

I asked a prospective new employee as part of the interview process to write a dissertation on what they saw as the greatest threat to Agriculture today. I thought that I would try my own exercise. The greatest threat to Agriculture today is "ignorance." The non-farm public left the farm a couple generations ago and with their leaving the connection to the farm was broken. Better yet their memory of Agriculture was fixed in time to what they remembered it to be when Grandpa farmed. What else in life is the same as it was 50 years ago?

Technology has changed Agriculture just as much as every other aspect of life yet consumers pine for the nostalgic old days embracing the outdated organic foodie concept of agriculture. The general public has no concept of Agriculture other than what they have been told and they listen to the wrong people like the Environmental Working Group, the HSUS or Chipotle who have agendas that have no relationship with modern agriculture. They are impacting Wal-Mart, K-Mart and all the other "Marts" so they are now dictating production practices from the top down forcing farmers to farm their way rather than the right way. On various trips that I have taken where I meet others from the west or east coast you find out how terribly uninformed these consumers are. They don't know enough about agriculture to even have an incorrect imagination of what it looks like forget any clue as to what it should look like.

Our adversaries are taking advantage of that ignorance to fill their heads with all sorts of misinformation so whatever concept of Agriculture that they do have is distorted. We can't blame consumers for having the wrong perceptions and conceptions of agriculture if we are doing nothing to properly inform them. Agriculture has some good commodity organizations but the challenge of informing the public correctly as to what Agriculture is and does needs to be on the scale of the Big Oil public relations campaign and it's not close to that level of information. This takes funding and some farmers chafe at contributing to check-offs but they need to understand that until Agriculture makes the effort to educate public opinion with truth someone else that does not have their interest in mind will spread their "truth" and consumers will believe it.

This gap between what is and what opponents of conventional agriculture tell consumers it is, is growing and the failure to correct it will result in more regulation, fewer market based choices and even the rejection of science based production practices that will handicap Agriculture in achieving its mission. It will reduce the profitability of Agriculture and increase the cost of food to consumers for absolutely no justifiable purpose because of ignorance. The comprehensive structure and mechanism for the platform as to how we inform the public of what they do not know about Agriculture doesn't currently exist and we need to get to work to create it or we will not like the result. That is the biggest threat that we face today.

The following is an example of the gap in knowledge that exists between agriculture and the non-farm public evident in a letter to the editor of the Des Moines Register.

"My Grandfather's take on the role of farmers: I attended the recent climate-control forum in Ames where one of the speakers on the panel talked about planting "corn on corn" as if that were a good thing. My grandfather, father, and uncle used a crop rotation plan on our family farm in southwest Iowa that included corn, soybeans, alfalfa, and oats, using knowledge they had each gained as students at Iowa State University years ago. Iowa agriculture experts promote leaving corn stover on the fields to reduce soil erosion and enrich the soil. Sadly, some farmers can't resist removing the corn stover, baling and selling it to the new cellulosic ethanol plant in Nevada where, a few days ago, the stover stockpiles burned. What a misguided venture. Let us find our way back to the concept that our job as farmers is NOT to "mine" the land, but rather, to "conserve" the land (a lesson my grandfather taught me when I was a young child growing up on our farm). - Jane- Ames."

Jane remembers her grandfather on the farm and is intelligent enough to have interest in attending the climate-control forum in Ames. That says that she has interest and she cares, which is one level beyond what many

consumers going on with their life, who as long as there is food at the supermarket, pay little attention to where it comes from. Yet Jane's perception of corn stover and how it relates to cellulosic ethanol production is outdated by about half a century. Let me explain: In 1970 the average yield of an acre of corn was 86 bpa. The crop produced 2.2 tons of crop residue per acre. They moldboard plowed after that leaving much less residue on the soil surface after harvest.

Today we have doubled the plant population per acre more than doubling the yield and we produce 4.3 tons of crop residue on an acre of corn. I had a farm yield 240 bpa that should have produced 6 tons of residue nearly 3 times what her grandpa produced. Cellulosic ethanol producers limit their residue harvest to approximately 1 ton per acre. They leave most of the residue produced. So if we take that average 4.3 tons of residue and harvest 1 ton for the cellulosic ethanol we leave 3.3 tons left on the field to control soil erosion and enrich the soil. That is 1.1 tons more than Jane's grandpa left. Additionally we do not moldboard plow anymore so far more of the remaining stover is left on top to protect the soil than Jane's grandpa left on his fields. So we have more production, we are leaving more residue to protect and enrich the soil than ever before and we have a ton of residue per acre that we can still make cellulosic ethanol out of.

One could understand based upon her life experience why Jane thought what she thought coming to the conclusion that she did. But she just doesn't know. No business is being performed today the way our grandfathers did it. Why do people think that Agriculture is somehow different? Agriculture is better today than the way our grandfathers farmed. I have no disrespect for anyone here but there are lots and lots of Janes out there whose knowledge of Agriculture is outdated and unless we correct them they will expand the ignorance. We are already ahead of where Jane thinks farmers ought to go taking care of the land but she doesn't know it. Take this example times thousands of instances and you get what Agriculture is up against... the threat and the challenge that we face.