

Cornstalk

A Publication of the Nebraska Corn Board

www.nebraskacorn.org



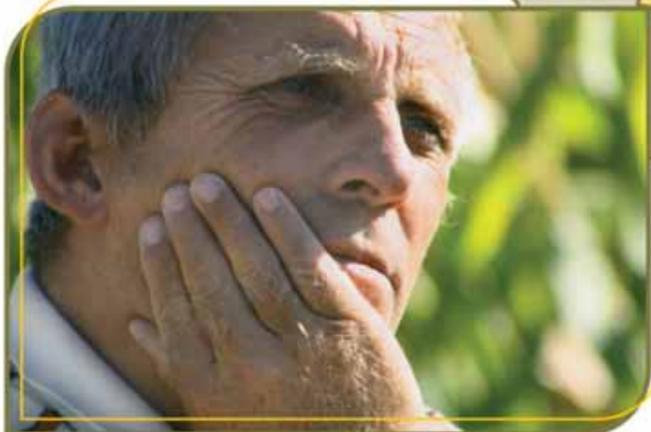
Sunset on the John Carter ranch in the Brazilian frontier.



Loading soybeans at the port on the Parana River in Rosario, Argentina.



Brazilian consumers have a wide variety of fuels available—including 25% (G) and 100% (A) ethanol.



Argentine farmer Gustavo Miroglio listens to a question from one of the mission team members.



Grain testing at the Rosario Board of Trade.



Cattle on pasture in what was once Brazilian rainforest.



Cattle rancher John Carter points out the location of his ranch on a map of Mato Grosso, Brazil.

What's really happening in Brazil and Argentina?

South America has a significant influence on American and global agriculture—and it's getting even stronger. Several nations are major players in agricultural production, driving commodity markets—and Brazil is a pioneer in the area of biofuels.

Development of agricultural land in Brazil, especially as it relates to rainforest territory, is part of the debate in the U.S. regarding policies impacting our domestic ethanol industry. The tariff on imported ethanol—and the ability of the world's farmers to meet demand for food and fuel—continue to be important issues.

In January 2009, four representatives of Nebraska's corn industry joined growers and

staff from Iowa and Illinois on an Agri-Energy and Food Study Mission to Brazil and Argentina. The group went with five key objectives in mind:

- Gather in-country information regarding land use change in an attempt to better understand the extent and dynamics of deforestation;
- Discover more about biofuels production, infrastructure, usage and policy;
- Assess the production potential in the two countries in terms of addressing the food and fuel debate—as well as to gauge the competitiveness of South America;

- Learn how these nations position agriculture as a strategic national asset;

- Establish relationships and partnerships that may be beneficial to agriculture and the biofuels industry on both continents.

In this edition of *Cornstalk*, we summarize the group's findings—and consider how they might impact checkoff investment, national policy and the future of corn farmers in Nebraska, the nation and the world.

For even more information on the mission, read the detailed blog at:

www.midwestcorn growers.blogspot.com



FIELDnotes

by Jon Holzfaster, Chairman

The good reputation of the corn industry came under attack last year in Washington, D.C., as organized efforts that spread myths and misinformation on corn and corn-based ethanol got a lot of publicity.

Add to that the popularity of some authors like Michael Pollen (*The Omnivore's Dilemma, In Defense of Food*), who tend to discredit and in some cases bash modern farming practices, and it gets a bit easier to understand why Nebraska corn growers got together with nine states to form the Corn Farmers Coalition.

The coalition's main purpose is to educate folks inside the Beltway about the numerous positives surrounding modern corn production. It is doing this through a print, Internet and radio advertising campaign, with the main theme being that corn growers produce more corn today from less.

To help dispel the "corporate farm" myth, the ads let people know that more than 90 percent of U.S. corn farms are family owned and operated.

Besides the targeted advertising campaign, the coalition produced *The Corn Fact Book*, which was delivered to every member of Congress and numerous federal agencies. As a follow-up, the coalition will host a briefing for members of Congress and their staff, along with a meeting for "think tanks".

The coalition's website – www.CornFarmersCoalition.org – contains a sample of the ads, numerous facts and figures and profiles of real farmers, including yours truly.

This effort was necessary because it has become clear that some people involved in the government, from members of Congress to various agencies, need to know the truth about how corn is produced and what that corn is used for. A lot of assumptions have been made based on myths and mistruths and that's a bit concerning.

By targeting the campaign's positive messages to policymakers, we are making a difference – and helping to keep the corn industry one of the most respected inside the Beltway and across the country.

Production Potential

The sheer magnitude of available land in South America along with upside yield potential make global food and fuel concerns a moot point.

It's been a tough year for Gustavo Miroglio. The worst drought in 40 years has devastated his corn crop. The Argentine federal government has slapped a 35 percent tariff on exports of soybeans, choking off key European markets. His integrated livestock and grain operation near San Andreas de Giles has suffered as a result.

Still, Gustavo remains optimistic. After all, he's a smart farmer who is on top of technology and management practices. His land is holding its value. And his country is poised to become an even more significant player in the world agricultural markets, even as Argentina looks to mandate the use of biofuels made from locally grown soybeans and corn.

Already the world's second largest corn exporter, Argentina intends to increase corn production from 25 million metric tons to 80 million by 2017—a 234% increase. And they have more than 13 million hectares available for agriculture development. Additionally, the use of no-till is almost universal in Argentina, putting them well ahead of the U.S. in terms of reduced carbon impact—an issue that is increasingly important to global policy makers.

Biofuels Strategy

When the first oil shock hit in the 1970s, Brazil set a goal to become energy independent—and has never taken its eye off the ball.

Brazil recently announced the discovery of the third largest oil reserve in the world off its coastline. Already the world's second largest ethanol producer, Brazil is now positioned to supersede Venezuela as the western hemisphere's primary petroleum source—further enhancing its economic strength as an energy provider.

This strength has its genesis more than three decades ago when Brazil got serious about reducing its dependence on imported oil by transforming sugar cane into ethanol. And while the road to energy self-sufficiency has not been without its speed bumps, Brazil has achieved goals the U.S. can only dream about.

Brazil is proof that higher ethanol blends work well, without significant reengineering. All consumer vehicles in Brazil run on ethanol—either Gasoline C, which is 25% ethanol, or 100% ethanol, targeted to flex-fuel vehicles, which constitute 27% of the nation's fleet. Additionally, the nation has instituted a 3% biodiesel mandate for trucks and commercial vehicles, rising to 5% in 2013. (Argentina also has a biofuels mandate for 5% ethanol and biodiesel by 2010.)

Interestingly, the world's carmakers—including those based in the U.S.—have adapted their vehicles to the Brazilian fuel market. Engines are optimized for horsepower rather than miles per gallon—and

Brazil is an even more impressive agricultural giant. Mato Grosso is the largest state in Brazil and its governor, Blagio Maggi, is the largest soybean producer in the world. In fact, the seven main Corn Belt states in the U.S. could fit inside Mato Grosso, with some room to spare. Still, less than one percent of Mato Grosso is used to produce soybeans.



Farmer Gustavo Miroglio talks about the effect of the 40-year drought on his Argentine corn fields.

Brazil has 100 million additional hectares available for agriculture expansion and another 17 million for livestock—land that does not involve encroachment into existing rain forest. (One hectare is equivalent to about 2.5 acres.)

Add the fact that much of South America is able to double crop—or even triple crop—each year, and the upside potential for food production is enormous.

"The sheer magnitude of land and the potential for increased yields are astounding," said Randy Uhrmacher of the Nebraska Corn Growers Association. "This information is important as we look to answer those who question farmers' ability to grow crops for food, feed, fuel and fiber."

engines tend to be smaller than in U.S. models. The "100% ethanol" used in FFVs is actually hydrous (containing about 5% water), allowing ethanol producers to eliminate the expensive molecular sieve process of removing that last bit of water from the fuel.

Ethanol has been shipped in Brazilian pipelines since 1967. Marlon Leal, an official with the Brazilian Ministry of Mining & Energy said, "You can ship ethanol in pipelines. You should. And you must!"

To be fair, Brazil does have a distinct advantage over the U.S.: The federal government owns a 51% controlling interest in Petrobras, the nation's only petroleum company. So when the government says ethanol is the fuel of choice, it is so.

But Brazil does not want to be known as the only nation doing biofuels "right." Brazilian officials see biofuels as a way for more nations to participate in the world's energy markets, whether it's using sugar cane, soybeans, corn, sorghum, animal fats or new energy crops.

"There may be significant opportunities for the U.S. and Brazil—the two largest biofuels producers in the world—to join forces in communicating the economic and strategic value of biofuels to political leaders around the world," said Randy Klein of the Nebraska Corn Board.

The Dynamics of Land Use Change

The concept of indirect land use change is threatening the future of biofuels in the U.S. But the dynamics of deforestation in Brazil have nothing to do with growing U.S. corn to make ethanol.

John Carter is living a life out of the American Old West. Except he's doing it in 2009 in the Brazilian frontier.

A native Texan, John is carving out a cattle rancher's life on a huge ranch that his Brazilian wife inherited. Tough enough. But making it even more difficult are the lawlessness, Indian tribal issues, squatters, land-grabbers and lack of infrastructure that make every day not just a struggle, but sometimes life-threatening.



John Carter visits with members of the Xavante tribe, whose reservation adjoins his ranch. Carter is helping the tribe adopt cattle production.

No one in Brazil believes that biofuels production is causing deforestation. It's not ethanol. It's economics. Land simply has more value as pasture than as forest. The fact is that Brazil has strict regulations in place regarding land use. In forested areas for example, landowners must retain 80% of the land as undeveloped.

The problem is enforcement, particularly in the Brazilian frontier where squatters simply move deep into large tracts of forested land (usually owned by absentee landowners), clear some trees, plant some crops and claim it as their own—and in some cases, the courts find in their favor, since they are "developing" the land for greater value. Or armed invaders, usually paid by unscrupulous politicians or organized crime, set forests ablaze—and then establish cattle herds onto the newly "cleared"

territory. Soybean production follows the cattle.

Carter has had his own land set on fire by invaders, and while trees and undergrowth have returned, they are simply not the same as what was lost. But once the damage is done, there is no choice but to do with the land what can best be done.

Carter has created an alliance that encourages landowners to preserve protected lands, stand up to lawbreakers and gain economic value in the process. Additionally, he is working to improve the efficiency of cattle production. Currently, one hectare typically supports one animal—the goal is to raise five animals per hectare through pasture management and better education.

U.S. regulatory agencies and policy makers are currently working to establish connections between corn ethanol in the U.S. and the destruction of Brazilian rainforest as one measure of assessing the environmental footprint of ethanol production in America. "The concept of indirect land use change is just the latest in misguided attempts to establish policy before there is a sound scientific basis," said David Merrell, a farmer-director on the Nebraska Corn Board. "What's happening in Brazil is not related to biofuels in either country. And the majority of new agricultural development is taking place on the *cerrado*, not in the rainforest."

Agriculture as a Strategic National Asset

In South America, agriculture and economic development are not seen as separate and distinct. Rather, they are considered to be one and the same.

A mere twenty years ago, it was undeveloped Brazilian *cerrado*, or prairie. Today, it's home to 28,000 people (and growing at 18% per year) and a bustling agricultural "industrial park" with virtually every major agribusiness company represented in some way.

This is Lucas do Rio Verde, a successful community and economic development initiative founded in agriculture—integrating crop production, grain processing, biofuels and livestock production to generate commerce and wealth.



A research plot at the Lucas Foundation shows grass being raised in a cornfield. Once the corn is harvested, cattle will be turned out on the grass.

Lucas is also home to a "foundation", which is roughly equivalent to extension services in the United States. The Foundation is funded through a checkoff on farmers, as well as financial support from most major agribusiness companies present in Brazil. The Foundation conducts research, establishes test plots and provides education for ag producers.

Lucas is indicative of Brazil's national strategy of building economic vitality through agriculture. Not

only is agriculture seen as a way of generating income, it is also viewed as a way to raise the standard of living across rural areas of the nation.

For example, tax incentive programs are in place to encourage biodiesel producers to buy soybeans from small farmers. And every official spoke of the "socio-economic" impacts of agriculture as a means to improve the quality of life for their citizens. This integrated approach to agriculture—from crops to biofuels to entire communities—is at the very core of national policy in both Brazil and Argentina and is a key strategy in their overall national plan for success.

"Maybe it's the fact that South America is still under development and thus still tied to its agricultural roots, but there is a clear understanding of the connection between agriculture and economic development—and federal policies are in place to make sure agriculture's value is enhanced and captured for the benefit of the nation and its people," said David Merrell, a farmer-director of the Nebraska Corn Board.



DID YOU KNOW?

• While areas of Mato Grosso hold potential for 2.5 to three crops per year, Paraguay is actually doing it. The difference is rainfall. In Brazil, there is a rainy season and a dry (very dry!) season. Not so in Paraguay, where rains occur throughout the year. As a result, farmers in Paraguay plant soybeans followed by a winter crop of corn in the north or wheat in the south—and then another crop of sunflower or canola. This triple-cropping helps spread out risk and increases the output per hectare.

• Argentina is the world's number three producer of soybean oil—and the world's leading exporter of that commodity.

• The value of currency can have as great an impact on profitability as the price on the board. For example, a one percent change in the value of the Brazilian *reals* can affect the per bushel price by 12 to 15 cents. In other words, beans worth \$12 per bushel when the currency is worth \$1.55 will result in roughly the same level of profitability as \$9 beans when the currency is worth \$2.40. While currency value affects U.S. farmers as well, it's a bit more pronounced in South America given the number of nations on the continent.

• There were no soybeans grown in Uruguay ten years ago. Now it produces 800 metric tons. One Argentine group is growing 190,000 acres of soybeans in Uruguay.

• The Brazilian government has a special secretary/agency focused on small farms—defined as five hectares or less. There are some 150,000 farmers who fit this criterion. The agency works to develop and support farmer cooperatives, provide technical assistance, etc.

Dickey serving as president of NCGA

Serving as president of an organization with more than 35,000 members across the country is no easy task. Yet to Laurel, Nebraska, native Bob Dickey, being president of the National Corn Growers Association (NCGA) is just another year of service to an industry that has given him so much.

"Agriculture, and the corn industry in particular, have been so good to me over the years, so being involved with NCGA, the Nebraska Corn Board and other groups are some of the ways I give back," Dickey said.

Dickey owns and operates a diversified grain and livestock operation, producing corn, soybeans, swine and cattle. For the last 14 years, he has been a member of the Nebraska Corn Board.

"I've always had a passion for agriculture, and the people involved in agriculture are the best – the cream of the crop," Dickey said. "People in the corn industry, from producers on state boards to the national board, and all the staff people at the state and national levels, are truly the greatest asset we have, in my mind."

Dickey said his year as president of NCGA has kept him very busy. A lot of time is spent doing interviews with media, while conference calls with other leaders, staff and organizations occur regularly. "I've had three conference calls today," Dickey said on a Tuesday afternoon in April. "Being involved at the leadership level does take some time, but when you have a passion for something, you just make it work. I have a passion for agriculture and corn."

He has also been very active in the U.S. Grains Council. In fact, he has held all officer positions, including vice chairman and chairman.

Through his involvement in these organizations, Dickey has traveled the country and the world. He has been to Mexico, Vietnam, Cuba, Malaysia, Singapore, Taiwan, China, Brazil, Chile, Peru, Egypt, Saudi Arabia, Japan, Austria and more. Last year he was on Gov. Dave Heineman's trade mission to Europe.

He is also a member of Nebraska corn, soybean, cattlemen and pork associations, as well as the Nebraska Farm Bureau Federation and the American Legion. He has also served as a state Senator representing District 18.

Bob and his wife, Mary, have been married for more than 40 years and have three children and three grandchildren.

To help celebrate Dickey's year as president of NCGA, the Nebraska Corn Board hosted a reception in his honor at the Commodity Classic in February. The reception, attended by several hundred, featured a '50s theme and a video tribute to Dickey.

Dickey expressed appreciation to all who helped with the reception and encouraged others to get involved.

"I believe whatever occupation you choose, you should get involved and volunteer, to help make the industry better than when you first entered it," he said. "I've followed that philosophy through the years, and hopefully others have been inspired to follow."



Bob and Mary Dickey

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The CORNER Office

by Don Hutchens,
Executive Director

I still remember giving my parents their first mobile phone. It was cumbersome, had bad reception and was mind boggling for them to comprehend.

You must realize that my father doubled as the troubleshooter for the county telephone line. Our phone on the party line was two longs and two shorts (that meant it was a call for us).

As cell phones improved, I gave one to my dad to have in the tractor – to a man who started farming by walking behind a team of horses. He adapted to change pretty well, and certainly would have appreciated today's guidance and precision applications that help farmers be more sustainable while producing more corn.

Advances also change our communication tools, many of which bombard us everyday with naïve political and social advocates that believe farmers are damaging the environment, cruel to animals and misusing biotechnology, and that our food is not safe.

Like it or not, we have to adapt to new tools in order to communicate, educate and provide a means of getting our point to a new generation – a generation that doesn't necessarily get its news from a newspaper or TV, or appreciate what agriculture brings to the table. It is called a "social media", where the terms are Twitter, Facebook, YouTube and blogs.

I showed my ignorance when I told my niece, a soon to be Kansas State agribusiness graduate, that I wasn't going to get a SpaceBook account. Her reply: "That's exactly why you shouldn't, Uncle Don. It's called Facebook, not SpaceBook". OK, I'm half deaf from sitting on a tractor half my life, but I get the point we have to adapt.

We must learn to communicate a different way and get the "word" out that agriculture is still the backbone of our economy; that our food is cheap, safe and abundant, and that it is produced in a sustainable way by farmers who live on the land and eat the products they produce.

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Nebraska Corn Board members represent the eight districts indicated on the map and are appointed by the Governor. One at-large member is elected by the other Board members.



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