

Northern Crops Institute Annual Update

2009

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.



Ribbon Cutting Festivities for Pilot Swing Mill, November 24, 2009



Connecting in the Global Marketplace



Director's Corner

Brian Sorenson

Director, Northern Crops Institute

I am excited about the achievements of the NCI this past year. We educated over 250 course participants from over 36 countries at our facilities in Fargo, plus we interacted with



Sorenson

hundreds more through our outreach efforts in the U.S. and internationally. Our staff worked extremely hard to make this a very successful year and I am very proud of them all. With our small staff, NCI relies on the efforts of many others to make our programs possible. Please take some time to look through the list of names on page 3.

For many reasons, 2009 has been a challenging year for regional agriculture. The late spring and cool growing season pushed back planting and harvesting of essentially all of our key crops and impacted yield and quality – good and bad. Now, more than ever, it is important that NCI continues to look for new opportunities for educational programs and technical services to help buyers and processors of agricultural commodities learn about our northern grown crops and the value they offer. This past year, we added new analytical and processing equipment to increase our technical capabilities. One example of our efforts is the completion of the pilot mill renovation project, celebrated with a ribbon cutting celebration on Nov. 24.

On a final note, those closely involved with NCI and regional agriculture are already aware of the loss of Dan Wiltse, as stated in the article to the right. He represented the North Dakota Oilseed Council on the Northern Crops Council, served two years as NCC Vice Chair, and was elected in June as the 18th NCC Chair. His sudden passing is a tragic loss for his wife and family, and it has saddened those who knew him. A card we received from Dan's family contains a picture of Dan along with a great message entitled, "A Life Well Lived." We will all remember Dan and I hope that those words help us focus on the important things of life as we face the challenges ahead.

NCC Chair Dan Wiltse Dies in Farm Accident

Dear Friends,

By now, many of you may have heard that Dan Wiltse, our friend and Chair of the Northern Crops Council from



Wiltse

June-October 2009, was killed in a farm accident on Thursday, October 22. We all mourn the loss of Dan—a great person, family man, and friend to so many. He devoted his life to helping and serving others, and our thoughts and prayers go out to Dan's wife and family as they try to cope with this tragedy. I hope all of you will keep Dan's family and friends in your thoughts and prayers.

Brian Sorenson, NCI Director

A Note from the New NCC Chair

David Clough, Fessenden, N.D.

North Dakota Wheat Commission

(See election story on page 5)

The 2009 crop year has been very challenging for the farmers in the NCI region, with the late spring, cool summer and wet fall. Many farmers are still trying to get the crops off the fields. With the tragic death of Dan Wiltse, we are all reminded that farming is one of the most dangerous occupations.



Clough

NCI has had another great year of short courses. Even with the world economy in a slump, people realize the value of the courses offered at NCI and continue to attend. I had the opportunity to meet with one of the largest classes for the Grain Procurement Management for Importers short course this fall. In talking with some of the participants, who were mostly young and enthusiastic, I could see that the future of the grain trade is bright and I think they will help promote NCI courses in the future.

The new pilot-scale flour mill provides a great opportunity for Northern Crops Institute to move forward in the future. From being able to mill the HRS wheat for the OVA (Overseas Variety Analysis) program instead of sending samples out of the region, to doing test milling on new products for large companies, the swing mill will be an asset to the region. With this change and others, NCI is moving forward and will continue to educate the USA and the world about the great crops grown in the northern 4-state region.

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Thank You to Our 2009 Cooperators and Speakers

North Dakota State University Agribusiness & Applied Economics William Wilson, Ph.D. Agriculture and Biosystems Engineering Kenneth Hellevang, Ph.D. Animal & Range Sciences Kurt Johnsen Greg Lardy, Ph.D. Robert Maddock, Ph.D. Todd Molden Bryan Neville J.W. Schroeder, Ph.D. Research Extension Center Vern Anderson, Ph.D. Chris Schauer, Ph.D. Cereal and Food Sciences Clifford Hall, Ph.D. Plant Sciences Elias Elias, Ph.D. Rich Horsley, Ph.D. Hans Kandel, Ph.D. Frank Manthey, Ph.D. Mohamed Mergoum, Ph.D. Paul Schwarz, Ph.D. Senay Simsek, Ph.D. Stan Stancyk	Circle K Feed and Grain, Inc. Glen Ullin, ND Clyde Krebs Columbia Grain Minneapolis, MN Ron DeJongh ConAgra Foods, Omaha, NE Todd Dick Dakota Feeds, LLC, Huron, SD Jarvis Haugeberg Dakota Growers Pasta Company Carrington, ND Jason Jarrett New Hope, MN Radwan Ibrahim, Ph.D. Dakota Pride Cooperative Jamestown, ND Leland (Judge) Barth Dakota Specialty Milling, Fargo, ND Robert Meyer Daryl Bashor DeMari Pasta Dies Dracuti, MA Gabriele Cannata Elliott Brothers, Galesburg, ND Kevin Elliott Faribault Foods, Cokato, MN Jim Nelson FC Stone, St. Louis Park, MN David Bullock, Ph.D. Feed Management Systems Brooklyn Center, MN Duey Yliniemi Joel Dekkers Lori Harner Five Star Dairy, Milnor, ND Anthony Schmidt Frontier Futures, Minneapolis, MN Austin Damiani GIPSA/FGIS, Superior, WI Art Boline Howe Farm, Casselton, ND Jim Howe Hunter Grain Co., Hunter, ND Paul Skarnagel Randy Readell Int'l Nutrition Consulting, Inc. Sioux Falls, SD Darwin Britzman Lab Synergy, Goshen, NY Jason Romberg Minneapolis Grain Exchange Mark Bagan Ray Erickson Roger Hipwell Rita Maloney MN Soybean Research & Promotion Council The Money Farm Casselton, ND Mike Krueger Montana State University National Grain and Feed Association North Dakota Barley Council North Dakota Corn Utilization Council	North Dakota Grain Inspection Service, Fargo, ND Darcy Rasmussen North Dakota Soybean Council North Dakota State Mill and Elevator Grand Forks, ND Robert Sombke Vance Taylor North Dakota Wheat Commission Neal Fisher Erica Olson Jim Peterson Perten Instruments, Springfield, IL Terry Allen Philadelphia Macaroni Company Grand Forks, ND Leo Nist Bill Stabert Poet Nutrition, Sioux Falls, SD David Bertram Matt Gibson Mark Gieseemann, Ph.D. Eric Heismeyer Progressive Ag, Fargo, ND Ray Grabanski Qual Dairy, Lisbon, ND Alan Qual Scafco Grains Systems, Spokane, WA Larry Prager Seaway Port Authority of Duluth Ron Johnson Adolph Ojard Adele Yorde South Dakota Corn Utilization Council South Dakota Soy Processors Volga, SD Rodney Christianson	South Dakota State University Animal and Range Science Bob Thaler, Ph.D. Dairy Science Department Alvaro Garcia, Ph.D. Arnold Hippen, Ph.D. Ken Kalscheur, Ph.D. Vikram Mistry, Ph.D. David Schingoethe, Ph.D. South Dakota Wheat Commission TE Ibberson Company, Hopkins, MN Gerry Leukam Tharaldson Ethanol Brad Kjar Keith Finney Trading Technologies, Chicago, IL Tanya Hart Coakley Brian McLaughlin Turner County Dairy Parker, SD Steve Bossman University of Minnesota Department of Animal Science Sally Noll, Ph.D. Extension Service, Mankato, MN Mark Whitney, Ph.D. USA Dry Pea and Lentil Council USDA/ARS, Brookings, SD Kurt Rosentrater, Ph.D. U.S. Grains Council U.S. Soybean Export Council U.S. Wheat Associates Steve Wirsching Valero, Marion, SD Ken Hattori WCCO Belting Inc., Wahpeton, ND Tom Shorma
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Thank You to Our 2008-2009 Funding Partners

Minnesota Department of Agriculture
Minnesota Soybean Research and Promotion Council
Minnesota Wheat Research and Promotion Council
Montana Wheat and Barley Committee
National Sunflower Association
State of North Dakota
North Dakota Barley Council
North Dakota Corn Utilization Council
North Dakota Oilseed Council
North Dakota Soybean Council
North Dakota Wheat Commission
Northharvest Bean Growers
Northern Pulse Growers Association
State of South Dakota
South Dakota Wheat Commission
USA Dry Pea and Lentil Council
U.S. Grains Council
U.S. Soybean Export Council
U.S. Wheat Associates

Leadership



2009-2010 Northern Crops Council. Left to right, Front row: Doug Goehring; D.C. Coston; Claude Richard; Karolyn Zurn; NCI Director Brian Sorenson; Second row: Bob Majkrzak; Vance Taylor; René Steiner; Doyle Lentz; Third row: Laird Larson; Kevin Skunes; Mark Jossund; Ernie Hoffert; Fourth row: Ryan Brooks; David Clough; Arlo Skari. (Not pictured: NDSU Pres. Richard Hanson and Bob Sinner.)

2009-2010 Northern Crops Council

David Clough, Chair
Fessenden, ND
ND Wheat Commission

Ryan Brooks
Bowman, ND
Northern Pulse Growers

Richard Hanson, Ph.D.
Interim President
North Dakota State University

D.C. Coston, Ph.D.
(NDSU President's Designee)
Vice President for Agriculture
North Dakota State University

Doug Goehring
Commissioner of Agriculture
ND Department of Agriculture

Ernie Hoffert
Carrington, ND
AmeriFlax

Mark Jossund
Moorhead, MN
MN Wheat Research and
Promotion Council

Laird Larson, Past Chair
Clark, SD
SD Wheat Commission

Doyle Lentz
Rolla, ND
ND Barley Council

Robert Majkrzak, Vice Chair
Fargo, ND
Red River Commodities Inc.

Claude Richard
Fargo, ND
ND Soybean Council

Robert Sinner
Casselton, ND
SB&B Foods Inc.

Arlo Skari
Chester, MT
MT Wheat & Barley Comm.

Kevin Skunes
Arthur, ND
ND Corn Utilization Council

René Steiner
Plymouth, MN
Buhler Inc.

Vance Taylor
Grand Forks, ND
North Dakota Mill

Karolyn Zurn
Callaway, MN
MN Soybean Growers Assn.

David Clough Succeeds Dan Wiltse as Northern Crops Council Chair

Sorenson Thanks Larson for Leadership in Mill Project

David Clough, North Dakota Wheat Commission, was elected the new chair of the Northern Crops Council (NCC). The election was held at the November 24 NCC meeting.

Clough succeeds **Dan Wiltse**, who died in a tragic farm accident on October 22. Wiltse, a producer from Lisbon, N.D., was elected Chair of the Northern Crops Council in June. Wiltse represented the North Dakota Oilseed Council.

Clough, a producer from Fessenden, N.D., was elected NCC vice chair in June. He began his first three-year term on the NCC in 2007.

Robert Majkrzak, Red River Commodities Inc., was elected vice chair. Majkrzak joined the NCC in 2007.

Laird Larson, a producer from Clark, S.D., retired in June as chair after two years of service, and will continue on the NCC as past chair. He represents the South Dakota Wheat Commission.

NCI Director **Brian Sorenson** expressed his thanks to Larson by saying, "We appreciate the great leadership that Laird provided as chair of the NCC over the past two years, and we are grateful for his continued insight and support in his new role as past chair of the NCC. Laird's leadership is evident in the advancement of the project to reconfigure the NCI pilot durum mill into a dual purpose ("swing") mill. He helped identify the needs of our region for this capability and worked hard to secure funding for the project."

Karolyn Zurn, a producer from Callaway, Minn., joined the Council in June. She represents the Minnesota Soybean Growers Association. **Claude Richard**, a producer from Fargo, begins his second three-year term in the permanent NCC seat held by the North Dakota Soybean Council.



Laird Larson, (center) presents a gift check from the South Dakota Wheat Commission to NCI Director Brian Sorenson. David Clough, newly elected NCC Chair, is on the right.



NCI Director Brian Sorenson (left) thanks Mark Askegaard (center) and Laird Larson (right) for their years of service to the Northern Crops Council. Larson served as NCC chair from 2007-2009 and will continue on the NCC. Askegaard served six years on the NCC and is now a member of the NCI's Industry Advisory Board.

2009-2010 Industry Advisory Board

NCI's Industry Advisory Board advises NCI staff on educational programming and technical services. The board draws its members from the agricultural supply and processing industry and the grain trade in Minnesota, Montana, North Dakota, South Dakota and the region.

- **John McLean**, chair
Cargill
- **Mark Askegaard**
Askegaard Organic Farm
- **Eric Bartsch**
United Pulse Trading
- **David Berg**
American Crystal Sugar
- **Darwin Britzman**
Int'l Nutrition Consulting
- **Rodney Christianson**
SD Soybean Processors, Inc.
- **Ron DeJongh**
Columbia Grain
- **Joel Dick**
Dakota Specialty Milling
- **Mark Dillon**
Golden Growers Coop.
- **Timothy Dodd**
Dakota Growers Pasta
- **Carrol Duerr**
Colfax Elevator
- **Tim Egeland**
Dahlgren & Company Inc.
- **Gordon Gingras**
Evonik
- **Mike Gray**
Kellogg's
- **Greg Johnson**
Premier Pulses International
- **Brad Kjar**
Tharaldson Ethanol
- **Jon Long**
BNSF Railway Inc.
- **Ray Lottie**
General Mills (retired)
- **Robert Majkrzak**
Red River Commodities
- **Dave Polries**
Northern Pulse Growers
- **Jay Romsa**
General Mills
- **Robert Sinner**
SB&B Foods
- **Travis Sitter**
Hesco Inc.
- **René Steiner**
Buhler Inc.
- **Mike Stevens**
Busch Agricultural Resources
- **Tom Streifel**
Highwater Ethanol
- **Mark Stutrud**
Summit Brewing Company
- **Vance Taylor**
North Dakota Mill
- **Jennifer Tesch**
SK Food International
- **Ken Ulbrich**
Bay State Milling
- **Kimberly Vachal**
Upper Great Plains
Transportation Institute

Seventeen Nations at NCI's Grain Procurement Management Course

Japan, Philippines, Korea, Mexico, Italy, Indonesia, Colombia, China, India, Jordan, Netherlands, Malaysia, Poland, Romania, Singapore, Canada, and St. Vincent • September 21-30, 2009



Grain buyers attending the course represent large and small food processing, feed manufacturing, and trading companies that import and trade HRS and durum wheat, corn, soybeans, barley and other commodities.

"Participants in the annual Grain Procurement course come to NCI to learn about purchasing tools that will help them navigate through unpredictable grain and commodities markets," says Brian Sorenson, NCI Director. "One of our main objectives for this course is to help our customers understand the markets and how to purchase grain, so that they will be long-term customers of U.S. grains."



Crabtree

Thirty-nine grain buyers from 17 nations attended the 2009 short course. U.S. Wheat Associates and U.S. Grains Council sponsored several participants.

John Crabtree, NCI Assistant Director, coordinates the annual course.



Wilson

Dr. Bill Wilson, NDSU professor of agribusiness and applied economics, is the lead lecturer for the course.

"In Asia, and in China particularly, the people who are selected to come to this course often have a very basic understanding about how to use the futures market, and even with the cash market, how to monitor and analyze it," says Matt Weimar, Regional Vice President, U.S. Wheat Associates, Hong Kong,

who accompanied several Chinese participants to the course.

"NCI's course is very comprehensive and develops technical aspects. This year we are getting more interest in HRS wheat. In fact, I understand from one of the participants that they made a small, 35,000 metric ton new crop purchase for December delivery. Protein is a concern, but they actually targeted a lower protein level, 12-13%, to be able to blend for Asian products."

"China has an artificially high price because they are trying to subsidize producers and use the market by setting minimum values for wheat in different classes and varieties. Spring wheat and soft white have recently become competitive with new crop prices. We have inquiries about hard red spring and hard red winter wheat, so there's lot of interest," Weimar concludes.

Joe O'Brien, Regional Director, U. S. Grains Council (USGC), Jordan, accompanied two participants from India, who were sponsored by USGC.

"U.S. Grains Council has been active in India for a number of years," says O'Brien. "However, many buyers lack the knowledge about how to import or how to use financial instruments like options or futures in their grain purchasing. We regard this course as a chance to educate them on how to purchase U.S. commodities and how to deal with the markets."



The class is divided into small groups to apply what they have learned during mock trading games. Each group receives a scenario that they must analyze and then decide how to proceed.

“India is a major producer of food grains for themselves, especially wheat and rice. They maintain significant stocks that would normally see them through any severe weather catastrophes like droughts or floods. However, we feel at some future point, India’s demand will outstrip its local supply. When that occurs, we want them to be ready to import U.S. commodities,” O’Brien concludes.

Visiting farms in the region to see the crops in the field is an important segment of the course. During the first week of the course, the group toured the Hunter (N.D.) Grain Company elevator with Paul Skarnagel and the Jim Howe farm near Casselton, N.D.

“The grain trade has expressed concerns this year about the status of the grain crops, particularly HRS wheat. Because of too much moisture and cool conditions, farmers planted their crops very late and they developed very slowly. Some unseasonably warm fall weather helped finish many late season crops in our region,” Sorenson concluded.

At the end of the first week, course participants traveled to Duluth, Minn., where they toured the Duluth Seaway Port Authority with Executive Director Adolph

Ojard, and the CHS Export Grain Terminal with Supt. Dick Carlson.

At the Minneapolis Grain Exchange (MGE) during the course’s second week, short course participants met with grain traders, who discussed commercial grain export trading practices. Roger Hipwell, MGE Vice President for Business Development, explained the MGE’s historic open-outcry trading floor. Randy Bailey hosted a tour of the CHS Cash Marketing Laboratory.

Superintendent Greg Oberle explained the grain transport system on the Mississippi River during a tour of CHS Barge Facility at Savage, Minn.

Additional short course speakers included: Mark Bagan, MGE; Tanya Coakley and Brian McLaughlin, Trading Technologies Int’l; Austin Damiani, Frontier Futures; Ron DeJongh, Columbia Grain; Ross Edwards, BNSF Railway Co.; Ray Grabanski, Progressive Ag; Julie Heinz, Mike Klein, and Roger Baker, CHS; Mike Krueger, The Money Farm; Randy Narloch, ADM-Benson Quinn; Erica Olson, N.D. Wheat Commission; Darcy Rasmussen, N.D. Grain Inspection Service; and Steve Wirsching, U.S. Wheat Associates.



Participants enjoyed a tour of the CHS Export Grain Terminal in Duluth with John Crabtree, (center right), and Brian Sorenson, (back row, right). Supt. Dick Carlson hosted the tour.



Duluth Seaway Port Authority staff hosted the Grain Procurement participants at the port office and for a harbor luncheon tour before they departed for Minneapolis.

Demand for Pasta Education Sharply Increases in 2009

Chile, Colombia, Guatemala, Jamaica, Mexico, Peru, and United States

“We’ve been offering our pasta courses since 1984, and each year we are pleasantly surprised by how many industry people they attract,” says Brian Sorenson, NCI Director and an instructor in the courses.

This year, 54 participants from 7 countries attended three pasta courses.

U.S. Wheat Associates sponsored several participants at the April and July courses.



NCI staff demonstrate the new ravioli and laminated noodle pasta machine during a pasta short course.

“People are very interested in learning more about the utilization of durum wheat from this region and how to make the best quality pasta. The course allows us to showcase the quality of the durum and other crops from this region,” comments Sorenson.

“Pasta is a very exciting segment of the food industry right now. There is a lot of interest not only in traditional

pasta, but also in different types of pasta products such as fresh and frozen pasta, and in incorporating non-traditional ingredients such as flax, peas, lentils, whole wheat and other grains into pasta. NCI promotes all these crops by showing people how to create new and innovative products that appeal to consumers,” says Sorenson.

“Our pasta courses continue to evolve to meet the needs of the industry. This year, we expanded our courses to include information on fresh, frozen, and canned pasta, and we incorporated the new laminated noodle and ravioli machine to allow us to focus on a wider spectrum of pasta products,” he concludes.

Twenty-four pasta makers from Chile, Colombia, Peru and U.S. attended the Pasta Production and Technology Short Course in April.

A nine-person team from Faribault Foods, Minn., came to NCI for a customized Pasta Production and Technology Short Course in May.

Twenty-one participants from pasta companies in Guatemala, Jamaica, Mexico and U.S. attended the Pasta Short Course in July.

In addition to lectures and laboratory work, the participants tour regional pasta production facilities.

Pasta courses directly support the mission of Northern Crops Institute—increasing markets for crops produced



Naggie Jeradechachai, NCI Crop Quality Specialist, (left), assists a short course participant in arranging long goods before placing them into the dryer. The pasta was made on NCI’s pilot-scale pasta extruder during the class.

in Minnesota, Montana, North Dakota and South Dakota.

North Dakota and Montana rank first and second, respectively, in the production of U.S. northern durum.

U.S. Wheat Associates reports the five largest importers of U.S. durum from June 2008 to May 2009 were Italy, Nigeria, Algeria, Venezuela and Costa Rica.



2009 Pasta Production and Technology Short Course



2009 Faribault Foods Customized Pasta Short Course



2009 Pasta: Raw Materials and Processing Technology Short Course

Three DDGS Workshops Attract International Feed Industry Japan, Jordan, Mexico, Canada and United States

DDGS, a co-product of ethanol production, is a relatively new feed ingredient, but one that is definitely catching on. To give you an idea of the growing sales of this new feed ingredient, Mexico imported 1.2 million metric tons of U.S. DDGS in 2008, and Japan imported 198,000 metric tons in 2008, according to USDA's Foreign Agricultural Service.

DDGS is an acronym for dried distiller's grains with solubles. It is used in high quality pelleted feed for poultry, swine, beef, dairy, and aquaculture.

Twenty-nine feed manufacturers from Japan, Jordan, USA, Canada, and Mexico came to NCI this summer to learn more about adding DDGS to feed.



Koch

Kim Koch, Ph.D., NCI Feed Center Manager, coordinated and lectured in the courses. He also led the teams during feed pelleting instruction and demonstrations at the NCI Feed Center.

U.S. Grains Council (USGC) sponsored delegations from Japan, Mexico and Jordan for the course.

The Japanese pelleting team attended NCI's DDGS course in April. Hiroko Sakashita, Associate Director for USGC Japan, escorted the team.

Representatives from the Jordanian Ministry of Agriculture and the

Deputy General Manager of Jordan Feed Company attended the DDGS short course in July. The team was accompanied by Joe O'Brien, USGC Regional Director for the Middle East and Subcontinent. The July course was also attended by feed manufacturers from Canada and the U.S.

U.S. Grains Council sponsored a team of Mexican nutritionists for the DDGS short course in August. Patricia Esqueda, Technical Director for USGC Mexico, accompanied the team.

Topics addressed in the courses included: corn ethanol production technologies; DDGS supply and demand; DDGS use in feed for aquaculture, beef cattle, dairy, swine, sheep/goats, poultry; extrusion demonstrations using DDGS; feed manufacturing technology; and pelleting demonstrations.

Additional speakers included: Kurt Rosentrater, Ph.D., USDA; Bill Wilson, Ph.D., NDSU; Rilie Morgan, NCI; Gregory Lardy, Ph.D., NDSU; Vernon Anderson, Ph.D., NDSU REC; Alvaro Garcia, Ph.D., Arnold Hippen, Ph.D., Ken Kalscheur, Ph.D., David Schingoethe, Ph.D., all SDSU; Mark Whitney, Ph.D., UMN; Robert Thaler,

Ph.D., SDSU; Bryan Neville, NDSU; Chris Schauer, Ph.D., NDSU; Robert Maddock, Ph.D., NDSU; Darwin Britzman, Ph.D., International Nutrition Consulting, Inc.; Sally Noll, Ph.D., UMN.

Short course participants visited the NDSU and SDSU Dairy Units; SDSU Department of Wildlife and Fisheries; NDSU Animal Units; Tharaldson Ethanol, Casselton, ND, hosted by Keith



Kim Koch, NCI Feed Center manager, (left), demonstrates feed pelleting with DDGS to the Mexican delegation.

Finney and Brad Kjar; Elliot Brothers Feedlot, Galesburg, N.D., hosted by Kevin Elliot; POET Nutrition, Sioux Falls, S.D.; POET Ethanol Facility, Chancellor, S.D.; Turner County Dairy, Parker, S.D., hosted by Steve Bossman; Bones Feed Yard, Parker, S.D., hosted by Walt Bones.



2009 DDGS: Nutrition, Use and Feed Manufacturing Short Course



2009 DDGS: Nutrition, Use and Feed Manufacturing Short Course (Japan)



2009 DDGS: Nutrition, Use and Feed Manufacturing Short Course (Mexico)



Mehmet Tulbek, Ph.D., NCI Technical Director, (front right), and the short course participants evaluate the bread they baked during the course. Tulbek and Sorenson also demonstrated the TA-Xt Plus and C-Cell technology, equipment that evaluates bread quality.

Basics of Wheat and Flour Quality Course Provides Introductory Experience

Seven production and quality managers and two graduate students attended the Basics of Wheat and Flour Quality Short Course in May, where they learned about how grain type and quality affects milling and baking processes.

"This course is a great introduction to wheat and wheat flour quality," says Brian Sorenson, NCI Director and lecturer in the course.

"In this course, we give the

participants a broad knowledge of quality parameters, milling and lab equipment, and some of the issues that relate to processing wheat and product utilization," says Sorenson.

"The participants learn testing procedures and protocols that will help them understand what's most important in wheat and flour quality," he continues.

"In the past few years, we've been incorporating more hands-on

practice in the laboratories because the participants learn even more when they try out the lab procedures themselves," Sorenson concludes.

Topics in the course include: defining wheat and flour quality, environmental influences, quality tests and procedures, impact of milling on flour quality, role of protein and starch, dough rheology, functional ingredients, mixing, fermentation, baking processes, and hands-on baking.



2009 Basics of Wheat and Flour Quality Short Course



The American Malting Barley Association hosted two Kernel ID Workshops at NCI in November.



Brian Sorenson (right) and John Crabtree (center) welcome Brendon Donnelly, (left), NCI's first Director, for a brief visit at NCI.

Short Course Looks at Functional Food Values of Flaxseed

Flaxseed: Adding Functional Food Value, a short course offered in April, attracted food processors from Illinois, Minnesota, North Dakota, and Ohio.

"Flaxseed is an important crop for our region and can be utilized in many ways to improve nutritional and functional attributes of food products," says Mehmet Tulbek, Ph.D., NCI Technical Director.

"Our main objective in this program is to educate participants on production, quality, shelf life and processing of U.S. flaxseed. Hands-on experiences with tortilla and snack foods help participants understand the impact of flaxseed fortification in food systems," he concludes.

The short course was co-sponsored by AmeriFlax, the trade organization that represents North Dakota flax producers. Sheri Coleman, Ameriflax Executive Director, and three members of the Ameriflax board also attended the course.

According to Ameriflax, flaxseed is one of the highest plant sources of omega-3 fat, with over 50% of the fat portion in flaxseed comprised of an omega-3 fat called alpha-linolenic acid (ALA). Every ounce (about 3 Tbsp.) of ground flaxseed delivers more than 30% of the recommended daily fiber intake. Flax is an excellent source of lignans, natural cancer-preventative phytonutrients.

Protocol Seminar Takes Some of the Mystery Out of International Business

Fifteen participants braved an ice storm to attend the International Protocol Seminar offered in February. Pat Berglund, Ph.D., a corporate etiquette and international protocol consultant and former NCI Director, led the seminar.

This year's seminar addressed many areas of international protocol including how to present a business card, present gifts, make introductions, and appreciate cultural differences. The take-home message was that familiarity with a country's culture, knowing how to present a business card, or properly eat a formal meal, will allow you to concentrate on your business negotiations.

Instructor Pat Berglund is a familiar face in the region after leading Northern Crops Institute for 12 years until her retirement in 2007. Berglund is certified by The Protocol School of Washington. She has international experience in Asia, Central and South America, Africa and Europe.

Berglund and her husband, Duane, spend their summers in Minnesota and their winters in Arizona.



During the luncheon, Berglund, (right), assists a participant with table etiquette appropriate for a formal meal.

Whole Wheat Foods Short Course Attracts Food Processors from Four Nations

Whole wheat foods were the focus of the Exploring Whole Wheat Foods short course held in September at NCI. Participants were from Japan, Mexico, United Arab Emirates, and the U.S.

Topics for the course included whole grain ingredients; whole wheat and health; quality characteristics for whole wheat products; microbial quality of whole wheat flour; baking performance; whole wheat in flat bread and pasta products; Branscan technology for flour quality evaluation; and sourcing IP wheat.

Lectures were supplemented with lab demonstrations, hands-on baking, milling demonstrations, and a tour of Dakota Specialty Milling, Fargo, hosted by Daryl Bashor.



2009 Flaxseed: Adding Functional Food Value Short Course



Sheri Coleman, Ameriflax, makes flax-enhanced pancakes during the flax course.



2009 Exploring Whole Wheat Foods Short Course

Pakistan Pushes to Improve Dairy Productivity

“This team came to NCI to learn more about the manufacturing of pelleted dairy feed using U.S. hi-pro soybean meal (SBM) and the quality of dehulled SBM, and to participate in field trips to learn about dairy technology and practices,” says R. Shahnawaz Janjua, technical director for the U.S. Soybean Export Council, Pakistan. Dr. Ramesh Thaper, consultant for the American Soybean Association/USSEC/India, also escorted the team.

“Productivity per unit dairy animal in Pakistan is low, due to inadequate nutrition and other challenges. The demand for dairy and meat products in Pakistan is definitely going to rise in coming years. It is clear that we will meet increased demand only through improved productivity,” concludes Janjua.

To help fill this need, a group of top poultry and dairy feed producers from Pakistan came to NCI to attend the Dairy Feed Manufacturing Technology Short Course in June. The U.S. Soybean Export Council and the American Soybean Association sponsored the group. The North Dakota Soybean Council (NDSC) hosted the team at a dinner.

Kim Koch, Ph.D., manager of NCI’s Feed Center, was the course coordinator and lecturer.

The team toured the SDSU Dairy Unit and Processing Center, where they learned more about dairy feed production from Arnold Hippen, Ph.D.; Ken Kalscheur, Ph.D.; Vikram Mistry, Ph.D., David Schingoether, Ph.D.; and Alvaro Garcia, Ph.D. Tours of several dairy farms and processing centers included the S.D. Soy Processors, Volga, S.D., hosted by general manager Rodney Christianson; Qual Dairy, Lisbon, N.D.; and Five Star Dairy, Milnor, N.D.



The Pakistani Dairy Feed Manufacturing Team tours the Qual Dairy, near Lisbon, N.D., hosted by Al Qual (left).

USADPLC & NPGA Hold Joint Staff Workshop

Staff from the USA Dry Pea and Lentil Council and the Northern Pulse Growers Association came to NCI in October for a joint staff workshop.

The associations have sponsored short courses at NCI and overseas seminars in the past few years.

During their training sessions, they heard from experts on the NDSU pulse breeding program; overview of U.S. pulse quality; pulse milling applications; pea-fortified baked products; pulse research updates; and pulse nutrition.



USADPLC & NPGA staff prepare muffins enhanced with pea flour in NCI’s Bake Lab.

SE Asia Feed Millers Attend Feed Course

A twelve-member team from feedmills in Southeast Asia attended the Feed Manufacturing and Feedmill Management Short Course in October.

U.S. Grains Council (USGC) sponsored the team. Adrian Morales from USGC escorted the team.

Kim Koch, Ph.D., NCI Feed Center manager, coordinated and lectured in the course. In addition to updates on current trends in feed production and feedmill management, the team toured Alton Grain Terminal, Hillsboro, N.D.



Representatives from feedmills in Indonesia, Malaysia, Philippines, Thailand, and Vietnam came to NCI to learn more about feed production.



2009 Dairy Feed Manufacturing Technology Short Course



2009 Feed Manufacturing Technology Short Course



2009 USA Dry Pea and Lentil Council and Northern Pulse Growers Joint Workshop

2010 Short Courses...Short Courses

Tentative Schedule

April 13-15	Pasta Production and Technology
April 27-29	Functionality of Canola and Flaxseed in Food Systems
May 4-6	DDGS: Nutrition, Use, and Feed Manufacturing
May 17-21	Advanced Grain Procurement Strategies
June 8-10	Legumes in Food Products
July 12-16	Pasta: Raw Materials and Processing Technology
July 26-30	Baking with Soy
Aug. 17-20	Barley Malt Quality Evaluation
Sept. 20-29	Grain Procurement Management for Importers
Oct. 4-8	Feed Manufacturing Technology
Oct. 18-22	DDGS in Aquaculture Feed Production

Check our website for the most up-to-date information.
www.northern-crops.com



Nigerian Company Trains to Promote U.S. Soy

Mark Ogbebor, Alltech Nutrients, Ltd., Nigeria, (left), tested the baking performance of soy flour with NCI Director Brian Sorenson (right) in October. Ogbebor was sponsored by the American Soybean Association's WISHH program. Ogbebor, who is an importer/distributor, will work to establish a supply chain for soy and promote the benefits of soy to local bakers and food manufacturers.

NCI's Second Visiting Scholar is Nisshin Flour's Kenji Motomatsu

Kenji Motomatsu, who works for Nisshin Flour Mills, Japan, is the second of three scholars who will study for one year at NCI. Nisshin scholars are at NCI to learn more about U.S. HRS wheat production and availability of their desired quality of wheat. Motomatsu is accompanied by his wife, Naoko, and their son, Hitoshi.



Motomatsu

NCI's first visiting scholar, Bungo Hirano, (center), completed his year at NCI in March 2009. He received a plaque of appreciation from Brian Sorenson and NCC Chair Laird Larson at the March NCC Meeting.



Participants of the Dairy Feed Manufacturing short course visited South Dakota Soy Processors plant in Volga, S.D.



Young farmers representing the Montana Grain Growers Association visited NCI to learn more about NCI. This group aims at developing new leaders in agriculture.



Larry Farris, Senior Commercial Counselor from the U.S. Embassy in Nigeria, talked at NCI on business opportunities in Nigeria.



Pam Schubbe, CHS Soyflour Sales Manager, (left) and Rick Steinberg, CHS Protein Sales and Soybean Products, (center left), join Ogbebor and Sorenson in NCI's Baking Lab.

Mill Celebration



Cutting the Ribbon! Left to right: Mehmet Tulbek, NCI Technical Director; Brian Sorenson, NCI Director; René Steiner, Buhler North America; North Dakota Governor John Hoeven; North Dakota Commissioner of Agriculture Doug Goehring; David Clough, North Dakota Wheat Commission; Arlo Skari, Montana Wheat and Barley Committee; Laird Larson, South Dakota Wheat Commission; Mark Jossund, Minnesota Wheat Research and Promotion Council; and John Crabtree, NCI Assistant Director.



Left to right: D.C. Coston, Ph.D., NDSU Vice President for Agriculture and Outreach, North Dakota Governor John Hoeven and NCI Director Brian Sorenson.



North Dakota Commissioner of Agriculture Doug Goehring said that Northern Crops Institute plays an important role in making the region's crops more attractive to foreign buyers.



Sorenson presents a plaque of appreciation to René Steiner, President of Buhler North America, the company that designed the new pilot mill. Buhler also donated an optical color sorter.



Sorenson presented plaques of appreciation to representatives of each of the regional wheat commissions that were instrumental in funding and planning the pilot mill. Accepting the plaques are (left to right): Mark Jossund, Minnesota Wheat Research and Promotion Council; Arlo Skari, Montana Wheat and Barley Committee; David Clough, North Dakota Wheat Commission; and Laird Larson, South Dakota Wheat Commission.

NCI Celebrates Pilot Flour Mill Renovation with Ribbon Cutting

Northern Crops Institute celebrated its new pilot Flour Mill with a ribbon cutting ceremony on November 24.

NCI Director Brian Sorenson kicked off the event that included comments from special guests including North Dakota Governor John Hoeven, North Dakota Agriculture Commissioner Doug Goehring, D.C. Coston, Ph.D., NDSU Vice President of Agriculture and University Outreach, representatives of regional wheat commissions, and René Steiner, President, Buhler North America.

Guests toured the mill after the ribbon-cutting ceremony. A dinner followed the event.

"In 2007, the Northern Crops Council (NCC) formed a committee to look at the future of NCI's technical capabilities in milling, and they identified a definite need for a mill of this capacity," said Sorenson.

"The committee decided to review the existing equipment, and they determined that we had a great asset in our pilot durum mill. Using the existing durum mill equipment as a starting point for the new mill sped up the project as well as kept the overall costs down," he continued.

"The Northern Crops Council voted to move forward with the project at their November 2008 meeting. To go from a project design to a completed installation in a year was a testament to the NCI staff, the NCC, as well as to Buhler, who helped us put this project together," Sorenson concluded.

Gifts from the South Dakota Wheat Commission, North Dakota Wheat Commission, Montana Wheat and Barley Committee, Minnesota Wheat Research and Promotion Council, General Mills, Horizon Milling, and several individuals partially funded the renovation. Buhler Inc. donated an optical color sorter, which can detect and remove defective product and foreign material in wheat.

"NCI's new flour mill represents another great opportunity to promote northern-grown crops and create new and

expanded domestic and international markets for producers in the region," said Governor Hoeven.

"This project is the result of a strong partnership between North Dakota, South Dakota, Minnesota and Montana and a steadfast commitment to growing the agriculture and value-added processing industries in our states, as well as enhancing our competitiveness in marketing commodities worldwide," Governor Hoeven concluded.

NCI's pilot durum mill was converted into a dual-purpose or "swing mill" to give the region the capability to mill pilot-scale or test-scale quantities of bread wheats (Hard Red Spring, Hard Red Winter and Hard White) into flour for quality and test baking/processing evaluations. Importantly, the mill retains the capability to mill durum wheat into high quality semolina.

The new mill is capable of milling flour, durum semolina and whole wheat flour. Flour milling capacity of the new mill is 200-300 pounds/hour, a larger quantity than a laboratory scale mill can produce. Flour quality closely matches flour from a commercial flourmill.

In addition to milling and testing flour, the new pilot mill will be used for educating millers about hard wheats. NCI's pilot scale durum mill, built in 1991, was one of the few facilities in the nation dedicated specifically to educating and training durum millers.

The existing building and much of the pilot scale durum mill equipment was used in building the new mill. Additional equipment to improve grain handling, cleaning, tempering, and purifying was purchased or donated.

The next phase of the renovation will begin when funding is secured. The second phase will include a flour mixer, storage bin, and flour packing equipment that will fill 50# bags.

NCI is conducting a nation-wide search for a full-time milling specialist.

With sincere gratitude, we recognize the following individuals and organizations:

FINANCIAL SUPPORT

Platinum Level

Montana Wheat & Barley Comm.
North Dakota Wheat Commission
South Dakota Wheat Commission

Silver Level

General Mills – Meals Division
General Mills – G-Tech Division
Minnesota Wheat Research and
Promotion Council

Bronze Level

Horizon Milling, LLC

Emerald Level

Patricia Berglund, Ph.D., and
Duane Berglund, Ph.D.
Sue and Dave Katzke
Cathy and Brian Sorenson

Equipment Donation

Buhler Inc.

CONTRACTORS

Buhler Inc.
Gast Construction
Kise
Meyerhofer Steel and Construction
NDSU Facilities Management
RBB Electric, Inc.
Robert Gibb and Sons, Inc.
Standard Industries

SPECIAL THANKS TO:

Kenji Motomatsu, Nisshin Flour Co.
Chris Hamre, NDSU Facilities Mgm't.

Mill Celebration



Ruedi Weiss, Buhler Inc. (left), Steve Meyerhofer (middle), and Andrew Meyerhofer (right) from the Meyerhofer Steel and Construction Company look at the optical color sorter that was donated by Buhler Inc.



Tours of the new mill followed the ribbon cutting. This view is from the second deck to the first floor of the mill.



North Dakota Governor John Hoeven and former ND Governor George Sinner tour the mill.



Brian Sorenson (right) visits with (l to r): Randy Englund, Executive Director of South Dakota Wheat Commission; Laird Larson, past chair of Northern Crops Council; David Clough, newly elected chair of Northern Crops Council; Neal Foster, Executive Director of South Dakota Crop Improvement Association; and Mary Ellen Wagner, South Dakota Wheat Commission.



Brian Kaae, (left), MT Wheat and former NCC Chair, visits with Kim Koch, (center), NCI Feed Center manager, and Doug Goehring, (right), ND Commissioner of Agriculture.



Neal Fisher, (left), Administrator of North Dakota Wheat Commission, and former North Dakota Governor Sinner (right) enjoyed a moment to visit. Sinner was the first chair of the Northern Crops Council and was instrumental in establishing Northern Crops Institute.

Mill Celebration



L to r: Mrs. Lorraine Langseth; David Torgerson, Executive Director of Minnesota Wheat Research and Promotion Council; Bill Zurn, Minnesota Soybean Research and Promotion Council; Karolyn Zurn, Northern Crops Council; former ND Governor George Sinner; Senator Keith Langseth, Minnesota District 9; and Mark Jossund, Minnesota Wheat Research and Promotion Council.



NCI Director Brian Sorenson presents a plaque to Kenji Motomatsu, Nisshin Flour Milling Company, Japan, in thanks and appreciation of the work he did in the swing mill before its opening. Kenji is NCI's second visiting scholar.



Sorenson presents a plaque to Jay Romsa, in recognition of the Silver Level sponsorship General Mills gave to the mill project.



Brian Walker receives a plaque in recognition of the Bronze Level sponsorship Horizon Milling gave to the mill project.



Brian Kaae, (left), former NCC Chair and 8-year NCC member, with Arlo Skari, (right), who succeeded Kaae on the NCC representing the Montana Wheat and Barley Committee.



Randy Englund, (left), Executive Director of South Dakota Wheat Commission, and Laird Larson, (right), who represents South Dakota Wheat Commission on the NCC.



René Steiner, (left), Buhler North America, and Pat Berglund, Ph.D. (center), former NCI Director, discuss the new color sorter with NCI Technical Director Mehmet Tulbek, Ph.D. (right).

Technical Team Conducts Projects to Promote Multiple Northern Crops

The NCI technical team has worked on many service and crop utilization projects concerning the utilization of functional food ingredients and regional co-products.



Tulbek

Technical Director Mehmet Tulbek, Ph.D., Crop Quality Specialist Thunyaporn (Naggie) Jeradechachai, and Processing Specialist Rilie Morgan conducted 138 days of processing (pasta, snack food, aquatic feed, wheat flour milling, specialty milling and canning) and product development projects in 2009.

Tulbek has been overseeing projects involving peas, lentils, chickpeas, edible beans, flaxseed, soy meal and DDGS utilization.

NCI staff collaborated with NDSU faculty members Clifford Hall III, Ph.D., Kevin McPhee, Ph.D., Juan Osorno, Ph.D., and Senay Simsek, Ph.D., on the development and characterization of extruded lentil flour, extruded bean snacks, characterization of pre-cooked pea flour, pea flour in baked products and evaluation of canned pea, lentil and edible bean quality.



Morgan

In addition, NCI has been working with Kurt Rosentrater, Ph.D., USDA-ARS Brookings, S.D., on the use of

DDGS in aquatic feed applications and edible bean based texturized vegetable proteins (TVP). The U.S. Dry Bean Council has been funding the TVP project via the Emerging Market Development programs in Southeast Asia.

“Worldwide, there has been significant interest in pulses due to their high protein and dietary fiber, low glycemic index and non-allergen attributes. NCI has been an integral part of promoting pulses for domestic and international markets with processing, crop quality evaluation and engineering programs,” Tulbek says.

Tulbek was the keynote speaker at the annual meeting of the Western Pea and Lentil Growers Association in Moscow, Idaho in December.

Jeradechachai has been overseeing the end-product quality surveys of commodity soybean, food grade soybean, dry edible pea, lentil and canola crops grown in the region. “Collaborative survey and crop quality evaluation efforts with the North Dakota Soybean Council, Northern Pulse Growers Association, Northern Canola Growers Association and USDA help us present materials to trade teams and short course participants,” Tulbek says.



Jeradechachai

NCI technical staff presented at the Institute of Food Technologists, American Association of Cereal Chemists Meetings and other meetings including:

Functionality of Pulse Flours in Processed Foods (Oral presentation by Mehmet Tulbek at Institute of Food Technologists Annual Meeting Anaheim, California).

Dietary Fiber in Pea Ingredients: Evaluation in Baked Products (Oral presentation by Thunyaporn (Naggie) Jeradechachai at the Philippines Association of Food Technologists Annual Convention, Manila, Philippines), is co-authored by Tulbek and Katanchalee Kaewmanee of AgriSource, Thailand.

Pulse Flours & End Uses (Oral presentation presented by Tulbek at the USA Dry Peas, Lentils and Chickpeas Innovation Seminar, Culinary Institute of America, Napa, CA).

Pre-cooked Pea Flour: Processing, Quality and End-Product Utilization (Oral presentation presented at American Association of Cereal Chemists Annual Meeting, Baltimore, Maryland), is co-authored by Hall and Simsek.

“Our support role in these collaborative research efforts with NDSU and USDA examine the effects of regional crops and co-products. We present the data at NCI short courses and global outreach activities,” concludes Tulbek.

The following crops or their milled products were tested at NCI in 2009:

Amaranth	Corn	Sunflower
Barley	Flaxseed	Confection
Beans	Lentils	Oil
Black	Millet	Wheat
Navy	Oats	Durum
Pinto	Peas	Hard Red Spring
Canola	Sorghum	Hard Red Winter
Chickpeas	Soybeans	Hard White
	Sugarbeet	

Sorenson Presents Wheat Quality Reports Throughout Asia for U.S. Wheat Associates

NCI Director Brian Sorenson assisted with U.S. Wheat Associates’ HRS and durum wheat crop quality seminars in Asia for the 8th consecutive year. He traveled to Jakarta, Indonesia; Manila, Philippines; Bangkok, Thailand; Taipei, Taiwan; Seoul, Korea; and Tokyo, Japan.

“The U.S. Wheat Crop Quality Seminars are an excellent opportunity for us to inform wheat buyers and processors around the world about the recently harvested wheat crop,” says Sorenson. “My presentations focus on the Hard Red Spring and Durum wheats grown in North Dakota, South Dakota, Montana and Minnesota.”

“At these seminars, we help the buyers understand what they can expect from the crop and provide insight into how they can handle any potential challenges. These personal contacts are important in strengthening our relationships with the end users so they will continue to purchase wheat from our four-state region,” he concludes.

Feed Center Promotes Studies That Benefit World Feed Industry

The NCI Feed Center staff have worked on a multitude of projects during 2009. In addition to educational and consulting projects, the feedmill provides the diets for NDSU's Animal Research Units (beef, dairy, equine, sheep and swine).

The feedmill produced 6.5 tons/day; or 45.5 tons per work week, averaged over the working year (248 days), according to Kim Koch, Ph.D., NCI Feed Center Manager. These figures include the research portion of production. Corn is the primary dietary energy source, and soybean meal is the primary protein source used in the diets fed to NDSU research animals.

In 2009, 1,140 tons of corn and 240 tons of soybean meal were used for teaching and research animal diets. In addition, 44 tons of DDGS, the co-product from corn ethanol production, and 35 tons of soy hulls, one of the co-products from soybean meal production, were used.



Participants from Mexico examine equipment during a pelleting demonstration in the feedmill at the August DDGS course.

SuperFeed projects that combine agricultural byproducts from crops grown in the northern Great Plains have attracted a lot of attention from domestic and international feed manufacturers. SuperFeeds are designed to improve pelleting, density and nutritional quality.

Six North Dakota SuperFeed projects were conducted: three beef grow/finish trials (DDGS and soybean meal); two swine grow/finish trials (soybean meal); and one dairy trial (soybean meal and DDGS). SuperFeeds, which are used for feed in the U.S. and exported, are collaborative efforts between Koch at NCI, Vern Anderson at Carrington Research Extension Center, and Central Dakota Feeds Initiative.

Koch spoke on understanding and improving feedmill operational efficiency at the California Grain and Feed Annual Meeting in January 2009. One of the goals of feed manufacturing is the optimization of resources, including the ingredients, the diet formulations and the physical processing. Through best management practices, it is possible for a feedmill to improve overall operating efficiency by 25%, translating ingredient, utility (energy), and labor costs into savings, says Koch.

A broiler chicken trial involving DDGS that NCI conducted with Dr. Radhakrishnan Srinivasan, Mississippi State University, was published in *Cereal Chemistry*, Vol. 86, No. 4, pages 393-399.



Kim Koch welcomes the Japanese team to the DDGS short course in April. They were sponsored by the U.S. Grains Council.

A custom steam conditioner for NCI's pellet mill was built by Standard Industries of Fargo and installed this fall. This new conditioner is all stainless steel and has increased length and variable speed drive. This design provides NCI with substantially increased control over the level of steam conditioning, an important new capability that will benefit NCI's educational programming and research activities for increased utilization of northern grown crops in animal feed ingredients and products.

NCI is working with Wenger Manufacturing to identify a single screw extruder for the NCI Feed Production Center. This extruder will give NCI added capabilities to process feeds and feed ingredients for livestock, pet, equine and aquaculture feeds using northern grown crops.

NCI Participates in Durum Collaborative



Brian Sorenson (right) traveled to Morocco in October to establish procedures for bread making with Durum semolina for the Durum End Products Collaborative (Durum EPC) project, sponsored by the North Dakota Wheat Commission and U.S. Wheat Associates. The objective is to work with millers and bakers from North Africa to exchange information and to teach them about the quality and utilization of northern U.S. Durum and for us to learn about their needs for quality.

Trade Teams and International Consulting



Vietnam Kim Koch, Ph.D., (center), NCI Feed Center manager, spoke at the 17th Annual ASAIM Southeast Asian Feed Technology and Nutrition Workshop in Vietnam in June. Increasing concerns over feed and food safety issues, particularly the melamine adulteration incident last year, drew 118 participants to ASAIM SE Asia's annual flagship event. ASA International Marketing, United Soybean Board, and the U.S. Grains Council sponsored the event.



Japan Toyota Tsusho/Showa Sangyo Co. sent a team to North Dakota this fall to gather information on the new crop in order to prepare for shipments. They met at NCI with NCI Director Brian Sorenson; Mohamed Mergoum, Ph.D., NDSU HRS Wheat Breeder; Senay Simsek, Ph.D., NDSU Wheat Quality Specialist; Frank Manthey, Ph.D., NDSU Durum Quality Lab; and Bill Wilson, Ph.D., NDSU Professor of Agribusiness. Erica Olson and Jim Peterson, North Dakota Wheat Commission, hosted the team.



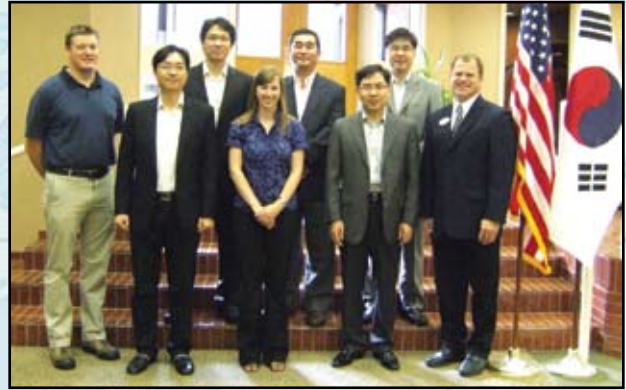
United Kingdom Representatives from the Numax Fibre Technology Ltd. of United Kingdom (left) visited NCI and learned about North Dakota flaxseed production and agriculture, and NCI technical and by-product utilization programs. The delegation was led by Mr. Vyvyan Nusenbaum. They were hosted by Mehmet Tulbek, Ph.D., NCI Technical Director, and Clifford Hall, Ph.D., NDSU Dept. of Cereal and Food Sciences.



Indonesia and Philippines Mehmet Tulbek, (front row, right), traveled to Indonesia and Philippines to speak at a series of seminars in Jakarta and Manila during February and March. Tulbek also visited specialty crop milling and food processing companies in Jakarta. The seminars were organized by USA Dry Pea and Lentil Council and US Dry Bean Council. The objective of these programs was to help establish pulse milling and end product use industry in Southeast Asia and to educate industry officials on pulse end-use applications.



South Africa A Crop Assessment Team visited NCI July 21-22 to assess the current status of the state's hard red spring crop and review prospects for availability and potential quality features for the 2009 crop. The team was escorted by Jim McKenna, (front row, left), U.S. Wheat Associates Cape Town. Erica Olson, North Dakota Wheat Commission, hosted the team. The team was senior management staff from Premier Foods, Tiger Brands and Ruto Mills, three of South Africa's largest milling groups.



Korea A Wheat Survey Team visited NCI in July to gather information on the current year's crop quality and availability. The team members represent four major flour milling companies that account for as much as 70 percent of market share in Korea. They were accompanied by Dr. Woojoon Park, (back row, center), Senior Technical Marketing Specialist with U.S. Wheat Associates in Seoul. Erica Olson, NDWC, hosted the team. Korea is generally a top ten market for U.S. exports.



Philippines NCI Director Brian Sorenson presents Amado Gurango (left) with a new Certificate that Amado requested to replace his, which was destroyed in a flood. Amado attended the 1985 Grain Procurement Management for Importers short course. Amado works for the Philippine Flour Mills in Makati City, Philippines.

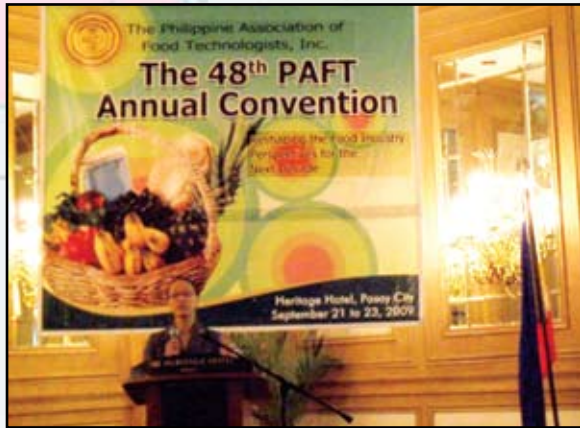


China Mehmet Tulbek traveled to China to present two Global Base Initiative Noodle short courses in Shanghai and Qingdao, sponsored by the USA Dry Pea and Lentil Council (USADPLC). The short courses were organized by USADPLC area representative Ms. Lucy Dai. During the trip, potential use of US dry peas by Chinese vermicelli noodle processors in the region was discussed.



Japan Ken Lijima of Nisshin Flour Mills, Japan, spent a day at NCI where he joined Kenji Motomatsu, (center right), NCI's visiting scholar from Nisshin, in learning more about the 2009 hard red spring wheat crop. Brian Sorenson gave the team an overview and tour of NCI. Erica Olson, NDWC, reviewed the 2009 HRS supply and demand situation.

Trade Teams and International Consulting



Thailand and Philippines Thunyaporn (Naggie) Jeradechachai, NCI Crop Quality Specialist, spoke at the Philippine Association of Food Technologists (PAFT) Meeting in September. She was in Thailand and Philippines to assist the USA Dry Pea and Lentil Council in promoting the use of pulse crops. Naggie commented, "Food companies showed lots of interest in the information I provided. Legume products are common in Thailand and Philippines. However, they are not as familiar with yellow pea. Food companies were open to using pea ingredients in their products." She also met with a number of snack and bakery companies in the region to promote the use of pulse crops.



Japan Representatives from the Torigoe Mills, Mitsui & Company, both of Japan, and United Grain Corporation came to Northern Crops Institute to discuss the quality of the 2009 wheat crop. NCI Director Brian Sorenson, (right), hosted the group, leading the discussion and guided them on a tour of the NCI facility. They also visited with other wheat experts at NDSU.



Belgium, France, Germany, Poland, Spain and UK

A team of young farmers from European Union countries visited NCI in June to learn more about NCI and regional agriculture. North Dakota Soybean Council Executive Director Deb Johnson hosted the team, who were accompanied by United Soybean Board officials. The group listened to a welcome and brief overview of regional agriculture by Mehmet Tulbek, and then toured the NCI facility. While in Fargo, they also visited the farm of Claude Richard, a member of both the Northern Crops Council and the North Dakota Soybean Council Board.



Philippines Representatives of the Philippine Association of Flours, Inc. and the Chamber of Philippine Flour Millers visited NCI to familiarize themselves with regional wheat and our grain marketing system. The five-member team was escorted by Shane Townsend, U.S. Wheat Associates, South Asia. They were hosted by Erica Olson, North Dakota Wheat Commission. Philippines is North Dakota's second largest wheat customer. The U.S. typically supplies 85-90% of the food quality wheat imported by the Philippine milling industry.



Turkey Two delegations from Pankobirlik, the largest sugarbeet cooperative in Turkey, visited Northern Crops Institute in September and October. The September delegation (left photo) was led by Board Chairman Recep Konuk and hosted by Mehmet Tulbek, Ph.D., NCI Technical Director, and Jeff Zent, North Dakota Trade Office Communication Director, during their visits at Big Iron Show, NDSU and Northern Crops Institute. In October, the Pankobirlik University Taskforce Delegation (right photo) was led by Mr. Oner Kabasakal. The delegation was hosted by Tulbek and Kerri Spiering, NDSU Director of International Programs, during the group's visits at NDSU, NDSU Carrington Research Extension Center and NCI. The cooperative groups came to learn more about North Dakota agriculture, NDSU agriculture research program, and the work of Northern Crops Institute in education and technical programs, crop quality and sugarbeet by-product utilization projects.



Japan Koji Noguchi, (right), a representative from Nippon Mills, Japan, came to NCI in October to review the 2009 wheat crop. He was escorted by Erica Olson, (NDWC), who also presented the HRS and Durum supply and demand situation and outlook. Dr. Senay Simsek, NDSU Wheat Quality Specialist, reviewed the 2009 HRS crop quality. NCI Director Brian Sorenson, (left), presented an overview of work done at NCI and hosted Mr. Noguchi on a tour of NCI. Dr. Frank Manthey reviewed the 2009 durum crop, while Jim Peterson, NDWC, gave an update on biotechnology in wheat.



Israel A Wheat Team from Israel came to NCI in August to learn more about the region's wheat. At NCI, they were greeted by NCI Director Brian Sorenson, (front row, right), who gave an overview and tour of NCI. Additional speakers are Senay Simsek, Ph.D., Wheat Quality Specialist, NDSU; and Erica Olson, NDWC. The team was accompanied by Goris van Lit (third from left in back row), and Rutger Koekoek, (second from left in back row), both of the U.S. Wheat Associates, The Netherlands. Three team members attended NCI's 2005 Grain Procurement short course.



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