

# EXTENOVATIONS

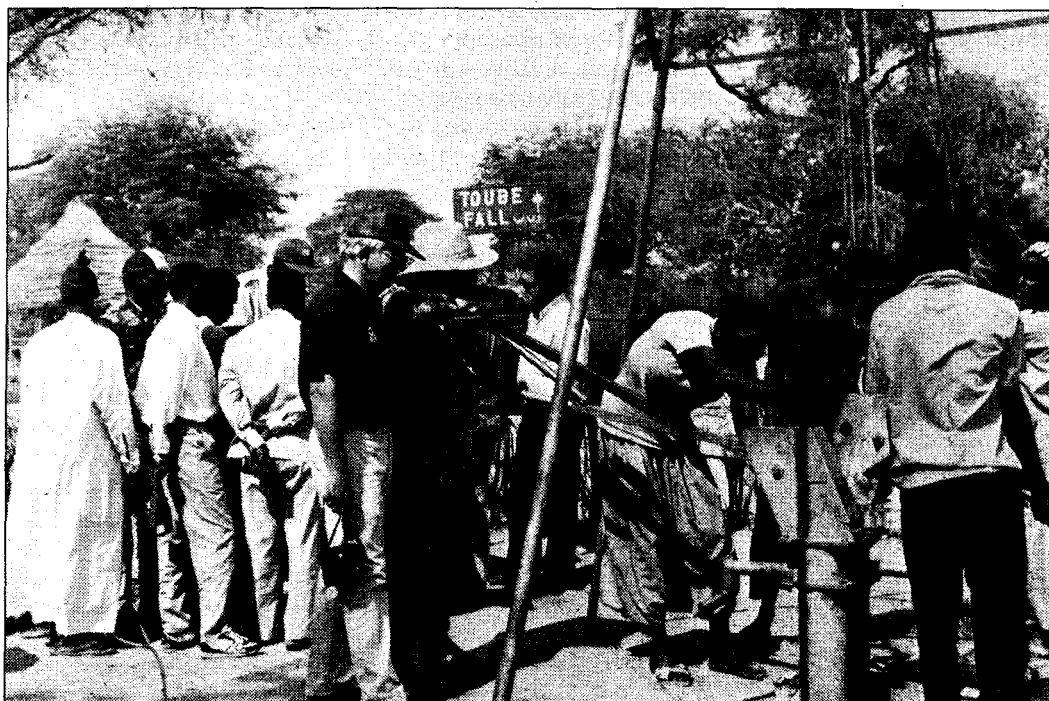
VOL. 11, NO. 1 FEBRUARY 1990 FOR ALL OF EXTENSION

## Agents share ag expertise with Senegal, W. Africa

Louga in Senegal, West Africa, now knows about the Minnesota Extension Service. So do some Peace Corps volunteers stationed in the area as well as Rotary International with members in Dakar Senegal's capital, and World Vision.

These international ties were formed when two Minnesota Extension Service workers spent 28 days last fall in Senegal. Marlin Johnson, area agent, Crookston, is happy about the whole experience and particularly the potato storage huts he helped construct there. Robert Stauffer, agricultural agent and county extension director, Cass County, feels just as strongly about the experience and his contribution: an impromptu corral. They left both the huts and corral behind to make life a little easier for the villagers there.

Both men have had previous Third World experiences before being selected as volunteers for the Rotary International Health,



Marlin Johnson and Bob Stauffer observe a technician repairing a village water pump in Senegal, West Africa.

Hunger, and Humanity program. Rotary operates in partnership with World Vision in water exploration, health, agriculture and community

development in the Louga region of Senegal. The Rotary Foundation paid their travel and expenses and they volunteered their time.

Johnson's assignment was in soil fertility and irrigated crops and Stauffer's in animals. "Below ground potato storage will hold 600-700 pounds of

potatoes and above ground storage about 1,000 pounds," Johnson says. "It will help give a better price beyond the time when potatoes are abundant."

Stauffer saw the stress on people and the animals when the latter were being caught so they could be given medication to control internal parasites. He decided a simple corral was the answer. "The village chief hung on to the animals by the tail as if he were water skiing," he describes the former procedure. "I scrounged some rusty angle iron and pipes left from well drilling equipment and had it welded together.

"In parts of five days (three for the design and two for construction) the corral emerged. The personal bank account in rural Senegal is animals," he remarks. He also did visuals and charts for bush technicians to encourage the feeding of

- SENEGAL  
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## MES cooperates on 'Forests 4 Ever'

The Forests 4 Ever contest which aired on WCCO, KCCO and KCCW television stations earlier this month was sponsored in part by the University's College of Natural Resources and it included slides and video tape from MES and Agricultural Experiment Station sources.

Dave Hansen of the Educational Development System staff worked with WCCO-TV producer Jon Carlson as the series of ten short forestry-related features was shot. The promotional poster for the series also included shots taken by Hansen and EDS photographer Don Breneman.

Schoolchildren from throughout Minnesota and Wisconsin participated in the contest by viewing segments on newscasts and answering worksheet questions distributed to schools. Classroom entries were then eligible for drawings for weather-related prizes. ■



Extenovations photo by Don Breneman

A WCCO-TV camera man tapes some children carrying in firewood for the Forests 4 Ever series, which aired earlier this month. Dave Hansen, MES audio visual producer, helps direct the action. The two older children are Erica and John Breneman, children of EDS photographer Don Breneman and his wife, Nancy. The youngest child is Britta Hansen, daughter of Hansen and his wife, Karen Lilley, EDS information and technology head.

## Inner city 4-H programs cited for excellence

Three Hennepin and Ramsey County 4-H programs for inner city youth have been cited for their quality and their contributions to city life.

The 4-H American Variety Theatre Company and the Soaring Eagles 4-H Club of Minneapolis and the Khmer Youth Leadership Camp of St. Paul were given "spotlight" awards by the National Crime Prevention Council.

The American Variety Theatre, which began seven years ago under the leadership of Hennepin County Agent Bill

Svendsgaard, was cited for its contributions to youths interested in the performing arts. Soaring Eagles, begun in 1985 by Ellie Webster, guides and supports young Native Americans. The Khmer Youth Leadership Camp of St. Paul, created in 1985, trains young Cambodians to serve as camp leaders for fellow Southeast Asian immigrants. Loeung Khi heads the group. The week-long camp focuses on the Cambodian culture and solutions to problems of adjusting to a new culture.

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# Brennan: Agriculture tops hazardous occupations

From 1980 through 1988, (the latest period for which figures are available), 428 Minnesotans died of injuries received in farm work-related accidents. Nationally, during the same period, the National Safety Council estimates the number of farm work related fatalities at nearly 14,000.

"The number of workers who die while working in agriculture contribute to making agriculture the most hazardous occupation in the country, as measured by accident and fatality rates," says

Tom Brennan, extension safety specialist with the Department of Agricultural Engineering. Mining was formerly recognized as the most hazardous occupation, he adds.

Although 1988 was a bad year for farming in Minnesota, it was a good year for keeping more farmers alive. Brennan reports there were only 26 farm work-related fatalities that year, compared with 63 in 1982, the high for the decade. Brennan added that preliminary figures for 1989 indicate that the

number of fatalities will be comparable to the total for 1988.

What accounts for the drop in deaths during the last two years? As recently as 1987, 48 Minnesota farmers perished in their work while the total for 1988 and 1989 combined will be near that mark. Brennan has some theories on what may have contributed. He says that 1987 was a relatively good weather year. Although the state received below normal rainfall for the year, subsoil

moisture was plentiful from previous years. This insured good yields statewide. Because of this, there was much field work to do as well as equipment to operate and repair and crop to store or transport. "As a result, farmers were more frequently exposed to the most potentially hazardous situations on their farms," Brennan says. "The result was a greater number of accidental deaths."

1988 was very different. The drought worsened, and Brennan says, "It was rare to see any field activity beyond the middle of May in 1988. There was little need to work around with the tractors or other machinery, let alone take it into the field." Thus, with less farm activity, fatalities dropped by nearly half compared with the year before.

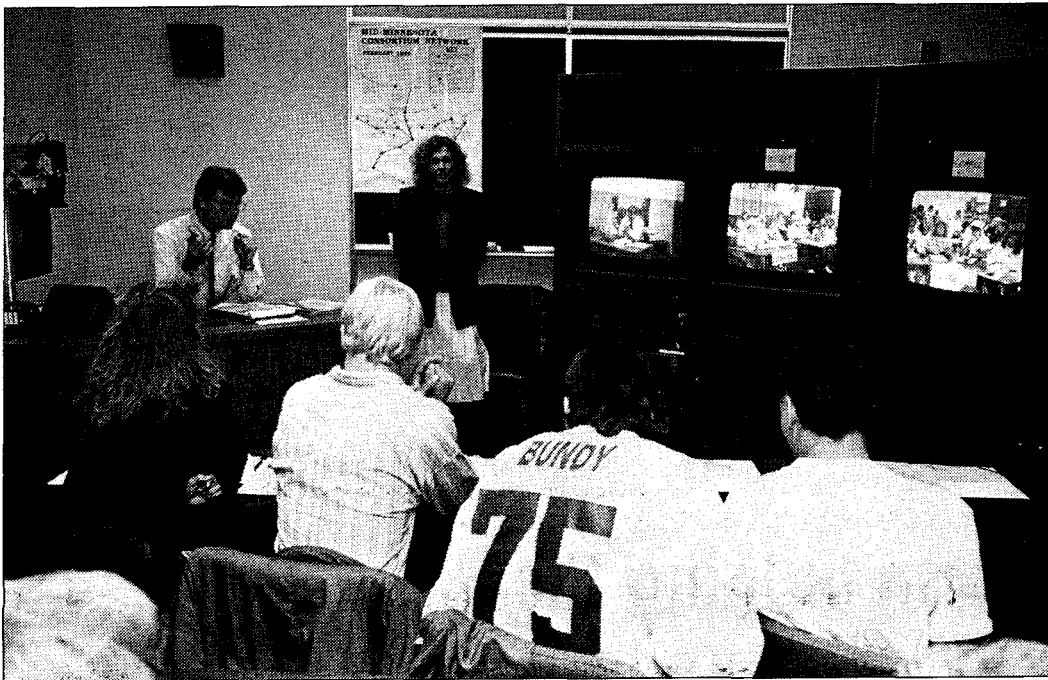
Brennan adds that the decline in the number of Minnesota farms appeared to have slowed. At the end of 1988, there were about 94,000 farms, down about 10,000 from 1980. The size of farms increased, however, from 291 acres in 1980 to 319 acres in 1988. Fewer farmers are working on bigger farms. Because farming is so labor

intensive during the growing season, finding reliable workers is important to the farm's efficiency.

Brennan says that as the farm population ages to an average age in the mid-40s, there are fewer young people choosing farming as a career. Because of this there are probably more very young workers on farms. Jobs that were once done by older siblings or hired workers, may now fall to young teens. In addition, farmers often continue to farm well beyond the age of 70. "The stage is set for both the young and the old to be exposed to hazardous conditions much more frequently," Brennan adds. In 1987, of the 48 farm deaths reported, 12 of those killed were age 65 or older while 11 were age 16 or younger.

Through the Department of Agricultural Engineering, MES has completed a set of farm safety materials available in bulletin, slide and audio tape format. Topics include use of farm machinery, airborne hazards, movement of farm machinery on the roads,

- SAFETY  
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Extenovations photo courtesy of St. Cloud Technical College

## Teens get Alcohol Decisions training via interactive TV

Sherri Wright of the 4-H Youth Development staff and Rich Reeder, video technology expert from the Educational Development System staff, led the St. Cloud Technical College site for an interactive television training session on the 4-H Alcohol Decisions program held this fall. Teens at nineteen other sites throughout Minnesota also participated in the training, which included both audio and visual interaction between the sites. The training project, which was developed through the Telecommunications Development Center, was the first to link these four interactive television networks. The networks are generally used for classes taught by St. Cloud and Pine Technical Colleges, St. Cloud State University and a variety of secondary schools. Teens who completed the training conducted classroom sessions on alcohol decisionmaking for elementary students in their local schools.

Ellen Schuster, EFNEP nutritionist, has been selected as a fellow in the Leadership Development Project for Resources for the Future through the National Center for Food and Agriculture Policy. She will participate in the program for two two-week sessions in February and March, 1990. In September, the EFNEP program was also given the Minnesota Dietetic Association's Golden Apple Award for "promotion of good nutrition and the nutrition profession."

A. Scott Reed, coordinator of the Cloquet Forestry Center and extension forest resources specialist, received the Minnesota Forestry Association's "Excellence in Communications" award. He was cited for his work on the television series on forestry stewardship known as "Our Growing Heritage." The series aired on the Duluth station KDLH.

Jim Anderson, extension soil scientist, was one of two University of Minnesota Dept. of Soil Science faculty members to receive this year's Fellow Award of the Soil and Water Conservation Society. Also cited from Minnesota was Raymond R. Allmaras with the USDA's Agricultural Research Service on the St. Paul campus. Anderson was cited for his accomplishments in promoting the use of soil survey information.

Roger Wilkowske, extension water quality agent, received the Distinguished Service Award from the South Central Education Association. University Regent Elton Kuderer received the same award in ceremonies held in December.

Shirley Barber and Rose Allen, Ramsey County extension home economists, were national winners of the Interna-

tional Fabricare Institute Award sponsored by the National Association of Extension Home Economists. Their winning entry documented a county study group's topic on "What's New in Interior Textiles and How to Keep Them Looking That Way." Barber also presented a poster session as a first place winner in the Excellence in Research category and was honored with the group's Continued Excellence Award.

Cindy Ash, plant pathology, and Jeffrey Hahn, entomology, both of the Dial-U Insect and Plant Information Clinic, were recognized in January for their contributions to the Minnesota Nurserymen and Landscape Association's newly published "Landscape Construction and Reference Manual." They collaborated on a chapter on disease and insect control for the reference book.



Extenovations photo by Don Brennan

## AMC advisory committee meets with Borich

Dean and Director Pat Borich, far right, met in November with the advisory committee of the Association of Minnesota Counties (AMC). The committee members are, from left, Marvin Reitmeier, Polk County; Henry Aaby, Norman County; Morris Benson, Lac qui Parle County; Marilyn Krueger, St. Louis County; Thomas Brown, Faribault County; Sally Evert, Washington County; LeRoy Stensgaard, Pipestone County; Margaret Langfeld, Anoka County; Arvid Thompson, Clay County; Harlan Buck, Dodge County; and Paul Mettling, Murray County. Margaret Sherman of Aitkin County, standing to Borich's right, also attended the November meeting.

# EXTENOVATIONS

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# DNR/4-H MINNAQUA Program casts off to hook metro area anglers

Minnesota already boasts some 3 million persons who enjoy fishing, but a new 4-H and Department of Natural Resources (DNR) cooperative program hopes that even more will take it up and will be knowledgeable, environmentally conscious and sportsman-like in their angling.

The MINNAQUA Program is funded by the Legislative Commission on Minnesota Resources. It is aimed primarily at youth, single parents, senior citizens and minorities in the Twin Cities and Duluth areas and will use the successful 4-H Fishing Sports program, currently involving nearly 4,000 young people statewide, as a model.

Steve Bilitz, aquatic resource educator in 4-H, says the pro-

gram is designed to teach participants about aquatic ecology, fish management, water quality, safety, ethical behavior and fish identification. Training sessions will begin in March for as many as 200 adult volunteers in Hennepin, Ramsey and St. Louis Counties.

After ten hours of instruction, these volunteers will take their new skills and knowledge to a variety of organizations including Boy Scouts, Girl Scouts, park and recreation departments, sports clubs and community groups. Bilitz expects that the volunteers will begin reaching would-be anglers this summer when many park and youth organizations are active. An initial push will coincide with "Take a Kid Fishing Weekend" on June 9

and 10 when adults needn't have fishing licenses if they are fishing with a child.

In the second year of the two-year, \$350,000 pilot, Bilitz expects to take the program to other urban areas in the state, again focusing on the targeted audience groups. Once the pilot program is completed, 4-H and the DNR may seek funding for a statewide effort.

For more information about the spring volunteer training sessions scheduled for St. Paul on March 13 and Minneapolis on March 14 and for Duluth at a later date, contact Bilitz through the state 4-H office, 360 Coffey Hall, St. Paul, MN 55108 or phone Bilitz (612/625-4774) or DNR aquatic education specialist Ilo Howard (612/296-3325.) ■

- Deedee Nagy

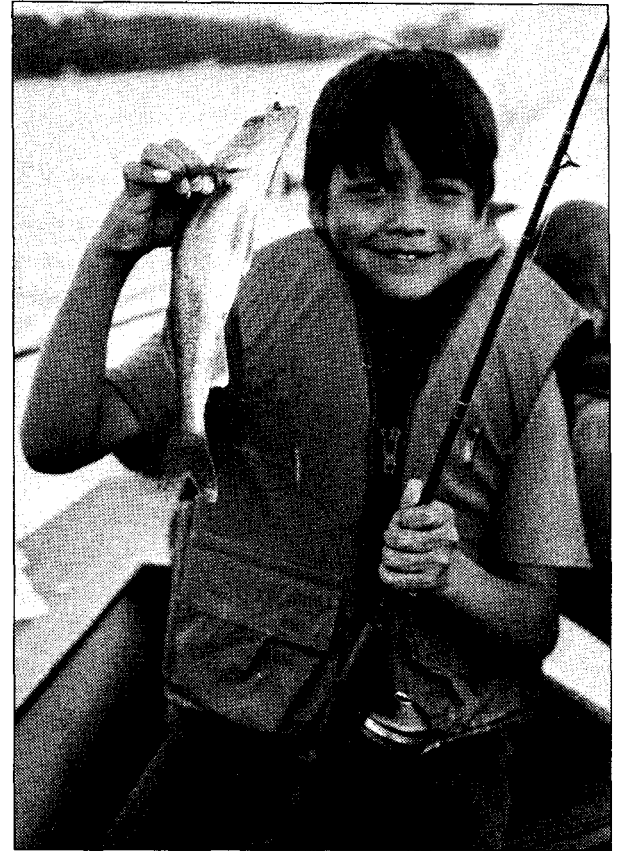


Photo courtesy of Larry Karels

Native American children like this young boy holding a walleye are among those expected to learn fishing and environmental awareness from the MINNAQUA Program.

# CD-ROM project to transform bulging files into sleek disc

County office file drawers and display racks overflowing with extension publications may soon graduate to a sleek electronic format — a CD-ROM disc resembling a compact disc (CD) found in music stores alongside tapes and albums.

When outfitted with CD-ROM hardware, a county office computer can retrieve, scan and print out any of the thousands of documents stored on the disc. This means that Distribution Center publications, once changed to electronic format and stored on a disc, can be called up quickly to a computer screen, perused and printed out to meet an agent's, campus faculty member's or a client's need for information.

Bob Rubinyi, communication technologies educator on the Telecommunications Development Center (TDC) staff, and Sharon Conlan, communication technologies educator in Educational Development System (EDS), hope to see CD-ROM technology streamline the way counties handle publications. This month, ALDE Publishing of Minneapolis issued the first Minnesota CD-ROM disc containing about 700 agriculture publications, several pieces of computer software and the Visual Fairness Clip Art Book.

In March, Rubinyi and Conlan will begin CD-ROM staff training at three campus and



Extenovations photo by Don Breneman

EDS staff members Sharon Conlan and Bob Rubinyi review some of the training materials that will introduce selected campus and county office staffs to CD-ROM storage and retrieval of extension information.

seven field pilot sites. Within about a year, two more discs containing first, home economics, natural resources and community economic development materials and later, 4-H materials, will be available.

In addition, Minnesota is participating in a national CD-

ROM disc project in cooperation Virginia Tech and several other states. That CD-ROM disc is expected to be complete this spring. It will contain such Minnesota data bases as the Water Quality Resource Notebook and a large collection of materials on alternative crops. That national disc will

go to more than 200 sites across the country.

Rubinyi, who has headed the MES CD-ROM project for both the state and national discs, says, "Extension has a strong incentive to make this project a success. This is a new technology that will allow us to get large quantities of very accessible information out to many sites at a low cost." He adds that information storage and retrieval via CD-ROM is a trend in many governmental agencies and it is spreading quickly to libraries. The CD-ROM hardware, which attaches to a computer, costs about \$700 and discs, if pressed in large quantities, can cost as little as a few dollars.

Each disc has the capacity to hold the equivalent of ten sets of a multi-volume encyclopedia. CD-ROM can do key word searches that scan every word of each item on the disc and alerts the user to where to find these references. Rubinyi says the system will allow users to call up many references on a topic from a variety of publications. After determining their usefulness on the computer screen, the user can have a hard copy printed out quickly on a printer attached to the computer. Photographs, tables and line art will also print out although their quality may not be quite as high as in the original printed piece.

Rubinyi credits Dave Nelson, assistant director — EDS, with the initial interest in CD-ROM and its application for extension. Conlan undertook the task of having campus faculty members review their publications in the Distribution Center. Publications that were judged appropriate for CD-ROM went to ALDE Publishing, the firm that converted the printed pages to electronic format and will handle marketing of the program area discs as they are readied. Eventually, about 1,400 publications will be included on one of the three state discs, according to Rubinyi. Conlan also wrote the training materials and exercises.

The pilot sites where Conlan and Rubinyi are training staff in CD-ROM usage are Food Science and Nutrition, Plant Pathology and Forest Resources on campus. The field sites are in county offices in Olmsted, Blue Earth, Todd, Dakota, Marshall and Lyon Counties and a site in Duluth shared by Sea Grant, the northeast district and St. Louis County.

Results at the pilot sites will determine how quickly statewide implementation goes, according to Rubinyi. ■

- Deedee Nagy

## Plant Pest Newsletter: 22 years of 'the latest'

Grasshoppers overwhelming your fields? Wonder what effect herbicides will have on groundwater? Trying to identify the disease attacking your soybeans?

*Plant Pest Newsletter (PPN)* was designed to respond to these issues and what to do about them, and to get that information into the farmers' hands in time for them to react.

Aimed at farmers, chemical dealers, and consultants, *PPN* was designed to get information out to the field quickly, addressing issues as they become cause for concern. And this timeliness is the major cause of the newsletter's success.

A team effort from the extension agronomy, entomology, and plant pathology departments, this year's April edition marks its twenty-second season providing information quickly on a wide range of topics, according to Ward Stienstra, extension plant pathologist and one of the newsletter's organizers.

Stienstra says that *PPN* was begun in 1968 as a free weekly service with about 20 issues per year, covering the growing season from spring through the end of summer. Subscriptions were free until 1982, when a fee was instituted to make the publication self-supporting. Currently, it is self-supporting with a fee of \$15 for 26 issues throughout the year. Circulation of the printed version is about 600 copies.

*PPN* is written by faculty members in the various departments who have an area of concern to discuss during the growing season. Copy is given to Debbie Baden-Drange, plant

pathology, to pull together into a format which is available electronically through EXTEND-U on Friday of each week.

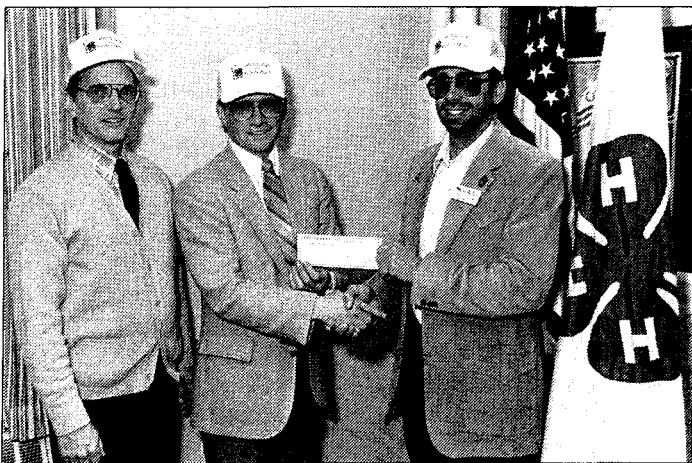
On Thursday afternoon, copy is given to Phyllis Petersen in Educational Development System for editing and production on DeskTop Publishing. The newsletter in final form is delivered to Duplicating in Coffey Hall early Friday, printed, and mailed before 3 p.m. that day. Subscribers have the information in their hands on Monday. This ability to produce a complete newsletter with less than 24-hour turnaround assures that timely information gets to the field, according to Stienstra.

For its 22 years, *PPN* has received a positive response from users. Several county agents personalize the information for publication in their local newspaper, and the information is a trigger for the media to pursue stories about problems which are discussed in the publication.

Published weekly from April through August, *PPN* goes to bi-monthly publication through September, and then appears monthly through the winter months when topics include such things as registration for training courses and seminars, dealing with indoor pests, tree-trimming advice, and planning for the spring season.

Subscriptions for the 1990 growing season are now being taken for the issues starting in April. Contact Debbie Baden-Drange, Department of Plant Pathology, 612-625-6290 for information. ■

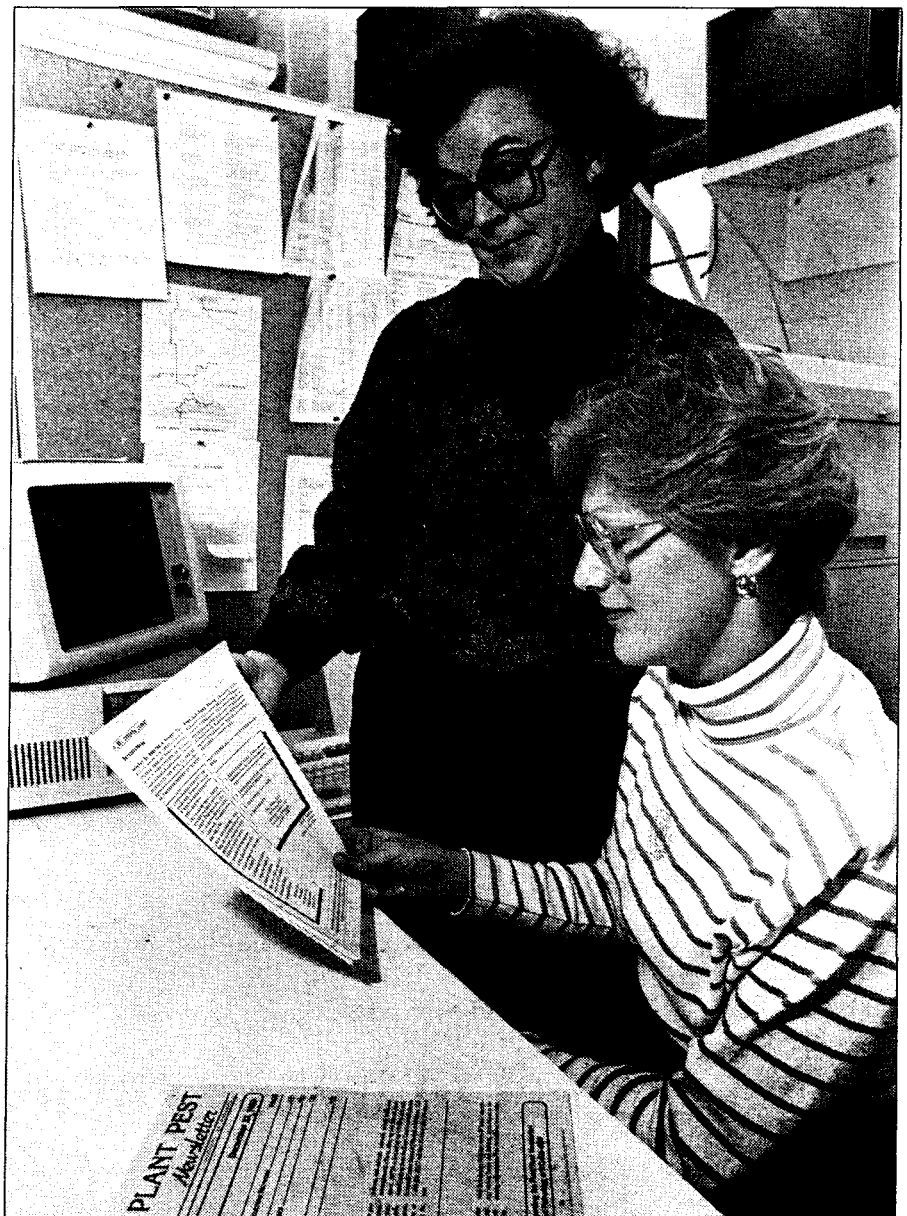
- Phyllis Petersen



Extenovations photo by Don Breneman

### 4-H wildlife curriculum receives donation

John Kvasnicka, right, executive director of the Minnesota Deer Hunters Association, presents the second of two checks for \$10,350 to Larry Karels, center, outdoor extension educator with 4-H Youth Development, and Jim Kitts, extension faculty member in wildlife. The deer hunters group's total contribution of \$20,700 will fund a wildlife education leaders guide for use with 4-H shooting sports and wildlife groups. The materials, which will be printed next month, will reach more than 8,000 Minnesota youth involved in programs to learn outdoor and sportsman ethical behavior and stewardship.



Extenovations photo by Don Breneman

Jill Pokorny, standing, director of the Plant Pathology Diagnostic Lab, and Debbie Baden-Drange, of the Plant Pathology Department, review a page of the *Plant Pest Newsletter*, now in its 22nd year of publication.

### Safety

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anhydrous ammonia practices and noise safety. Eleven topics deal with farm safety and four are on logging safety.

Brennan adds that MES safety programming also includes issues associated with pesticides including training of applicators, handling of protective clothing and proper handling of pesticide containers and application equipment. Many of these issues are also tied to water quality efforts statewide.

A new program now underway is exploring the viability of farmstead safety audits. The pilot program, administered through the Farm Mutual Insurance System in the state, will test the effect of a safety audit coupled with an insurance discount for farms with a good safety score. The two-year program will begin in June. ■

- Mary Kay O'Hearn

### Senegal

- continued from page 1

proteins and supplements to pregnant cows. He taught the technique of cleansing a well head by using a small plastic container and a locally available disinfectant, to combat the bacteria buildup.

At the same time Johnson was urging farmers (women) to spread out nitrogen use over the season rather than putting it all on at one time. He brought squash, cantaloupe ("it might fit in as a cash market crop for them"), sweet corn, bush and green beans seed along from Crookston.

"Extension has the kind of expertise that's needed there," Stauffer says. He, too, returned with a greater appreciation of life in a subsistence existence and what it means to have month-to-month dependence on whether or not there is enough food.

Both met people who would like to come to the U.S. to study and especially to learn English. At a Rotary meeting in Dakar (the capital city) Johnson extended a general invitation to members to

come out to the fields to see what was going on. "Much to the delight of the people running the program, four members did come and the media followed along." The result was national publicity for Rotary and the Minnesota Extension Service. ■

- Mary Kay O'Hearn

### Urban 4-H

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In addition to the awards from the crime prevention council, David C. Farley, associate program director of the W.K. Kellogg Foundation, cited the excellence of the American Variety Theatre Company after a Kellogg-sponsored seminar group visited the group in November. In a letter to Hennepin County Extension Director Barbara Thell, Farley praised how the theatre contributes to the development of young people. "By casting youth in roles where their natural behavior is appropriate, your staff is able to virtually guarantee that the youth will realize success and thus build self esteem, that all-important element." ■