food, Werner said the training also aims to enhance the future of the livestock industry. Educating youth on these issues fosters more informed producers, consumers and employees in the agriculture and food industry.

There are online and in-person training options, both which require a small fee.

Wolverton will lead in-person trainings for Seward County and said she plans to host three or four trainings between January and June. The dates are yet to be determined.

“Oftentimes, I will add an activity so that it's just not a classroom

setting,” she said. “You want to be sure that you have something entertaining for them, an activity fun to do as they go through this training. So I'll incorporate that as well into what the curriculum is this year.”

A Saline County YQCA training is tentatively scheduled for Thursday, Jan. 2, from 1 – 2 p.m. at the Extension office, and registration will open soon.

Interested parties from either county will be able to sign up for the online or in-person trainings at yqcaprogram.org. The 4-H locations will also send updates via email, social media and their newsletters.



Clinton Turnbull



Jacob Warm

Centennial alumni earn top degrees

Each year, the National FFA Organization honors FFA members who show the utmost dedication to the organization through their desire to develop their potential for premier leadership, personal growth, and career success through agricultural education.

The American FFA Degree is bestowed upon a select group of students in recognition of their years of academic and professional excellence. This year over 4,800 American Degrees were awarded.

Clinton Turnbull, Thayer, and Jacob Warm, Staplehurst, members of the Centennial FFA Chapter in Utica, were awarded the American FFA Degree at the 97th National FFA Convention & Expo on Oct. 26.

Turnbull is a sophomore at the University of Nebraska-Lincoln, majoring in Agronomy, with a minor in Grazing Livestock Systems and Engler Agribusiness Entrepreneurship. Warm is a sophomore at the Univer-

sity of Nebraska-Lincoln, majoring in Agricultural Economics.

Sponsored by Cargill, Case IH, John Deere, and Syngenta, the award recognizes demonstrated ability and outstanding achievements in agricultural business, production, processing, or service programs.

To be eligible, FFA members must have earned at least \$10,000 or earned at least \$2,000 and worked at least 2,250 hours outside of class time through a supervised agricultural experience program in which they own their own business, hold a professional position as an employee, or conduct research.

Recipients must also complete 50 hours of community service and demonstrate outstanding leadership abilities and civic involvement through the completion of a long list of FFA and community activities. Less than one percent of FFA members achieve the American FFA Degree.



COURTESY PHOTO

Jacob Warm stands alongside his heifer, Rocksey.

Warm taking herd to new heights with American Angus Association

BY HANNA CHRISTENSEN
scireporter@sewardindependent.com

Raised on a farm in Staplehurst and now bringing up his own herd of cattle, Jacob Warm of Staplehurst has found his place among the 21,000 members of the American Angus Association.

Warm, a sophomore at the University of Nebraska-Lincoln majoring in ag economics and minoring in animal science, was accepted as a junior member of the AAA in September.

The AAA is the largest beef association in the world. As a member, Warm is now eligible to register cattle with the AAA, participate in programs conducted by the junior association and take

part in Association-sponsored shows and other national and regional events.

Warm grew up on an acreage in Staplehurst with a family who raised horses. He attended Centennial High School and was a member of Future Farmers of America for five years. He said he was always more interested in agriculture and shop class than sports and was the president of FFA for a year.

Warm began showing market steers at age eight and was instantly drawn to cattle. In eighth grade, he got a \$5,000 loan to purchase his first two cattle as part of his Supervised Agricultural Experience project for FFA.

He has continued growing his herd since then.

“It's just my love and passion and being able to raise cattle and improve genetics and see the difference from where I started to where I am now with the cattle quality,” he said.

Warm now owns 15 cattle and has plans to buy five to 10 more before the end of the year. He keeps them at the family farm in Staplehurst and on family land near Juniata and hopes to one day sell them as show cattle or have a cow-calf operation.

Warm registered some of his cattle with AAA when he became a member and is looking forward to registering their calves one day as well.

“From a very young age, it's just been, I guess, what I was born to do,” he said.

Growing with your insurance needs for over 30 years

Jake • John • Kristy

505 1st St. • Friend
402-947-3421

JOHN DEERE | AKRS

Solutions for Every Field.

977 280th Road, Seward, NE | 2185 County Road H, Crete, NE

Come see us for all your agricultural needs!

CRETE LUMBER AND FARM SUPPLY

Millet, Sundangrass, annual forage mixes and no-till drill rentals available

M-F 7:30-5:30 • SAT 7:30-4 • SUN 1-4

402-826-2197 • cretelumberandfarm.com
W. Hwy 33 • Crete, NE 68333

NEED SOMETHING PRINTED? WE GOT YOU COVERED.
Call today to get started! **402-643-3678**

SWEET TEA PRINTING

Latest 2024 farm income forecast shows overall decrease from 2023

BY CAMI KOONS
Nebraska Examiner

Farm income is forecasted to have decreased in 2024 by 4% from 2023, largely because of a decrease in cash receipts, or the gross income, from the sale of commodity crops, according to the December update of the U.S. Department of Agriculture's farm income forecast.

Carrie Litkowski, the farm income team leader with USDA Economic Research Service, presented the latest update in a webinar Tuesday, and said the forecast was very similar to its previous September iteration.

"But somehow it feels a little more important, as we near the end of the year, to evaluate the current state of the farm economy as a starting point for considering what challenges and opportunities may lie ahead for U.S. agriculture," Litkowski said.

Net cash farm income for 2024 is projected to be \$158.8 billion, which in inflation-adjusted figures is 3.5% lower than net cash farm income in 2023. The forecast shows the 2024 figure, however, is 9.8% above the 20-year average for net cash farm income, and represents a less gradual decline than that of 2022 to 2023.

Net cash farm income is the income minus

expenses of the farm, including government payments, but excluding things like changes in inventories or economic depreciations, which are reflected in the "net farm income" figures.

The sale of agricultural commodities is projected to decrease by less than 1 percent overall as an over 8% increase in animal and animal product receipts nearly offsets the over 9% decrease in forecasted crop receipts.

Because of this, net cash income for all farm businesses specializing in crops is forecasted to be lower this year than last, but all farm businesses specializing in animal or animal products are expected to have higher net cash farm income than they did in 2023.

This could mean lower net cash income for the farming sector in Iowa for 2024, as the majority of cash receipts on Iowa farms in 2023 were for corn and soybeans, which are projected to decrease, nationally, by 23% and 14% respectively in 2024.

The data used in the USDA ERS forecasts represents the entire farming sector of nearly 2 million farms and ranches. Litkowski said the reports are used to inform policy makers and lenders, and in determining the ag



AARON SANDERFORD/NEBRASKA EXAMINER

Farm income is forecast to decrease by 4% from 2023. Shown is a corn field in Saunders County, Nebraska, just outside of Ashland, in August 2022.

sector's contributions to the U.S. economy.

It's forecasted that farmers in 2024 will have a decreased need of supplemental and disaster assistance, as well as lower dairy margin payments. That will result in a forecasted \$1.7 billion decrease from 2023 in direct government payments to farmers.

Litkowski said natural disasters like hurricanes Helene and Milton have not yet

shown up in the data, because much of the harvesting in the affected regions had already been completed at the time of the hurricanes, and payments have not yet been issued.

"Natural disasters have the potential to affect farm income, and historically, they have," Litkowski said. "Sometimes it just takes time to know the impacts."

USDA also forecasts overall lower input costs, primarily in feed

fertilizers and pesticides for farmers in 2024. Other inputs, however, like labor, interest rates and livestock and poultry purchases are forecasted to have increased.

Median farm income for 2024 is expected to increase to \$100,634, which is almost 3% higher, without adjusting for inflation, from 2023. Off-farm income, which represents the biggest share of income for most on-farm

families, is projected to increase in 2024, after decreasing slightly over the past three years.

Litkowski clarified that "half of all farms are residential farms" where the owner's primary occupation is not farming, which typically leads the median on farm income to appear as a negative amount.

The forecast will be updated again Feb. 6 when the department will release its first projections for 2025.

Farmers Mutual Farm & Ranch Policies

Covering the expected...

and the unexpected.

- Home & Household Property
- Farm Property
- Buildings
- Farm & Personal Liability
- Replacement costs on buildings
- Special form on blanket implement
- Replacement costs on pivots
- Enhanced Equipment Breakdown & Service Line Coverage
- Collapse of grain bins
- Medical expenses
- Claims for property damage
- Claims for injuries

Multi-Policy Discounts Available

Call for information today!



Mark Suhr
CIC



Diane Lichty
CPSR, CIC



Tyler Lichty



Thomas Suhr

SUHR & LICHTY
INSURANCE AGENCY

145 N. 5th St. • Seward, NE • 402-643-2911 • suhrlichty.com



SUPPORTING OUR AG PRODUCERS

- SEED & CHEMICAL FINANCING
- LOAN PROGRAMS FOR BEGINNING FARMERS
- OPERATING LINES OF CREDIT
- TERM MACHINERY & EQUIPMENT FINANCING
- FARM REAL ESTATE FINANCING
- BREEDING & FEEDER LIVESTOCK FINANCING

*For complete terms & program details, ask for Justin or Tanner.

Cattle
— BANK & TRUST —

CattleBank.com





Josh Nickel of Carbon Connections in Friend demonstrates how to obtain a soil test on Dec. 5. Carbon Connections helps local farmers and businesses with soil balance soil health.

AMY HAUSMAN

Soil Economics: How the ground beneath our feet mirrors our economy

BY KEITH BERNIS
Nebraska Soil Health Coalition Founding Member

Did you know that the principles of economics don't just apply to nations or businesses? They're also at work beneath our feet—in the soil! Just like in our everyday lives, the “economy” of soil is all about interactions, transactions, and relationships, driven by the big three players: soil, plants, and soil biology. Let's break it down:

Supply and Demand in the Soil Economy

Just as supply and demand shape markets, they also drive the soil ecosystem. Plants are the powerhouses of this system, producing carbon compounds and oxygen through photosynthesis. In return, the soil provides mineral nutrients, a habitat for roots and soil organisms, and water storage. Meanwhile, the biology in the soil (think microbes, fungi, and other critters) steps in to supply nutrients and protect plants.

But here's the catch: when we farm in ways that ignore or disrupt soil biology, the system gets out of balance. Without these unseen workers, plants can suffer from stress and disease. And guess who has to step in? Us—with a kind of “welfare system” that relies on heavy applications of chemical fertilizers, pesticides, and other inputs to make up for what the natural system would have provided for free.

Carbon: The Currency of the Soil

Just like money makes our economy go round, carbon is the “cash” of the soil economy. Plants produce carbon through photosynthesis, then “spend” it by releasing it through their roots (known as root exudates) in exchange for the nutrients and services provided by soil biology.

Carbon is the ideal currency because it can be:

- Earned (via photosynthesis),
- Spent (as root exudates),
- Stored (in soil organic matter), and
- Desired by all players.

Want to increase the flow of carbon currency? Cover crops are a game-changer. They help plants keep the system running by extending the time carbon is collected and exchanged, improving soil health and boosting productivity.

Building Capital for Long-Term Stability

In economics, capital is stored wealth that drives growth. In the soil, organic matter is the capital. It's a critical indicator of soil health and provides long-term stability for the system. But just like any savings account, you can't build capital if you're spending more than you're saving. To increase soil organic matter, you need more carbon coming in than leaving.

Cover crops play a huge role here. They grow longer, capture more carbon, and reduce the carbon “leaving” the system through harvest or erosion. Over time, this builds a strong foundation for healthy, productive soil.

Energy and Resources: The Power Behind the System

Every economy needs energy and resources, and the soil economy is no exception. The energy here

See CARBON, page 6B

See ECONOMICS, page 6B

Carbon: the cash cow right under your feet

BY AMY HAUSMAN
amy@friendsentinel.com

Carbon. In rural Nebraska this is a hot buzzword heard at the scales, morning coffee, pipeline discussions, extension offices and in government at nearly every level. It is a word that is not far from home and closer than you may think. Maybe right under your feet.

45Z Clean Fuel Production tax credit

There is the potential for corn and soybean growers in Nebraska, including those in Saline and Seward counties, to stand to benefit significantly from the federal tax credit 45Z. Tax credit 45Z is a provision aimed at promoting low-carbon biofuels and boosting agricultural sustainability. The incentive, introduced as part of the Biden administration's Inflation Reduction Act in 2022, could become a game-changer for biofuel producers and the farmers who supply them.

The 45Z credit as written rewards the production of biofuels with low carbon intensity (CI) scores, encouraging sustainable farming practices and innovative technologies like carbon capture and sequestration (CCS). This aligns with Nebraska's robust ethanol and biodiesel industries, which already play a critical role in the state's economy, generating \$4.5 billion annually and sup-

porting more than 6,200 jobs.

“This is a credit that the ethanol and biodiesel producers will be able to get. The credit goes to the producer of the fuel, not the farmers,” Greg Zoubek of Manning and Associates in Crete said. “The fuel producers should be willing to pay the farmers a premium if they can prove they are using practices of things like cover crops and no-till farming. Nobody knows yet how much that premium might be. Right now everyone is waiting on the Treasury Department to issue the final regulations on this.”

Zoubek, a CPA who specializes in farm and business taxes, said the treasury will have to define how 45Z will work and what kind of documentation the farmer will need to prove that their crop is being grown in a climate smart agricultural practice.

“Then we will have to wait and see what the next president's administration does with this,” Zoubek said.

The credit is supposed to take effect Jan. 1, 2025, and run through 2027 but is currently awaiting important regulations from the U.S. Treasury about how exactly the credit will work for ethanol and biofuel producers, and how that translates into dollars for farmers at home. Those regulations had a deadline of Dec. 31.

On Dec. 3, the U.S. Treasury announced the Biden administration is set to finalize guidance on the 45Z Clean Fuel Production tax credit prior to President Joe Biden leaving office on Jan. 20. However, some believe the Inflation Reduction Act and its tax credits including 45Z will be on the chopping block with the incoming Trump Administration and are a moot issue.

“The 45Z tax credit really looks like it's on shaky legs whether it will even be implemented at all,” University of Illinois Agricultural Economist Scott Irwin said during a FarmDoc biofuels webinar on Dec. 4.

But what happens if it does, in fact, happen?

Incentivizing Carbon-Smart Practices

The carbon intensity of biofuels is calculated through a lifecycle analysis, measuring greenhouse gas emissions from production to consumption. Ethanol made from Nebraska corn already has a CI score 46% lower than gasoline, and with CCS technology, producers can cut emissions even further. This makes Nebraska a leader in sustainable biofuel production.

Farmers are encouraged to adopt practices such as cover cropping, reduced tillage and precision nutrient management to lower CI scores further. These methods

not only enhance soil health but also open doors to voluntary carbon markets, providing additional revenue streams.

It is not as far away as you may think. POET, the ethanol plant in Fairmont just west of Seward and Saline counties, is keeping a close eye on the regulations and thinking of local farmers.

“POET is committed to creating value and sharing that value with our farmers. That becomes even more important as we await federal guidance and rulemaking related to 45Z. POET wants all producers with low-carbon grain to be a part of our efforts to maximize 45Z opportunities and create value for our farm partners,” Erin Branick, a POET spokesperson, said.

Farmers are encouraged to start doing their homework about the carbon markets available to them. According to the Nebraska Corn Board's website, there are two types of agricultural carbon markets: insetting and offsetting.

In the case of offset-

See CARBON, page 6B

KUBOTA

FIELD EVENT

GREAT RIDES. GREAT DEALS.

Come to the Kubota Field Event to demo tractors, mowers and utility vehicles – plus, take advantage of competitive financing offers and on-site coupons up to \$250.

Kubota

Nebraska Equipment
1275 280th
Seward, Nebraska 68434
402-643-6641



647 US Highway 6
Friend, NE

(402) 947-2080

THE ULTIMATE SMART IRRIGATION PACKAGE

Combine the structural integrity of the Reinke Swing Arm Corner with the precision accuracy of the ESAC™ for an extremely efficient and uniform water application. Electronic sprinkler sequencing provides you with a smart solution for virtually eliminating over and under watering throughout your fields' corners.

LEARN MORE AT
REINKE.COM



3221 N. Lincoln Ave | York, NE 68467
Main Phone: 402-745-6318 | Cell Phone: 402-363-1917

WHO CARES ABOUT LOWER CARBON INTENSITY SCORES?

FARMERS & RANCHERS

Emerging carbon markets provide monetization opportunities for farmers, ranchers, and landowners who implement climate-smart practices that lower their CI.

Supporting value-added ag industries that prioritize low-CI operation, such as ethanol production, secures a future for corn demand and valuable co-products like distillers grains, corn oil, and CO₂.



Scan the QR code for an introduction to carbon marketing for farmers.



ETHANOL PRODUCERS

Nebraska's ethanol industry positively impacts the state through an economic impact of \$4.5B and employment of more than 6,200 full-time employees.

Various low-carbon fuel markets and regulations within the U.S. and Canada currently incentivize the use of low-carbon biofuels, with more in development. Nebraska producers are well positioned to capture much of this value, which stimulates rural economic growth.

Today, a Nebraska farmer who supplies grain to an ethanol bio-refinery sees an average benefit of \$0.22 per bushel. This amount increases as ethanol producers deploy technologies that lower their CI score, including carbon capture and sequestration (CCS), biogas, and renewable energy.

CONSUMERS

Utilizing higher blends of ethanol lowers the CI of driving a vehicle by reducing both lifecycle and tailpipe emissions. With well over 250 million cars on the road in the U.S. using gasoline today, this equates to vast improvements in air quality by lowering greenhouse gases and particulate matter emissions.

In Nebraska, drivers that utilize a 10% blend of ethanol will routinely save at least \$0.40 compared to gasoline with no ethanol. The savings are even greater when choosing higher blends like E15, E30, and E85. Find ethanol retailer locations near you at fueledbynebraska.com.



COURTESY OF DEEP DIVE CARBON AS A COMMODITY / NEBRASKA CORN BOARD

Economics

Continued from page 5B

comes from the sun, and farmers are essentially soil investors planting “solar collectors” in the form of crops.

When it comes to resources, nitrogen is one of the most important—and costly. American agriculture spends \$5 billion annually on nitrogen fertilizers. But here's a fun fact: the air above every acre of land holds 30,000 tons of free nitrogen! The trick is accessing it, which requires the right soil biology to convert atmospheric nitrogen into a plant-available form.

Beyond nitrogen, many essential nutrients are already in the soil, waiting to be unlocked by biology. Promoting soil health is like hiring an invisible workforce to mine, transport, and deliver these resources—efficiently and sustainably.

Infrastructure: The Soil's Super-highway

Every economy relies on infrastructure like transportation and communication, and the soil is no different. Mycorrhizal fungi, earthworms, and other soil organisms are the transportation engineers of the soil world, moving nutrients and water where they're needed. Even communication happens underground! Soil microorganisms interact through a complex web of signals in the rhizosphere (the area around plant roots), ensuring everyone in the system knows their role.

The soil economy is an incredible, self-sustaining system—when we let it work the way nature intended. By promoting healthy soil biology and supporting practices like cover cropping and reduced chemical inputs, we're not just improving our land; we're building a thriving economy underground. And just like in any economy, when the system is strong, everyone benefits.

For more information, visit www.greencover.com or search “Carbonomics” on YouTube.

Let's invest in the soil—and let it pay us back, one carbon “coin” at a time.

The Nebraska Soil Health Coalition is a collaborative effort to increase sustainable agricultural production and thriving rural communities. As part of that vision, we support Nebraska's community newspapers. Our mission is to advance producer-centered education, outreach, and adoption of soil health principles to build resilient farms, ranches, and communities across Nebraska. Our purpose is to advance producer-centered education, outreach, and adoption of soil health principles to build resilient farms, ranches, and communities across Nebraska. You can learn more at www.nesoilhealth.org.

Carbon

Continued from page 5B

ting, the purchaser of the carbon credits is outside of the agricultural supply chain. A company pays a producer for the “good” they are doing on their farm to store/reduce carbon emissions so that the company can continue to operate or “emit” the same amount of carbon in their day-to-day processes. The company is using the carbon credits to “offset” their total emissions.

With an inset market, a buyer within the ag industry will pay growers to implement practices that improve and support the longevity of ecosystem services including clean water, soil, air and wildlife habitat.

Economic ripple effect

The 45Z credit is poised to ripple through Nebraska's rural economy. Ethanol plants implementing CCS could see additional revenues of \$200 million to \$1 billion annually, creating new opportunities for capital investment and employment. For growers, the benefits translate to higher demand and prices, with ethanol production adding money by the bushel. How much will be determined by the CI rate and U.S. Treasury regulations but opinions vary that it could be somewhere between \$0.22 and \$1 per bushel. Much is uncertain but there is agreement that it will be more money to the farmer.

Soybean growers are also expected to benefit as biodiesel gains traction. The American Soybean Association highlighted the importance of 45Z in supporting renewable diesel production, which can reduce greenhouse gas emissions by up to 80% compared to traditional diesel.

Looking forward or down?

While the opportunities are vast, challenges remain. Transitioning to carbon-smart farming practices requires upfront investments in education, equipment, technology and soil nutrients.

Yet in Friend, father and son duo Dave and Josh Nickel of Carbon Connections are looking down, right under their feet, to the soil.

“What we do is take Haney Soil Tests to get a baseline of what your

carbon and nutrient levels are,” Dave said. “It gives a full analysis of areas that the soil is lacking so we can apply the correct products for the soil to heal itself. Cover crops do the same thing but take more time, where we can speed up those results raising organic matter percentages 1% per year, and that is very huge. There is not a lot of organic matter in the soils because of synthetic fertilizers that actually burn down the organic matter, which is the carbon that farmers are seeking.”

A lot of people do not understand soil testing reports and the importance of comprehensive data according to Dave. Haney Soil Tests are recommended to be done once a season to allow farmers to make changes to raise their CI scores.

The more organic matter, the more water and nutrients it will hold, which should be somewhere between 6-10%. However most farmers in the area are closer to 2% because of the disturbances to the soil from fertilizers and tilling according to Dave.

“Everything is in balance with Mother Nature's plan and she can heal things. We are building soil and in four to five years, many of our customers will not need us because their soil will be functioning on its own,” Dave said

The data from the soil tests is exactly what 45Z will pay a price for but understanding the information is crucial and anhydrous nitro-

gen might not always be the solution.

“We recommend taking a soil test for baseline and then putting on their fertilizer,” Dave said. “Then do another one (soil test) in a couple of months and see what is going on. Most of the fertilizer will be gone every time because there is no organic material to hold it, so it's time to do something different and get back to soil health to rebuild that carbon. It does not matter the crop - it always starts with the soil.”

Nitrogen Reduction Incentive Act (NiRIA)

Nickel is not the only person encouraging a move from nitrogen to carbon.

The Lower Platte South Natural Resources District and the Nebraska Department of Natural Resources announced Dec. 6 they are launching a cost-share program to promote the reduction of nitrogen fertilizer use. Growers must verify a decrease in nitrogen application rates, limited to either 40 pounds per acre or 15% of their baseline rate. Eligible fields must be planted to corn in 2025. Funding ranges from \$10 to \$15 per acre

dependant on the priority of the field.

Applications are accepted on a first-come, first-served basis until Jan. 15, 2025. The LPSNRD will continue to work with producers until the allocated funds are exhausted. To qualify for payments by Jan. 15, 2026, landowners must provide documentation of nitrogen sources, reduction methods, reported yields and soil test results.

For more information, call (402) 476-2729.

Time will tell

If 45Z takes effect, Nebraska farmers and biofuel producers are well-positioned to capitalize on its benefits. By embracing sustainable practices and leveraging technological advancements, they can secure a more prosperous future with more dollars staying in their rural communities.

For more information on the 45Z credit and its implications for Nebraska agriculture, visit NebraskaCorn.gov or soygrowers.com.

INSURE YOUR LIVELIHOOD

It's your farm. It's your life. Make sure you have the right insurance.

- FARM PROPERTY & CASUALTY
- EQUIPMENT INSURANCE
- LIVESTOCK INSURANCE
- PIVOT INSURANCE

WESTERN UNITED MUTUAL
SINCE 1879
Wilber, Nebraska

116 W. 3rd St., Wilber
www.westernunited.net
402-821-2370

“We Understand Markets”

Roger L. Gamble
Andrew K. McGill
Eric G. Wendelin
Chris McGonigle
Sandy Ahrens

Call Us 402.643.6669

ARG Investments
MEMBER NEA
222 South 5th • Seward, NE

GRECKEL Construction Company
MOVING THE EARTH SINCE 1982

All types of Soil Conservation, Farm Improvements and Commercial Dirt Work

Contact Mark or Nancy Greckel
Office: 402-534-3211
Cell: 402-643-8354
greckelconst@hotmail.com

Farmers and Merchants Bank
Member FDIC
MILLIGAN NEBRASKA

FUND YOUR FARM

Finance crop production, livestock operations or equipment needs with an agricultural loan from Farmers and Merchants Bank. We have the money you need, with repayment schedules tailored to accommodate your cash flow.

- Real Estate Loans
- Equipment/Machinery Loans
- Revolving Lines of Credit

501 Main St. • Milligan
402-629-4251
www.fmbmilligan.com

Absolute AGRONOMY

- Crop Scouting
- Soil Sampling
- Chemical Sales
- Aerial Fungicide Application
- Custom Spraying
- Fertilizer Application and Sales

BECK'S

Delayne Bohac
402-540-6647

Lucas Ahrens
402-450-1606

Scott Meinke
402-826-9694

Briggs CATTLE COMPANY

We treat other people's cattle as if they were our own!

Contact Mike Briggs • Briggs Cattle Company
402-643-2303
3044 Alvo Rd. • Seward, NE 68434