



Agricultural Sciences Advisory Committee

Summary of Advisory Committee Meeting Minutes

Date: 12/14/2021

Time: 12:00-1:30 PM

Location: Zoom

Attendees

Industry Members:

- Josh Schmidt-Ag Country
- Sly Krautkramer-Swidorski Equipment Inc.
- Melissa Heise-Swidorski Equipment Inc.
- Chad Glaze-Vine Vest North Inc
- Hans Brietenmoser-Dairy farmer

NTC Team:

- Greg Cisewski-Dean, School of Agricultural Sciences, Utilities & Transportation
- Bobbi Lee, Learning Coordinator, School of Agricultural Sciences, Utilities & Transportation
- Don Radtke, Farm Manager
- Stephen Krueger, NTC Faculty
- Katie VanDerGeest-Agricultural Sciences Development Manager
- Elizabeth Hillebrand, Farm Veterinarian
- Charl VanDerNest-NTC Faculty

Other:

- Betsy Leonard-WTCS, Education Director

Summary—Include a brief statement(s) of topics and action items

- A. **Industry Trends**-Acceleration of different technology in Ag is getting faster and faster. Precision farming and technology, more production on the same or less acres. More efficient with less down time. Electric vehicles have gained a lot of traction including tractors and autonomous vehicles are getting bigger. Younger people are getting into Ag and the average age of a farmer is younger now. They operate differently and time off, family time is more of that than historically. Melissa stated they are having the same challenges with recruiting as in the spring. Talking to younger prospective employees, they are more concerned with their benefits besides just pay. They want to see their career pathway, how their career is going to progress. How do we develop an interest in Ag earlier? Need to get students excited in the agri-business occupations that are available (marketing, HR, IT, accounting). Chad asked if we started the new insurance class? Yes, this class will start in spring 2022 in the agri-business and crop science programs.
- B. Workforce Training-if you see something you would like us to put on a training for, please let us know.
- C. Program Information
1. Student Club-PAS State & National Competition, Dairy Challenge
 - i. PAS did really well in the Dairy competitions last year. NTC had two teams, we had 1st in the nation and 1st, 2nd, 3rd, and 5th overall. This year we are picking it up and going to the Midwest Dairy Challenge. Our team is going to Indiana, 8 students signed up, along with 2 coaches. We will have 25 students for state and hopefully most will move on to nationals. The club helped out at Willow springs over the summer. They did a pumpkin painting, entry fee was food items for Neighbors Place because in the fall we did a food drive and filled Timberwolf Table.
 2. Crop Science projects- on the south end of the farm the students planted an apple orchard, conventional with 15 trees on 20'x20' spacing. This summer we staked and put wires up for a high density orchard-4' apart on 10' rows. Looking at doing a spoliated orchard-instead of tying branches out, we make them go straight and graft 3 different varieties on each root stock. Would love to have students be able to come and look at trees with 3 different apples on 1 tree. Pollinator plot planted. Steve and Greg went to Minnesota this summer for the C2A3 conference. They had a century garden with varieties of flowers, shrubs, bushes and we should do that at NTC. Students are planning the garden. Greenhouse is up and going, going to start flowers after break.

3. Test plots- Asked precision ag students to dream about what they would do with our 4 test plots. Justin Zoellner, crop science student, gave the tentative plan-Year 1-introduction year-gathering equipment, drone scouting. Either purchasing our own drone or having someone come and do it with NDVI (color mapping) capabilities. Soil and plant tissue sampling, yield monitoring, leasing equipment from local dealer. 2nd year-drone scouting, check color maps-check fertilizer and weed emergence, continue with soil sampling. By the end of year 2 we will have 2 years of data that we can compare against each other. Year 3—start compiling data and look for trends. Contact past students and see what ways they have found success and what we can improve on now that they have experience in the field. Year 4-assess how everything is going. Make sure students have adequate experience. Soil sampling, drones. Variable rate seeding? Obtain feedback in the community on the benefits of implementing this plan. Follows along with WIGs.
4. A5 Robot installed & operating—update on what we are doing to stay current. Old robot was A3, updated to A5. It is now installed and operating. All farm staff learning the new technology.
5. Lely footbath-in conjunction with A5. New footbath tips itself up, dumps and rinses. Automatically calibrates the amount of chemicals it needs and fills itself.
6. Calf warmer-try to keep the milking barn as cool as possible. Once calves are born we can warm them up and put them in their individual hutches. We have purchased some paneling for pair raising so they can have a buddy. The paneling keeps them separate for disease control.
7. Water fountain for super hutches -Once calves are weaned they go in the super hutch. In the past, water tubs were filled with garden hoses, we are now installing an automatic water fountain. This will save time and wear and tear on the staff and there will be no hoses laying out.
8. Cattle Chute in wet lab-partially need for the farm, partially for Vet Tech program. AVMA will be visiting in Feb 2023 to accredit us. We need to teach large animal skills and are trying to keep everyone safe.
9. New equipment-tractor, chopper box, skid steer.
10. Vet Tech building renovations- the Ag equipment lab is being converted into the Vet Tech learning lab. This will be done by beginning of April. We are working on bringing back ag equipment in a different form by combining it with Diesel students-can add a few classes that focus on ag equipment, precision equipment maintenance and technician. Maybe 3 course certificate on top of the 1st year of diesel technical diploma. Per Chad, this program needs to be looked at, this is a foundation of the ag program and we need to make it work. Sly agreed, stating the students will need advanced hydraulics, advanced electronics and precision



technology on top of the basics. Basic stuff is important, but the other items are as well. Chippewa Valley just started ag equipment programs and Swiderski has been trying to get into schools and do more career fairs. CNH offers precision ag equipment classes and Fox Valley teaches the classes. CNH top tech program is certified for ag and construction sides. Chippewa Valley has an ag service technician 1 year program. Mid-State has a diesel and heavy equipment program.

11. IACUC-institutional animal care and use committee. Committee is made up of Greg, Elizabeth, Sarah, two other people from outside the college and a 3rd that is an advisor. Setting up protocols on how animals are used on the farm for the vet tech program. Method to make sure as an institution that we are not over using animals, that interaction is limited.

Grants

- A. NRCS Internship Grant-new opportunity. This summer a student will be working for NRCS through this internship grant. Looking at Crop science students with soil management skills.
- B. NRCS Grant-C2A3-test plots that were discussed, orchard, pollinator plot are placed out by our windmills. Partnering with Pheasants Forever. Meeting with local/State NRCS bi-monthly, and quarterly with national NRCS.
- C. National CIG Grant-conservation innovation grants-state grant was not granted. We have 2 ponds on the farm and would like to do water conservation practices and control field runoff. Both grant applications were unsuccessful, but we will still try to find solutions to make this work. First pond used to be 15 feet deep, it is now about 1 foot deep and the grant project was to clean out the pond. We have been in touch with Marathon County on how to do this and will take this portion out of the grants.

Friday is Don's last day, he is retiring. The farm and NTC are definitely going to miss him. We are working to fill his position. We wish Don well.

Next meeting—April 26th at 12:00 noon.