



PHOTO: RITA BRHEL

This irrigated corn is maturing well in the current drought, but dryland corn producers are facing total losses with this year's crop. A new carbon credit program available to farmers in South Dakota and Nebraska, may offer some cash-flow help.

A Carbon Option

New Carbon Program Benefits Dryland Corn Producers

BY RITA BRHEL
P&D Correspondent

With the area in the grip of severe to extreme drought conditions, and with no relief in sight through at least the fall, agricultural producers are looking for any glimmer of hope. While it'll be too late to help with this year's cash flow, a new carbon credit program is now available to dryland corn producers in 12 Mid-western states, including South Dakota and Nebraska, beginning with the next planting.

The Climate Action Reserve, a Los Angeles-based carbon offset registry, recently announced the new program, the Nitrogen Management Project Protocol, that rewards producers who reduce their application of synthetic nitrogen fertilizer. Like other carbon credit programs, such as the Chicago Climate Exchange, this program generates carbon offsets that earn revenues through the carbon market and continuing to allow the producer to use the land for agricultural production.

"Carbon offsets are the 21st century crop for the agricultural sector," said Debbie Reed, executive director of the Coalition on Agricultural Greenhouse Gases in Washington. "For far too long, the role of agriculture in climate change mitigation has been ignored, but appropriate attention to agricultural offsets is building a full head of steam. This allows farmers to harvest carbon in order to achieve a successful yield of reductions in greenhouse gas emissions and increases in revenue streams. Market incentives can serve to reward farmers for stewardship activities and, done correctly, will ensure that the agriculture sector will play a serious and needed role in climate stabilization."

The goal of the program is to reduce releases of nitrous oxide into the atmosphere, a significant byproduct of the application of nitrogen fertilizer. Even though nitrous oxide represents but a fraction of the major greenhouse gases contributing to global warming, it is much more ominous than the more prevalent carbon dioxide or methane. According to the U.S. Environmental Protection Agency, national green-

house gas emissions per year total 84 percent carbon dioxide, 10 percent methane, and just 4 percent nitrous oxide. But each molecule of nitrous oxide is 310 times more potent at trapping heat in the atmosphere than the more prevalent carbon dioxide.

And the EPA reports that the majority of nitrous oxide emissions in the U.S. — two-thirds — comes from agricultural practices: 6 percent of the total nitrous oxide emissions from manure management and a whopping 68 percent from soil management. Other emission sources include 7 percent transportation, 7 percent stationary combustion sources like boilers and turbines, 8 percent industry and chemical combustion, and 4 percent other.

"The agriculture sector plays a critical role in reducing atmospheric greenhouse gases as a voluntary source of emission reductions," said Linda Adams, chair of the Climate Action Reserve's Board of Directors. "Better agricultural management practices will provide readily available and low-cost solutions to achieve greenhouse gas emissions reductions and mitigate global climate change. We are very pleased to provide an avenue for farmers to earn financial incentives as they help to solve the challenge of climate change."

Widespread use of synthetic nitrogen is the surest way to higher yields, especially combined with intensive farming practices. In dryland, without the insurance provided by regular irrigation, excessive nitrogen application is more likely. A carbon credits program gives producers more of a reason to change their fertilizer application methods than simply "to benefit the environment," by helping to financially offset the reduction in profits that they fear from lower yields.

But does reduced fertilizer use necessarily mean reduced yields?

In 2001, an Iowa State University study compared yields between corn with reduced rates of spring-applied nitrogen 50 pounds per acre below the recommended amount and corn with the recommended nitrogen application. All yields were reduced, but sometimes, it was only

by one bushel per acre and sometimes by five bushels per acre. The largest deviation was 11 bushels per acre in one field. There was no strong correlation between the amount of fertilizer applied and the yield received, however, and the researchers determined that stressed plants use the applied nitrogen less efficiently, even at higher application rates, than do plants that are in the best of growing conditions.

Overall, yields in the trial from crops receiving reduced nitrogen were lower by an average of three bushels per acre. However, because the extra 50 pounds of nitrogen would have cost more than the extra three bushels per acre, the researchers determined that the lower amount of nitrogen applied was actually more profitable than applying the recommended amount of nitrogen.

Timing is probably the best determinant for nitrogen use efficiency. Too early or too late, and it'll be wasted and unavailable to the crop. A 2008 University of Missouri trial showed that the ideal timing of nitrogen fertilizer application is just before the crop's peak demand for the nutrient: For corn, this is when plants are knee-to thigh-high. Also, the source of nitrogen — whether synthetic fertilizers, nitrogen fixation from a soybean rotation, livestock manure, or others — doesn't matter nearly as much as the timing. University of Wisconsin research shows that timing depends on the soil type: Medium- and fine-textured, well-drained soils are best fertilized pre-planting; whereas medium- and fine-textured soils that poorly drain are better with side-dressed nitrogen, as are coarse-textured soils.

Basically, there is more to successful nitrogen management than simply applying the full recommendation of synthetic fertilizer. Reducing fertilizer applications below the recommended amounts may even be the most prudent course of action given high input costs.

"If N prices are high and corn prices are [lower], and depending on the specific situation," said John Sawyer, associate agronomy professor at Iowa State University at Ames, Iowa, "it might be justified to reduce rates."

iGrow.org Is South Dakota's Drought Resource

BROOKINGS — iGrow.org is the go-to resource for South Dakotans impacted by current drought conditions, says Rosie Nold, Agriculture and Natural Resources Program Director for SDSU Extension.

"iGrow is one location where timely, research-based information and resources can be accessed 24-7," Nold said of the SDSU Extension Web site which is a teaching platform used by SDSU Extension to assure state of the art program delivery.

From current drought information for livestock and crop producers to information on identifying and handling stress and the most recent drought monitor, including analysis by State Climatologist, Dennis Today and SDSU Extension Climatology Field Specialist Laura Edwards; iGrow.org is updated several times each day.

"During the Drought Update meetings held July 23, SDSU Extension Specialists fielded many questions — and we know there are more to come," Nold said. "These conditions bring new

challenges which South Dakota's agriculture producers have not had to face in recent years. iGrow.org is a valuable resource to provide them with answers and user-friendly applications."

Nold points to the issue of nitrate levels. In drought conditions, crops which cannot be harvested for grain are often considered for livestock feed. However, drought conditions can often result in toxic nitrate levels in crops and forages. Preliminary nitrate tests are available at all eight Regional Extension Centers. iGrow.org has a tool farmers can use to interpret the results.

"iGrow has current drought information to help producers understand the scope of the situation, and determine what decisions and management practices they should consider," Nold said.

iGrow.org also provides farmers with the current information on the drought, climate, crop conditions throughout the state and resources including; Top 10 Drought Management Tips for Ranchers, Interpretation of Water Analysis for

Livestock, Early Weaning Beef Calves, Managing Pastures Before and After Drought and Feed Testing.

Challenges brought on by drought are far reaching, says Suzanne Stluka, SDSU Extension Food and Families Program Director.

"To many South Dakota families, this drought will have a negative impact on income levels — which will impact buying decisions and stress levels at home," Stluka said. "Our specialists have prepared resources and articles on identifying stress, how to cope with stress and ways families can communicate during stressful times."

Because South Dakota is just one of many Corn Belt states facing a drought, Stluka says experts expect to see food prices increase. She says the team of SDSU Extension Food and Family specialists is posting several resources on iGrow to help all South Dakota families manage their food and household budgets.

To check out these resources for yourself, visit iGrow.org.

Drought Update Meeting In Yankton Aug. 9

South Dakota State University and University of Nebraska-Lincoln Extension hosts a Drought Update Aug. 9 in Yankton. The event runs from 7-9 p.m. and will be held in the 4-H Building on the Pine Acres Fairgrounds, (709 Whiting Drive).

Event presenters include: Dennis Today, SDSU State Climatologist; B. Lynn Gordon, SDSU Extension Cow/Calf Field Specialist; Bruce Anderson, UNL Extension Forage Specialist and Tim Lemmons, UNL Extension Educator, Applied business research and agricultural economics.

The event is free and open to the public.

For more information about this meeting, contact SDSU Extension Cow/Calf Field Specialist Lynn Gordon at 605-782-3290. For more information on the drought and resources, SDSU Extension provides weekly drought briefings throughout the 2012 growing season on iGrow.org.

SDSU Extension Offers Nitrate Testing

BROOKINGS — Due to the drought, nitrate toxicity is an issue this growing season. Before cutting silage or feeding forages to livestock, test for nitrates.

SDSU Extension offers a nitrate quick test for standing forage. Interested parties can take forage samples to the following Extension Regional Centers: Aberdeen, 605-626-2870, Lemmon, 605-374-4177, Mitchell, 605-995-7378, Rapid City, 605-394-1722, Sioux Falls, 605-782-3290, Watertown, 605-882-5140 and Winner, 605-842-1267; and the following county offices: Charles Mix County Office, Clark County Office, Douglas County Office, Hamlin County Office, or Pennington County Office.

Call before you take samples to be tested to ensure that the individual who is trained to do the testing is available. Nitrate quick test is an indicator of presence or absence of nitrate in forages. If present, producers can send the sample in for a quantitative analysis or wait for plants to continue to mature/grow.

Trained personnel are only allowed to do the testing. If you have any questions on nitrate testing, contact your local SDSU Extension Regional Center.

For information on how to evaluate nitrate tests or other drought resources, visit iGrow.org/drought.

Mastitis Council Registration Deadline Aug. 7

BROOKINGS — The registration deadline for the National Mastitis Council (NMC) Regional Meeting, Aug. 15-16, is Aug. 7. This two-day forum will be held at the Holiday Inn City Centre in Sioux Falls. Registration will also be accepted on the day of the event provided space is available in the courses.

Along with networking and knowledge-sharing opportunities, the two-day conference will consist of specialized, interactive short courses. Ten different short courses are planned so that individuals can select specific topics of interest. Participants may enroll in up to four different courses, depending on scheduling.

Workshop topics to choose from include:

- Prototheca and klebsiella mastitis: Major environmental mastitis threats;
- Identifying milking system issues with dynamic testing;
- Tapping the milk quality records analysis potential of PCDART management software;
- Successfully planning for success;
- Developing a growth strategy;
- Troubleshooting bacteria issues;
- Keeping the parlor crew on target for 22 hours a day by using performance information;
- Conducting a dairy farm milk quality walk-through;
- System analysis following the NMC procedures for evaluating vacuum levels and air flow in milking systems;
- and Understanding and coupling bacterial cultures with other milk quality tests to solve on-farm problems.

In addition to these classroom and on-farm courses, NMC is also offering a Spanish-taught course titled: "The Reasons Behind Udder Preparation," to further promote the importance of milk quality to Spanish-speaking employees.

Anne Saeman, executive director of NMC, says that the breadth of topics presented at the regional meeting will benefit attendees of all levels who are interested in udder health, mastitis control, milking management, milk quality and milk safety.

"The information presented has the power to strengthen milk quality programs and increase dairy profitability," Saeman said. "The conference also provides an excellent opportunity to network with other dairy producers and industry professionals who share a common interest of quality milk production. Space is limited, so be sure to reserve your spot early."

To learn more about the NMC regional meeting and to register, visit: <http://nmconline.org/regionalmeet/2012/>, contact the NMC office by e-mail at nmc@nmconline.org or phone 608-848-4615. Registration for the courses is based on a first-come, first-serve basis.

Feedstuffs Cost Spreadsheet Available

BROOKINGS — Even before the drought, livestock producers daily faced the difficult decision of figuring out which feed source was the best buy when it comes to providing protein and energy sources to their livestock.

This dilemma is even greater as feedstuff prices continue to increase due to the current drought, says Warren Rusche, SDSU Extension Beef Cow/Calf Field Specialist.

To aid livestock producers in this chore, Rusche and Tracey Renelt, SDSU Extension Dairy Field Specialist together developed a Feedstuff Cost Comparison Spreadsheet.


The Excel spreadsheet is available for online use on iGrow.org under the Drought Community or any of the Livestock Communities.

"This tool lets producers compare two feedstuffs on an equal basis," Renelt said. "In essence it allows producers to compare apples to apples via protein and energy, while taking trucking and purchase price into consideration."

In order to utilize the spreadsheet, producers will need basic input information for each feed source such as percent dry matter, crude protein and energy content on a dry matter basis, feed cost per pound or ton, and trucking cost. In return, livestock producers will be able to compare feedstuff A to feedstuff B on a dry matter basis and be able to determine which feedstuff is a better buy, if they are looking for a protein or energy source.

"The feed market is exceptionally volatile this year. We hope that this tool will be useful to producers as they evaluate their feed options during this drought," Rusche said.

For more information, contact either Rusche or Renelt at the Watertown Extension Regional Center at 605-882-5140 or email at Warren.Rusche@sdstate.edu or Tracey.Renelt@sdstate.edu.




Savor the Possibilities

It's all about fresh, seasonal dishes prepared by our culinary expert, Chef Staci Stengle.

Check out Staci's case-for pre-made salads and side dishes, ready for your table! Or pick your favorites for the perfect picnic to take to the lake or your campsite!

Chef Staci will also answer your food questions and give advice on how to prepare chef inspired meals.


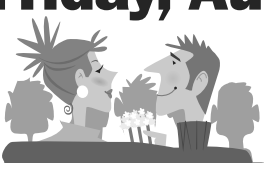



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2012 RIVERBOAT DAYS KIDDIE PARADE

Friday, August 17, 2012

Parade Begins at 5:30pm
Begin lining up at 5:00pm



PARTICIPANT WAIVER FORM

I, _____, state that I am the parent or legal guardian of _____, a minor child, I hereby give my consent for _____ to participate in the Kiddie Parade sponsored by Yankton Riverboat Days, Inc. In considerations for my child or ward's participation, I agree to waive any liabilities, claims, actions, damages, costs, or expenses which I or my child or ward or our assignees, successors, or heirs may have against Yankton Riverboat Days, Inc., as a group or as individual committee members, directors, volunteers or employees, which may arise out of my child or ward's participation in the Kiddie Parade.

BY SIGNING BELOW, I ACKNOWLEDGE THAT I HAVE READ AND UNDERSTAND THIS FORM, AND I REALIZE THAT BY SIGNING I AM RELEASING YANKTON RIVERBOAT DAYS, INC., FROM ANY LIABILITY.

Dated this _____ day of _____ 2012. _____

Signature

LOCATION: Behind Farm Credit Services, 124 Walnut Street in Yankton.

Bring registration to parade. For more information call 605-665-1657. E-mail to: office@riverboatdays.com