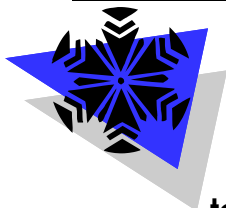


Blizzard Watch

NDSU – Department of Plant Sciences

2005-06



**Belated
Merry Christmas
or Happy Holidays
and
Happy New Year
to you and your loved
ones from the faculty, staff
and students in the
Department of Plant Sciences.**

With all the things going on in the world--hurricanes, earthquakes and the wars in Iraq and Afghanistan etc., take a moment to think about how lucky we are to have a job, a warm home, plenty of food and the love and support of a family and our circle of friends. We think about those families who have loved ones serving in the armed forces and hope they are safe and come home soon. Also, we remember those who have lost loved ones or have loved ones who are ill.

Well, here it is the 12th of December and I am working on the "Blizzard

Watch". That is about three weeks ahead of last year's schedule. We are considering putting some of the pictures in color this year, but have not yet made that decision. I must warn you in advance, many of us, including me, do not look any better in color than we do in black and white. My goal is to have everything turned over to Edie Nelson, my right hand in this project, by December 31st, so she can put it all together. We have a large external review scheduled for March 2006, and with faculty evaluations on the horizon and numerous other meetings, it seems like the Christmas/New Year holiday period is the only time of the year that things slow down a little, so I need to take advantage of that. Again, I do appreciate all of the nice comments that I receive from many of you concerning the "Blizzard Watch". Knowing that my efforts are appreciated makes it much easier to be stimulated to work on it. If there is anything you would like to have me focus on in future issues, let me know. I just try to hit some of the high points of last year's happenings.

One of these years when I retire, I intend to write a history of the department. We have our history up until the 1950s that was written by Dr. Stoa, but nothing since then. I

THE YEAR IN REVIEW

- DR. RICHARD FROHBERG IN N.D. AG HALL OF FAME
- TEACHING AGREEMENT WITH UPRM
- ROD LYM FELLOW OF WSSA
- WHEAT/BARLEY SCAB EPIDEMIC
- VARIETY RELEASES

continually pester Dr. Carter to take this task under his wing, but he is just too busy. He is the busiest retired man that I have ever known.

Okay, time to do the usual "North Dakota thing"-- whine about the weather. 2005 was a very good year for crops. Producers began planting mid-April, which is ahead of normal. Planting of soybean and dry edible beans was initiated earlier than normal, but was delayed by cool, wet weather. In 2004, we had a generally dry June and July with a June average of 2.27 inches precipitation. In 2005, June was the wettest on record with a state average of 7.54 inches. South Dakota and Minnesota also had above normal amounts of rainfall. It was, however, an excellent fall for harvesting with many clear,



dry days. Generally, producers had to spend less time drying down many of the crops, which is very important because of the price of fuel. Thus far (end of January 2006), it has been a very pleasant winter, although western North Dakota had an early freezing rain/snowstorm the second week of October. We had a similar storm in eastern North Dakota in early December, which took out a large number of power poles in the southeastern part of the state. NDSU was closed for one and a half days. A few communities did not have electricity for several days, including Gardner and Christine, where Eileen and Edie, two of our office staff live. A typical day since mid-December has been a high of +30 and a low of +22 to +24, with only a few days below zero.

The high amount of rain, coupled with the earlier planting made it an ideal situation for a wheat/barley scab epidemic. Even winter wheat, which generally escapes the wheat scab because of earlier heading dates, was severely damaged in both North and South Dakota. Although scab was present the last two years, it was not wide spread. As a result, acreage of Alsen, an NDSU variety with good scab resistance, decreased. Producers opted for higher-yielding varieties that are not as scab resistant, with the idea that they could spray to control the scab. That was a very serious mistake, as scab returned with a vengeance and was evident over all, except the extreme southwestern parts of North Dakota. Even dryer areas of the state, for example, just east and northeast of Hettinger had scab. While we are on the topic of scab, let's visit about it a little. William Nganje from the Agribusiness and Applied Economics Department combined some figures on the cost of scab to North Dakota between 1993, the first year it became a major problem, and 2005. In direct costs (price discount and yield reduction), losses due to scab in hard red spring wheat, durum and barley have been \$746.12M, \$239.8M, and \$472M respectively. This totaled up to \$1.46B of direct loss. For each \$1 of direct scab loss by the producers, Dr. Nganje estimated \$2.08 of cost in other parts of the rural and state economy, for a total of \$3.03B. Totaled up, the direct and indirect losses to the state's economy due to scab between 1993 through 2005, would be \$4.49B. Thus far, the worst scab years in terms of direct economic loss, have been 1997 and 2005 with losses at or over \$500M per year.

'Alsen' and 'Steele-ND', both NDSU hard red spring wheat releases, have Type II resistance to scab. In plants with Type II resistance, individual florets can be infected, but the disease does not spread throughout the rest of the head. However, if the disease pressure is great and there are enough spores in the air, a significant part of the head can become infected. Type I resistance would be complete immunity, which has yet to be found. Alsen's scab resistance comes from a Chinese spring wheat, while Steele-ND's scab resistance is from a wild wheat. As was also mentioned in last year's Blizzard Watch, NDSU released 'Glenn' HRSW which was named after Dr. Glenn Smith, NDSU's second wheat breeder. Glenn combines the resistance found in Alsen, and the resistance in Steele-ND into one variety. The result is a Type II resistance that is slightly better than either Alsen or Steele-ND, and also has better quality and yield. I expect Glenn to replace most of the acreage of Alsen, the leading variety in the state. This year we released 'Howard', named after Howard Olson. Howard was superintendent at the time the Williston Research Extension Center was moved to its present site. It had been located, since the early 1900's, at the site now occupied by Williston State College. He oversaw the breeding and development of the current Williston REC, five miles west of Williston. In the late 1950s, Howard was transferred to Carrington where he developed and served as specialist of a new research extension center located five miles north of Carrington. The variety Howard has excellent quality, scab resistance equal to Steele-ND and is well adapted to central and western North Dakota, where Reeder and Parshall are important varieties.

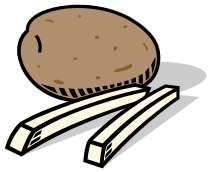
Although no Type I resistance has been found, barley has a natural Type II resistance. Significant progress is being made to increase the level of Type II resistance.

In durum, the entire U.S. germplasm collection (7,000) and 1,000 accessions from ICARDA (International Center for Agricultural Research in the Dry Areas), located in Syria, has been screened for scab resistance. No resistance has been found. So far, the best source of scab resistance for durum appears to be in the same Chinese spring wheat that provided the resistance found in Alsen. Durum and spring wheat, however, have different chromosome numbers and crosses are not easily made.



Significant progress has been made in all three crops, but we have a long way to go to solve this problem. Both the barley and durum breeding programs have screening nurseries in an area of China where scab is epidemic each year.

Last year I mentioned the theft of durum wheat heads from a segregating nursery for scab resistance at Langdon. As far as we know, none has occurred this year, so apparently they were able to obtain what they needed last year. I just do not understand anyone who would do that. Theft should not be taken lightly.



Other releases since last year include two new potato varieties: 'Dakota Crisp' and 'Dakota Diamond'. Dakota Crisp which was released last spring, can be chipped at 45^BF, and makes excellent potato chips. Dakota

Diamond, released in December 2005, has a beautiful white color, can be chipped at 42^BF, and has shown some preferential avoidance by Colorado potato beetle. Their main attributes are a high yield potential and resistance to sugar accumulation in storage. For many years NDSU has had the most prolific U.S. breeding program in the release of widely accepted potato varieties. 2005 was the 75th year (Diamond Jubilee) of the NDSU Potato Breeding Program, which focuses on red, white and russet varieties.

Six roundup resistant soybean varieties were released by Dr. Ted Helms. They are of varying maturities, all have good yield, chlorosis resistance and a high level of phytophthora root rot resistance. All lines will be marketed through Roughrider Genetics®, the marketing association of NDSU.

Dale Herman continues to release woody plants adapted to the northern Great Plains. Two introductions, *Betula papyrifera* 'Varen' and *Betula platyphylla* 'VerDale' were patented. His introductions, Prairie Vision® Asian White Birch; Northern Acclaim® Thornless Honey-locust; and Prairie Statesman® Swiss Stone Pine were trademarked. Other introductions that have been trademarked, but were not reported in previous issues of the Blizzard Watch include Snow Mantle® Gray Dogwood, Snow Lace® Gray Dogwood and Prairie Radiance® Winterberry Euonymus.

Always remember that although plant breeders are the project leaders in the development of a new variety or selection. The collaborative effort includes several other scientists and staff in Plant Sciences, other departments on campus, the USDA, and research extension centers throughout the state. The result of a new variety is a team effort by many also including the North Dakota taxpayers, commodity groups and other interested parties.

OTHER IMPORTANT AND EXCITING EVENTS

Dr. D.C. Coston, formerly of Oklahoma State University, joined NDSU in late June as Vice President for Agriculture and University Extension. Dr. Coston replaces Pat Jensen, Vice President for Agriculture and Dean, who left NDSU in December 2004. Dr. Coston is a horticulturist by training and, as such, has an appointment in our department. **"WELCOME D.C."** Dr. Ken Grafton, Director of the AES, is now also Dean of the College of Agriculture, Food Systems and Natural Resources. Duane Hauck continues as Director of Extension.



Dr. Coston



Dr. Grafton



Duane Hauck

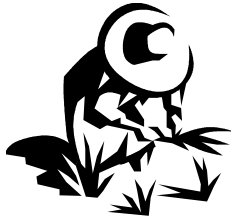
Craig Schnell, Provost and Vice President for Academic Affairs, announced that Edward Deckard was one of two professors named interim associate vice president for academic affairs-academics. They will share responsibilities with the Teaching Academy and provide leadership in the development of programs to enhance the quality of undergraduate, graduate and outreach education. In addition, they will represent Dr. Schnell on committees including the Program Review and General Education Committees. They will also serve as campus representatives in efforts to establish collaborative relationships with overseas institutions, such as the one created with the Ansal Institute of Technology, India. Dr. Deckard will lead the peer review of teaching and mentoring programs and oversee the Caring Community of Leaders and Problem-solvers.





The department has a very strong cadre of faculty and support staff. The last legislature provided us funding to refill the dry edible bean breeder position. The search closed December 31st with a total of 31 applicants. I rely on the search team to make recommendations relative to the training necessary to do the job. My role is to hire someone who is a good teacher, has a good work ethic and, most importantly, is a good fit with the rest of the faculty.

Last September I went to Puerto Rico with Drs. Horsley, Carena, and Kianian from our department; Dr. Ken Grafton, Dean and AES Director; and Dr. Wittrock, Dean of the Graduate School. During our visit, we signed an agreement with the University of Puerto Rico at Mayaguez to cooperatively train Ph.D. students, primarily in plant breeding, an area that our department has a strong national and international reputation for excellence. The students selected will do some of their research and course work in both Puerto Rico and at NDSU, with the degrees being awarded by NDSU. We are also establishing an intern program, which will allow us to screen prospective students and to help them improve their English skills. We expect the first of these students to arrive late this spring.



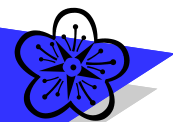
Graduate student applications have leveled off. This does not mean we are static as we have thirteen new students this year. The Ph.D. students and their advisors are: Paul Sadosky (Dr. Schwarz); Harkanwal Sandhu (Dr. Manthey); Fabio Pedraza-Gracia (Dr. Horsley); Andrzej Noyszewski (Dr. Kianian); Fahmida Shireen (Dr. Xu); and Baojun Yang (Dr. Cai). The M.S. students and their advisors are: Bin Xu (Dr. Dai/Dr. Chao); Andrea Swanberg (Dr. Dai); James Loken (Dr. Hatterman-Valenti); Angela Kazmierczak (Dr. Howatt); Neerja Tyagi (Dr. Dahleen); Xinrong Dong (Dr. Schwarz); and Sara Kruppner (Dr. Howatt). Also, Luke Samuel (Dr. Lym), transferred from a GRA to a GRF.

Our graduates continue to do well. Those who have graduated with a Ph.D. are: Dr. Nadejda Krasheninnik (Dr. Franckowiak), a soybean breeder for Pioneer Hi-Bred Int'l; Dr. Ju Wang (Dr. McClean), postdoc with Dr. Lulai a Plant Sciences adjunct professor with USDA/ARS in Fargo; Dr. Kenneth Lamb (Dr. Horsley), a Research Biologist/Post-Doctoral Associate in the College of Medicine, Department of Pediatrics, Division of Cell and Molecular Gene Therapy at the University of Florida; and Dr. John Davies (Dr. Berzonsky), a wheat breeder for Western Plant Breeders in Fargo. Those who have graduated with an M.S. are: Clarissa Barata (Dr. Carena), a Research Associate for Monsanto Corn Trait Integration in Monmouth, Ill.; McDonald Jumbo (Dr. Carena), a Ph.D. student at the University of Delaware; Snigdharani (Reena) Dash (Dr. Johnson), a chemist in our department; Zhiwei (Allen) Chen (Dr. Hatterman-Valenti), a Ph.D. student at the University of Florida; Xunfen Chen (Dr. Faris), an M.S. student in the Department of Statistics at NDSU; Jamie Kloster (Dr. Messersmith), an agronomist with Cenex Harvest States in Kindred; Shipra Mittal (Dr. Dahleen), a Ph.D. at Oklahoma State Univ. in Stillwater; Shalini Sinha (Dr. Manthey) is working for Silliker, Inc. at Modesto, CA; Napoleon Tadatada, (Dr. Manthey) is working for Diversified Foods in Mobile, AL.



In March 2005, 14 graduate students from the Department of Plant Sciences attended the 21st Graduate Student Symposium in Saskatoon, Canada. John Davies received second place in the Genetics and Breeding Section for his presentation 'Evaluation of marker based selection for high grain protein content in spring wheat'. Lisa Dahl received second place in the Agronomy Section for her presentation 'Alfalfa response to Tribenuron'. Congratulations to both of them! This year the symposium will be held in Winnipeg.

Undergraduate numbers continue to increase. Our new Sports and Urban Turfgrass Management Program has 39 students; Crop and Weed Sciences has 101 students, which is an increase of 16; and Horticulture has 49 students, which is four more than last year. The majority of our students continue to be from North Dakota and Minnesota, but we are seeing increasing numbers from surrounding states in the region. Almost 50% of our CWS undergraduate



students are female, while in Horticulture female students outnumber male students, and approximately 42% of our graduate students are female. That is a real change from when I went to school at Montana State University 40+ years ago. I do not recall any female undergrads in the College of Agriculture, except a couple that were in Animal Science. There were not any in the Agronomy or Horticulture undergraduate and graduate programs. At the time I attended MSU, as a whole, there were about 2.5 male students for each female student. Times have definitely changed for the better.

NDSU, the only Division I school in the state, is an excellent school--both for graduate and undergraduate programs. If you know of a good prospective student, let me know and I will contact her/him.

It was, as always, good to visit with and see those of you who attended the North Dakota Blizzard Party at the ASA/CSSA/SSSA Meetings in Salt Lake City. I appreciate your interest and support of the department and NDSU. It is always a pleasure to see how well all of you are doing. It makes those of us who had some part of your careers, however small, feel very proud.

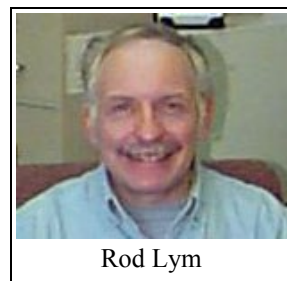
We had nine graduate students and nine faculty attend the meetings in Salt Lake City. One of our graduate students, Tao Wang who works with Dr. Cai, won first place in the poster competition at the meetings.

In July, Dr. David Dai attended the American Society of Horticultural Science Meeting in Las Vegas, NV.

The American Association of Cereal Chemists Meeting was held in September in Orlando, FL. Frank Manthey and three graduate students attended.

The North Central Weed Science Society Meetings were held in Kansas City, MO in December. The past president is Dr. Tom Peters, who is with Monsanto, while the current president is Dr. Steve Miller, Dean and Director of the Experiment Station at the University of Wyoming. Dr. Adrian Moses, Field Research and Development Specialist, Syngenta Crop Protection, Iowa, is president elect. All three are NDSU Plant Sciences graduates. Many of our faculty and past graduates have also served as president of this society, but never three in a row.

Dr. Rod Lym has been named a Fellow of the Weed Science Society of America. Rod had been assistant chair of Plant Sciences for a couple of years and is now the Interim Chair of the Department of Soil Science. The faculty and staff of the Soil Science Department are very lucky, as he will do a fine job. He was a tremendous help to me as has been Rich Horsley, who replaced Rod as my assistant. There were several reasons that I asked for an assistant chair. I have sat in on many search committees where NDSU faculty were overlooked, even though they were, in my mind at least, as well qualified as others that were being considered. I have also seen NDSU faculty not receive off campus interviews because they did not have any administrative experience.



Rod Lym

Having an assistant provides faculty the opportunity to decide if they would like administration. Also Plant Sciences is the largest department on campus and larger than some colleges. Sometimes I need help for special projects. For example, Rich has been doing all of the work on the joint project with the University of Puerto Rico at Mayaguez. He has also been working on the greenhouse fund-raising project. I have tried hard not to give any of my assistant chairs too much to do as they need to continue their research projects and fulfill their teaching duties.

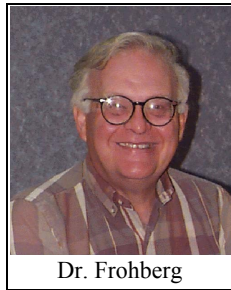


Rich Horsley

In early November, Dr. Carter was honored at the NDSU Harvest Bowl with the Outstanding Agri-Business Award. The plaque reads "For leadership and service to agriculture at the local, state and international level. For continuous and spirited support of the agricultural community through research in flax utilization and production which have greatly benefitted North Dakota producers and the flax industry. For outstanding leadership and promotion of research and agricultural education in North Dakota and beyond for five decades". I can't think of anyone more worthy of this award. He continues to be a role model and inspiration for many of us in the department, including yours truly.



In other news, I recently learned that Dr. Richard Frohberg will be inducted into the North Dakota Agricultural Hall of Fame at the Valley City Winter Show in early March. He joins Drs. Jack Carter, Glenn Smith and Roald Lund as other agronomists that are in the Hall of Fame. Dr. Frohberg is a very humble man and did a tremendous service to the wheat producers of North Dakota. NDSU varieties continue to dominate North Dakota and Montana spring wheat production.



Dr. Frohberg

Dr. Bev Durgan, a Ph.D. graduate from Plant Sciences, is the new Director of Extension at the University of Minnesota. Prior to being appointed to this position, she served as Chief Budget Officer of the Agriculture College, Associate Director, and as an extension weed science specialist, all at the U of MN.

Dr. Steve Miller, a Ph.D. graduate from our department, has been named Dean and Director of the Experiment Station at the University of Wyoming. He was a faculty member in our department from 1968 to 1984, and then served as weed scientist and department chair at the University of Wyoming prior to receiving his present appointment.

CONGRATULATIONS!!! You make us very proud.

Andrew Thostenson was named Agricultural Communicator of the Year. The selection is made by the NDSU Agriculture Communication Department and the members of the North Dakota Association for Communication Excellence. Andrew is the leader of the NDSU Extension Service Pesticide Program, which is housed in Plant Sciences. The program is responsible for the training, testing and licensing of all private and public pesticide applicators in the state. Last year 1754 commercial and 3959 private applicators were certified. Both types need to be re-certified every three years. In addition to that, he also is involved in training cooperatively with the University of Minnesota. Last year's Agricultural Communicator of the Year was Dr. Rod Lym, also from Plant Sciences.



Andrew Thostenson

The only faculty resignation this year was that of Dr. Monisha Chakraborty, who moved to California to join her husband. I have received permission to refill her position and am working with a group of faculty and others outside the campus to determine the best skills necessary. Ironically, last year the Wheat Commission provided funding for a Cereal Science technician who will work with Monisha's replacement. Kristin Whitney was recently hired and will work with Truman Olson and Frank Manthey in the Cereal Science labs to learn the necessary skills.

Among the support staff, Sue Brantseg transferred from Plant Sciences to the Graduate School. She was replaced by Michelle (Shelly) Lura. One of Shelly's primary responsibilities will be to work with the graduate students, making sure they jump through all the hoops that are required. She is also responsible for handling the paperwork when new graduate students apply.



Shelly Lura

New postdocs are Liwang Liu from China working with Dr. Cai on wheat genetics; Ju Wang from China working with Dr. Lulai on potato physiology; Anantharama Rishi from India working with Dr. Kianian to develop a reverse genetic collection for wheat; and Bing Yue from China working with Dr. Hu on development DNA markers to map sunflower sclerotinia head rot resistance and other important traits. In a recent article in *The Scientist*, NDSU was ranked 34th in the nation as one of the best places for a postdoc to work. Among land grant universities only Cornell University, University of Illinois and University of California, Davis were ranked above NDSU.

New visiting scientists are Xihua Zhang from China working with Dr. Carena, on corn breeding; Hisham Taher from Egypt working with Dr. Miller on sunflower breeding and genetics; Monica Rossi from Italy working with Dr. McClean on the study of evolution patterns of genes and gene families in the common bean; Eungchul Yu from working with Dr. Lee and Daniel Martins from Brazil working with Dr. Deckard in collaboration with Karen Klotz, an adjunct in Plant Sciences and a research molecular biologist with the USDA/ARS. Daniel is working on the biology of postharvest respiration in sugarbeet roots.



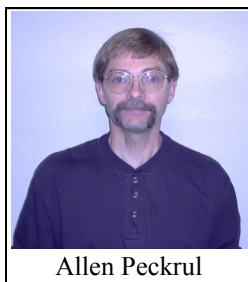
Renna Dash

Cielo Castillo

Kristin Whitney

New research specialists are Reena Dash, who will work with Dr. Manthey. Reena completed a M.S. under Dr. Burton Johnson this summer. She replaced Jonathan Neubauer, who took a position with USDA. Also hired was Cielo Castillo. Cielo works with Dr. Dai and will be doing transformation in woody plants. As mentioned earlier, Kristin Whitney will work as a technician with the cereal science group.

Truman Olson who does most of the HRSW and HRWW quality analysis, moved from full time to half time. Allen Peckrul transferred to Dr. Shahryar Kianian's lab from Biochemistry.



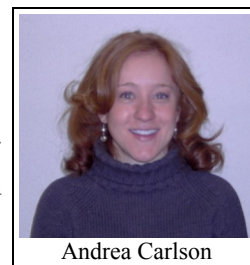
Allen Peckrul

Other resignations include Annie Erickson, who worked with the potato breeding project. She continues to live in the FM area and works at the Neuropsychiatric Research Institute as a Research Study Monitor/Data Technician. Mary Wentz, from the germplasm enhancement project, moved with her family to Maine, where her husband is employed. Eric Auwarter, who worked with the potato breeding project, now works in O'Neil, Nebraska for RDO, a company heavily involved in potato production. He married Fernando Silva, a graduate student from Brazil in the potato breeding project.

The Horticultural Demonstration and Research Plots continue to be developed. This year quite a bit of landscaping was completed and irrigation systems were installed. Both the annual and perennial gardens were transferred to the new site, and almost all of the Iris donated by Arthur Jensen have been planted. We will probably have a dedication of the Iris garden sometime in the next year.



Andrea Carlson a graduate student in our department, continues to have responsibility for designing the horticultural gardens. It will take several years to complete, but good progress is being made. If any of you stop by this summer and you would like a tour, please let me know.



Andrea Carlson

It was good to see Phil and Mary Goynes, who stopped by this summer while they were on a world tour. Phil, who hails from Australia, is a former student of mine and just recently retired. He was a terrific student and did very well professionally after leaving NDSU. I am extremely proud of him.

Congratulations are due to Harlene Hatterman-Valenti, who has been elected to the Council of College Faculties.

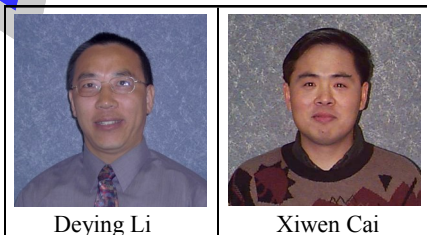


Harlene Hatterman-Valenti



Louise Heinz & Mike Christoffers

Thirty-three NDSU agriculture faculty and staff were recognized for their service during a recognition and awards program. The sponsors of the endowments and the award recipients in our department were: Earl and Dorothy Foster Excellence in Teaching Award - Michael Christoffers; Donald and Jo Anderson Clerical Staff Award for Excellence - Louise Heinz. Congratulations!

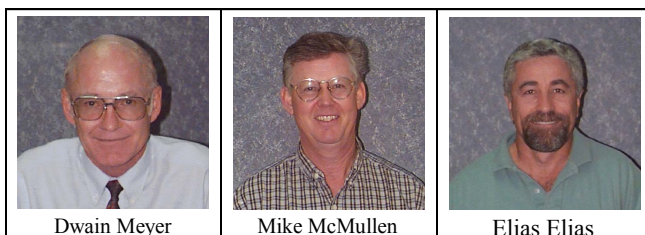


Deying Li

Xiwen Cai

At a College faculty meeting the following persons were elected by their peers to represent the College of Agriculture, Food Systems and Natural Resources.

- University Senate: Deying Li and Xiwen Cai
- University Senate Academic Integrity Committee: Dwain Meyer
- University Senate Faculty Personnel Committee: Mike McMullen
- CAFSNR PTE Committee: Elias Elias



Dwain Meyer

Mike McMullen

Elias Elias

As each of you know, each year I take the office staff on a one day outing, usually in August. This year we visited the Carlos Creek Winery in Alexandria, Minnesota. It is a little further than we usually go, but was worth the visit. I had never visited a winery before.



Wine casks aging in the cellar.



Melissa & Eileen looking at the life-sized chess game.

We have a couple of new scholarships this year. The Minnesota Nursery & Landscape Association has provided a \$1000 scholarship, which is co-sponsored by Lee Nursery of Fertile, MN. The award goes to an outstanding student who is interested in the landscaping industry. This year's winner was Alyssa Hoffert, a horticulture major from Carrington, ND. She traveled to the Minnesota Green Expo in early January to receive the award. Congratulations!



Gary Lee & Alyssa Hoffert

Andrea Carlson, a M.S. horticulture graduate student from Hibbing, MN, was the recipient of the \$3500 National Garden Club Scholarship. Applicants must have at least a 3.25 average in order to apply. They must also include a letter discussing their goals, background, financial need and personal commitment of their career of choice. Only one application from each state is considered.

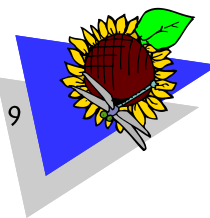
Scholarship Recipients

2005-2006 scholarship recipients are as follows: (hometowns in ND, unless otherwise noted)

Horticulture Curriculum:

Harry C. Baker Memorial Scholarship, \$200: Chad Burrer, Wing; **Jack F. Carter PLSC Undergraduate Scholastic and Leadership Scholarship**, \$1,000: Michelle Duppong, Glen Ullin; **Harry A. Graves Memorial Scholarship**, \$200: Suzanna Kuchera, Wyndmere; **Margaret Haedt Memorial Scholarship**, \$150: Ashley Braun, Melette, SD; **Horticulture & Forestry Club Scholarship**, \$300: Kevin Michener, Hatfield, PA; **Horticulture and Forestry Faculty & Staff Scholarship**, \$150: Jill Jerve, Montevideo, MN;

Horticulture Faculty Scholarship, \$120: Rebecca Rogne, Minot; **Hovland-Jensen Scholarship Fund**, \$300: Alyssa Hoffert, Carrington; **Ruth M. Johnson Scholarship**, \$200: Aimee Thapa, Williston; **Mainline Potato Company Scholarship**, \$125: Suzanna Kuchera, Wyndmere; **ND State Horticultural Society Scholarship**, \$750: Valerie Eitreim, Garretson, SD; **Henry R. and Corinne Foley Peterson Horticulture Scholarship**, \$475: Bethany VanderVorst, Bismarck; **H. Donald Piepkorn Scholarship**, \$350: Shanna Hauck, Dunn Center; **A.D. Stoesz Memorial Scholarship**, \$400: Michelle Duppong, Glen Ullin; **W. Allan and H. Lucile Watt Scholarship**, \$200: Carly Bye, Rugby.



Scholarship Recipients, Cont.

CWS Curriculum:

Arthur Companies/Joe Burgum, \$275: Luke Kuster, Reynolds; **John Breker Crop Science Scholarship**, \$200: Justin Balsdon, Langdon; **CHS Cooperative Foundation Scholarship**, \$500: Sarah Gegner, Redwood Falls, MN; **CHS Cooperative Foundation Scholarship**, \$500: William Mack, Park Rapids, MN; **James R. Dawson Scholarship**, \$300: Ryan Starr, Doland, SD; **Russell and Anna Duncan Foundation**, \$500: Sheri Kemnitz, Cavalier; **Russell and Anna Duncan Foundation**, \$500: Jason Fisher, Minot; **Travis C. Engstrom Memorial Scholarship**, \$500: Magan Friskop, Hankinson; **Ernie French CWS Scholarship**, \$500: Elizabeth Bruins, Arnegard; **Lars A. Jensen Scholarship (NDCISA)**, \$650: Sheldon Gerhardt, Mandan; **H.R. Lund Freshman PLSC Scholarship**, \$500: Matthew McRell, Olivia, MN; **George Meagher Scholarship**, \$900: Diana Hanson, Crookston, MN; **George Meagher Scholarship**, \$900: Nancy Hillen, Fargo; **George Meagher Scholarship**, \$900: Rebekah Miller, Lawton; **Monsanto Ag. Products Co. Scholarship**, \$500: Chad Schulz, Edgeley; **Monsanto Ag. Products Co. Scholarship**, \$500: Shana Ternes, Strasburg; **ND Ag Assoc. - Irvine T. Dietrich**, \$500: Jena Flaten, Portland; **ND Ag Assoc. - Donald Kenna**, \$500: Patrick Foster, Britton, SD; **ND Ag Assoc. - Chuck Rongen**, \$500: Sarah Gubbels, Kennedy, MN; **Glenn A. Peterson Memorial Scholarship**, \$500: Jason Becker, Wishek; **Glenn A. Peterson Memorial Scholarship**, \$400: Kirk Rabenberg, Britton, SD; **PLSC Freshman Scholarship**, \$1,000: Andrew Friskop, Hankinson; **P.C. Sandal Memorial Scholarship**, \$500: Kelly Olson, Cambridge, MN; **Harry and Lillie Seidel Ag. Scholarship**, \$1,000: Jason Thomas, Mandan; **Theodore E. and Marguerite R. Stoa Freshman Scholarship**, \$315: Eric Broten, Dazey.

Graduate Students:

H. L. Bolley Graduate Scholarship, \$800: Jesse Underdahl, Hebron; **Gustav N. Geiszler Memorial Scholarship**, \$400: Luke Samuel, Fargo; **John H. Longwell, Jr. Memorial Scholarship**, \$250: Xunfen Chen, Wuxi, Jiangsu China; **Devin Miller Memorial Scholarship**, \$400: Angela Sebelius, Overly; **Eric Matthew Miller Memorial Scholarship**, \$1,000: Marcelo Melani, Chascomus, BS AS Argentina; **Monsanto Graduate Student Scholarship**, \$500: Chelsea Juricek, Crete, NE; **Monsanto**

Graduate Student Scholarship; \$500:

Robbie Holthusen, Wahpeton; **Monsanto**

Graduate Student Scholarship, \$500: Deborah Willard, Barnesville, MN; **Charles and Linda Moses Presidential Graduate Fellowship**, \$1,000:

Guorong Zhang, Shanghai, China; **Charles and Linda Moses Presidential Graduate Fellowship**, \$1,000:

Carrie Schumacher, Reynolds; **Charles and Linda Moses Presidential Graduate Fellowship**, \$1,000:

Aruna Kandikonda, Hyderabad, India; **Charles and Linda Moses Presidential Graduate Fellowship**,

\$1,000: Rebekah Oliver, Pelican Rapids, MN;

Charles and Linda Moses Presidential Graduate Fellowship, \$1,000: Zhiwei Chen, Shanghai,

China; **Charles and Linda Moses Presidential**

Graduate Fellowship, \$1,000: Rongshuang Lin

Yantai Shandong, China; **John D. Nalewaja Graduate**

Scholarship, \$625: Aaron Carlson, Milaca, MN;

North Dakota Dry Edible Bean Seed Growers Scholarship, \$1,000: Eric Delahoyde, Cogswell;

North Dakota Dry Edible Bean Seed Growers

Scholarship, \$1,000: Xiaoke Wang, China; **PLSC**

Graduate Scholarship, \$500: Marisol Berti,

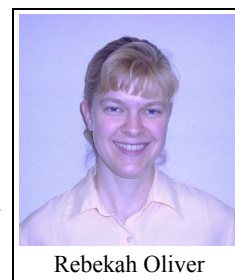
Chillan, Chile; **Glenn L. Smith International**

Graduate Fellowship, \$450: John Davies,

Maylands, Australia.

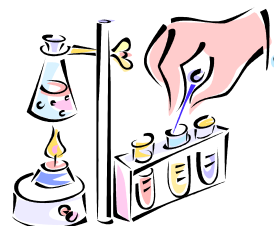
Faculty, Staff & Student Awards

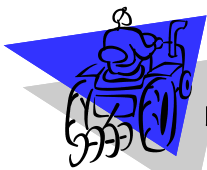
Rebekah Oliver, a Ph.D. graduate student from Pelican Rapids, MN, was selected as the department recipient of the 2006 Gerald O. Mott Meritorious Graduate Student Award in Crop Science. This award is given annually by the American Society of Agronomy to an outstanding graduate student at each university.



Rebekah Oliver

Patrick Kilzer, a Soil Science undergraduate student from Mott, ND, was selected as the outstanding senior in Crop and Weed Sciences. He was recognized by the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America.





Barb Laschkewitsch, research specialist in Plant Sciences, received the Mary McCannel Gunkelman Recognition Award. The honor goes to the student, faculty or staff member who has made the most significant and unselfish contribution to a happy environment at NDSU. Barb manages the horticulture greenhouse, supervises student employees and teaches floral design class. Anyone who knows Barb, knows the award is well deserved.



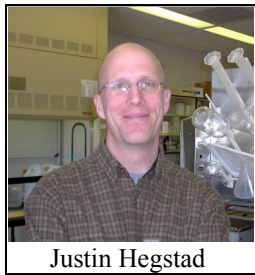
Barb Laschkewitsch



Ken Grafton

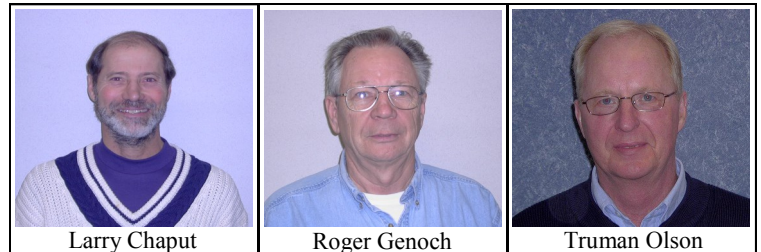
Robert Nudell

Dr. Ken Grafton became a member of the Quarter Century Club. Robert Nudell was honored for 20 years of service; Larry Chaput for 30 years; and Roger Genoch and Truman Olson for 35 years.



Justin Hegstad

Justin Hegstad, research specialist in Plant Sciences, received an Individual Staff Recognition award for his courtesy, professionalism and cooperative spirit. Only 10 individuals on campus received the honor in 2005.



Larry Chaput

Roger Genoch

Truman Olson

Edward Deckard, professor of Plant Sciences, was awarded the prestigious Peltier Award for Innovation in Teaching, at the "Celebration of Faculty Excellence" in May. Ed is a co-developer of the Virtual Conferences on Genomics and Bioinformatics, and the co-founder of Plant Science's Teaching Circle, where participants discuss teaching and learning techniques. He has also played a significant role in the development of the Plant Sciences Learning Center.

Marisol Berti, a Ph.D. graduate student from Chile, was given a travel award of \$1,500 by the Agricultural Advancement of Industrial Crops to attend a AAIC Conference in Madrid, Spain September 18-21, 2005.



Marisol Berti

Valerie Ann Eitreim, and Bethany Vandervorst, horticulture undergraduates, along with Carrie Schumacher, a Horticulture M.S. student, were named to the 2005 edition of "Who's Who Among Students in American Universities and Colleges". First published in 1934, the directory includes an elite group of students from more than 2,300 institutions of higher education. Congratulations!

Brian Quinn, a sports and urban turfgrass management major from Plymouth, MN, was awarded a one-week internship with USGA (United States Golf Association) Northwest Region. Students selected traveled with members of the Green Section staff on Turf Advisory Service visits for one week between May and August 2005. Selected students received a \$250 stipend for the week, and all transportation, hotel, and meal expenses were paid by the USGA.

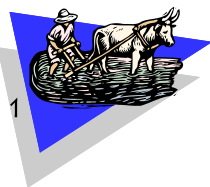


Valerie Ann Eitreim

Bethany Vandervorst

Carrie Schumacher

Ryan (David) Sticha, a horticulture major from New Prague, MN, received a \$1,000 award for tuition or the purchase of books and supplies from the Midwestern Chapter of the International Society of Arboriculture (MWISA), a professional society of arborists.



Proposed research to decipher a gene leading to humankind’s domestication of wheat won the USDA -Agricultural Research Service’s T.W. Edminster Research Associate Award for 2006. USDA-ARS plant geneticist Justin D. Faris won the award for his proposal to study the “super” Q gene. In cultivated wheat, *Triticum aestivum*, the Q gene is something of a master switch that regulates many different traits, most notably the “naked” (hullless) grain characteristic. Justin is an adjunct faculty member of Plant Sciences. He is originally from Beach, ND and has a B.S. and M.S. from our department. Way to go Justin!

Dr. Ted Helms won the Bison Chip this year. He has not visited with me about it. I assume that he is just overcome with emotion and the high that comes with winning this prestigious award.

We do have a new bison chip award this year. It originated in western North Dakota and is on a new plaque shaped like a bison’s head. The old award served us well for 26 years. The chip was starting to fall apart and it was looking a little rustic and tacky. It has been retired and will be on permanent display one of these days. The committee that determines the award winner considered naming it the Meyer-Smith Award, since Dr. Meyer and Dr. Smith collectively have won it six times.

New Additions

I can tell every time someone brings a baby into the office. All at once everything is quiet. I can look out and see the whole office staff hovering around a baby who is usually sleeping or too scared to cry. We had a number of new additions to the Plant Sciences family this year:



These include our third grandchild, Claire Ann, born on December 12, 2005. She weighed 7 lbs., 13 ozs. and was 21 in. long.

Jack Cornelius, born to John and Keri Davis on August 29, 2005. He weighed 8 lbs., 10 oz. and was 20 in. long.

Cyrus Feridoon, born to Shahryar and Penny Kianian on May 24, 2005. He weighed 9 lbs., 1 oz. and was 21 and 1/4 in. long.

Kaia Mckenzie, born to Rian and Diane Lee on June 27, 2005. She weighed 4 lbs., 12 oz. and was 17 and 3/4 in. long.

Juan Esteban Osorno, born to Juan and Judith Osorno on April 13th, 2005. He weighed 7 lbs., 10 oz. and was 19 in. long.

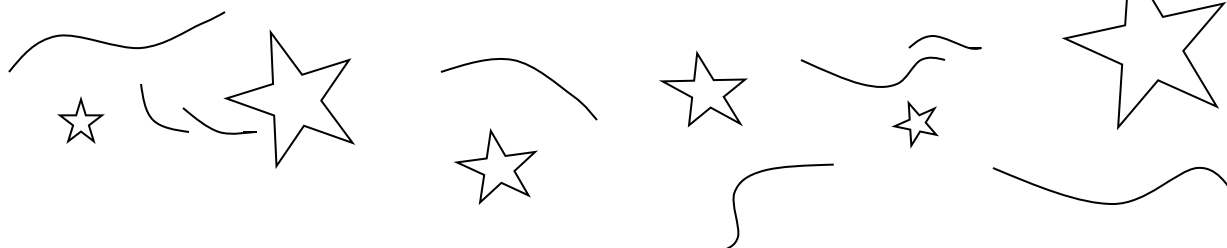
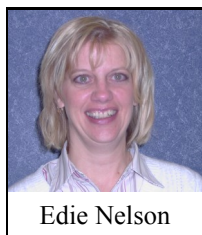
That about takes care of my portion of the Blizzard Watch. If you are in the Fargo area, stop in and visit us. If you know of any potential graduate students, send them our way. Also visit us on the web at <http://www.ag.ndsu.edu/plantsci/>

If you have any questions or comments and need to call me, my telephone number is 701.231.8137 or email me at albert.schneiter@ndsu.edu. I hope you all have a great personal and professional year and all your loved ones remain safe and sound.

See you next year,

Al Schneiter,
Professor and Chair

Eddie Nelson
Administrative Secretary





Plant Sciences Faculty

BLIZZARD WATCH

Schneider, A. A.	<i>Prof. & Chair (crop production)</i>	Kegode, G. O.	<i>Asst. Prof. (weed biology & ecology)</i>
Berglund, D. R.	<i>Prof. (ext. agr., row crops, specialty crops)</i>	Kianian, S. F.	<i>Assoc. Prof. (HRS, durum wh. germ. enhanc.)</i>
Berzonsky, W. A.	<i>Assoc. Prof. (HWS, spec./sawfly wheat brdg.)</i>	Lee, C. W.	<i>Prof. (ornamentals, turf/biotech.)</i>
Cai, X.	<i>Asst. Prof. (wheat genetics)</i>	Li, D. M.	<i>Asst. Prof. (sports turf management)</i>
Carena, M. J.	<i>Asst. Prof. (corn breeding and genetics)</i>	Lym, R. G.	<i>Prof. (perennial weed control)</i>
Christoffers, M. J.	<i>Asst. Prof. (weed science/genetics teaching)</i>	Manthey, F. A.	<i>Assoc. Prof. (durum and pasta quality)</i>
Dai, D. W.	<i>Asst. Prof. (woody plant phys./biotech.)</i>	McClellan, P. E.	<i>Prof. (dry bean genetics, biotechnology)</i>
Deckard, E.L.	<i>Prof. (crop physiology)</i>	McMullen, M. S.	<i>Assoc. Prof. (oat breeding and genetics)</i>
Dexter, A. G.	<i>Prof. (ext. weed phys., sugarbeets)</i>	Mergoum, M.	<i>Assoc. Prof. (HRSW breeding)</i>
Elias, E. M.	<i>Prof. (durum wheat breeding)</i>	Messersmith, C. G.	<i>Prof. (weed science, physiology)</i>
Franckowiak, J. D.	<i>Prof. (2-row barley breeding, genetics)</i>	Meyer, D. W.	<i>Prof. (forage prod. and physiology)</i>
Grafton, K. F.	<i>Prof. (dry bean breeding)</i>	Ransom, J. K.	<i>Assoc. Prof. (ext. agronomist, sm grains)</i>
Hammond, J. J.	<i>Prof. (flax/crambe brdg, computer prog.)</i>	Schwarz, P.	<i>Prof. (malting barley quality)</i>
Hatterman-Valenti, H.	<i>Asst. Prof., (high value crop prod.)</i>	Smith, R. C.	<i>Prof. (extension horticulture/turfgrass)</i>
Helms, T. C.	<i>Prof. (soybean breeding, genetics)</i>	Thompson, A. L.	<i>Asst. Prof. (potato breeding)</i>
Herman, D. E.	<i>Prof. (woody plants, ornamentals)</i>	Thostenson, A.	<i>Ext. Spec. (pesticide program spec.)</i>
Horsley, R. D.	<i>Prof. (6-row barley brdg, genetics)</i>	Williams, M. D.	<i>Seedstocks Director</i>
Howatt, K. A.	<i>Asst. Prof. (weed science-annual weeds)</i>	Zelevnik, J. D.	<i>Ext. Forester (urban/rural forestry)</i>
Johnson, B. L.	<i>Assoc. Prof. (sunflower, minor, new crop prod.)</i>	Zollinger, R.K.	<i>Assoc. Prof. (extension weed control)</i>

Adjunct Professors

Anderson, J. V.	<i>USDA (plant biochemistry)</i>
Campbell, L. G.	<i>USDA (sugarbeet genetics)</i>
Carr, P. M.	<i>Dickinson Res/Ext Center (sustainable ag.)</i>
Chao, S.	<i>BRL/USDA (genomics)</i>
Chao, W. S.	<i>USDA (molecular biology/weeds)</i>
Dahleen, L. S.	<i>USDA (barley genetics, biotechnology)</i>
Faris, J. D.	<i>USDA (wheat molecular genetics)</i>
Foley, M. E.	<i>USDA (weed biology)</i>
Henson, R. A.	<i>Carrington Res/Ext. Center (crop prod.)</i>
Horvath, D. P.	<i>USDA (perennial weed physiology)</i>
Hu, Jinguo	<i>USDA (sunflower genomics)</i>
Jan, C. C.	<i>USDA (sunflower cytogenetics)</i>
Jauhar, P. P.	<i>USDA (wheat cytogenetics)</i>
Klotz, K. L.	<i>USDA (sugarbeet physiology)</i>
Lulai, E. C.	<i>USDA (potato physiology)</i>
Miller, J. F.	<i>USDA (flax and sunflower genetics)</i>
Seiler, G. J.	<i>USDA (sunflower/sugarbeet germplasm)</i>
Sowokinos, J. R.	<i>USDA (potato physiology)</i>
Suttle, J. C.	<i>USDA (potato physiology)</i>
Xu, S. S.	<i>USDA (HRS development)</i>
Beaver, J.	<i>Univ. of PR-Mayaguez</i>
Brunner, B.	<i>Univ. of PR-Mayaguez</i>
Erpelding, J.	<i>Univ. of PR-Mayaguez</i>
Ortiz, C.	<i>Univ. of PR-Mayaguez</i>
Porch, T.	<i>Univ. of PR-Mayaguez</i>
Wessel-Beaver, L.	<i>Univ. of PR-Mayaguez</i>
Guimaraes, E. P.	<i>FAO-Rome, Italy</i>

Postdoc. Research Fellow/ Visiting Scientists, Project leader, Country, Area of Research

Abu Hamad, W.	<i>Elias (Jordan - durum wheat breeding)</i>
Chen, J.	<i>Hu (China - sunflower genomics)</i>
Feng, J.	<i>Jan (China - sunflower cytogenetics)</i>
Gelin, J.	<i>Grafton (Haiti - bean breeding)</i>
Gonzalez, J.	<i>Kianian (Spain - scab resistance/spr wht)</i>
Gu, X.	<i>Foley (PRC - weed biology)</i>
Jia, Y.	<i>Chao (China - perennial weeds)</i>
Liu, L.	<i>Cai (China - wheat genetics)</i>
Lu, H.	<i>Faris (China - wheat genetics)</i>
Martins, D.	<i>Deckard (Brazil - sugarbeet physiology)</i>
Rishi, A.	<i>Kianian (Kianian - wheat genetics)</i>
Rossi, M.	<i>McClellan (Italy - common bean)</i>
Rojas-Cifuentes, G.	<i>Grafton (Chile - bean breeding)</i>
Singh, P.	<i>Mergoum (India - wheat breeding)</i>
Taher, H.	<i>Miller (Egypt - sunflower breeding/genetics)</i>
Tobias, D.	<i>Dahleen (Manila - barley genetics/biotech)</i>
Wang, J.	<i>Lulai (China - potato physiology)</i>
Yu, E.	<i>Lee (Korea - ornamentals)</i>
Xihua, Z.	<i>Carena (China - corn breeding)</i>
Yue, B.	<i>Hu (China - sunflower research)</i>
Yue, M.	<i>Jan (China - sunflower cytogenetics)</i>

Office Staff

Aanstad, Robin	Lura, Shelly
Anderson, Julie	Nelson, Edie
Blaskowski, Michelle	Odegaard, Mary Beth
Buringrud, Eileen	Perrin, Char
Heinz, Louise	Welter, Melissa
Johnson, Lisa	



Research Specialists, Technicians, Chemists

<i>Auwarter, Collin</i>	<i>(high value crop prod.)</i>	<i>Laschkewitsch, Barb</i>	<i>(vegetables & perennials)</i>
<i>Barr, John</i>	<i>(malting barley)</i>	<i>Leach, Gene</i>	<i>(hard spring wheat)</i>
<i>Baumann, Robert</i>	<i>(oat breeding)</i>	<i>Lee, Rian</i>	<i>(dry bean genetics/biotechnology)</i>
<i>Bellon, Mike</i>	<i>(seed processing)</i>	<i>Lindberg, Lyle</i>	<i>(flax breeding)</i>
<i>Castillo, Cielo</i>	<i>(woody plants)</i>	<i>Luecke, John</i>	<i>(sugarbeet weed control)</i>
<i>Chaput, Larry</i>	<i>(woody plants)</i>	<i>Magnuson, Victoria</i>	<i>(woody plants biotechnology)</i>
<i>Christianson, Katheryn</i>	<i>(perennial weeds)</i>	<i>Maianu, Josef</i>	<i>(seedstocks)</i>
<i>Ciernia, Mark</i>	<i>(weed control)</i>	<i>Mark, Sandra</i>	<i>(weed science)</i>
<i>Dash, Snigdharani (Reena)</i>	<i>(durum quality)</i>	<i>Martin, Larry</i>	<i>(soybean breeding)</i>
<i>Davidson-Harrington, Janet</i>	<i>(weed science)</i>	<i>McArthur, Rachel</i>	<i>(wheat genetics)</i>
<i>Deckard, Brenda</i>	<i>(student services director)</i>	<i>McMonagle, Kelly</i>	<i>(durum quality)</i>
<i>Duppong, Lisa</i>	<i>(high value crop production)</i>	<i>Meyer, Scott</i>	<i>(extension small grains)</i>
<i>Faller, James</i>	<i>(HRS wheat breeding)</i>	<i>Nudell, Robert</i>	<i>(forages)</i>
<i>Faller, Jason</i>	<i>(barley breeding)</i>	<i>Olson, Rachel</i>	<i>(wheat quality)</i>
<i>Farnsworth, Bryce</i>	<i>(potato breeding)</i>	<i>Olson, Truman</i>	<i>(wheat quality)</i>
<i>Genoch, Roger</i>	<i>(barley breeding)</i>	<i>Peckrul, Allen</i>	<i>(germplasm enhancement)</i>
<i>Gillespie, James</i>	<i>(malting barley quality)</i>	<i>Pederson, Jeremy</i>	<i>(seedstocks)</i>
<i>Green, Marci</i>	<i>(barley breeding)</i>	<i>Pederson, Shauna</i>	<i>(weed science)</i>
<i>Gregoire, Pete</i>	<i>(crop physiology)</i>	<i>Petersen, Paula</i>	<i>(crop production)</i>
<i>Halley, Jeremiah</i>	<i>(HRSW breeding)</i>	<i>Ries, Jerry</i>	<i>(weed survey)</i>
<i>Hanson, Dave</i>	<i>(soybean breeding)</i>	<i>Roach, Ron</i>	<i>(weed control)</i>
<i>Hatzenbeller, Debra</i>	<i>(malting barley quality)</i>	<i>Stancyk, Stan</i>	<i>(durum breeding)</i>
<i>Hegstad, Justin</i>	<i>(wheat germplasm enhancement)</i>	<i>Underdahl, Sarah</i>	<i>(durum breeding)</i>
<i>Hinsz, Brent</i>	<i>(durum and pasta quality)</i>	<i>VanderWal, Jody</i>	<i>(dry bean breeding)</i>
<i>Hochhalter, Martin</i>	<i>(barley breeding)</i>	<i>Wanner, Duane</i>	<i>(corn breeding)</i>
<i>Kercher, Kreg</i>	<i>(durum wheat breeding)</i>	<i>Whitney, Kristin</i>	<i>(durum and pasta quality)</i>
<i>Lafta, Abbas</i>	<i>(potato physiology)</i>	<i>Wijetunga, Theja</i>	<i>(molecular markers)</i>
		<i>Zhou, Zing Kai</i>	<i>(weed science)</i>

Pictures from Puerto Rico



Marcelo Carena & Shahryar Kianian by a banana tree.



Ken Grafton by a mango tree.



Marcelo Carena by a bean and corn field.



Graduate Students

BLIZZARD WATCH

Bergh, Lisa
 Berti, Marisol Tatiana
 Bhamidimarri, Suresh
 Caffarel, Juan Carlos
 Carlson, Aaron
 Carlson, Andrea
 Chenggen, Chu
 Dahl, Lisa
 Davies, John
 Delahoyde, Eric
 Dilawari, Mridull
 Dong, Xinrong
 Dvorak, Eric
 Ehli, Arielle
 Eidenshink, John
 Gamotin, Emma
 Ghosh, Pradyot
 Holthusen, Robbie
 Huhn, Melissa
 Jumbo, McDonald
 Juricek, Chelsea
 Kandikonda, Aruna
 Kazmierczak, Angela
 Krippner, Sara
 Kumar, Sunil
 Lin, Rongshuang
 Loken, James
 Mamidi, Sujan
 Mathew, Sudeep
 Matkovic, Kornelija
 McConnell, Melody
 Melani, Marcelo

Horsley
 Johnson
 Kianian/Elias
 Franckowiak
 Dexter
 Smith
 Faris
 Howatt
 Berzonsky
 Zollinger
 Kianian
 Schwarz
 Howatt
 Howatt
 Berzonsky
 Berzonsky
 Chakraborty
 Johnson
 Elias
 Carena
 Lym
 Christoffers
 Howatt
 Howatt
 Faris
 Horsley
 Hatterman-Valenti
 McClean
 Hatterman-Valenti
 Chakraborty
 McClean
 Carena

Michalak, Monika
 Nazre, Gauri
 Noyszewski, Andrzej
 Oberoi (Seth), Kiran
 Oliver, Rebekah
 Osorno, Juan Manuel
 Pedraza-Garzia, Fabio
 Reddy, Leela
 Sadosky, Paul
 Samuel, Luke
 Sandhu, Harkanwal
 Sandhu (Singh), Keti
 Schorno, Anton
 Schumacher, Carrie
 Sebelius, Angela
 Sezegen, Bahadir
 Shireen, Fahmida
 Silva, Fernanda
 Swanberg, Andrea
 Tyagi, Neerja
 Underdahl, Jesse
 Varanasi, Vijaya
 Vilaro, Diego
 Waletzko, Angela
 Wang, Ju
 Wang, Tao
 Willard, Deborah
 Xu, Bin
 Yang, Baojun
 Yu, Goutai
 Zhang, Guorong
 Zhang, Zeng Cui

Kianian
 Kegode
 Kianian
 Kianian
 Cai
 Carena
 Horsley
 Faris
 Schwarz
 Lym
 Manthey
 Manthey
 Manthey
 Hatterman-Valenti
 McMullen
 Carena
 Xu
 Thompson
 Dahleen
 Mergoum
 Mergoum
 Horvath
 McMullen
 Hatterman-Valenti
 McClean
 Cai
 Hatterman-Valenti
 Dai/Chao
 Cai
 Franckowiak
 Mergoum
 Faris/Xu



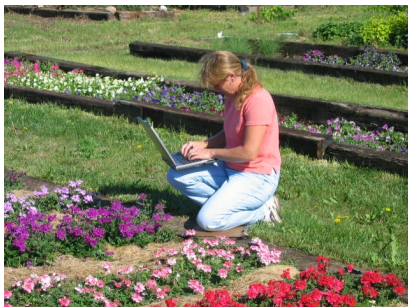
Producers in the field at Dickinson.



Pioneer monument at Williston.



Kirk Howatt at a field day.



Barb Laschkewitsch in the field at Williston.



Dwain Meyer speaking at a field day.



Mohammed Mergoum speaking in front of a Glenn wheat field.



Dr. Jack & Imogene Carter

First, thank you for the holiday messages and several photos, that came from you to the department or to us personally, and other messages via e-mail coming mostly to Mrs. Carter at

imysm@aol.com. We appreciate letters, and especially photos, very much and wish to “keep track”--please tell us more about yourself and your families. Send pictures, even if you may have aged since we last met--we all do! Several former graduate students and faculty visited us and NDSU in summer, 2005. I passed 86 years last October 2005! Imogene is not far behind, passed 39 for sure!! And we will have our 65th wedding anniversary October 19, 2006! Some of you donated to the Jack Carter Endowed Professorship funded NDSU, too, and thanks, or if not, it's not too late to give. Send to the NDSU Development Foundation, 1241 North University Drive, Fargo, ND 58105.

My health problem reported last year fortunately seems better and quite stable. It seems that one of us has a clinic visit every week or two for routine or other reasons. I mostly feel good and continue usual activities at home or NDSU most days, and outdoors in growing season. Mrs. Carter is our computer expert which allows very efficient email in U.S. and internationally and communicates frequently with some of you older former students, or their children in some cases (imysm@aol.com). No stamp needed for you to communicate with us! She continues to be troubled by an imbalance problem for which the medics seem to have no remedy. I had cataracts of eyes removed in September resulting in wonderful vision improvement. Our five children and families continue to live and work as in past years--some of you know them. Our oldest grandson was married in 2002 and we have been great-grandparents of a precocious young lady since June, 2003. They came to Fargo to visit us in April, 2006. Sadly, her grandfather Eric, husband of our daughter Nancy, died recently of a heart attack at 61 years.

I still work most afternoon and part of some

mornings at NDSU with many former and some new associates. I'm helped as needed by excellent “secretaries” and others. Yes, Eileen is still here!!!

Last November I was awarded the Outstanding Agri-Business Award at the annual Harvest Bowl dinner at NDSU Homecoming.

I'm still President of the Flax Institute of the United States. We meet March 22-24, 2006, in Fargo. I also serve as “flax consultant” to the North Dakota Oilseed Council and supervise some the research that they fund. Flaxseed provides healthful omega 3 fatty acid, lots of dietary fiber and apparent anticarcinogenic lignans in human nutrition, and for other animals. I recommend your eating about 30 grams or 1/5 cupful of ground flaxseed per day in orange juice, baked foods, or whatever. Flaxseed has been consumed for hundreds of years by people in the countries of some former international students. Please request a flax-for-food leaflet if you wish to learn more.

Mostly at home I have been doing more cooking than formerly, some maintenance, gardening, and fishing. I graft five apple trees to multi-variety trees to sell each year at Bidder's Bowl, and for special friends, (they averaged \$675 each in 2005 sales) and attended Bidder's Bowl (raises funds for NDSU Development Foundation) in October, 2005. Also, we attend home games of Bison football and basketball, especially the lady basketball Bison. NDSU has gone Division IAA in sports so many of the games are with institutions of which we know little. The lady Bison basketball team are not as good as in 2004-05, but the men are very good.

In retrospect, many of you have influenced our work and lives favorably, and we yours, we hope. We are unlikely to attend future Agronomy meetings and the Blizzard Party to see some of you, so please write, e-mail or stop to see us as you pass this way. Best wishes to you for a HAPPY and HEALTHFUL 2006.

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North Dakota Blizzard Party in Salt Lake City



Ron & Betsy Smith visiting
with Dwain Meyer



Marisol Berti & Angela Sebelius



Jim Hammond & Deying Li