

Soil Nutrient Study Tour & Trade Mission to Germany

August 14-22, 2015

Hannover - Berlin



Iowa FB Delegation





Combined Iowa & Illinois Delegation





Study Tour & Trade Mission Objectives

- Continue the US-German TransAtlantic Dialogue
- Gain greater understanding of common issues & challenges faced by both US & German/EU farmers
- Provide a "face" of American farmers for our embassy people in Berlin & to the German Ministry of Food & Agriculture
- Reinforce the understanding of the importance of trade to US farmers and the need for TTIP



Key "Take-aways"

- The challenges faced by US & German farmers are more alike than different
 - Disconnect of the public from agriculture
 - Production challenges
 - Weather issues
 - Nutrient management
 - Regulatory burden
 - Transportation & infrastructure
 - Markets



Key "Take-aways" Cont's

- Some differences do matter
 - Precipitation (20 in (Germany) vs 35 in (Iowa)
 - Affects drainage, leaching, etc.
 - Cropping patterns
 - Summer harvested small grains facilitate cover crops
 - Less concentration of planting & harvesting timelines
 - Subsidies
 - \$120-\$150 per acre direct subsidy
 - "Greening" subsidies
 - Harvesting of "green" lands
 - Biogas cropping



Key "Take-aways" Cont's

- Germany is not likely to be a significant exporter
- German directives to their EU trade team focused on maintaining some status quo items:
 - Ban on "hormone" beef
 - Ban on "chlorine" chicken
 - Precautionary Principle with regards to GMOs
- There is significant trade concerns about sugar policy and 2017 commitments
- TTIP is important to German manufacturers, but German ag is worried about competitiveness



Conservation Tillage

- Soil erosion was largely non-existent in the areas we visited.
- German farmers till the land more times than American farmers and can do multiple herbicide/insecticide applications.
- They are a little more stuck in their traditions and they are limited by having to use manure and get it incorporated within hours.
- Resistant weeds are not as huge of an issue as in the U.S., probably due to the more frequent tillage and more diverse crop base.
- Midwest farmers started relying more on weed killers when they moved towards more conservation tillage and more of a duo-culture of crops (corn and soy).
- In the sandier soils in eastern Germany, wind erosion is more of a concern than water erosion. This also reflects precipitation of 20 inches per year and seldom getting more than an inch at a time.



Gerhard & Andrea Schwetje Farm





The Schwetje family farm is a crop & livestock farm located about 60 km from Hannover.

They have two broiler barns each with 40,000 birds.

They have 360 acres with 308 used for crops.

They grow:

Crop	Acres	Yield
Winter Wheat	187	174 bu/ac
Sugar beets	76	28.3 tons/ac
Corn	32	203 bu/ac
Field peas	12	95 bu/ac
Cover crop	32	

They have an N-balance of +55 lb/ac



Strube Seed Company



Strube is an independent, medium-sized plant breeding company that began in 1877.

Their main crops are sugar beets, wheat, sunflowers, peas and sweet corn.

Strube has done some lab work on GMOs, but is prohibited by regulations from doing field trials.

Strube has developed patented processes designed to enhance seed placement, germination and emergence.



Koechy & Von Eltz-Ruebenach Farm





The "Landwirtschaftliche Domane Familie Koechy is entirely a crop farm with 148 acres owned and 939 acres rented in the state of Lower Saxony. The daughter & son-in-law are in the process of taking over the farm.

They have 679 acres of loess soils, 148 acres of fen and 11 acres of heavy clay soils.

Average field size is 31 acres.

A common rotation is: winter canola, wheat, barley or sugar beets, wheat.

On the fen they grow corn silage (biogas) and follow with a rye cover crop.

Avg yields are: wheat 130 bu/ac; barley 152 bu/ac; canola 78 bu/ac; sugar beets 26 ton/ac; and corn silage 9.8 tons/ac.



DLG International Crop Production Center



The DLG (Deutsche Landwirtschafts-Gesellschaft) *German Agricultural Society* was founded in 1885. It has over 25,000 members and is a leading organization in the ag & food sectors. The DLG is an expert organization doing original ag research and is politically independent.

DLG has 200 full-time staff and 3,000 voluntary experts.

The DLG crop production center is a site for applied, field-level research, exhibitions and testing of farm equipment.

Study fields cover the entire spectrum of crop production – crop rotation, tillage strategies, nutrient management, plant breeding, organic farming, and climate change adaptation.



Vrieswould & van Ginkel Farm



The Vrieswould/van Ginkel farm is located in the "Zerbster Ackerland" of Saxony-Anhalt.

The multi-generational and extended family milk about 1,000 Holstein cows and farm about 2,600 acres. They moved to this farm from the Netherlands. Their herd average was about 17,000 lbs/year.

They employ 21 permanent employees and usually have 4 apprentices and a couple of international interns from all over the EU.

The primary crops are 588 acres of rye, 229 acres of barley, 121 acres of wheat, and 580 acres of corn silage. They also have 677 acres of grasslands which is cut 4 times per year for cattle feed

Avg yields are: rye 80 bu/ac; barley 130 bu/ac; wheat 112 bu/ac and corn silage 8.6 tons/ac.



Isterbies Rottenau Farm



The Isterbies Rottenau farm is located in Saxony-Anhalt and belongs to the foreland of the Flaming Region. The farm is 1,705 acres and is operated by the manager and 2 employees.

Field size is between 9.8 acres to 123 acres with an average field size of 34.6 acres. The soils are a sandy loam and water is a limiting factor on crop rotation and yields.

The light soils have a rye-lupine or sunflower-ray rotation; the average soils are canola-triticale-ryecorn silage-winter barley; and the best fields are winter wheat-triticale-canola-corn silage-winter barley. Occasionally they plant some field peas.

On the farm, they are using a light-spectrum crop analysis bar on the front of the tractor that then supplies information to the variable rate fertilizer spreader on the rear of the tractor. They use this on their small grains to manage nitrogen fertilizer.



Agrar GmcH Flamingland Blonsdorf Farm





The Agrar farm consists of 10,625 acres, 500 dairy cows, 1,300 sows farrow-finish. They employ 70 people. The farm is owned by 130 investors.

The primary crops on the farm are winter wheat, potatoes, canola, rye, barley, corn silage, with a few acres devoted to some minor crops like lupins, lentils and peas.

Dr. Stefan Dobers is a company advisor that is conducting a 5-yr study of soil fertility & nutrient use, and developing site-specific crop production strategies on the farm utilizing soil mapping, precision ag, UAVs and proprietary algorithms to optimize nutrient use and cropping plans.

The farm has adopted a "zonal" strategy for nutrient applications, but is not using variable rate seeding technology.

The farm has recently expanded its dairy and hog operations to provide more employment for the nearby community.



US Embassy Reception





The Iowa and Illinois Farm Bureau delegation was hosted at a reception at the U.S. Embassy in Berlin. Ambassador Emerson greeted those in attendance which included the Farm Bureau delegation, selected farmers from Germany, including those whose farms we visited, officials from the German Ministry of Food and Agriculture, embassy staff and selected media.

In his remarks at the reception, the Ambassador focused on the importance of trade to both U.S. and German farmers and stressed the importance of addressing such issues as the GMO approval process in Germany, the need to harmonize food safety protocols among the TTIP countries, and the importance of improved trade access for US products into the European Union.

IFBF President Craig Hill thanked the Ambassador for hosting the reception and presented him with a book about Iowa and a Farm Strong shirt.



Friedersdorf Farm



Hans-Georg von der Marwitz and Lukas Kersten hosted us at the Friedersdorf farm. The farm is 1,274 acres and grows a mix of conventional and organic crops. Organic crops include winter and spring wheat, rye, spelt, triticale, lupine, and corn silage. Conventional crops include winter wheat, canola, corn silage and sugar beets. The farm has an on-farm biogas plant.

Mr. Marwitz returned to the farm from Bavaria after the reunification of Germany. The city was the historical home of his family. Mr. Marwitz has been very instrumental in the restoration of the village church and was elected to the parliament.

On the farm, there is a restaurant which has a fourstory museum and historical displays.

Near the farm was the "Seelow Heights" World War II battleground. The field below the ridge was the site of a battle with 2.9 million German soldiers and 1.9 million Russian troops.



Final Thoughts

- German agriculture comprises just .9% (less than 1%) of the total economic GDP.
- German wheat yields are impressive; with some as high as 10 -12 tons/hectare on wheat (150-180 bu/acre). The crop is very competitive domestically and internationally. Some possible reasons include:
 - Seeding rates are higher (rows closer together and a higher rate).
 - Less disease than we have (wheat can be planted after wheat).
 - They can use less nitrogen per bushel.
- We thought there would be a lot more corn grown for livestock; German farmers largely grow corn for silage and/or bio-gas. (This was the most frequently mentioned observation & there are more than 7,000 biogas plants in Germany.) Wheat and barley are the primary feed grains. They don't want to spend the money on gas to dry down corn.
- Agricultural research in Germany was advanced, but much more focused on taking care of the soil, not maximizing production. They feel if the soil is good, then it will produce better; however, they aren't increasing organic matter like we are in the States.
- The farmers themselves did not talk a lot about farm programs, but they clearly receive them. Typical direct payment is \$120-150 per acre.



Quotes from Iowa and Illinois farmers:

- "Farming in Germany here is like painting in that the farmer has an image or picture in his mind of what he hopes to achieve and then he uses his different tools or methods to get there."
- "Politicians have more of an influence on ag policy here than they do in the U.S. and geopolitical issues drive decisions here just like they do in the U.S. (RFS/biogas)."
- "We are staring at the future of American agriculture, so we need to try to frame the policy and regulations that we can and what can we do to avoid the most draconian or onerous regulations."



Thank You



IFBF 2016 South Africa Market Study Tour

- The IFBF market study tour to several sites in South Africa is set to begin March 13 and will last through March 24, 2016.
- It will explore the agriculture and cultural sites in a country that is relatively unknown to most lowans but is taking a larger role in world agriculture
- "There is significant potential for agriculture in the sub-Saharan region of Africa, and South Africa will clearly be the economic and financial leader of those gains. But, because of the sanctions linked to Apartheid until the mid-1990s, South Africa is relatively unknown to many people around the world."
- Application, itinerary & more information is on www.iowafarmbureau.com
- Participant cost is \$2,000.
- Registration deadline: September 30, 2015.

