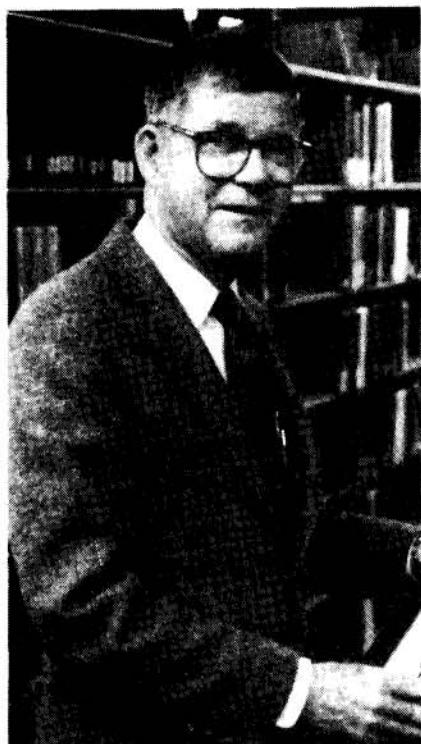


Aurora Sporealis



D. W. French
June 30, 1992



T. Kommedahl
June 30, 1990



R.D. Wilcoxson
November 30, 1991

**Department of Plant Pathology
University of Minnesota
St. Paul, Minnesota 55108**

November 1992

MESSAGE FROM THE HEAD

Dear Friends:

It is again a pleasure to bring you greetings from the Department of Plant Pathology. Since the last edition of the *Aurora Sporealis* came to you, we have again had some significant changes in our faculty. Dr. Roy Wilcoxon, small grains pathologist, retired in December of 1991 and Dr. David French, forest and shade tree pathologist and former department head, retired June 30, 1992. Both of these individuals are responsible for successfully guiding a great number of graduate students in our department to their graduate degrees. Their contributions in research and outreach have also been outstanding. Both Roy and Dave continue to be active in an Emeritus capacity and are contributing to the department and to our state with their expertise.

Dr. Deborah A. Samac joined our faculty in 1992 as a part of the USDA-ARS alfalfa project which is based at the University of Minnesota. Debby is a University of Wisconsin graduate who spent about three years in a post doctoral position with Monsanto Corporation at their research facilities in St. Louis. Debby will be using her expertise in molecular genetics to study disease resistance in alfalfa. We are extremely pleased to have her in the Department and look forward to her contributions as a faculty member.

Dr. Judy Thies is a graduate of our department and was an adjunct faculty member assigned to the USDA-ARS Alfalfa Project. Judy recently left us to take a USDA vegetable pathology position at Charleston, South Carolina. We wish her well as she begins her new responsibilities there.

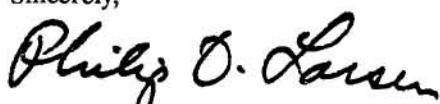
We continue to have 30-35 graduate students and believe the quality of our students is very high. They greatly enrich our department with their energy and ideas. A highlight of the year was the Fourth Annual Symposium coordinated by our students. The theme of this event was International Agriculture and Dr. Norman Borlaug, 1970 Nobel Peace Prize recipient and alumnus of our department, was the keynote speaker for this extremely successful event. We were extremely grateful to Dr. Borlaug for his willingness to spend an entire week with us participating in the symposium and then later traveling around the state to speak with high school students and agribusiness leaders about global food production issues.

With the budget cutbacks that we continue to experience, we have become increasingly dependent upon our endowment system for support for our students, research support, and teaching. We are grateful to each of you who contribute to the department through your financial gifts and through your moral support of our activities. I invite you to read the article describing our Endowment program in this year's *Aurora* and request that you consider a contribution if possible. Please be assured that we will do our best to see that these funds are used effectively to accomplish the work of the Department.

Let me close by thanking those who have again put this year's edition of the *Aurora Sporealis* together. Dr. Elwin Stewart has provided leadership this year with the help of many throughout the department.

Best wishes and kindest regards for the coming year.

Sincerely,



Philip O. Larsen



DEPARTMENT GROUP PICTURE

Front Row - left to right: Gilbert Ahlstrand, Vergel Concibido, Daruish Danesh, Roxanne Denny, Marguerite Clemens, Nevin Young, Junping Chen, and Delores Huebner.

Second Row - left to right: Kuo Chih Lin, William Bushnell, Janell Stevens-Johnk, Connie Post, Linda Kinkel, Robert Noyd, David French, and Richard Woodward.

Third Row - left to right: Tarkus Suganda, Sarah Rizzo, Debra Baden-Drange, David Rizzo, Francis Pfleger, and Daqun Liu.

Fourth Row - left to right: Neil Anderson, Ernest Banttari, Sandra Gould, Judy Thies, Jean Williams, Robert Blanchette, Christian Fatokun, and Lalitha Kumar.

Fifth Row - left to right: James Groth, Ann Arendt, J. Patrick Martinez, Eric Eckwall, James Kurle, Timothy Clark, and Elwin Stewart.

Sixth Row - left to right: Tsitsi Ndowora, Andrew Ryan, Deborah Samac, Pedro Figueroa, Roger Jones, Dean Malvick, Cynthia Ocamb and Philip Larsen.

Seventh Row - left to right: Dann Adair, Kurt Leonard, and Brent McCallum.

Missing: Faculty - Clyde Christensen, Carl Eide, Bill Kennedy, Thor Kommedahl, Sagar Krupa, Benham Lockhart, David MacDonald, Donald McVey, Richard Meronuck, Chester Mirocha, Thomas Nicholls, Robert Nyvall, James Percich, Alan Roelfs, Darroll Skilling, Ward Stienstra, Les Szabo, Roy Wilcoxson, Carol Windels and Richard Zeyen.

Professional Academic - Cynthia Ash, Samuel Boutin, Dean Herzfeld, Anne Kubelik, David Long, John McCain, Bruce Potter, Weiping Xie, and Paul Zambino.

Visiting Scientist - Girma Bekele, Mervat El-Wahab, Desiree Menancio-Hautea, Marge Palmer, and Yi-Chun Xu.

Graduate Student - Nora Altier, Ligia Ayala, Dehong Jiang, Kathryn Kromroy, Javier Plasencia, and Bruna Bucciarelli.

Civil Service - Erik Biever, Todd Burnes, John Haight, Odette Holter, Bryan McCoulough, Elizabeth Ozmon, James Rowe and Monica Wallace.

Federal Civil Service - David Casper, Mark Hughes, Jacolyn Morrison, Christine Newby, Gerald Ochocki, and Rosalind Richards.

Editors note: The 1992 departmental photo is the second annual group picture. It was taken with a 4 x 5" format view camera. Special thanks to our photographer, Gilbert G. Ahlstrand.

AURORA SPOREALIS

VOLUME 62
NUMBER 1

NOVEMBER
1992

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Production Editor

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Robert A. Blanchette
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Aurora Sporealis is an annual publication mailed to former and current faculty, staff and graduate students, and to *Old Timers* who worked in the Department of Plant Pathology, at some time or other. Any contributions can be sent to the Department Head at the address below.

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COVER STORY

The three retirees pictured on the cover of this Aurora received their degrees in plant pathology at the University of Minnesota and remained in (or returned to) the Department to develop distinguished careers and help the Department maintain its world-wide reputation as a great school of plant pathology. Brief academic histories are given below. Unless indicated otherwise, all degrees and all positions held were in the Department.

David W. French. BS, Forestry, 1943; MS, Forestry and Plant Pathology, 1949; PhD, 1952. Research Assistant in Forestry, 1946-1948. In Plant Pathology: Research Assistant, 1948-1950; Professor, 1963-1992. Assistant Head, 1973-1977; Acting Head, 1977-1978; Head, 1979-1985. Retired, June 30, 1992. Dave is continuing his field research on forest and urban tree problems and doing a little consulting, mostly gratis.

Thor Kommedahl. BS, 1945; MS, 1947; PhD, 1951. Assistant Professor, Ohio State Agricultural Experiment Station, 1951-53. At Minnesota: Assistant Professor, 1953; Professor, 1963. Retired, June 30, 1990. Thor keeps his computer hot as writer and editor of several publications, including the newsletter of the International Society of Plant Pathology, Plant Disease and publications of the Science Museum of Minnesota.

Roy D. Wilcoxon. BS, botany, Utah State Agricultural College, 1953. At Minnesota: MS, 1955; PhD 1957. Research and Teaching Assistant, 1953; Instructor, 1956; Professor, 1966. Retired, November 30, 1991. Roy is now on duty in Chicago for the Church of Jesus Christ of Latter Day Saints.

DEPARTMENTAL ENDOWMENT PROGRAM

In recent years as we have been faced with shrinking state and federal budgets, the Department of Plant Pathology has become increasingly aware of the importance of our Endowment Program and the role it serves as source of enrichment and financial backstop for many departmental activities. We are extremely grateful for the continuing support of alumni and friends for their contributions to our Endowment projects. The purpose of this article is to inform our friends about how our Endowment accounts are being used and to request your continued support. These funds have frequently enabled the Department to provide timely financial support for activities and individuals when state and federal funding was not available.

Graduate Student Fellowships and Scholarships

We presently award two \$1000 scholarships each year to graduate students who have excelled in their graduate programs while at the University of Minnesota. These scholarships were established in memory of Dr. Fred Frosheiser, former USDA faculty member, and Dr. Milton Kernkamp, former Department Head and faculty member. These scholarships provide us an opportunity to formally reward and acknowledge the efforts of outstanding graduate students in our Department.

Recently, Dr. H. H. Flor and his wife Iva donated a generous financial gift to the Department to establish a research assistantship. This gift will be extremely useful in helping to support graduate education in the Department.

Library Support

Our Department is fortunate to have a library concentrating on plant pathology and mycology consisting of approximately 8000 cataloged volumes and over 120 current periodicals. In order to maintain this valuable resource the Department needs to pay the salary of a librarian and some part-time student help. Contributions to the Library Endowment will help ensure that the Plant Pathology Library continues to be a part of our future.

General Department Support

The Department has four endowment accounts that can be used to provide financial support wherever most needed. The J. J. Christensen Endowment was established as a memorial to this former faculty member and department head who made significant contributions to our Department during his career. Similarly, the Helen Hart Endowment was established as a memorial to this former faculty member and first female APS president. Both of these funds can be used wherever most needed. The Bausman and Service Endowments also permit the use of interest income in this manner. These accounts are extremely helpful in that they provide access to funds that can be used in a flexible manner to support department activities, equipment needs, or seed money to start new research or teaching initiatives.

The Lieberman/Okinow Endowed Chair for Disease Resistance Breeding in Cereal Crops

This Endowment provides support for research, faculty/student exchanges, and publications for a collaborative program between the Department of Plant Pathology and the Institute for Cereal Crops Improvement at Tel Aviv University in Israel. The activities associated with this program focus upon

identification and characterization of disease resistance genes from wild relatives of wheat, oats, and barley with the intent that these genes may be used as sources of disease resistance in small grains breeding programs. Although the program is off to a good beginning, increased funding would increase the amount of research being done in this area.

Teaching

Professor Matt Moore was well known to former students in our department for his dedication to teaching. The Matt Moore Endowment was established as a memorial to Professor Moore to provide support and encouragement for good teaching in the Department. This fund is still at a very modest level. It is intended that interest income would be used to provide teaching lab support and equipment to enhance our teaching program.

E. C. Stakman Endowment Funds

There are three accounts established from the personal estate of Dr. Stakman and from funds donated by friends in memory of the significant accomplishments of this scholar and statesman. The E. C. Stakman Award Endowment provides funds for an annual award to be given to an individual who has made a significant contribution to plant pathology throughout his or her career. The Stakman Visiting Scientist Endowment was established for, as stated in Dr. Stakman's will, "the support of research and experimentation leading to the development of varieties of basic food crops, especially wheat, corn and potatoes, with as much generalized resistance as possible to the destructive diseases which afflict them". Finally, in recognition of Dr. Stakman's love of sports and competition a small endowment account was established to fund refreshments and related expenses associated with an annual softball game between faculty, staff and students.

We are proud of our Endowment Program in the Department and believe it gives us an advantage that many other academic departments do not have. We are especially proud because this program is a direct indication of the devoted support of alumni and friends for the Department. We sincerely hope that you will continue to provide support for our teaching, research, and outreach activities in this way. If anyone has questions about special projects, equipment, or activities they may wish to support through our Endowment Program, I invite them to call [612-625-8200] or write to me. Thanks to each of you for your loyalty and friendship.

- Philip O. Larsen,
Department Head

Volume 62, Number 1

AURORA SPOREALIS

November, 1992

OLD TIMERS

In April 1992 Carol Windels talked by phone with **Janese Thatcher**, MS 1984. Janese has remarried, has three children and teaches airplane maintenance at Thief River Falls Technical College. She lives at St. Hilaire, MN.

Frank del Prado, MS 1951, is retired and staying with his daughter in Fort Lauderdale, FL.

Shu-Rong Zhang, who was a Research Associate in Dr. Mirocha's laboratory from 1987 until August, 1990, is working on mycotoxins at the Shanghai Normal University.

As of November 18, 1991, **Beatriz Perez**, PhD 1990 missed the low temperatures and snow in Minnesota. Beatriz is at the Institute of Genetics-INTA in Buenos Aires, Argentina, where the weather was hot.

Barry Jacobsen, PhD 1973, became Dean of the College of Agriculture and Director of the Experiment Station at Montana State University, Bozeman, effective July 1, 1992. He resigned his position as Head of the Department of Plant Pathology at Auburn University.

David Sauer, PhD 1967, is editor of the Fourth Edition of Storage of Cereal Grains and Their Products. \$98.

John Hill, MS 1961, was elected to the Board of Directors of the American Type Culture Collection in 1992. John, who is Professor of plant pathology at Iowa State University, will serve a three-year term with the ATCC.

Lois E. B. Johnson, PhD 1980, has transferred from the Research Division to the Global Registration in the Ag Products Department at DuPont in Wilmington, DE. The new position entails managing a computer data base which will contain pertinent data for registration of DuPont pesticides. Lois was in the Research Division for 10 years.

Lars Semb, who spent a year in the Department, 1957-1958, writes from Ås, Norway that greenhouse growers have extensive problems caused by *Pythium* and *Phytophthora* on ornamental plants and cucumbers.

Rollie Line, PhD 1962, has two Post Docs working for him. One is computerizing the knowledge Rollie has accumulated on the integrated control of wheat diseases; the other is helping to complete his information on the genetics of resistance to stripe rust, including durable, non-specific resistance.

Jeri Ooka, PhD 1975, reported that 24 days after hurricane Iniki scored a direct hit on Kauai he was still without electricity and telephone service. He did have water and had developed a profound respect for women who washed clothes by hand. He doesn't have a roller wringer, an invention which he believes is worthy of a Nobel Prize. He expected relief in about two weeks. Jeri's house sustained some, but not major, damage. The experiment station at Kapaa is operating on a standby generator that isn't adequate to operate the autoclaves so Jeri and his colleagues were making media in pressure cookers.

Always the optimist, Jeri writes: "When everyone turns off their portable generators at night it grows very quiet and the stars are bright--rather nice". Mary Ooka works at Aiea on Oahu, that escaped the works of the storm.

Earle W. Hanson, PhD 1936, and **Maryan** were the subjects of a commendatory feature article in the Wisconsin State Journal for Sunday, June 14, 1992. Since Earle retired from the Department of Plant Pathology, University of Wisconsin in 1976 he has spent at least 25 days a month doing volunteer work at Oakwood Village, a retirement residence.

Earle said, "What I do is push wheelchairs and then work in the dining hall. During the meals I pour their coffee and cut their meat because some of them have arthritis so bad they are paralyzed. It is pretty elementary stuff but that is what I do". Maryan visits individual residents and reads letters and books to them and writes letters and performs similar services. Their work has been recognized with Oakwood's Outstanding Service Award in April and Earle received the J. C. Penny - United Way Golden Rule Award in May, also for his volunteer at Oakwood.

Earle and Maryan moved to Madison in 1946 where Earle worked, first for the USDA and then on the University faculty, eventually as professor of plant pathology.

That Earle should spend his "Golden Years" helping others is no surprise to people who knew him when he was at Minnesota. As an undergrad student Thor Kommedahl worked in the field and lab for Earle and recalls with gratitude the education Earle gave him in plant pathology, botany and experimental methods - besides his modest salary. He gives Earle a good deal of credit for his pursuit of a rewarding career.

MINNESOTANS AT CORNELL

The Cornell Plant Path Newsletter for July, 1992 features an article about Allan G. Newhall, age 98, Professor Emeritus of Plant Pathology. He retired in 1960 after a career that emphasized research with vegetable diseases and included teaching, research and consulting in several foreign countries, especially in Central America, Africa and the Philippines. Prof. Newhall is a Minnesota Old Timer.

However, his relationship with the Plant Pathology Department at Minnesota was brief and tenuous. Allan received the BS degree in Agriculture at Minnesota and thereafter was one of several Assistant State Leaders. E. M. Freeman was the leader. The barberry campaign was started in 1918 through the efforts of Freeman, E. C. Stakman and H. L. Bolley of North Dakota.

After the eradication job and some teaching experience at Grinnell College, IA, Newhall became a graduate student at Cornell when Stakman recommended him to H. H. Whetzel for an assistantship financed by commercial funds. In an address given in 1957 during the Cornell Golden Anniversary celebration, Allan said that "It was Whetzel that rescued me from Stakman".

Other Minnesotans mentioned in the Cornell Newsletter are:

H. David Thurston. PhD 1958, who still travels extensively in Central and South America and spreads the gospel of the value of "Sustainable Practices for Plant Disease Management in Traditional Farming Systems". He has published a book on the subject.

George Hudler, MS 1973, rated a photo copy of a news article about his course in PP 201; Magical Mushrooms, Mischievous Molds, 2 credits. More than 200 students took the course in 1992 (up from 165 last year as we recall). On January 8, 1991 he talked about his course to an informal seminar at the Department of Plant Pathology at Minnesota. George received the Outstanding Teacher Award from the APS at the meetings in August, 1992.

Boothroyd Taught Ecology

The author of the Newhall sketch, Prof. Emeritus Carl W. Boothroyd, spent a sabbatical leave (January-June, 1956) at Minnesota. In a recent letter he recalls:

"J.J. was chairman at that time and I remember my first session in his office. 'Boothroyd, I want you to teach a course in Ecology of Plant Pathogens'. 'Dr. Christensen,' I said, 'I'd really like to do some research. I've been spending pretty much full time teaching at Cornell'. Chris replied, 'oh, you can do some research, but we really need someone to teach 'Ecology'. 'But I

haven't even had an Ecology course,' I ventured. 'That doesn't make any difference,' he said, 'you're from Cornell and you can handle anything'.

"And of course you know what happened. I dug out some Ecology texts to learn the basic terminology, polished up my Whetzel notes on Principles of Plant Pathology and gave a small group of grads the Cornell approach to Ecology of Plant Pathogens. It wasn't really too different from what Helen Hart and Allison? used to teach as Ecology because both of our institutions emphasize basic principles, and a thorough grounding in life history details.

"I really enjoyed teaching although I didn't get any research done. I had only a few students but they were all good, including Julio Bird, Puerto Rico, Neil Anderson, mycologist, Dick Frederiksen, Texas A&M, de Isla (Bauer) from Mexico (Chapingo?), and couple of others. And I learned how to use a small grain planter for Chris' wheat virus plots, boned up on cereal smuts for extension trips on which I had to 'educate' growers, etc.

"I'll not forget a field crop Field Day. Chris said, 'Boothroyd, I want you to handle the flax disease plots. When the wagons come around with the farmers you explain the diseases and tell them how to control them.' Well, I'd never seen a flax plant growing, let alone, its diseases. So back to the library, and staff willing to bail me out. On Field Day I was ready; at least I thought so. The first wagon pulled up - farmers and wives. On a bale of straw sat J.J. Wouldn't you know? -- he was the first to ask me a question. Don't remember what it was but I think he was trying to help me by asking something I could answer.

"It was a good six months and I enjoyed the staff and students. Incidentally, please give my regards to Dave French, who I suppose is as busy as ever but enjoying retirement. I was away over the period he retired, but wish him the best now.

"Al Newhall said that his job with the Minnesota department in eradication of alternate hosts was primarily with search and destruction of Ribes for blister rust control. That job cruising around the countryside, in fact, convinced him that Plant Pathology was to be his life's work. He did find a few barberry bushes but mostly at small towns where the train stopped on his Ribes trips.

"We at Cornell were very proud of two former Minnesotans now deceased, Leon Tyler and Arden Sherf. There may have been others of our faculty from Minnesota but not that I know of. I did have an excellent undergrad - Larry Littlefield - who got his B.S. here and went to Minnesota for Ph.D., then S. Dakota and then Oklahoma. I also remember Karl Fezer, Cornell PhD, who taught at St. Paul."

VISITORS - 1992

March 24. **Dave Thurston**, PhD 1958, was one of the speakers at the symposium on International Agriculture (see elsewhere, this *Aurora*). Dave is author of a book on "Sustainable Practices for Plant Disease Management in Traditional Farming Systems", published early in 1992. He also visited his sons George and Alexander and their families.

May 14. **Ted Knous**, PhD 1979, was on the campus on business and to visit friends. After Ted got his degree in 1979 he took a position with the University of Nevada at Reno. He left there in 1988 to become Director of grants and contracts at Winona State University. Since 1989 he has been Assistant Dean for research at the University of Wisconsin, Stout.

May 15. **Dr. Richard Jones**, Dean of the College of Agriculture visited the Department from 1:00 - 5:00 PM. The purpose of the visit was to tour Departmental facilities and to meet individual faculty and people involved with their programs. A reception for the Dean was held in 401 Stakman to which all departmental personnel were invited.

June 30. **Eugene Saari**, PhD 1966, stopped in on his annual visit to Minnesota. Geno, who is still working for CYMMIT, in Mexico, is a native of Northern Minnesota, land of fish and saunas.

July 2. **Mohammed Boulef**, PhD 1986, stopped on his return from the Second Annual Tan Spot Workshop at the North Dakota State University. At NDSU he met Old Timers Brian Steffenson and Jim Venette, who were glad to see another Old Timer. Mohammed is on the faculty of the National School of Agriculture at Meknes, Morocco.

July 15. **Professor Alwyn Gibbs**, PhD 1971 came to morning coffee. Al is on an extensive holiday and long service leave and after visiting in the Twin City Area will go to Wisconsin to see friends including Bob Slattery, PhD 1977. Later he will take a bicycle trip in the northern Rockies.

Al is Professor in the School of Information Technology at Charles Stuart University at Bathurst, NSW, where he is course coordinator in environmental science. He teaches general biology, animal systematics and fresh water ecology.

July 15. **Mark Stennes**, MS 1981, had coffee with the 10 AM group. Mark, who for several years managed his own tree service, recently joined Rainbow Tree Care,

St. Louis Park, MN where he practices his expertise in disease control and care of trees.

July 17. **Cheryl Engelkes**, PhD 1991, came in for coffee bringing her cross-stitch work and her old coffee mug with the big cork cover. It was just like old times. Cheryl came to Minnesota to attend the retirement party for Dr. French on July 19. That being done she and some of her family, like good Minnesotans, took a trip to the North Shore. She returned in time to have coffee again on July 23 and took a 1 PM flight for Maryland where she is Research Pathologist, USDA/ARS, working on biological control of plant diseases at Beltsville.

July 21. Former faculty member **Paul Teng**, who attended the retirement party for Prof. French visited the Department.

August 17. **Flavio Lazzari**, PhD 1990, attended the APS meeting in Portland and stopped to visit his Alma Mater. Flavio is employed as a consultant, giving about half time each to academic and industrial institutions.

Flavio was accompanied by a colleague, **João Pagliosa**, coordinator in animal nutrition for a Brazilian meat packing company. They planned to make several business visits in the north central U.S. before returning to Brazil.

September 3. **Dexter Douglas**, PhD 1968. Dexter, who was on his way to Ohio, grows certified potato seed near Areo, Idaho. No ordinary seed potato grower, Dexter tests selections in cooperation with the potato breeder at the U. of Idaho. His establishment includes a laboratory where seed is propagated from tissue culture and tested for the presence of pathogens. Test plots are maintained in several parts of the world including Mexico and Taiwan.

Dexter will be remembered as a rider of bucking horses, and participated in a rodeo on the Minnesota State Fairgrounds. He & Mrs. Douglas have two daughters, one of whom works on the ranch, "She can do anything". The other is a linguist and speaks several languages; including a number of Native American Languages.

September 11. **Lloyd Brinkerhoff**, PhD 1962, and Mrs. Brinkerhoff stopped in the Department on Saturday and found Bill Kennedy and a couple other plant pathologists on duty. Lloyd retired in 1978 from Oklahoma State University where he had spent about 30 years working on diseases of cotton. He and Mrs. Brinkerhoff now live in Orem, Utah.

From St. Paul they planned to go to northern

Minnesota where Mrs. Brinkerhoff spent a year, 1982-83, on a Mission for the Mormon church. She was eager to visit old friends among the Chippewa there.

October 15. Charles E. Logsdon, PhD 1954 and Arloine, who was Secretary in the Plant Pathology office in the 50s, were in St. Paul. Their principal objective was to visit Arly's relative. See elsewhere in this *Aurora Sporealis* for more on the Logsdons, who live in Palmer, AK.

October 15. Stein Telneset, PhD 1963 and Signe, of Ås, Norway, arrived in St. Paul. Stein will attend the conference on Ecological Interaction and Biological Control, October 25-27 and in the meantime hopes to confer with plant path faculty on the same subject. Stein is in charge of seed certification in Norway, including grasses, vegetables and especially potatoes. Signe teaches school.

CORRESPONDENCE

Christmas greetings from Old Timers sometimes include messages, the principal subjects being the OT's travels or their children.

An example of the latter was the business section of the Anchorage, Alaska Daily News which featured an article about **Chuck Logsdon, Jr.**, who was currently in the throes of making his annual forecast of the world oil market, a figure very important to Alaska which gets 85% of its revenue from oil taxes and revenues.

Chuck Logsdon the Younger has a PhD in Ag Economics from Washington State University. The news article in question comprised about 56 column inches of type and a 7 x 10 colored picture.

Publicity is not uncommon for the Logsdons. **Chuck Sr., PhD 1954** was photographed by the "media" riding in a car with the late president J. F. Kennedy. Chuck was Mayor of Palmer, Alaska at the time.

Paul Fridlund, PhD 1954, a contemporary of Logsdon, finds retirement "the best job I ever had". He loves to travel and brags "Stakman can't show me a thing about travel". He and **Maxine** were planning a trip to the Galapagos Islands in February, 1992.

Howard Bissonnette, PhD 1964, wrote in February, 1992 that he and **Karwyn** were building a house near North Bay, Florida and expected to move in by mid April. Howard reported satisfactory sailing, fishing and kite flying. They expected to start north by the middle of May, stopping at the U of Illinois to see daughter **Suzanne** receive her PhD.

OBITUARIES

Marjorie G. Kernkamp, 79, died November 21, 1991 at the Royal Oak Care Center. She was born at Minnesota Lake, MN. For several years she was Assistant to the Director of the Minnesota Agricultural Experiment Station, where she was known for her great energy and good judgement. She retired in 1962. After Dr. Kernkamp retired in 1977, they moved to Sun City, AZ. Marjorie is survived by a niece, Susan Dabelsteen, of Anchorage, AK.

Conrad Olson, BS 1940, died February 6, 1992. Conrad and Herb Johnson worked together for several years for Yoder Brothers, a large greenhouse company in Ohio. Herb left Yoder eventually to resume graduate work but Conrad remained until he retired (sometime in the 70s) and built a distinguished career in the control of insects and diseases of greenhouse plants.

VITAL STATISTICS

Births

December 9, 1991. Jeffrey Daniel to Marge and Dan Palmer, 7 lb, 12 oz.

September 2, 1992. Laura Michelle to Todd and Pat Burnes, 10 lb, 12 oz.

October 17, 1992. Julia Laura to Gerald and Brita Amundson, 7 lb, 3 oz.

Marriages

March 21, 1992. Martha Musil and Julio Huerta-Espino, in Minneapolis, Minnesota.

August 16, 1992. Sarah T. Jensen and David M. Rizzo, in Jackson, Wyoming.

October 10, 1992. Mervat El Araby and Robert Zweighardt in St. Paul, Minnesota.

Defensive Driving Pays

A defensive driving course, sponsored by the Plant Pathology Physical Resources Committee was given March 18 & 19, 1992 for members of the Departments of Plant Pathology, Agronomy, and Soils. The course consisted of four lectures on defensive driving by Wallace Caryl, Director of the University Department of Emergency Management. Attendance at the course qualified employees over 55 for a 10% reduction in automobile insurance premiums.

VISITING SCIENTISTS



Yichun Xu



Jacob Manisterski



Bob Rees

VISITING SCIENTISTS

Yichun Xu, Chief and Senior Engineer from the Food Chemistry Research Laboratory, Shanghai Cereal and Oil Science Institute (SCOI), Shanghai, PR, China arrived here in July 1991. He received a BS in Plant Pathology and Biochemistry from Peking Agriculture University, PR of China. He is an Honorary Fellow in Dr. Chester Mirocha's laboratory where he is doing research in analytical chemistry on the mycotoxicology project.

Dr. R. I. McIntosh of the Plant Breeding Institute, University of Sydney, Australia, visited the Cereal Rust Laboratory September 10-12 to discuss rust research with the CRL staff. Dr. McIntosh, working with Dr. I. A. Watson, PhD 1941, and formerly Director of the PBI, isolated many of the genes for stem rust resistance in wheat. In recent years he has worked with European scientists in identifying and isolating genes for resistance to stripe rust in wheat. He also headed an Australian AID project to identify leaf rust resistance in wheat in India and Pakistan and to train a number of scientists in those countries. His host was Dr. Kurt J. Leonard.

Dr. Y. H. El-Daoudi visited the Cereal Rust Laboratory during the month of April. He is with the Cereal Disease Division of the Plant Pathology Institute, ARC, at Giza Egypt. Dr. El-Daoudi received his Ph. D. at the University of Egypt in 1983. He has worked with a number of aspects of rust including specific resistance for controlling wheat leaf rust, virulence in *Puccinia*

graminis tritici, slow rusting resistance, economic threshold for controlling stem rust, effects of microelements and phenolic compounds on rust development, and yield losses caused by rusts. While at Minnesota, Dr. El-Daoudi has been using USA cultures of wheat leaf and stem rust to postulate the resistance in current Egyptian cultivars and selected germplasm lines.

Dr. Jacob Manisterski from the Institute for Cereal Crop Improvement at Tel Aviv University, Israel arrived in January 1992 for a research study leave in the Cereal Rust Laboratory. At the Institute he does research on resistance of wild cereal relatives of oats, barley and wheat to their pathogens and studies physiologic specialization and biology of rust fungi. He spent 7 months at the CRL doing research on the range of variation in the *Puccinia recondita* complex.

Dr. Bob Rees from Australia arrived in the Department March 2, 1992 and was a Visiting Scientist for a period of three months. He is a Senior Principal Plant Pathologist with the Queensland Wheat Research Institute. He worked in the Cereal Rust Laboratory with Dr. Kurt Leonard on resistance to oat crown rust in Australian varieties and on wheat leaf rust with Dr. Alan Roelfs.

Dr. Tim Carver from the Institute for Grasslands Research at Aberystwyth, Wales, U.K. visited the Department from April 27 to May 8, 1992. He worked with Dr. Zeyen through a NATO sponsored scientific exchange grant for investigating durable plant disease

resistance. He worked on phenolic pathway inhibitors and their effects on powdery mildew resistance in oats.

Martin Gatabazi was a visiting scientist in the Department during the Fall Quarter, 1991. He came here through the USAID - USDA project between Rwanda National University and the University of Minnesota. He worked with Ben Lockhart on Plant disease diagnosis.

Hans Henrik Kampman of L. Dachnfeldt A/s, Breeding Station Danefeld, Denmark visited the Department December 16 - 18, 1991. During his visit he studied disease resistance breeding. His host was Dr. Philip O. Larsen.

HONORS

Sequeria Receives 1992 Stakman Award

Dr. Luis Sequeira, J. C. Walker Professor of Plant Pathology and Bacteriology, University of Wisconsin, received the E. C. Stakman Award October 8, 1992.

His citation read "For fundamental research in phytobacteriology on growth regulator functions in pathogenesis, the nature of resistance of plants to bacterial wilt, identification of genes in host-pathogen interactions, and taxonomy of *Pseudomonas solonacearum* using restriction fragment length polymorphisms;

"For developing a major international training program for bacterial disease physiology;

"For professional leadership in the American Phytopathological Society as president in establishing a new journal, creating the APS Foundation, and forming an Office of International Programs in the Society, and for significant editorial direction as editor-in-chief of *Phytopathology*, and of *Molecular Plant-Microbe Interactions*".

At the award meeting Dr. Sequeira delivered a lecture on Biotechnology and Third World Agriculture". He was the twenty-ninth individual to receive the Stakman Award which was first given to Dr. W. L. Waterhouse in 1956.

Kerr Receives 1991 Stakman Award

Dr. Allen Kerr, Professor and Head, Department of Crop Protection, University of Adelaide, Australia received the E. C. Stakman Award November 7, 1991. Dr. Kerr gave a lecture on "Genetic Engineering to Control Crown Gall". He was chosen to receive the award for his "fundamental contributions on soil-borne fungi in host-pathogen interactions and for his landmark series of papers on biological control of crown gall.

Malcolm Shurtleff, PhD 1953, Extension Pathologist at the University of Illinois, Urbana, received the Senior Faculty Award for Excellence in Extension at the annual recognition banquet of the College of Agriculture March 5, 1992. The award included a certificate and a \$1,000 recurring annual salary increment. Mal's achievements are too numerous to list and include more than 1000 publications.

Malcolm also received the Distinguished Service Award at the Annual Meeting of the North Central Division, APS at Urbana, IL, June 22-24, 1992. This is the highest recognition given by the Division and was given to Mal for his contributions.

David Rizzo, a candidate for the PhD, was awarded the Philip C. Hamm Memorial Scholarship for Graduate Students in the Plant Sciences and Related Disciplines. Hamm got his PhD in Plant Physiology when the Section of Plant Physiology was part of the Department of Plant Pathology and Botany. The Hamm Fellowship and annual lecture were established in his memory by the Monsanto Agricultural Products Company where he worked from 1944 until his death in 1979. At Monsanto he contributed extensively to weed science and was eventually given the title of Distinguished Science Fellow.

Martha Roane, MS 1946, was made a Fellow of the Virginia Academy of Science in May, 1991. Martha and husband Curt, PhD 1953, are both Professors Emeritus of the Virginia Polytechnic Institute and State University. They have spent part of their leisure seeing the USA and some of their numerous friends across the nation.

Ochoa Receives Prestigious Prize

Carlos M. Ochoa, MS 1955, was awarded the 1991 "Bernardo A Houssay" Inter-American Science Prize in the Agricultural Sciences field at a ceremony held October 28 in the Hall of Heros, Organization of American States in Washington, DC.

The Prize was awarded by the Inter-American Council for Education, Science and Culture (CIECC) of the Organization of American States (OAS) to Prof. Ochoa "for his important contributions and his continuous exemplary work in the genetic preservation of the potato, recognizing the importance to maintain genetic banks as a preservation tool of the genetic heritage, as well as for the discovery of new wild species and the development of new varieties of this kind".

Prof. Ochoa has worked for many years at the International Potato Center in Peru.

1992 DEPARTMENTAL AWARDS & RECOGNITION DAY

The Departments annual Awards Ceremony was held May 7, 1992 at 4 PM in 365 Borlaug Hall. An Awards Ceremony flyer announcing the occasion stated it was "In Recognition of the Outstanding Scholarship and Dedicated Service with which the Recipients have Enriched the Department of Plant Pathology". Phil Larsen presided and presented the following awards:

M. F. Kernkamp Scholarship

David M. Rizzo

Fred I. Frosheiser Scholarship

Timothy A. Clark

Civil Service Awards of Excellence

Marguerite M. Clemens
Roxanne L. Denny

Distinguished Mentor Award

Dr. Robert A. Blanchette

(Awarded by the Graduate Students)

Distinguished Friend of the Department

Dr. Michael G. Boosalis

Dr. Abdelaziz H. Abuzinada

During the ceremony Dr. Larsen also recognized department members who had received various honors and recognitions during the past year. These included:

Dr. Bill Bushnell 1992 Federal Service Recognition, Civil Servant of the Year, USDA Agricultural Research Service.

Dr. Roy Wilcoxon, retired December 31, 1991 after 35 years of outstanding service to the department and Plant Pathology. Roy received the Honorary Fellow of the Indian Phytopathological Society, 1992; and the Minnesota Crop Improvement Association's Honorary Premier Seed Grower Award.

Dr. Sagar Krupa received a Special Research Award and was Elected to the Directory of Distinguished Leadership, 1991.

Drs. Frank Pfleger and Elwin Stewart received a Certificate of Commendation from Governor Arne Carlson for their mycorrhizal research.

Bruce Potter also received a Certificate of Commendation from Governor Carlson for his disease survey work.

Richard Woodward received a APS Foundation Award on behalf of the Graduate Students, 1992.

David Rizzo received the 1992 C.M. Crosby Fellowship from the Graduate School as well as the 1992 Philip C. Hamm Memorial Scholarship from the Institute of Agriculture, Forestry, and Home Economics.

The following students having completed their PhD degrees were promoted to Full Membership in Sigma Xi:

German Hoyos
Cindy Ocambo

Michael Ostry
Laura Todd

The PEPP (Professionalism and Equity in Plant Pathology) Committee Certificates of Appreciation for 1991-1992 were given to **Dr. Thor Kommedahl** and **Janell M. Stevens-Johnk**.

To wind up the program **Ann Arendt** was recognized for 15 years of superb Civil Service.

We then adjourned to the front steps of Borlaug Hall where a group picture was taken and then down to the serious business of congratulating the awardees while enjoying a very tasty and beautifully arranged buffet.

- Neil A. Anderson

Additional Honors

Janell M. Stevens-Johnk won the oral competition for graduate student presentations at the Annual Meeting of the North Central Division of APS, June 22-24, 1992. Her paper was on EBDCs and Alternative Fungicides for Control of Early Blight of Potatoes (R. K. Jones, co-author).

Prof. Isaac Wahl received one of two 1992 prestigious Israel Prizes in the life sciences. The other went to Prof. David Erlik, urologist.

Prof. Wahl, Head of the Division of Mycology and Plant Pathology, Tel Aviv University, has been an adopted Minnesotan for several years, spending periods of weeks to several months working in the Department. He has been active in promoting the University of Minnesota/Tel Aviv University Endowed Land Grant Chair for Disease Resistance and Improvement in Cereal Crops. He is a world authority on the use of wild cereals as a source of resistance to disease.

Prof. R. D. Wilcoxon has been elected Honorary Fellow of the Indian Phytopathological Society. Roy first visited India in 1969 on a sabbatic leave, and again in 1981 on quarter leave, both times working on cereal rusts, especially slow rusting resistance. He made three shorter trips since, as visiting scientist.

Dr. James Percich was elected Vice President of the North Central Division of APS at the annual meeting held at the University of Illinois, Urbana/Champagne. He will serve his term as VP in 1992-1993 and in 1993-1994 become president. The annual meeting in 1994 will be held at the University of Minnesota.

Plant Pathologists Commended

At the Partnership Minnesota Conference held February 4, 1992, the Department received a certificate of commendation from Gov. Arne Carlson for its involvement in a collaborative effort with a state agency. The project in which **Frank Pfleger** and **Elwin Stewart** were co-project leaders was recognized for its effort to develop cost effective and environmentally compatible mind land closure techniques for coarse taconite tailings on the Mesabi iron range. Their partnership was with the Minnesota Department of Natural Resources, Minerals Division and the U.S. Department of Interior Bureau of Mines.

Professor French Praised

In an "Arbor Day Salute to Dave French" Susan Price stated that "he is really the father of urban forestry in Minnesota". The article appeared in the Minnesota Horticulturist and describes the many contributions he made to the science, culture and appreciation of trees.

At the May 4, 1992 Volunteer Recognition and Advisory Council Annual Meeting, Science Museum of Minnesota, **Dr. Thor Kommedahl** was awarded the 1991 Volunteer of the Year Award. Dr. Kommedahl regularly writes many articles in the *Bog Hopper*, a publication for secondary school teachers, and for *Encounters*, a magazine published for the Science Museum membership.

DEPARTURES

Dan Gillman, MS 1988, accepted a position as Director of the oak wilt program, Minnesota State Department of Agriculture, effective December, 1991. Dan worked on the Dial-U Clinic from February, 1989 to December, 1991.

Dr. Sharon Aarons left in March 1992 to accept a Postdoctoral position at the Institute of Plant Sciences, Burnley Gardens, Victoria, at Monash University, Australia. Sharon worked in Dr. Nevin Young's laboratory on mapping genes for resistance to bacterial wilt in tomato.

Julio Huerta-Espino and Martha Musil left for Mexico in July 1992. Martha worked as an Agricultural Research Technician on Dr. Don McVey's wheat leaf and stem rust project. Julio studied under Dr. Roelfs and completed his PhD in March 1992. He will be working as a Pathologist at SARH IMIFAP in Mexico.

April 1, 1992, there was a farewell tea for Dr. Roelfs' graduate student, **Irshad Ali**. He received his MS in March 1992 and returned to Pakistan where he will work as a Pathologist at PARC.

Jill D. Pokorny, MS 1989, accepted the position of Survey Plant Pathologist with the USDA-Forest Service, (Northeastern Area) located at North Central Forestry Research facility on St. Paul Campus. Jill's contributions to our Department as Director of the Plant Disease Clinic will be missed. Under her direction, the Clinic has become one of the outstanding facilities for plant disease diagnosis in the country. She moved to her new job in March of 1992. Happily Jill will be near enough so she can interact and attend events in the Department.

A farewell tea was held for **Dr. Robert Rees** on May 27, 1992. When Dr. Rees left the Department he went to North Dakota State University to continue his research and sabbatic leave there for a few months.

Dr. Judy Thies, PhD 1988, accepted a position in the USDA Agricultural Research Service as a Research Plant Pathologist/Nematologist at the U.S. Vegetable Research Laboratory in Charleston, South Carolina. Judy, who worked on the USDA Alfalfa Project, held an appointment in the Department as Adjunct Assistant Professor and Associate Member of the Graduate Faculty. She assumed her duties at the Vegetable Research Laboratory on June 29, 1992.

Dr. Reza Etebarian, who spent his sabbatic leave in Drs. R. Wilcoxson's and E. Stewart's lab, left the Department on August 20, 1992 to return to his home in Iran. We bid him farewell at a tea in early August before many faculty and graduate students left for the Phytopath Meetings.

A farewell tea was held for **Dr. Urooj Mirza** September 27, 1991. Dr. Mirza worked as a post doctoral fellow as a chemist on saxitoxin analysis in Dr. Chester Mirocha's lab. He left for the Rockefeller University to join the laboratory of Dr. Brian Chait who is working in the development of mass spectrometry instrumentation.

RETIREMENTS

Professor Roy Wilcoxon

A retirement banquet for Professor Wilcoxon and his wife, Iva, was held in the Hubert H. Humphrey Room at the Radisson Hotel Metrodome on March 7, 1992. Eighty friends and relatives of Dr. and Mrs. Wilcoxon travelled from several states within the USA and from as far away as Norway to celebrate Wilcoxon's many accomplishments throughout his career in Plant Pathology. Dr. Philip O. Larsen was master of ceremonies and gave a brief biography of the guest of honor. Two of Wilcoxon's former students, Dr. Larry J. Littlefield, Professor and Head, Department of Plant Pathology, Oklahoma State University, and Dr. Leif Sundheim, Research Director, Norwegian Plant Protection Institute, Department of Plant Pathology, Ås, Norway, reflected on their experiences while at the University of Minnesota. Dr. Harley J. Otto, President and CEO, Minnesota Crop Improvement Association, presented Wilcoxon with the MCIA Premier Seedsman Award. Dr. Larsen presented Wilcoxon with University of Minnesota mementos and a monetary gift from his friends and colleagues. Wilcoxon eloquently responded with memorable comments about his and Mrs. Wilcoxon's experiences in the Department and in the University community.

Wilcoxon came to Minnesota in 1953 after earning a BS in botany from Utah State Agricultural College, Logan. He earned both the MS (1955) and PhD (1957) degrees at Minnesota. He became Instructor in the Department in 1956 and rose through the ranks to become Professor in 1966. During his tenure at Minnesota, Wilcoxon was major professor and adviser of 56 graduate students including 20 MS, 26 PhD, and 10 who completed both MS and PhD degrees. His research and that of his students focused on diseases of cereals, forage crops, and grasses. His cooperation with plant breeders resulted in the release of thirteen cultivars of five crop species (oat, 6; wheat, 3; barley, 2; bromegrass, 1; and alfalfa, 1). Wilcoxon is author or coauthor of 177 journal articles, 56 abstracts, various book chapters, and numerous non-refereed and popular articles. Wilcoxon was very active in international activities and served a year on sabbatical leave in India in 1969 sponsored by the Rockefeller Foundation. He also served as Plant Science Project Leader (1970-76) and as Director (1983-87) of the University of Minnesota-AID Project with Morocco. In September 1992, Wilcoxon went to Chicago to serve with The Church of Jesus Christ of Latter Day Saints for one year.

- Judy A. Thies

Professor Dave French

Sunday July 19, was filled with Dixie land music, fine food and a large gathering of **Dave and Audrey French's** friends. After 42 years of service to the University Dave officially retired on June 30, 1992. The social attracted friends from all over the United States with old timers **Paul Manion** (Syracuse), and **Fred Baker** (Salt Lake City) tied for travelling the longest distance to attend. Other guests included: Yvonne & Keith - Anna Knowles; Liz Heberston; Cindy Ash; Grace Bucher; Connie Post; Diane Young; Nevin Dale Young; Jeannie Young; Roger K. Jones; Robert & Susan Noyd; Meg Clemens; Dave Hillings; Cheryl Engelkes; Debbie Baden Drange; Gloria Warner; Ken & Pam Brooks; Paul Teng; Janell & Mike Johnnk; Linda Vukelich; Margo McNabb, Ames, Iowa; Sande McNabb, Ames, Iowa; Mike Ostry; Paul & Kelly Karelis, Worthington, MN; Paul & Sigrid Rothman; Oriville Bielenberg, Maplewood, MN; Darroll & Marie Skilling; Linda Kinkel & David Anderson; Kathy, Greg, Joan & Peter Widen; Alice Rowell; Jeanne & Frank Pring; Phil & Sandy Larsen; Pauline and Dick Skok; Joyce and Jack Schafer; Steven S. Kunde; Marty Agleson; Kathy & Tom Kromroy; Donald & Arnella McVey; Steve Cook; Elwin L. Stewart; Chad J. Behrendt; Alan Ek; Marge, Dan & Jeff Palmer; Donna and Chet Mirocha; Don Willeke; Jim Kurle; Richard and Rose Meronuck; Gene and Connie Allen; Dave MacDonald; Ann & Bill Bushnell; Dave Rizzo & Sarah Jensen; Ward & Myrna Stienstra; Mark & Kathy Nelson; Iva & Roy Wilcoxon; Girma Bekele; Merlise Clyde and Glenn Fournier; Dorothy & Al Hallgren; Rajah & Jack Kolb; Tracy Salisbury; Cindy Ocamb; Tom and Mary Lou Nicholls; and Mr. and Mrs. Bob Nelson. It was a great day to celebrate with Dave and Aud. There were many individuals, located around the world that could not attend but sent letters of congratulations that were bound and presented to Dave. The volume contained hundreds of letters from past students, friends and colleagues. The weeks preceding Dave's retirement saw numerous newspaper articles in Minneapolis and St. Paul papers that gave tribute to Daves work over the past decades. A poem was even written by Dave DeVoto, the head of Minneapolis Parks and Recreation that was entitled "The French Connection" It concluded with:

"You're right, Dave as far as you go
We'll defend trees, but more than you know.
For we have all become
Your students, each one,
And you've showed us the right way to go".

And an article in the Minnesota Horticulturalist

summed up Dave's contributions very well:

"There isn't anything David hasn't done for trees, from organizing policy committees at the very top levels to taking his pruning saw out of his trunk and demonstrating the right way to prune a tree. He's really the father of urban forestry in Minnesota".

- Robert A. Blanchette

Malcolm C. Shurtleff, PhD 1953, announced his retirement and a picnic was held in his honor by the Department of Plant Pathology, University of Illinois, Urbana, where Mal is Professor and Extension Specialist. The picnic was held September 12, 1992, but the announcement didn't state exactly when he would be off the payroll. He had been at Illinois since 1961.

Mal's energy and productivity are amazing. In 1990 he admitted having published five books and shorter articles in encyclopedias (6), extension and research papers (960) and in magazines (377). He still had other writing to do, including four more books.

Old Timers who knew Mal when he was a graduate student recall that he held at least two other jobs besides his research assistantship. One of those jobs was that of track coach at Murray High School in St. Paul. Mal is still an outstanding runner. He professed to being unable to understand why a person of normal intelligence and ambition should not be able to save money while taking graduate work.

Mal and his wife, Margaret have three children, one MD, one PhD (soil science) and one MSB (accountant-comptroller).

Dr. Wallace Nelson retired June 30, 1992 as Superintendent of the Southwest Branch Experiment Station, Lamberton. Dr. Nelson has provided outstanding leadership at the station for more than 40 years, making it one of the outstanding facilities of its kind in the country. **Dr. Harlan Ford** is Acting Superintendent.

Dr. Gary Lemme replaced **Dr. Richard Vatthauer** as Superintendent at the West Central Experiment Station May 1, 1992. Dr. Lemme was formerly Assistant Dean of Academic Affairs, College of Tropical Agriculture and Human Resources, University of Hawaii. Previous to that he was on the faculty in Soil Science, South Dakota State University.

Duane J. LeTourneau, PhD 1954, retired from his position as professor of biochemistry and chemistry at the University of Idaho in August 1991. Duane joined the faculty at the U of Idaho in 1953. During his 38 years at

Idaho he authored or co-authored 116 publications and won many honors as an educator. He was a Fellow of the American Association for the Advancement of Science and of the American Institute of Chemists. Duane was a native of Stillwater, MN. His degrees, all from the U of M, were BS in Agricultural Biochemistry, MS in Agricultural Botany, and PhD in Plant Physiology. He was a student in the Section of Plant Physiology which was a part of the Department of Plant Pathology and Botany. This relationship ended in 1966.

THE SECTION OF PLANT PHYSIOLOGY

In an article on Stakman Hall in *Aurora* 1991 the statement was made that after the Section of Plant Pathology moved to the "new" building the Tottering Tower was occupied principally by the Federal Rust Laboratory.

Dr. Al Linck, until recently Provost/Academic VP at Colorado State University, read the article and wrote to Dr. Phil Larsen to correct a rather major error. Al pointed out that after the Section of Plant Pathology moved the Section of Plant Physiology remained a very active organization in the T T until 1966 when the plant physiology personnel were assigned to the Departments of Agronomy and Horticulture.

Aurora apologizes. (Eide wrote the article.)

Dr. Linck's letter reads: "I want to thank you for sending the November *Aurora Sporealis* to me. My wife and I are old timers since I was on the faculty from 1955 until about 1970 and she worked in the office in the fifties. We both have fond memories of the department, J.J., Stak, Thor, Carl, Dave, Neil, John (Rowell) etc. Many of the old timers in the November issue were acquaintances of ours and we are saddened by the passing of some of them.

"Since I spent my entire career in the Tottering Tower I appreciated the picture of the building even in the midst of the wrecking ball. I must take exception to the editor's comment (and Neil* is an old friend) that the Tottering Tower was "occupied principally by the Federal Rust Lab" for some thirty years. While the part about the Rust Lab is true there WERE others in the building. In fact as the plant physiology group grew we occupied most of the building, even part of the third floor and the attic, after the Seed Lab left.

"Thor Kommedahl occupied a wonderful second floor office looking out on the campus (and later I did after Thor returned to Stakman Hall). Jim DeVay was there, followed by Rick Durbin. Ray Landon, Ted Sudia,

Ed Stadelmann and our students all were denizens of the old tower. I must have had 25 or 30 students and post docs, during that period.

"Anyway, thanks for the memories. Since you asked for personal news I have laid aside the pressures of the Provost/Academic VP here at Colorado State and will continue for a couple of years working on extended study programs and faculty development. Then Van and I will retire and move back to the Twin Cities. It has been a pleasure working with Ken Knutson, Monty Harrison and for a short period with Clark Livingston. Minnesota can be proud of them, as is CSU.

"Warm regards to our many Plant Path friends."

SOCIAL AFFAIRS

Corn Roast - 1991

The Annual Plant Pathology Corn roast was held on September 21, at the Rosemount Plant Pathology Farm. A total of 125 people attended the event. A piñata for the kids was a big hit!

Volleyball, touch football and hayrides also topped off the days activities. The menu consisted of roast pig, and turkey. Fun was had by all.

- Debra Baden-Drange

Holiday Extravaganza and Hallway Decorating Contest

This year's Holiday party was held on December 19th under the light of a towering Christmas tree from Dr. French's nursery. This tree was especially noteworthy because it was filled with decorations from people throughout the department. In a break with tradition, the party was held in 411 Stakman Hall and throughout the 4th floor - an arrangement to the liking of most who attended. Food from exotic countries throughout the world were served, reflecting the international flavor of the department. Guests were serenaded by a spirited group of musicians, including Gib Ahlstrand, Liz Ozmon, Dann Adair, Paul Zambino and Nevin Young. As part of the holiday festivities, a hallway decorating contest was held and the best decorated hallway selected by vote. The third floor of Christensen Laboratory was the winner of the competition, with decorations that included Christmas lights in the form of a DNA double helix molecule.

- Nevin D. Young

Caribbean Vacation

On March 20th, the department got away from the cloudy winter weather of 1992 with a short "trip" to the Caribbean. For the afternoon, the atrium of Borlaug Hall was transformed into a summery beach including sand,

volleyball and a putting green. Party-goers frolicked to tropical music and feasted on tasty beverages and Jim Rowe's famous chicken shish kebabs. Plans for next year's "trip" are still uncertain - but the Social Committee certainly welcomes suggestions.

- Nevin D. Young

NEW FACULTY

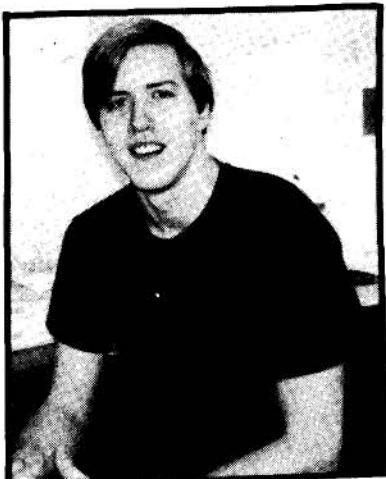
Dr. Deborah A. Samac

Dr. Deborah Samac joined the Department in December 1991 as a Research Plant Pathologist, USDA/ARS and Adjunct Assistant Professor. Her area of specialization is in molecular genetics of diseases in alfalfa and she is working on developing improved disease resistant elite alfalfa germplasms by molecular biological techniques. She granted associate membership in the Plant Pathology Graduate Faculty and will be active in the graduate program in the Department.

Dr. Samac received her B.A. degree from the Colorado College graduating *cum laude* with distinction in Biology (1981). She received her PhD in Plant Pathology from University of Wisconsin (1988) where she worked in Professor Sally Leong's lab and focused on molecular biological analysis of plasmids in *Fusarium solani f. sp. cucurbitae*, a pathogen of cucurbits. Before coming to Minnesota, Dr. Samac was a post-doctoral Research Associate with Monsanto Agricultural Company, Plant Science Technology, St. Louis, Missouri, where she worked on the molecular biology of pathogen response in *Arabidopsis*.



NEW EMPLOYEES



Steve Anderson



Leslie Johnson



Amar Elakkad



Rama Velicheti



Anne Kubelik

NEW EMPLOYEES

Steve Anderson has been working as an applications programmer for the Minnesota Plant Pest Survey Program since November 1, 1991. He previously worked in the program through student employment while pursuing a B.S. in Physics at the University of Minnesota.

Amar Elakkad, a research plot technician, has been working on the barley project with Dr. Alan Roelfs in the Cereal Rust Laboratory since March 3, 1992. While attending the University of Minnesota, he worked in Dr. Roy Wilcoxson's wheat project.

Leslie Johnson was hired as a word processing operator and is working in Dr. Sagar Krupa's air pollution project. Leslie received her B.A. in Elementary Education from the University of Minnesota in March 1992. While pursuing her degree, she worked for Dr. Krupa through student employment.

Dr. Anne Kubelik began working in the Cereal Rust Laboratory in January 1992 as a post doctorate researcher. Projects she is working on includes the analysis of genetic variation, CHEF analysis, and making a genetic map of *Puccinia graminis* f. sp. *tritici*. Prior to coming here she held a post doctorate position at

Dupont, Wilmington, DE. Dr. Kubelik holds a BS in Biology and Chemistry, Allegheny College, Meadville, PA and a PhD in Biochemistry, St. Louis University, St. Louis, MO, 1989.

Dr. Rama Velicheti arrived here August 1, 1992 to fill a research associate position in Dr. Chester Mirocha's laboratory where he will work in the chemistry of saxitoxin and mycotoxins. Dr. Velicheti received his B.S. degree in botany, chemistry, zoology, Osmania University, 1980; M.S. in biological sciences, Osmania University, 1982 and completed his Ph.D. in Botany, Osmania University, India, 1989.

RECENT PROMOTIONS

Monica K. Wallace from Junior Scientist to Assistant Scientist, January 1, 1992.

Dean E. Herzfeld from Extension Educator and Assistant Professor to Extension Educator and Associate Professor, July 1, 1992.

Cynthia L. Ash from Extension Educator to Extension Educator and Assistant Professor, July 1, 1992.

Judy A. Thies, Plant Pathologist, USDA/ARS was appointed Adjunct Assistant Professor and granted Associate Membership in the Plant Pathology Graduate Faculty, August 1, 1991.

FACULTY AND STAFF ACTIVITIES

Prof. R. J. Zeyen attended the Second Conference of the European Foundation for Plant Pathology hosted August 24-27 by the Societe Franciase de Phytopathologie at Strassburg, France. Zeyen presented a paper on "Specific inhibitors of PAL and CAD affect expression of *Mla* but not *mla* based *Erysiphe graminis* resistance in barley". The paper was co-authored by T. L. W. Carver, J. Clark, W. R. Bushnell and C. P. Vance.

Prof. Sagar Krupa was in Germany, February 17-18, 1992 where he testified before the parliament in Bonn on the subject of climate. Prof. Krupa was also appointed in 1992 to serve as a member of the Strategic Grant Selection Panel on Environmental Quality with the Engineering Research Council of Canada. His appointment will be for a 3-year period.

Delores Huebner, Administrative Director of the Department was awarded the BS degree in Management by the Metropolitan State University, January 25, 1992. A surprise celebration of the event was held at the 10 AM coffee break in 410 Stakman.

Prof. Jim Percich presented an invitation paper at a symposium on "Decision Case Development" conducted by the American Society of Agronomy in Minneapolis, November 1991. Jim talked on "Manomen Development Corporation: Wild Rice Producers". The producers had to decide how to control fungal brown spot of rice after Dithane M-45 could no longer be used.

Professor Emeritus Thor Kommedahl spent July 1 sealing and stamping 650 envelopes containing the Newsletter of the International Society of Plant Pathology. Approximately half of the Newsletter, which is published six times a year, went to foreign countries. Thor has been Editor of the Newsletter since 1983 and will serve until 1993. Besides being Editor he was Secretary General and Treasurer, 1983-1988 and is Treasurer, 1988-1993. The four-page Newsletter now in volume 22, is commendable for its professional journalistic style and attractive typography. The ISPP was organized in 1968.

Professor Robert A. Blanchette was mildly surprised June 4 when his students showed up wearing identical T-shirts decorated with a mysterious device copied from an article in *Mycologia*. The drawing depicts a Pacific Northwest Indian myth concerning fungi and the origin of women. Bob Noyd arranged to have the T-shirts made and they became so popular that he had to order another fifty.

Birthday Club

A new social event has been created in the Department. Any Department members "who were born" are eligible for membership in the Birthday Club. It meets on the last Tuesday of each month in 401 Stakman during the morning coffee period. We all sing and share cake with those whose birthday occurred in the current month. The birthday people are easily identified by their dinosaur party hats.

The idea was presented by Dann Adair last winter as a way to get people out of their desks and laboratories for a monthly get together. Debra Baden Drange has been providing beautifully decorated cakes and, along with Dann and other office staff, dressing up 401 Stakman with birthday banners. The first "meeting" was held on January 28, 1992 and is still going strong.

- *Dann K. Adair*

PROFESSIONAL ACTIVITIES

The Pesticide Applicator Training Program

The Pesticide Applicator Training Program (PAT) for the Minnesota Extension Service is based in Plant Pathology. It continues its responsibility to support its educational programs to commercial, non-commercial and agricultural users of pesticides. As environmental and environmental health concerns of pesticides have grown by those in pest management fields and by the public as well PAT has expanded its interdisciplinary activities to provide a good research/educational base for PAT programs. PAT is expanding its working relationship with the Division of Environmental and Occupational Health in the School of Public Health, U of M, and the Midwest Center for Occupational Health and Safety at St. Paul/Ramsey Hospital. Some of these expanded PAT efforts include:

- * Co-investigator in a 3 year, \$1.2 million Cancer Control in Farmers Study funded by the Centers for Disease Control. This project is evaluating intensive medical and educational intervention strategies in two Minnesota counties for the reduction of health effects in farm families focused on three different health concerns: pesticide exposure, breast cancer, and skin cancer as a result of sun exposure. The Minnesota Extension service is the lead in developing and implement the community education programs through local county extension agents.
- * On steering committee of a major agricultural health and safety needs assessment which indicated Extension and Physicians as the most looked for sources by health care providers and ag professionals of farm health and safety information.
- * Co-sponsor, planning committee member, and presenter for a two day EPA funded North Central Region conference in 1992 for Agricultural professionals and health care providers on health effects of pesticides in occupational settings.
- * Founding and active member of the University of Minnesota's newly created Center for Research in Agricultural Safety and Health, CRASH for short, to coordinate and support research and outreach programs.
- * Primary participant/co-lead in a three year, first in the nation, comprehensive agricultural pesticide container collection/recycling program which has gone on to become the national model.

- Dean Herzfeld

Greenhouse Improvement

On December 10, 1991 the 10 AM coffee break was held in the plant path greenhouse so Department members could see and appreciate the new "glazing" of double sheets of acrylic material, which replaced the traditional glass, providing less heat loss and maintenance costs. Elizabeth Ozmon played appropriate music on her harp.

As evidence that he still keeps up on potato literature, Howard Bissonnette sent a clipping from the Wall Street Journal for 3/13/92. The article emphasized potato improvement, especially at the International Potato Center, Lima Peru. The adventures of Carlos Ochoa, MS 1955, during his searches for new *Solanum* spp. in the Andes were emphasized.

We received the same clipping from Clark Livingston, PhD 1966, but no news about Clark.

RECENT GRADUATE STUDENTS

Name, Academic Background, Starting Date,	Advisor
Behrendt, Chad J. HS, Pulaski, Pulaski, WI, 1987; B.S., University of Wisconsin, Green Bay, WI, 1991. SSI 1992	Blanchette
Brantner, Jason R. HS, Oak Grove Lutheran, Fargo, ND, 1988; BA, Concordia College, Moorhead, MN, 1992. Fall 1992	Percich/Nyvall
Concibido, Vergel C. HS, Laguna College, San Pablo City, Philippines, 1982; BS, University of the Philippines, Los Banos, Philippines, 1987; MS, North Dakota State University, Fargo, ND, 1990. F 1991	Young
Figueroa-Lopez, Pedro. Bsc, Universidad Autonoma de Chihuahua, Chihuahua, Chih, Mex, 1983; Msc, Instituto Tecnologico Y De Estudios Superiores De Monterrey, Mexico, 1987. S 1992	Roelfs
Mishra, Akhilesh N. Board of Secondary Education, M.P., Bhopal, 1968; Bsc, Vikram University, Ujjain, M.P., 1971; Msc, Vikram University, Ujjain, M.P., 1974. F 1992	Roelfs

Student Symposium 1992

On March 24, 1992, the Graduate Students in Plant Pathology, Agronomy and Plant Genetics, and Soil Science organized a symposium entitled "A Multidisciplinary Approach to Problems in International Agriculture". Dr. Norman Borlaug, CIMMYT, was the keynote speaker and used the theme of the symposium as the title for his talk. Each group of graduate students also invited a speaker from within their discipline. The Plant Pathology students invited Dr. David Thurston, Cornell University, who spoke on "Sustainable Practices for Plant Disease Management in Traditional Farming Systems". Dr. Bob Stewart, USDA Conservation and Production Lab, Bushland Texas, discussed "Sustainability of Soil Resources: A Global Perspective" and Dr. Arnel Hallauer, Iowa State University, spoke on "Adaption of Tropical Maize Germplasm for Temperate Areas".

The final part of the symposium consisted of a panel

Ndowora, Tsitsi C. R. BS Honours, University of Zimbabwe, Harare, Zimbabwe, 1991.

W 1992 Kinkel

Williams, Jean L. HS, Dulaney Senior High School, Cockeysville, MD, 1983; BS, University of Wyoming, Laramie, WY, 1988; MS, University of Wyoming, Laramie, WY, 1991.

W 1992 Percich

ORAL EXAMINATIONS PASSED

1991

June 20	Jan Erik Backlund	MS
August 7	Laura R. Todd	PhD final
September 20	Janell M. Stevens-Johnk	MS
October 17	Tarkus Suganda	MS
October 29	Weiping Xie	PhD final
November 11	Nancy K. Osterbauer	MS
November 21	Rita A. Kalis Kuznia	MS

1992

January 3	Eric W. A. Boehm	PhD final
March 2	Julio Huerta-Espino	PhD final
March 23	Timothy A. Clark	PhD prelim
May 29	Janell M. Stevens-Johnk	PhD prelim
June 1	Daqun Liu	PhD final

discussion on education of international graduate students. Five international graduate students from the three departments gave short talks on their perspectives of graduate education in the United States. Tarkus Suganda, from Indonesia, and Junping Chen, from China, participated from Plant Pathology. These talks were followed by a lively discussion among the invited speakers, the graduate students and audience members.

The symposium took place in the St. Paul Student Center and was well attended by the University community. In addition, many people traveled quite a distance to attend, including a bus load of students from North Dakota and two high school students from Missouri! Following the symposium an informal wine, beer, and cheese reception was given for the symposium speakers. Overall, the symposium was a great success and gave students a chance to learn about different areas in international agriculture.

- David M. Rizzo

RECENT GRADUATE STUDENTS

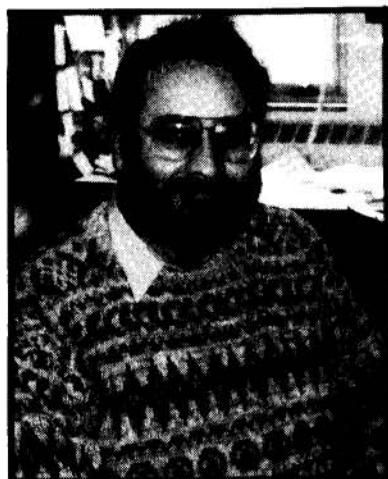
Chad J. Behrendt



Jason R. Brantner



Vergel C. Concibido



Pedro Figueroa-Lopez



Akhilesh N. Mishra



Tsitsi C. R. Ndowora



Jean L. Williams

SEMINARS

Plant Pathology Seminar, 8201, Monday, 3 PM, 365 Borlaug. Refreshments at 2:45. Fall Quarter 1991

September 23. Dr. Girma Bekele. *Fusarium* Head Blight of Wheat, Germplasm Development: Methods and Results.

September 30. Timothy Clark. The Etiology of Grape Fanleaf.

October 7. Daqun Liu. Plant Parasite Recognition Models in Plant Disease.

October 14. David Rizzo. Host Responses to Fungal Infection in Conifers.

October 21. Janell Stevens Johnk. The Impact of Fungicide Registration: The EBDC Story.

October 28. Richard Woodward. Ergot and Its Historical Consequences.

November 11. Javier Plasencia. Selection of Maize Inbreds with Resistance to *Aspergillus* Kernel-Rot.

November 18. Irshad Ali. Stalk Rot of Corn.

November 25. Dr. J. A. Molina. Variation on the Theme of Soil Organic Matter.

December 2. Dr. Ray Allmaras. Soil Environment for Roots and Diseases: Tillage and Crop Residue Influences.

Plant Pathology Seminar, 8201. Monday, 3 PM, 365 Borlaug. Refreshments at 2:45. Winter Quarter, 1992

January 13. Patrick Martinez. Single Stranded RNAs and Virus Like Particles of Plant Pathogenic Fungi.

January 27. Dr. Florence Gleason. Cyanobacterin and Analogs: Structure-Activity Relations of a Natural Herbicide.

February 3. Eric Eckwall. Biological Production of Natural Products. Followed by an Interdepartmental Social for Plant Pathology & Soil Science in the hallway in front of 365 & 375 Borlaug, 4:00 PM.

February 10. Dr. Vernon Ruttan. Sustainable Growth in Agricultural Productivity: Poetry, Policy and Science.

February 17. Ligia Ayala. *Rosellinia* on Potatoes.

February 24. Biological Forum Symposium III. Genetically Engineered Organisms. 8:30 AM-5:00 PM Earle Brown Center, St. Paul Campus.

March 2. Bruce Potter. Methods for Collection and Distribution of Plant Pest Survey Information.

March 9. Dr. Ron Phillips. Do We Understand Somaclonal Variation?

Plant Pathology Seminar, 8201. Monday, 3 PM, 365 Borlaug. Refreshments at 2:45. Spring Quarter, 1992

March 30. Nora Altier. Effects of Virus Infection on Symbiotic N₂-Fixation in Forage Legumes.

April 6. Panel Discussion: Update on Status of Current Plant Disease Problems in Minnesota. The panelists consist of Extension Faculty in the Department of Plant Pathology.

April 13. Beth Jarvis, Master of Agriculture Candidate. Soil Amendments in Nursery Stock Container Media.

Special Seminars

February 19, 1992. Professor Karl Smith, Department of Civil and Mineral Engineering, U of M. Innovative Methods in Teaching.

March 18, 1992. Dr. Ann Duin. Teaching with Interactive Technologies.

April 14, 1992. Dr. Jacob Manisterski, Visiting Scientist, University of Tel Aviv, Israel. Points of Difference.

May 27, 1992. Dr. Laurie Hayes, Associate Dean for Curricula and Instruction College of Agriculture. Preparation and Presentation of Good Scientific Seminars.

July 30, 1992. Dr. Seiji Ouchi, Kinki University, Japan. Microinjection as a Tool for the Analysis of Gene Expression During Host-Pathogen Interactions.

**Plant Disease Recognition Workshops. Room 491,
Borlaug Hall, Noon to 1:00 PM.**

July 10. Recognition of Viral Diseases. Dr. Ernest E. Banttari.

July 17. Recognition of Soybean Diseases. Dr. Ward C. Stienstra.

July 24. Recognition of Woody Plant Diseases. Cindy Ash.

July 31. Recognition of Bean & Grain Diseases. Dr. Richard A. Meronuck.

International Discussion Group

Interest in International Agriculture and Plant Pathology led to an informal discussion group of students, faculty and staff which met bimonthly during Fall and Winter Quarter. With almost 50% of the department's graduate students coming from many different countries, a ready pool of speakers was available. Slides, maps and hand-drawn overheads were used by the speakers to inform the audience about the culture, agriculture, and plant diseases common to their country. Nine countries were visited during these discussions.

The following students each lead a discussion session: Nora Altier - Uruguay, Ligia Ayala - Ecuador, Javier Plasencia - Mexico, Junping Chen and Daqun Liu - Mainland China, Kuo Chih Lin - Taiwan, Tarkus Suganda - Indonesia, Vergel Concibido - Philippines, and Mervat El-Wahab - Egypt. While a native of Canada, Brent McCallum led a discussion about Australian agriculture based on a trip he had taken there. Additional information about Australian agriculture was obtained from Dr. Allen Kerr when he was in the department for the Stakman Award.

- Janell M. Stevens-Johnk

Microbial Ecology Seminar Series

The Graduate School provided a grant of \$4,500 to the Microbial Ecology Minor Program for the purpose of supporting seminars by invited speakers. The Microbial Ecology Program is interdisciplinary, involving faculty from many departments (Plant Pathology, Ecology, Soil Science, Microbiology, and others), and the seminars are hosted in turn by these departments. The Plant Pathology department hosted Dr. Susan Hirano (University of Wisconsin-Madison), who presented a seminar on "The Population Dynamics of Bacteria in the Phyllosphere". Seminars in other departments presented research on viruses in marine microbes, the role of microbes in the geochemical cycling of mercury, and studies of native populations of bacteria in soil. - Linda L. Kinkel

Rhizosphere Microbial Ecology Discussion Group

During the Fall quarter, scientists in Plant Pathology, Soil Science, and Agronomy met regularly to discuss current research in soil and rhizosphere microbial ecology. Speakers presented their current ideas, data, and experimental designs in informal discussions over the lunch hour. Plant pathologists figured prominently in the group, bringing us up-to-date on the possible role of metal adsorption by *Armillaria* rhizomorphs in rhizomorph resistance to microbial antagonists (Dave Rizzo), the dynamics of mycorrhizae in crop rotations (Jim Kurle), the ecology of *Fusarium* in the rhizosphere (Cindy Ocambo), and the interactions between mycorrhiza and native plants (Bob Noyd). Soil scientists presented current research on the longevity of individual roots as studied using tiny video cameras in clear tubes established horizontally in the soil (maybe a way to study rhizosphere infection *in vivo*?), and on the genetic interactions between legumes and symbiotic nitrogen-fixing bacteria (the gene-for-gene in another context!). Interactions and feedback resulting from the discussion group have benefitted many projects. We look forward to regrouping this fall for updates on last year's presentations and to learn more about current UM work in this area.

- Linda L Kinkel

The Minnesota Potato Seed Certification Department has announced that 50.15 acres of the variety "Eide Russet" were certified as seed in 1992; 2,850.68 acres of "Burbank Russet" were certified.

PATHOLOGISTS, MYCOLOGISTS MEET

The annual meeting of the APS/MSA was held in Portland, OR, August 8-12, 1992. Highlights gleaned from official records are as follows:

Twenty-three present members of the Department were authors on the 12 papers from Minnesota that were presented orally. Two of these were based on research done in California and Wyoming, respectively.

There were 12 posters for APS and one for MSA by Minnesotans prepared by 24 plant pathologists with the help of 10 collaborators from other disciplines and institutions.

Three Minnesota graduates were honored. **John H. Hill**, MS 1966, was one of the 13 members of APS made Fellows of the Society. John is professor of plant pathology at Iowa State University.

Two Old Timers received the APS Excellence in Teaching Award. **George Hudler**, MS 1973, is associate professor at Cornell University where he teaches three courses, including one called "Magical Mushrooms, Michevious Molds" which attracted large numbers of students who scored the course and the professor as nearly perfect. **Bill Merrill**, PhD 1963, is professor at Pennsylvania State University where annual enrollment in his beginning course in plant pathology grew in 10 years from 30 to about 240. From 1973 to 1985 Bill taught plant pathology to more than 2000 majors in agronomy, horticulture, entomology, biological sciences, plant sciences and plant pathology. The course also attracted majors in computer science, biochemistry and economics.

Dr. James Tammen, who was Dean of the College of Agriculture at Minnesota, 1976-1981 and Professor in the Department of Plant Pathology, received the Distinguished Service Award for his many contributions to the science of plant pathology and to the APS.

Old Timers, plus a few spouses, who signed the guest book at the Minnesota/Wisconsin Hospitality Party are listed below.

Guests who attended the Hospitality Party sponsored by the University of Minnesota and University of Wisconsin from Minnesota were: **Neil A. Anderson**, **Ernest & Marlene Banttari**, **Bob Blanchette**, **Eric Eckwall**, **J. V. Groth**, **Roger K. Jones**, **Linda Kinkel**, **Thor & Faye Kommedahl**, **Jim Kurle**, **Dean Malwick**, **Brent McCallum**, **Robert Noyd**, **J. A. Percich**, **Jean Williams**, and **Richard P. Woodward**. Guests from the Cereal Rust Laboratory, USDA-ARS, St. Paul, MN were: **Anne Kubelik**, **Kurt Leonard**, **David Long**, **John Roberts**, and **Les Szabo**. Guests from the USDA Forest Service, St. Paul, MN were: **Joe O'Brien** and **Darroll & Marie**

Skilling. Guests from the Northwest Experiment Station, Crookston, MN were: **Rita Kuznia** and **Carol E. Windels**. Old Timers from elsewhere were: **Hamed K. Abbas**, USDA-ARS, Southern Weed Science Laboratory, Stoneville, MS; **Claude Bernier**, University of Manitoba, Winnipeg, Manitoba, Canada; **Bob Bowden**, Kansas State University, Manhattan, KS; **Bill Bugbee**, USDA-ARS, North Dakota State University, Fargo, ND; **E. Butler**, University of California - Davis, Davis, CA; **Bob Campbell**, University of California - Davis, Davis, CA; **H. Edwin Carley**, Rohm & Haas, Co., Philadelphia, PA; **Kory Cease**, University of Alaska, Fairbanks, AK; **Rob Doudrick**, USDA Forest Service, Southern Forest Experiment Station, Gulfport, MS; **Al Ellingboe**, University of Wisconsin, Madison, WI; **Cheryl Engelkes**, USDA-ARS Biocontrol of Plant Disease Laboratory, Beltsville, MD; **Wiley Garrett**, University of Georgia, Athens, GA; **Craig Grau**, University of Wisconsin, Madison, WI; **Bill Haglund**, Washington State University, Mount Vernon, WA; **Al Heagle**, North Carolina State University, Raleigh, NC; **Coy W. Jones**, RTP, RTP, NC; **Clint Kohls**, American Cyanamid Company, Princeton, NJ; **Flavio A. Lazzari**, Rua Joao Antonio Prosdocimo, Curitiba, Parana, Brazil; **Ken Leath**, Penn State University, University Park, PA; **Roland F. Line** and **Frances L. Line**, USDA-ARS, Washington State University, Pullman, WA; **Larry Littlefield**, Oklahoma State University, Stillwater, OK; **Jennifer Lorang**, University of California - Riverside, Riverside, CA; **Denis & Judy McGee**, Iowa State University, Ames, IA; **T. W. Mew**, International Rice Research Institute, Manila, Philippines; **Nancy K. Osterbauer**, Oregon State University, Corvallis, OR; **Mary E. Palm**, USDA-ARS, Mycology Lab, Beltsville, MD; **Eugene E. Saari**, CIMMYT, Mexico; **Dave & Lois Sauer**, U. S. Grain Marketing Research Center, Manhattan, KS; **Dave Schroeder**, University of Connecticut, Storrs, CT; **Mal Shurtleff**, University of Illinois, Urbana, IL; **Larry Singleton**, Oklahoma State University, Stillwater, OK; **Tad Smith**, USDA Forest Service, Otto, NC; **Erik L. Stromberg**, Virginia Polytechnical Institute & State University, Blacksburg, VA; **Ruth and Roy Sturgeon**, Oklahoma State University, Stillwater, OK; **Paul S. Teng**, International Rice Research Institute, Manila, Philippines; **Judy A. Thies**, USDA-ARS Vegetable Laboratory, Charleston, SC; **Rama, Devi and Suchi Urs**, Dahlgren & Company, Crookston, MN; **Jim Venette**, North Dakota State University, Fargo, ND; and **Ron Welty**, USDA-ARS, Oregon State University, Corvallis, OR. Ninety two individuals signed the guest book, 29 being non-Minnesotans.

International Conference on Biocontrol

Thanks to a large grant from the Legislative Commission on Minnesota's Resources, the Departments of Plant Pathology, Entomology, and Agronomy, with the help of the Minnesota Department of Agriculture, sponsored a conference on "Ecological Interactions and Biological Control" October 25-27, 1992. Over 130 scientists from all over the world attended the conference, including old-timers Stein Telenest, PhD 1963 (Norway), and Dennis Johnson, PhD 1978 (Washington State University). The program was divided into four sessions (resource competition, parasitism and antibiosis, herbivory and predation, and disease), corresponding to different ecological interactions leading to biological control of plant pathogens, insect pests, or weeds. The Department of Plant Pathology was well represented among the program speakers: Drs. Neil Anderson (Biological Control of Scab Disease by Antibiotic-Producing Species of *Streptomyces*), Linda Kinkel (Microbial Competition and Plant Disease Biocontrol), Kurt Leonard (Selection Pressures and the Coevolution of Host-Pathogen Systems), and Carol Windels (Altering Community Balance: Organic Amendments, Selection Pressures, and Biocontrol) were invited participants. The attendance of many of our graduate students helped guarantee the success of the conference. For those who missed the conference, contributions from each of the invited speakers will be published in the book "Ecological Interactions and Biological Control", due out in about a year.

- Linda L. Kinkel

Fishing Prior to Meetings

Just prior to APS meetings in Portland, the fishing trip was organized and enthusiastically promoted by Ron Welty. We fished out of the Canadian Princess Resort at Ucluelet, BC, that's on the west coast of Vancouver Island. Everyone caught fish, including halibut, ling cod but not enough of the target fish - salmon. We have mellowed and acquired some common sense over the years, but we managed, at a subdued level, to pickup where we left-off back in the mid-60's, at least with regard to storytelling and raucous behavior. A timewarp was definitely in effect.

Front row left to right: Gene Saari, Dave Schroeder, Bill Bugbee, Ron Welty; Back row: John Halloin, John Kraft, Jim Froyd and Al Heagle. - Bill Bugbee

Wisconsin Students Visit CRL

Al Ellingboe, University of Wisconsin-Madison, brought the 8 members of his summer Field Pathology class to St. Paul on 9 July 1992. His students joined with 9 U of M students from the PIPa 5650 course, Field Plant Pathology. The students spent most of the morning at the Cereal Rust Laboratory where Kurt Leonard had arranged for them to learn about the operation of and the research being conducted there. He then took them on a walking tour of the CRL field plots ending with the crown rust of oats-buckthorn research area. Don Barnes from the Agronomy Department and Dann Adair, PIPa Field Plot Coordinator, completed the morning by talking about screening for *Phytophthora* resistance in alfalfa in the "Eagle Lake" area of the St. Paul field plots and field plot bird control by means of raptors, respectively. Phil Larsen then hosted a box lunch discussion session that was held in the Borlaug Hall seminar room. After lunch the students returned to the St. Paul field plot area to learn about Jim Groth's work on rust of sweet corn and scab of wheat. The rest of the day was spent at Rosemount where Jim Rowe, PIPa Field Plot Coordinator, told the students about the operation of the Rosemount "farm", Dave Long, Cereal Rust Laboratory, showed and told them about his cereal rust disease garden, Ann Journey, an Entomology Department graduate student, talked about her work with biological (nematode) control of corn rootworm larvae, and Neil Anderson introduced them to the characteristics of Hypoxylon canker on aspen and talked about his work to develop aspens that are resistant to the disease. Neil continued by talking about his work with and sexual reproduction by *Phytophthora infestans* and Dave MacDonald finished with a description of the plant parasitic nematode populations associated with corn, flax, oats, soybean, and wheat continuous culture plots at Rosemount.

- David H. MacDonald



SPORTS

1992 E.C. Stakman Annual Softball Game

The annual E.C. Stakman student-faculty & staff softball game was played on 21 May, 1992 at the Falcon Heights Field. The game started under threatening skies and the students took advantage of a slow start by an aging faculty team and scored 3 runs in the first inning. The runs scored on a home run to right field by the students' shortstop David Rizzo. The faculty team threatened to score in the second and third innings, as a light rain started, but outstanding fielding plays by the student team kept the score 3-0. The students scored a single run on a combination of hits and fielding miscues, and at the end of the fourth inning the score was 4-0 in favor of the students. The rain gods intervened on behalf of the student team, after the fourth inning, and the game had to be canceled. By consensus the students were awarded a "rain shortened victory" with the provision that an asterisk be placed beside the results when recorded on the E.C. Stakman Trophy. The asterisk will be a reminder that the faculty-staff late inning winning strategy could not be implemented. A rain dampened picnic followed the game, but the rain could not diminish the "glow" of the student team.

- Richard J. Zeyen

MEMORIAL STADIUM RAZED

A few Old Timers may remember the Memorial Stadium on the Minneapolis campus and be interested to know that it has been demolished. The sad process began Friday, July 24. After a brief ceremony by Pres. Hasselmo and several other U dignitaries (a sort of funeral service) the man in the crane worked his levers and took the mighty swipe at the doomed edifice with his iron ball. Thus the beginning of the end.

The stadium was the scene of Minnesota football games, graduation and other ceremonies from 1924 until 1982. Since then football has been played in the shelter of the Metrodome near downtown Minneapolis.

According to present day "media" it cost \$572,000 to build the stadium and \$568,000 to knock it down. (Inflation) The Minnesota Alumni Ass'n collected some of the bricks and offered them for sale at \$10.00, without topping, or \$25.00 with an engraved plate attached.

Iowa State Softball Challenge

The weekend of September 12-13, 1991, seven graduate students (Bob Noyd, Paul Gieser, Pat Martinez, Eric Eckwall, Janell Johnk, Dick Woodward, and Dave Rizzo) and one post-doc (Cindy Ocamb) from our department travelled to Iowa State University to take on the Department of Plant Pathology in a softball game. We arrived on Friday afternoon and had a picnic lunch at one of the University research farms. During the afternoon, we toured several research facilities and heard talks by graduate students and faculty about current research on diseases of apples, tomatoes, oats, soybean, corn, and aspen. This was followed by a wine and cheese poster session in Bessey Hall on campus. That evening department head Tom Harrington hosted a barbecue at his house that was attended by almost all of the students, faculty and staff of the Plant Pathology Department.

Saturday morning the game was preceded by a continental breakfast at the field. The game was very informal and lots of fun. We got off to an early lead in the first inning, but a series of lousy fielding plays allowed Iowa State to take control of the game. going into the last inning we were behind 14-6. A furious rally brought us to within one run before a spectacular running catch by the Iowa center fielder ended the game with the score 14-13. Bob Noyd provided a highlight in the last inning by getting too excited after hitting the ball into deep left field and overrunning Cindy at third base.

Even though we lost the game the weekend was a great success and gave us a chance to interact with other plant pathologists. This year we will be hosting Iowa State and, hopefully, we will be able to entertain them as well as they did for us. It would also be nice to crush them in softball!

- David M. Rizzo

Historic Basketball Replayed

David Rizzo and Brent McCallum participated in a re-enactment of the first intercollegiate basketball game, originally held February 9, 1895 between teams from The School of Agriculture, U of M and Hamline University. The re-enactment was held April 2 at Hamline's Student Center Ballroom in conjunction with the National Men's Collegiate Basketball Championships held in Minneapolis. The score was 4 to 3 with Hamline the winner. Brent scored a goal for us.

PLANT DISEASE CLINIC

In 1991 the PDC processed 3,092 samples and serviced 1,300 phone calls. As in past years the activity level is very dependent on the weather for disease development and on the concerns of growers or consultants. The major crop host was again Soybean, as nearly 800 samples were recorded under this host category. The producers are having serious problems with: Soybean Cyst Nematode, Phytophthora Root Rot and seed quality. A wet spring, an early frost and wet conditions at harvest set up soybeans for many problems. SCN continues to be reported in more soybean fields each year. The second major host, 375 samples was Oaks. The interest in Oaks is mostly Oak Wilt and the majority of samples were from the 7 county metro area.

The PDC assisted with two major research efforts, a Minnesota Department of Natural Resources funded disease survey of forest nursery soils and University project measuring SCN egg populations. The Minnesota DNR study was specifically looking for *Cylindrocladium* species, a root pathogen of conifer seedlings. The SCN egg counts were made to determine thresholds and population shifts following resistant and susceptible hosts in fields with the nematode. Just over 1,400 soil samples were processed for nematode egg counts and this is, I believe, the largest single service performed in the Clinic's history since 1956. At the end of 1991, this nematode has been reported in 27 counties. An elutriator, funded by a grant from the Minnesota Soybean Research and Promotion Council will be set up in 1992 to reduce the hand labor needed to process soil for eggs.

The clinic was effectively operated by Jill Porkony and Sandra Gould with the assistance of a part time secretary and undergrad students. As reported in the last *Aurora Sporealis* the goal to provide permanent funding for the director position was the primary effort of 1991. Given the reduction in extension budgets the PDC was required to reduce its operating costs. The PDC began the 1992 year with a full staff, but Jill soon accepted a USFS position. We do miss her and will miss her, as she was with the clinic for 12 years. Jill has a position in the North Central Forest Experiment Station on the St Paul Campus and does stop in. The PDC operation is now the responsibility of Sandra Gould and an extension faculty member is her supervisor.

- Ward Stienstra + Sandra Gould

DIAL-U CLINIC

The Dial U Clinic continues to be an important source of information for county extension agents, master gardeners and the public in general. The Dial U Clinic is a sister clinic to the Plant Disease Clinic and handles non-production oriented problems. Extension specialists in plant pathology, horticulture and entomology along with students or graduates respond to phone calls, mail samples and walk-in clientele. Most of the calls to the clinic come by way of 976 phone lines, resulting in an automatic billing of \$2.50 to the calling phone. In January of 1992, the phone line was changed to a regular 900 line (1-900-988-0500), which can be reached from anywhere in Minnesota and surrounding states (previously, the 976-line was only available to Minneapolis/St.Paul residents).

In 1991, Dial U responded to over 23,000 clients. It was a bad year for apple tree owners, as fire blight and apple scab were bounteous. An unusually warm and wet spring favored it's own set of diseases. Anthracnose was present on shade trees but not as plentiful as if it had been cool and wet. Of course, tomato blight (*Septoria* and *Alternaria* species) were out in full force.

Ash yellows was discovered on the St. Paul Campus in copious amounts in July and August. News releases on this disease caused a flurry of calls to the Clinic. Fortunately, most trees are simply exhibiting abiotic stress.

- Cynthia L. Ash

Clinic Management Changed. Dr. P. O. Larsen announced (Newsletter, May 12, 1992) that Dr. Ward C. Stienstra would be the faculty supervisor in charge of the Clinic. Sandra Gould will coordinate the day-to-day operations of the Clinic with the help of part-time personnel during peak seasonal periods. Faculty and staff are asked to support the Clinic with their expertise and advice when required.

Bird Damage in the St. Paul Field Plots

Since the St. Paul Campus has field plots right in the middle of a city, our crops often become feeding grounds for the local bird population. University barns and nearby homes provide good shelter for the birds. House sparrows are the primary pests but starlings, blackbirds, and grackles also cause damage.

Sometime in 1955 (or possibly even earlier), a joint Agronomy-Plant Pathology Committee on Bird Control was formed with Matt Moore serving as Chair. As a result of Matt's interest and thorough attention to the bird problem, either he or other Department employees have since been largely responsible for bird damage management on the St. Paul plots. Currently, Dann Adair, the St. Paul Research Plot Coordinator, is the lead person with assistance from a Bird Control Committee.

Control measures have been many and varied. In 1955, Louis Neid, of the Twin City Pigeon Eliminating Company, began trapping and destroying pest birds. Trapping continued until 1990 when negative public reaction caused us to try control measures other than trapping. Although 5,000 to 10,000 birds could be trapped in a given year, the problem has never disappeared. Thus, we have turned our attention to various other tactics with crop damage remaining relatively the same as when traps were employed.

Scare tactics involving noise, shiny ribbons strung over the tops of the crops, and balloons bearing a hawk eye have been used recently with varying success. These tactics seem to be most effective when combined with the use of live hawks and other birds of prey. Feeding repellents, alternate feeding sites, and noise have also been attempted. We are currently looking at installing infrared motion detectors which could trigger scare noises or distress calls.

Since 1985, the Department has hired John Arent, a falconer, to assist with the problem. He manned the traps when they were used and flies his trained hawks in the plots which keeps the pest birds extremely nervous thus increasing the effectiveness of the other scare tactics. This year, thanks to John and his friends at the University's Raptor Rehabilitation center, we are temporarily housing at the Field House and then releasing many orphaned kestrels. Kestrels, formerly known as sparrow hawks, are fast enough to catch small birds and are very able to provide a great amount of fear in the local bird population. Hopefully, several of these 4 hunters will take up permanent residence in the neighborhood and help us for years to come.

- *Dann K. Adair*

Plant Pathology at the NCES

Plant Pathology at the North Central Experiment Station concentrates on two areas; diseases of cultivated wild rice and development of mycoherbicides as a biocontrol of weeds. Additional work is done on diseases of fruit and vegetables in support of station horticulturalist, Dr. David Wildung.

Work on diseases of cultivated wild rice at the University of Minnesota began in the 1960s. George Bean, in 1961, published a paper on "A Severe Epidemic of *Helminthosporium* Brown Spot Disease on Cultivated Wild Rice in Northern Minnesota". *Helminthosporium* brown spot, now called fungal brown spot, continues to be the most important disease in Minnesota of cultivated wild rice and is the focus of the present work. This disease has been worked on by a succession of plant pathologists and is currently being studied by Dr. James Percich and myself.

Fungal brown spot is the limiting factor to growing cultivated wild rice in many parts of Minnesota. Presently this industry provides employment in marginal agricultural areas of north central Minnesota. Control of fungal brown spot is a priority if the cultivated wild rice industry in Minnesota is to survive and stay competitive with other parts of the United States and Canada.

The goal of the present work centers on developing control measures and involves several objectives. The development of resistant varieties in cooperation with plant breeder Dr. Ramy Porter; seeking a federal label for the fungicide propiconazole (Tilt); and studying the etiology of the causal organisms *Bipolaris sorokiniana* and *B. oryzae*. A portion of this latter effort will be worked on by Jason Brantner for his masters thesis and will address survival and dispersal of the causal fungi. The work on etiology is to provide a basis for cultural controls so farmers will not have to rely solely on expensive fungicides to control disease.

The other half of my work, development of mycoherbicides as biocontrol agents of weeds, involves a 180 degree turn in thinking about disease-causing organisms. Instead of controlling plant diseases the object is to create a plant disease that will kill or control a plant. Specifically my work concentrates on the development of mycoherbicides to control purple loosestrife (*Lythrum salicaria*). Purple loosestrife is a weed that is currently threatening to overgrow much of Minnesota's wetlands and marshes crowding out useful native vegetation and creating a monoculture and virtually useless to wildlife.

Plant Pathology at NWES

Plant pathology research at Crookston focuses on the ecology and control of soilborne pathogens, particularly those on sugar beet. However, there are a few supplemental projects on root rot diseases of soybean, small grains, and potatoes. These projects are in cooperation with scientists at North Dakota State University and with sugar beet cooperatives in the Red River Valley and west central Minnesota.

About a year ago, we started to concentrate on the "water molds" that attack sugar beet - *Pythium* species and *Aphanomyces cochlioides*. There are many days when we are reminded that if it was easy to work with these fungi, the research would have been done a long time ago! We are determining the sensitivity of isolates of *Pythium* species to seed treatment fungicides used on sugar beet and looking at the relationship of seedling vigor to infection by *Pythium* species over a wide range of soil temperatures.

Highlights of research on *A. cochlioides* include interactions with sugar beet herbicides; plant susceptibility in relationship to buildup of inoculum; and the effect of oats, as a full-season crop and as a green cover crop, on the suppression of damping-off and root rot.

These efforts are supported by a most capable staff: Rita Kuznia (M.S., 1991 - my right, and left, arm), 3-4 students from the University of Minnesota, Crookston, and Jeff Nielsen (field, greenhouse, data analysis). These positions are supported by the Sugar Beet Research and Education Board of Minnesota and North Dakota. Todd Cymbaluk assists in research projects involving other crops. Incidentally, for a student with a pioneer spirit, a graduate assistantship is available in plant pathology at the Northwest Experiment Station. - Carol E. Windels

Pathology at NCES - continued

To date, the only known approved control of purple loosestrife is the application of glyphosate (Rodeo). This has several obvious drawbacks such as the expense of application, regrowth of vegetation and the social issue of applying pesticides to our lakes and waterways.

Development of mycoherbicides is field-oriented research that requires much traveling, observation and patience. Loosestrife sites are visited and examined for signs of disease. Plant samples are then taken to the laboratory and microorganisms isolated and identified. Hopefully, these "walk throughs" will yield one or more fungi, bacteria, etc. that can be manipulated to cause a

Women in Agricultural Science

Women in Agricultural Science, an informal group of female students, faculty, staff, and post-docs from Plant Pathology, Soil Science, Agronomy, and Horticulture, had a second very busy year. The group meets regularly to discuss issues of interest or concern and to provide a forum for interaction with agricultural scientists from different departments. Our activities over the first half of the year were focused primarily upon completing our suggestions for enhancing the COA climate, as requested by our department heads. Suggestions focused on campus child-care needs and maternity-leave policies, as well as on strategies for enhancing the visibility and respect for technical staff, providing support to two-career couples, and encouraging 'friendly' scheduling of meetings. These suggestions were presented to Dean Richard Jones and the COA Department Heads for further consideration. We have continued to update our library of references, and have included new materials on time management. Our group has recently created a directory of scientist-mentors for Jean Underwood in the COA office. This will provide Jean with a source of mentors for COA undergrads who are interested in science. Members of our group were involved in the University-wide Commission on Women Undergraduate Initiative, and were also invited to the University Support Services Committee meeting to present our perspectives on child-care needs of the St. Paul Campus Community. We closed our year with a special visit with Professors Eide, Kommedahl, and French, who discussed with us the changes relative to women in science that they have experienced over the course of their careers. We learned much of the history of our predecessors, Drs. Helen Hart, Louise Dosdall, and Louise Jensen. We look forward to new challenges in 92-93!

- Linda L. Kinkel

disease that will control or harm the original plant. Several examples of successful mycoherbicides currently exist but these have been developed primarily for weeds in the southern United States. Currently, several fungi have been consistently isolated and identified from purple loosestrife that hold promise as candidate mycoherbicides.

Future work will include development of mycoherbicides to control other weed species such as burreed and water plantain in cultivated wild rice fields. I would like to give special thanks to An Hu for her capable technical assistance.

- Robert F. Nyvall

COMMITTEE REPORTS

Research Committee Report 1992

Research Funding. The research committee was asked by Philip Larsen to explore alternative methods of utilizing "hard money", GAR (General Agricultural Research) and Hatch (Federal -Agricultural Research) funds allocated to the Department through the Minnesota Agricultural Experiment Station. Ten years of retrenchments have eaten away at these funds, there is little flexibility for creative use of the remaining funds, and future retrenchments appear imminent. At present, there simply is not enough hard money funding to continue Departmental operations in the same manner as we have done for the past 10 years. The Department, must now seriously consider the impact of current and future retrenchments of GAR and Hatch funding. It may soon be necessary to view these funds more as "seed money" for attracting grant and contract funding, than as operational, base funding.

The Committee, in 1992, had a series of six meetings devoted to the funding utilization issue. Many aspects were examined including the current allocation system. Potential impacts of changes were discussed. There is no simple solution which does not involve major changes. Two alternative models for using these funds are being developed. Once developed they will be brought before the full faculty for in-depth discussions.

APS Graduate Student Rehearsals. Tuesday, 28 July was selected as the day set aside for rehearsal of oral and poster presentations for the national APS meetings in Portland. Graduate students have been assigned rehearsal times, and financial assistance to the APS meetings is contingent upon rehearsal presentations.

Computer Networking System for Plant Pathology. Several members of the Research Committee have been working with Dr. Larsen to bring the "backbone" hardware for a computer networking system into the Department. The north end of the St. Paul Campus is not yet hooked to the University-wide Ethernet system, and as a result we do not have access to the benefits of the current University of Minnesota system. Currently the Department is being "wired" using LAN's (Local Area Network Lines), hopefully fiber optical cable will be added later. We will be holding workshops relative to using electronic mail and other network features already available in the University of Minnesota network system.

Future Committee Activities. Research funding is and will continue to be the priority issue for the

Committee. This issue is at the heart of research activities and Departmental goals and objectives. More time will be spent on methods for obtaining outside funding for research activities. For the short term, faculty and staff are reminded that a series of video tapes on grant writing are already available in the Plant Pathology Library Annex.

Richard J. Zeyen, Chair

PAIR Committee Activities

Members of the committee for 1991-92 were:

Sharon Aarons	Sagar Krupa
Gilbert Ahlstrand	Donald McVey
Neil Anderson, Chairman	Elwin Stewart
Robert Blanchette	Richard Woodward
Delores Huebner	

This article summarizes some of the activities of the PAIR (Public Alumni & Institutional Relations) Committee for the past year. Displays in the departments exhibit cases were stuffed with posters from professional meetings. Coordinating the displays was Sharon Aarons who departed in mid year for Melbourne, Australia. Events and happenings in the department were recorded and forwarded to *Phytopathology News* by Robert Blanchette. One of the important committee assignments is to select awardees for the Annual Awards Ceremony and to plan the reception for the occasion. Phil Larsen presided at the ceremony held May 7, 1992. Special thanks are due to Delores Huebner for handling all the details for the awards and to Gilbert Ahlstrand for arranging for the buffet served at the reception honoring the awardees. The committee also recognizes faculty for various awards and this year nominated two faculty members for the APS Fellow award and one for the APS Extension award. We also facilitated nominations of four graduate students to Sigma Xi. The committee also coordinates and plans the Minnesota APS Social at the annual meeting and this past year it was at the Clarion Hotel in St. Louis, MO. We also displayed the departments public relations poster at the College of Agriculture Farm Family Recognition Banquet March 14, 1992.

A new responsibility for the committee this past year was to be in charge of the preparation of the *Aurora Sporealis*. Special thanks go to all the contributors, Old Timers news items are especially appreciated, and to Meg Clemens our production editor for her dedication, enthusiasm and computer skills, to Dr. Eide for his news gathering and editorial acumen and to Dr. Stewart for his excellent photographic work.

The committee also is in charge of endowments and for the last two years have emphasized the Library fund. Response to our annual pitch for endowment help runs far ahead of the national average of fund raising drives and in these days of limited budgets the faculty and students here in Borlaug - Stakman Halls - and Christensen Laboratory are very appreciative.

- Neil A. Anderson, Chair

Physical Resources Committee

The Physical Resources Committee performs some of the "house-keeping" functions of the Department - that is we attempt to respond to space and furnishing needs for faculty, staff, visiting scientists and students; maintain and up-date our vehicles, and in general keep commonly shared mechanical equipment, e.g. growth chambers, autoclaves, etc., in reasonably good mechanical order. This committee was in 1991-1992 made up of faculty members Bill Kennedy, Benham Lockhart, Darroll Skilling, Ward Stienstra, civil service employee, Dann Adair; professional academic employee, Dariush Danesh; and graduate student, Timothy Clark. Neil Anderson has been elected to this committee for 1992-1993 and has replaced Bill Kennedy.

This past year the Committee dealt with, perhaps, a normal mix of housekeeping chores such as finding laboratory and office spaces for new faculty, Dr. Deborah A. Samac, as well as a number of visiting scientists, post-docs and students. The need to hold a tight fiscal budget resulted in such constraints as buying a reconditioned autoclave rather than a new model. This is analogous to buying a second-hand car with the same concerns about the "remaining life" in it. An example of a highly commendable piece of work was that by Dann Adair, a member of the Physical Resources Committee, who made a cost analysis of energy savings for replacement of glazing in our old 370-B series of greenhouses and convinced the University Physical Plant that installation of Exolite brand acrylic panels would result in a 50% energy savings compared to a replacement with single-pane glass glazing. The Albert Lauer Greenhouse Company made the installation and we now have a range of refurbished greenhouses that also no longer leak and saves the University of fuel expenses. Dann did a commendable job. In these tight budget times, we did manage to purchase a new 1/2 ton "Chevy" pick-up and a topper which was paid for by a user fee system - +.28/mile. For many years, for whatever reason, amenities in University vehicles such as air conditioning were not considered, or perhaps not even permitted. This one does and makes travel to such places as the Potato Research Farm, Grand Forks, ND, more tolerable in

summer when 90°F July and August temperatures are not uncommon. This summer's temperatures have been, to date, exceptionally cool and very little use of air-conditioning in buildings or vehicles has been necessary.

The Physical Resources Committee sponsored a two-day seminar on safe driving. The course was attended by approximately 30 faculty, civil service employees, students and a few spouses. The completion of the course had an added inducement in that many insurance providers offer a 10% reduction in car insurance premiums to participants over 50 years old. Presumably we all profited by improvement in our defensive driving skills and recognition of correct "rules of the road".

Ms. Dee McManus, Laboratory Products Information Specialist of the University Stores, presented a program on a new University system for purchase of supplies and equipment through a central vendor, in this case Fischer Scientific. The attainable improvements are a potential savings of \$2.5-2.6 million for project budgets and the University, fast response with orders placed by telephone, FAX or computer, plus next day delivery of many items. It appears this is another step in our inexorable transition into computer usage.

A few goals of the Physical Resources Committee for 1992-1993 are to review our Departmental space resources and project future needs, review the functioning of our Plant Pathology Research Farm at Rosemount and to conduct a safety seminar, perhaps on safe usage and disposal of laboratory chemicals, pesticides, and biological cultures in laboratory, greenhouse and field research.

- Ernest E. Bantari, Chairman

An Editorial from the Editor

The editor takes this opportunity to praise all those individuals who submitted 'camera ready copy' articles to the *Aurora Sporealis* this year. Gib Ahlstrand, Meg Clemens, and Dr. Carl Eide are due special thanks for their dedication in seeing the *Aurora Sporealis* to press.

- Elwin L. Stewart