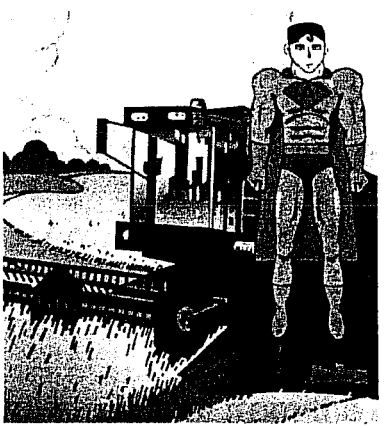
Is Today's Agriculture Producer a Superhero?



Maverick Squires

Noble FFA

8th/9th/10th General Agriculture

He was faster than the momma cow trying to tackle her enemy as he tagged her new baby calf. He could leap a fence in a single bound when an animal was injured or his own youngen' had gotten into trouble. This superhero could not only operate machinery with one hand but could also talk on the c.b. radio, give directions to a lost fellow, and fix a broken window on the tractor with a piece of bailing wire. I grew up knowing not only a Mister Gadget, Superman, and Spiderman but my true hero was the Agrarianman. You heard me... I said Agrarianman. That was his pseudo name but in real life I had my own true action hero or heroes my grandfathers. They both grew up as progeny of agriculture and the true agrarian way of life was instilled in me, from the grassroots of Iowa to the plains of Oklahoma.

Agriculture has changed since my superheroes started farming. Let's go back to the 1940's and remember how things were and what was happening. The farmer was self sufficient and he was not only a producer but he was the local baker, butcher, and milk man. He was completely diversified and he solely depended on the land. He grew enough for himself and about 30 people. The livestock herds were relatively small in size and the overall phenotype of livestock was smaller. Genetics was being discussed and it wouldn't be until the 1950's when artificial

insemination of cattle would seem like a natural phenomenon, and dairy bull studs would be the early pioneers of selected matings and predicting their outcomes. Other changes would have been made from animals to tractors and stock racks to trailers.

Transportation advancements led to my grandfather purchasing a sale barn and helping his customers to sell their cattle to buyers in Iowa, Missouri and Oklahoma. The livestock markets stayed strong through the 1960's and with the inflation in the 1970's the land prices went crazy and livestock markets hit an all-time high. However, the Agrarianman had to learn a new skill and that was how to handle the high cost of inflation and low agricultural prices as the 1980's brought a new recession. Although, the average producer could feed 100 people in comparison as he became more efficient and produced more his profit margin had remained the same.

Again, diversification became a key in crops and in livestock. Diversification of beef breeds would no longer be just Angus and Hereford. We began to hear of larger breeds such as Charolais, Chianina, Limousin, and Simmental. Just as cattle were getting more efficient and so was the equipment. We began to see larger combines, hay balers and tractors and even saw other pieces of equipment with foreign names like Zetor and Polaris. John Deere had been Agrarianman's best friend and no matter

what he bought he always favored that 4020 and he could count on it for most jobs.

Making jobs easier was another challenge of 1980's and the invention called the computer would revolutionize agriculture and give agrarian yet man another tool to either make his life easier or more difficult. Initially it was used for records, spreadsheets, financial documents and a few games of solitaire. It wasn't long before it was used as a national tool to buy, sell, and trade any agricultural commodity conceived. In the 90's this tool combined with a palm pilot could be used to keep his Angus herd information from (EPD's) Expected Progeny Differences to pedigree history and calving records at the click of a pen which could then be synched by his computer. Also, sires could be selected from perusing Internet websites and even making orders online. Agrarianman was rapidly becoming a multi-tasker and his local market had expanded to be global and with his cell phone he would never out of touch or out of reach of anyone. In fact, he could use his Bluetooth, to buy and sell cattle while driving on his way to have lunch at the local café with the folks.

Not only could Agrarianman be found but so could his livestock. With microchips being used for monitoring market cattle in the market livestock arena, in conjunction with words such as premise identification and tracking

cattle using scanners; would create another challenge for today's agricultural producers.

How many of us have seen or used sprayers which have GPS tracking, mapping, and look so confusing that you think you might need a computer programming degree to operate it? Another modern invention is the greenseeker which automatically sprays the crops the exact amount of fertilizer needed based on the color and health of the plant.

Complimenting this tool are crops that are genetically modified to be more pest resistant, changing the plants colors to offer more varieties and be more disease resistant. From disease resistant plants we have created plants to hold vaccines. In 2002, the tomato was modified to carry a vaccine for hepatitis. We have taken wheat and rice and genetically modified it to have more Vitamin A to prevent diseases and alleviate chronic malnutrition in African and Asian countries.

Currently there are seeds coming from more than 104 countries around the globe and are being stored in a large vault. There are 2.25 billion seeds and 4.5 million samples being kept in a seed vault located in the arctic mountain side of Norway. Maintaining these seeds will provide genetic diversity which will help ensure a genetic resource base for the future.

Already, scientists are redesigning the basic genetic codes of other organisms. "Last year, some 2 million mice, fish, monkeys and other animals were genetically altered for research purposes. A gene inserted to cause or to eliminate cancer, one to create a mouse with super muscles, and another to create a featherless chicken that doesn't have to be plucked."

Our superhero is not a chicken but is willing to wear an under-armor that is strong and protective. This new fiber is as soft as cashmere, flame resistant, and has an internal thermostat to keep you warm when it's cold and to keep you cool when it's hot. I am not talking about a new product but an old product called wool and it has been bio-polished. Bio-polishing uses a series of chemical and enzyme treatments to provide smoother and softer wool than by conventional methods.

My superheroes aren't conventional in any means. No matter what your superhero wears or what he stands for I can't think of any other person besides Agrarianman that can do so much for so many. Agricultural producers represent 2% of the American population which feeds the other 98%. They work hard to provide us with a safe and healthy food product, clothe us and continuously work to protect our natural resources. So the next time you see a man leap fences, tag baby calves and embrace

technology you should salute him for he truly represents a superhero who has improved our quality of life.

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