

# BLIZZARD WATCH

## HOLIDAY GREETINGS, 1990

Dear friends of NDSU Crop  
and Weed Sciences:



We certainly are getting a white Christmas in Fargo. Our fall weather had been very mild and dry, and we had begun to think that we couldn't get any kind of moisture. The last two days we have had about a foot of snow and the bottom has dropped out of the thermometer. We are thankful for the moisture and winter sports enthusiasts will make good use of the snow.

We are anticipating the completion of our new office and laboratory building. It was originally scheduled for completion on May 31, but work has progressed more rapidly than planned. We now expect to accept the office part of the building by February 1 and the remainder of the building by March 1. The extra offices and laboratories will allow us to move all of our faculty into one building. The actual moving may take several weeks because we will be waiting for the Physical Plant to construct some furniture and bookcases. Formal dedication ceremonies are scheduled for graduation weekend in May, and Senator Burdick will be involved. The legislation he

sponsored indicated that the name of the building will be Loftsgard Hall.

The office areas we vacate in Walster will be taken over by Plant Pathology and Soils. We will retain most of our teaching space until the basement of the new building is completed, and the timing for that is uncertain. Areas that are vacated in Waldron by CWS and Soils are scheduled to be taken over by Ag. Engineering. Ag. Eng. will vacate the top floor of their building when they move to Waldron. There still is a lot of discussion about the space situation.

Another building that affects CWS is a new experiment station shop building, presently under construction west of Waldron Hall. Our shop facilities, now in Waldron, will be transferred to this new building. It is scheduled for completion in May of 1991.

The computer center will finally get new facilities as part of an Industrial Ag./Computer Science Center. Computer Science people are now in several different buildings, and the new Center should accommodate all of them. This building will be constructed just north of Hultz Hall using about \$5 million federal funds, \$4 million state funds, and \$1.3 million private funds. Ground breaking is tentatively set for March of 1991.

The Fargo Dome, a large multi-purpose building, is under construction north of the football field. They have completed the excavation and have put down many concrete pilings, over 200 of them, each going down about 110 feet. Work is scheduled to continue through the winter with completion some time in 1992. Cost of the building is about \$35 million, and is being paid for by a 0.5% sales tax in the city of Fargo. It is not a University building, even though it is on state property. The football team is scheduled to play their home games in the building.

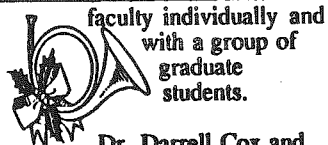
1989-90 was the Centennial year for NDSU, and in April we had the final festivities with a week long celebration. We had several world renowned speakers, including Dr. Norman Borlaug, Beverly Sills, Malcomb Forbes, Jr., and Dr. J.K. Galbraith. Dr. Carter spent many hours on the planning committee for these events. Each of the different Colleges set up displays in the Bison Sports Arena and each department in the Agricultural Experiment Station had a display of their research activities. Dr. Ahrens coordinated the CWS display. In September, we celebrated the centennial for the Ag. Expt. Sta. and we used all of the same displays plus some additional. There were food



stalls, musical entertainment, open houses in the various buildings, and several tours. The weather cooperated so we had a successful event. The planning and coordination for the September event was handled primarily by retired faculty, with George Pratt and Howard Olson the co-chairs.

After several months of negotiation, Pioneer Hi-Bred International, Inc., gave their entire spring wheat breeding program to the NDSU Research Foundation. This included rights to and seed of released varieties and also all breeding materials. Seed of the breeding lines and populations has been shared with Minnesota and South Dakota. The Pioneer breeding program was very large and Dr. Froberg will be evaluating these materials as time, personnel, and money become available. The ND Wheat Commission has provided funds to hire a Graduate Research Fellow, but to date we have not been able to attract a viable candidate. This gift also required considerable extra work for Dr. Spilde in allocating seed of the existing varieties, etc. We have a two year lease on the Pioneer seed plant in north Moorhead, and the seed cleaning and other activities are headquartered there. We were fortunate to hire Don Pingree to manage the plant - he managed the plant for Pioneer.

Dr. Colin Law, head of the Cambridge Laboratory at the John Innes Centre for Plant Science Research in Norwich, England, and a former visiting professor at NDSU, presented the Karl Lucken Memorial Lecture on October 18. Dr. Law presented two other lectures and visited with many



faculty individually and with a group of graduate students.

Dr. Darrell Cox and family returned from Kenya after spending nearly a year at Egerton University on sabbatical leave. He has been in demand as a speaker since his return. He has many excellent slides.

Dr. Cal Messersmith is in Australia for eight months on sabbatical leave. He left July 1 and we expect him back March 1 in time for spring quarter teaching. He has been writing, traveling, giving speeches, and studying teaching methods. One of Dr. Messersmith's graduate students, Kevin Thorsness, taught the beginning crops course during the fall quarter.

Dr. Elias Elias, a 1987 NDSU graduate, took over the durum breeding position on April 1. He arrived in time to go to Yuma to harvest the winter nursery. Dr. Elias, his wife Kristi, and their three children bought a home in south Fargo. Dr. Roy Cantrell, the previous durum breeder who had transferred to a new wheat germplasm improvement project, resigned on June 30 to accept a cotton breeding position at NMSU in Las Cruces. Ms. Kristi Breiland, the project research specialist, is carrying on the germplasm project until a new person can be hired. We hope that the legislature will restore the funding necessary for this position.

Dr. Richard Zollinger came May 15 to fill the extension agronomist for weed control position vacated by Dr. Dallas

Peterson. Dr. Zollinger was able to help answer the hundreds of phone calls that come in every spring. He learned about North Dakota by speaking at several of the summer field days at the Research Centers (a new name for the Branch Stations).

Dr. Lynn Dahleen was confirmed as an adjunct professor of CWS. She is a USDA-ARS scientist working on barley biotechnology in the Northern Crop Science Laboratory.

We have had two changes in the clerical group. Joann Kolnes replaced Mardell Krebsbach as accountant in August. Mardell accompanied her husband to McAllen, TX where he has a teaching position. Joann had worked in the AES office for nine months before coming to CWS. The second change involved Eileen Buringrud. She and her husband Mike became the proud parents of a baby boy, Steven Ray, on September 18. Eileen returned to work December 1. The other secretaries carried the extra burden during Eileen's absence.

Among the technicians, Don Lippert replaced Jeffrey Prischmann to work on Dr. Meyer's forage grant project. Yuzhi Zheng replaced Kim Evenson as the research specialist on Dr. McClean's project. Stan Stancyk replaced Jim Liedahl as the technician on the durum project. Kristi Breiland was mentioned earlier as the research specialist for the wheat germplasm enhancement project.

Dr. Earl Stegman will become chair of Ag. Engineering on January 1. Dr. George Pratt

had retired in 1989 and Mr. Les Backer had served as interim chair. Dr. Marvin Duncan became chair of Ag. Economics September 1. He received his B.S. and M.S. degrees at NDSU.

Crop and Weed Sciences graduated 6 Ph.D and 10 M.S. students in the 1990 commencement. Those receiving Ph.D.'s were Fernando Gonzalez, Margaret Klindworth, Bill Laskar, Mohammad Mostafavi, Tom Peters, and Md. Abdus Samad. Those receiving M.S. degrees were Jeff Flake, Pat Gross, Vicki Gustafson, Bruce Held, Mesut Keser, Gene Leach, Oscar Olmedo, Jeff Posch, Kristine Prodoehl, and Dagou Seka.

Crop and Weed Sciences had 63 graduate students in the fall of 1990. We have 22 foreign students representing 16 different countries. We have openings for additional students and are actively recruiting for replacements. We raised our stipend to 9,600 and 10,200 for M.S. and Ph.D.'s, resp., to try to be more competitive with other institutions. New students since last year are listed below (U.S. citizens unless a foreign country is added): Chris Goblirsch, Mike Hagen, Jim Stordahl, Chris Lambrides (Australia), Tracey Henderson, Armando Luna (Mexico), Dale Weston, William Wilson, Abu Yarmah (Sierra Leone), Mohammad Rahim (Pakistan), Belgin Olmedo (Turkey), Marisol Berti (Chile), Carlyle Hohen, Shujun Xu (PR China), Roy Martens, Greg Endres, John Leppert, and Grant Johnson.

Edward Szelezniak completed his year as a Polish Foreign

Exchange Scientist. Maciej Czajka and Zikmund Turski are new Foreign Exchange Scientists, having arrived from Poland in April and October, resp.

NDSU again declined in student numbers in 1990. I believe this is mainly the result of a sharp tuition increase. The tuition increase relates directly to the rejection of the tax increase measures in the December, 1989 referral. Although the CWS department declined in numbers of undergraduate students, the number of new freshman and transfer students increased slightly over 1989. Perhaps we have passed the low point. We initiated some new scholarships for entering freshman and this should help increase enrollment.

The ninth annual Blizzard Party was held October 23 in San Antonio at the ASA meetings with nearly 100 people attending. It was fun to visit with so many former faculty and students, and Dr. Jim Lofgren supplied ND grown sunflower seeds via Dahlgren Seeds. We hope you can attend the 10th Blizzard Party, scheduled for October 29th in Denver.



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

Dr. Messersmith completed his term as the first Editor of Weed Technology.

Dr. Dexter was honored by the North Central WSSA with an Honorary Membership.

Dr. Schneiter is an Associate Editor of the Agronomy Journal and is a member of the sunflower Variety Review Board of AOSCA.

Dr. Grafton is an Associate Editor of Agronomy Journal and is on the Crop Advisory Committee of Phaseolus.

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

Dr. Hammond is Associate Editor for statistics for Crop Science.

Dr. Franckowiak is on the Crop Advisory Committee for barley and is on the International Organizing Committee for the International Barley Genetics Symposium, which is set for July 21-27, 1990, in Sweden. He is also Editor of the Barley Genetics Newsletter.

Dr. Cross is chair of the ASA subcommittee on Variety Registration for maize. He also released several corn inbreds.

Dr. McMullen is a member of the Exec. Committee of the National Oat Workers Conference, Technical Director of the American Oat Association, and Editor of the Oat Newsletter. He released a new oat variety, Newdak, so named to recognize that the variety was jointly released with New York.

Dr. Foster completed 17 years as chair of the ASA subcommittee on Variety Registration. He will serve as a committee member for one more year.

Dr. Miller released a yellow seeded flax variety, Omega, so named to indicate the food and health qualities of flax.

Dr. Carter is President of the Flax Institute and has been appointed to the ND Oilseeds Council.

Dr. Jan released several sunflower germplasm stocks.

President Ozbun is very interested in establishing more international programs. As part of this effort, we had programs for people from Egypt, Turkey, and Japan.

The State Board of Higher Education has mandated that we will change from quarters to semesters, effective in the fall of 1992. This will involve much planning, and our faculty are busy with decisions for new curricula.

Crop and Weed Sciences and Soils will host the summer meeting of the NC Branch of the ASA. The meetings are scheduled for August 4-6. The program will be targeted for the practicing agronomist and we hope for a good turnout from the ND, SD, MN area. With this early notice, we hope that those of you in the area will make plans to come.

Bison athletic teams had another good year. The football team had an undefeated season and won the playoff for the Division II title. The women's volleyball team took second place in the national championship for Division II. The men's golf team took the NC conference championship.

The annual fall picnic was held at the West Fargo Park on September 4. Dr. Cross

supplied an abundance of corn in spite of the dry weather. Our mid-winter party was held December 14 at the Knights of Columbus Hall with good attendance. The committee awarded prizes for the best hors d'oeuvres and Dr. Ahrens helped Dr. Zollinger get the coveted Bison Chip Award. The "Norm Williams Open" golf tournament was held August 31 and Dr. Meyer won the puttoff of the seven flight winners. I missed the tournament because of a previous commitment in San Francisco. Our daughter Mary was married that weekend.

Please let us know of any address changes so that we can continue to correspond with you. We hope you will stop by and visit us in our new facilities. We hope you have a happy Holiday Season and a prosperous New Year.

A. E. Foster



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

I'm pleased to send you a short message as it is impossible 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 3 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 Spring Quarter and I've spoken to several wheat and barley Trade Teams, mainly about wheat and barley grading, and to a few commodity groups. I taught wheat and barley grading to a group of Saudi Arabians for 3 weeks in December—they had no biology background and not too good with English so that was a challenge.

Also, I've been involved in "action" on flax seed and flax oil as possibly beneficial to human nutrition and health because of the high linolenic acid content (omega 3) that may 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 25, 1990. Also, flax is high in lignans and soluble fiber and is one of five plant products to be 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 Oilseeds Council which soon will deal with research on flax as food, we hope. Obtaining GRAS (Generally Recognized as Safe) status for flax seed and flax oil for human consumption may be one of Council's first activities. People in some of your countries maybe have consumed flax for hundreds

of years, or should if you have not for the omega 3 fiber benefit.

Also, on campus I received the Blue Key Distinguished Educators Award in January which was a pleasant surprise. The Centennial Year for NDSU was completed with various programs in April and May, including Dr. Norman Borlaug's visit to campus and his lecture which was one of the highlights of the speaking program. The two Founder's Day and Centennial committees which I was on for 3 years completed their work in late April at conclusion of the Centennial program. I hosted a busload of farmers, businessmen, agribusiness people, and some wives from North Carolina in July.

Mostly at home I have been doing some long neglected upkeep on windows, refinishing, etc., grafted 7 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, retired playing the organ full time at church, the usual household duties from which women never retire, I guess, and many other activities. She also spends some time with her parents, now 98 and 97 years old, in Bethany, a retirement home in Fargo, although her mother died December 13. She would like to travel more to some other countries and maybe we will get going on that soon. We did travel in 1990

to visit Brian and family in Baton Rouge. Also, we saw some of you at ASA in San Antonio. We should be in the south now as it is COLD in North Dakota, even for December. We had a very interesting cruise and trip to Alaska in late August and early September—an amazing area, we recommend. Mrs. Carter had a hip replacement in May which worked quite good for traveling by late August and continues to improve.

Our family is much as described in 1989, 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 in State Department and they are now in Washington, D.C., for several years, we hope. They now speak six languages which is useful to Nancy in teaching English as second language near Mt. Vernon, VA. Many of immigrant children do not know English and are illiterate in their own language so they are a teaching challenge, Nancy says.

We will hope to see you at the next Blizzard Party, ASA. Stop to see us as you may pass this way and best wishes for a HAPPY and HEALTHFUL 1991.

How about those BISON?  
DIVISION II FOOTBALL  
CHAMPS for 1990!!

Dr. and Mrs. Carter

## AGRONOMY FACULTY

A. E. Foster, Professor and Chairman

W. H. Ahrens, Ass't. Professor, Weed Science

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

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

J. F. Carter, Professor Emeritus, Retired

D. J. Cox, Assoc. Professor, HRW Wheat Breeding

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. Frohberg, 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, Ass't.  
Professor, Soybean  
Breeding**

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

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

**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, Ass't.  
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 SCIENTIST**

**Frank Manthey, Weed  
Science**

#### **GRADUATE RESEARCH FELLOWS**

**Debra Steiger, Durum  
Breeding**

**Jim Stordahl, Weed Control**

#### **SECRETARIES**

**Eileen Buringrud, Admin,  
Ass't. I**

**Joann Kolnes, Account  
Technician I**

**Elaine Dobrinz, Admin. Sec.  
II**

**Amy Jo Johnson, Inf. Proc.  
Oper. I**

**Iris Bachand, Word Proc.  
Oper. I**

**Sharon Ahrens, Adm. Sec. I**

**Marilyn Geiszler, Admin.  
Sec. I (50%)**

#### **TECHNICIANS/RES. SPECIALISTS**

**Robert Baumann, oat  
breeding**

**David Birdsall, durum wheat  
genetics, USDA**

**Kristi Breiland, germplasm  
enhancement**

**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**

**Joan Gordon, wheat  
cytogenetics**

Mark Halvorson, soybean  
breeding

Burton Johnson, crop  
production

Gerald Johnson, HRW wheat  
breeding

Daryl Klindworth, wheat  
genetics, USDA

Lyle Lindberg, flax breeding

Don Lippert, forages

John Luecke, sugarbeet weed  
control

Carl Madsen, HRS wheat  
breeding

Josef Maianu, seedstocks

Marvin Mayer, Motor  
Vehicle Mechanic I

Cheryl Mihelich, perennial  
weeds

Garry Mowery, sunflower  
breeding, bird resistance

Wayne Norby, forage crop  
production

Paul Otto, crop physiology

Kris Prodoehl, sugarbeet  
breeding, USDA

Dale Rehder, sunflower  
breeding, USDA

Ronald Roach, weed control

Marilyn Schroeder, crop  
physiology

Stan Stancyk, durum  
breeding

Jody VanderWal, dry bean  
breeding

Duane Wanner, corn  
breeding

Yuzhi Zeng, biotechnology

CROP AND WEED SCIENCES  
MAJORS, FALL, 1990

NAME	SUPPORT	COUNTRY
Alam, Mohammed	USAID	Bangladesh
Arneson, Jerry	Self	
Axton, Lisa	Self	
Beech, Paul	GRA	
Bertl, Marisol	GRA	Chile
Birdsall, David	Self	
Buss, Lonny	GRA	
Busse, Steven R.	Self	
CASTILLO, JULIO	Self	
Christianson, Kathy	Self	
Dolan, Dennis	GRA	
Gibson, Darin	GRA	
Goblirsch, Chris	GRA	
Gonzalez, Jose	GRA	Chile
Gonzalez, Victor	CIMMYT	Colombia
Hagen, Michael	GRA	
Halvorson, Mark	Self	
HEMENWAY, JEFF	Self	
Henderson, Tracey	GRA	
Hla, San San	OICD	Burma
Holen, Carlyle	Self	
HOUGHTON, ROBERT	Self	
Johnson, Burton	Self	
Johnson, Grant	GRA	
Kang, Tao-Jin	Self	Korea
Kennicker, John	GRA	
Kirsch, Michael	Self	
Klindworth, Daryl	Self	
Lambridge, Chris	Pioneer	Australia
Luna, Armando	GRA	Mexico
Martens, Roy	GRA	
McKay, Kent	GRA	
Masud, Amir	Self	Pakistan
Miklas, Phillip	GRA	
Miller, Bradley	Self	
Mohammad, Rahim	TIPAN	Pakistan
Nearcellah, N.	MIAC	Morocco
Obaidat, Motassem	USAID	Jordan
Olmedo, Belgin	Pioneer	Turkey
Olmedo, Oscar	GRA	Mexico
Panaram, William	LASPAU	Guyana
Park, Young-Doo	GRA	Korea
Pazdernik, Dave	GRA	
Pino-Munoz, M.	GRA	
Quresh, Zar	TIPAN	Pakistan
REYNOLDS, DEAN	Self	
Rochl, Steve	GRA	
Rugroden, Daniel	Self	
Saylor, Ronald	GRA	
Seka, Dagou	Pioneer	Ivory Coast
Steiger, Debra	GRF	
Stordahl, James	GRF	
Sudupak, Mehmet	Gov't.	Turkey
SWENSON, JOHN	Self	
Tallman, Wayne	GRA	
Tan, Ahmet	OICD	Turkey
Thillmony, Anthony	GRA	
Thorances, Kevin	GRA	
Virwest, Lisa	Self	
Weston, Dale	GRA	
Wilson, William	GRA	
Yarmah, Abu	AFGRAD	Sierra Leone
Xu, Shujun	GRA	PRC