Agricultural Sciences Advisory Committee
Summary of Advisory Committee Meeting Minutes for NTC Board of Trustees

Date: 12/14/2021

Time: 12:00-1:30 PM

Location: Zoom

Attendees

Industry Members:

- Josh Schmidt-Ag Country
- Sly Krautkramer-Swiderski Equipment Inc.
- Melissa Heise-Swiderski 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. 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).

B. 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 with15 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. 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—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.
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.
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 is 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.