

# Cornstalk

WINTER  
2013

## IN THIS ISSUE

**A Disturbance  
in the Force**

**Is it a "Farm Bill"  
or "Food Bill"?**

**Putting a  
Face on Food**

**Attack of the  
Killer Tomatoes**

**Low-Octane  
Gasoline Confuses  
Consumer Choice**



Nebraska's  
Family Corn  
Farmers

A  
Publication  
of the  
**Nebraska**  
CornBoard  
NebraskaCorn.org

Hoffschneider Family  
Waco, Nebraska

# A Disturbance in the Force

No Progress on  
**FARM BILL**

Lack of federal funding  
for Foreign Market  
Development

**UNCERTAINTY**  
of farm programs

**RFS** Changes

## Nebraska's robust ag economy—and all who benefit from it—are at risk.

While many other states have suffered severely during the recent economic crisis, Nebraska's economy over the past few years has been one of the better performers in America.

The reason is Nebraska's strength in agriculture—including crops, livestock, ethanol production and food processing. But there are changes looming that could threaten Nebraska's recent track record of economic success. Regulatory changes, political action—and political inaction—are conspiring to weaken the ag economy in Nebraska.

With one in three jobs in Nebraska directly related to agriculture, any "disturbance in the force" that is Nebraska agriculture has a profound effect from border to border.

While corn prices reached historically high levels recently—due in large part to drought across the nation—they have slipped back to become virtually even with the cost of production.

In other words, it appears that corn farming is about to become a break-even proposition—or worse.

That's not just bad news for Nebraska farmers. Ag equipment suppliers, bankers and main street businesses have benefitted from a thriving ag economy. School districts and local governments have seen increased tax revenue. Young people have been attracted back to rural areas to get involved in farming, ranching and agribusiness.

"All of this progress and success can be throttled with one stroke of a pen in Washington, DC," said Debbie Borg of Allen, a farmer-director on the Nebraska Corn Board. "As Nebraska agriculture goes, so goes Nebraska."



There are two key developments that pose a serious threat to the success of agriculture in Nebraska and the nation:

1. No progress on the Farm Bill; and
2. Potential reductions in ethanol requirements.

## No Progress on the Farm Bill

Congress began looking at a new Farm Bill more than two years ago. At publication, they were still kicking the can down the road—simply extending the bill that was written in 2005.

“American agriculture has come together to suggest changes in farm support programs that provide sensible solutions and help reduce the cost to taxpayers,” said Curt Friesen of Henderson, a farmer-director on the Nebraska Corn Board. “But we need Congress to realize the importance of assuring that producers and consumers have a farm and food bill they can count on over the long term.”



Some key areas of concern for Nebraska corn farmers and Nebraska’s economy:

- Lack of federal funding for Foreign Market Development (FMD) and Market Access Programs (MAP) would result in the closing of foreign offices of the U.S. Grains Council and U.S. Meat Export Federation—two key organizations that help build global demand for Nebraska corn, sorghum, beef and pork.
- Export markets for grain and red meat are critical to the success of Nebraska farmers and ranchers—and help shore up prices by creating demand worldwide. Without partners working on our behalf in foreign markets, competitive nations will steal market share that will be difficult to regain.
- Attempts to separate food assistance programs from farm support programs have turned the Farm Bill into a political football—further delaying any substantive action. See related story on page 4.
- The uncertainty of farm programs makes it difficult, if not impossible, for Nebraska farmers and ranchers to plan for their businesses. Each spring, Nebraska corn farmers invest nearly \$3 billion just to put their new crop in the ground.
- If a new Farm Bill is not passed, there is a chance that some farm and food programs could revert to levels that were in place a half-century ago.

“We need a Farm Bill that is in step with modern agriculture and the global marketplace in which we are doing business,” Friesen said. “If we aren’t competing, we’re retreating.”

## Reducing America’s Commitment to Renewable Fuels

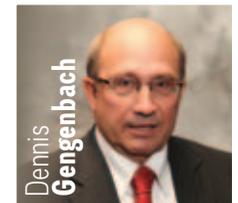
In mid-November, the Environmental Protection Agency proposed to reduce the amount of ethanol required in the nation’s fuel supply that was established in the Renewable Fuel Standard (RFS) passed by Congress as part of the Energy Policy Act of 2005.



“The RFS created an environment of certainty for the biofuels industry and for the farmers who grow the grain that supplies it,” said Dennis Gengenbach of Smithfield, a farmer-director on the Nebraska Corn Board. “It’s done exactly what it was intended to do: reduce our dependence on imported oil; increase America’s energy security; lower prices at the pump; and create economic vitality and jobs in rural America.”

- Nebraska is the nation’s second largest ethanol producer. That means thousands of direct and related jobs would be at risk if the industry suffered a setback.
- Nebraska’s leadership in ethanol means a huge supply of distillers grains—a high value livestock feed that is a co-product of ethanol production. This has been a boon to Nebraska livestock producers and has attracted tens of thousands of cattle from other states to be fed here just prior to processing. Reduced ethanol production would result in less distillers grains—and that would mean cattle producers would have to find other sources of feed.
- Nebraska and the nation are looking at record corn harvests in 2013 and a surplus of some two billion bushels. Without the demand created by a growing biofuels industry, corn prices will likely continue to spiral downward—and that will have a dramatic effect on Nebraska’s economy statewide.

“Cutting back on the required levels of renewable fuels plays right into the hands of the oil industry which has been fighting ethanol for decades,” Gengenbach said. “Without ethanol in our fuel supply, we’re stuck with one choice—oil. If that’s not a mandate, I don’t know what is.”



### Since the Renewable Fuels Standard was passed:

- Oil imports have **dropped nearly 462 million barrels** in 2012 (RFA).
- Nebraska has become the **second largest ethanol producer** in the United States.
- Having ethanol in the fuel supply has helped consumers **save thousands** of dollars at the pump.
- More than 2,250 Flex Fuel and E85 pumps have been installed across America, providing **higher ethanol blends** for the 11 million consumers who drive Flex Fuel Vehicles.
- **Average pay** in Nebraska’s ethanol industry **rose to \$56,000** per year compared to an average of \$37,000 in all industries.

# Is it a “Farm Bill” or a “Food Bill”?

## Huge Percentage of “Farm Bill” Budget is Actually Devoted to Food Assistance Programs

The Farm Bill actually contains several “titles”—each dealing with specific programs related in some way to agriculture and food. The Farm Bill includes funding for conservation, rural development, forestry, crop insurance, trade and other related issues.

While most of the media and public attention goes to Title I, which deals with commodity support programs, Title I programs only represent some 6% of the total spending in the Farm Bill.

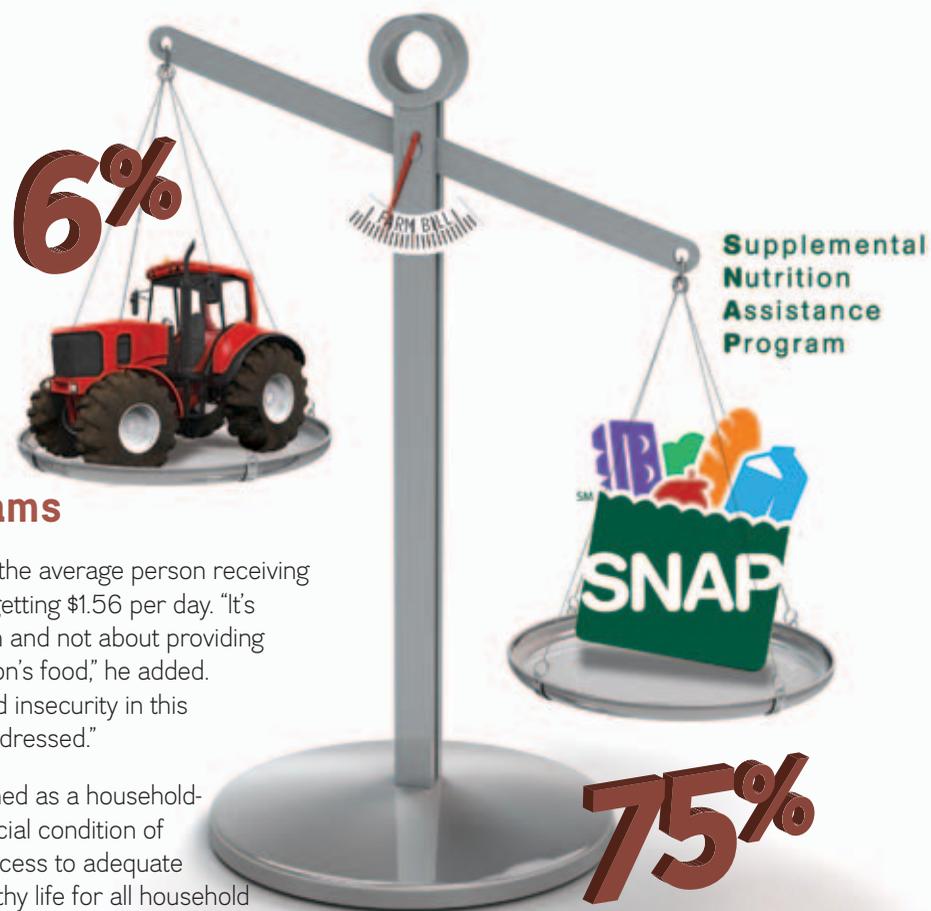
The largest program by far is Title IV, the Nutrition Title—commanding some 75% of total funding in the current (2008) Farm Bill. This title includes the Supplemental Nutrition Assistance Program (SNAP)—formerly known as Food Stamps—emergency food assistance, and similar programs.

Some Congressional representatives have advocated separating the Nutrition title of the bill from other aspects for political purposes. This has become a serious source of conflict in Washington, DC, which has delayed the passage of a Farm Bill—creating uncertainty, frustration and serious concerns for not only farmers and ranchers, but the millions of Americans needing food assistance.



Jon Doggett

“Hunger in the United States should be taken very seriously,” said Jon Doggett, vice president of public policy for the National Corn Growers Association (NCGA). “The fact that there are 48 million Americans accessing the SNAP program shows that there is a need—and farmers and ranchers are producing to meet that need.”



According to Doggett, the average person receiving food aid in the U.S. is getting \$1.56 per day. “It’s about supplementation and not about providing 100 percent of a person’s food,” he added. “There is a level of food insecurity in this nation that must be addressed.”

Food insecurity is defined as a household-level economic and social condition of limited or uncertain access to adequate food to support a healthy life for all household members. “An example would be a household in which parents skip meals so their kids can eat,” said Scott Young, executive director of the Food Bank of Lincoln. “Or a single working parent with children who is finding it difficult to pay for daycare and groceries.”



Scott Young

In 2011 (the most recent statistics available), 13.7% of Nebraska’s population was considered to be “food insecure” or more than 252,000 Nebraskans. “That’s roughly equivalent to the population of Lincoln,” Young said. The food insecurity level of Nebraskans under 18 years of age is 21%—or nearly 95,000 Nebraska children.

Young believes the Farm Bill deserves a name change. “I love the idea of calling it the Food Bill, because that’s exactly what it is,” he said. “Farm states are losing more and more power inside the Beltway. Separating the nutrition title from the agriculture programs in this legislation is seen by some as a first shot across the bow against agricultural states.”

---

**More than 252,000  
Nebraskans are  
“food insecure.”**

---

# Putting a Face on Food



## Consumer skepticism about food system demonstrates need for farmers to engage.

Some 95% of corn farms in America are family-owned. Still, more and more consumers believe the majority of their food is being produced by large corporate farms.

According to Charlie Arnot, CEO of The Center for Food Integrity, consumers have become increasingly interested in food. “Food is on the consumer radar—big time,” he said. “There is also an increased skepticism regarding food production.”



Charlie Arnot

Arnot said that consumers are deeply conflicted about food. There is a low correlation between what consumers say concerns them and their actual buying behavior. “While many consumers support greater regulation that can lead to higher food costs, they will still buy the least-cost product. In fact, one out of four dollars spent in retail food is spent at Wal-Mart stores.”

## What consumers say...

Recent consumer research from The Center for Food Integrity found three key perceptions about the food system in the United States:

- 1 Consumers believe industrial processes are inherently impersonal. People cannot relate to them.
- 2 Consumers believe that anything produced at a large scale has a greater opportunity for error—and thanks to the incredible efficiency in our food distribution system, the impact of error is faster and greater.
- 3 Consumers believe that larger entities will put profit ahead of public interest—and put their obligation to shareholders ahead of responsibility to consumers.

While one might think that food safety would be at the top of the list of consumer concerns, affordability of healthy food actually holds the number one position. “Safety is an assumed given in the U.S. food supply,” Arnot said. “It’s the one fundamental, non-negotiable requirement of our food system in this country. But people most want access to healthy foods they can afford.”

The Center for Food Integrity recently conducted a nationwide survey to gauge consumer perceptions about the food system in the United States. (See below). The results indicate that consumers are less trusting of “corporate” food production and they are demanding a high degree of transparency from those who provide food for the marketplace. Arnot sees this as a challenge and an opportunity for farmers and ranchers to reach out to consumers.

“We’re not going to change what someone believes by providing them with data,” Arnot said. “Farmers and ranchers need to engage directly with consumers in honest conversations about food production. Agriculture has to embrace a much more radical idea of transparency.”

The Nebraska Corn Board supports a number of initiatives that connect food producers with food consumers, including CommonGround, the U.S. Farmers & Ranchers Alliance, Ag in the Classroom and several other consumer-focused programs.

Arnot said that putting a face on agriculture is critical to overcoming consumer concerns. “Shared values drive trust. When consumers see and sense that the farmers and ranchers growing their food feel the same way they do about important food production issues—that builds a connection and understanding that numbers and science simply cannot.”

This will be a long term process, Arnot said. “Agriculture is very results-oriented. When we see a problem, we want to have it fixed in the next production cycle. When it comes to consumer perceptions on food, it’s a generational challenge—and it will take years to establish a stronger connection between farmers and consumers.”



Alan Tiemann

“It’s very clear that consumers want to trust their food system, but they find it more difficult to trust a ‘company’ than a ‘person,’” said Alan Tiemann of Seward, a farmer-director on the Nebraska Corn Board. “That’s why it is increasingly important for all of us in agriculture to take the personal responsibility to meet consumers, listen to what’s on their minds and do what we must to answer their questions and earn their trust and confidence.”

## How genetic technology and breeding are helping meet global food demand—safely.

**B**efore genetic modification, the alkaloid levels in that tomato on your BLT could have killed you. And instead of corn on the cob, you'd be eating a handful of birdseed.

Genetic management and selective breeding have been used for centuries (Gregor Mendel and Luther Burbank, anyone?). Today, we're just doing it better.

As farmers and ranchers work to meet the daunting challenge of feeding an exploding global population, they continue to grow more with less—less water, less land, less fertilizer and pesticides, and less impact on the environment.

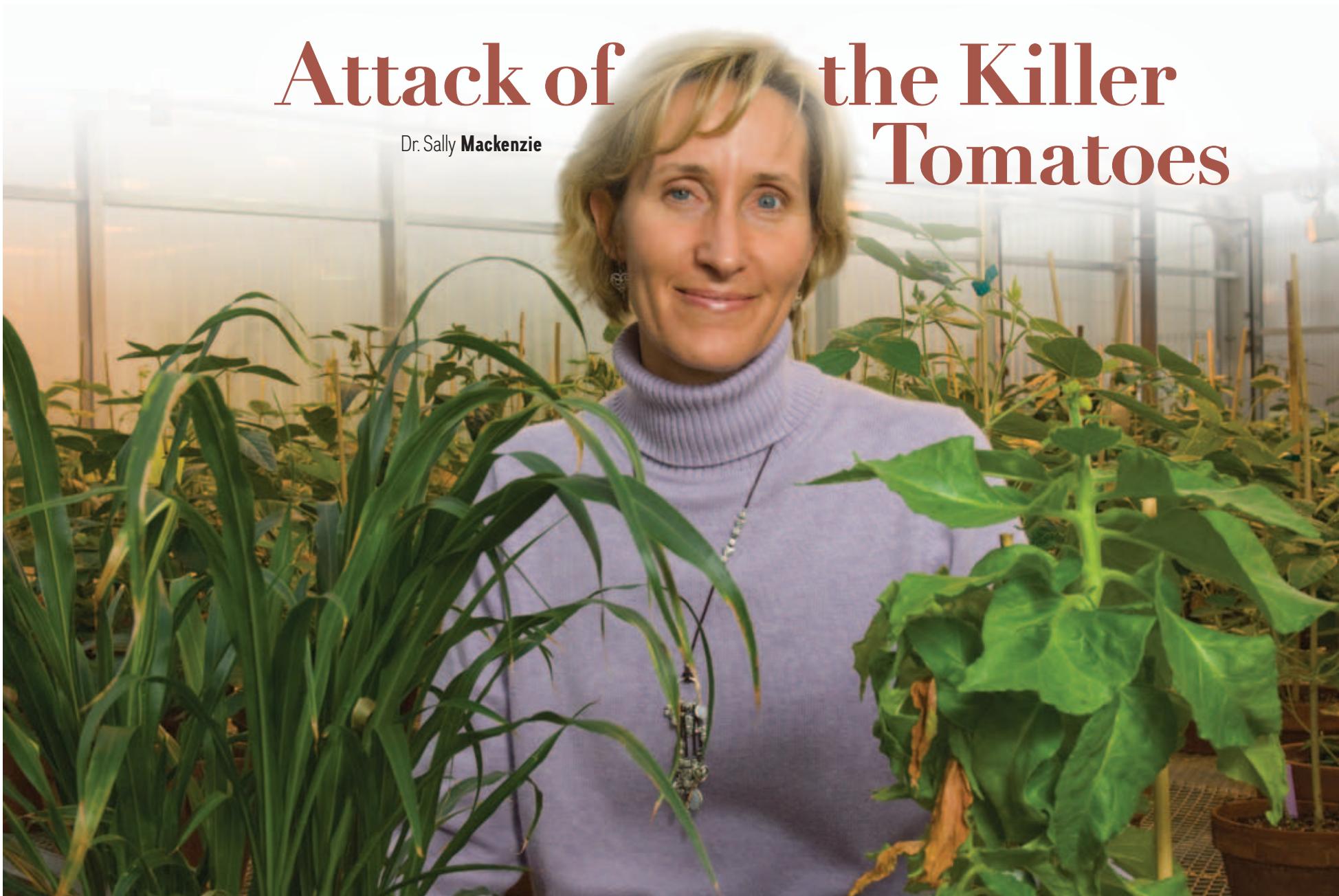
Currently, genetically modified (GM) crops—also referred to as “biotechnology”—are an important part of a farmer's portfolio. But they are not an end-all solution.

“The research we do is not an either-or proposition; it's a continuum,” said Dr. Sally A. Mackenzie, the Ralph and Alice Raikes Professor in the department of agronomy and horticulture in biological sciences at the University of Nebraska–Lincoln. “We're not able to predict what biotechnology will give us. It's a tool in an increasingly robust toolbox.”

Dr. Mackenzie says that genetic modification simply refers to human intervention to create a different genetic combination to create a desired outcome.

# Attack of the Killer Tomatoes

Dr. Sally **Mackenzie**



"We're using transgenes to create gene combinations that result in diversity and enhanced performance. The outcomes rely on the genes themselves and how they are expressed within the plants." This same concept is being used in animal research and in human health research for cancer and other diseases.

Researchers are focused on helping plants overcome stresses, challenges and inhibitors that keep them from achieving their full genetic potential. Epigenetics is one emerging technology that involves temporarily adding a transgene to a plant and then removing it—while leaving the effects of that transgene intact within the plant. This can lead to more vigorous plants, more biomass and more production.

"With epigenetics, what you eat is not transgenic, but transgene technologies were used to affect the performance of the plant," Dr. Mackenzie said.

---

## **"There has not been a single documented case of a food allergy or human health situation due to crop biotechnology."**

---

Researchers are also looking at the microbes the plants live with, which dramatically impact the way a plant uses water and nitrogen, and interacts with pathogens. This approach doesn't change the genetic complexion of the plant, but instead strives to better understand and manage the environment around the plant to optimize its performance.

Dr. Mackenzie says that assertions that GM foods are unsafe is a distortion of the truth—and in many cases, is a scare tactic used by special interest groups to gain financial support and media attention. "There has not been a single documented case of a food allergy or human health situation due to crop biotechnology," Dr. Mackenzie added. "It has never been unsafe or unhealthful. When we see distortions of the truth, the first place we should look is at who is benefitting from this misinformation."

When asked about concerns about insects and weeds becoming resistant to GM crops, she asserts that this concern cannot be placed at the doorstep of biotechnology.

"There is nothing about GM technology that causes weeds to become tolerant to herbicides, just as there is nothing inherent in our medical system that makes us more resistant to antibiotics," she said. "Just as any doctor needs to be responsible in prescribing medications, farmers need to be careful stewards of their crops—regardless if they are growing GM or non-GM varieties."

Dr. Mackenzie said that genetics have long been part of agriculture. For example, the original corn was much like birdseed—and the alkaloid levels in the original tomato would be fatal to humans. Ruby red grapefruit is sweeter because gamma radiation was used to mutate the genes to express themselves in that manner.

"Carrots, wheat, corn—Mother Nature never meant for us to eat any of them. Plants resist being eaten," Dr. Mackenzie said. "All the crops we eat are essentially manmade through conventional breeding. This is what feeds us. Today we're more precise and we can better manage change thanks to advancements in knowledge and technology."

"Transgene plants will be part of our future; they must be," Dr. Mackenzie said. "Our problems are so challenging, so daunting that we don't have the luxury to depend on alternatives that are less sustainable or less productive."

"If we're going to meet global food demand over the next 30 years, we need to pull out all the stops. This is our generation's equivalent of the putting a man on the moon."

View Dr. Mackenzie's presentation as part of the UNL Heuermann Lecture Series at:

<http://heuermannlectures.unl.edu/2013-2014>

## **Former Anti-GMO Activist Reverses Course**

Mark Lynas, one of the leading anti-GMO voices in Europe, publicly recanted his position, citing a better understanding of the science and the need to feed a growing global population as reasons for his new support for GMO technology. Here are excerpts from his speech given in January 2013.



"I want to start with some apologies. For the record, here and upfront, I apologize for having spent several years ripping up GM [genetically modified] crops. I am also sorry that I helped to start the anti-GM movement back in the mid 1990s, and that I thereby assisted in demonizing an important technological option which can be used to benefit the environment.

"As an environmentalist, and someone who believes that everyone in this world has a right to a healthy and nutritious diet of their choosing, I could not have chosen a more counter-productive path. I now regret it completely.

"So I guess you'll be wondering—what happened between 1995 and now that made me not only change my mind but come here and admit it? Well, the answer is fairly simple: I discovered science, and in the process I hope I became a better environmentalist.

"I'd assumed that it would increase the use of chemicals. It turned out that pest-resistant cotton and maize [corn] needed less insecticide.

"I'd assumed that GM benefited only the big companies. It turned out that billions of dollars of benefits were accruing to farmers needing fewer inputs.

"I'd assumed that Terminator Technology was robbing farmers of the right to save seed. It turned out that hybrids did that long ago, and that Terminator never happened.

"I'd assumed that no one wanted GM. Actually what happened was that Bt cotton was pirated into India and roundup ready soya [soybeans] into Brazil because farmers were so eager to use them."

See more at: <http://www.marklynas.org/2013/01/lecture-to-oxford-farming-conference-3-january-2013/#sthash.QfcjbyQk.dpuf>



# Low-Octane Gasoline Confuses Consumer Choice

**Y**ou have probably seen a change in your options when you fill up your vehicle. In many locations, the choice of an 89 octane **now may contain up to 10% ethanol and is also blended with premium. Additionally at some retailers, we are seeing two choices of 87 octane**—one with 10% ethanol and one with no ethanol.

This difference in your choices at the pump has been driven by changes in the gasoline that oil companies are sending into the marketplace.

“The real change is that the base gasoline that oil companies are putting in the pipeline is of lower quality with reduced octane levels,” said Kim Clark, director of biofuels development for the Nebraska Corn Board. “They have lowered the octane levels of this base gasoline so far that it is actually illegal to sell it as transportation fuel in that form.”

At the pump, 87 octane with ethanol is typically priced lower—much lower—than 87 octane without ethanol. The reason: The no-ethanol version is a blend of the sub-octane base gasoline and higher octane (and much higher-priced) premium unleaded.

**The blending with premium is also the reason why 89 octane is priced higher.**

There was no legislation or regulation that required oil companies to begin flooding the market with lower quality base gasoline. The oil companies made the choice themselves to begin refining sub-octane gasoline.

Todd Sneller, administrator for the Nebraska Ethanol Board, says this move is all about enhanced profitability for oil companies. “It’s interesting to note that ethanol—a product that the oil companies have been fighting against for decades—is now their octane source of choice to make their sub-grade gasoline actually usable in our vehicles. I guess it’s not as bad as they’ve made it out to be.”

**What is octane?** Clean-burning ethanol adds two to three points of octane to gasoline—and does so without adding toxic chemicals that end up in exhaust.

Octane rating or octane number is a standard measure of the performance of a motor or aviation fuel. The higher the octane number, the more compression the fuel can withstand before detonating.

Fuels with a higher octane rating are used in high-compression engines that generally have higher performance. Use of gasoline with lower octane numbers may lead to engine “knocking.”



- |  |   |  |  |
|--|---|--|--|
| District 1<br><b>Dave Bruntz</b><br>Friend, NE       |    |   | District 6<br><b>Dennis Gengenbach</b><br>Smithfield, NE |
| District 2<br><b>Mark Jagels</b><br>Davenport, NE    |   |    | District 7<br><b>David Merrell</b><br>St. Edward, NE     |
| District 3<br><b>Curtis Friesen</b><br>Henderson, NE |  |   | District 8<br><b>Jon Holzfaster</b><br>Paxton, NE        |
| District 4<br><b>Debbie Borg</b><br>Allen, NE        |  |   | At-large<br><b>Alan Tiemann</b><br>Seward, NE            |
| District 5<br><b>Tim Scheer</b><br>St. Paul, NE      |  | 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. |  |



Facebook.com/NebraskaCornBoard  
Twitter.com/NECornBoard  
NebraskaCorn.blogspot.com  
**NebraskaCorn.org**

Nebraska Corn Board  
301 Centennial Mall South, Fourth Floor  
Box 95107, Lincoln, Nebraska 68509  
Phone 402/471-2676  
Toll-Free 800/632-6761



**On the Cover** Lana and Chad Hoffschneider farm near Waco, Nebraska. They raise corn and soybeans, and also operate a cattle feedyard as part of a family farm partnership.