

CONNECTING IN THE GLOBAL MARKETPLACE

Northern Crops Institute

2019 ANNUAL UPDATE

NORTHERN CROPS INSTITUTE

The Northern Crops Institute supports regional agriculture and value-added processing by conducting educational and technical programs that expand and maintain domestic and international markets for northern-grown crops.





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DIRECTOR'S REPORT



Mark Jirik
Director

The past year has been another year of change for the Northern Crops Institute. We continue to evolve with the dynamics of the region we serve and the changing nature of the global marketplace.

From an educational standpoint, NCI conducted a record number of educational short courses and educational sessions throughout the region and abroad. From a technical service standpoint, we continue to see an increase in demand as consumer tastes and preferences change and adapt. We continue to look for ways to help assist value added agriculture in the region fulfilling our mission of expanding markets domestically and abroad, as well as assisting domestic processors. We also hosted a number of special events throughout the region with the hope of sparking interest in potential new market opportunities, as well as celebrate past accomplishments.

Our intent continues to be to utilize the resources we have to continue to advance our mission of supporting regional agriculture and value added processing by conducting educational and

technical programs that expand and maintain domestic and international markets for northern-grown crops.

To fulfill this mission, we continue to look at expanding our educational offerings with focus on markets both large and small. We hope to benefit producers and processors in this region as well as help nourish a hungry world with changing consumer tastes and preferences.

While the work we do in our traditional areas of strength continues, we look to expand it in other areas to ensure that all crops in this region are represented. We also endeavor to grow feed and food markets both domestically and abroad.

In 2019, we reached a record number of participants with courses, trade teams, meetings, programs abroad and technical services. Our intent and plans for 2020 and beyond look to see us continue this growth pattern with the ultimate goal of growing value for our farmers and communities we serve.

NCC CHAIR'S REPORT



Tregg Cronin
NCC Chair

Tregg Cronin, a farmer and rancher from Gettysburg, South Dakota and member of the South Dakota Wheat Commission, was elected as chair of the Northern Crops Council at the reorganizational meeting on June 5th, 2019 in Fargo, ND. Mark Martinson was elected as Vice Chair and Kevin Haas was elected as a new board member.

In September, the Northern Crops Institute met in Elk River, Minnesota at the Oliver Kelley Farm. The site is a beautiful working farm nestled just outside of the Twin Cities and offers a glimpse of the past, present and future of agriculture in the Northern Plains. NCI conducted a “Barley to Beer” course as well as a “Wheat to Bread” course at the location. The NCI meeting also featured an informative presentation from Kermit Nash, a partner at Saul, Ewing, Arnstein & Lehr which focused on the state of value-added processing and investment in the Northern Plains. The

presentation hit home the importance of supporting value-added agriculture in our region in order to retain as much value from the crops we raise as possible.

2020 will be an exciting year for the Northern Crops Institute with more courses planned than ever before. In these uncertain times, education and information can be the best tools a producer has at their disposal. Fortunately, the Northern Crops Institute specializes in both.

The Northern Crops Council, made up of producers, industry representatives, and administrators from the four state region, help guide the path of the Northern Crops Institute and ensure it is carrying out its mission to support regional agriculture and value added processing by conducting educational and technical programs that expand and maintain domestic and international markets for northern-grown crops.



LEADERSHIP BEGINS WHEN WE CHOOSE TO SERVE OTHERS.

2019-2020 NORTHERN CROPS COUNCIL (NCC)

The Northern Crops Council is the governing body for the Northern Crops Institute. They dedicate their time and talent to making sure NCI is focused on our mission and properly utilizing the time and resources of the institute. It's members consist of:

- Tregg Cronin, Chair** | SD Wheat Commission
- Mark Martinson, Vice Chair** | U.S. Durum Growers Association
- Jim Bahm** | ND Wheat Commission
- Adam Carney** | MT Wheat & Barley Committee
- Anthony Chavez** | Buhler Inc.
- Kris Folland** | MN Soybean Research & Promotion Council
- Doug Goehring** | ND Department of Agriculture
- Greg Lardy** | North Dakota State University
- Kevin Haas** | Northern Pulse Growers Association
- Justin Halvorson** | North Dakota Corn Growers Association
- Dave Katzke** | General Mills
- Tony Schneider** | ND Barley Council
- Todd Sinner** | SB&B Foods, Inc.
- John Swanson** | MN Corn Research & Promotion Council
- Vance Taylor** | North Dakota Mill
- Dan Spiekermeier** | ND Soybean Council
- Ben Vig** | ND Oilseed Council
- Chris Wiegert** | Healthy Food Ingredients



DOUG GOEHRING, ND AGRICULTURE COMMISSIONER

"When you look at NCI, they are such a great resource and tool. They help people understand how they can utilize the different grains [grown in our region]."





NCI THANKS OUTGOING NCC MEMBERS FOR THEIR SERVICE

We would like to thank to following outgoing council members for their years of service:

1

GREG KESSEL

Greg Kessel (Belfield, ND) represented the ND Barley Council and served as Chair from 2016-2019.

2

RANDY HINEBAUCH

Randy Hinebauch (Chinook, MT) represented the MT Wheat & Barley Committee.

3

GREG SVENNINGSSEN

Greg Svenningsen (Valley City, ND) represented the ND Wheat Commission.

4

CHRIS WESTERGARD

Chris Westergard (Dagmar, MT) represented the Northern Pulse Growers Association.

EDUCATIONAL COURSES



The Northern Crops Institute offers a variety of courses that unite customers, commodity traders, technical experts, and professors for discussion and education. Some of our 2019 courses included:



PREVENTIVE CONTROLS FOR ANIMAL FOOD

January 22-24, 2019

Individuals completing this course were certified as Preventive Control Qualified Individuals (PCQIs) by the FSPCA, allowing them to construct food safety plans in compliance with FSMA by the FDA.



PASTA PRODUCTION AND TECHNOLOGY

April 30-May 2, 2019

This course introduced participants to the fundamental and applied aspects of pasta production and quality through lectures, laboratory demonstrations and hands-on processing in NCI's pilot-scale pasta processing laboratory. Grain and ingredient quality, specifications and processing variables and their impact on final pasta product quality were presented in detail. The course focused primarily on traditional dry durum-based pasta; however, non-traditional ingredients and fresh pasta were also covered through lectures and demonstrations.



TECHNICAL TRAINING ON RISK MANAGEMENT (PHNOM PENH, CAMBODIA)
May 20, 2019

The Northern Crops Institute in conjunction with the World Initiative for Soy in Human Health (WISHH) conducted a one day technical training on risk management in Phnom Penh, Cambodia. The training covered basic principles of buying soybean meal and other feed ingredients from the United States. Following the one day training, there were one-on-one meetings with feed millers, reviewing their risk plans and strategies.



SOY BASED TEXTURIZED PROTEIN AND MEAT ANALOG
May 21-24, 2019

This course taught participants about the role soy products can play in meat analogs. The participants were a mix of both international and domestic participants, with widely varying industries.



HIGH OLEIC SOYBEAN OIL: USES AND BENEFITS
June 12-13, 2019

Content for this course included the history of High Oleic Soybean Oil and the current status of the industry. There were also opportunities for hands-on evaluation and utilization of the oil as well.

EDUCATIONAL COURSES



PREVENTIVE CONTROLS FOR HUMAN FOOD

June 24-26, 2019

Individuals completing this course were certified as Preventive Control Qualified Individuals (PCQIs) by the FSPCA, allowing them to construct food safety plans in compliance with FSMA by the FDA.



PASTA PRODUCTION FROM MULTIPLE U.S. WHEAT CLASSES

July 15-19, 2019

NCI's Pasta from Multiple Wheat Classes short course introduced participants to the characteristics and quality of the different classes of wheat from the U.S.A, and their use for making pasta. Participants learned through lectures, laboratory demonstrations and hands-on processing in NCI's pilot-scale pasta processing laboratory. Grain and ingredient quality, specifications and processing variables, and their impact on final pasta product quality were covered.



BARLEY TO BEER: A FIELD PERSPECTIVE

July 22-24, 2019

This short course provided participants with information on how to successfully grow high quality malting barley through lectures and tours – including a trip to a farm to see actual barley fields and meet with the producers growing them. The program provided information on botanical and physiological factors in barley growth, grain handling and storage information specific to malting barley, risk management and marketing, and practical advice from barley growers in North Dakota. The program is a collaboration between the Institute of Barley and Malt Sciences (IBMS) at North Dakota State University and the Northern Crops Institute (NCI).



NCI NORTHERN CROPS INSTITUTE
TUNISIAN FEED MANUFACTURING - TRAIN THE TRAINERS PROGRAM
 July 28 - August 7, 2019 | 9 Participants
 Tunisia

U.S. GRAINS COUNCIL CENTER FOR FEED MANUFACTURING - TRAIN THE TRAINERS POULTRY PROGRAM

July 28-August 7, 2019

This training program, in partnership with the U.S. Grains Council and specifically focused on poultry production, combined in-classroom technical trainings with practical hands-on training at an on-site feed mill, which included state-of-the-art feed manufacturing equipment.



NCI NORTHERN CROPS INSTITUTE
NCI-INTSOY
 August 12-16, 2019 | 20 Participants
 Dominican Republic | Ghana | Guatemala | Nicaragua | Sri Lanka | USA

NCI-INTSOY

August 12-16, 2019

A comprehensive view of the soybean industry covered uses for soy in both food and feed. This course provided many entrepreneurial opportunities in soy for international as well as domestic participants.



NCI NORTHERN CROPS INSTITUTE
SOUTH ASIA CONTRACTING FOR WHEAT VALUE WORKSHOP
 August 14-20, 2019 | 7 Participants
 Malaysia | Myanmar | Philippines

U.S. WHEAT ASSOCIATES

SOUTH ASIA CONTRACTING FOR WHEAT VALUE WORKSHOP

August 14-20, 2019

For this course, U.S. Wheat Associates partnered with NCI to provide important training to teams from milling companies from South Asia on topics related to Hard Red Spring Wheat, including supply and demand, logistics, wheat and wheat flour quality. Mr. Roy Chung (USW Bakery Consultant) and Rachel Carlson (NCI Food Scientist) conducted baking trials to compare participant flour samples with commercial flour samples from the U.S.. Group tours included a country grain elevator, shuttle train terminal facility and local farm that produces HRS wheat.

EDUCATIONAL COURSES



USSEC FOOD GRADE SOYBEAN CHINESE PROGRAM August 15-17, 2019

United States Soybean Export Council sponsored a course for a Chinese team of food grade soybean buyers. This course focused on risk management techniques and the role of soy in the food industry, along with hands-on tofu and soymilk production.



FEED MILLING RISK MANAGEMENT PROGRAM August 19-20, 2019

World Initiative for Soy in Human Health with the American Soybean Association brought a team of African soybean buyers to NCI to learn risk management techniques and the importance of soybean quality in feeds.



GRAIN PROCUREMENT MANAGEMENT FOR IMPORTERS September 9-18, 2019

This course provided an excellent overview of the U.S. grain marketing and handling systems. Designed to educate individuals responsible for making purchasing decisions, it focused on the mechanics and risk management tools available. Daily lectures and exercises were held at NCI and the NDSU Commodity Trading Room, with tours of a wheat farm, country elevator, and a shuttle-train loading facility. Participants traveled to Duluth, Minnesota to meet with the Duluth Seaway Port Authority and tour an export grain terminal, and then to Minneapolis to meet with experts in the grain trade at the Minneapolis Grain Exchange, and tour a barge loading facility.



SOYBEAN PROCUREMENT MANAGEMENT FOR IMPORTERS

October 7-11, 2019

This course focused on risk management in the purchase of soybeans in three different tracks: bulk, container, and food grade soybean purchases. The final portion of this course included travel to meet with soy exporters in each respective field.



U.S. GRAINS COUNCIL CENTER FOR FEED MANUFACTURING - TRAIN THE TRAINERS DAIRY PROGRAM

November 18-23, 2019

This training program, in partnership with the U.S. Grains Council and specifically focused on dairy production, combined in-classroom technical trainings with practical hands-on training at an on-site feed mill, which included state-of-the-art feed manufacturing equipment.



BARLEY TO BEER (OLIVER KELLEY FARM)

November 20, 2019

This one-day program helped those inside and outside of agriculture better understand the role of barley in malting and beer production, as well as gain an understanding of barley breeding, barley and malt specifications. This program included lectures, lab demos and local brewery tour.

EDUCATIONAL COURSES



WHEAT TO BREAD (OLIVER KELLEY FARM) November 21, 2019

This one-day program helped those inside and outside of agriculture better understand the steps that wheat travels to become nutritious breads, pastas, and other food products. Participants were introduced to wheat breeding, crop production, milling and baking, and basic information on how the protein, starch and other components impact end-use quality. The program included lectures, lab demos, and hands-on bread making for all attending.



HIGH OLEIC SOYBEAN OIL: USES AND BENEFITS December 3-4, 2019

Content for this course included the history of High Oleic Soybean Oil and the current status of the industry. There were also opportunities for hands-on evaluation and utilization of the oil as well.



GRAIN INDUSTRY EMERGING LEADER PROGRAM PART 1: MERCHANDISING TO LEADERSHIP December 17-19, 2019

The first of several trainings offered for grain elevator employees preparing for management roles. This training specifically focused on grain merchandising techniques.

2020 COURSE SCHEDULE

*More courses added throughout the year.

1 PREVENTIVE CONTROLS FOR HUMAN FOOD
February 25-27

9 NCI-INTSOY
July 13-17

2 NCI EXPORT TOUR OF PACIFIC NORTHWEST
March 18-20

10 CONTRACTING FOR WHEAT VALUE
August 12-14

3 GRAIN INDUSTRY EMERGING LEADER PT. 2
March 24-26

11 FULL FAT SOYBEAN IN ANIMAL FOOD
August 3-7

4 WHEAT TO BREAD
April 2

12 WHEAT PROCUREMENT MANAGEMENT FOR IMPORTERS
September 14-24

5 BARLEY TO BEER
April 3

13 SOYBEAN/CORN PROCUREMENT MANAGEMENT FOR IMPORTERS
September 28-October 2

6 PASTA PRODUCTION AND TECHNOLOGY
April 28-30

14 BARLEY AND MALT QUALITY
October 5-8

7 PLANT-BASED TEXTURIZED PROTEIN & MEAT ALTERNATIVES
May 19-21

15 FOOD-GRADE SOYBEAN PROCUREMENT MANAGEMENT FOR IMPORTERS
October 12-16

8 PREVENTIVE CONTROLS FOR ANIMAL FOOD
June 9-11

16 GRAIN INDUSTRY EMERGING LEADER PT. 1
December 15-17

CONNECTING IN THE GLOBAL MARKETPLACE

The Northern Crops Institute is an international meeting and learning center that unites customers, commodity traders, technical experts, and professors for discussion and education.

The Northern Crops Institute is a globally recognized facility. In the past year, we had the privilege of educating 274 participants from 37 different countries through our courses and programs. It is through these courses and programs that we work to expand and maintain domestic and international markets for northern-grown crops.

During last year's courses and programs, participants had the opportunity to tour farms, engage in hands-on activities and demonstrations, attend a variety of lectures from university professors and technical experts in the industry and much more.

Additionally, the Northern Crops Institute offers custom courses

and programs to suit the needs of businesses and organizations and focus on specific practices and aspects. During the last year we carried out a variety of these custom courses and programs.

At the Northern Crops Institute, we believe that crops grown in the northern-tier of the U.S. are valued by perceptive worldwide customers and will stand the test of quality against competitors. We also believe that adapting to new trends and technologies is necessary to remaining vital to the agricultural industry. Our courses and programs allow us to truly connect in the global marketplace.



COURSE PARTICIPANT

“We learned a lot and will come again to gain more knowledge. Thanks to NCI for providing us the best facilities to learn.”



DID YOU KNOW? Participants from over 133 countries have attended courses at the Northern Crops Institute since 1983.

274

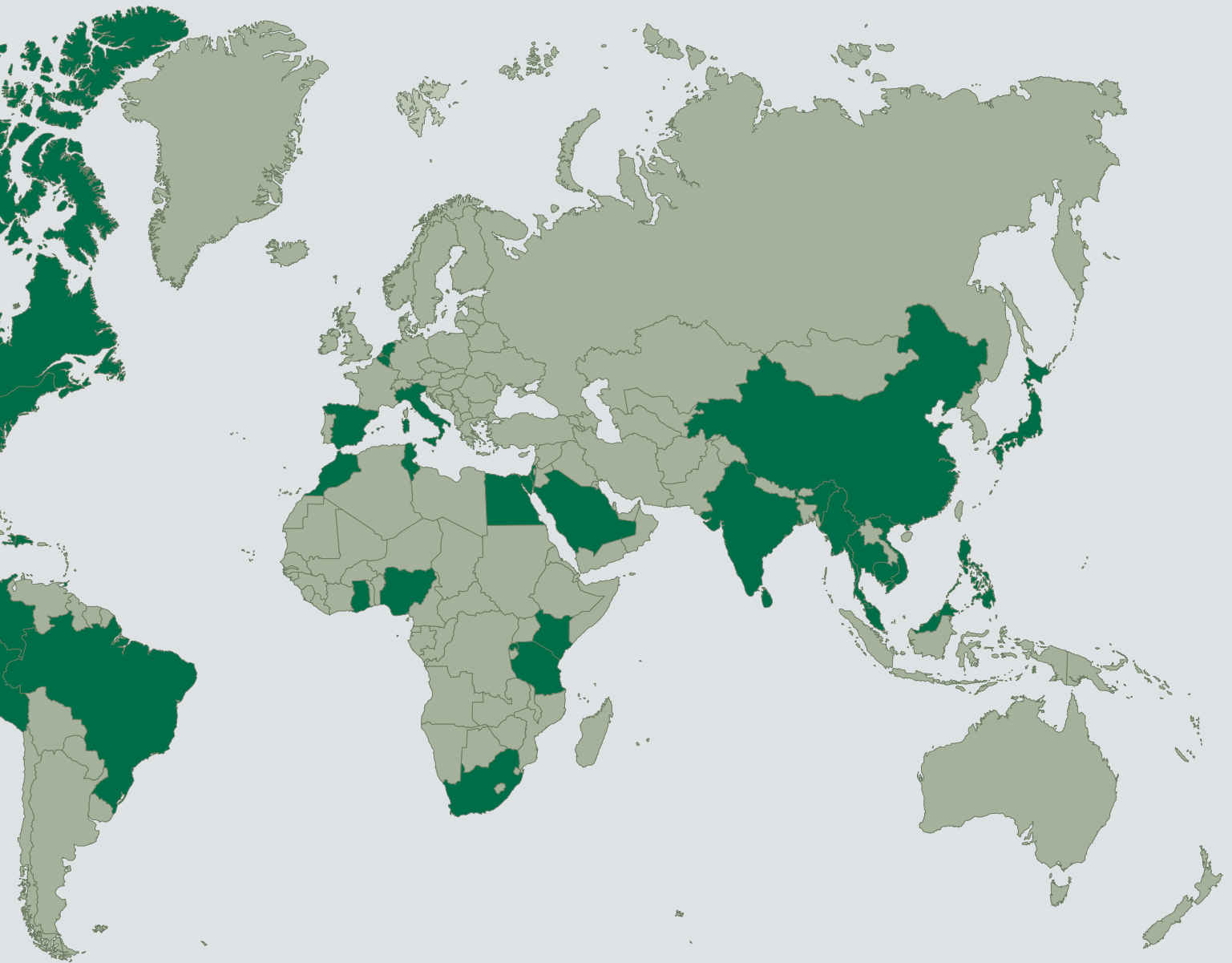
PARTICIPANTS

from

37

COUNTRIES

attended courses at
the NCI in 2019.



■ Countries participants were from in 2019.

GLOBAL OUTREACH

The Northern Crops Institute leads the effort in Minnesota, Montana, North Dakota and South Dakota to establish northern-grown U.S. crops as the world's choice for food, feed, and value-added applications. By engaging in the global marketplace, we work hard to foster relationships with U.S. and International partners, producers and customers; one of the many principles that guide our work.

WHERE WAS NCI IN 2019?



NEW ORLEANS, LA | JANUARY 14-18

Brian Sorenson attended the Wheat Foods Council Winter Meeting, which was a great opportunity to interact with many different people from different aspects of the wheat industry from production to milling and baking.



FORT RANSOM, ND | JANUARY 16

Jena Bjertness and Kim Koch attended the North Dakota Livestock Alliance Annual Meeting, which included speakers and panels relevant to the livestock industry in North Dakota, along with a tour of Qual Dairy in Lisbon, ND.



- PANAMA CITY, PANAMA OCTOBER 28
- SAN JOSE, COSTA RICA OCTOBER 30
- SAN PEDRO SULA, HONDURAS NOVEMBER 1
- GUATEMALA CITY, GUATEMALA NOVEMBER 4
- SANTIAGO, DOMINICAN REPUBLIC NOVEMBER 6
- SANTO DOMINGO, DOMINICAN REPUBLIC NOVEMBER 7-8
- SEOUL, SOUTH KOREA NOVEMBER 11
- TAIPEI, TAIWAN NOVEMBER 13
- CHENGDU, CHINA NOVEMBER 15
- TOKYO, JAPAN NOVEMBER 18

NCI Assists With U.S. Wheat Associates Crop Quality Tour

During the months of October and November, program manager, Brian Sorenson and business development manager, Dr. Neil Doty assisted the U.S. Wheat Associates (USW) with their annual Crop Quality Tour.

Dr. Neil Doty traveled on behalf of the USW and Northern Hard Wheat Farmers to Central America to report on the 2019 hard red spring wheat and durum wheat crops grown in the U.S.. Presentations were made in Panama, Costa Rica, Honduras, Guatemala, and the Dominican Republic.

Dr. Doty's purpose of travel was to make two presentations to promote the increased purchase of U.S. hard red spring wheat presenting the 2019 Hard Red Spring Wheat Crop Quality Report and the 2019 Durum Wheat Crop Quality Report. Dr. Doty presented the reports so that Central American wheat

buyers, millers, and processors would gain an accurate understanding of the crop quality features of the 2019 U.S. hard red spring wheat and durum crops.

Brian Sorenson traveled on behalf of the USW to Northeast Asia to report on the 2019 hard red winter wheat crops grown in the U.S.. Presentations were made in South Korea, Taiwan, China and Japan.

The purpose of this important and substantial effort by USW was to provide timely and accurate information on the recently harvested U.S. wheat crop to wheat buyers and millers around the world, so they can make informed decisions on their wheat purchases through the coming year. Hundreds of decision makers were able to hear about the quality and supply, and ask questions that impact their businesses, as well as their customers.



MANKATO, MN | JANUARY 23-24

Jena Bjertness attended the Minnesota Ag Expo, which provided her an opportunity to sit in on the Northern Soy Marketing meeting that took place there.



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GLOBAL OUTREACH



CARTAGENA, COLOMBIA | FEBRUARY 11-13

Mark Jirik attended the USGC International Marketing Conference, which allowed him to help continue building relationships with USGC and their international staff, as well as discuss opportunities for collaboration in the coming years.



ATLANTA, GA | FEBRUARY 12-14

Kim Koch attended the International Poultry and Processing Expo, which allowed him to engage with those in the pet food industry, as well as commodity partners.

CONNECTING IN THE G



KANSAS CITY, MO | FEBRUARY 20-21

Brian Sorenson attended the Wheat Quality Council Annual Meeting, which was a great opportunity to hear from wheat breeders from the universities and private companies on their new varieties and the factors that drive their breeding efforts.



ORLANDO, FL | FEBRUARY 26-MARCH 2

Jena Bjertness attended the Commodity Classic, which included networking with NCI's national partners and hearing Secretary of Agriculture Sonny Perdue speak about the state of agriculture in the U.S.



WASHINGTON, D.C. | FEBRUARY 12-15

Brian Sorenson attended the U.S. Wheat Associates Winter Board of Directors Meeting, which was important for NCI to connect with the leadership of USW to discuss the upcoming needs for programming in the coming year and future.



TUNIS, TUNISIA | FEBRUARY 16-23

Kim Koch visited the U.S. Grains Council Tunis Office to review the Institute National Agriculture Tunisia (INAT) Training Center progress as well as visit dairy cooperatives.

GLOBAL MARKETPLACE



NAPLES, FL | MARCH 10-13

Brian Sorenson attended the National Pasta Association Annual Meeting, which brought together the ownership and upper management of many of the nations top pasta manufacturers, equipment manufacturers, ingredient suppliers, durum producers and many others involved in the pasta industry.



ST. LOUIS PARK, MN | MARCH 27-28

Jena Bjertness, Neit Doty and Kim Koch attended the New Uses Forum, sponsored by AURI, which showcased food innovation in Minnesota on a smaller scale.

GLOBAL OUTREACH



CHANGSHA, CHINA | APRIL 2-4

Dr. Zach Lui attended and presented at the Annual International Soyfood Processing Technology and Equipment Exhibition, during which the NDTO staff introduced the state's food grade, identity preserved soybeans to Chinese food-soybean buyers.



JIANGXI, CHINA | APRIL 5-7

With support from the North Dakota Soybean Council, Dr. Zach Lui visited several soy food companies in Jiangxi, China.

CONNECTING IN THE G



ST. LOUIS, MO | MAY 5-8

Kim Koch attended the American Oil Chemists Society Annual Meeting & expo, which included networking with industry and commodity partners, as well as engage with attendees.



MINNEAPOLIS, MN | MAY 14-16

Kim Koch attended the Distillers Grains Symposium, which included networking with industry and commodity partners.



AUSTIN, TX | APRIL 17-19

Kim Koch presented a FSMA update, which included the current status of inspections and PCQI trainings, to the Cereals and Grains Milling and Baking Division.



KANSAS CITY, MO | APRIL 29-MAY 2

Kim Koch attended the Petfood Forum, which included assisting with the Northern Pulse Producers booth and engaging with attendees.

GLOBAL MARKETPLACE



NANJING, CHINA | MAY 27-28

Dr. Zach Lui attended and presented at the U.S. Soybean Export Council Soy Food Workshop, which highlighted how soybeans affect soy food quality and production efficiency.



CANCUN, MEXICO | JUNE 2-4

Brian Sorenson attended the U.S. Wheat Associates Mexico Buyers Conference, which was intended for buyers in Mexico to hear from U.S. wheat producers, wheat exporters, trade and policy experts.

GLOBAL OUTREACH



MINNEAPOLIS, MN | JUNE 25-26

Brian Sorenson and Mark Jirik attended the Wheat Foods Council Annual Meeting, which they outlined NCI's efforts in wheat and the programming NCI is conducting to support the wheat foods industry.



FARGO, ND | JULY 17-18

Jena Bjertness attended the United Soybean Board meetings, which provided a good opportunity to see the board present their priorities and speak with USSEC about their goals as well.

CONNECTING IN THE G



DENVER, CO | NOVEMBER 3-5

Mark Jirik, Kim Koch, Zach Lui and Rachel Carlson attended the annual Cereals and Grains Conference, which allowed them to network with past, present and future customers.



TOKYO, JAPAN | NOVEMBER 19

Brian Sorenson attended the U.S. Wheat Associates Japan Buyers Conference, which brought together officials from Japan's MAFF, milling companies and baking companies, to hear about issues and opportunities facing Japan regarding wheat purchases from the U.S. and around the world.



BARCELONA, SPAIN | AUGUST 26-28

Brian Sorenson attended the U.S. Wheat Associates World Staff Conference, which brought together nearly all of the leadership and staff from the offices in Virginia and Portland, as well as all of the various countries in which USW has offices and representatives.



BANGALORE, INDIA | OCTOBER 11-18

Kim Koch instructed 25 industry professionals during the FSPCA Animal Food Lead Instructor Course.

GLOBAL MARKETPLACE



ST. LOUIS, MO | DECEMBER 10

Brian Sorenson attended the USSEC International Marketing Dialogue Meeting, which reviewed the issues facing the soybean market and the efforts in which USSEC is currently involved. He also discussed how to focus programming in the coming years to increase sales of soybeans around the world.



GRAND FORKS, ND | DECEMBER 12

Brian Sorenson attended the Prairie Grains Conference, which NCI was asked to provide a very timely discussion on the Falling Number test and demonstrate the procedure for producers to better understand the purpose of the test and to see how it is conducted.

RED RIVER VALLEY JOINS TOGETHER TO CELEBRATE LOCAL AGRICULTURE

Community without borders. Those are the three words that helped shape and develop an event for the local agriculture community like never before.

Northern Crops Institute (NCI) in collaboration with Minnesota Wheat hosted the first ever Red River Valley Ag Leadership Celebration on July 16th in Mentor, Minnesota at the Maple Lake Pavilion. The event, a celebration of value added processing and innovation in the region, opened a door for agriculturalists from both sides of the Red River to come together for an evening of networking, live music, delicious food, demonstrations, and guest speakers.

“We saw an opportunity for there to be a day dedicated to celebrating our local producers, and we took it,” says Mark Jirik, Director at NCI. Jirik continued by saying, “We wanted this to be a day where producers can get together, despite their differences of where they come from or the factors that their operations have faced in the past year, and truly connect and unite with their shared passion for agriculture.”

Farmers in the Red River Valley have faced many struggles in the recent years with drastic weather changes and other factors within their production. However, for this one day, concerns about weather, yield predictions, and other worries were left behind as farmers from across the valley instead united on topics such as

the importance of volunteering, collaboration with others, and the efforts being made to improve the agriculture industry.

The event received an abundant amount of support. Jirik says, “People and businesses see this as a worthwhile thing to invest in. With the sponsorships we have received, we have begun to set our sights on this being an annual event.” Not only did the celebration receive financial support, but “we did not know how many to expect to attend the event, and were certainly delighted to have over 225 guests present,” stated Jirik. “Our attendees have also given us wonderful feedback to see how we can make this event grow and improve in the years to come.” NCI has already begun to brainstorm where the event will be next year, planning for it to be in southeast North Dakota.

“It’s just what we needed.” North Dakota farmer and guest speaker at the event, Doyle Lentz, says. He continues with “Not only is it a place for us to unite and support each other, it is an event that you leave feeling more inspired and filled with hope than before. Now, more than ever, we need to celebrate and come together as industry, and this came at the perfect time.”



A BIG THANK YOU TO THE SUMMER INTERNS WHO HELPED WITH THE CELEBRATION.



PRESENTATION BY MINNESOTA FFA STATE OFFICER, BRITTON FUGELSETH.



ATTENDEES DIDN'T LEAVE THE CELEBRATION HUNGRY.

FEATURED TECHNICAL EQUIPMENT

The Northern Crops Institute is equipped with a variety of analytical and technical equipment used to process, develop and evaluate northern-grown crops. Two featured pieces of equipment include:

CHOPIN TECHNOLOGIES ALVEOGRAPH

The Alveograph determines the gluten strength of hard red spring wheat flour by measuring the force required to blow and break a bubble of dough. The machine measures both the resistance to stretching and the final size of the bubble. Stronger dough requires more force to blow and break the bubble, while a bigger bubble means the dough has higher extensibility. The process is meant to reproduce the formation of dough when it is subjected to carbon dioxide during fermentation. It is a common test in Europe and parts of Latin America, but becoming more of interest in the US.



CHOPIN TECHNOLOGIES ALVEOGRAPH

MONFORTS COLD PRESS

The cold press system is designed to press oil from various oilseed crops, including soybeans, canola, flax, sunflowers, and hemp; these oils can also be used to make a wide range of products. The press allows the user to get a first (or raw extraction) that can determine oil yield or used for analytical tests. This piece of equipment comes with different screws and sieves that work for the various crops and also has option to add heat to the press if desired.



MONFORTS COLD PRESS



**NEED TO TEST AN INGREDIENT OR GET
ASSISTANCE WITH PRODUCT OR PROCESS
DEVELOPMENT?**

We're here for you.

50+

DID YOU KNOW?

The Northern Crops Institute has over 50 pasta dies. Now that's a lot of noodle shapes.

PROCESSING AND PRODUCT DEVELOPMENT

If you need to test an ingredient or get assistance with product or process development, then pilot-scale processing at the Northern Crops Institute might be your solution.

WE'RE HERE FOR YOU.

NCI's technical staff has worked with food processors and ingredient suppliers, large to small, established to start-up, from all over the globe.

WE'VE GOT EXPERIENCE.

Our technical staff has experience in extrusion, post-extrusion, pasta manufacturing, milling and baking. We can assist in developing fresh/pre-cooked/frozen pasta, noodles, couscous, expanded snacks, texturized foods, imitation extruded foods, ready-to-eat cereals (expanded and flaked), expanded snack foods and industrial products from food grade materials. Our staff will also travel worldwide to assist in the uses of northern-grown crops.

WHAT WE OFFER.

We offer cost effective service fees, confidentiality, complete services including purchase of ingredients (specialty ingredients are supplied by client - other ingredients provided at cost) and laboratory for proprietary use (upon approval).

TO LEARN MORE OR CONTACT US WITH QUESTIONS, VISIT:

WWW.NORTHERN-CROPS.COM/PRODUCTDEVELOPMENT

OUR TEAM

We're here to assist you.



TECHNICAL TEAM

David Boehm | Technical Manager
Kim Koch, Ph.D. | Feed Production Center Manager
Neil C. Doty, Ph.D. | Business Development Manager
Rilie Morgan | Process Project Manager
Rachel Carlson | Food Scientist
Minwei Xu | Food Scientist
Mary Niehaus | Food Technologist
Nick Sinner | Processing Technologist

EDUCATIONAL PROGRAM TEAM

Brian Sorenson | Program Manager
Jena Bjertness | Program Manager

COMMUNICATIONS TEAM

Grant Christian | Communications & Marketing Manager

ADMINISTRATIVE TEAM

Janel Brooks | Account Technician
Lynn Stadum | Administrative Assistant

EXECUTIVE TEAM

Mark Jirik | Director

FOLLOW US ON SOCIAL MEDIA!



@NorthernCropsInstitute



@NCI_NDSU



Northern Crops Institute



Northern Crops Institute

THANK YOU'S

THANK YOU NORTHERN CROPS INSTITUTE SUPPORTERS

Thank you to all who supported NCI programs and activities in 2019. An additional thanks to our:

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