

# BLIZZARD WATCH

Crop and Weed Sciences Department Newsletter

Dear friends of NDSU  
Crop and Weed  
Sciences:



We are getting cards and letters from some of you so I know it is time to prepare this yearly update of activities. We do enjoy hearing from you, and pictures are particularly appreciated.

All North Dakota institutions of higher learning were put on the semester system with a common calendar beginning last August. Many of our faculty and students are not yet convinced of the wisdom of that move.

Two new buildings were completed this year. The Industrial Agriculture and Communications Center (IACC) was finished in November (north of Hultz Hall) and the computer center moved into the two lower floors. The third floor is dedicated to food processing and related areas, and the Crop Reporting Service occupies the top floor. The Fargodome, located north of the football field, was dedicated in early December. Funds to build the dome come from a .5% city sales tax for 20 years. The facility is not operated by the University. A professional basketball team, called the Fever, uses the dome, and a hockey team may play some of their games there (normally, they play in Moorhead). The Bison football team will play all of their home games in the dome. Several other events have been scheduled the next few months, including Marie Osmond and Oak Ridge Boys, Ice Capades, and Guns and Roses.

The chemistry buildings, Ladd-Dunbar Halls, are being renovated and the renovation plans did not include space for biochemistry! We recently were told that we had to find space for four biochem faculty to have laboratories and offices in Loftsgard

Hall, two others are being transferred to the new IACC building. This move is causing much concern among our staff and students as we try to condense our activities to accommodate the additional people and equipment. We hope the move will have some positive aspects because of the proximity of the biochemists.

Dr. Cox resigned March 1 to go to Kenya where he is part of a missionary team called "Missions: Moving Mountains." A recent letter indicated that he and Carrie are slowly learning the language. The environment is drastically different from what we have here in the USA. We were able to hire Dr. Jim Anderson, Ph.D. from Cornell and native of MN, to head the combined wheat germplasm enhancement/winter wheat breeding programs. Jim and Janet arrived July 1 and have purchased a home on south 8th St.

Bill Ahrens is taking developmental leave for nine months starting in January. He and his family will be going to the University at Harbin in northeast China. Bill says the climate is similar to that of North Dakota but homes and offices are not heated as well as they are here.

We filled two postdoctoral/research associate positions. Dr. Carlos Reide accepted a three year appointment with major responsibility to handle evaluation of the former Pioneer spring wheat germplasm with Dr. Froberg. Carlos is a former graduate of NDSU (PhD 84) and is "on loan" from Brazil. Dr. Cathy Morton (Wisc.) was selected to head up work on the biology and ecology of kochia and Russian thistle. Her position is funded by a USDA special grant developed by Drs. Nalewaja and Messersmith with a four year duration. They obtained

Merry Christmas

and

Happy New Year



December 1992

another grant to extend the scope of the project and we are searching for another postdoc to conduct that research.

Because of a projected shortfall in appropriated funds, our new Governor froze all hiring for positions not in higher education. The chancellor of the ND University System has extended that freeze to cover all non-faculty positions. Any "emergency" requests will need considerable justification.

Fortunately, we had no changes in our clerical group this year. Our bookkeeper, Joann Kolnes, had her position classification upgraded one rank! All of the clerical computers are now 386s, and we are indebted to Dr. Hammond to keep them and our printers operating efficiently, and to Lyle Lindberg for help in the network wiring.

Among the technicians/research specialists, Kristi Breiland resigned and has been replaced by Justin Hegstad in Dr. Anderson's laboratory; Joan Gordon left, along with her husband in chemistry, and has not been replaced in Dr. Maan's laboratory; Gary Mowery resigned and has been replaced by Mitch Montgomery on Dr. Hanzel's project; Paul Otto accepted a position in Michigan and has been replaced by Dr. Theja Wijetunga on Dr. Duysen's project; Janet Stromberg has been hired on the USDA weeds grant; Todd Steffes and Yuzhi Zheng have resigned effective December 31 from

Drs. Meyer's and McClean's projects, respectively.

Dr. Ted Schulz, chair of Entomology, and Prof. Clayton Haugse, chair of Animal and Range Science, both took early retirement effective June 30, 1992. Drs. Bob Carlson and Jim Tilton are serving as interim chairs of the respective departments. Dr. Art Boe, chair of Horticulture and Forestry, will take early retirement on December 31. Dr. Glenn Statler, chair of Plant Pathology, will have the additional responsibility of interim chair of H&F.

The Agronomy Club, made up of CWS and Soils undergraduates, was reorganized this fall after disbanding several years ago. David Voller, a junior in Soils, was instrumental in generating the enthusiasm for reorganization. Faculty advisors consist of Drs. Anderson and Morton from CWS and Richardson from Soils.

Crop and Weed Sciences graduated 6 Ph.D. and 8 M.S. students in the 1992 commencement. Those receiving the Ph.D. were Madduma Dhanapala, Aslam Khan, Phillip Miklas, Thomas Peters, Zar Quresh, and Mohammad Abdus Samad. Those receiving M.S. degrees were Dennis Dolan, Sayed Hussain, John Kennicker, Aynur Kural, Kent McKay, David Pazdernik, Sami Suzer, and Ahmet Tan.

We had 49 full and part-time active graduate students in the fall of 1992, of which 20 are international students representing 13 different countries. Although we have openings for additional students, state supported positions will be put on hold until the budget position for the next biennium is clarified. New students since last year are listed below (U.S. citizens unless a foreign country is added): Oswaldo Chicaiza (Mexico), Jonathan Ewing, Scott Fitterer, Victor Gonzalez (Colombia), James Harbour, Herman Kandel (Netherlands), Asfaw Mesfin (Ethiopia), Simon-Pierre Nguetta (Ivory Coast), Troy Roebke, Hector Roman (Chile), and Molly Welsh-Maddux. Chris Goblirsch recently completed a M.S. degree and has been appointed a Graduate Research Fellow in the barley project.

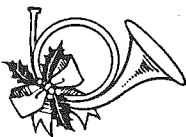
Graduate students receiving scholarships in 1992 for outstanding achievement are (name of scholarship

in parentheses): William Wilson (John H. Longwell, Jr.), Chris Goblirsch (Devin Miller Memorial Scholarship), Mohammad El-Antri (Gus Geiszler Memorial Scholarship), Paul Isakson (Eric Matthew Miller Memorial Scholarship), and Shujun Xu (Smith Fellowship for Foreign Graduate Students).

Tracey Henderson received the Alice Glover Fellowship for Women. This is a special fellowship of \$1500 offered by the North Central Region of the Soroptimist International of the Americas, Inc. The award is made to encourage capable women to prepare for careers in public service or international affairs.

Marisol Berti received the 1992 Association for the Advancement of Industrial Crops "Student of the Year Award".

Weislaw Koziara returned to Poland after working here as a visiting scientist. Current visiting scientists are Robert Matysiak, Tadeusz Praczyk, Grazyna Podolska, and Zenon Woznica from Poland, and Shi-yun Xia from Peoples Republic of China.



The eleventh annual Crops and Soils Blizzard Party was held November 3 in Minneapolis during the ASA meetings. About 120 current and former faculty and graduate students took advantage of the opportunity to renew acquaintances. We had a larger contingent of faculty and graduate students than usual from NDSU because the meetings were so close. Dr. Jim Lofgren and Dahlgren Seed Co. again supplied sunflower seeds that added to the hors d'ouvres. Fourteen of our faculty and 21 of our students attending the meetings presented papers or posters.

The Weed Science Society of America annual meeting was in Orlando in February, not a bad time of year to go to that area. We interviewed for a postdoc position and 5 of our faculty attended and presented 3 papers. The NCWSS meetings were in Chicago this December. Eight of our faculty and 8 graduate students and visiting scientists attended, presenting 10 posters or papers. Congratulations to Dain Bruns and Greg Endres who won second place in their respective sections of the paper contest! The

regional weed meetings have much better support from their membership than does the NC regional ASA meetings.

Mr. Ernie French, superintendent at the Williston Research Center since 1960, died November 29 from cancer. Neil Riveland was named acting superintendent.

Several of our faculty received recognition for their accomplishments this year, including:

Dr. Cross received the Outstanding Research Award among senior faculty in the College of Agriculture.

Dr. Dexter received the Alpha Zeta Outstanding Agriculturalist Award. Also, he was named to the CAST Board of Directors representing the WSSA.

Dr. Elias is coordinator of the durum wheat regional nursery.

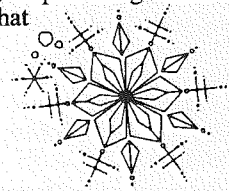
Dr. Franckowiak is on the Crop Advisory Committee for barley, is a member of the Organizing Committee for the International Barley Genetics Symposium, and is Editor of the Barley Genetics Newsletter

Dr. Froberg received the Distinguished Service Award from the North Dakota Crop Improvement Association at their meeting on November 10, 1992.

Dr. Grafton is an Associate Editor of Agronomy Journal and is on the Crop Advisory Committee of Phaseolus. He shared in the development and release of four pinto bean germplasm lines.

Dr. Hammond is an Associate Editor for statistics for the Agronomy Journal.

Dr. Hanzel released two sunflower inbred lines which carry and transmit physical characteristics which markedly reduce bird predation prior to harvest. Dr. Hanzel now is changing the emphasis of his research from sunflower to crambe. One of our former graduates, Dr. Jennifer Mitchell-Fetch, is providing valuable assistance on that project.



Dr. Horsley is a member of the National Barley Improvement Committee.

Dr. Joppa received the Red River Valley Agriculture Research Center Scientist Award and the Federal Executive Association Employee of the Year Award for outstanding performance in his work with wheat genetics.

Dr. McMullen is a member of the Executive Committee of the National Oat Workers Conference, Technical Director of the American Oat Association, and Editor of the Oat Newsletter.

Dr. Messersmith was named a Fellow of the Weed Science Society of America.

Dr. Meyer is a Technical Editor of Crop Science for Divisions C3 through C6.

Dr. Miller released eight sunflower germplasm lines.

Dr. Nalewaja received the University's Economic Development Award for work with AGSCO chemical in developing adjuvants.

Dr. Schneiter is an Associate Editor of Crop Science and a member of the sunflower Variety Review Board of AOSCA. He has also been appointed Editor for the revision of the ASA Sunflower Monograph.

Dr. Seiler released six interspecific sunflower lines.

The large teaching auditorium in Loftsgard Hall was named the "Glenn Smith Auditorium" in recognition of the contributions that Dr. Smith made to NDSU. Dr. and Mrs. Smith and many friends attended the dedication ceremony.

Dr. Carter continues as President of the Flax Institute and already is planning for the 55th meeting of the Institute in Fargo in January, 1994.

The Bison athletic teams won several honors. The football team won the conference title and the first playoff game but lost the second 35-34 in overtime when they were stopped inches short of the goal line. The women's volleyball team won the conference and advanced to the final eight before losing. The women's

basketball team did very well last year and has an unbeaten record so far this year.

The annual fall picnic was September 17 in Oak Grove park and the shelter was filled to overflowing. The Christmas party was in the El Zagal Shrine clubhouse where we had dinner and dancing. Santa and his helper distributed "white elephant" gifts. Winner of the prestigious Bison Chip Award was Tom Teigen for his ability to reduce the length of access tubes for neutron probes. By winning this award, Tom also has the honor of being Master of Ceremonies at next year's Christmas party. The "Norm Williams Open" golf classic was held August 14 on the Frazee golf course. Eight teams competed in the best ball scramble and the big money winners were Whited, Williams, and Smith. An ethics committee may be formed to determine if it is proper for the host to be a tournament winner!

Please let us know of address changes for yourself or others, or if there is incorrect information. If you are traveling in the area, please stop by to visit and see our facilities. We hope you had a happy Holiday Season, and best wishes for 1993!

Sincere thanks to Eileen Buringrud for design, layout, proofing, and other details needed to prepare this letter.

A. E. Foster



### Merry Christmas from "Jack's Corner"

I'm pleased to send you a short message as it is not feasible for me or my wife to write each of you individually. First, thank you for the Holiday messages that came from you to the department or to us personally—we appreciate very much and wish to "keep track" and learn about you and your families.

I've survived 5 1/2 years of retirement successfully, I believe, lost 10 pounds

being more active and less chair-bound, and been involved enough in agronomic things not to go "brain-dead," I hope. My wife says that I'm not doing a lot differently than in past but we start more slowly in the morning and I'm working many fewer hours, going to a fraction of "meetings" of past, and more or less doing the "agronomic things" as I please. I taught Grain Grading in the last Spring Quarter at NDSU and I've spoken to a few wheat and barley Trade Teams, and to a few commodity groups, mainly about wheat and barley grading, and to a few service clubs about flax-as-food.

Also, I continue to be involved in "action" on flax seed and flax oil as possibly beneficial to human nutrition and health because of the high fiber and linolenic acid content (omega 3) that will have some interesting and valuable developments in the future. I'm President of the Flax Institute which had a one day program on "flax as food" January 30-31, 1992. Also, flax is high in lignans and soluble fiber and is one of five plant products being studied in very large experiments by the National Cancer Institute and Food & Drug Admin. for the next several years. I am Director Lund's appointee to the North Dakota Oilseed Council which recently retained FASEB (Federation of Associated Societies of Experimental Biology) to establish that the "12% no objection" status for flax in food products is an adequate substitute for GRAS status (Generally Recognized as Safe) for now. People in some of your countries maybe have consumed flax for hundreds of years, or should if you have not, for the omega 3 and fiber benefits. Flax seed fed to poultry and swine appears to have beneficial indirect effects via eggs and pork products too so you may hear more about that in the future.

Mostly at home I have been doing some maintenance, helping an older neighbor, gardening, fishing, hunting, grafted 11 apple trees for Bidder's Bowl and special individuals, and attended Bidders Bowl in October.

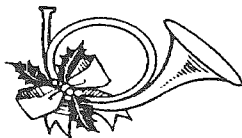
Imogene, Imy to some of you, continues to work with several clubs, church women groups, has retired playing the organ full time from church, the usual household duties from which women never retire, I guess, and many other activities. She also spends time with her father, now

100 in Bethany, a retirement home in Fargo. Her mother died December 13, 1991, at 97 years. Imogene would like to travel more to some other countries and maybe we will get going on that soon. We did travel in 1992 to attend the Ph.D. graduation of our youngest son Brian from LSU at Baton Rouge in May, and oldest grandson Andrew from high school at Alexandria, Va., in June. We regret not seeing some of you at ASA Blizzard Party in Minneapolis but icy roads interfered—maybe next year in Cincinnati!!

Our family is much as described in 1991, only one year older. We have had several visits from some of them this year. Some of you know our daughter Nancy. Her husband is the State Department liaison to United Nations in Vienna, Austria, and she teaches English as second language. They have added German to their list of foreign language competence. Their oldest son attends Virginia Poly, Blacksburg (Bob Harrison's location) and stays with us during "breaks".

In retrospect, many of you have influenced our work and lives favorably, and we yours, we hope. We hope to see you at the next Blizzard Party, ASA, in Cincinnati. Stop to see us as you may pass this way and best wishes for a HAPPY and HEALTHFUL 1993.

Dr. and Mrs. Carter



## CROP AND WEED SCIENCES FACULTY

A. E. Foster, Professor and Chairman

W. H. Ahrens, Assoc. Professor, Weed Science

J. A. Anderson, Asst. Professor, Wheat Germplasm Enhancement/Winter Wheat Breeding

D. R. Berglund, Professor, Extension, Row Crops and Specialty Crops

L. G. Campbell, Adjunct Professor, Research Geneticist, Sugarbeets (USDA)

J. F. Carter, Professor Emeritus, Retired

H. Z. Cross, Professor, Corn Breeding

L. S. Dahleen, Adjunct Professor, Barley Biotechnology (USDA)

E. L. Deckard, Professor, Crop Physiology

A. G. Dexter, Professor, Extension, Weed Science, Sugarbeets

D. L. Doney, Adjunct Professor, Research Geneticist, Sugarbeets (USDA)

M. E. Duysen, Professor, Crop Physiology

D. C. Ebeltoft, Professor Emeritus, Retired

E. M. Elias, Asst. Professor, Durum Wheat Breeding

J. D. Franckowiak, Professor, Barley Breeding

R. C. Froberg, Professor, Wheat Breeding

D. S. Galitz, Professor, Crop Physiology

J. C. Gardner, Adjunct Professor, Crop Physiology

K. F. Grafton, Assoc. Professor, Dry Bean Breeding

J. J. Hammond, Professor, Flax Breeding

J. J. Hanzel, Adjunct Professor, Sunflower Breeding

J. L. Helm, Assoc. Prof., Extension, Cereal Crops and Forages

T. C. Helms, Asst. Professor, Soybean Breeding

R. D. Horsley, Asst. Prof., Barley Breeding, Genetics

C. C. Jan, Adjunct Professor, Sunflower Cytogenetics (USDA)

P. P. Jauhar, Adjunct Professor, Wheat Cytogenetics

L. R. Joppa, Adjunct Professor, Res. Geneticist, Durum Genetics (USDA)

H. R. Lund, Professor, Director, Experiment Station

R. G. Lym, Assoc. Professor, Weed Science

S. S. Maan, Professor, Wheat Cytogenetics

P. E. McClean, Assoc. Professor, Molecular Genetics

M. S. McMullen, Assoc. Professor, Oat Breeding

C. G. Messersmith, Professor, Weed Science

D. W. Meyer, Professor, Forage Crops

J. F. Miller, Adjunct Professor, Res. Geneticist, Flax & Sunflower Breeding (USDA)

J. D. Nalewaja, Professor, Weed Science

A. A. Schneider, Professor, Specialty Crops

G. J. Seiler, Adjunct Professor, Sunflower and Sugarbeet Germplasm (USDA)

R. H. Shimabukuro, Adjunct Professor, Plant Physiologist (USDA)

G. A. Smith, Adjunct Professor, Sugarbeet Genetics (USDA)

G. S. Smith, Professor Emeritus, Retired

L. A. Spilde, Assoc. Professor, Seedstocks

D. A. Whited, Professor, Genetics Teaching

N. D. Williams, Adjunct Professor, Research Geneticist (USDA)

R. K. Zollinger, Asst. Professor, Extension, Weed Control

## RESEARCH ASSOCIATES

C. A. Morton, Weed Science  
C. R. Riede, Wheat Breeding  
Yin-ming Li, Cadmium Research

## GRADUATE RESEARCH FELLOWS

Christopher Goblirsch, Barley Breeding  
Debra Steiger, Durum Breeding

## SECRETARIES

Eileen Buringrud, Admin. Ass't. I  
Joann Kolnes, Account Tech. II  
Elaine Dobrinz, Admin. Sec. II  
AmyJo Johnson, Inf. Proc. Oper. I  
Iris Bachand, Word Proc. Oper. I  
Sharon Ahrens, Adm. Sec. III  
Marilyn Geiszler, Admin. Sec. I

## TECHNICIANS/RES. SPECIALISTS

Robert Baumann, oat breeding  
David Birdsall, durum wheat genetics, USDA  
Kay Carlson, wheat cytogenetics  
Katheryn Christianson, perennial weeds  
Mark Ciernia, weed control  
Steven Ellefson, barley breeding  
James Faller, HRS wheat breeding  
Roger Genoch, barley breeding  
Mark Halvorson, soybean breeding  
Justin Hegstad, wheat germplasm enhancement  
Jeffrey Huckle, HRS wheat breeding  
Burton Johnson, crop production

Gerald Johnson, HRW wheat breeding

James Kapaun, forage crop production

Daryl Klindworth, wheat genetics, USDA

Lyle Lindberg, flax breeding

John Luecke, sugarbeet weed control

Josef Maianu, seedstocks

Mitch Montgomery, sunflower/crambe breeding

Wayne Norby, forage crop production

Don Pingree, seedstocks

Kris Prodoehl, sugarbeet breeding, USDA

Dale Rehder, sunflower breeding, USDA

Ronald Roach, weed control

Marilyn Schroeder, crop physiology

Stan Stancyk, durum breeding

Todd Steffes, forages

Janet Stromberg, weed science

Jody VanderWal, dry bean breeding

Duane Wanner, corn breeding

Theja Wijetunga, crop physiology

Yuzhi Zheng, biotechnology

## CROP AND WEED SCIENCES MAJORS Fall, 1992

### FULL-TIME STUDENTS

Berti, Marisol	GRA	Chile
Bruns, Dain	GRA	
Carter, Robert	Self	
Chicaiza, Oswaldo #	CIMMYT/GRA	Ecuador
El-Antri, Mohammad #	MIAC	Morocco
Endres, Greg	Self	
Ewing, Jonathan	GRA	
Fitterer, Scott	GRA	
Gibson, Darin	GRA	Canada
Goblirsch, Christopher	GRA	
Gonzalez, Victor #	CIMMYT	Colombia
Harbour, James #	GRA	
Henderson, Tracey #	GRA	
Isakson, Paul	GRA	
Kandel, Hans #	GRA	Netherlands
Kuehl, Brian	Self	
Lee, Curt	GRA	
Lince, Michael	Self	
Lu, Zhenxiang #	GRA	PRC
Luna, Armando	GRA	Mexico
Mesfin, Asfaw #	GRA	Ethiopia
Nguetta, Simon-Pierre #	GRA	Ivory Coast
Obeidat, Motassem	USAID	Jordan
Olmedo, Belgin #	GRA	Turkey
Olmedo, Oscar #	GRA	Mexico
Park, Young-Doo #	GRA	Korea
Roebke, Troy	GRA	
Roman, Hector #	GRA	Chile
Rystedt, Craig	GRA	
Seka, Dagou #	GRA	Ivory Coast
Steiger, Debra #	GRF	
Tallman, Wayne #	GRA	
Wang, Chengguo #	GRA	PRC
Welsh-Maddux, Molly #	GRA	
Wilson, William	GRA	
Yarmah, Abu	AFGRAD	Sierra Leone
Xu, Shujun #	GRA	PRC

### PART-TIME - ACTIVE

Birdsall, David	Self	
Breiland, Kristi #	Self	
Christianson, Kathy	Self	
Halvorson, Mark	Self	
HOLEN, CARLYLE	Self	
Johnson, Burton #	Self	
Klindworth, Daryl #	Self	
Montgomery, Mitch	Self	
MILLER, BRADLEY	Self	
RADKE, RUDY	Self	
VERWEST, LISA	Self	
Zheng, Yuzhi #	Self	PRC

### PART-TIME - INACTIVE

ARNESON, JERRY	Self	
AXTON, LISA	Self	
CASTILLO, JULIO	Self	Panama
HEMENWAY, JEFF	Self	
HOUGHTON, ROBERT #	Self	
MASUD, AMIR #	Self	Pakistan
REYNOLDS, DEAN #	Self	
RUGRODEN, DANIEL	Self	
STORDAHL, JAMES #	Self	
SWENSON, JOHN	Self	