

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710

Immediate Release

11 15 1971

## STATE WINNERS IN 4-H POSTER CONTEST ANNOUNCED

Fifteen 4-H members have been selected as state winners in the national 4-H poster-art contest, Juanita Fehlhafer, assistant state leader, 4-H and youth development at the University of Minnesota, has announced.

They were selected from among 50 who submitted entries.

The young artists ranged in age from 10 to 15. The winners, who will compete for national awards, are: Ann Walton, 10, Stillwater; Mark Stephan, 10, Stillwater; Kelly Raasch, 10, Morris; Gwen Schack, 14, Route 6, Duluth; Vernon Stevenson, 13, Hawley; David Sonstegard, 14, 981-44th Ave. N.E., Minneapolis; Sheldon Bengston, 13, Braham; Barb Jurgens, 14, St. James; Carolyn Krogh, 14, Cromwell.

Bonnie Skarp, 15, Cloquet; Cheryl Schmidt, 11, Le Center; Becky Korhonen, 16, Moose Lake; Pam Stadther, 15, Olivia; Sherry Paulson, 15, Anoka. Another winner was the Sugar City 4-H Club, Carver County, whose poster was designed by Charles, 10, Ed, 16 and Louise Worm, 17, of Chaska.

Delegates to the National 4-H Conference in Washington April 18-23, will select the 10 best entries from all states for national awards. Coats and Clark, Inc., will award cameras to the national winners.

Art work from the posters selected as national winners will be used in 4-H calendars, leaflets, exhibits and displays as well as for the national 4-H poster.

Aim of the poster contest is to give young people an opportunity to express what 4-H is and does for all young people.

###

56-jbn-71

M

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 733-0710  
April 1, 1971

Immediate Release

#### MIDDLE RIVER YOUTH TO RECEIVE JUNIOR CONSERVATIONIST AWARD

A 17-year-old 4-H and Future Farmers of America (FFA) member from Middle River, Minn., will be named 1971 Junior Conservationist at the Northwest Boat, Sports and Travel Show, Saturday through Sunday (April 3-4) in Minneapolis.

Arne Rantanen will receive the award for conservation work he has done on the 840-acre farm that he and his mother, Mrs. Betty Rantanen, manage in northwest Minnesota.

Mrs. Rantanen was named the northwest Minnesota farmer-sportsman winner for 1971.

Young Rantanen, also 1969 Minnesota FFA Forestry Award winner, has built three miles of firebreaks during each of the past three years, planted 4,000 trees and shrubs and built two windbreaks, two miles of ditches in 1969 and 1970 and three ponds in 1970.

Over 400 acres of the Rantanens' land is in clover cover and never mowed and about 70 acres of grain are grown each year for wildlife. Ponds and wet areas are fenced to keep livestock out and all hunting is carefully supervised. They have hosted duck, goose, upland game bird and deer hunters and fishermen on their land. Rantanen serves as a guide to many sportsmen.

He has written articles, given talks and put on demonstrations on conservation and helped with conservation programs for senior citizens. Rantanen is a certificate winner for the past two years in the Junior Conservationist Contest and is a 4-H Club conservation leader.

# # #

60-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 1, 1971

Immediate Release

## CHANGES IN SCHOOL SITE SELECTIONS PROPOSED

Bring the student to the environment if education is to be used to develop a better environment--that's the advice being given primary and secondary teachers in Minnesota today.

But how close do students need to be to the environment?

"If students are going to learn how to properly use our natural environment, they should be out in it. If the teacher is going to teach environmental management or conservation, he must learn 'where the action is' too," according to Clifton Halsey, extension conservationist at the University of Minnesota, St. Paul.

Halsey said a teacher can conduct environmental education activities at a site near the school. For example, in order to appreciate qualities of a good trout stream, the teacher and class would study a nearby creek. They would measure stream vegetation and water speed, temperature and clarity.

Carl Vogt added another dimension to the "student and environment" proposition recently at the Land in Transition Symposium in St. Paul, sponsored by the Agricultural Extension Service and the Association of Metropolitan Soil and Water Conservation Districts.

He is a staff associate with the Environmental Science Center in Minneapolis.

add 1--changes in school

Vogt suggested that outdoor environmental study areas be established on school grounds and that this be achieved through "realistic planning." With metropolitan areas growing by leaps and bounds and available land becoming more expensive to acquire, the time for "intelligent land acquisition is now," he added.

"Instead of just looking for a nice flat field to literally 'plunk' a building, sites should be selected that contain marshland, ponds, woodlots or hilly areas where students can study under real conditions.

"The creation of virtual deserts around schools is practiced by some planners who have not taken time to acquaint themselves with the real needs of the school community. Cars receive more consideration than people.

"No longer can we be satisfied with clearing every tree and shrub around school buildings for the sake of saving one hour's time on a crawler tractor. Natural land features are irreplaceable once destroyed. No matter how many ornamentals are planted, the constituency of a woodlot cannot be man-manufactured.

"Where trees or shrubs have to be cleared for footings and foundations, equipment operators, planners and educators should work hand in hand to assure the least amount of damage to residual vegetation. . . . The mechanics of ecology and social interaction are difficult to teach on school grounds patterned after Victorian gardens that suggest man's dominion over nature. The sterility of a brick and mortar building standing in the middle of a flat field is a terrible epitaph to those who are really interested in creating a true learning environment," he said.

add 2--changes in school

Vogt said these points should be considered when selecting and planning a new school site:

--Architects and community representatives should work together in planning and implementing phases of any project.

--Select sites that are functional and as aesthetically pleasing as possible.

--Save as many of the natural features of the site as possible.

--A quality school site may cost more at the outset, but remember that thousands of students will be utilizing the site in the future.

--Find out what has been done and think about what can be done to enhance the educational potential of our schools.

# # #

61-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 1, 1971

Immediate Release

## TIPS GIVEN ON BUYING AND COOKING HAM FOR EASTER

Serving ham for your Easter dinner?

Richard Epley, extension specialist in meats at the University of Minnesota, has some tips for consumers on selecting, cooking and serving cured and smoked hams.

First, he suggests that you read the label on the ham before you buy to be sure you'll get exactly what you want.

The three types of cured and smoked ham on the market are classified as "regular"; "water added" or "moist ham," with water added up to 10 percent of the uncured weight; and "imitation," which means that more than 10 percent of uncured weight has been added in the form of moisture.

Ham may be purchased with the bone in or boneless--with all bone removed. Boned hams are usually wrapped in film or canned.

If you buy a half ham, you should check to see whether you are getting the shank half or the butt half. The butt half is closer to the loin, has less bone than the shank end but is also more expensive.

The label will also tell you whether you are getting a "fully cooked" or a "cook before eating" ham.

Fully cooked hams are ready to eat, but heating enhances the flavor. Heat only to 130° internal temperature.

add 1--cooking ham

Epley emphasizes the importance of using a meat thermometer when baking ham. A "cook before eating" ham should be roasted to 160° F. internal temperature--or approximately 20 minutes per pound. Because the cooking time required will vary according to temperature of the meat, size and shape of the cut, amount of meat, fat and bone, a meat thermometer is the only reliable way of telling when the ham is done.

A boneless ham will provide about four servings per pound, a bone-in ham about three and a half servings per pound.

Before cooking, ham may be stored in the refrigerator for three to seven days, in the freezer for one to two months. An unopened canned ham will keep for several months in the refrigerator.

The University meats specialist adds this bit of advice: Once the ham has been cooked and served, get leftovers into the refrigerator as soon as possible to prevent spoiling.

# # #

59-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties  
Immediate release

INCREASE PASTURE  
YIELDS WITH EARLY  
SPRING MANAGEMENT

Early spring pasture management has the potential to increase pasture yields in Minnesota fourfold.

At present, Minnesota's 6 million acres of pasture support about one cow per two acres. Better pasture management could increase production to at least two cows per acre, says a University of Minnesota agronomist, Oliver Strand.

Pasture production can be increased by fertilization, better weed control and improved grazing management. Nitrogen fertilizer and broadleaf weed control is particularly important for grass pastures, he says.

A soil test is recommended for pastures--phosphorus and potassium can then be supplied as needed. Nitrogen should be broadcast as follows: 50 pounds before growth starts in the spring plus additional increments of 50 pounds once or twice during the summer if rainfall is normal.

Broadleaf weeds should be controlled at the end of May or in early June with 2,4-D at one pound acid equivalent per acre. Keep dairy cattle off the area for seven days after application. Perennial broadleaves such as Canada thistle should be controlled when they are about 6 to 8 inches tall.

Areas with a heavy growth of grasses should be grazed intensely early in spring so growth doesn't get too mature. "Tame" pastures of grass and alfalfa can be cut for hay in early June on acres not needed for pasture at this time. Further growth can be encouraged with fertilizer.

Rotational grazing, strip grazing or some form of grazing management should be practiced to allow grass growth to recover somewhat before it's grazed again.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties

ATT: County Extension Home Economists

Immediate release

PROTECT WOOLENS  
FROM MOTH DAMAGE

Before you store the family's wool clothing, take some precautions to protect it from damage from moths and carpet beetles.

Because good woolens represent a considerable investment, they deserve the best of care during the storage season.

David M. Noetzel, extension entomologist at the University of Minnesota, has some suggestions on protective measures to take.

Always wash woolens or have them dry cleaned before storing to remove soil that might attract moths to lay their eggs. However, you can't always be sure washing will kill eggs that are already present. That's why additional protection is necessary.

Treat fabrics made of wool blended with another fiber as if it were made of all wool. Unless they are absolutely clean, these blended fabrics are appetizing to moths and carpet beetles.

If possible, store all the family's winter woolens in an airtight chest, trunk or closet, not to be opened during summer. Plastic bags from the dry cleaner or garment bags, when tightly closed, will serve for a few items. Before storing the garments, however, clean out the closet or container thoroughly and treat it with a contact moth spray (available in aerosol container). It is also advisable to spray cedar closets and cedar chests.

The best protection against moths in stored woolens is to use naphthalene or paradichlorobenzene flakes, crystals or balls. They may be placed in an old nylon stocking. Read the directions for the amount to use. Since fumes go downward, it is well to put crystals on top of or above the clothing.

An alternative to moth crystals is to use a moth spray on clothing before storing it.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 2, 1971

Immediate release

UM AG SCHOOL REUNION SET FOR APRIL 24-25

The University of Minnesota School of Agriculture Alumni Association will hold its 80th annual reunion April 24-25 at the University's St. Paul Campus, LuVerne Ludtke, Minneapolis, association president, announced.

Special recognition will be given to persons graduating more than 60 years ago. The 1921 graduating class will be honored as the 50th-year graduating class.

Former students of the School of Agriculture are invited to attend. Reservations can be made by contacting Martha Hawkins, association secretary-treasurer, 4100 East 50th St., Minneapolis.

An annual banquet will be held at 5:30 p.m. April 24 (Saturday) in the Student Center's North Star Ballroom. On April 25 (Sunday), Sherwood O. Berg, dean of the Institute of Agriculture, will address a luncheon.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

SPECIAL SHORT COURSE SCHEDULE (April-September)

- March 15-  
May 10      The Rural Community in an Urban Age, St. Paul seminaries. Purpose is to develop a clearer perception of the economic, political and social forces that are shaping the present and future well-being of people and communities. Intended for theology students.
- April 6-7      Fair Management Short Courses, April 6, Grand Rapids; April 7, Bagley. Intended for fair board members, fair officers and superintendents and supervisors who have responsibilities in connection with the management of county, district and state fairs. Purpose is to improve effectiveness of county fairs.
- April 13      Public Health Conference for Veterinarians, Veterinary Science Building, St. Paul Campus. Purpose is to continue the education of veterinarians working in public health.
- April 14      Shade Tree Maintenance Clinic, Mayo Civic Auditorium, Rochester. Intended for commercial tree service personnel, park and municipal employees and others engaged in shade tree maintenance. Updated information on shade tree maintenance problems and demonstrations of maintenance techniques will be presented.
- April 14-16      Farm Mutual Insurance Conference, St. Paul Campus, North Star Ballroom, Student Center. Purpose is to assist township mutual personnel to better understand some of the latest principles and concepts related to management, insurance inspection and fire prevention.
- April 26-29      Minnesota State Fire School, Hotel St. Paul. Intended for volunteer and paid fire department personnel, city officials, and interested government and industry personnel who deal in fire safety, prevention, control, rescue and first aid work. Instruction will be given on a broad range of skills related to fire service.
- May 2-4      Minnesota Future Farmers of America Convention, St. Paul Campus.
- May 10-14      Spring Conference for Extension Personnel, St. Paul Campus.
- May 14      Minnesota Association of Conservation Education (MACE) Teachers Workshop, Hyland Park, South Minneapolis. Purpose is to develop a better understanding of conservation education principles among junior and senior high school general science and biology teachers and elementary school teachers.
- May 18      Retirement Luncheon, Gymnasium, St. Paul Campus.

- May 19-20 Meat Processing Technology Short Course, Food Science and Industries Building, St. Paul Campus. An introductory course to provide basic information on meats to food technologists. Enrollment is limited to persons with B.S. in food science, animal science, biology, biochemistry or related fields.
- June 9-11 Livestock Judging and Evaluation Short Course, Livestock Pavilion, St. Paul Campus. Swine and sheep clinics, June 9; beef cattle clinic, June 10; poultry and egg judging clinic, June 11. Intended for livestock judges, vo-ag instructors, county agents, beef producers and other interested persons. Purpose is to teach participants how to evaluate and select the desired meat animal and to promote more uniformity in selection for the desirable meat animals at various shows.
- June 9-11 Forest Harvesting Equipment Professional Improvement Seminar, Duluth. Intended for Minnesota vo-ag instructors.
- June 14-18 Banks for Cooperatives Management Training and Development Conference, St. Paul Campus. Purpose is to develop the financial capabilities of analysts and junior officers in Banks for Cooperatives.
- June 22-23 Homemakers Workshop, Edson Hall, Agricultural Experiment Station, Morris.
- June 22-25 School Lunch Short Course, Waseca. Intended to provide school lunch personnel with information, methods and techniques needed to effectively carry out their responsibilities.
- June 29 Visitors' Day, Southern School of Agriculture, Waseca. Intended for area residents interested in agricultural research information, home demonstration and technical college development.
- June 29-  
July 2 School Lunch Commuters Course, St. Paul Campus. Intended for school lunch personnel in the metropolitan area to provide them with information, methods and techniques to effectively carry out their responsibilities.
- June 30 Crops and Soils Field Day, Southwest Experiment Station, Lamberton. Intended for farmers and others interested in crop production to review the latest research in progress in major crop production areas.
- July 8 Crops and Soils Field Day, Edson Hall, Agricultural Experiment Station, Morris. Intended for farmers and others interested in crop production.

- July 12-16 Microbiology and Sanitation in the Food Industry, Food Science and Industries Building, St. Paul Campus. Intended for persons in public health laboratories, food processing and control laboratories. Purpose is to emphasize the role of micro-organisms in food spoilage and disease production and the importance of sanitation, disinfection and processing procedures in the production of high quality foods.
- July 12-16 Tractor Ignition Testing Professional Improvement Seminar, Winona. Intended for Minnesota vo-ag instructors.
- July 13-16 School Lunch Short Course, Morris.
- July 14 Northwest Experiment Station Summer Field Day, Crookston. Intended for producers of agricultural products.
- July 15 North Central Experiment Station Summer Field Day, Grand Rapids. Intended for producers of agricultural products.
- July 26-28 Basic Electricity and Controls Professional Improvement Seminar, Wadena. Intended for vo-ag instructors.
- July 28-30 Tractor Hydraulics Professional Improvement Seminar, Canby. Intended for vo-ag instructors.
- August 10-13 School Lunch Short Course, Duluth.
- August 15 Horticultural Day, University Technical College, Waseca.
- August 17-18 Snowmobile Power Units Professional Improvement Seminars, Anoka, Faribault and Jackson. Intended for vo-ag instructors.
- Sept. 13-17 DHIA (Dairy Herd Improvement Association) Supervisor Training Short Course, Haecker Hall, St. Paul Campus.
- Sept. 14 Corn and Soybean Field Day, Southern Experiment Station, Waseca. Intended for farmers and others interested in crop production.
- Sept. 14-15 Minnesota Nutrition Conference, Holiday Inn Central, Minneapolis. Purpose is to present the latest information on livestock nutrition to professional livestock nutritionists, feed manufacturers and dealers.
- Sept. 15 Corn and Soybean Field Day, Southwest Experiment Station, Lamberton. Intended for farmers and others interested in crop production.
- Sept. 16 Corn and Soybean Field Day, West Central School and Experiment Station, Morris. Intended for producers and persons in agri-business associated with corn and soybean production.

- Sept. 16-17 Sanitaricians Conference, Student Center, St. Paul Campus. Intended for municipal, state and federal health officials, food plant management, sanitation and laboratory personnel, veterinarians and dairy plant fieldmen.
- Sept. 23 Shade Tree Maintenance Short Course and Equipment Show, place to be announced. Purpose is to provide arborists, city officials and others responsible for shade tree maintenance current information on maintenance techniques and equipment.
- Sept. 30 North Central Cheese Conference, Hyatt Lodge, Minneapolis. Purpose is to inform cheese makers, cheese plant personnel and persons in allied industries of the latest cheese-making technology and economic developments in the dairy processing industry.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties

Immediate release

DROP EXPECTED IN  
SOWS FARROWING

The number of sows farrowing this spring in Minnesota is expected to be down eight percent from a year earlier, according to David Taylor, assistant director of the Minnesota Crop and Livestock Reporting Service.

For July through August, sow farrowing intentions are expected to be 19 percent below the same period in 1970.

Minnesota's winter pig crop was slightly over one million head or one percent more than a year earlier. The number of sows farrowing was up two percent from a year ago while the litter size was down one percent, Taylor said.

As of March 1, there were about 3.3 million head of hogs on Minnesota farms--an increase of 14 percent over a year earlier. Of the 3.3 million, nearly three million head were primarily intended for market, while breeding hogs, down eight percent from March 1, 1970, made up the rest of the inventory, he added.

The 10 major Corn Belt states had a winter pig crop totaling almost 13.75 million head--one percent more than last winter's crop. The number of sows farrowing was about two million head--five percent above the 1970 figure. The average number of pigs per litter was down four percent for the 10 states.

Farrowing intentions for the Corn Belt are seven percent less for this spring than for March through May of 1970.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties  
Immediate release

DAIRY FARMERS:  
AVOID RESTRICTED  
PESTICIDES

Seven pesticides restricted in use by a recent Minnesota law should not be used by dairy farmers, except for seed treatment, University of Minnesota Extension Entomologist John Lofgren said.

The "restricted use" insecticides include DDT, DDD (TDE), dieldrin, endrin, heptachlor, lindane and aldrin. A state pesticide regulation, which became effective July 1, 1970, makes the sale or use of these chemicals illegal except for certain recommended uses for which a permit must be obtained.

Lofgren recommended that dairy farmers confine their use of the restricted insecticides to seed treatment to avoid illegal contamination of dairy products from residues of these insecticides.

If these pesticides are used as soil treatments on corn, the crop should be harvested for grain only and dairy cattle being finished for slaughter should not be allowed to graze in treated fields, he said. Dairymen should also be sure that hay or other feed purchased does not contain illegal residues, Lofgren added.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties  
Immediate release

INCREASE PASTURE  
YIELDS WITH EARLY  
SPRING MANAGEMENT

Early spring pasture management has the potential to increase pasture yields in Minnesota fourfold.

At present, Minnesota's 6 million acres of pasture support about one cow per two acres. Better pasture management could increase production to at least two cows per acre, says a University of Minnesota agronomist, Oliver Strand.

Pasture production can be increased by fertilization, better weed control and improved grazing management. Nitrogen fertilizer and broadleaf weed control is particularly important for grass pastures, he says.

A soil test is recommended for pastures--phosphorus and potassium can then be supplied as needed. Nitrogen should be broadcast as follows: 50 pounds before growth starts in the spring plus additional increments of 50 pounds once or twice during the summer if rainfall is normal.

Broadleaf weeds should be controlled at the end of May or in early June with 2,4-D at one pound acid equivalent per acre. Keep dairy cattle off the area for seven days after application. Perennial broadleaves such as Canada thistle should be controlled when they are about 6 to 8 inches tall.

Areas with a heavy growth of grasses should be grazed intensely early in spring so growth doesn't get too mature. "Tame" pastures of grass and alfalfa can be cut for hay in early June on acres not needed for pasture at this time. Further growth can be encouraged with fertilizer.

Rotational grazing, strip grazing or some form of grazing management should be practiced to allow grass growth to recover somewhat before it's grazed again.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties

Immediate release

IN BRIEF . . . .

Killing Frost Unlikely After May 20. If corn is planted in major Minnesota corn producing areas after April 20, the odds are better than four to one that corn will not be exposed to a killing frost. The growing point of corn planted April 20 to 30 will not reach the soil surface until about May 20, say University of Minnesota agronomists. The probability of a killing frost after May 20 is less than 20 percent. A prolonged period of low temperature would be necessary to kill the plants. Some loss may occur, but this temporary setback would have little effect on yield, the agronomists say.

\* \* \* \*

Dairymen: Don't Mix Raw Soybeans and Urea. Dairymen should avoid mixing raw soybeans and urea for cattle feed, since the mixture will cause a chemical reaction making the feed unacceptable to the animal. Soybean meal, which does not contain the enzyme urease, may be mixed with urea.

\* \* \* \*

Plan Grain Drying System Carefully. Keep in mind that once you've built a grain drying system you'll have to live with it for a long time. This means some careful planning is in order. Remember that anything portable is temporary. As your operation gets bigger you must have a well planned, permanent grain handling system to allow for required expansion.

\* \* \* \*

-MOR-

add 1--in brief

Plywood Farm Buildings. Plywood is good for farm buildings. The rigidity of plywood panels helps plywood buildings hang together well. But make sure you use only exterior-type plywood in farm buildings. Some interior-type plywood is made with exterior glue, but still doesn't qualify for use in high humidity buildings.

\* \* \* \*

House Plants Need Light. A house plant growing in a sunny window or strong light can stand higher temperatures than the same kind of plant growing in poor light, according to University of Minnesota horticulturists. Excessively high temperatures and low light intensity form a fatal combination. Flowering plants usually require sunlight or bright light most of the day. While foliage plants will thrive in less light, they should be located where the light is bright enough to permit reading most of the day.

\* \* \* \*

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties

ATT: County Extension Home Economists

Immediate release

PROTECT WOOLENS  
FROM MOTH DAMAGE

Before you store the family's wool clothing, take some precautions to protect it from damage from moths and carpet beetles.

Because good woolens represent a considerable investment, they deserve the best of care during the storage season.

David M. Noetzel, extension entomologist at the University of Minnesota, has some suggestions on protective measures to take.

Always wash woolens or have them dry cleaned before storing to remove soil that might attract moths to lay their eggs. However, you can't always be sure washing will kill eggs that are already present. That's why additional protection is necessary.

Treat fabrics made of wool blended with another fiber as if it were made of all wool. Unless they are absolutely clean, these blended fabrics are appetizing to moths and carpet beetles.

If possible, store all the family's winter woolens in an airtight chest, trunk or closet, not to be opened during summer. Plastic bags from the dry cleaner or garment bags, when tightly closed, will serve for a few items. Before storing the garments, however, clean out the closet or container thoroughly and treat it with a contact moth spray (available in aerosol container). It is also advisable to spray cedar closets and cedar chests.

The best protection against moths in stored woolens is to use naphthalene or paradichlorobenzene flakes, crystals or balls. They may be placed in an old nylon stocking. Read the directions for the amount to use. Since fumes go downward, it is well to put crystals on top of or above the clothing.

An alternative to moth crystals is to use a moth spray on clothing before storing it.

# AGRICULTURAL EXTENSION SERVICE • UNIVERSITY OF MINNESOTA

*Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties

ATT: County Extension Home Economists

Immediate release

## OVEN-BAKED RICE EASY TO PREPARE

Next time you plan to serve rice, bake it in the oven. It's one of the easiest ways of preparing rice, says \_\_\_\_\_ County extension home economist \_\_\_\_\_.

Remember that most kinds of rice swell during cooking. A cup of uncooked white or brown rice will yield 3 cups or more and will provide about  $\frac{1}{2}$  cup for each 6 servings.

To keep as much of the food value as possible in cooked rice, don't wash it before cooking and don't rinse it after cooking. Packaged rice is clean.

To prepare oven-cooked rice for 6, bring 2 cups of water to a boil on top of the range, stir in a cup of uncooked white or brown rice, cover the pan tightly and put into the oven which has been preheated to 350°F. Bake for 30 to 35 minutes. Don't peek and don't stir while the rice is baking. When the time is up, fluff the rice with a fork before serving it.

For variety, cook the rice in chicken or beef broth or with equal parts of tomato juice and water. Or cook chopped onions, celery or mushrooms in a little fat until tender and add to the rice before putting it in the oven.

Serve the rice on a warm platter topped with creamed fish, poultry or meat. Leftover rice can be used in any casserole dish that calls for cooked rice.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 5, 1971

To all counties  
Immediate release  
4-H NEWS

4-H HORSE  
PROJECT CLINIC  
SCHEDULED

If you're a 4-H'er enrolled in the horse project, you may want to plan now to attend a light horse clinic on Saturday, June 5, in the Hippodrome at the Minnesota State Fair grounds.

Well-known Minnesota horsemen will conduct the discussions and demonstrations at the clinic, according to County Agent \_\_\_\_\_.  
(Name)

The morning program will include grooming and preparing a horse for show, tack and equipment care, showmanship at halter and judging horses at halter.

The demonstrations presented after lunch will cover hunter and jumper horses, English and western pleasure horses, horsemanship and winning at timed events.

All 4-H leaders and members are invited to attend. There is no admission charge and lunch will be available on the grounds. Contact County Agent \_\_\_\_\_  
(NAME)

prior to May 10 for your reservations.

The 4-H horse clinic is sponsored by the Minnesota Agricultural Extension Service and the Western Saddle Clubs Association, Inc.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 6, 1971

Immediate Release

### MINNESOTA ECONOMY DOESN'T LAG, UM ECONOMIST SAYS

Although per capita personal income is and has been lower in Minnesota than for the nation as a whole, the state's economy is not lagging, John D. Helmberger, agricultural and applied economist at the University of Minnesota, said.

The decline in agriculture's significance and the rapid growth in such expanding industries as electronics suggest that Minnesota's prospects for greater than average economic growth are good. This applies to growth in total personal income despite continued migration from the state, in non-farm income and in per capita personal income, he added.

Minnesota's rate of non-farm income increase from 1929 to 1969--810 percent--was higher than any neighboring state and higher than the national increase of 750 percent, according to U.S. Department of Commerce figures.

Weekly manufacturing wages are greater in Minnesota than the national average and the state's manufacturing payrolls increased 1,126 percent from 1929 through 1968 while the national manufacturing payroll increase was 807 percent, Helmberger said.

Non-farm incomes and manufacturing wages have also increased more in the state than in the nation in the past two decades.

add 1--minn. economy

Minnesota's growth is good considering it has "more than its share of farmers" whose incomes are lower than those of urban residents and considering the migration from rural areas and from the state, he said. Minnesota's cities absorb most of its rural migrants, but not all of them. The state's loss in rural residents has occurred as farmers all over the country have flocked to urban areas, but farming remains relatively more important in Minnesota than in the nation as a whole.

# # #

63-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 6, 1971

Immediate Release

## STATE FFA CONVENTION SET FOR MAY 2-5

Nearly 2,500 high school students from outstate Minnesota will be on the University of Minnesota's St. Paul Campus May 2-5 to take part in the 1971 Future Farmers of America (FFA) State Convention and Leadership Training Program.

This is the first state FFA gathering in 41 years that will be officially represented by girls who are FFA members.

The two day leadership conference meeting will kick off Sunday, May 2, with an open house at University's Veterinary College. A talent show and vesper service will be held in the evening.

The convention will wind up Wednesday with a training session for newly-elected state FFA officers. The theme for this year's event is: "FFA--involved in America's Future."

During the convention the FFA'ers will make plans for their annual corn drives for Camp Courage. They will also plan two fund drives for the mentally retarded and a dime per member program for the March of Dimes.

Special sessions will be held for individual members interested in developing new techniques in their state-wide programs in the areas of air and water pollution, traffic safety, wildlife habitat improvement projects, anti-smoking and drug educational campaigns and agribusiness-national resources occupations.

-more-

add 1--ffa convention

Monday's events will include judging contests, the annual Creed Contest, annual extemporaneous speech and public speaking contest and an awards luncheon honoring FFA'ers excelling in supervised agricultural experience programs. The awards are financed by State and National FFA Foundations. Harold Pluimer, nationally known lecturer and ecologist, will talk on "This land is your land."

The delegates will leave the campus Monday evening for the 35th annual convention banquet in the St. Paul Municipal Auditorium. Governor Wendell Anderson, National FFA Vice President Wayne Humphreys and Minnesota Commissioner of Education Howard Casmey will be the principal speakers. Another banquet highlight will be the presentation of the State and Regional Star Farmers and Foundation Proficiency Award winners. An annual highlight of the convention is the hand milking contest between the State Star Dairy Farmer and Minnesota's Princess Kay of the Milky Way in front of Coffey Hall on Tuesday at 8:45 a.m. The 39th annual parliamentary procedure contest will also be held on Tuesday.

The State FFA band and chorus will give concerts during the convention. Newly named convention band director is Len Teel of Le Center. Layton Peters of New Ulm will direct the state chorus.

The delegates will be encouraged to take part in "FFA's Operation Rain Gauge." The chapter members will serve as amateur climatologists by recording percipitation between May and October and reporting the data to the state climatologist at St. Paul Campus. The National Weather Service and University of Minnesota are cooperating in this statewide weather recording project which is the first in the nation.

# # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 6, 1971

Immediate Release

#### MINNEAPOLIS WOMAN TO RECEIVE HOME ECONOMICS HONOR

Mrs. Helen Forte, 3728 Columbus Ave. Minneapolis, has been selected to receive the Certificate of Service to Home Economics given by the University of Minnesota's College of Agriculture, Forestry and Home Economics Alumni Association.

The award will be presented by Mrs. Janice Stroom at the 13th annual <sup>the</sup> banquet of Association Saturday evening, April 17, in the North Star Ballroom on the St. Paul Campus.

Mrs. Forte will be the sixth distinguished home economics alumna to receive the honor since the first Certificate of Service to Home Economics was presented in 1964.

She is especially known for her achievements in adult education. She was involved in the organization of the Suburban Hennepin County Area Vocational Technical School and is now teaching clothing construction at the school. During the past 15 years she has taught classes for the Minneapolis YWCA as well as adult classes in the Minneapolis and St. Paul schools.

Previously she had been a home economist for the McCall Pattern Company in the Twin Cities area for seven years, working with high school and college classes and adult education programs.

add 1--home economics honor

For the past four years she represented the Minnesota Home Economics Association on the Institute of Agriculture Advisory Council. She has served as vice president of the Minnesota Home Economics Association as well as its secretary, president of the Twin Cities Home Economists in Homemaking and has been active on the Home Economics Alumnae Legislative Committee.

Mrs. Forte was graduated from the University of Minnesota with a major in dietetics and institutional management. Immediately following her graduation she worked as a hospital dietitian.

# # #

62-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 7, 1971

Immediate Release

## HOUSING MIX POSSIBLE IN PLANNED UNIT DEVELOPMENT

A compatible mix of expensive and inexpensive housing units--town houses, apartments and homes--is possible in a planned unit development, Robert Engstrom, vice president for planning and design, Pemton, Inc., Minneapolis, said.

Engstrom addressed the recent Land in Transition Symposium in St. Paul, sponsored by the Agricultural Extension Service and the Association of Metropolitan Soil and Water Conservation Districts.

Planned unit developments, made possible by local legislation, attempt to encourage good design in specific developments through design review by local boards and officials rather than relying on uniform, established zoning and subdivision regulations pertaining to the area.

There's a potential for planned unit development ordinances, given the flexibility of this concept. But as a municipality develops more sophisticated administrative organizations, adding a fire marshal, right-away engineer, sewer engineer and water engineer--"all trying to do a good job--they all take a little whack at you." Then the very purpose for which a planned unit development ordinance was enacted in the first place--to do a more effective job--is destroyed, Engstrom added.

"Regulations continue to pile up the more populated and sophisticated the municipality is. In other words, more staff--more regulations.... The smaller the community, the easier it is to work with a planned unit development ordinance," the construction firm executive said.

add 1--unit development

Housing densities can be greater in planned unit developments than subdivisions, yet more open space can be made available. By concentrating densities, a golf course can be provided in a planned unit development, thereby creating value that flows back to a large area, he said.

A consequence of present zoning regulations is a surplus of single-family residentially-zoned land and a shortage of apartment land. This creates "an artificially high price for apartment land, thereby forcing people who can't afford to own homes to pay a higher rent in the interest of health, safety and welfare," Engstrom added.

With an overall density of 60 units per acre--three times that of a standard subdivision, it could be decided what type of housing would be best for the site and what natural features of the site should be preserved. This would allow people to put more money back into the land rather than "just wasting it on things that don't contribute to conservation and livability.... If you can economize on things underground--utilities, etc.--then you can afford to haul in trees and improve the environment," he said.

# # #

66-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 7, 1971

Immediate Release

## SELECT GARDEN 'MUMS

Now's the time to select the best garden chrysanthemums for your fall display of living color.

Chrysanthemums provide a colorful display when most other garden flowers have been tarnished or killed by early frosts, says Richard Widmer, University of Minnesota horticulturist.

However, not all varieties are satisfactory for Minnesota gardens and selecting the right variety now will pay off next fall, Widmer says. Minnesota gardeners must select cultivars--or cultivated varieties--which start to bloom in September. Cultivars developed for other parts of the country often bloom too late for Minnesota where the average date for a killing frost is about October 14 in the Twin Cities area.

The University's Department of Horticultural Science has been breeding chrysanthemums tailored to the needs of Minnesota gardeners for 40 years, according to Widmer. All varieties must pass a rigorous testing program for at least 5 years before they are recommended.

This year the Department's 50th introduction, Golden Jubilee, has been released. It is a stocky plant with deep-gold colored, 2 1/2 to 3-inch flowers.

-more-

add 1--garden 'mums

Minnesota introductions are available from many greenhouses, garden centers, nurseries and mail-order nurseries. Order your plants by name and don't accept substitutes unless you know that the substituted varieties are equally well suited to Minnesota conditions, Widmer cautions.

For more detailed information and colored pictures of recent Minnesota introductions, write for Miscellaneous Reports 82 and 101 to the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101.

# # #

65-jms-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 7, 1971

Immediate Release

#### FEW PESTICIDE ACCIDENTS, POISONINGS IN MINNESOTA

There are few recorded accidents and no recorded deaths in Minnesota due to pesticide poisoning, according to a Minnesota Department of Health official.

Most cases of pesticide poisoning result from carelessness or lack of supervision, said Warren Lawson, deputy executive officer with the department. Many accidents could be prevented if the user would follow label directions, he said.

"We had a case two summers ago where six people were using organic phosphate insecticides for aerial spraying. Within four hours one got sick and within 9 hours, all were sick and in the hospital. They were careless and got some of the insecticide on their skins," Lawson said.

Another case involved the accidental spraying of Argyle, Minnesota with the insecticide parathion in July, 1966, he said.

"The town was supposed to be sprayed with a safe dilute solution of DDT and malathion for mosquito control," Lawson said, but someone accidentally substituted parathion for the malathion midway through the application.

"Immediately we started looking for an adequate supply of atropine (a therapeutic agent) in case it was needed for the 800 who lived in Argyle. There wasn't that much atropine available in Minnesota, Wisconsin, North and South Dakota, Iowa and Nebraska if we pooled all the resources," Lawson explained.

add 1--pesticide accidents

As it turned out, only a small amount of parathion was used in the sprayings. "No one got sick, but everybody was pretty scared for a few hours," Lawson said.

The Argyle incident is another reminder of the different toxicities of insecticides, Lawson said. Parathion, an extremely toxic insecticide, must be used with extensive precautions.

Pesticide usage on a national basis has doubled during the 5-year period from 1964-69, but there have been no increases in accidental deaths or poisonings, added Phillip Harein, extension entomologist at the University of Minnesota. "In fact, there have been no increases in pesticide poisonings in the U.S. during the past 20 years despite a tremendous increase in the use of these chemicals," Harein said.

"The only exception to this trend occurred in 1970 when there were a few more accidental poisonings as a result of a switch from chlorinated hydrocarbons to organic phosphates, a more persistent pesticide," he added.

While pesticides can be dangerous if not used correctly, they have been part of an agricultural system which has brought us a higher standard living than ever before.

And insecticides have played an important role in improving public health. Malaria is an example. It has been practically eradicated in the U.S., Lawson said.

While pesticides have improved our standard of living, they have sometimes been found in unacceptable quantities in food, according to Horace Allen, former Minneapolis District Deputy Director of the Food and Drug Administration.

Some pesticide problems that the FDA has uncovered are:

\*Fish in Minnesota's Red River have been found to contain high levels of mercury residue.

add 2--pesticide accidents

\*Coho salmon being shipped to Minnesota from Lake Michigan contained 20 parts per million of DDT.

\*A few years ago, milk from Wisconsin was found to contain high amounts of the pesticide dieldrin. The cattle were being fed with beet pulp from the Red River Valley which contained the pesticide.

\*In Montana, chlordane was being used on alfalfa. It consequently got into milk and was discovered in routine FDA sampling.

"Very few samples that the FDA examines approach the tolerance level even with the most strenuous use of pesticide. Trimmings and other treatment in food processing reduce pesticide residues even further," Allen said.

Many food processing plants are now making their own tests, Allen said, to aid the FDA in discovering pesticide residues.

# # #

64-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 12, 1971

To all Counties  
4-H NEWS  
Immediate release

4-H'ERS CAN  
HELP SAVE  
PHEASANTS

4-H'ers in \_\_\_\_\_ County can help boost Minnesota's dangerously low  
(NAME)

pheasant population through two activities connected with the 4-H Wildlife Habitat Improvement Program.

The activities are delayed mowing and salvaging and incubating eggs from abandoned pheasant nests.

4-H'ers are urged to increase the nesting cover by delaying mowing of diverted acres, roadside ditches, odd areas and fencelines in their communities, says County Agent \_\_\_\_\_.  
(NAME)

If mowing can be delayed until July 15, nesting success can average 50 percent. When mowing occurs about July 1, hatching success is reduced to 25 percent. When mowing is completed in June, hatching success is less than 10 percent, according to the State Department of Natural Resources, Division of Game and Fish.

When damage to nests does occur, 4-H'ers can save the eggs by collecting them and incubating them until they hatch. Each year during hay mowing about a third of the hens nesting in alfalfa are killed or severely injured. Hen pheasants abandon their eggs when their nests are damaged.

Arrangements must be made for raising the birds after they hatch until they are seven to eight weeks old.

If you're interested in participating in the 4-H Wildlife Habitat Improvement Program, contact County Agent \_\_\_\_\_ no later than May 1 at the \_\_\_\_\_  
(NAME) (NAME)  
County Extension Office.

The program is being offered this year in a cooperative effort by the University of Minnesota's Agricultural Extension Service, Federal Cartridge Corporation, Minnesota Pheasants Unlimited, Inc., and the Minnesota Department of Natural Resources

# AGRICULTURAL EXTENSION SERVICE • UNIVERSITY OF MINNESOTA

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 12, 1971

To all counties

ATT: Extension Home Economists

Immediate release

### MEALS CAN BE INTERESTING FOR ONE OR TWO

Many women complain that cooking for one or two is dull--that it's difficult to make meals interesting and inviting.

But Grace Brill, extension nutritionist at the University of Minnesota, says there are many ways to perk up meals for one or two and to make cooking a pleasurable experience. She gives these suggestions:

- . When you go to the grocery store, select a new food among the many you'll find on the shelves. A new food can add real zest to a meal, especially if you serve it with some of your favorite dishes.
- . When you find a new food you like, invite a friend, a neighbor or some family members to enjoy it with you.
- . Serve meals with attractive placemats or a gay tablecloth and an attractive centerpiece.
- . Take time to eat your meals so you can enjoy them.
- . If you are eating alone, eat near a window where you can watch children playing in the neighborhood or birds at the feeder. Or you may find that an interesting program on television will help to make mealtime a pleasure.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 12, 1971

To all counties

ATT: County Extension Home Economists

Immediate release

LEARNING PROBLEMS  
OF ELDERLY LEADS  
TO UNDERSTANDING

Understanding the problems of older people is increasingly important in the United States as the proportion of this age group grows.

An exploding youthful population has caused extreme emphasis to be placed on youth, yet in Minnesota more than 400,000 men and women are over 65.

Age is actually a quality of mind, says Mrs. Susan Meyers, extension specialist in family life at the University of Minnesota. Some people are young in mind and heart at age 80; others at age 50 are old in spirit.

To understand the problems of aging, it's necessary to recognize its positive aspects along with the physical limitations of older people. Older people have maturity, insight into their own and others' problems, expertise and knowledge of real value to younger people. Retirement allows them freedom for creative activities and new experiences as well as time for reflection. On the other hand, enjoyment of the "golden years" is often limited by failing sight, hearing, touch, smell and memory. Restricted physical mobility can be frustrating.

Mrs. Meyers says younger people must recognize that older people have the need to be:

- . Independent as long as possible.
- . Respected as persons--not treated like children.
- . Useful. Many older people have knowledge and talents that could be put to good use in the community. Foster Grandparents' programs, too, can be rewarding.
- . Remembered as a member of the family and a friend. Letters, telephone calls, visits are important to remind older persons they are not alone but have an important role to play in human relationships. Older people can enrich the lives of youth--and youth in turn, can bring enthusiasm and joy into the lives of the aging.

The most frequently mentioned problems of the aging are finances, health and loneliness.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 12, 1971

To all counties

Immediate release

SEED LABEL LAWS  
PROTECT USER

Today, seeds are treated with chemicals which, if misused, can harm or kill man and animals.

The chemicals, such as phenol mercury acetate, are used to prevent damage to the seeds by insects, fungi and bacteria.

To help prevent misuse of treated seeds and possible fatal results, the U. S. Department of Agriculture and the Food and Drug Administration have label or other requirements that warn the farmer or home gardener against possible hazards.

The Federal Seed Act, enforced by the USDA, requires that seeds treated with mercurials and similarly toxic substances to be labeled with the word "poison" in red letters and with the skull-and-crossbones symbol.

Other seeds classified as harmful must be labeled such as "Do not use for food, feed or oil purposes."

All labels must state the name of the substance the seed is treated with--either the commonly accepted coined name, the chemical name or a standard abbreviation of the chemical name. These names and abbreviations are found in "Requirements Under the Federal Seed Act for Labeling Treated Seed," available from the Seed Branch, Grain Division, U. S. Department of Agriculture, South Laboratory Bldg., Agricultural Research Center, Beltsville, Md. 20705.

The Food and Drug Administration requires that food or feed grain seeds such as wheat, oats, barley, rye, corn or grain sorghum be colored an unnatural color if they're treated with a toxic substance. Most of these treated seeds are colored red.

To prevent misuse of treated seeds, USDA's Consumer and Marketing Service has recommended that farmers and home gardeners:

\*Carefully read and heed the label when buying seed.

-more-

add 1--seed label laws

\*Buy only the amount of treated seed necessary, or treat only the amount of seed you're going to use.

\*Place treated seed in containers marked "poison" and fully identify these as containing treated seeds.

\*Don't reuse bags or containers which previously held treated seeds or were used in treating the seeds with chemicals.

\*Don't store treated seeds with animal feed, or in places accessible to livestock or children.

\*Destroy unused seeds immediately to prevent their use as livestock feed or human food. Burying small amounts of treated seed deep into the ground is a good way of disposing of them.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 12, 1971

To all counties  
Immediate release

DON'T UNDERESTIMATE  
MINNESOTA'S CLIMATE  
FOR CROP GROWTH

Don't underestimate Minnesota's climate for crop growth, say University of Minnesota soil scientists Lowell Hanson and Donald Baker.

During the early crop season Minnesota is rewarded with more hours of sunlight than points south. For April through July, Minnesota receives almost 100 more hours of daylight than Memphis, Tennessee. St. Paul receives 1806 hours of daylight compared to 1748 for Urbana, Ill., 1707 for Memphis, Tenn. and 1663 for New Orleans, La.

Summer temperatures in Minnesota are also more favorable for rapid growth of many crops than in southern states. The soil scientists compare sun's rays as the crops' fuel supply, and the thermometer as a kind of speedometer measuring crop growth rate. The higher the temperature, the faster the growth rate up to a certain point.

Corn growth increases up to 85 degrees and then falls off rapidly at higher temperatures. In Minnesota only 8 days average above 85 degrees, while just a few hundred miles south in Ames, Iowa, 14 days average about 85 degrees.

It has been found that during most of the growing season, areas south of Ames, Iowa such as Columbia, Mo., Fayetteville, Ark. and Baton Rouge, La. have night temperatures that are often above the optimum for corn. This is probably particularly important during the ear-filling months of August and September, the soil scientists say.

Lower temperatures during the growing season in Minnesota also mean that less water is lost from crop fields. For example, irrigation is usually necessary for corn production in central Nebraska, while southern Minnesota, with only slightly more rainfall, usually doesn't need irrigation.

add 1--Minnesota's climate

Water can be considered as the radiator or cooling apparatus of the plant. The higher the temperatures, the greater the loss of water by plant transpiration. A corn field in southwest Minnesota in May, for example, loses about 2,700 gallons per acre per day. The same corn field in July, however, loses about 5,400 gallons per acre per day.

Because of Minnesota's unique climate, you should have a skeptical attitude toward the value of crop water-use figures if the information is from a location with a different climate than your own farm, the soil scientists say.

More information on this subject is available in the most recent issue of Minnesota Science, a publication of the Minnesota Agricultural Experiment Station.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 12, 1971

To all counties  
Immediate release

IN BRIEF. . . .

Tips for Barn Fan Location. When locating fans in a new dairy barn the following tips should be considered:

\*Locate fans in the warmest part of the barn where they won't discharge into prevailing winds.

\*Fans can be located side by side, but should not be located nearer than 8 feet to outside doors.

\*In barns longer than 110 feet, place fans midway along one side wall.

\* \* \* \*

Urea Doesn't Provide Energy. Cereal grain rich in starch or some other source of energy is needed when using urea as a protein supplement, since urea provides no energy. University of Minnesota extension dairymen say the feeding value of poor quality, low protein, high fiber forage cannot be improved simply with the addition of urea. Cereal grains such as corn, wheat and barley are excellent components for urea containing rations.

\* \* \* \*

Plan Electric Power Use. Plan your long-range electric power use now. Adding air conditioning, grain drying, feed processing, and other electrical equipment will drastically increase your electrical service requirements. Be sure to include all possible additions in your planning. Talk over your ideas with your electric power supplier if you intend to add any of these electrical loads.

\* \* \* \*

Anti-Pollution Drive Needs Individual Effort. It's the duty and responsibility of each of us to recognize the great value of Minnesota's water resources. Each of us must be aware of this responsibility to minimize pollution.

\* \* \* \*

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 13, 1971

Immediate Release

#### FOUR MINNESOTA 4-H'ERS TO NATIONAL 4-H CONFERENCE

Four outstanding Minnesota 4-H'ers have been chosen to attend the National 4-H Conference April 18-23 in Washington, D. C.

They are Jerome Deden, Red Wing, Connie Hillyer, Thief River Falls, Steve Larson, Minneota, and Connie Lewis, Sherman, South Dakota (Rock County).

"Caring and Sharing" is the theme of the 41st National 4-H Conference. The discussions and speeches will cover these topics: respect for others, equal educational opportunities for all, maintaining a healthy environment, choosing lifestyles, and building a healthy mind and body.

Two hundred fifty 4-H members from the 50 states, Puerto Rico, the District of Columbia and Canada will discuss how the conference topics relate to 4-H'ers wherever they live and whatever their race, color or creed.

Deden, 18, is a freshman at North Dakota State University, Fargo. He has been president, vice-president and reporter of his local 4-H club. He is on the State Junior Leadership Conference planning committee for 1971. He attended the North Dakota 4-H Retreat, helping revamp the North Dakota Junior Leadership program and establish an ambassador program. He is the son of Mr. and Mrs. Vincent Deden.

-more-

add 1--4-h conference

Miss Hillyer, 18, has been a 4-H member for nine years. Active in the 4-H Public Speaking program, she has received numerous awards for her speeches. As a clothing project member, she made at least 40 garments. Miss Hillyer is a freshman at Concordia College, Moorhead, majoring in drama and speech. Her parents are Mr. and Mrs. Robert Hillyer.

Larson, 18, is a freshman at Southwest State College, Marshall. During his nine years in 4-H he participated in the 4-H Teen Caravan exchange with Norway and attended the Citizenship Short Course in Washington, D.C. He is a member of the 1971 Junior Leadership Conference planning committee. Larson has made numerous radio and television appearances in behalf of 4-H. He is the son of Mr. and Mrs. Norman Larson.

All the delegates served this past year as state 4-H ambassadors, helping acquaint the public with the 4-H program.

Leonard Harkness, state program director, 4-H and Youth Development at the University of Minnesota, and Miss Ute Wolfhard, assistant county extension agent in McLeod County, will accompany the delegates to the conference.

The Minnesota Bankers Association pays all expenses for the trips to the conference. Delegate selection was done by the Agricultural Extension Service of the University of Minnesota.

# # #

67-11h-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 13, 1971

Immediate Release

## FOOD PREPARATION, SANITATION PRACTICES BLAMED FOR ILLNESS

An apparent increase in a relatively new type of food poisoning in this country is in part due to Americans dining more in public places and using more frozen and other processed foods, according to a University of Minnesota scientist.

Only in recent years have "clostridium perfringens" microorganisms been implicated in food poisoning outbreaks in the United States, said Edmund A. Zottola, extension food microbiologist.

The recent change in food consumption patterns in the United States is a factor in the apparent increase in the number of "clostridium perfringens" food poisoning cases. Nearly half the meals are eaten away from home, whereas in the past almost all were eaten at home. Of the 100 million meals served a day by 400,000 food service establishments, 82 percent are served in public eating places and the rest in hospitals and other institutions, he said.

Also, food preparation is shifting from the traditional use of basic ingredients to pre-packaged, frozen, ready-to-cook, reconstituted, portion-control prepared and other ready-to-serve foods.

As a result, "people have a greater chance to become sick from contaminated food prepared away from home under unknown conditions," Zottola said.

add 1--food preparation

Outbreaks more often occur after large banquets or at schools or hospitals where large amounts of meat, poultry and gravies are prepared. Inadequate cooking of beef followed by cooling it slowly to room temperature apparently caused an outbreak of "clostridium perfringens" food poisoning in Tennessee public school system cafeterias. Of the 67,000 persons served the entree of braised beef on rice, about 13,500 became ill. This situation could have been prevented by adequately cooking the beef and rapidly cooling it below 45 degrees, he said.

Improper sanitation practices were the cause of an outbreak at a banquet in New York, where roast beef was served to 1,800 people. From two to 26 hours after the meal, about 900 people became ill with headaches, nausea, abdominal cramps and diarrhea. The illness was mild and lasted 12 to 24 hours.

"Clostridium perfringens" food poisoning was first noted in 1895 in Europe and for many years has been identified in England as a cause of food-borne illness.

Zottola's report appears in the new Agricultural Extension Service Bulletin 365, "Clostridium Perfringens Food Poisoning," available from the Bulletin Room at the University of Minnesota, St. Paul, Minn. 55101

# # #

66-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 15, 1971

Immediate Release

ADDITION/CORRECTION

The following paragraph was omitted from the release sent  
you April 13 entitled: Four Minnesota 4-H'ers to National Conference.

Miss Lewis, 19, is a freshman at the University of Minnesota,  
Morris. During her nine years in 4-H she has received many awards  
for her work in the health, clothing, horticulture and leadership projects.  
She has organized and is leading a special education 4-H club in Morris.  
She is a member of the planning committee for the National 4-H Conference.  
Her parents are Mr. and Mrs. James Lewis.

###

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 15, 1971

Immediate Release

#### 4-H HORSE CLINIC WILL BE JUNE 5

A 4-H horse project clinic will be held 9 a. m., Saturday, June 5, in the Hippodrome at the Minnesota State Fair grounds.

Well known Minnesota horsemen will conduct the discussions and demonstrations at the clinic, according to Wayne Carlson, assistant state leader 4-H and youth development at the University of Minnesota.

The morning clinic will feature demonstrations on preparing a horse for show, tack and equipment care, showmanship at halter and judging horses at halter. Afternoon demonstrations will cover hunter and jumper horses, English and western pleasure horses, horsemanship and winning at timed events.

All 4-H leaders and members are invited to attend. There is no admission charge.

The 4-H horse clinic is sponsored by the Minnesota Agricultural Extension Service and the Western Saddle Clubs Association., Inc.

###

69-11h-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 15, 1971

Immediate Release

British Expert:

COMMUNITY CONCERN NEEDED TO PROTECT ENVIRONMENT

Environmental improvement requires community cooperation, a British town and country beautification expert told a meeting Tuesday (April 14) at the University of Minnesota, St. Paul.

Graham Ashworth, director of the Civic Trust for the Northwest, Manchester, England, addressed the Minnesota Conference on Town and Country Beautification, sponsored by the University's General Extension Division, Agricultural Extension Service and Office of International Programs and the League of Minnesota Municipalities.

The Civic Trust, an independent agency formed in 1957, campaigns for high architectural standards throughout the United Kingdom.

An agency achieves maximum impact when environmental problems become a paramount concern--a top priority--to a maximum number of people, Ashworth said. A campaign to make people aware of environmental problems is needed first, then steps must be taken to talk about what needs to be done about the problems, he added.

Making environmental problems top priority requires determination--"stickability"--a quality many young people have, Ashworth said. Several British citizens become involved in environmental problems through the 650 amenities societies in the country, with memberships of about 50 persons in each group. The societies sponsor lecture programs and projects such as tree plantings, maintain vigilance committees concerned with local developments and conduct planning studies where local architects are recruited to prepare design schemes.

-more-

add 1--community concern

Due to heavy population density, most Britons recognize the need for environmental controls, such as design and development restrictions, Ashworth said. A Ministry of Environment has been established with a secretary of state for environment, thus setting a pattern for administrative control. But this does not automatically insure a high quality of planning, he added.

The United Kingdom has sufficient legal powers to control the environment, but lacks the needed funds to carry out programs. Ashworth cited specific gains in town and country beautification, but added that past achievements are "no more than a beginning in the United Kingdom."

Ashworth is the first Kermit A. Olson Memorial Lecturer. The annual memorial lecture was made possible from the estate of the late Kermit A. Olson, a graduate of the University of Minnesota with a major in horticultural science.

Also speaking on the program was Louis E. Reid Jr., chief of the Division of Technical Assistance of the U.S. Bureau of Outdoor Recreation.

Reid said "...the time may be ripe for enacting a national land-use policy." A bill establishing such a policy has been drafted by the Council on Environmental Quality and introduced into Congress. The bill, if passed, would authorize the secretary of interior to make grants to encourage and assist states to prepare and implement land-use programs. These programs would protect areas of critical environment concern such as, coastal zones, estuaries, shorelands, river flood plans, important lakes and streams and scenic and historic areas.

# # #

70-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 15, 1971

Immediate Release

## EARTH WEEK TO FEATURE POWER PLANT TALKS

A staff assistant to Gov. Wendell Anderson will discuss state government control of electrical power production Monday (April 19) during Earth Week activities at the University of Minnesota's St. Paul Campus Student Center.

Robert E. Crew Jr., a staff assistant to the governor and assistant professor of political science at the University, will speak at 4 p.m. during an open forum discussion on electrical power production controls and regulations. Crew has major responsibility for state liason to the State Department of Natural Resources and the Minnesota Pollution Control Agency.

Also on the panel will be Herbert S. Isbin, University professor of chemical engineering, speaking on nuclear energy and safety considerations. An official of Northern States Power Co. is also scheduled to speak.

On Tuesday, pollution controls and land use considerations in mass transit will be discussed at 10 a.m. by Metropolitan Transit Commission officials, including James Kosmo, information director, and David Therkelsen, public affairs administrative assistant. New systems of computerized personal transit will be discussed at 3 p.m.

Population problems will be featured on Wednesday from the viewpoints of two biologists and a psychologist. The feasibility and ecological consequences of the "green revolution" to increase the world's food supply through grain improvements will be discussed by University staff members on Thursday.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 15, 1971

SPECIAL

#### CANADIAN SCIENTIST TO RECEIVE UM AWARD

James B. Harrington, a Canadian plant breeder whose research has made great contributions to man's food supply through improved varieties of wheat and other crops, will be presented the University of Minnesota's Outstanding Achievement Award Saturday, April 17, at the St. Paul Campus.

Harrington, Chatham, Ontario, will be presented the award at the Institute of Agriculture's Alumni Banquet for the high eminence and distinction he has achieved in his field.

Harrington studied with the University's Department of Agronomy and Plant Genetics, receiving two degrees including a master of science in 1922 and a doctorate in 1924. At the University, he was a graduate assistant in plant breeding research from 1920 to 1924 and a Shevlin Fellow from 1923 to 1924.

He served at the University of Saskatchewan, Saskatoon, Sask., from 1924 to retirement in 1955, becoming head of the Department of Field Husbandry there in 1951.

-more-

add 1--canadian scientist

Harrington served with the United Nation's Food and Agriculture Organization (FAO) as an advisor on cereal breeding in the Egyptian Ministry of Agriculture from 1949 to 1950 and as a consultant on wheat improvement and production in the Near East from 1955 to 1962. He was a wheat improvement consultant in Pakistan for the External Aid Office of Canada from 1964 to 1965. Harrington was a temporary consultant in Mexico and lecturer on wheat improvement in the Near East from 1966 to 1969 for the Rockefeller Foundation.

He was elected a fellow of the Agricultural Institute of Canada in 1954 and also is a fellow of the American Society of Agronomy. Harrington received a doctor of laws degree from the University of Saskatchewan in 1965 and the Canadian government's Medal of Service in 1969.

# # #

daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 15, 1971

Immediate Release

#### EARTH WEEK TO FEATURE POWER PLANT TALKS

A staff assistant to Gov. Wendell Anderson will discuss state government control of electrical power production Monday (April 19) during Earth Week activities at the University of Minnesota's St. Paul Campus Student Center.

Robert E. Crew Jr., a staff assistant to the governor and assistant professor of political science at the University, will speak at 4 p.m. during an open forum discussion on electrical power production controls and regulations. Crew has major responsibility for state liason to the State Department of Natural Resources and the Minnesota Pollution Control Agency.

Also on the panel will be Herbert S. Isbin, University professor of chemical engineering, speaking on nuclear energy and safety considerations. An official of Northern States Power Co. is also scheduled to speak.

On Tuesday, pollution controls and land use considerations in mass transit will be discussed at 10 a.m. by Metropolitan Transit Commission officials, including James Kosmo, information director, and David Therkelsen, public affairs administrative assistant. New systems of computerized personal transit will be discussed at 3 p.m.

Population problems will be featured on Wednesday from the viewpoints of two biologists and a psychologist. The feasibility and ecological consequences of the "green revolution" to increase the world's food supply through grain improvements will be discussed by University staff members on Thursday.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 19, 1971

To all counties  
Immediate release

SPOTTED SWINE  
BOARD ADOPTS  
OPEN REGISTRY

Combining the best bloodlines of the Poland China and Spotted breeds should result in a superior source of breeding stock for commercial hog producers, says Charles Christians, extension livestock specialist at the University of Minnesota.

An "open registry" policy has been adopted by the National Spotted Swine Record and was effective April 1, 1971. Poland China breeding stock may now be registered with the National Spotted Swine Record. Poland China pedigrees submitted to the Spotted Record before July 1, 1971 will be recognized for a \$1 fee. After July 1, the fee is \$2.

The open registry policy should lead to the development of a sound, productive, fast gaining and muscular breed that will better meet the needs of the swine industry than either the Poland or Spotted breed by itself.

Anyone desiring more information on the open registry policy may contact either the National Spotted Swine Record, Inc., Bainbridge, Indiana, 46105, or Charles Christians, Extension Livestock Specialist, University of Minnesota, St. Paul, Minnesota, 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 19, 1971

To all counties

Immediate release

U SCIENTIST CITES  
NUTRITIONAL VALUE  
OF IMMATURE CORN

Lighter weight corn that has not fully matured due to either a killing frost or damaging hail or drought is worth nearly the same as fully ripe corn on a dry weight basis, according to a University of Minnesota scientist.

"Immature corn in the milk stage of kernel development may contain up to 50 percent more protein, but 10 percent less total digestible nutrients (TDN) and about two times as much fiber as ripe corn," Animal Scientist James Nordstrom said.

In feeding studies with lambs at the University, ruminant nutritionists have found that some immature corn contained 95 percent as much TDN as fully ripe corn-- yet this same corn on the market brought only 85 percent as much in price.

Livestock feeders have traditionally thought that immature corn has less feeding value than fully mature corn. But tests have shown that as the corn matures, starch is deposited at a faster rate than protein and a lower quality protein is laid down in the kernels during their later stages of development. That is the reason for the high protein value of immature corn, Nordstrom said.

On the basis of protein value, the immature corn actually makes a better feed than ripe corn for an animal such as the pig.

"Our studies have shown that young animals, such as the young pig, would grow two to three times faster when fed diets containing immature corn with no supplementary protein than when fed ripe corn. It would also take less supplementary protein such as soybean meal or skim milk to properly balance the immature corn," he said.

-more-

add 1--immature corn

It would not be profitable for a farmer to harvest corn before maturity just to obtain better quality protein because of the lower total yield and the harvesting and storage difficulties with the soft corn, Nordstrom said.

But immature corn, when properly dried or ensiled, will have nearly the same energy content as ripe corn on a dry weight basis and may even be superior in protein value.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 19, 1971

To all counties  
4-H NEWS  
Immediate release

4-H'ERS MAKE  
AMERICA BEAUTIFUL

"Keep America Beautiful" is more than just a slogan for many Minnesota 4-H'ers-- it's a year-round project.

These are the 4-H'ers who are participating in the Youth for Natural Beauty program in \_\_\_\_\_ County. Sponsors of the program are the University of Minnesota's Agricultural Extension Service and Northrup King and Co. of Minneapolis. \_\_\_\_\_ County 4-H clubs participate as a group in the program by identifying a community need and then organizing to improve the situation, according to County Agent \_\_\_\_\_.

Activities are as varied as the individuals involved. Many 4-H'ers renew their town with paint, mowers and many hours of hard work. The bleachers at the local baseball park frequently need a new coat of paint, and a community mailbox painting service can be a useful project.

Many public buildings benefit from the hard working 4-H'ers. They clean the town hall inside and out and then plant some flowers to brighten up the building. Some 4-H'ers have renovated old buildings for use as a youth center in the community.

The Youth For Natural Beauty Program may take the form of scenic and clean places for public recreation. 4-H'ers often clean up recreation areas and plant trees and flowers. Nature trails are made in the recreation area to acquaint the community with wild flowers, shrubs and trees. The program emphasizes community involvement and cooperation.

The 4-H'ers work with the highway department, township officers, conservation agencies, civic clubs and nurseries and florists in the program. They learn to work effectively with others and have community pride in their projects, \_\_\_\_\_ says.

Clubs that participate in the program submit a report of their activities for awards at the end of the year. If you are interested in participating in the program, contact the County Extension Office by June 1, 1971.

-11h-

Note: Add or substitute details about what your 4-H'ers did in the program last year.

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 19, 1971

To all counties

ATT: Extension Home Economists

Immediate release

### MENDING IS FORGOTTEN ART

Have you known women--your mother, perhaps--who took special pride in the beautiful mending they could do?

Mending seems to be a forgotten art. It takes skill and imagination if it is done in such a way that clothes do not look mended.

There are ways you can use mending to good advantage to repair tears and worn spots--yet give clothes a new look rather than a patched appearance. Thelma Baierl, extension clothing specialist at the University of Minnesota, suggests some ways:

. Over tears or worn spots on girls' clothes, use a colorful applique, a contrasting band or border, braid or edging you can buy at a notions counter. The decoration will cover up the damage and the added trim will give a fashionable look at the same time.

. On boys' clothes, patch with contrasting rather than matching material. Then repeat the patch on an undamaged elbow or knee. Patches are often deliberately noticeable, as in the tailored elbow patches of fabric or leather on men's sports coats and sweaters.

. Cover up holes or worn places on both boys' and girls' clothing by adding a pocket where there were no pockets before. Miss Baierl gives this added tip: when you shorten or alter a new garment, save the trimmed piece of material for future repairs.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 19, 1971

April 21 release

WASTES FROM DITCH  
CARRY PATHOGENS,  
UM SCIENTISTS SAY

Infection of man and animals is possible from the sludge, effluents and manure of an oxidation ditch used for livestock waste handling, University of Minnesota researchers said today.

Reports on University of Minnesota research were presented today (April 21) and Tuesday (April 20) at the International Symposium on Livestock Wastes at Ohio State University.

The U. S. Public Health Service granted the University of Minnesota \$90,000 in July, 1968, to determine the life expectancy of infectious agents in the wastes from an oxidation ditch.

Conducting the research under this grant were Doctors Stanley L. Diesch and Benjamin S. Pomeroy, both of the Department of Veterinary Microbiology and Public Health, and Professor E. R. Allred of the Department of Agricultural Engineering.

A public health problem is created when livestock wastes contaminated by leptospira, a pathogen capable of infecting man and animals, are handled in the oxidation ditch. In simulated winter conditions, leptospores survived in the aerated manure for up to 18 days and for shorter time periods in effluent and sludge, they reported.

For the past three years, University researchers have been evaluating the treatment of beef cattle wastes under below-zero winter temperatures at a pilot-size field installation ditch at the Minnesota Rosemount Experiment Station.

Russell E. Larson, an engineer with the U.S. Department of Agriculture, and James A. Moore, an agricultural engineer at the University of Minnesota, reported on the oxidation ditch at Tuesday's (April 20) session of the symposium.

add 1--wastes from ditch

Trial tests show that in some below-zero climates on oxidation ditch can be operated successfully for a 150-day batch period. Additional research is needed, such as a study of ditch operation at waste depths of five to six feet, which may be required by closer confinement of beef cattle. The interrelation between ventilation system design and efficient operation of the ditch also needs to be investigated, they said.

Solids handling, especially with high roughage and whole grain rations, presents some unsolved problems. Recovering and recycling unused feed may provide the means to reduce treatment cost by lowering feed costs and reducing the solid waste load, Larson and Moore said.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 19, 1971

To all counties

ATT: Extension Home Economists

Immediate release

HOME SHAMPOOING  
OF CARPETING  
CAN BE SATISFACTORY

When your carpeting gets soiled, can you shampoo it successfully yourself? Will the carpet look clean? Will the fiber affect soilability or efficiency of cleaning?

Findings of a cooperative research study completed at the University of Minnesota and South Dakota State University supply some answers. Some of the results of the study may also provide some guidelines for homemakers who are planning to select new carpeting. Here are some of the findings, as reported by Suzanne Davison, professor of home economics at the Minnesota Agricultural Experiment Station and Lillian Lund, professor of home economics at the South Dakota Station, who conducted the study.

Home methods of shampooing were perfectly satisfactory when a commercially marketed liquid concentrate shampoo was applied with an electric rug shampooer.

. Nylon carpeting changed the least of any fiber in the study after three years of heavy traffic.

. Higher priced wool, acrylic and nylon changed less in pile height than the lower-priced fibers.

. With continued use and more shampooings, the carpeting lost some of its resistance to soiling, making it necessary to clean it more often.

In the study, light beige panels of four different fibers--acrylic, nylon, olefin and wool--were assembled into a 10-by 16-foot rug and placed in heavy traffic areas of the home economics buildings on the St. Paul and Brookings campuses. Each fiber was represented by a sample in the low price and high price range.

The carpet was vacuumed daily throughout the test period. When maximum soiling was reached--as determined by photovolt meter readings--the carpet was removed from the corridor and shampooed.

add 1--shampooing carpeting

A commercially marketed liquid concentrate shampoo was mixed with cool water according to manufacturer's directions and the mixture applied with an electric rug shampooer. As each section was cleaned, the carpet pile was brushed in one direction to raise the nap and to avoid streaking. After the carpet dried, it was vacuumed thoroughly.

The rug panels were shampooed 12 times during the three-year study. With increased use and more shampooings, they soiled more quickly. Carpeting loses some of its resistance to soiling with age and wear, the researchers concluded. On the other hand, the home methods of cleaning restored the carpeting satisfactorily each time, even though more frequent shampooing was needed.

The higher-priced, thicker pile carpeting withstood wear better than its lower-priced companion fiber, with the exception of olefin. The lower-priced, shorter pile olefin carpet--the fiber often used for kitchen and indoor-outdoor carpets--showed only half the wear of the higher-priced, thicker pile olefin, which crushed and matted. Of all the fibers in the study, nylon--both the low and the high pile--outperformed the others. Nylon stood up better under the wear and also maintained its original appearance far better than the other carpeting.

The study is discussed in the winter issue of Minnesota Science, University of Minnesota Agricultural Experiment Station publication.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 19, 1971

To all counties  
Immediate release

IN BRIEF. . . .

Livestock Judging Clinic June 9-11. The latest trends in livestock evaluation will be featured at the University of Minnesota's annual Livestock Judging and Evaluation Clinic on the St. Paul Campus June 9-11. Programs start at 9 a.m. each morning. Swine judging will be featured the morning of Wednesday, June 9. The Wednesday afternoon program will include a discussion of arthritis in swine and how the disease affects carcass quality.

The beef cattle conference will be held on Thursday, June 10. Beef cattle judging will emphasize performance and changing type characteristics. The beef evaluation part of the clinic is sponsored by the Minnesota Beef Improvement Association and the Minnesota Shorthorn Association.

New in this year's program is the poultry and egg evaluation session scheduled for Friday, June 11. For registration materials, contact Charles Christians, extension livestock specialist, Peters Hall, University of Minnesota, St. Paul, Minnesota 55101.

\* \* \* \*

Field Day, Beef Bull Sale June 3-4. June 3 is the date for the Minnesota bull testing station field day at Lake Benton. The event will be held at the Jack Delaney bull test station 11 miles northwest of Lake Benton. The program starts at 3 p.m. The selection of Simmenthal bulls will be the featured attraction. Type and desirable carcass characteristics will be discussed by Richard Epley, University of Minnesota extension meats specialist. Judging contests will be held and there will be awards in both a youth and adult division.

The Minnesota Beef Improvement Association will hold their annual meeting in the evening.

Friday, June 4 is the date for the bull sale. Here's your chance to pick up a top-performing herd sire. All bulls on performance at the University test station will be offered for sale.

\* \* \* \*

add 1--in brief

Improvement in Environment. Some people overlook the fact that we have improved many aspects of the environment in "unnatural" ways. For example, it's often contended that many lakes were green and scummy before European man arrived in the U.S. This leads to the idea that it's futile or unnatural to attempt to improve them.

However, it's unnatural to raise corn on prairie grasslands and to build cities beside lakes, says Robert Megard, a University of Minnesota specialist in fresh water lakes. He points out that the benefits of raising corn and building cities justify the cost. Our efforts to improve lake quality are justified whether we are dealing with a naturally fertile lake or one damaged by man's activities.

\* \* \* \*

Urea Warning Issued. University of Minnesota extension dairymen advised dairy farmers that excess ammonia may build up in the cow's rumen faster than the bacteria can utilize it if too much urea is fed at one time or if sufficient carbohydrates are not readily available. This buildup can result in waste of nitrogen and possibly the animal's death. So it is recommended that no more than one-third of the nitrogen or protein equivalent of concentrates, including grains, come from urea. Feeding concentrates more often during the day so less urea is supplied at one time may make it possible to use more urea in the ration.

\* \* \* \*

Veterinary Medicine Open House. Open house at the University of Minnesota College of Veterinary Medicine is scheduled for Sunday, May 2. The event will run from 12 noon until 5 p.m. at the Veterinary Medicine complex on the St. Paul Campus. Veterinary students will demonstrate the latest developments in veterinary practice. So if you're interested in how veterinarians keep your dog, horse or farm animals healthy, plan on attending.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 20, 1971

Immediate Release

UM Scientist Says:

NUCLEAR REACTOR SAFETY BACKUPS PROTECT PUBLIC

The chance of serious injury from an accident at a nuclear power plant as determined by random failures is considerably less than one in a million per year, a University of Minnesota scientist said Monday at Earth Week activities at the University's St. Paul Campus.

Herbert S. Isbin, professor of chemical engineering and material sciences and a member of the Atomic Energy Commission's Advisory Committee on Reactor Safeguards, spoke during an open forum on electrical power production.

Although there are "no zeroes on the scale for unloading releases from a nuclear reactor," it is possible to provide reasonable assurance that nuclear reactors can operate with regard to public safety, he said.

Nuclear reactors are designed to withstand natural onslaughts such as earthquakes and hurricanes by providing safety backups. Also, designers are required to investigate the possibilities of failures in reactor components and safety backups engineered to contain radioactivity in the event of a reactor accident, Isbin added.

Controls are adequate so that nuclear reactor accidents can be coped with to minimize the consequences, he said.

Although the amount of electricity now provided by nuclear power plants is only a small percent of the total amount of electric power, by 1980 nuclear capacity will be almost 25 percent of the total generating capacity in the United States, Isbin said.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 20, 1971

Immediate Release

## TWO 4-H'ERS WIN LIVESTOCK SCHOLARSHIPS

Two Minnesota 4-H'ers with outstanding livestock records will receive scholarships to continue their agricultural education.

Bradley Swenson, Dawson, will receive the McKerrow scholarship, and Neal Glessing, Howard Lake, has been selected for the Minnesota Livestock Breeders scholarship. Both scholarships are for \$450.

The 4-H'ers were chosen according to their financial need, livestock records showing their growth in a livestock operation and scholastic achievements. They also must demonstrate leadership and involvement in 4-H, school and community affairs.

Bradley Swenson, 17, is a senior in the Dawson Public High School. A 4-H'er for nine years, he has received many awards for his work in the beef, sheep, horse and conservation projects. He has participated on both the 4-H and FFA general livestock judging teams in his area. Swenson has held several offices in his local 4-H club and is the president of the Lac Qui Parle County 4-H Leaders' Council. He plans to attend the Minnesota Technical College, Crookston, and major in agricultural production. His parents are Mr. and Mrs. DuWayne Swenson.

Glessing, 18, a senior in Howard Lake Public High School, has been a 4-H'er for eight years. He is the Wright County 4-H Federation vice president and has held several offices in his local club. He received many awards for his work in the dairy, conservation and junior leadership projects. He led a nine-county discussion group on ecology at Camp Courage, and has given talks to clubs on conservation practices. Glessing plans to follow either a food and fiber industry or an animal science curriculum at college. He is the son of Mr. and Mrs. Lorren Glessing.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 20, 1971

Immediate Release

## RESTRUCTURE STATE GOVERNMENT, CREW SAYS

Increasing public awareness of environmental problems and convincing the legislature to restructure state government to deal with these problems were called for Monday by a University of Minnesota political science assistant professor.

Robert E. Crew Jr., also a staff assistant to Gov. Wendell Anderson, made these suggestions during an Earth Week open forum at the University's St. Paul Campus.

Control of environmental problems in Minnesota and many other states suffers from a lack of coordination among various state agencies which results in a lack of overall planning, he said. State agencies are unprepared to deal with current environmental concerns due to lack of information and technical expertise, Crew added. Also, the public lacks formal channels through which it can be brought into decisions concerning the environment.

The Citizens League of Minnesota has recommended a reorganization of state agencies that deal with environmental control and having an arm of the governor's office provide coordination for these agencies.

# # #

71-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 20, 1971

Immediate Release

#### REGENTS APPROVE SUNDQUIST TO HEAD AG AND APPLIED ECON

Appointment of Wesley B. Sundquist, a U.S. Department of Agriculture administrator, as head of the University of Minnesota's Department of Agricultural and Applied Economics, was approved Friday (April 16) by the University's Board of Regents.

Sundquist of Annandale, Va., succeeds Professor Vernon W. Ruttan, who became director of the University's Economic Development Center. Professor Harald (cq) R. Jensen has served as acting department head since last July.

Sundquist will assume his new duties in June. He has been deputy administrator in the USDA's Economic Research Service since 1970 and has been chairman of the Social Science Department at the USDA's Graduate School in Washington, D.C., since 1968. From 1967 to 1968 he was chairman of the school's economics committee and from 1965 to 1970 he also was director of the Farm Production Economics Division of the Economic Research Service.

Sundquist was an associate professor in the University of Minnesota's Department of Agricultural Economics from 1961 to 1965 and was a researcher at Michigan State University, East Lansing, Mich., from 1954 to 1956 and at the University of Kentucky, Lexington Ky., from 1953 to 1954.

add 1-- sundquist

He has received three degrees in agricultural economics including a Bachelor of Science in 1952 from North Dakota State University, Fargo, N.D.; a Master of Science in 1953 from the University of Kentucky and a doctorate in 1957 from Michigan State University.

Sundquist was born Dec. 28, 1927, at Christine, N.D., He served in the Army from 1946 through 1947. He is a member of Gamma Sigma Delta, the national agricultural honorary; National Economists Club; American Agricultural Economics Society; International Association of Agricultural Economists and American Association of Farm Managers and Rural Appraisers.

Sundquist received the USDA's Superior Service Award in 1969.

# # #

daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 26, 1971

To all counties  
Immediate Release

IN BRIEF . . .

Tips on Starting New Lawn. When starting a new lawn, be sure to loosen and grade the subsoil before applying topsoil, advises Donald White, University of Minnesota horticulturist. Subsoil is below the root zone and topsoil is where the grass roots grow. Sandy soil is best for subsoil, which should offer good drainage. Sandy loam makes the best topsoil for turfgrass growth. Help establish turf in overly sandy or clayey topsoil by adding one inch of fibrous peat tilled to a depth of five to six inches. First apply about two inches of topsoil, mixing it with the subsoil. Then apply topsoil to a minimum depth of four inches, but preferably to a depth of six to eight inches. Send a post card for the booklet, "The Home Lawn," to the Bulletin Room, University of Minnesota, St. Paul 55101, or to your \_\_\_\_\_ County Extension Office.

\* \* \* \*

Contact Agent for Test Help. Your county agricultural extension office will furnish information and forms for testing topsoil when starting a new lawn. Soil test information is also available from the Department of Soil Science, University of Minnesota, St. Paul 55101. Apply 0-20-20 or 0-20-0 fertilizer at 20 to 30 pounds per 1,000 square feet, mixing thoroughly into the topsoil before grading, if it is impossible to test the soil.

\* \* \* \*

Fertilizer Suggestion Given. University horticulturists say it's a good idea to till 0-20-20 or 0-20-0 fertilizer into the topsoil when starting a new lawn, because phosphorus moves extremely slow in the soil. The possibility of phosphorus runoff is essentially eliminated when phosphorus is mixed throughout the topsoil. Tillage benefits the turf by placing the phosphorus where it is available to the grass root system. More information is in the booklet, "The Home Lawn." Just send a post card to the Bulletin Room, University of Minnesota, St. Paul 55101, or to your County Extension Office.

\* \* \* \*

-more-

add 1--in brief

Drop Finish Grade for Water Flow. Starting a new lawn? Be sure the finish grade drops at least one foot in 100 feet away from the house or in the direction that surface water will flow, University horticulturist Donald White advises. Follow grading with a light rolling to expose humps and hollows by filling the roller no more than one-third full. Correct surface irregularities by raking or by dragging an eight-foot or 10-foot, two-inch by 10-inch plank or a ladder across the lawn. After grading, rake a half-pound of actual nitrogen into each 1,000 square feet. Then your lawn is ready for seeding. For more information, get "The Home Lawn" booklet by sending a post card to the Bulletin Room, University of Minnesota, St. Paul 55101, or to the \_\_\_\_\_ County Extension Office.

\* \* \* \*

Seeding Suggestions Given. For most sunny lawn situations, use a mixture of 60-80 percent Kentucky bluegrass and 20-40 percent creeping red fescue, University horticulturist Donald B. White suggested. A mixture of 60 percent creeping red fescue and 40 percent Kentucky bluegrass is suited to most shady situations. No more than 5 to 10 percent of a mixture should be redtop, perennial, Italian or common ryegrass. High percentages of these grasses commonly are found in cheap mixtures that give unsatisfactory results. They are soft, short-lived grasses that germinate rapidly and are useful only in some locations where temporary or rapid cover is required.

\* \* \* \*

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 26, 1971

To all counties  
Immediate Release

REPRODUCTION RECORDS  
VITAL IN MANAGEMENT  
OF DAIRY CATTLE

Economically sound management of dairy cattle depends on adequate reproductive records, says University of Minnesota veterinarian Raimunds Zemjanis.

Good reproductive records should include the following information:

\* Calving dates--which aid in estimating length of lactation as well as the length of post calving rest.

\* Observed heat is another important reproductive event to be recorded. Records of observed heats during early post calving period aid in observing subsequent heats. A similar benefit is gained from recorded bleeding which occurs after heat.

\* Service dates and the bull used are two obvious entries.

\* Results of fertility examination and treatments should also be recorded.

Dr. Zemjanis suggests keeping these points in mind when choosing a record system:

\* The record must be simple and contain all essential information to be useful.

\* Records must be kept in a convenient location.

\* Entries must be arranged so that important information can be retrieved almost at a glance.

\* Individual records are preferable.

\* Time intervals such as between calving and heat and between heats or services are significant and should be entered so they may be easily and quickly calculated.

For day to day operation, a heat expectancy calendar is a must in every barn, Dr. Zemjanis says. Names or numbers of cows are entered in the calendar for the date when they're expected to return to heat following service or a heat observed too early for breeding after calving. Since detection of heat is the most serious problem, these heat expectancy calendars are extremely useful, the veterinary specialist concludes.

\* \* \* \*

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 26, 1971

To all counties  
Immediate Release

FARMERS' CREDIT  
SITUATION IMPROVES

The farm credit situation looks brighter for 1971 than it has for 2 or 3 years, says John Lee of USDA's Economic Research Service. He says that the farm credit situation should improve during the first half of 1971, but money may get tight again if we have a big economic boom. The improved credit situation affects farmers in three ways:

\*The sound commercial operator who has been able to get adequate production cash even during periods of tight money will now be able to get expansion money. He'll be able to invest in new machinery, add to his breeding herd or perhaps build a new porch or home. Many of these expenditures were postponed during the tight money period.

\*Some farmers who were considered marginal borrowers during tight money times will now be able to get credit. These were the people hurt most during the past 3 years although there's no evidence that farmers as a group were any worse off than other borrowers in the economy, Lee adds.

\*And, the cost of borrowed funds will be lower for all farm borrowers.

\* \* \* \*

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 26, 1971

To all counties

ATT: Extension Home Economists

Immediate release

SPRING DIETS  
SOMETIMES POOR

Your grandmother may have believed in a spring tonic of sulphur and molasses, but perhaps what you and your family need is a diet with more fruits, vegetables and milk.

More American families have poor diets during spring than at any other season of the year, according to studies by the U. S. Department of Agriculture. A Household Food Consumption Survey showed that 21 percent of the diets in the U. S. rated "poor" in spring compared with 18 percent "poor" in each of the other three seasons.

In the North Central Region--of which Minnesota is a part--diets rating poor in quality did not provide the recommended amounts of ascorbic acid, vitamin A and calcium.

These three nutrients are important to good health and well being, extension nutritionists at the University of Minnesota explain. Ascorbic acid or vitamin C, for example, helps to hold body cells together, keeps the walls of blood vessels strong and is needed to heal wounds. Vitamin A is needed for growth, helps protect against infection and helps eyes to adjust to dim light. Growing children need calcium for building bones and teeth, but older people need it also for the proper functioning of nerves, muscles and heart.

How can you improve your own and your family's diets this spring?

The first step is to build your meals around the four food groups: milk, meat, vegetables and fruits, breads and cereals, serving a variety of these foods.

A second step is to learn the best sources of the nutrients that may be lacking in your diet and to make a point of getting enough of these foods, say the nutritionists.

-more-

add 1--spring diets

Important sources of ascorbic acid (vitamin C) are oranges, cantaloupe, grapefruit, strawberries, broccoli, Brussels sprouts, raw cabbage, green and sweet red peppers, tomatoes and potatoes cooked in their jackets.

Foods high in vitamin A include liver; dark green and yellow vegetables like broccoli, turnip and other leafy greens, carrots, sweet potatoes, pumpkin and winter squash; apricots and cantaloupe; butter and fortified margarine; whole milk and cheese.

Milk provides more calcium than any other food. But you can get calcium, too, from ice cream, cheese, leafy vegetables such as dandelion, mustard and turnip greens.

-jbn-

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 26, 1971

To all counties

ATT: Extension Home Economists

Immediate Release

### HERE'S HOW TO MAKE CLOTHES LAST LONGER

Do the children's new clothes--and yours--wear out before you'd like them to?

Some preventive mending done while the clothes are still new will not only make them last longer but save a big mending job later. You can do this mending by hand or do some by machine if you prefer.

Thelma Baierl, extension clothing specialist at the University of Minnesota, suggests that you go over new clothes as soon as they are purchased and make these repairs:

- . Fasten dangling threads. Put the loose thread into a needle, bring to the wrong side and tie or fasten.
- . Make hems secure. If the hems have been poorly sewed with a chain stitch, ravel the stitch, wind the thread on a card and use it to hem the garment again.
- . Sew around buttonholes. Go around buttonholes with a blanket stitch or buttonhole stitch. Place the stitches close together. At the end of the buttonhole make a "bar tack" by sewing a few stitches over each other.

-more-

add 1--how to make clothes last longer

. Re-fasten buttons so there's no danger of losing them. Make a thread shank by using a double thread and fastening it in the cloth. Put a pin, toothpick or nail on top of the button. Make a stitch through the bottom over the pin or nail and through the cloth. After doing this about four times, take the pin or nail away, wind the thread from the needle around the thread between button and cloth to form a shank. Then fasten the thread on the wrong side.

. Reinforce seams. If the material ravel, overcast the seams. If the seams are narrow, machine stitch them a little deeper. Reinforce crotch seams and the curve of the sleeves by back stitching by hand or by machine stitching. You can do this on top of stitching already there.

. Strengthen pocket corners. Overlap a few stitches at the top corners of the pocket for added strength. Or you can make the corners still stronger by ironing on mending tape on the wrong side before stitching.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 26, 1971

To all counties  
4-H NEWS  
Immediate release

4-H LEADERSHIP  
MEET JUNE 15-18

\_\_\_\_\_ 4-H'ers from \_\_\_\_\_ County will attend the Minnesota  
(Number) (Name)  
4-H Junior Leadership Conference June 15-18 on the State Fair grounds.

(Insert paragraph giving names and addresses of the delegates from your county.)

The theme of the conference is "I Care." Keynote speaker will be Charles McCarty,  
mayor of St. Paul. Approximately 650 4-H'ers from all parts of Minnesota are  
expected to attend the conference, according to County Agent \_\_\_\_\_.  
(Name)

The conference objectives are to provide experiences which will help the 4-H'ers  
develop awareness of the ways we learn, understand people's problems and develop  
personal commitments to the theme "I Care."

Discussion groups and speakers will discuss how we learn to care, and how to  
show that we care. The delegates will make posters on the conference theme.

A banquet will be held at the Pick Nicollet Hotel sponsored by the Greater  
Minneapolis Area Chamber of Commerce. Friends of 4-H and selected company presidents  
will be recognized at the banquet.

Delegates will have a picnic at Como Park and attend a theater party. State 4-H  
Federation officers will be elected at the conference.

-llh-

NOTE: If any 4-H'ers from your county are on the conference planning committee or  
are continuation committee members write a paragraph listing their names and  
positions.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
April 27, 1971

Immediate release

## CARPET CAN BE CLEANED SUCCESSFULLY AT HOME

If you've wondered about the efficiency of cleaning your own carpeting, a recently completed study shows that home methods can be perfectly satisfactory.

The three-year research study was conducted by Suzanne Davison, professor of home economics at the University of Minnesota Agricultural Experiment Station and Lillian Lund, professor of home economics at the South Dakota State University Experiment Station.

The home method of rug cleaning restored carpeting almost to its original appearance when a commercially marketed liquid concentrate shampoo was applied with an electric rug shampooer, the home economists found. The home shampooing method was especially successful on nylon. Nylon stood up better under wear and shampooing than other fibers.

Four different carpet fibers were used in the three-year study: acrylic, nylon, olefin and wool. Light beige panels of the different fibers were assembled into a 10- by 16-foot rug and placed in heavy traffic areas of the home economics buildings on the St. Paul and Brookings campuses. The carpet was vacuumed daily throughout the wear period and photovolt meter readings were recorded at the end of every week to determine soiling. The photovolt meter is an instrument that measures changes in light reflectance, is used to determine soiling and changes in carpet surface due to wear. When maximum soiling was reached, the carpet was removed from the corridor and shampooed. Twelve different shampooings were required during the study.

-more-

add 1 -- carpet

Both research groups used a method of cleaning any homemaker might choose. A commercially marketed liquid concentrate shampoo was mixed with cool water according to manufacturer's directions and applied to the carpet with an electric rug shampooer. While the rug was still damp, the pile was brushed in one direction to raise the nap and avoid streaking. After the carpet dried, it was vacuumed thoroughly.

With more shampoos and continued use, the carpeting lost some of its resistance to soiling, making it necessary to clean it more often. On the other hand, light reflectance readings showed that the home method of cleaning restored the carpeting satisfactorily each time, even though more frequent shampooing was needed.

The higher-priced, thicker pile carpeting withstood wear better than its lower-priced companion fiber, with the exception of olefin, the fiber often used for kitchen and indoor-outdoor carpets. The lower-priced, short pile olefin showed only half the wear of the higher-priced, thicker pile olefin.

The study is reported in the winter issue of Minnesota Science, University of Minnesota Agricultural Experiment Station publication.

####

jbn-77-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 29, 1971

Immediate Release

#### FOOD PRICES EXPECTED TO INCREASE

If you're a typical American, you'll probably be spending nearly 5 percent more for food in 1971 than in 1970.

Most of the increase will come from rising prices of food eaten away from home, as well as higher marketing costs. Grocery store prices of food may average only 1 to 2 percent higher than in 1970--a sharp reduction from the 5 percent increase in 1970--but food eaten away from home will again cost substantially more in 1971.

These predictions were made at the recent National Agricultural Outlook Conference in Washington, D.C., according to Dale C. Dahl, extension economist at the University of Minnesota.

Although food prices are expected to move up during the first three quarters of this year, prices may level off or decline during the fourth quarter as large supplies of food come to market after the fall harvest.

This year you can look for lower average retail prices for pork, poultry, eggs, potatoes and some fresh vegetables, Dahl says. But you can expect higher prices for fish, dairy products, cereal products, sugar and processed vegetables.

Most of last year's large increases in retail grocery prices were attributed to a 7 percent boost in marketing charges because of higher wages and costs of other goods and services bought by marketing firms. Prices of farm products used for food contributed very little to the overall increase. A 7-1/2 percent jump in prices of food eaten away from home further contributed to the rise in total food costs in 1970.

The proportion of disposable income Americans spent for food in 1969 and 1970 held steady at 16.7 percent, but it is expected to be less in 1971. A decade ago Americans spent 20 percent of their income for food.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 29, 1971

Immediate Release

#### MINNESOTA FFA'ERS RECEIVE AWARDS

More than 130 young Minnesotans from 75 high school FFA chapters throughout the state were recently named winners of some \$5,000 in cash, plaque and trophy awards.

They will be honored at a noon awards luncheon on the St. Paul Campus of the University of Minnesota Monday (May 3) during the state FFA convention. The convention runs May 2-4.

State winners for this year include the following: Agricultural Electrification--Brian Brockway, Milroy; Agricultural Mechanics--Darryl Schuette, Owatonna; Beef Farming--David Able, Fairmont; Crop Production--Michael Krueger, Springfield; Dairy Production--Dean Opsahl, Goodhue chapter; Fish and Wildlife Management--David Schneck, Ortonville; Forest Management--Daniel Theel, Cherry High School, Iron.

Hog Farming--Mike Schweiss, Hector; Home Improvement--Dan Skwira, Pierz; Livestock Production--Curtis Radloff, Hector; Ornamental Horticulture--Jerry Clemenson, Zumbrota; Outdoor Recreation--Raymond Peterson, Forest Lake; Placement in Agricultural Production--Terry Strain, Byron; Placement in Processing--Michael Keefe, Thief River Falls.

Placement in Sales and/or Service--Gene Miller, Winthrop; Poultry Production--Paul Keehr, Little Falls; Sheep Farming--(dual winners) Glen Hoff, Halstad and Marty Rupprecht, St. Charles; Soil, Water and Air Management--Donald Schliep, Zumbrota; Chapter Farm Safety--(four State winners) Eagle Bend, Faribault, Ortonville and Stewartville chapters.

-more-

add 1--ffa awards

Regional Award winners are: Agricultural Electrification--David Wille, Staples; Tom Bjorndahl, Hawley; Patrick Mohr, New Ulm, Bruce Whitney, Delavan and Allen Janke, Northfield.

Agricultural Mechanics--Larry Stortroen, Climax; Don Reed, Staples; Larry Hesteness, Hawley; Roger Huhn, Litchfield; Dave Kubesh, Olivia; Tom Ahlers, Worthington and George Dickinson, Pine Island.

Beef Farming--John Baker, Ada; Richard Mittag, Eagle Bend; Gene Moske, Parkers Prairie; David Damof, Willmar; Douglas Anderson, Canby; Stephen Babcock Winnebago and Gary Olson, Lanesboro.

Crop Farming--Glenn Ramstad, Ada; Brian Roth, Staples; Dale Engen, Hawley; Dennis Johnson, Litchfield; Thomas Hoffman, Renville; Curtis Larson, Albert Lea and Jerry Weis, Pine Island.

Dairy Farming--Donald Slininger, Ada; Ronald Lashinski, Little Falls; Michael Heiser, Parkers Prairie; Douglas Gunnink, Princeton; Arnonl Alsleben, Glencoe; James Hansen, Tyler and Martin Tesch, Waldorf.

Fish and Wildlife Management--Ron Salber, Staples; Robert Schaefer, Frazee; James Weinkauf, Forest Lake, Wayne Fluegge, New Ulm and Franklin Fitch, Jr., Winona.

Hog Farming--Dennis Simonson, Fosston; Donald Eishens, Park Rapids; Kim Boyce, Parkers Prairie; Jerry Hanmeier, Foley; Donald Bruggeman, Windom; Edward Butler, Blooming Prairie and Craig Elliott, Kasson-Mantorville.

Livestock Production Award--Dale Hemberger, Halstad; Keith Granby, Staples; Greg Hughes, Barnesville; Craig Knutson, Atwater; Tom Nielson, Jackson; Bradley Ahrens, Owatonna and Richard Wardwell, Winona.

Ornamental Horticulture--John Capistrant, Staples; Brent Jacobson, Ortonville and Douglas Oniel, Worthington.

add 2--ffa awards

Outdoor Recreation--LeRoy Hall, Staples.

Placement in Agricultural Production--Larry Langevin, Thief River Falls; Gordon Hall, Staples; Dean Pederson, Graceville; Tom Bergman, Stillwater; Bruce Lenz, Renville; Jerry Vogt, Worthington and Duane Schroeder, Owatonna.

Placement in Processing--Thomas Larson, Staples; Roy Pietz, Elbow Lake; Mark Koenig, Buffalo Lake; Ron Carr, Tyler; Mike Steinbauer, Owatonna and Thomas Pries, Byron.

Placement in Sales and/or Service--Glenn Schack, Brainerd; Anthony Michener, Hawley; Steve Rumsey, Litchfield; Steve Hardies, Canby; Lynn Marsden, St. James and Dale Rud, Byron.

Poultry Production--Richard Boen, Fergus Falls; Kevin Yager, Howard Lake; Tim Burdick, Ortonville; Richard Besel, St. James; Earl Lynee, New Richland and David O'Brien, Pine Island.

Sheep Farming--Brad R. Irwin, Motley; Morris Fenlason, Ulen; Steve Kramer, Hector and Jon Penner, Mountain Lake.

Soil, Water and Air Management--Curtis V. Neal, Staples; David Emerson, Hawley; Ronald Reisdorph, Ortonville and Craig Rogers, Worthington.

Chapter Farm Safety--Ashby, Stillwater and New Ulm.

Concrete Improvement Award--Steve Nelson, Climax; Mark Larson, Staples; Greg Umlauf, Fergus Falls; Dennis Stern, Litchfield; David Popowski, Ivanhoe; Richard Mages, Sleepy Eye; Gene Chirpick, Wells and Charlie Prigge, Byron.

District Star Farmers--Larry Langevin, Thief River Falls; Edward K. Johnson, Barnum; Gary Shulstad, Barnesville; Lyle Christensen, Atwater; Doug Lueders, Canby; Thomas Gieseke, New Ulm; James Deidrick, Watertown and Marty Rupprecht, St. Charles.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minn. 55101 Tel. 373-0710  
April 29, 1971

\*\*\*\*\*  
\* Do Not Release Until After \*  
\* 8:30 p.m., Monday, May 3 \*  
\*\*\*\*\*

#### EAGLE BEND YOUTH NAMED FFA STATE STAR FARMER

Richard Mittag, 17, who owns and operates a 160 acre farm near Eagle Bend, received the 1971 Minnesota Star Farmer award this evening (Monday, May 3).

The son of Mr. and Mrs. Earl Mittag, Richard purchased the farm on a contract for deed from his parents in 1968. The purchase was financed from savings accumulated from gifts and wages earned by working for area farmers.

Young Mittag lives on the farm and is responsible for the operation and management of the crop and livestock enterprises.

He started the livestock enterprise by purchasing 5-day old calves from area farmers. Using the earnings from the livestock, he purchased more cattle which became the basis for his beef herd. Richard purchased the machinery from his father with repayment on a five-year loan.

Richard has initiated a heavy fertilization and chemical weed control program. In 1970 his corn yielded 85 bushels per acre, compared to the 56 bushels county average. Mittag has also constructed a new pole shed for his feeder operation and is remodeling the house.

Mittag has served as chapter reporter and president. He was a member of the parliamentary procedure team which competed in the 1970 and 1971 state contest, and received the Star Chapter Farmer award in crops and livestock. He has earned varsity letters in three sports and is a member of the school band and brass ensemble. He is also a member of his church youth group and 4-H.

Richard has enrolled in the farm operation and management course at the area vocational-technical school in Alexandria. He will continue to operate and expand his farming operation as a commuter student.

Named Regional Stars at the banquet were Glenn Ramstad, Ada; Richard Mittag, Eagle Bend; David Ferris, Osakis; Douglas Gunnink, Princeton; Mike Schweiss, Hector; Neal Hoyme, Hills-Beaver Creek; Bradley Ahrens, Owatonna; and Donald Schliep, Zumbrota.

Fourteen adults were awarded the state FFA honorary degree for their years of service to FFA members. They were: George Burger, manager of Max McGraw Wildlife Foundation, Dundee, Illinois; Howard Casmeay, State Commissioner of Education, St. Paul; Armando DeYoannes, Commissioner of Iron Range Resources and Rehabilitation, St. Paul; Don Keith, FFA Advisor, Braham High School; John Murray, president of Minnesota Vocational Agricultural Instructors Association, Jackson; Carl Nadasdy, former General Manager of North Central Wool Market Coop, Minneapolis; William L. Olson, former FFA advisor, St. Paul; Charles Painter, former area coordinator, Austin; T. V. Reese, Otter Tail Power Company, Fergus Falls; Harvey B. Sathre, House of Representatives, Adams; Palmer Sorlie, father of State FFA president, James - Osakis; James Swan, University of Minnesota Soils Department, St. Paul; Ken Unger, Minnesota Division of the American Cancer Society, Minneapolis; and John Zwach, U.S. Congressman, Washington, D. C.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
April 30, 1971

SPECIAL

## SCIENTIST SAYS 'NATURAL' FIRES VITAL TO FORESTS

Controlled fires are being set and other natural fires are being allowed to burn in some areas of the national parks in an effort to preserve the forests by U.S. National Park foresters.

Fire must be restored to the giant sequoia redwoods of the Sierra Nevada Mountains as nearly as possible in its age old natural role if we want to have the giant trees in the future, according to U.S. National Park Service biologist Bruce M. Kilgore, who spoke at the University of Minnesota this week. (April 28)

For decades, National Park Service policy has been to totally suppress all fires. The result of that policy has been the build up of dense thickets of young pines, white fir, incense-cedar and brush under the sequoia redwoods in areas that natural forest fires once burned clear every few years. The dense brush and tree thickets under the sequoia redwoods are now a source of fuel that could support a catastrophic forest fire that would seriously damage or kill the giant redwood trees, Kilgore said.

Natural fires caused by lightning are now being allowed to burn in over two thirds of the high elevation back country in Sequoia-Kings Canyon National Park located in the California Sierra Nevada Mountains. Elsewhere in the park, controlled forest fires are being set to clear brush and reduce the hazard of a major fire in the redwoods, Kilgore said.

add 1--natural fires

The new policy has a strange ring after hearing Smokey Bear say all forest fires are bad and "only you can prevent forest fires," but without some forest fires, many foresters feel that select forests such as the giant sequoias of California may not survive. Without the natural forest fires, redwood seeds either do not germinate or the seedlings do not survive, Kelgore said.

Fire has been recognized, Kilgore said, as probably playing a key role as a vital forest ecological agent in the following aspects:

\*Fires have occurred in the redwood forests every few years over past centuries and are a vital part of the redwood forest ecological system.

\*Periodic lightning fires reduce vegetation under giant sequoias that might provide fuel for a catastrophic fire which could destroy the entire forest.

\*Forest fires quickly convert brush, "down" logs, branches and litter to vital nutrients for the sequoias redwoods.

\*Fires remove brush and litter and expose mineral soil from time to time--a condition that is necessary for the germination of redwood seeds.

\*Mild forest fires favor browse types of brush which deer favor for feed.

In the past, forest fires have been classified as morally wrong. Now the role of fire in the development and preservation of sequoia redwoods must be considered, Kilgore explained.

In dealing with the problems that beset the redwoods, the assignment of restoring natural environmental conditions must be handled with humility and great ecological sensitivity, he said.

Kilgore's visit at the University of Minnesota was sponsored by the College of Forestry, with the cooperation of North Central Forest Experiment Station, U.S. Forest Service.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 3, 1971

To all counties  
Immediate release

CHANGE NEEDED IN  
RURAL BANK SYSTEMS

Small rural commercial banks have not kept pace with farmers' needs, maintains John Lee, a USDA economist.

He says small rural banks have limited loan funds and so are restricted on loan sizes to any one customer. But as farms grow, there's a need for larger operating loans.

A farmer with a moderate-size operation may need \$30,000 or even \$40,000 in cash for production expenses, but a small bank may be limited to lending only \$20,000 to a single borrower.

One proposal to remedy the problem involves correspondent bank relationships. Say a small country bank needs to make a loan of \$40,000 to an individual farmer. The small banker gets together with a larger bank on the loan. The small bank lends the farmer \$20,000. The larger bank puts up the other \$20,000, but the small bank services the loan. In other words, the small bank acts the part of an agent for a big city bank.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 3, 1971

To all counties  
Immediate release

RETAILING COSTS FOR  
FERTILIZER INCREASE

Minnesota's fertilizer industry suffers from too much competition, according to a report issued recently by the University of Minnesota's Agricultural Extension Service.

The report was prepared by agricultural economists Dale C. Dahl of the University of Minnesota and Robert A. Rathjen of Oklahoma State University.

The increase in the number and size of retail commercial fertilizer outlets in the past decade has outpaced the demand for fertilizer in Minnesota. This has resulted in firms struggling to meet the costs of selling fertilizer and to make a return on their investment. "The fact that there were several large, relatively new bulk blending facilities idle in 1970 testifies to the problem confronting the industry and individual firms," they said.

Although average fertilizer consumption volume is expected to increase in 1980 as compared to 1970, return on investments for many dealers will be insufficient. "The position of smaller dealers will continue to deteriorate as operating costs continue to rise and as farmers increasingly look to their farm supply dealers for associated services. Apparently, the decade of the 70's will be a period of consolidation in contrast to the expansionist period of the 60's," Dahl and Rathjen said.

Their report appears in "Minnesota Agricultural Economist," published by the Minnesota Agricultural Extension Service.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 3, 1971

To all counties  
Immediate release

IN BRIEF. . . .

Farm Credit Eases. More money will be available for farm borrowing in 1971. Interest rates will be 1 to 2 percent less than they were a year ago, maintains E. Fred Koller, University of Minnesota economist. Koller points out that interest rates are retreating from the highest rates in half a century, so for the rest of 1971 the cost of borrowed money should be lower than it was last year.

This increased availability of funds could help farmers expand their land, livestock or machinery holdings and to get operating capital at lower costs.

\* \* \* \*

Shorting Pigs on Protein is Expensive. Hog producers who "cheat" a little on the protein supplement due to high feed costs and low hog prices are only cheating themselves. Illinois research shows that pigs fed four percent less protein than recommended used 90 pounds more feed per 100 pounds of gain than did pigs fed an adequate ration. With corn at three cents a pound and supplement at \$120 a ton, cost of 100 pounds of gain increased by \$1.75 for the pigs receiving inadequate protein. Jerry Hawton, University of Minnesota livestock specialist, recommends the following protein levels for complete rations: weaning to 50 pounds, 18 percent protein; 50 to 100 pounds, 15 percent protein; 100 to 125 pounds, 12 to 13 percent protein.

\* \* \* \*

Mix Urea Properly. Urea by itself should not be fed to cows, University of Minnesota extension dairymen recommend. Urea is unpalatable, so most cows would not eat it straight. It is also impractical to weigh out accurately the small amounts each animal could utilize. It is very important to mix urea uniformly in the ration since improper mixing may result in poisoning animals that eat excessive amounts.

\* \* \* \*

-more-

add 1--in brief

Sod Buying Tips. Buy sod from a reputable landscape firm or producer, University Horticulturist Donald B. White recommended. The grass in the sod field should be freshly mowed at a lawn height of 1½ inches before it is cut. Rolled sod should be a uniform half-inch thickness and weed free. Generally peat or upland soil is satisfactory. On athletic fields and heavily trafficked areas, upland sod is recommended. A sodded lawn requires the same soil preparation as a seeded lawn. If you use peat sod, be sure to mix peat into the topsoil before laying the sod. For more information, see "The Home Lawn," available from the Bulletin Room, University of Minnesota, St. Paul, 55101, or the \_\_\_\_\_ County Extension Office.

\* \* \* \*

Sod In Spring. Sodding can be done as soon as spring plant growth starts, but is not recommended after Oct. 1. University Horticulturist Donald B. White said sod should be laid down immediately. Don't allow it to stand stacked and rolled for more than a day or two and then only when absolutely necessary. Lay the sod on moistened soil. Stagger the joints and fit the pieces as closely together as possible. Always lay sod across a slope, using short wooden pegs spaced a foot apart to anchor it. Soak the area immediately after laying the sod and keep it well watered until it is firmly rooted, which takes about three weeks. After it becomes established, treat it as you would an established lawn.

\* \* \* \*

Fertilizing Tips Given. The average lawn requires about four pounds of actual nitrogen per 1,000 square feet a year. Never apply more than a pound of nitrogen per 1,000 square feet at any one time. Lawns should be fertilized at the time of the first mowing in the spring. If you use a dry fertilizer. water the lawn adequately to prevent burning after applying it. See the publication, "The Home Lawn," available from the \_\_\_\_\_ County Extension Office. Or, send a post card to the Bulletin Room, University of Minnesota, St. Paul, 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 3, 1971

To all counties

ATT: Extension Home Economists

Immediate release

ROLL-TOP DESKS  
RETURNING TO  
FASHION SCENE

If you have an old roll-top desk hidden away in a corner of the basement, the attic or the garage, better get it out and put it to use--it's back in style!

Take a look at the desks on display in furniture stores and home furnishings departments and you'll find many new desks of the variety Americans refer to as "roll tops" and French call "tambours." Whichever descriptive name you apply, the desks have an arrangement of either horizontal or vertical slats that roll on a track. Since the tracks now used are of nylon, the slats roll easily and stay neatly in place, says \_\_\_\_\_, \_\_\_\_\_ County extension home economist.

An advantage of these desks is that it's an easy matter to roll the top over your work without putting it away and still hide the clutter.

The National Association of Furniture Manufacturers point to many roll-top designs that are currently popular. These include the kneehole double pedestal for the den or for student quarters, tall secretaries that have roll-top desk sections with display area above, the Governor Winthrop style with spacious drawers below the tambour desk area for living room or bedroom. There are also very feminine small-scaled desks for the women in the family.

The roll-top table desks are in high favor because they are usually scaled for smaller apartments.

The schoolmaster-type desk has a roll-top that conceals little drawers, pigeon holes and writing surface--much like the roll-tops of bygone days.

Whether you're looking for a desk for the teen-ager, the man or woman in the family, you can find a roll-top desk in a suitable design.

The desks are available in a variety of woods--cherry, walnut, birch, oak--or with pastel paint finishes, some with plastic writing surfaces. The price range is wide.

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 3, 1971

To all counties

ATT: Extension Home  
Economists

Immediate release

### WHAT MAKES A GOOD HAMBURGER

As you've eaten hamburgers haven't you wondered why some are better than others? There are reasons.

No hamburger will ever be better than the meat you start with. The cheapest price is not always the best buy. Hamburger is made from different cuts of beef, as well as from the trimmings. It should be purplish-red on the inside. Sometimes it is lighter red on the outside because meat exposed to the air turns the lighter color. Fresh hamburger feels crumbly and smells good.

To make hamburgers, mix the meat, salt and pepper together in a bowl. Lightly pat out seasoned meat into the size and shape you want. Heat the frying pan over medium heat. Put patties in hot pan and lower the heat. Cook patties on one side only until the pink of the meat is gone. Turn and cook the other side. Don't press down on patties as you turn since this squeezes out the meat juices. And, only turn hamburgers once because it is easy to overcook them.

Hamburgers can be cooked on the broiler too. Lay seasoned patties on the broiler pan and broil about four inches from the heat.

When the hamburgers are ready to serve, set out the catsup, mustard, pickles, onions and the buns. Provide a pot of baked beans, bowl of carrot sticks, pitcher of milk and platter of fresh fruit. Now, sit down and enjoy the meal with your family.

-lsn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 3, 1971

To all counties  
4-H NEWS  
Immediate release

4-H CAMPING  
PROGRAM IS  
GROWING

More than 7,000 4-H'ers from almost every Minnesota county take part in the 4-H camping program every year.

\_\_\_\_\_ 4-H'ers from \_\_\_\_\_ County will attend \_\_\_\_\_  
(Number) (name of camp,  
\_\_\_\_\_ this summer. They are \_\_\_\_\_,  
location and date) (Names) (Addresses)

Campers have the opportunity to participate in outdoor recreation, water front, craft classes, wilderness hiking and many other programs. Through these activities the 4-H'ers learn to appreciate the out-of-doors and relate to the environment.

The 4-H'ers also learn how to work with their fellow campers, counselors and adult leaders. A camping program is effective only if it relates to the needs of the camper, according to County Agent \_\_\_\_\_.

4-H'ers are given a time at camp when they can be quiet and think about the things that are important to them. The natural setting provides a place where the body and soul can forget the pressures and demands of modern living. Campers learn how they relate to the out-of-doors, God, themselves and others, says Marian Larson, assistant state leader 4-H and youth development, at the University of Minnesota.

There is a variety of camping programs in Minnesota. Resident camps are designed to work with one group of campers for a week or less. Day camps continue for a series of days with the same campers, but they return home each night. Wilderness camps feature canoeing trips into the northern forests of Minnesota and other lakes and streams throughout the state.

Winter camps are gaining in popularity with the increasing interest in the snowmobile project. Campers enjoy winter sports and living in cabins. Special opportunity camps serve many different 4-H needs. Some are for the economically, physically or mentally handicapped youth. Others are foods, career or teen camps.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 5, 1971

Immediate Release

#### FFA ELECTS NEW OFFICERS AT CLOSING SESSION

The Minnesota Future Farmers of America elected a new slate of officers at the closing delegate session of their annual convention this week on the St. Paul Campus of the University of Minnesota.

Named 1971-72 state president was Steve Thal, 17, Watertown. The son of Dr. and Mrs. I.L. Thal, Steve helps his parents operate their 160 acre farm north of Watertown. They raise horses and feed out Holstein feeder steers.

His high school FFA adviser is Vernon Richter. Young Thal also won the Extemporaneous Speech Contest.

Other new state officers are Rodney Christianson, 17, Halstad, first vice president; Paul Fixen, 18, Minneota, secretary; Roger Steinkamp, 18, Renville, treasurer; Tom Husnik, 18, of Forest Lake, reporter; and Martin Rupperecht, 17, St. Charles, sentinel. Paul Day, W.J. Kortesmaki and Odell Barduson were re-elected as state adviser, executive secretary and executive treasurer, respectively.

The other newly-elected state vice presidents are: Ken Carlson, Barnum; Gary Schulstad, Barnesville; Cort Arlien, Howard Lake; Larry Buysse, Minneota; Dave Vanderkoi, Worthington; Dale Wische, Arlington; and Henry Tvedt, Byron.

Winners of several convention contests were also announced.

In the Parliamentary Procedure Contest, first place went to the Kenyon chapter, coached by John Shelstad. Second place went to Faribault and third place to Halstad.

-more-

add 1--new officers

Henry Tvedt of Byron was named first place winner in the Minnesota FFA Public Speaking Contest. He received a \$100 National FFA Foundation award and a gold watch from the Minnesota Farm Bureau for his talk on pollution problems. He will represent Minnesota at the Regional FFA Public Speaking Contest in Kansas City on October. Tom Husnik, Faribault was second place winner and Pat Porisch of Mountain Lake was third. Pat is the first girl in state FFA's 41 year history to compete in State finals.

The annual Creed Contest was won by William Weber of Luverne. Second place winner was Alan Anderson of Barnum and third was Karl Kronebusch of Lewiston.

Each of the finalists in public speaking, creed speaking and extemporaneous speaking received a State FFA Foundation trophy.

The chapter winners in the third annual FFA delegate quiz sponsored by the Delta Theta Sigma fraternity were Graceville, first place; and Thief River Falls, second place.

The individual awards in the delegate quiz were: Greg Hallstrom, Thief River Falls, first; and Ken Roberts, Graceville, second place. Richard Mittag, member of the Eagle Bend FFA chapter, was the winner of the state-wide Individual Leadership Contest and received a trophy donated by the Farm House fraternity. Roger Steinkamp, Renville, was second and Kerry Gronewold, Truman, was third.

The following chapters won the third annual Collegiate FFA Innovation Awards: Lake Crystal, first; Amboy-Good Thunder, second; Plainview, third.

The University of Minnesota Ag. Ed. Club PR Image Award winners are: Eagle Bend, Hills-Beaver Creek and Amboy-Good Thunder.

-more-

add 2--new officers

The following chapters were winners in the first annual Building Our American Communities (BOAC) program: Gold emblem chapters - New Richland, Stillwater, Le Center and Redwood Falls; Silver emblem chapters - Morgan, Litchfield, Waterville-Elysian, Winona; Bronze emblem chapters - Chaska, Kasson-Mantorville and Watertown. The Le Center chapter was named state winner of BOAC.

# # #

86-jms-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 5, 1971

Immediate Release

## FFA HONORS CHAPTERS, OUTSIDE SERVICE GROUPS

The Minnesota Future Farmers of America honored outstanding chapters and gave special recognition to individuals and organizations supporting FFA programs during the group's annual convention earlier this week on the University of Minnesota's St. Paul Campus.

Chapters receiving outstanding achievement awards for the 1971 "Corn Drive for Camp Courage" were: Montevideo, Norwood-Young America, Princeton, Freeborn, Elk River and Glenville. These six chapters were among the 152 chapters that contributed, from sales of gleaned corn or donated farm crops, more than \$46,900 to finance camperships for handicapped youngsters at Camp Courage for Crippled Children near Annandale. The FFA funds also helped refurbish the speech therapy building and construct greenhouses in the camp's work-study area. Minnesota FFA chapters have contributed over \$200,000 to Camp Courage since 1953.

The New Ulm chapter won the FFA cooperative award, based on classroom and off-school campus study and participation in cooperative activities. The chapter adviser and two officers will get an expense-paid trip to the Minnesota Association of Cooperatives (MAC) meeting in Minneapolis in October.

The Faribault chapter placed second, and Renville third, in the cooperative contest and received travel awards from Midland Cooperatives, Inc. and Mutual Service Insurance Companies.

-more-

add 1--ffa honors

The Minnesota FFA Association presented special service plaques and official FFA paperweights to the following individuals for their encouragement and support of state FFA programs: John Sperbeck, assistant professor and extension information specialist, University of Minnesota; Joseph Strub, meteorologist, U.S. Weather Bureau; Earl Kuehnast, state climatologist, University of Minnesota; Donald Baker, soils science professor, University of Minnesota; Dick Tretsven, State Department of Agriculture, St. Paul; Curt Norenberg, Office of Special Programs, University of Minnesota, St. Paul.

Donald Keith, Braham High School FFA adviser, received a desk pen set for service on the Minnesota FFA Board of Directors.

Some 20 chapters received superior gold emblem ratings and were awarded University of Minnesota Alpha Gamma Rho Fraternity chapter contest certificates at the Tuesday afternoon awards assembly held as the final event at the annual convention. They were: Blooming Prairie, Byron, Eagle Bend, Evansville, Faribault, Forest Lake, Goodhue, Lamberton, Mountain Lake, New Ulm, Ortonville, Paynesville, Redwood Falls, Renville, St. Charles, St. James, St. Peter, Sleepy Eye, Springfield and Stillwater. Entries from four of these top 20 chapters will be selected to represent Minnesota in the 1971 National Award Program.

Other superior chapters in Minnesota include: Ada, Adams, Albany, Ashby, Atwater, Buffalo Lake, Elbow Lake, Fergus Falls, Franklin, Graceville, Grand Meadow, Hoffman, Howard Lake, Jackson, Jeffers, Kimball, Montevideo, Olivia, Owatonna, Parkers Prairie, Pine Island, Pipestone, Stewartville, Thief River Falls, Tyler, Wells, Westbrook, Wheaton, Willmar, Windom, Winona and Worthington.

add 2--ffa honors

Participating FFA chapters received honor citations from the Minnesota Division of the American Cancer Society for their activities in the field of health hazards of smoking. Many chapters have put on smoking and health educational programs for their own members and other youth groups and others have submitted entries in the American Cancer Society's poster-slogan contest on smoking and health. Over 3,000 posters were submitted in the contest.

Minneapolis Association for Retarded Children, Inc. (MARC) honored four FFA chapters for contributing to "Christmas for the Mental Retarded Project." The Gaylord FFA chapter contributing over \$300 and led the cash drive. Blackduck was second in contributions and the Northfield and Blooming Prairie chapters led in gift contributions.

# # #

85-jms-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 5, 1971

Immediate Release

### FFA JUDGING CONTEST WINNERS ANNOUNCED

Individual and chapter winners in over a dozen judging contests were announced at the state FFA convention on the University of Minnesota's St. Paul Campus this week.

Chapter judging contest winners were as follows: Adams, farm management; Pipestone, soils; Jackson, livestock; Owatonna, dairy cattle; Silver Lake, farm mechanics; Tyler, crops; Pierz, horticulture, Ortonville, poultry; Lake Crystal, wildlife; Freeborn, dairy products; Kasson-Mantorville, meats and Toivala-Meadowlands, forestry.

High individual FFA judges were Paul Lammers, Adams, farm management; Gene Geesman, Jackson, livestock; Dennis Hearsma, Pipestone, soils; Ken Hebranson, Battle Lake, dairy cattle; John Kelzer, Waconia, dairy holder; Mark Tetrick, Redwood Falls, beef holder; Dan Hagen, Osakis, farm mechanics; Mitch Klempe, Blooming Prairie, crops; Daniel Flotterud, Zumbrota, horticulture.

Also, Mike Johnson, Jackson, poultry; Kevin Rollings, Lake Crystal, wildlife; Doug Jacobs, Freeborn, dairy products; John Thrombley, Litchfield, meats and Ron Lahti, Toivala-Meadowlands, forestry.

###

83-jms-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 10, 1971

Immediate Release

#### AMERICANS ARE MEAT EATERS

Americans have been eating more meat each year since 1965-- and the increase in meat consumption is expected to continue in 1971.

Red meat consumption last year rose to a record 185.5 pounds per person, according to Dale C. Dahl, extension economist at the University of Minnesota. Beef is by far the most popular meat. Beef consumption in 1970 totaled 113.4 pounds, a new record.

Along with more meat, Americans ate more poultry, fish, vegetable oils, processed potatoes, sugar and sweeteners last year. They ate about the same number of eggs as the year before but fewer dairy products, fresh potatoes, cereal products and animal fats and drank less coffee, Dahl reported.

For 1971, per capita food consumption may increase 1 percent, with animal products again making up the greatest proportion of the increase. During the first half of 1971 consumption of livestock products is expected to be higher than in the same period in 1970, largely because Americans have been eating more pork.

###

jbn-87-71

# AGRICULTURAL EXTENSION SERVICE • UNIVERSITY OF MINNESOTA

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 10, 1971

to all counties

ATT: Extension Home Economists

Immediate release

### GOOD HEALTH CAN MAKE A NEW YOU

General well being and a good appearance go hand in hand. Good food habits can make a difference.

Are you always tired? Does a gnawing hunger cause you to snack all of the time? Do you lack zip to do the things you'd like to do? If so, check the food you eat every day.

Do you eat some food from each of the four food groups each day? They are the milk group, bread and cereals, meat and fruit and vegetables. There is no one perfect food.

An adult needs at least 2 cups of milk each day, a teenager 4 or more. Other foods in the milk group such as cheese and ice cream can replace part of the calcium in the milk, for example, a 1-inch cube of cheddar cheese for one-half cup of milk or one-half cup ice cream for one-fourth cup of milk.

Eat at least four servings of bread and cereals which are whole grain, restored or enriched. These include macaroni, spaghetti, noodles, rice and all baked goods besides the usual bread and cereals.

Also eat four servings of fruits and vegetables. Try to use dark-green and deep-yellow vegetables daily as well as citrus fruits and tomatoes.

From the meat group, eat at least two servings each day. These include eggs, poultry, fish, dry beans and peas, nuts and peanut butter, as well as all kinds of meat.

And, eat other foods to round out your meals. These include fats and sweets.

A copy of the Daily Food Guide which lists what you should eat every day is available from your county extension office. Keep it handy in the kitchen to remind you to feed your family well.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 10, 1971

To all counties

ATT: Extension Home Economists

Immediate release

PARENTS SHOULD BE  
STUDENTS OF PARENTHOOD

Parents exert the strongest force in the lives of children, yet most people have less training for the job of parenthood than for any other job they will hold during their lifetime.

"We must receive training and demonstrate competence before being permitted to enter into most important careers except marriage and parenthood," says Ronald Pitzer, extension family life specialist at the University of Minnesota. "We must pass a test and obtain a driver's license before we are permitted to drive a car, but to become a spouse and a parent, we need prove only that we are of age and can afford a marriage license," he adds.

Although through the centuries parents have been guided by some combination of tradition, experience and common sense in bringing up children, these are no longer adequate in a society which is increasingly complex and rapidly changing, Pitzer declares.

Since parenthood is one of the most important jobs in society, parents need to learn all they can about child development and their own roles as parents. They should, therefore, become students of parenthood, realizing that they will improve as they learn more.

As students, parents will undertake some self-analysis, giving attention to their values and the goals they hope to achieve in the role of parent. They will read widely, yet be critical of what they hear or read, constantly asking what significance the material has for their own situation and asking the source of the speakers or writer's knowledge. They will not see themselves primarily as rule followers or expect to get simple rules of procedure. Instead they will perceive themselves as problem-solvers, seeking to improve their competence to deal effectively with day-to-day child-rearing situations confronting them.

add 1--students of parenthood

As students of parenthood they will realize that they are not expected to be perfect. They will be aware that they may not have learned enough to be able to solve some particular problem; hence they will seek to learn more. If a situation seems to be beyond their present ability to handle they will be aware of sources of assistance and may go to someone who can help them find the answer.

Parent education classes are one of the sources of information for the student of parenthood. If you are interested in such a class, contact your county extension office to find out what possibilities are for organizing a group.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 10, 1971

To all counties  
Use if applicable

REUNION FOR  
RURAL YOUTH

A number of former members of the \_\_\_\_\_ County Rural Youth-Young Adult Citizens and their families will attend a steak fry and statewide reunion of RY-YAC at the Como Park Pavilion in St. Paul at 12 o'clock Sunday noon, June 20.

\*(Among those attending from this county will be: )

Representatives are expected from each of the 67 counties which formerly had RY-YAC, Extension-sponsored groups for young people.

Visits to the conservatory and the zoo and carnival rides for the children are planned for the afternoon.

Former RY-YAC members interested in attending the reunion should notify Earl Bergerud, assistant state leader, 4-H and Youth Development, University of Minnesota, St. Paul, Minnesota 55101 by June 1.

-jbn-

\* Add if you know who are going.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 10, 1971

To all counties  
4-H News  
Immediate release

LOCAL YOUTHS TO  
CONSERVATION CAMP

\_\_\_\_\_ 4-H'ers from \_\_\_\_\_ County will be among 100 club members  
(No.-write out)

attending the State 4-H Conservation Leadership Camp June 7-11 at the University of Minnesota's Forestry and Biological Station at Itasca State Park.

They are: (names and addresses).

4-H'ers are chosen to attend the camp on the basis of their leadership potential, willingness to assume responsibility and interest in conservation, forestry and entomology programs. They must also have a record of achievement in the conservation project.

(Give some facts here about conservation achievements of members going to camp.)

While at the camp members will study wildlife, plants, trees and entomology. Tours of the park and ecology studies at selected sites are also scheduled. Recreational activities will include a steak fry, outdoor sports and songfests.

A decathlon will feature such events as log sawing, match splitting, bait casting, nail driving, tree identification and tug-of-war.

The camp promotes the 4-H conservation program in Minnesota by leadership and subject matter training in this project and by developing an awareness of the condition and interrelationship of Minnesota's natural resources and environment. The camp helps youth develop a commitment to use and support sound environmental management practices. It also gives 4-H'ers an opportunity for a meaningful group living experience in an outdoor setting.

The Conservation Camp is sponsored by the Federal Cartridge Corporation and the University of Minnesota's Agricultural Extension Service.

###

\* Note to Agent: If an adult leader is attending the conference, include his name and address in paragraph 2 along with this explanation: Adult leaders attending the camp will be trained as county chairmen of the conservation project.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 10, 1971

To all counties  
Immediate release

CATTLEMEN REMINDED  
OF FIELD DAY, SALE

Cattlemen are reminded that a beef cattle judging contest and evaluation clinic is scheduled for Thursday, June 3 at the Delaney bull test station 11 miles northwest of Lake Benton.

The event is open to 4-H and FFA members, and judging teams may be entered, says Ray Arthaud, University of Minnesota extension animal scientist. Registration starts at 1:30 p.m. and the contest begins at 2:30.

A program on the new Simmental breed will follow the judging contest. Don Vaniman, national secretary of the Simmental Association, will discuss the breed and various programs offered by the association. Simmental cross bulls will be on display.

Ray Schnell, a noted auctioneer and cattleman, will discuss bull selection and breeding of commercial cattle.

On the following day, Friday, June 4, about 70 tested bulls will be sold starting at 1 p.m. These bulls have been on a 140 day official test and many of them have gained more than 3 pounds per day, Arthaud says. Some gained over 3.5 pounds. Arthaud points out that rate of gain is highly heritable, so these high gaining bulls can be expected to pass on much of their superior gaining ability. Many of the bulls have outstanding conformation along with excellent size, he adds.

Breeds which will be sold include Angus, Charolais, Hereford, Polled Hereford, Shorthorn and Simmental cross bulls.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 10, 1971

To all counties  
Immediate release

APATHY THREATENS  
ERADICATION PROGRAM  
FOR HOG CHOLERA

Although the number of hog cholera cases reported in the United States continues to drop, federal officials fear that apathy born of optimism threatens the state-federal cholera eradication program.

According to the National Hog Cholera Committee of Livestock Conservation, Inc., federal officials say the 54 percent decrease in cases in 1970 and the continuing downward trend justify the forecast of a "hog cholera free U. S." in December, 1972.

But they warn that the eradication program cannot succeed until the last known source of hog cholera virus has been located and wiped out. This means that areas being plagued with re-occurring outbreaks will need to concentrate on the problem.

Also, more intensive efforts are needed to establish the source of infection in isolated cases that keep popping up, they added.

An April 8 outbreak of cholera set back Minnesota's eligibility for a "hog cholera free" status to March 10, 1972, assuming there are no further outbreaks up to that date.

Dr. Ray Solac, extension veterinarian at the University of Minnesota, says cholera should be suspected first in sick or dead pigs and suspected cases should be reported early so an official head count can be made to insure adequate indemnity payments. Since there are non-fatal strains of hog cholera, it is important to check with a veterinarian immediately on all herd health problems, he added.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 10, 1971

To all counties

May 14 release

UM SCIENTIST  
TELLS YUGOSLAVIANS  
OF SWINE RESEARCH

Rapid weight gain in baby pigs does not assure rapid and efficient gain during the final growing period, Robert J. Meade, University of Minnesota animal scientist, said at a Yugoslavian trade fair.

Meade presented two papers at the Novi Sad International Trade Fair, May 14-24 at Novi Sad, Yugoslavia.

Meade cited results from 16 experiments where the effects of nutrition and management during the early life of pigs were studied. Several experiments showed that pigs that weighed less at 56 days or attained weights of 45 to 50 pounds at older weights, gained faster and more efficiently during the final growing period than pigs that reached 45-50 pounds by 56-59 days of age.

These pigs also tended to yield leaner carcasses. Meade concluded that rapid weight gains during early life and heavy weights at 56 days of age do not assure that these pigs will gain more rapidly and efficiently during the final growing period and yield more desirable carcasses than pigs that may weigh as little as 30 to 40 pounds at 56 days.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 10, 1971

To all counties  
Immediate release

IN BRIEF. . . .

Farmers Have Less Debt. Are farmers getting too deeply in debt? Not in comparison to most major industries in the nation, answers John Lee of USDA's Economic Research Service. He points out that although farmers are borrowing more than twice as much as at the start of the 1960's, their debt of \$60 billion on January 1, 1971, amounts to less than 20 percent of total assets.

Farmers now approach credit like businessmen, Lee continues. "They see money as a tool to expand and increase productivity. And if by borrowing more they make more--- they borrow."

\* \* \* \*

I.D. for Dairy Calves. You need a positive identification of each dairy calf born last fall and winter, and there's still time to use a sketch, snapshot, tatoo, freeze branding, eartag or neck chain before you lose track of the calves during the summer. If you use ear tags, supplement them with a permanent identification such as sketches, freeze branding, tatoos or photos. Record the information with the date of birth and identification numbers of the sire and dam for future reference. You'll need the information when you select the heifers to be used for herd replacements.

\* \* \* \*

Spot Spray Weeds. You can spot spray weeds when isolated patches appear in your lawn. Another method is to tie a cellulose sponge to a stick, dip it into the herbicide solution and brush the weeds with it. For more information, see "The Home Lawn," available from the \_\_\_\_\_ County Extension Office or the Bulletin Room, University of Minnesota, St. Paul, 55101.

\* \* \* \*

-more-

add 1--in brief

Ear Muffs for Tractor Drivers. Do you have ringing ears and head noises for a few hours after you get off the tractor following a day's work? This is a sign of exposure to noise stress which can cause loss of hearing. Another sign of trouble is when your speech seems muffled after you've been around loud noise for an extended period.

A pair of lightweight acoustical ear muffs will help reduce hearing losses even if you wear them only part of the time, maintains John True, University of Minnesota extension agricultural engineer. He points out that research has shown that most farm tractors make enough noise--above 85 decibels--to be potentially dangerous to hearing. A Canadian research project showed that farmers have a greater loss of hearing than the general public and that amount of hearing loss increased according to time spent operating tractors.

Ear muffs are available through safety equipment and sporting goods stores. They could prove to be one of the best investments you've ever made.

\* \* \* \*

Crabgrass Control Told. Control annual grassy weeds such as crabgrass before they appear in the spring, which is before Memorial Day. Good pre-emergence crabgrass control chemicals include Dacthal, Tupersan, Betasan and Balan. You cannot seed grass during the season you use these chemicals, but Tupersan controls crabgrass and can be used in combination with a new seeding. You don't need to control annual weeds after they have seeded or near the end of the growing season. Post-emergence crabgrass control is not commonly recommended. See "The Home Lawn," available from the \_\_\_\_\_ County Extension Office or the Bulletin Room, University of Minnesota, St. Paul, 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minn. 55101  
May 11, 1971

Immediate Release

UM Economist:

#### MINNESOTA'S DAIRY PRODUCT MIX SHIFTS

Cheese and powdered milk have joined butter as Minnesota's top volume dairy products, broadening the state's major dairy product mix since World War Two.

While continuing to lead the nation in butter production, Minnesota also has become the leader among the states in powdered milk production since World War Two, according to E. Fred Koller, agricultural economist at the University of Minnesota.

Output of powdered milk in Minnesota increased three-fold in 20 years-- from 160.4 million pounds in 1950 to 482 million pounds in 1970.

The rapid increase in cheese production is a further indication of the changing dairy product mix of Minnesota plants. Output more than doubled from 1965 to 1970 and 1971 output is likely to be considerably larger as new cheese plants and expanded capacity come into production, Koller said.

Average cheese output per plant in 1970 in Minnesota was 10 million pounds compared with an average of 1.7 million pounds in 507 Wisconsin plants in 1969. "Most of the state's cheese plants are large, modernly equipped and operate very efficiently," he said.

--more--

add 1--dairy product mix

The number of fluid milk plants in the state declined from 236 in 1940 to 63 in 1971 with the move toward larger scale plants. Economies resulting from larger size may lead to further concentration in the number of fluid milk plants in the 1970's, Koller added.

The rapidly increasing volume of Grade A milk in Minnesota is another significant change in the state's dairy industry. Grade A milk accounted for 14 percent of the state's output in 1962 as compared to 25 percent in 1970. Output of Grade A milk in the state included about 2.5 billion pounds in 1970 and 1.5 billion pounds in 1962.

Dairy farm returns are increasing gradually with the shift to Grade A milk, since Grade A prices received by farmers average about 50 cents per hundred-weight more than manufacturing grade milk prices.

Also changed in Minnesota's dairy industry is the market organization. In 1969 and 1970, more than 100 of the state's local and smaller regional dairy cooperatives were merged into three large regional cooperations-- Associated Milk Producers, Inc., Land O' Lakes, Inc., and Mid-America Dairymen, Inc. With the mergers came the closure of local plants and a shift from plant to milk receiving station status as processing concentrated into fewer, larger plants. These changes are expected to continue in the 1970's, he added.

The merged and greatly revised market organization in the state may incur some problems, but in general it should bring significant net gains to dairy producers. Improved returns for milk are expected to result from the superior bargaining position of the large cooperatives in some fluid milk markets, making it possible to charge dealers higher than federal order prices for milk, Koller said.

# # #

88-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minn. 55101 Tel. 373-0710  
May 13, 1971

Immediate Release

#### FIRST SUCCESS WITH FROZEN BOAR SEMEN CONFIRMED

The first success with frozen boar semen reported by University of Minnesota Animal Scientist Edmund Graham in October of 1970 has been confirmed by repeated conceptions.

Since the first litter conceived from frozen boar semen was born last October 11, a total of 46 sows were inseminated and 19 have conceived, about a 41 percent rate. Graham and his co-workers are continuing their research in the hope of developing techniques which can be used by commercial hogmen.

"Our conception rate of 41 percent probably would have improved about 20 percent if we had used two inseminations instead of one," Graham says. "If we can get our techniques to the stage where we have about 80 percent conception with frozen semen, commercial hogmen will benefit if an acceptable heat synchronization technique is developed and cleared.

"Eventually frozen boar semen will be economically significant for commercial swine producers, but a practical heat synchronization technique must be developed," Graham adds.

Heat synchronization would allow hogmen to make maximum use of facilities by breeding a large number of sows at one time. Farmers would know within a few days of when their sows would be farrowing and could plan to move pigs in and out of the facilities accordingly.

-more-

add 1--first success

The scientists found that glycerol--commonly used in freezing bull semen--reduces enzyme action in boar semen. "Our conception rate dropped to zero when we added 7 percent glycerol," Graham says.

Funds for the research project came from the Hill Family Foundation. All animals for the research project plus feed and manpower were furnished by the Cargill research farm at Elk River, Minnesota.

# # #

89-jms-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 17, 1971

To all counties  
4-H NEWS  
Immediate release

4-H'ERS ARE BUYING  
SEWING MACHINES

If you're a 4-Her enrolled in the clothing project, you're involved in one of the most popular activities not only in 4-H but throughout the nation. Home sewing helps stretch your clothing budget and gives you the satisfaction on knowing you've made an original and very personal garment.

With the rising interest in home sewing, many girls are buying their own machines. Here are some guides to help you decide which machine is best for your needs, from Athelene Scheid, extension clothing specialist at the University of Minnesota.

As you compare machines pay particular attention to those operations done repeatedly in home sewing--threading the machine, taking out and putting in the bobbin and winding the bobbin. Can these be done easily and quickly? Then check the adjustments made most frequently--like stitch length, needle thread tension and pressure. Are the dials for these adjustments easy to read and re-set after they have been changed?

Does the machine have adjustable back lock positions for the forward and reverse stitching control? Is there an automatic bobbin cut-off? Is the needle area well-lighted and is the lamp placed so it will not burn you during normal use of the machine? Positive answers to these questions on the easy use of a machine increase the joys of home sewing.

When testing different machines at the shop run them at a slow and fast speed to make sure both speeds run smoothly. The machine should be free from noticeable vibration and it should also start quickly and smoothly to insure easy sewing.

-more-

add 1--4-H news

Then try the machine on some of your material. Stitch both straight and curved seams. Notice whether the fabric has a tendency to drift to the right or left or whether one layer of material tends to creep over the other during sewing. It's important that the machine operates properly in these respects.

When you're checking the machine remember to use many different types of material in the machine. Use a soft sheer blouse fabric, a heavy coating fabric, thick fabrics, smooth fabrics, bumpy fabrics, and knit fabrics both tricot and double. This range of fabric should give you a good check on tension, stitch and ease of movement under the pressure foot.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 17, 1971

To all counties

ATT: Extension Home Economists

Immediate release

KNOW KIND OF  
SEWING MACHINE  
YOU'LL NEED

Since a sewing machine is a fairly big investment, you should know something about the kinds of machines available before you buy.

High school graduates often receive a sewing machine as a gift for use at college. Whether you're a parent planning to buy such a gift or a graduate with gift money to spend on a machine, be sure you know how to select the right machine before you invest your money in it, cautions \_\_\_\_\_, \_\_\_\_\_ County extension home economist.

Athelene Scheid, extension specialist in clothing at the University of Minnesota, says there are three basic kinds of sewing machines. They are the straight-stitch, the semi-automatic zig-zag and the fully automatic machine. The straight-stitch machine does the everyday work that makes up the greatest part of your sewing: clothing construction, the mending and altering, and the making of curtains and slip covers.

The second type of machine also does straight stitching but the needle can stitch from side to side as it moves forward. This zig-zag stitch has many practical and decorative applications. The third type, the fully automatic zig-zag machine, will perform all of the functions of the semi-automatic zig-zag and will also make a number of automatically sewn decorative stitches with no special skill required of the operator.

-more-

add 1--sewing machine

The type of sewing you do determines what machine will be best for you or someone else. You can decide what type of machine you need, then compare several different models in at least two or more different makes of machines. Pay particular attention to those operations done repeatedly in home sewing--threading the machine, taking out and putting in the bobbin and winding the bobbin. Can these be done easily and quickly? Also check the adjustments made most frequently like stitch length, needle thread tension and pressure. The dials for these adjustments must be easy to read and re-set after they've been changed.

The needle area should be well lighted and the light shouldn't be in a place where it will burn you during normal use. Adjustable lock positions for the forward and reverse stitching controls make sewing easier, too. The machine should also have an automatic bobbin cut-off.

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 17, 1971

To all counties

ATT: Extension Home Economists

Immediate release

### IT'S PICNIC TIME-- USE MAY PLENTIFULS

Why not dust off the old picnic basket, check the picnic supplies and shop for your first picnic foods from the May Plentiful Foods list. Memorial Day weekend could be your first outing of the season.

Eggs head the May Plentiful Foods. Why not hard-cook some, or make deviled eggs? Milk and cheese are on the list also. You could use some eggs, along with plentiful potatoes and fix that first potato salad of the season. Add sandwiches made at home or pack the makings and prepare them on the spot.

Include some fresh fruit and ask one of your children to make a batch of cup cakes or cookies to complete the menu. Of course, you'll add whatever else your family likes to go with their picnic foods. Remember to keep family picnic foods simple to fix, handy to carry to the spot and easy to eat.

You'll want to be extra sure that all foods that start from home cold are kept cold until time to eat. This applies to foods that start from home hot; keep them hot until time to eat.

But if you prefer to spend Memorial Day weekend at home, check the prices on turkeys, because they are on the May Plentiful Foods list also. Turkeys with parts missing or skin tears may be better buys. Round out your at home menu with potatoes, a vegetable, a salad, plentiful canned cling peaches for dessert and milk for everyone

-lsn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 17, 1971

To all counties

Immediate release

EXERCISE CARE  
WHEN OPERATING  
POWER LAWNMOWER

Your power lawnmower is a safe and efficient machine--if you use it right. But a bit of carelessness on your part could lead to a serious injury.

John True, extension agricultural engineer at the University of Minnesota, suggests following these safety precautions.

- \* First of all, know your controls--read the operator's manual carefully.
- \* Disengage clutches and shift into neutral before starting the motor. Start the engine carefully with feet well away from the blades.
- \* Make sure the lawn is clear of sticks and other debris which could be thrown by the blade.
- \* Stop the engine before pushing the mower across walks, drives or roads.
- \* For mowing slopes, mow across the slope if you have a walk-behind mower and down the slope if you have a riding model.
- \* Never cut grass by pulling the mower towards you.
- \* Never use a plug-in electric mower in the rain or when the grass is wet.
- \* Maintain your mower so it's always in safe operating condition. True suggests a frequent check of all fasteners, guards and parts.
- \* Stop the engine and disconnect the spark wire before checking or working on the mower.
- \* And, never add fuel to a running engine.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 17, 1971

To all counties  
Immediate release

REGISTER NOW  
FOR LIVESTOCK  
JUDGING CLINIC

A machine which produces a "photograph" of backfat and loin eye measurements of live animals will be featured at the annual livestock judging and evaluation short course on the University's St. Paul Campus Wednesday morning, June 9, 1971.

The new ultrasonic machine called the "Observer" will be demonstrated by Tom Eckhart from the International Livestock Improvement Service in Ames, Iowa. This will be the first public showing of the machine, according to Charles Christian, extension livestock specialist at the University of Minnesota.

The livestock judging and evaluation short course runs from June 9 to 11. The swine judging clinic starts at 9 a.m. on Wednesday, June 9. Sheep judging will be held Wednesday afternoon. Chairman of the sheep and swine judging committee is Bert Moore, livestock judging coach from North Dakota State University.

The beef cattle judging clinic is scheduled for Thursday, June 10. The all-day affair starts at 9 a.m. Judging events are scheduled throughout the day. Of special interest will be a Simmental-Hereford cross and Angus steer evaluation. A smorgasbord dinner is scheduled for 7 p.m, followed by an address on "The Changing Beef Cattle Industry," by C.D.Swaffar, executive secretary of the American Shorthorn Association.

Special women's day events are scheduled on Thursday afternoon.

A new event this year is the poultry judging clinic scheduled for Friday, June 11. The purpose of this clinic is to train coaches and others working with 4-H and FFA youth with procedures involved in competitive judging contests.

Registration fee is \$5 for the livestock judging and evaluation short course. Register through your county extension agent, or write to Charles Christians, Peters Hall, University of Minnesota, St. Paul, Minnesota 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 17, 1971

To all counties  
Immediate release

CUT DAIRY FEED  
COSTS BY IMPROVING  
RUN-DOWN PASTURES

Fertilization plus a good weed control program can turn unproductive pasture into a profitable crop, says Oliver Strand, University of Minnesota extension agronomist.

Some farmers are abandoning unproductive pastures in favor of dry lot feeding, Strand says. However, almost two-thirds of Minnesota dairymen use some pasture and you'll be wise to consider the possibilities of improving unproductive pasture areas to take full advantage of all your land resources.

There are two basic methods of pasture improvement in use--renovation and pasture fertilization plus weed control.

Pasture renovation means killing the unproductive grass and weeds in the pasture area by either chemicals or tillage or a combination of both. The pasture area is then reseeded to a suitable legume-grass mixture. Renovation works best when you start in the fall and usually requires the pasture area to be out of production during the year of seeding establishment.

The pasture fertilization and weed control practice can be used effectively where there's at least half a stand of bluegrass or other grasses such as bromegrass, timothy, orchard grass or Reed canary grass. Get a soil test from the top 3 to 4 inches, then apply phosphate and potash according to soil test results.

Fifty pounds of actual nitrogen should be applied early in the spring. This is equivalent to 150 pounds per acre of ammonium nitrate (33.5-0-0). Additional increments of nitrogen can be applied again in June and early August if moisture conditions are favorable. A broadleaf weed control of low volatile 2,4-D ester at 1 pound acid equivalent per acre should be applied when perennial broadleaf weeds are 6-8 inches tall. This is about the last week in May to early June in most of Minnesota.

add 1--cut dairy feed costs

Strand cites these results from a Stearns County pasture study conducted in 1970 to show the value of improved pasture management in increased grass yields.

<u>Treatment</u>	<u>Green weight, pounds per acre</u>		
	<u>Grass</u>	<u>Broadleaf weeds</u>	<u>Total</u>
2,4-D ester 1 lb/A	3485	436	3921
Nitrogen 33.5 lb/A	3049	4792	7841
2,4-D plus nitrogen	8276	-	8276
Untreated check	871	3049	3920

As you see, when 2,4-D plus nitrogen was used grass yields increased about ten-fold compared to the untreated check and broadleaf weeds were completely wiped out.

The study conducted on Ken Albers farm near St. Cloud in cooperation with Extension Agents Francis Januschka and David Hart.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 17, 1971

To all counties  
Immediate release

IN BRIEF. . . .

Handle Gasoline Safely. Gasoline kept around the house for power lawnmowers and boats is a prime cause for accidents, so don't store it in glass or plastic containers. Glass containers break easily when dropped and gasoline dissolves some plastics. In either case, the risk of fire is great, say University of Minnesota agricultural engineers. Keep gasoline in a good quality safety can of heavy metal. Most hardware stores stock safety cans ranging in size from a quart to five gallons. They are relatively inexpensive and a must for safe storage.

And, don't use gasoline as a solvent for paint brushes, to clean floors or engine parts, or to light barbecue fires. Gasoline gives off an invisible vapor which is 130 times its bulk. This in turn converts to more than 1500 times its volume of air into an explosive mixture.

\* \* \* \*

Control Lawn Weeds. Mowing generally controls weeds in a new lawn during the first year. Never use herbicides on a new lawn without first reading the label, Donald B. White, University horticulturist recommended. The best weed control is a healthy turf, so use nitrogen-phosphorus-potassium (N-P-K) fertilizers. When using weed control chemicals, read the label carefully and follow the manufacturer's directions. With 2,4-D herbicides, use only the low volatile forms and take precautions to prevent spray or drift from contacting shrubs or other plants in the area. Apply herbicides only when there is no wind and temperatures are 70 degrees or more. Apply all but crabgrass control chemicals during the growing season.

\* \* \* \*

-more-

add 1--in brief

Keep SMV Emblems Clean. Use a soft rag dampened with kerosene to clean SMV emblems. The kerosene will cut road tar and grease on the emblem without harming its reflective and fluorescent properties. If nothing else is available, try diesel fuel or fuel oil followed by washing with a mild detergent. But do not, under any circumstances, use solvents such as carburetor cleaners or penetrating oils or gasoline.

\* \* \* \*

Don't Let New Lawn Dry. Newly seeded lawn should be watered two or three times a day for 10 to 20 minutes at a time. Never allow the seedbed to dry out once it has been watered. As seedlings develop, apply water in greater quantities at longer intervals until the grass is well-developed. Then water it at one-week intervals, applying about one inch of water at a time or as needed. For more information, see "The Home Lawn," available from the Bulletin Room, University of Minnesota, St. Paul, 55101, or the \_\_\_\_\_ County Extension Office.

\* \* \* \*

Farm Loan Repayments Good. Farm loan repayments over the past 3 years have been good. Delinquencies are relatively few and foreclosures have been rare, says John Lee, a USDA economist. However, some exceptions occurred in localized areas where drought, southern leaf blight or low livestock prices hurt farmers' incomes severely.

\* \* \* \*

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 18, 1971

(First of six stories)

HIGHER PROFITS  
POSSIBLE FROM  
SANDY SOILS

Many of the state's 8 million acres of sandy soils could become highly productive and profitable, according to recent experiments at the University's Sand Plain Experimental Field near Elk River, Minnesota.

Presently the sandy soil areas of Minnesota are responsible for relatively low economic returns to farmers and communities due to low rainfall and low moisture-holding ability of the soil, said Paul Read, University of Minnesota horticulturist.

Read lists some of the most successful projects at Elk River:

\* Experiments with irrigation and soil amendments such as peat have resulted in corn yields in excess of 200 bushels per acre on the sandy soil.

\* Irrigation plus fertilizer treatments provided yield increases of over 400 percent in sunflower trials. Irrigated rye yields were as good or better than the best yields obtained elsewhere.

\* Yields of alfalfa were nearly doubled from 3.3 tons per acre on non-irrigated plots to 6.2 tons per acre on irrigated plots.

\* In potato variety trials on sandy soils, the highest yielding variety, Norchief, averaged 573 hundred weight per acre. Five other varieties tested yielded in excess of 500 hundred weight per acre.

\* Slow release fertilizers demonstrated that second applications were not needed when applied at the normal time of the first sidedressing.

\* Succession cropping experiments offer hope to the grower of growing two crops each year. Early peas have been successfully followed by snap beans, sweet corn, transplanted crops and late potatoes. However, snap beans after snap beans also exhibited promise to more efficiently use the land and equipment.

add 1--higher profits possible

The overriding purpose of experiments at the Sand Plain Experiment Station is to manipulate the environment in such a way as to overcome the disadvantages and utilize the advantages of Minnesota's sandy soils.

Among the disadvantages are the soils' low moisture--holding capacity and low ability to hold fertilizer nutrients.

Sandy soils have many key advantages though. Most coarse textured soils drain rapidly. This aids earlier soil preparation and eliminates serious compaction problems. Because water does not build up in sandy soils, they warm up and dry faster in the springtime, allowing the farmer to plant earlier. The low-water, low-nutrient holding characteristics of sandy soils actually allow operators to more closely control crops.

Experiments at Elk River in asphalt barrier research show that irrigation waters can be prevented or slowed from percolating down through sandy soils and away from root zones. The asphalt is laid down by a plow that scoops deep below the soil surface displacing only a few inches of soil while the hot asphalt is sprayed into place through powerful jets. The thin continuous layer of asphalt then hardens and prevents moisture from draining away from the root zone of crops.

The asphalt barriers increased yields on onions, potatoes, sweet corn and field corn.

# # # #

NEXT WEEK: Crop Yields Boosted With Buried "Soil Barriers."

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 19, 1971

Immediate Release

#### APPLE GROWERS: CHECK RUST, SCAB FUNGI

Take steps now to combat cedar apple rust and scab fungi, Herbert G. Johnson, University of Minnesota extension plant pathologist, advised home gardeners and commercial growers.

The next rainfall should cause red cedar trees to sprout spore-producing, jelly-like horns. The spores produced by these horns cause cedar apple rust on the leaves, fruit and young twigs of apple trees. This process is repeated following rains until about mid-June. After that time there is no new infection of apple trees for the season, Johnson advised.

Apple tree leaf infection will be evident as yellow spots which continue to develop into August when the spots' centers are red and spots' undersides have cushion-like structures.

Two fungicides should be combined for rust control since apple spray mixtures contain captan fungicide which controls scab but not rust, Johnson said. For rust control, add another fungicide such as zineb, maneb plus zinc, zinc ion plus maneb, thiram, Polyram, Niacide M or ferbam. These fungicides control scab too, but captan and dodine have been somewhat superior in scab control, he added.

Scab, which survives in leaves during the winter, first appears as soot-like blotches after new growth starts, then appears as distinct black spots. Scab infections can continue through the season since the fungus produces new spores throughout the season.

Apple disease control publications are available from your County Extension office. Or, send a post card to the Bulletin Room, University of Minnesota, St. Paul, Minnesota, 55101. Ask for Extension Pamphlet 184, entitled "Home Fruit Spray Guide," and Plant Pathology Fact Sheet 4, "Cedar Apple Rust."

###

90-daz-71

Department of Information  
Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 19, 1971

Immediate Release

## SCLB INFECTION DOWN AT SOUTHERN SPOTS

Southern corn leaf blight is less prevalent than it was a year ago, according to inspection reports and test plantings in some southern locations, according to Herbert G. Johnson, University of Minnesota extension plant pathologist.

No serious problems are anticipated at this time, but some loss of corn stands may result from the blight in Minnesota, he said.

The blight was found in trace levels in southern Florida and two other locations in southern states as the result of inspections of several hundred fields and test plantings with hybrids susceptible to the blight.

In many northern and southern states, southern corn leaf blight fungus has successfully survived the winter on corn plant refuse above ground, but not on refuse that was plowed down last fall or deliberately buried. Fungus survival could result in some early season infection, but normally the warm temperatures, rain, dew and humidity needed for a rapid spread of the fungus are not present early in the season.

Several days of warm temperatures and rainfall or dew on the foliage are needed for a rapid build-up of the fungus, but temperatures are likely to restrict fungus build-up until mid-summer. At that time, rain, dew and humidity will be critical factors.

add 1--sclb infection

Varying weather conditions make accurate predictions of the severity of southern corn leaf blight impossible in Minnesota. But it may be possible to find wilting plants soon as a result of seed infection, since the earliest plant corn in the state has emerged.

Johnson added that it is not always possible to distinguish whether a wilted plant has died from southern corn leaf blight or some other cause. Plants wilted from southern corn leaf blight generally have some streaks on their leaves, are stunted in growth and have lost their root systems.

# # #

89-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 20, 1971

Immediate release

#### GROUND BROKEN FOR CEREAL RUST LABORATORY

Ground was broken this week for a new Cereal Rust Laboratory on the University of Minnesota's St. Paul Campus.

The new \$486,650 building is financed entirely from federal funds. It will have office and laboratory space for six professional specialists and nine support personnel from the United States Department of Agriculture. Construction of the new building is expected to be completed in May, 1972, according to John Rowell, research leader.

The Cereal Rust Laboratory is the national center for investigations on black stem rust of wheat, oats, and other small grain cereals. Total estimated losses caused by these diseases in the Central United States from 1952 to 1970 was over \$73.4 million dollars, says Rowell.

Cooperation between the laboratory and wheat breeders in the University's Department of Agronomy has resulted in the development of hard red spring wheat varieties such as Chris, Era and Fletcher with excellent stem rust resistance.

The Cereal Rust Laboratory is a cooperative venture of the Agricultural Research Service, U. S. Department of Agriculture, and the University of Minnesota's Department of Plant Pathology and Agricultural Experiment Station.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 20, 1971

Immediate Release

## STUDENTS CONTRACT FOR GRADES AT THE 'U'

Students at the University of Minnesota need not fear of the class "Crop Growth and Culture" because they studied the wrong things, were sick for the test or just plain "blew it."

It's all because of a program initiated for this class by agronomy Instructor Vernon B. Cardwell, called "learning for master" which allows students to retake tests until they reach the performance level they desire and takes them out of the do or die situation of a single test on each topic.

The program begins at the start of the quarter when each student has the option of signing a contract for the letter grade desired or taking the class on the usual one test, one chance system. The student can void his contract at any time if he wishes to go back on the traditional one test system of grading.

Cardwell signs the contract which also binds him to provide an opportunity for each student to learn the material and retake exams over the same material as many as two times. In addition, students complete take home problems and laboratory write-ups or an independent research report for the class.

To retake a test, the student must either attend a one hour discussion session on the material or submit a list of ten questions and answers pertaining to the subject being reviewed.

-more-

add 1--students contract

Of the 55 students who have tried the contract system in Cardwell's class, 44 completed the contract and received the desired grade or higher. Four of the remaining 11 received an incomplete in the class and hope to make up the necessary material to get the grade they contracted for.

Two-thirds of the students usually tried the first retake test and one tenth tried the second retake test in an attempt to achieve the contracted grade. The retake tests employed different questions over the same material which were of the same difficulty as the first test.

Of the 123 retaken tests, students improved their performance in 94. The requirement of attendance at discussion groups and additional studying by the students before the retaken tests is partially responsible for student improvement, Cardwell explained.

The effect of the contract system was to give the student more opportunity to perform better in the class and thus moved the grading curve towards the "A" and "B" brackets, he said. As a result, 19 students were given "A's", 28 "B's", 2 "C's" and 2 "P's" and four were given an incomplete for the course.

Most students didn't consider the contract system easy and agreed they worked as hard or harder on the contract system as they worked in classes based on the usual grading system. In fact, individual students had to put in about two to five hours extra work in order to retake a test, Cardwell said.

Cardwell found that the contract system also required more time from the instructor than the usual one test system. Extra time was needed for construction of exams, giving retake tests, and evaluating the exams. This amounted to at least five extra hours of work per week, he said.

add 2--students contract

The idea behind "learning for mastery," Cardwell said, is the belief that nearly every student, given the chance, sufficient time, and motivation can perform at his optimum level in the classroom. One student may work ten hours to obtain 80% comprehension of a topic; another may require twice the time. Cardwell's system aims at giving each student the opportunity to achieve the level which the student believes himself capable of achieving or desires to achieve.

The contract is a method of stimulating an individual to achieve at higher levels and have a better understanding than would be normally possible in single test situations, he said. The contract eliminates most other factors that might influence a test score such as a student being sick, sleepy, or failing to understand the major points for a specific topic.

Student response to the contract teaching system is overwhelmingly favorable. The system is valuable in motivating both the teacher and students, Cardwell concluded.

# # #

92-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 20, 1971

Immediate Release

#### EXTENSION MARKETING SPECIALIST PEDERSON TO RETIRE

Harold C. Pederson, 1777 Lindig Street, St. Paul, is scheduled to retire May 31 from the University of Minnesota's Agricultural Extension Service, where he has served for the past 44 years.

Pederson is a professor of agricultural and applied economics and program leader for extension marketing and utilization.

Before joining the St. Paul Campus staff in 1951, he had been Hennepin County agricultural extension agent for eight years. He has also served as agricultural extension agent in Winona County from 1932 to 1941 and in Traverse County from 1927 to 1931.

After graduating from the high school in Franklin, Minnesota, Pederson went on to receive his B.S. degree in agricultural science in 1927 from the University of Minnesota. In 1952 he earned his M.S. degree in agricultural economics, also from the University. He has done additional graduate work.

He is the author or co-author of numerous articles, extension publications and economic development study reports for various Minnesota counties.

In 1970, Pederson was included among the Civil Servants of the Year in the Twin Cities. He has also been awarded the Order of the North Star, Minnesota Centennial Commission, the USDA Superior Service Award in 1950 and the Distinguished Service Award National County Agents Association in 1942.

add 1--pederson to retire

He is active in several professional societies, service, civic, fraternal and business organizations. Among them are the American Agricultural Economics Association, Minnesota Economics Association, International Conference Agricultural Economists, Minnesota Chapter Soil Conservation Society of America (president, 1968), Minnesota Federation of County Fairs (president, 1959-60), Minnesota State Horticultural Society (president, 1950) and the Minnesota Chapter Farm Managers and Rural Appraisers.

He also served on the Educational Advisory Committee for the Chicago Board of Trade from 1965 to 1967.

# # #

91-daz-71

MSC  
4/22/71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties  
Immediate release

EXPANDED DAIRY  
ADVERTISING  
EFFECTIVE

An expanded dairy advertising campaign in the Twin Cities appears to have achieved some immediate success in offsetting a national trend of declining dairy products consumption.

The national per capita consumption of dairy products has dropped from 740 pounds per person in 1950 to 557 pounds per person in 1970--a frightening national trend for dairymen.

The dairy sales picture for the Twin Cities area reflected the national trend and at the end of 1967, sales for fluid milk had dropped another two-tenths of a percent from 1966.

With the expanded advertising programs over the last several years by the Minnesota-Wisconsin Milk Producers Foundation, the Twin City Milk Foundation, and the American Dairy Association, sales in the Twin Cities area began to climb. In 1968, sales for whole milk, flavored drinks, low fat milk and cream climbed 2.3 percent; sales increased 2 percent in 1969 and about 3 percent in 1970, according to LeRoy Jarl, sales manager at Mid-America Dairymen.

The advertising program started in 1967 by the Minnesota-Wisconsin Milk Producers Foundation, which is supported by dairy farmers in the two states, used radio, TV, and billboards. Themes for the new advertising program included: "Drink Milk For The Big Lift That Lasts," "Get Extra Milk For The Week-end," and "Get Extra Milk For The Holidays."

The Twin City Milk Foundation supported by milk producers and dealers started the "Every Body Needs Milk" slogan that is now familiar on billboards in the Twin Cities.

add 1--dairy advertising

Despite local successes in boosting dairy products sales, the national trend through 1970 in consumption of dairy products has continued a nose dive and predictions for total national sales of dairy products are not optimistic.

A report issued by the University of Minnesota's Department of Agricultural Economics in 1969 predicts that United States dairy products consumption will probably decline 5 to 10 percent by 1980 compared to the 1968 total sale figure of 116 billion pounds.

The report noted, however, that consumption has increased for cheeses made from whole and partially skimmed milk, cottage cheese and most strikingly for frozen dairy products such as ice milk, mellorine and sherbet.

The report, "Prospects for U. S. Consumption of Dairy Products," was prepared by Professor Marguerite C. Burk.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties

ATT: Extension Home Economists

Immediate release

DAIRY PRODUCTS  
PLENTIFUL  
DURING JUNE

June is National Dairy Month, and, appropriately, milk and dairy products head the U. S. Department of Agriculture's list of plentiful foods for the month.

Other foods in generous supply during June will be broiler-fryers eggs, dried peas, canned ripe olives, potatoes and potato products. All of the June plentifuls should be good buys.

Production levels for milk and most other dairy products should be at their peak by June. \_\_\_\_\_ County Extension Home Economist \_\_\_\_\_ suggests that June Dairy Month is a good time for families to take an inventory of their eating habits to see whether they are getting the amount of milk required to supply the calcium necessary to build and maintain good teeth and strong bones. Recommended for adults are 2 or more glasses daily; for children, 3 or more glasses; 4 or more glasses for teenagers.

In addition to serving milk as a beverage, you can get your daily ration in a number of appealing ways, such as milk puddings and soups, creamed dishes, ice cream and cheeses.

\_\_\_\_\_ reminds \_\_\_\_\_ County families that milk is nearly a complete food, containing protein, carbohydrates, fat (in whole milk), minerals and vitamins. It is almost impossible to get the amount of calcium needed by the body without including milk in daily meals, she adds.

-jbn-

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties

ATT: Extension Home Economists

Immediate release

### HARD COOKED EGGS CAN BE TENDER

Did you know that if you cook an egg for too long a time in boiling water that it will be tough and rubbery and truly be "hard boiled?"

For tender, tasty hard-cooked eggs, try cooking them for a shorter time in water that is simmering.

Try this the next time you fix eggs for your family:

1. Cover the eggs with cold water about one inch above the eggs. Bring the water to a boil.
2. Lower the heat and simmer the eggs for 3-5 minutes for soft-cooked eggs. Simmer them 20-25 minutes for hard-cooked eggs.

As soon as the eggs have finished cooking, pour off the hot water and cover them with cold water. This keeps a green film from forming around the yolk. The green is harmless, but it doesn't look very appetizing.

Have you wondered why some hard-cooked eggs are harder to peel than others? The fresher the eggs, the harder they are to peel. The longer the eggs are stored, the easier they are to peel.

Why not soft-cook or hard-cook some eggs for your family? Eggs are among the June plentiful foods and are reasonably priced.

-lsn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties  
Immediate release

CORN BLIGHT INCIDENCE  
MINOR, INFORMATION  
CENTER REPORTS

Plant pathologists and other corn experts in corn producing states report little or no evidence of spread of southern corn leaf blight (SCLB), according to the National Federal-State Information Center on Corn Blight.

Reports show only a minor increase in a few isolated Southern areas during the last two weeks.

The Information Center, established by the U. S. Department of Agriculture in cooperation with State Agricultural Experiment Stations and State Extension Services, coordinates blight information nationally.

Trapping of some airborne SCLB spores from apparently local infected plant residues remaining from the 1970 corn crop is reported from many corn producing states. However, plant pathologists emphasize that because of weather variations, type of corn planted, varying cultural practices, number and viability of spores, and other factors, it is too early to predict the possible effect the presence of these spores may have on the 1971 crop.

Cool temperatures--combined with previously dry weather conditions--have tended to inhibit the development and spread of the fungus--Helminthosporium maydis--which causes SCLB. The disease normally becomes most active during wet, humid weather when temperatures range from 65 to 85 degrees.

Reports from corn producing states in the South and in the Corn Belt indicate that daily temperatures are currently ranging from 60 to 85 degrees, indicating more favorable corn-growing weather.

-more-

add 1--corn blight

Corn planting is well ahead of usual in nearly all areas. Widespread rainfall has improved moisture conditions in most corn-growing areas of the country, but generally cool temperatures have tended to slow seed germination and plant growth. Reports show present corn growth varying from the early tasseling stage in northern Florida, to a few inches in other parts of the South and in southern areas of the Corn Belt.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties  
Immediate release

MINNESOTA CORN  
FIELDS SET FOR  
AERIAL PHOTOGRAPHY

Cropland in Minnesota and six other Corn Belt states will be photographed from the air with infrared film this summer in a federal-state experiment primarily aimed at detecting southern corn leaf blight.

The National Aeronautics and Space Agency (NASA) will photograph about 180 sites in the Corn Belt and several corn fields in each site will be checked every two weeks from mid June until late September.

Interpretation of the aerial photographs and ground observation data will be made at Purdue University's Laboratory for Applications of Remote Sensing (LARS).

Herbert G. Johnson, extension plant pathologist at the University of Minnesota, called the Corn Blight Watch "the most comprehensive remote sensing experiment ever undertaken in agriculture."

The Corn Blight Watch is aimed at testing equipment and techniques and to make improvements. Information on blight severity and the location of blight will be restricted because of possible effects on commodity markets, Johnson said.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties

Immediate release

IN BRIEF. . . .

Plan To Spray Pasture, Fence Weeds. Control pasture and fence row weeds between the last week in May and early June, advises University of Minnesota Extension Agronomist Oliver Strand. That's the time when perennial weeds are 6 to 8 inches tall and are growing rapidly. These large, actively growing weeds will retain enough spray to die and will move a high percentage of the weed killer to their roots, destroying the perennial root. Strand says 2,4-D is the best, safest and cheapest spray to use for pasture and fence row weed control. You can use 2,4,5-T or a mixture of 2,4-D and 2,4,5-T where brush is a problem. There is a seven-day waiting period after spraying 2,4-D before dairy cattle can graze. For more information, get Extension Folder Number 212, "Cultural and Chemical Weed Control In Field Crops," from your county extension agent.

\* \* \* \*

Cut Alfalfa Early. The best stage to cut first crop alfalfa is generally the late bud to first sign of bloom stage, remind University of Minnesota specialists. Early cut alfalfa has high protein content, high digestible nutrient content and production of dry matter or yield is acceptable. Later cutting--at the one-half to full bloom stage--may yield more dry matter tonnage, but nutrient content will be lower and digestibility of the forage will drop drastically. In southern and central Minnesota, higher temperatures result in a greater accumulation of growing degree days so alfalfa may need to be cut the last week of May or very early June. However, northern Minnesota farmers may not be able to take first crop alfalfa until June 10.

\* \* \* \*

-more-

add 1--in brief

Frost Damage on Strawberries, Green Peppers. Black spots in the center of strawberry blossoms indicate frost damage. You can see the black spots a few days after the frost on plants in full bloom. Plants with black spots in the blossoms will be unproductive or produce poor quality berries, according to University of Minnesota Extension Plant Pathologist Herbert G. Johnson.

Likewise, green pepper plants which suffered frost injury won't produce peppers next fall. However, there's no way to tell if the pepper plants suffered frost damage by looking at them, say University horticulturists.

\* \* \* \*

Water New Trees. Newly planted forest trees will need to be watered unless it rains regularly from now on, according to William Miles, Extension Forester at the University of Minnesota. It may be necessary to load up a tank truck and water the trees with a bucket to provide moisture. If you used a preemergence chemical, such as simazine, moisture is needed to prevent weed competition, which can be very severe. Control weeds by pulling them by hand, using a mechanical cultivator or, preferably, using a preemergence weed killer when the tree is planted. If you failed to apply a preemergence chemical, then use amitrol or amazine, but don't spray them on the trees. See Fact Sheet No. 6, "Weed Control in Shelterbelts and Forest Plantations."

\* \* \* \*

Check For Insect Damage. When forest seedlings are three to four feet high, start checking them for insect damage, says William Miles, extension forester at the University of Minnesota. If they appear damaged, contact your county extension agent or send samples to the extension entomologist at the University's St. Paul Campus.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 24, 1971

SPECIAL

#### PROGRAM SET FOR MINNESOTA NUTRITION CONFERENCE

Feeds for livestock and measuring feed nutrients and values will be major topics discussed at the 1971 Minnesota Nutrition Conference Sept. 20-21 in Minneapolis.

Details of the program for the 32nd annual conference were announced recently by Jay Meiske, animal science professor at the University of Minnesota. The meeting will be held at Holiday Inn Central, Minneapolis.

This is the regional conference for the north central area and is held each year for animal nutritionists. Major emphasis is on nutrition topics of current interest. The speakers are all researchers in their respective fields of animal nutrition.

The first morning of the conference will consist of a symposium on feeds for livestock. Topics to be covered include triticole, wheat and barley as livestock feeds, oilseed meals for livestock, feeding waste products and enhancing forage values.

In the afternoon a symposium will feature measuring feed nutrients and values. Other topics include variability in nutrient content, amino acid analysis and measurement of availability, biological availability of Vitamin D and net energy evaluation.

-more-

add 1--nutrition conference

Topics to be discussed Tuesday morning include effect of mycotoxins - ochratoxins and aflatoxins, influence of bentonite in livestock rations and 25-HCC and milk flavor.

In the afternoon, papers will be presented on low protein and protein phase feeding for turkeys, swine nutrition, backgrounding feedlot cattle and developments in horse nutrition.

The annual conference is sponsored by the American Feed Manufacturers Association, the Northwest Feed Manufacturers Association, the Northwest Agri-Dealers Association and the University of Minnesota.

Persons wishing more information on the event should contact the Office of Special Programs, Agricultural Extension Service, University of Minnesota, St. Paul, Minn. 55101.

###

jms

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties  
Immediate release

MINNESOTA CORN  
FIELDS SET FOR  
AERIAL PHOTOGRAPHY

Cropland in Minnesota and six other Corn Belt states will be photographed from the air with infrared film this summer in a federal-state experiment primarily aimed at detecting southern corn leaf blight.

The National Aeronautics and Space Agency (NASA) will photograph about 180 sites in the Corn Belt and several corn fields in each site will be checked every two weeks from mid June until late September.

Interpretation of the aerial photographs and ground observation data will be made at Purdue University's Laboratory for Applications of Remote Sensing (LARS).

Herbert G. Johnson, extension plant pathologist at the University of Minnesota, called the Corn Blight Watch "the most comprehensive remote sensing experiment ever undertaken in agriculture."

The Corn Blight Watch is aimed at testing equipment and techniques and to make improvements. Information on blight severity and the location of blight will be restricted because of possible effects on commodity markets, Johnson said.

# # # #

add 1--corn blight

Corn planting is well ahead of usual in nearly all areas. Widespread rainfall has improved moisture conditions in most corn-growing areas of the country, but generally cool temperatures have tended to slow seed germination and plant growth. Reports show present corn growth varying from the early tasseling stage in northern Florida, to a few inches in other parts of the South and in southern areas of the Corn Belt.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties  
Immediate release

CORN BLIGHT INCIDENCE  
MINOR, INFORMATION  
CENTER REPORTS

Plant pathologists and other corn experts in corn producing states report little or no evidence of spread of southern corn leaf blight (SCLB), according to the National Federal-State Information Center on Corn Blight.

Reports show only a minor increase in a few isolated Southern areas during the last two weeks.

The Information Center, established by the U. S. Department of Agriculture in cooperation with State Agricultural Experiment Stations and State Extension Services, coordinates blight information nationally.

Trapping of some airborne SCLB spores from apparently local infected plant residues remaining from the 1970 corn crop is reported from many corn producing states. However, plant pathologists emphasize that because of weather variations, type of corn planted, varying cultural practices, number and viability of spores, and other factors, it is too early to predict the possible effect the presence of these spores may have on the 1971 crop.

Cool temperatures--combined with previously dry weather conditions--have tended to inhibit the development and spread of the fungus--Helminthosporium maydis--which causes SCLB. The disease normally becomes most active during wet, humid weather when temperatures range from 65 to 85 degrees.

Reports from corn producing states in the South and in the Corn Belt indicate that daily temperatures are currently ranging from 60 to 85 degrees, indicating more favorable corn-growing weather.

-more-

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties

ATT: Extension Home Economists

Immediate release

### HARD COOKED EGGS CAN BE TENDER

Did you know that if you cook an egg for too long a time in boiling water that it will be tough and rubbery and truly be "hard boiled?"

For tender, tasty hard-cooked eggs, try cooking them for a shorter time in water that is simmering.

Try this the next time you fix eggs for your family:

1. Cover the eggs with cold water about one inch above the eggs. Bring the water to a boil.
2. Lower the heat and simmer the eggs for 3-5 minutes for soft-cooked eggs. Simmer them 20-25 minutes for hard-cooked eggs.

As soon as the eggs have finished cooking, pour off the hot water and cover them with cold water. This keeps a green film from forming around the yolk. The green is harmless, but it doesn't look very appetizing.

Have you wondered why some hard-cooked eggs are harder to peel than others? The fresher the eggs, the harder they are to peel. The longer the eggs are stored, the easier they are to peel.

Why not soft-cook or hard-cook some eggs for your family? Eggs are among the June plentiful foods and are reasonably priced.

-lsn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 24, 1971

To all counties

ATT: Extension Home Economists

Immediate release

DAIRY PRODUCTS  
PLENTIFUL  
DURING JUNE

June is National Dairy Month, and, appropriately, milk and dairy products head the U. S. Department of Agriculture's list of plentiful foods for the month.

Other foods in generous supply during June will be broiler-fryers eggs, dried peas, canned ripe olives, potatoes and potato products. All of the June plentifuls should be good buys.

Production levels for milk and most other dairy products should be at their peak by June. \_\_\_\_\_ County Extension Home Economist \_\_\_\_\_ suggests that June Dairy Month is a good time for families to take an inventory of their eating habits to see whether they are getting the amount of milk required to supply the calcium necessary to build and maintain good teeth and strong bones. Recommended for adults are 2 or more glasses daily; for children, 3 or more glasses; 4 or more glasses for teenagers.

In addition to serving milk as a beverage, you can get your daily ration in a number of appealing ways, such as milk puddings and soups, creamed dishes, ice cream and cheeses.

\_\_\_\_\_ reminds \_\_\_\_\_ County families that milk is nearly a complete food, containing protein, carbohydrates, fat (in whole milk), minerals and vitamins. It is almost impossible to get the amount of calcium needed by the body without including milk in daily meals, she adds.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 25, 1971

Immediate Release

#### DEAN SLOAN OF AG COLLEGE TO RETIRE JUNE 30

Hubert J. Sloan, dean of the College of Agriculture and associate dean of the Institute of Agriculture at the University of Minnesota, is scheduled to retire June 30.

Sloan, 2245 West Laurie Road, St. Paul, was appointed dean of the College of Agriculture on Feb. 12. He had served as acting dean since July, 1970. Before being appointed associate dean of the Institute, Sloan was director of the University's Agricultural Experiment Station for 13 years.

He came to the University in 1936 and headed the poultry section of the Division of Animal and Poultry Husbandry for 12 years. He was head of the Poultry Husbandry Department from 1948 to 1953. Before coming to Minnesota, he was a research associate at the University of Illinois.

A native of Illinois, he received his B.S. and M.S. degrees from the University of Illinois in 1926 and 1927. In 1929 he received his Ph.D. from Cornell University.

Sloan has served as vice president and president of the Poultry Science Association. He was also nutrition editor of "Poultry Science" for six years. He is a fellow of the Poultry Science Association and of the American Association for the Advancement of Science.

add 1--sloan to retire

Sloan was chairman of the Minnesota Poultry Industries Council from 1939 to 1953. He was awarded the Ranelius trophy by the Minnesota Turkey Grower's Association in 1950.

He is a member of Alpha Zeta, national honorary agriculture and forestry society; Gamma Sigma Delta, national honor society in agriculture; Sigma Xi, national society for the advancement of research; the World Poultry Science Association; the Minnesota Academy of Science and an honorary member of Phi Zeta, professional Veterinary Medical Society.

He studied agricultural research and practices in Africa in 1961 and was a consultant on agricultural research with the Agency for International Development in Ghana in 1962. In 1964 he served as an agricultural research consultant in several Latin American countries for the National Academy of Science and in 1969, studied agricultural development programs in India for the Agency for International Development (AID).

# # #

93-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 25, 1971

Immediate Release

#### 4-H CONSERVATION CLUB OF THE YEAR CHOSEN

Conservation-minded 4-H clubs throughout Minnesota have been planting trees, providing wildlife cover and feed and carrying out many other projects in the 4-H conservation program.

The Thrifty Thrivers 4-H club, Anoka County, has been named 4-H Conservation Club of the Year. Runners up are the East Valley 4-H Club, Marshall County; Silver Hill Ramblers 4-H Club, Wright County; Newhouse Norsemen 4-H Club, Houston County; Fast Freighters 4-H Club, Pine County; Moland Cloverleaf 4-H Club, Clay County; and Homer Hilltoppers 4-H Club, Winona County.

Counties receiving honorable mention are North Pole, Carlton County; Holly All Stars, Murray County; Clever Clovers, Big Stone County; Camden Busy Gophers, Carver County; Scott 4-H Club, Stevens County; Pleasant Hill Troppers, Pope County; Hi Lite 4-H Club, Isanti County; Skyblazers 4-H Club, Dakota County, Afton A OK's, Washington County; and Clover Blossom, LeSueur County.

The Thrifty Thrivers 4-H club set goals for their conservation program and learned how to carry out their plans in a manner beneficial to wildlife and the environment. The club has planted 400 trees which provide cover for pheasants and deer and also prevent soil erosion. Members follow up the planting with tree trimming.

They have also blasted marshy areas to provide leafing areas for waterfowl. Club members plant corn and leave it standing for winter pheasant feed and during winter provide hay as deer feed. 4-H'ers also give talks and demonstrations at meetings on conservation practices.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 21, 1971

Immediate release

BLACK, YELLOW SPOTS  
ON SPORTS FISH HARMLESS

Minnesota fishermen may think that the small black spots and yellow grubs often found on perch, pike, sunfish, bass, trout and rock bass ruin the fish or render them dangerous to eat.

Both the spots and grubs are caused by parasites that can't infect man. The defects can be trimmed out of the fish and cooking kills the parasites completely, according to a University of Minnesota veterinarian, Dr. Henry Griffiths, who specializes in the study of parasites in animals.

The black spots are not parasites, but a pigment which the fish produces around the parasites.

The life cycle of the parasite which causes fish to produce the black spots begins in the intestine of the kingfisher where a fluke lives and lays its egg. The egg exists via droppings and hatches to a baby fluke which swims around seeking a certain kind of snail which it enters. In the snail, the fluke multiplies and after a few weeks leaves to attack and penetrate the skin of fish. Some infected fish are eaten by the kingfisher and the life cycle is completed.

The yellow grubs found in fish are also the young stage of a fluke parasite.

The life cycle of this fluke begins in the mouth of the blue heron where it lives and lays its egg. The egg exits through the mouth or droppings, hatches to a baby fluke and seeks out a ram's horn type snail which the baby fluke penetrates. Within the snail, the fluke multiplies, then comes out of the snail and penetrates under the skin of the fish. When the fish is caught and eaten by the heron, the fluke move up to the heron's mouth and the cycle is completed.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
May 26, 1971

(Second of six stories)

CROP YIELDS  
HIKED WITH  
SOIL BARRIERS

The major problem with Minnesota's 8 million acres of sandy soils--low-nutrient and low-water holding capacity--may soon be remedied with buried asphalt or organic and clay soil barriers that will hold water and nutrients in crop root zones.

Presently, economic returns to farmers and communities are low in most sandy soil areas. Any improvement of sandy soil offers hope of boosting local economies as well as the state economy.

The barriers created and now being investigated by scientists at the University of Minnesota's Sand Plain Experimental Field and at a nearby farm are placed about a foot and a half deep by special machines. The asphalt barrier is very thin, while the organic "detention layers" are  $\frac{1}{2}$  to 1 inch thick.

Soil scientists G. R. Blake, D. S. Fairchild, and B. C. McCaslin obtained encouraging results with the asphalt barriers:

\* With onions, yields of nearly 11 tons per acre were obtained. Irrigations plus asphalt increased percent of number one bulbs.

\* Asphalt barriers, with no irrigation available, increased early yields up to 2,000 pounds per acre.

\* With field corn, asphalt barriers increased yields 21 bushels per acre with no irrigation on sandy soils. The top yield was 119 bushels per acre.

The asphalt is laid down by a long, flat, wedge-shaped plow that displaces the soil about 18 inches below the surface. The soil is displaced only a few inches while the hot asphalt is sprayed into place with powerful jets. The thin layer then hardens to form a layer which prevents water from leaking away from the root zone.

-more-

add 1--soil barriers

The barrier is not impermeable to water but conserves water by interrupting the capillary conducting channels in the soil that allow water to drain deep in the soil away from the root zone. Three different applications rates of asphalt are being used at one site: 750, 950, and 1,500 gallons of asphalt per acre.

In studies of organic or clay soil detention layers, similar in principle to barriers, soil scientists R. S. Farnham and D. S. Fairchild, found field corn yields were increased up to 70 bushels per acre in plots with the organic soil detention layers compared to plots without the detention layer. Top yields were in excess of 200 bushels per acre with irrigation and the detention layers. Snap bean yields were also consistently increased with row bands of various detention layers.

Materials that were used as detention layers include peat, wood products such as low grade pulp, composted garbage, manure, calcined clay and vermiculite.

Soil modification using barriers or detention layers may become increasingly important on Minnesota's sandy soils to hold moisture, and nutrients near the root zones of crops. In this way the soil detention layers conserve water resources and reduce nitrogen and phosphorus leaching and ground water pollution.

Soil detention layers also offer a use for the organic material in municipal wastes. Garbage and other organic waste that is now used for sanitary land fill or burned might be used as detention layers in Minnesota's sandy soils to prevent ground water pollution from plant nutrients and pesticides and boost crop yields at the same time.

Both asphalt barriers and soil detention layers offer hope for conserving natural resources and boosting crop yields on Minnesota's sandy soils, the scientists conclude.

# # # #

Nest week: Irrigation Could Double State's Alfalfa Yields

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
May 28, 1971

SPECIAL

MYRA ZABEL TO RETIRE MAY 31

Myra Zabel, 1294 Arona, St. Paul, professor and extension home furnishing specialist at the University of Minnesota, is scheduled to retire May 31 after serving the University 17 years.

Before joining the University staff, she was extension specialist in home furnishing at the University of Kentucky, Lexington, Ky. She also was an instructor in vocational home economics in high schools in Detroit, Almont and Lake City, Mich.

Mrs. Zabel has worked with extension home economists, Minnesota women and resort operators on problems and programs involving furnishing and decorating interiors. She also has written bulletins and leaflets, has conducted interior decorating clinics in various parts of the state and has presented half-day programs on many aspects of interior decorating.

She received her B.S. degree from Michigan State University and her M.A. degree in related art from the University of Minnesota.

Mrs. Zabel is a member of the American and Minnesota Home Economics Associations; Omicron Nu, national honorary home economics society; Pi Lambda Theta, national honor society for women in education, and the University of Minnesota Alumni Association.

###

jms - 71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

(Third of six stories)

IRRIGATION COULD  
DOUBLE STATE'S  
ALFALFA YIELDS

Alfalfa yields on thousands of acres of Minnesota's sandy soils could be doubled with irrigation and proper management techniques.

Last year's state alfalfa crop on nearly 2.2 million acres yielded an average of 2.5 tons per acre and little of it was irrigated. Scientists at the University of Minnesota feel that yield could be boosted to average five tons per acre.

In experiments at the University's Sand Plain Experimental Field near Elk River, Minn., soil scientist C. J. Overdahl and C. P. Klint, area soils agent, boosted yields in fertilized, irrigated plots to 6.2 tons per acre compared to 3.3 tons per acre on unirrigated plots.

If not cut too late irrigated alfalfa also enters winter in better condition and recovers quicker in the spring. The higher root build up of irrigated alfalfa after the last cutting is largely responsible for irrigated alfalfa's quick spring recovery, they said.

Irrigation can also accelerate the action of lime in acidic soils which alfalfa shuns. Eight tons of lime were applied to an acidic experimental field in 1968. The acidity of the soil was reduced to neutral in two years on the irrigated half of the field while the unirrigated part remained acidic with a pH of 6.0, he said.

Besides showing alfalfa yields that are possible, the experiments have helped scientists determine the nutrient requirements of alfalfa and the best management techniques.

add 1--alfalfa yields

The requirements of alfalfa on sandy soils for nitrogen, phosphorus, potassium, lime, sulfur and boron are now generally understood. Investigators have also found that nutrient deficiencies can be discovered by an alfalfa tissue analysis before those deficiencies are apparent in the crop. So alfalfa producers that shoot for high yields can now detect nutrient deficiencies early and learn what improvements in plant nutrition are necessary to further improve efficiency in alfalfa production.

# # # #

Next week: New Potato Varieties Boost State Yields.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

To all counties  
Immediate release

MS  
1/21/71  
P

IN BRIEF. . . .

Cocklebur in Soybeans. Consider spraying with 2,4-DB for control of severe cocklebur infestations in soybean fields. But use 2,4-DB only in cases of severe cocklebur infestation because of potential soybean injury, warns Gerald Miller, University of Minnesota extension agronomist. He cautions that soybeans may not be harvested within 60 days after application.

Cocklebur can be controlled by applying 2,4-DB at two-tenths pounds per acre to soybeans from 10 days before bloom up to midbloom or as a directed spray when soybeans are 8 to 12 inches tall. Cocklebur may develop regrowth and produce burs after a good initial dieback, Miller says. The burs produced will germinate.

The soybeans may be stunted, and stunting appears to be more severe under hot, dry conditions.

\* \* \* \*

Farm Debt to Increase. Farm debt this year will probably go up more than the 4 percent figure we saw in 1970. Lower interest rates and increased availability of credit in 1971 should encourage farmers to catch up on capital improvements they postponed during tight money times, USDA economists say.

If long-term interest rates drop much, the experts are even looking for some shifting of land contracts to permanent mortgage financing and some consolidation of short-term debts into real estate credit.

\* \* \* \*

Keep SMV Emblem Bright, Shiny. You can protect your Slow Moving Vehicle emblems by getting them out of the sunshine. Simply parking the vehicles south when they're to be idle for long periods of time will extend the emblem's life. Or, put the emblem on a removable mount and store it indoors when it's not in use and it will stay bright longer.

\* \* \* \*  
-more-

add 1--in brief

Watering Rule Given. If you water at all, water regularly with a one-inch application every week. If you don't intend to water regularly, don't water at all, University Horticulturist Donald B. White advises. Most lawn sprinklers are capable of applying about one-quarter inch of water an hour. On that basis, you would have to water about four hours a week. You can place containers with straight sides, such as coffee cans, on the lawn and measure the amount of water applied.

\* \* \* \*

Aerifying May Be Needed. Your lawn may need aerifying if it feels hard under foot, if puddles form or water runs off the lawn, if the grass is thin from wear and if it is difficult to push a large screwdriver into the soil. Aerify in cool weather when the soil will dry out slowly. Be sure that a machine that takes plugs of soil out of the ground is used, leaving a hole about a half-inch in diameter and three inches deep. If the machine just punches holes without taking a plug of soil out, it just makes the soil more compact. Good aerifiers are carried by most rental agencies and are available from almost all landscape management firms. For more information, see "The Home Lawn," available from the \_\_\_\_\_ County Extension Office or the Bulletin Room, University of Minnesota, St. Paul, 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

To all counties  
Immediate release

UM RESEARCHERS  
TO USE PIETRAN  
HOGS IN CROSSES

Pietran hogs from Belgium may provide the genetic key to pork quality and meatiness.

University of Minnesota animal scientists have two Pietran boars--heavily muscled, stress susceptible hogs from Belgium--and plan to cross them with Minnesota No. 1 hogs in an attempt to learn more about pork quality and muscling.

"This experiment is an attempt to help the swine industry by learning more about pork quality and meatiness--its purpose is not to sell Pietran breeding stock," says William Rempel, University of Minnesota animal scientist.

"From what we know about the Pietran hog, its characteristics are opposite those of Minnesota No. 1," Rempel says. For example, the Pietran is noted for heavy muscling, PSE, (a quality symbol for pale, soft, exudative pork) slow gains, little marbling in the lean and pale colored pork. Minnesota No. 1 has just the opposite characteristics.

Rempel plans to make several crosses with the Minnesota No. 1 breed, with the percent of Pietran running one-quarter, one-half and three-fourths. Then meats scientists will analyze meat quality characteristics of the various crosses.

However, the researcher points out that whether the breed has any utility so far as crossing with other commercial breeds is of secondary importance in the research project. "Our main objective is to get a handle on how the PSE trait and meatiness are controlled genetically," he said.

Although Pietran hogs have been imported to Canada, there are only 5 in the United States at the present time including the two boars at the University of Minnesota.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

To all counties  
Immediate release

RESEARCHER DISCOVERS  
KEY TO DEVELOPMENT  
OF HYBRID SUNFLOWERS

Red River Valley farmers soon will grow hybrid sunflowers which yield 20 to 25 percent more than old inbred varieties, due to a discovery by a United States Department of Agriculture (USDA) scientist.

Hybrid sunflowers with consistent high quality, good yield and high oil content may now be bred much the same way as hybrid corn since the discovery of a gene to restore fertility to male-sterile plants.

The gene--called a restorer gene--has been found by USDA agronomist Murray Kinman, who worked in cooperation with the Texas Agricultural Experiment Station on the venture.

Hybrid sunflower varieties may be offered to commercial producers as early as 1973, and more certainly by 1974, according to Jim Lofgren, a sunflower breeder with Dahlgren & Co., a Crookston based seed company.

In northern areas of the United States, experts think sunflowers could become a crop of considerable importance as a replacement for flax. The market for flaxseed (linseed oil) has declined so greatly that production substantially exceeds consumption. Because linseed oil is used primarily in industry, sunflower oil, which is both edible and industrial, has a greater potential in American agriculture.

Sunflowers are grown for two basic purposes--they're either crushed and processed for the oil content, or the seed is used for birdseed or confectionary products.

Sunflower production in the Red River Valley could expand rapidly if markets can be developed, especially for oil. Some industry spokesmen expect a doubling or tripling of sunflower acreage in the Red River Valley by 1975 if oil prices are relatively high. This would put sunflower acreage at half to three-quarters of a million acres.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

To all counties  
Immediate release

FLOCK SELECTION,  
PULLORUM TESTING  
COURSE SCHEDULED

A short course on "Flock Selection and Pullorum Testing" will be offered June 24 and 25 on the University of Minnesota St. Paul Campus.

The course, sponsored by the University's Office of Special Programs, is designed primarily for hatcherymen and service personnel in the game bird, exhibition flock and commercial poultry industries.

Some of the topics to be covered are farm sanitation, disease control, and regulations of the National Poultry Improvement Plan. There will be laboratory practice in collecting blood samples and pullorum testing, as well as sessions on the physical selection of birds for breeder flocks.

Melvin Hamre, University of Minnesota extension poultry specialist, is the course coordinator. Course instructors are from the University's Departments of Animal Science and Veterinary Microbiology and Public Health, plus the State Livestock Sanitary Board and Poultry Division of the Minnesota Department of Agriculture.

For further information and registration forms, write to the Office of Special Programs, University of Minnesota, St. Paul, Minnesota, 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

To all counties  
Immediate release

BEEF MAY ADD TO  
NORTHERN MINN.'S  
ECONOMIC GROWTH

Opportunities are good for profitable beef cow-calf production in the northern counties of Minnesota, Wisconsin and Michigan, according to Robert Jacobs, extension animal husbandman at the University of Minnesota.

Jacobs is an advisor for the Northern Beef Demonstration Center located at Michigan State University's upper peninsula Experiment Station, Chatham, Mich. The Center is part of a project funded by the Upper Great Lakes Regional Commission.

The relative capital investment per beef cow unit is much less in this region than in the West, Jacobs says. The region is suited to forage production, there's an excellent demand for feeder calves and little or no housing investment is required.

One part of the study involved keeping 49 commercial Hereford cows at the Center wintered outside with only a woods for shelter. They received 25 pounds of hay per cow per day plus mineral, salt and water free choice. Snowfall that winter was over 170 inches.

"This demonstrates that beef cows can be wintered on hay outside without expensive buildings," says T. R. Greathouse, Michigan State University beef cattle specialist and project director. "Reducing or eliminating housing costs is a way of increasing net profit to the beef producer."

The 1970-71 winter at the Center was one of the most severe in this century. However, 112 cows wintered outside and maintained their weight on a hay diet.

The cows were bred to start calving in January, 1971. Specialists at the Center designed equipment to protect new-born calves. They also established routine management practices essential to save calves born at 15 degrees below zero.

-more-

add 1--beef may add to economic growth

Researchers also are testing forage varieties adapted to the area. They established a demonstration of 45 varieties of alfalfa, variety comparison demonstrations of red clover, bromegrass, timothy and orchardgrass, and other crops such as crown vetch, sainfoin, lupines, big trefoil and horse beans, Japanese millet and corn for silage.

"These demonstrations should help producers decide which varieties produce top yields in the Upper Great Lakes Region," explained Greathouse.

Another project demonstrated how a stream can be diverted as a water source for cattle at minimum cost without pollution.

A recent survey of beef cattle producers in the 3-state, 119-county region will help develop beef and forage programs to meet the needs of farmers in the Upper Great Lakes Region, according to Greathouse.

# # # #

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

To all counties

ATT: Extension Home Economists

Immediate release

### WEIGHT WATCHING PAYS DIVIDENDS

When it's warm enough to try on your swim suit and think about a day at the lake or pool, that's the time when the high calorie foods you ate during the fall and winter show up as rolls of unwanted fat. It's not too late to do something about it, says \_\_\_\_\_, \_\_\_\_\_ County extension home economist.

Begin with these suggestions:

Cut down on food at your meals, but don't skip meals completely. You need the same well balanced meals while watching your weight, just eat less of everything.

Eat more low-calorie foods. Drink skim or 2 percent milk instead of whole milk. Select a salad of shredded lettuce or cabbage with low-calorie or very little dressing rather than an apple-banana salad combined with whipped cream. Cook green beans, broccoli or spinach for a vegetable rather than lima beans or corn. For dessert or snacks eat fresh fruit rather than canned fruit in syrup. Avoid eating potato chips, French fried potatoes, pies, cakes and malted milks.

Trim fat from meat before cooking it. It can be trimmed more at serving time.

Keep all servings small. Get in the habit of thinking small and set your mind to accepting less.

Serve sauces, gravies, dressings, butter and margarine separately and use them sparingly. Let each member of the family add his own.

Boil, broil, steam, bake and roast foods instead of frying or cooking with added fat. You can broil a hamburger just as easily as a steak.

At first it won't be easy to cut calories. You may slip back into your old food habits--but don't hesitate to start over again. Being able to wear that swim suit or new summer dress will make you glad you did.

-lsn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

To all counties

ATT: County Extension Home Economists

Immediate release

FOR SAFETY,  
KEEP HOT FOODS HOT,  
COLD FOODS COLD

Warm weather and food poisoning often go hand in hand.

Yet the upsets sometimes attributed to "stomach flu" but which are actually food poisoning can be prevented if families know the causes and exercise proper care in food preparation and handling.

More food poisoning occurs in summer than at any other time of year because the warm weather creates a favorable temperature for bacteria to grow rapidly, according to Edmund A. Zottola, extension food microbiologist at the University of Minnesota. But cleanliness and good sanitation practices are also important.

Here are some guidelines for handling and preparing food to prevent some types of food poisoning:

- . Cook meats properly (especially poultry) and serve them hot.
- . Never allow hot foods to cool slowly to room temperature before refrigerating them. Cool them in the refrigerator. Slow cooling on the kitchen counter provides an ideal growth temperature for bacteria.
- . Heat leftover, cooked meats to at least 165°F. internal temperature. Bring leftover gravy to a rolling boil.
- . Avoid preparing food several hours or a day before serving.
- . Keep bacteria out of food by cleanliness in handling and thorough cooking. Carefully wash all kitchen equipment and utensils to prevent cross-contamination between raw and cooked foods.
- . Always work with clean hands when preparing food. Keep hands away from mouth, nose, hair and from skin infections.

-more-

add 1--for safety, keep hot foods hot

. Never leave cold foods on the kitchen counter in a warm room or in a hot car for any length of time.

. Use insulated boxes or picnic coolers to keep food cold for picnics. Use plenty of ice and do not crowd the food. Leave the food in the cooler until just before serving time.

As for casseroles to be served hot at a picnic, it's best to heat these at the picnic site just before mealtime.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 1, 1971

To all Counties  
4-H NEWS  
Immediate release

4-H DRESS REVUE  
IS CREATIVE

One of the most exciting 4-H activities for many girls is participating in the 4-H Dress Revue. The girls have a chance to create their own outfits according to their personality and wardrobe needs.

Sewing your own clothes gives you a sense of accomplishment and individuality. You also know that you made exactly what you wanted with much less expense than buying ready made clothes.

Now is a good time to start working on your garment for the dress revue. You'll want to sew an outfit that is exactly right for you, so you must consider many factors when choosing your fabric and pattern. Learn how color affects your skin tones, hair, eyes and size. Be aware of posture and figure proportion; diet and exercise can be a help.

Read fashion magazines to learn about the new trends and then decide which ones are suited to your personality and figure type. Don't choose a style because it looks attractive on someone else. It must be right for you. Some of the great looks for this summer are U and V necklines, open backs, wide collars on blouses, belts and lace-up sandals. Hot pants are appropriate with turtleneck tops, blouses with long sleeves, opaque stockings, kneehighs, boots or sandals.

Maybe you're confused when you try to choose the length of your garment. Any length is acceptable, provided it looks good on you.

Whatever length you choose, your accessories can make or break the outfit. Carefully chosen accessories--headgear, jewelry, scarves, handbags, gloves, belts, hosiery, shoes--make "it" all work from head to toe.

Midi, mini, regular, mixi or maxi isn't just a length. Each is a total look, a feeling, a mood. All the elements of the costume must be thought of as a whole outfit, not separate items. A full length mirror may be your best friend.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 3, 1971

Immediate Release

#### HEMP CONTROL PROGRAM STARTED IN MEEKER COUNTY

A pilot program to eliminate wild hemp weed, commonly called marijuana, from farmland has started in central Minnesota's Meeker County with the assistance of the University of Minnesota's Agricultural Extension Service.

Meeker County Extension Agent K. Russel Bjorhus, Litchfield, has been working with County Weed Inspector Bill Nelson to determine if cost sharing might encourage farmers to eliminate hemp weeds on their farms. About \$3,000 in federal funds will be spent on the program in the county.

About 180 farmers in Meeker County have been contacted by letter advising them to destroy the weeds by spraying, pulling by hand or plowing. A maximum of \$40 will be made available to each farmer in the program.

Ten states are involved in this cost-sharing program to eliminate hemp weeds from non-cropland areas. Total cost for this program is estimated at \$68,000.

# # #

98-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 3, 1971

Immediate Release

Economist Says:

MAKE FEDERAL POLLUTION GRANTS TO MINNESOTA FIRMS

Sizeable federal environmental research and development grants should be made immediately to several Minnesota firms, John J. Waelti, agricultural economist at the University of Minnesota, said.

"Hard dollars" should go to firms such as Honeywell, Control Data, Univac, 3M and others for a "massive effort" on research development and testing, he added.

The grants could be used in such areas as improvement of environmental monitoring instrumentation, lower cost methods of collecting and recycling trash, new uses for recycled products, better methods of waste treatment and new systems of urban transportation, Waelti said.

Environmental research and development grants "would help take up the slack from cutbacks in aerospace and defense and would immediately put some people back to work."

Concrete plans will be needed in going from a wartime economy to a full employment peacetime economy "to ensure that any slack resulting from defense and aerospace contracts will be taken up with peacetime-oriented scientific pursuits." Also, any slowdown in manufacturing such items as throwaway containers should be compensated by equivalent jobs in recycling or transporting reusable containers so there will be jobs at living wages during the transition period, he said.

-more-

add 1--federal pollution

Minnesota cannot afford to wait "passively" for the federal government to make environmental research and development grants. The state's "stake in this transition period is too great not to actually participate in the shaping and direction of this 'new economy'," Waelti added.

A full-scale brainstorming effort is needed on "how to put Minnesota's industry and labor to work producing the goods and services that are needed in a peacetime economy and which are consistent with a sane environmental policy. This should be a combined effort of industry, college and university personnel, environmentalists and especially organized labor, which has the most to lose from instability and the most to gain from a full employment, non-inflationary peacetime economy.... Coordination might be by the governor's office or by the Legislature, but preferably by both," he said.

# # #

97-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 3, 1971

Immediate Release

## PARENTS CAN HELP CHILDREN LEARN

An understanding parent is essential to create an atmosphere for learning in the home.

The key to preparing a child to learn is love on the part of parents. Children who grow up in a loving family face the world with an assurance that the world is worth learning about.

Ronald Pitzer, extension family life specialist at the University of Minnesota, lists some ways parents can generate a desire for learning as well as provide the proper atmosphere:

- . Gain the child's trust. Trust is the greatest ally parents can have. A friendly smile, a reassuring hug or just five minutes' time to listen will help develop a close bond between parent and child and pay off in a happy, receptive, eager-to-learn child.

- . Provide an atmosphere for learning. Show the child that learning is fun. Allow him freedom to explore with all his senses. Provide him with toys and materials he needs in order to find out about all sorts of things; then encourage him by appreciating his efforts.

-more-

add 1-- children learn

. Be a good example. Children learn so many things by imitating grownups they love that parents can help merely by being the kind of persons they would like the children to be. If parents want children to be honest, they must be honest. If parents display a real love of learning, the children will sense it and try to copy it.

. Talk but listen, too. Because development of language is so important for the child, parents should make opportunities to talk with--not to--the children. Just as important is to listen to them. A walk in the park can lead to talk about nature. Story reading can lead to conversations about many subjects.

. Make the child feel important. A child needs to feel that he is important and that what he has learned is important. When he finally learns how to tie his shoes right, praise him, don't say "I thought you'd never learn." A human being does not respond to degradation.

Johnny's questions may be bothersome, but they should tell you he is just eager to learn. It's time to worry if he never asks questions. Simply paying attention to your child, talking to him will make him feel important. When Sue comes home from school with something she has written or drawn, praise it.

For the child the learning process is a journey into an unknown world. The parent can make that world attractive enough so the child wants to make the trip, the University family life specialist says.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 3, 1971

Immediate Release

## IMPROPERLY CLEANED UTENSILS CAN CAUSE SPOILAGE FROM BACTERIA

Sometimes milk, raw meat and other highly perishable foods develop strong, fruity odors or undersirable flavors after a few days' storage in the refrigerator.

Psychrophilic bacteria growing in the food in the refrigerator cause this spoilage, Edmund A. Zottola, extension food microbiologist at the University of Minnesota, said.

Psychrophilic bacteria are very heat sensitive and common cooking temperatures will destroy them as will treatments used to pasteurize milk. "The trick is to prevent recontamination after the food has been heated. Make sure that all surfaces or utensils that come in contact with the heated food are clean and sanitary. In the home, utensils washed in a dishwasher are clean and sanitary. If there is no dishwasher, the utensils should be cleaned with warm water and detergent or soap, rinsed with hot water and allowed to air dry," Zottola said.

For more information, see Food Science and Industries Fact Sheet No. 5, "Psychrophilic Bacteria Cause Food Spoilage," available from the Bulletin Room, University of Minnesota, St. Paul, Minn. 55101

###

95-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 7, 1971

To all counties  
Immediate release

MOVE HOUSE PLANTS  
OUTDOORS FOR EASY  
SUMMER CARE

Many house plants thrive better and are easier to care for outdoors during the summer if they are adaptable to outdoor conditions, according to Jane McKinnon, extension horticulturist at the University of Minnesota.

They can be grown on porches or terraces or in a garden border, but African-violets, gloxinias and few other tender plants should be left indoors all summer.

In areas where summer nights are quite cool, keep plants indoors if they require a temperature of 60 or more. A great many plants can be carried through the summer with a minimum of care by sinking the pots to the rims in the garden border, but keep in mind the different light requirements of various plants. Flowering plants usually prefer a semi-shady location during summer.

Set the plunged pots on a base of gravel, clinkers or sand to insure good drainage. Lift or twist the pots once a month to discourage rooting through the drainage hole. A location protected from strong winds is desirable, she added.

Fast growing plants that are fairly easy to propagate, such as fuchsias, geraniums and coleus, can be planted directly in the border. New plants raised from summer cuttings will produce house plants for the following season.

For more information read the illustrated booklet, "Care of House Plants," available from the \_\_\_\_\_ County Extension Office or the Bulletin Room, University of Minnesota, St. Paul, 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 7, 1971

To all counties  
Immediate release

TAKE CARE WITH SPRAY  
IN MILKING AREAS,  
UM ENTOMOLOGISTS SAY

Use chemicals very carefully for controlling flies in milkhouses and milk rooms to avoid contamination of milk and utensils, L. K. Cutkomp and D. M. Noetzel, entomologists at the University of Minnesota, advised.

Remove or completely cover all milk containers or other equipment before applying insecticides. Do not store insecticide containers in the milk room. The only material permitted for milkroom use is one-tenth of a percent of synergized pyrethrins as a space spray. Minimal applications should be made since oily deposits from repeated treatments are undesirable. Baited sprays and dry baits should not be used in the milkroom.

Recent Public Health Service recommendations have restricted the use of dichlorvos (Vapona) resin strips in food preparation areas. Since the milk room may be considered a food preparation area, producers should check with milk inspectors before using these strips in the milkroom.

For more information, see Entomology Fact Sheet No. 35-Revised 1971, "Fly Control For The Dairy Herd," available from the \_\_\_\_\_ County Extension Office or the Bulletin Room, University of Minnesota, St. Paul, 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 7, 1971

To all counties  
Immediate release

UM SCIENTISTS  
SEARCH FOR CATTLE  
LEUKEMIA DIAGNOSIS

University of Minnesota veterinary scientists are experimenting with electron microscopic studies of white blood cells in cattle, attempting to develop a method to diagnose leukemia in cattle.

Leukemia in cattle, called bovine lymphocytic leukemia, is similar to one type of leukemia developed by people. Bovine lymphocytic leukemia usually leads to the development of solid tumor masses in the lymph nodes, spleen, thymus and elsewhere.

The disease is believed to be due to a virus and occurs in cattle of all ages, but predominantly in the 5-8 year old group. It develops slowly over a period of one to several years, and then becomes fatal in a matter of months following the appearance of solid tumor masses.

A diagnosis for leukemia in cattle now exists, but it requires three blood samplings taken three months apart or a total of nearly one year for the complete diagnosis, said Alvin Weber, head of the University of Minnesota's Department of Veterinary Anatomy.

University veterinary scientists hope to develop a test that could be performed in a few days and would be as reliable in the detection of leukemia as the year-long test.

Bovine leukemia occurs in the United States at a rate of about 18 per 100,000 animals, with a range of up to 90 in some areas.

"In Minnesota, there is a considerable variation in incidence according to locality, with reports of up to 50 cases per 100,000 animals," Weber said. However, economic losses are greater than this since many animals in the pre-leukemic state are in poor condition and are sold for slaughter. Usually these animals have been at a low productive level for some time.

add 1--leukemia diagnosis

The veterinary scientists became interested in trying to develop a rapid and accurate test for bovine leukemia after noting some of the electron microscope blood findings published for cases of human leukemia.

"In these reports it was shown that certain very definite anomalous cellular changes, called nuclear pockets, occurred in blood lymphocytes (white blood cells) in human leukemia patients," Weber said.

"We made a statistical electron microscopic study of these changes in the white blood cells of cattle, and found that cell changes like those in the human were present in highly significantly increased incidence over values found in normal cattle."

The researchers also found that the results, which can be obtained in a single, three day test, were quite close to those of the present, year-long test.

"We further found that these blood cell changes were present in animals which had normal blood values, but which contained virus that is believed to be a causative agent for bovine leukemia," Weber stated.

Now the veterinary researchers are comparing the results of their so-called nuclear pocket test with those of the lymphocytosis test which takes approximately one year for evaluation on the same herds of cattle. The results should yield data which will indicate the accuracy and reliability of the nuclear pocket test.

"At the moment, on the basis of these results and others, we believe that any animal with values above 2 percent for the frequency of occurrence of nuclear pockets in lymphocytes should be regarded as potentially leukemic," Weber asserted.

Future research planned by the veterinary scientists includes evaluation work of the nuclear pocket test so that field sampling can become practical and a further survey of the incidence of the abnormal white blood cells in leukemia free herds as versus those with a history of leukemia.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 7, 1971

To all counties

ATT: Extension Home Economists

Immediate release

CHILDREN LEARN  
IN MANY WAYS

How does a child learn? And how early does a child start learning?

Scientific evidence is mounting to show that a human being learns more rapidly before the age of 3 than at any other time. Research studies show that children are dependent upon adults for almost all experience and learning until the age of 3, but at that age almost all children switch their attention to children, who then become a source of learning.

Parents, however, are the child's first teachers. They get all the questions and help set most of the child's attitude toward learning. Whether you as a parent help him or not, Johnny and Mary will learn. A child is equipped to learn through his senses, muscles, his curiosity, language and organizing ability.

Ronald Pitzer, extension family life specialist at the University of Minnesota, says a child learns in many ways:

. By exploration. Children explore the world with all their senses. The curious child, however, is not likely to be the cleanest child. Experimentation is often messy! It may be a real thrill for a young child to mix paint which he can use to paint a picture. But if a harassed mother scolds at the mess he makes, he may refrain from trying something new the next time. A child enjoys learning only when curiosity pays off with pleasure. A child's exploring nature is encouraged by providing a variety of play materials and experiences--blocks of different sizes and shapes, objects of different textures and weights, and by time outdoors where possibilities are endless.

. By trial and error. Children learn by doing and profiting by mistakes. When he undertakes a new activity, he tries one approach after another until he finds the right answer or approach.

add 1--8children learn

. By pain. Because pain is one of our most vivid experiences, it jolts us into learning rapidly what is likely to cause pain so we may avoid it in the future. One sting is usually enough to keep a child from trying to pick up a bumblebee again. Children may learn some valuable lessons as a result of painful experiences, such as learning after a burned finger not to touch the stove. But pain is not a good device to be used deliberately by parents. It may be cruel or inhuman and it is an inefficient way to learn. Pain can, at best, teach only what not to do. Corporal punishment--especially when severe--is more likely to teach the child to hate or fear the person administering the punishment than to teach him not to do whatever he did that prompted the punishment.

. By pleasure. When learning is fun, children naturally want to keep on learning. Smiles, conversation, praise of work well done are all rewards that spur children--and adults--on to further learning and accomplishments. Wise parents and teachers use such rewards freely. A child's pleasure in the attention he receives helps him to sharpen his powers of observation, an important skill in learning.

. By imitation. "Watch me!" is far more effective in trying to teach a child than telling him how to skip a rope or catch a ball. Children learn by observing and imitating. Two questions for parents are: Do you have the kind of relationship with your child that makes him want to imitate you? And: do you practice in your own behavior what you want your child to learn?

. By participation. Learning is an active process. The child learns by participating in family activities.

. By communication. Because it is impossible to think in an orderly fashion without words, a child must be helped and encouraged to develop a good vocabulary. Surveys show that low-language-ability students come from homes where there is little verbal interaction because the parents are not there, are too tired or disinterested to talk or spend so much time watching television there is little talking.

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 7, 1971

To all counties

ATT: Extension Home Economists

Immediate release

### DIFFERENT KINDS OF MILK AVAILABLE

As you've shopped for your family have you wondered about the many different kinds of milk available?

You probably know that raw milk is milk as it comes from the animal.

Pasteurized milk is raw milk heated until harmful germs are killed. This is the safest kind to drink.

To be more informed, check the following brief descriptions of pasteurized milk on the market today:

Homogenized milk has the cream mixed through it. It tastes "rich."

Fortified milk has vitamins and minerals added to it. Read the label or carton to see which nutrients have been added.

Two percent (2%) milk has less cream in it.

Skim milk has most of the cream taken out.

Chocolate milk is whole milk with chocolate added.

Chocolate flavored drink is low-fat milk with chocolate added.

Buttermilk is skim milk with a slightly sharp, acid taste.

Nonfat dry milk is skim milk with the water taken out.

Evaporated milk comes in a can. Some of the water has been taken out. Use evaporated milk as cream in your cooking, in coffee or tea and to pour over cereal, pudding or fruit. Or, mix with an equal amount of water and use it as regular milk.

Condensed milk also comes in a can. Sugar has been added to it, and it is very thick. Use condensed milk for making candy and special desserts.

-lsn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 7, 1971

To all counties  
4-H NEWS  
Immediate release

4-H'ERS ARE RAISING  
FOALS IN  
HORSE PROJECT

The 4-H horse project is one of the fastest growing 4-H activities in Minnesota.

Many of the 4-H'ers are helping the project grow by raising their own foals.

Robert Jordan, professor of animal science at the University of Minnesota, has some advice on choosing good breeding stock that will improve the horse population.

First make sure that the mare or stallion you are planning to breed is a good quality horse. Too many people make the mistake of breeding inferior mares to superior stallions hoping to get a 100 percent improvement over the mare. Remember that the genetic material that the foal carries comes equally from each parent, so improvements in the breed takes time and careful parent selection.

For example, improving the speed of race horses is a slow process. A Thoroughbred owner with outstanding horses can hope to increase the average speed of his herd by only a few tenths of a second per year.

Before you choose your stallion, analyze the conformation flaws of your mare. If your mare has weak legs, the stallion must have extremely strong, straight legs in order to improve the foal. Again, the improvement won't be one hundred percent, but the foal will probably have better legs than the mare.

You will want to judge the stallion's conformation before you decide to use his service. You'll also want to study his pedigree, look at his parents if possible and see his offspring. Many horses can look good if they are groomed to perfection and are in top fleshing, but the offspring is the true test of a stallion's quality.

Finally, Dr. Jordan says the "type of performance" is what an animal seems to be, the pedigree is what an animal ought to be but its progeny is a true measure of what an animal really is.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 8, 1971

Immediate Release

#### LIMIT HOME DISPOSAL UNITS, UM CONSERVATIONIST SAYS

Home garbage disposal units on sewage systems that empty into bodies of water should be banned, said Clifton Halsey, extension conservationist at the University of Minnesota.

But if sewage from the home empties into a septic tank, the garbage disposal in the sink drain is a "private, not a public problem," he added.

Garbage disposal units are a "very easy, convenient way of disposing of wastes at a high public cost. For the present, the sanitary landfill is a better way of disposing of food wastes, although it is less convenient. If we weren't so picky with our food, there'd be less waste," Halsey said.

The notions that clothes must be "whiter than white" and individual lawns must be the greenest in the neighborhood were challenged by the University extension conservationist.

If phosphates used in detergents end up in rivers or lakes via the sewage treatment system, these bodies of water can be enriched in nutrient content to an extent that will result in pollution. This is less of a concern where sewage disposal systems include drain fields and/or soil absorption systems with NO overflow into a stream and where the sewage treatment plant includes tertiary treatment that removes phosphate, he added.

add 1--limit home disposal

Status and a feeling of satisfaction result from the widely promoted values of having the "greenest lawn in the neighborhood, no dandelions, no crab grass and a deep green," he said.

Although some people think the easiest control for dandelions, 2,4-d weed killer, causes cancer, Halsey said he didn't believe it. But "heavy fertilizer used to get that affluent green color could be a source of nutrients in nearby lakes, especially if the lawns are not level" and lawn and tree insecticides can get into the foods animals eat, he said.

# # #

101-daz-71

Department of Information  
And Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 8, 1971

Immediate Release

#### TIPS GIVEN ON BUYING HOME FREEZER

If you're buying a home freezer to save money, you're on the wrong track.

On the other hand, if you buy a freezer because it's a time-saving convenience, you'll find it will pay off in such dividends, says Mrs. Shirley Munson, food scientist at the University of Minnesota.

Consumers frequently ask Mrs. Munson whether it's best to buy a chest type or an upright, whether a self-defrosting mechanism is a good investment and what size to choose.

The type you buy depends partly on personal preference, Mrs. Munson says. A chest-type freezer will hold more food than an upright, but it takes up more floor space. A chest freezer has the additional advantage of keeping the temperature low if there is a power failure.

An upright freezer will cost more to operate than a chest type, but many people find it more convenient for storing and locating the food. The upright is easier for children to open than the chest type, with the result that sometimes the door is left open and the food begins to defrost. If there is a mechanical failure, the upright will defrost more rapidly than the chest type. All of these factors should be weighed when deciding what type to buy, Mrs. Munson advises.

-more-

add 1--buying home freezer

An automatic defrosting mechanism--more common in the upright than in the chest type--will save the homemaker the messy job of defrosting the freezer, but it also increases the cost of operation and shortens the life of the appliance. Even though the defrosting job is eliminated, the freezer still has to be cleaned at intervals. It is sometimes difficult to keep the temperature of the automatic defrost freezer down to 0° F.

In deciding upon size, figure on 3 to 5 cubic feet per person unless the family is large and you expect to do a great deal of freezing. In that case, you may want 8 cubic feet per person.

Apartment dwellers and others with restricted space will usually find combination refrigerator-freezers perfectly satisfactory, Mrs. Munson says.

# # #

100-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 8, 1971

(Fourth of six stories)

NEW POTATO VARIETIES  
BOOST STATE YIELDS

The development of early varieties of potato plants and new potato farming techniques such as improved irrigation practices are helping to boost the state's potato yields on sandy soils, according to a University of Minnesota horticulturist.

Irrigation has boosted yields at the Sand Plain Experimental Field as well as on some of the state's sandy soil farms. Potato yields of the Russet Burbank variety in irrigated experimental plots were over 420 sacks per acre, Horticulturist O. C. Turnquist said. Some problems with irrigated potatoes, however, have arisen in potato producing areas all over the United States, Turnquist said.

One problem is that irrigation with extremely high rates of fertilizer results in a delay of potato maturity and a lower potato solids content. During the processing into chips, french fries and flakes, water must be removed--a process requiring time and money.

The new plant varieties--Anoka, Norland, Norgold, and Russet Burbank have shown promise as quality potatoes that can be grown in Minnesota's sandy soils, Turnquist said.

One variety, Norghief, yielded an average of 573 sacks per acre in experimental plots at the University's Sand Plain Experimental Field. Five other varieties tested at Elk River yielded over 500 sacks per acre with the standard varieties Irish Cobbler yielding 526 sacks per acre, Red Pontiac 488 sacks, and Norland 414 sacks per acre.

Early season potato production last year in Minnesota totaled nearly two million sacks on 7,800 acres for an average yield of 250 sacks per acre. Most of the early season production was on Minnesota's sandy soils.

Total Minnesota potato production last year was almost 13.4 million sacks, a substantial drop from the 1969 production.

# # # #

NEXT WEEK: Sunflower Farming to be Expanded.

## HIDDEN COSTS IN BUYING HOME

Buying a house involves a long series of decisions with risks that are inevitable. It is an expensive venture in both time and money, says Mrs. Edna Jordahl, extension home management specialist at the University of Minnesota.

Housing takes the biggest bite of a family's living dollars--often as much as 30 percent. Although most people assume that home ownership is cheaper than renting in the long run, it does involve hidden costs.

Here are a few of the costs Mrs. Jordahl suggests that the prospective home owner keep in mind when buying a house:

- . Real estate taxes. For an average income family, such taxes may easily amount to \$600 to \$1,000 a year.
- . Casualty and fire insurance. This may run \$100 to \$160.
- . General maintenance. This may take 1 percent of the value of the house.
- . Closing costs. Figure these at about 2 percent of the value of the house.
- . Lawn and garden tools.
- . Extra furniture, if you have lived in a small apartment.
- . Inflation.

Money going into all these extra costs could be earning interest and dividends if invested when the family rents. However, the satisfaction of home ownership may well outweigh the added costs, Mrs. Jordahl says.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 10, 1971

Immediate Release

### NEW ULM SWINE EVALUATION OPEN HOUSE SET FOR JUNE 16

A new, powerful ultrasonic instrument called the Observer which measures loin eye muscle and fat thickness in the live hog will be featured at the New Ulm swine evaluation open house Wednesday, June 16.

The machine presents recordings on a sophisticated visual display screen with memory storage capabilities. "This is comparable to the stop-action frame of an exciting football play on television," says Charles Christians, extension livestock specialist at the University of Minnesota who is supervisor of the test station.

The display of muscle and fat tissues are shown as actual live-scale measurements in complete two dimensional fashion.

About 100 pens of Minnesota's leading swine breeding stock will be exhibited, according to Christians. A judging clinic is scheduled from 10:30 until noon, and nationally known judges and breeders will appraise the classes of breeding and market stock.

An on-the-hoof evaluation contest will be available to all attending, and actual carcass cut-out data will be used for the final placing.

-more-

add 1--swine evaluation

Individuals evaluating the live hogs nearest the actual cut-out information will receive \$150 worth of certificate credit to be used at any of the Minnesota Pork Producers' Association performance tested boar sales. Awards are: 1st prize, \$50; 2nd, \$40; 3rd, \$30; 4th, \$20; and 5th, \$10.

An educational meats display and other demonstrations will be conducted throughout the afternoon activities, Christians adds.

# # #

102-jms-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 10, 1971

Immediate Release

#### 4-H JUNIOR LEADER CONFERENCE SET FOR JUNE 15-18

More than 600 Minnesota 4-H'ers are expected to attend the 4-H Junior Leader Conference Tuesday through Friday (June 15-18) on the State Fair Grounds in St. Paul, according to Leonard Harkness, state leader, 4-H and youth development at the University of Minnesota.

The Rev. Robert J. Hudnut of St. Luke Presbyterian Church, Wayzata, will give the keynote address Tuesday afternoon (June 15) in Erickson Hall. The Rev. Mr. Hudnut is co-chairman of the Joint Religious Legislative Committee.

The Greater Minneapolis Chamber of Commerce will be host to all delegates at the annual banquet Wednesday evening (June 16) in the Pick-Nicollet Hotel. Friends of 4-H awards will be presented at the event.

Officers of the State 4-H Federation will be elected Friday (June 18).

Delegates from each county are chosen who are enrolled in junior or teen leadership, are 15 years old or older, have a commitment to gain the most from the conference program and want to share their learning with others.

The theme of this year's conference is "I Care."

# # #

103-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 10, 1971

Immediate Release

## GRADE, INSPECTION MARKS CONFUSE MEAT BUYERS

Many consumers mistakenly assume that a government inspection stamp on meats is an indication of eating quality, while it actually refers to wholesomeness, according to Richard J. Epley, extension meat specialist at the University of Minnesota.

Inspections are conducted at packing and processing plants. The inspection mark means the meat is entirely suitable for consumption from a sanitary standpoint when it leaves the processing firm. Inspection is actually a consumer protection process; however, inspection does not tell the buyer much about the relative eating quality of the product, Epley said.

Quality and quantity differences in meats can be determined by the grade marking. Grades are based on the age of the carcass and marbling, color, firmness, lean texture and cutability of the meat. USDA grades for beef are Prime, Choice, Good, Standard, Commercial, Utility, Cutter and Canner; for veal, Prime, Choice, Good, Standard, Utility and Cull; and for lamb, Prime, Choice, Good, Utility and Cull. Although there are federal grades for pork, they are not widely used.

Prices vary according to grade with Prime more expensive than Choice and Good grades.

-more-

add 1--meat buyers

Grades are based on the meat's age, color, firmness, texture, cutability and marbling, which is the mixing of fat within the lean part of the meat. The more marbling, the more flavorful and juicy the meat will be, but as marbling increases, the amount of protein decreases.

Prime grade cuts have more marbling than other grades, giving them more flavor than lower grades of beef and lamb. Although a Good grade beef and lamb is less flavorful, it is higher in protein. Therefore, the Choice grade beef and lamb generally is featured in supermarkets, since it is in between Prime and Good Grades in flavor and protein, he added.

Saturated fat in animal products is an area of consumer concern, with some claims that saturated fats cause cardiac-vascular diseases and heart conditions. But there is not sufficient scientific evidence that this is true, Epley said. A person's total fat intake is more important in dietary considerations than the kind of fats he eats. Actually, smoking, exercise and heredity are thought by many authorities to be more important contributory causes in cardiac-vascular diseases, he said.

Some consumers reject pork products because they consider it a "fat" food and not readily digestible, yet some beef is fatter than pork. Pork is as digestible as beef and lamb, Epley added.

# # #

104-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minn. 55101 Tel. 373-0710  
June 10, 1971

Immediate release

## ART, WORKSHOPS AT ROCHESTER EVENT

An expanded program of art and craft workshops open to anyone interested will be a special feature of the second regional Southeastern Minnesota Art Exhibition to be held July 7-11 in Rochester on the Apache Mall.

Amateur artists from 16 southeastern Minnesota counties will exhibit their work at the event, which is open to the public. Artists must enter their original paintings, sculpture, drawings or prints by June 19 or 20.

The art event is sponsored by the University of Minnesota Agricultural Extension Service, the General Extension Division and Rochester State Junior College.

One-day workshops will be given in decorative stitchery and macrame as well as in advanced work with individual instruction in both crafts. Other one-day workshops will include stage set design, painting criticism and how to make good slides.

Two-day workshops will be offered in silk screen printmaking, wood block printmaking and good design for inexpensive publications.

The charge for each workshop will be \$7.50 per day. Instructors will be staff members of the University of Minnesota, the Minneapolis Institute of Arts and the Minnimath Film Center.

add 1--art workshops

New this year will be two courses for which University credit will be given:

Advanced Painting for Amateurs and Students and Understanding Children's Art. Byron Burford, professor of art, University of Iowa, Iowa City, will teach the advanced painting course. Frances Coles, instructor in art education at the University of Minnesota, will teach Understanding Children's Art. Fees will be charged for both courses.

Advance registration by July 1 is required for workshops and credit courses, according to Huldah Curl, extension arts coordinator at the University of Minnesota. Registration blanks for workshops and entry cards for artists are available from extension offices in southeastern counties, from art organizations in the area or from the General Extension Division in Rochester.

# # #

105-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minn. 55101 Tel. 373-0710  
June 10, 1971

Immediate release

#### UM PROFESSOR HUSTRULID TO RETIRE JUNE 30

Andrew Hustrulid, professor of agricultural engineering and a member of the University of Minnesota staff for the past 40 years, is scheduled to retire effective June 30.

Hustrulid, 1805 Fairview Avenue North, St. Paul, joined the University in 1931 as a teaching assistant. He was named an assistant professor in agricultural engineering in 1937 and has been a professor since 1947.

He received his bachelor of electrical engineering and doctorate degrees from the University of Minnesota. His primary interest in agricultural engineering research has been basic studies in drying cereal crops.

Hustrulid has served as chairman of the Minnesota section of the American Society of Agricultural Engineers and was elected a fellow in the society in 1965. He is a past president of the Minnesota Federation of Engineering Societies and is a member of the American Association of Physics Teachers, Minnesota Academy of Science, American Society for Engineering Education and Sigma Xi.

He is listed in "American Men of Science," "Who's Who in the Midwest," and "Personalities of the West and Midwest." Hustrulid is a fellow in the British Society for Research in Agricultural Engineering.

# # #

jms-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 11, 1971

SPECIAL

## OUTPUT ADJUSTMENTS TROUBLE U.S. TURKEY PRODUCERS

U.S. turkey producers have lost more than \$50 million dollars during the past 15 years because of uncertainty about future market prices, according to a recent report by a University of Minnesota agricultural economist.

A pattern of overproduction followed by under production results in inefficient use of production resources, unstable revenues and higher costs, Mostafa A. Soliman, a research associate in the Department of Agricultural and Applied Economics, said.

Producers rely extensively on past prices realized in the market in determining future production plans, which creates a pattern of extreme price changes. In response to high prices in a previous year, producers overexpand the following year, depressing market prices to low levels. Low prices curtail output in the next period and prices increase.

Turkey prices and production are expected to follow this cyclical pattern in the future because of time lags in production response, Soliman said.

-more-

add 1--u.s. turkey producers

Individual producers and producer groups should try to avoid overexpansion in their production plans by basing expansion on population growth to prevent wide fluctuation in price and, consequently, in income, he said. Stable price and income assurances in the future will depend on the producers' ability to curb substantial year-to-year production changes, Soliman said.

Supply control is one means of stabilizing output and reducing uncertainty in prices and producer income. Producers would be assigned quotas under a program administered by the U.S. Dept. of Agriculture, but returns would have to exceed costs of administration if producers are to realize significant benefits, he said.

Even with some price stability, there will still be risks from inventory price fluctuations and boom and bust cycles. These risks are due to the substantial lead time required in commitments to grow turkeys, perishability of the commodity resulting in a need to liquidate cold storage supplies to avoid quality deteriorations and the increased cost of feeding birds if they are kept after reaching marketable weights. Competitive meat supplies and prices for red meats, broilers and feed would also upset the cyclical pattern, he said.

# # #

daz

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 14, 1971

To all counties  
Immediate release

INSTRUCTION SHEET,  
OPERATOR'S MANUAL  
GOOD SAFETY GUIDES

The operator's manual or instruction sheet that comes with a new machine or tool is the best source of information on its safe use.

Have a good place to file and keep such instructions for ready reference, suggests \_\_\_\_\_ County Extension Agent \_\_\_\_\_. Also file warranty information.

Some other tips for farmers who have their own farm shops and others who have workshop corners or rooms:

\* A good working knowledge of a tool or piece of equipment is an important safety factor.

\* Keep tools sharp and properly adjusted--they're safer that way.

\* Have a definite place to keep tools, and keep them there when not in use.

\* Spilled oil or grease, scraps or trash should be cleaned from floors or benches as soon as possible.

\* Work in good light and avoid wearing loose clothing that can be caught on tools or equipment, \_\_\_\_\_ adds.

Accidents and injuries in home and farm workshops could be greatly reduced by avoiding difficult or hazardous work when you're tired, excited or worried, \_\_\_\_\_ says.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 14, 1971

To all counties  
Immediate release

MORE LOCALIZED  
OCCURRENCES OF  
BLIGHT REPORTED

Southern Corn Leaf Blight (SCLB) has been found in localized areas in 52 counties in 12 States, the National Federal-State Information Center on Corn Blight reported June 9. This represents an increase of 3 States and 22 counties from a week earlier.

The new states where SCLB has been identified include North Carolina, Georgia and Ohio. In addition, three states previously indicating small areas of SCLB are currently reporting the disease in 19 additional counties. These states are Illinois, Texas and Alabama. Other States where SCLB has been found include Kentucky, Tennessee, Nebraska, Iowa, Florida and Mississippi.

No reports have been received which indicate field to field spread of the disease. In the majority of counties reporting blight, infection is confined to volunteer seedlings in an individual field and plants in special research plots, the Blight Information Center reported. In those few instances where the disease has been identified on corn planted this spring, plant pathologists indicate infection was probably caused by spores from local debris or as a result of on-farm shelling operations.

In the Southern corn-producing States, current blight development is far behind that of a comparable period last year, probably because most of the crop was planted with resistant seed and because of the cold, dry spring.

The Blight Information Center, established by the U. S. Department of Agriculture in cooperation with State Agricultural Experiment Stations and State Extension Services, coordinates blight information nationally.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 14, 1971

To all counties  
  
Immediate release

IN BRIEF. . . .

No Corn Diseases in Minnesota. A corn disease survey made June 9 in southeast and south central Minnesota revealed no disease problems. A few leaf samples were brought back for laboratory diagnosis, but none of the serious leaf-spot fungi are likely to be found, according to Herbert G. Johnson, extension plant pathologist. No cases of seedling wilt or leaf spot were found. Stands were generally good and as of now the crop potential looks good, Johnson says.

Southern corn leaf blight in trace amounts has been found in Illinois, Iowa and Nebraska.

\* \* \* \*

Control Corn Borer Moths. Corn borer moths usually start laying eggs for the first brood in mid-June. Apply 5 to 14 percent diazinon or 5 percent carbaryl granules into the plant's whorls of leaves after eggs start to hatch, John A. Lofgren, University entomologist, suggests. The second brood usually appears in August and at that time treatments for earworm usually provide control of corn borer as well. Direct insecticides for earworm control at the silks. Apply a 5 percent diazinon or carbaryl dust when 25 percent of the ears show silking. A 1 percent spray of either of these chemicals will also provide control. A second application four or five days after the first one is necessary.

\* \* \* \*

-more-

Add 1--in brief

Attend Experiment Station Field Day. The summer field day at the \_\_\_\_\_

Experiment Station should be of interest to farmers, agribusiness man plus city and town dwellers. The event will be held \_\_\_\_\_.  
(date)

(Insert date for field day in your area: June 29, Waseca; June 30, Lamberton; July 8, Morris; July 14, Crookston; and July 15, Grand Rapids.)

The latest information on crops research will be discussed by University of Minnesota specialists. Bring plant pest specimens--a plant pest clinic will be available to help farmers and homeowners with weed and disease problems and assist in plant identification.

\* \* \* \*

Try for Early Calving. Cattlemen should follow good management practices to insure early calving within a short period of time, according to Ray Arthaud, University extension animal husbandryman. If calves are born in a short period of time, the producer has a more uniform "package" to market in the fall. Calves born at least three weeks before the cows get on pasture usually will be heavier when marketed at weaning than calves born later. This weight advantage is due to age and the fact that the calf is big enough early in the pasture season to use extra milk and good pasture.

\* \* \* \*

Provide Supplemental Feed. Cattlemen may need to provide some supplemental feed, particularly for first-calf heifers, Ray Arthaud, University extension animal husbandryman said. Adequate diets will increase conception rates and provide the energy to enable the cow to go into heat early in the season. It is not always possible for cows to eat enough lush, immature pasture growth to supply needed energy. When good pasture is not available or the growth is very immature, some supplemental feed might pay good dividends, Arthaud says. Good quality hay or two to four pounds of grain, if it's cheaper than hay, can be fed to provide extra energy.

# # # #

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 14, 1971

To all counties

ATT: Extension Home Economists

Immediate release

### YOU CAN EAT YOUR MILK, TOO

June has been set aside as National Dairy Month. Special newspaper and magazine articles and advertising, radio and television programs, posters and displays in grocery stores remind us of the value of milk and products made from milk.

Milk will not supply all of your daily body needs. But it makes a great contribution to the calcium, protein and vitamin needs of your body. Calcium builds bones and teeth and keeps them healthy and strong. Protein helps children grow, builds muscles and blood and keeps the cells of the body repaired. Vitamins help you look and feel good.

You do not need to drink all of your milk to supply your calcium needs. You can eat some of it. The following foods will give you about as much calcium as one cup of fresh whole milk or one cup milk made from nonfat dry milk:

- 1-1/3 cups cottage cheese or Cheddar cheese
- 1-1/4 ounces Swiss cheese
- 1/3 of a 14-inch round pizza made with cheese topping
- 1-2/3 cups cream soup prepared with milk
- 1 cup yogurt
- 1 cup custard
- 1-1/2 cups ice cream
- 1 cup cocoa made with milk
- 1-1/2 ounces pasteurized process American cheese

-1sn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 14, 1971

To all counties

ATT: Extension Home Economist

Immediate release

PREJUDICE  
IS LEARNED  
IN CHILDHOOD

Parents who want to bring up their children without prejudice must examine their own feelings about people who are different and recognize that children imitate and develop what they hear and see.

Children are born without prejudice. Prejudice is caught and taught--that is why the parents' attitude is the heart of the matter, says Ronald Pitzer, extension family life specialist at the University of Minnesota.

He gives some basic guidelines for parents who would bring up their children without prejudice:

- . Remember that children are always listening. When parents reveal prejudice, intentionally or unintentionally, it paves the way for their children to resort to prejudicial behavior directly patterned after remarks they have overhead.

- . Never permit--or practice yourself--the use of expressions degrading to any member of the family or any other human being.

- . Provide experiences for the children to associate with people who look, speak or worship differently so they learn in a natural way to appreciate differences and similarities among people and the richness in American's diversity.

- . Answer questions in regard to differences such as skin color and religion accurately and forthrightly. Help children see and understand how group differences came about.

- . Teach children to be sympathetic and understanding, to accept themselves and others to grow into emotional maturity so they do not use hostility and prejudice as a crutch for their own personality inadequacies.

- . Help them also to become secure in their groups so they do not feel threatened when they come in contact with people of other groups.

- . Encourage children to learn the art and skill of handling human relationships.

- . Teach them to make decisions and accept the moral obligations of their choices.

- . Work with neighbors to create a community where all children will have demonstrated to them how a good life can be achieved without sacrificing basic differences.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 14, 1971

To all counties  
4-H NEWS  
Immediate release

APPLY NOW  
FOR 4-H  
KEY AWARD

\_\_\_\_\_ County 4-H members with a record of leadership and achievement will again have an opportunity to apply for the 4-H Key Award, one of the most cherished awards given in the 4-H program, announces County Extension Agent \_\_\_\_\_.

Application forms and eligibility rules are available from the county extension office. Deadline for applying for the award is \_\_\_\_\_.

Nearly 12,000 outstanding 4-H members in Minnesota have received the 4-H Key Award, often referred to as the Phi Beta Kappa award of 4-H. The award includes a certificate of achievement and a gold key mounted on a tie tack for boys and a pendant for the girls.

Sponsor of the 4-H Key Award program in Minnesota since 1953 has been the Cities Service Company, at that time known as the Cities Service Oil Company. Minnesota was the third state to adopt the program. Some 30 states now carry it.

Last fall 700 4-H'ers in the state were recognized at county achievement events with the 4-H Key Award.

Among eligibility requirements are that a 4-H member must have:

- . Passed his or her 16th birthday by January 1.
- . Completed five years of 4-H.
- . Completed three years of junior leadership.
- . Given definite leadership assistance in the local club.
- . Held two local or county 4-H offices for at least one year.
- . Taken an active part in community service projects.
- . Attended at least eight training meetings for adult or junior leaders during the last three years.

Further information is available from the county extension office.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 14, 1971

SPECIAL

## GROUND BROKEN FOR UM MEAT SCIENCE LABORATORY

Ground was broken for a \$3.3 million Meat Science Laboratory  
June 9 on the University of Minnesota's St. Paul Campus.

Included in the new building will be complete slaughtering and meat processing facilities. The building is scheduled to be completed in December, 1972 and will have facilities for researchers in meat microbiology, histology, physiology and chemistry, according to Meats Scientist Eugene Allen.

The Meat Science Laboratory is the first phase of a new \$13 million Animal Science-Veterinary Science Complex which has been approved by the Minnesota Legislature.

According to Allen, research in the new meats building will concentrate in four basic areas: processed meats, including rancidity development, color, stability and sausage emulsion; development of techniques to develop microbiological standards in meats; fresh meat properties such as tenderness, flavor, color, and the relation of water binding capacity to juiciness; and the mechanism regulating synthesis of protein and fat synthesis in meat animals.

"We're hopeful that research can lead to more profitable utilization of waste products from packing plants," Allen says. "For example, connective tissue is now utilized in products such as jello, glue and animal feeds. If we could incorporate the collagen protein found in connective tissue into useful food products the processing industry would reap large savings."

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 15, 1971

Immediate Release

#### FIGURE COST PER SERVING FOR MEAT

Consumers who reject meat with bones removed because of the-product's per pound purchase cost are overlooking an important consideration, according to Richard J. Epley, extension meat specialist at the University of Minnesota.

Boneless products are usually slightly higher in per pound purchase cost than meat with bones due to labor involved in removing bones. But there is little difference in the per pound serving cost of boneless meat as compared with meat with the bone left in, Epley said.

When buying meat, purchase one-half to one pound per serving per person for bone-in meat and one-third to one-half pound per serving for boneless meat.

Flavor differs little in boneless and bone-in products except where moist heat is used in cooking, as in the case of a pot roast, Epley added.

Another common misconception is that once frozen meat is thawed it cannot be re-frozen. There's nothing wrong with freezing, thawing and refreezing, but it may affect tenderness and some juices and water-soluble constituents may be lost in the process, Epley said.

add 1--figure cost

When freezing meats, use aluminum freezer foil or some other moisture-proof and oxygen-proof wrapping. Wrap the meat tightly, since air that enters the package allows moisture to be drawn from the meat's surface and results in a condition known as "freezer burn". When "freezer burn" occurs, meat turns white and is tough and tasteless.

Fresh beef can be kept frozen up to nine months; pork, six months; and processed items, such as bacon, ham (cured and smoked) and frankfurters, one to two months.

It's best to thaw out frozen meat in the refrigerator or cook it frozen rather than thawing it out uncovered on the kitchen table. Although it takes longer to thaw out meat in the refrigerator, less moisture is lost and the product will be juicier this way than leaving it on the table, Epley said.

If meat is not frozen after bringing it home from the market, keep it in the coldest part of the refrigerator. If not used immediately meat can be kept in the refrigerator until it starts to turn brown, then it ought to be prepared or frozen. The storing meat above freezing temperatures, it's best to leave it in the store wrapper, he said.

# # #

106-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 15, 1971

Immediate Release

## DAMAGED PARK PINE TO BE RESTORED

Park managers at Minnesota's St. Croix State Park hope to restore the declining acreage of pine forests there while maintaining a large deer herd that has eaten and destroyed the young pine during winter for many years.

Deer have badly over browsed portions of the approximately 32,000 acre park and have totally eliminated any young pine started through natural regeneration or planting, according to University of Minnesota foresters, A. Fedkenheuer and Henry Hansen.

The problem has been especially perplexing to park managers because park visitors enjoy both deer and the virgin pine forests.

The foresters feel that the problem can be solved by planting pine trees in areas of the park which deer do not occupy in winter. Deer eat young pine trees only in winter and then only when other types of browse are gone.

A survey of the park by airplane, car and snowmobile taken last year showed that deer mainly occupy pine and pine-aspen forests in winter. Few or no deer were observed in hardwood forests or open areas in the park.

"Pine could be planted in clearings made in large stands of aspen and other hardwood types seldom used by deer in winter. Since they do not browse the pine in summer, these planted trees could have a good chance to become established. When the trees get large enough they would provide winter cover that might attract the deer to portions of the park presently given little winter use by the herd," the foresters said.

107-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minn. 55101 Tel. 373-0710  
June 15, 1971

Immediate release

## UM STUDENTS WIN NATIONAL CONTEST

Students at the University of Minnesota's College of Agriculture recently swept the National Lamb Intercollegiate Judging Contest at Albert Lea, Minn., taking high honors both in team and individual categories.

The Minnesota team, coached by Prof. C. J. Christians, took first place in team honors.

Team member James Resch, a freshman from Spirit Lake, Iowa, placed high individual overall, adult college, 4-H and FFA divisions. David Resch, a brother of James Resch and a sophomore, placed second in individual honors and third in high overall score.

The other two team members, Douglas Sandman, Lamberton, Minn., and Norman Abbe, Owatonna, Minn., placed third and fourth in the collegiate category, respectively. Both are juniors in the College of Agriculture.

The contestants for the National Lamb Intercollegiate Judging Contest included college area technical students, adults and high school students regularly enrolled in 4-H or FFA from anywhere in the United States.

Two market, two breeding and one grading lamb class were judged. A series of five written questions were answered on one market and breeding class.

# # #

111-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 15, 1971

\*\*\*\*\*  
\* \*  
\* FOR RELEASE: \*  
\* after 6 p.m. Wed. \*  
\* June 16 \*  
\* \*  
\*\*\*\*\*

#### 4-H AWARDS TO INDIVIDUALS AND FIRMS

Service to the 4-H program in Minnesota won special awards for eight Minnesotans as well as four business firms during the State 4-H Junior Leadership Conference.

The awards were presented Wednesday (June 16) evening at the annual 4-H leadership banquet sponsored by the Greater Minneapolis Area Chamber of Commerce at the Pick-Nicollet Hotel, Minneapolis.

Nancy Mrnak, State 4-H Federation president, awarded Friends of 4-H plaques and honorary membership in the Minnesota 4-H Key Club to Carroll Plager, Austin; Thomas Olson, Starbuck; **Viola Stallman**, 603 Main St. N.E., Minneapolis, and Jo Nelson, 2222 Hendon Ave., St. Paul.

Plager was cited for his work in judging at county and state 4-H livestock shows in Minnesota for more than 20 years. In 1957 he was recognized as one of Minnesota's outstanding 4-H alumni.

Olson, president of the First National Bank, Starbuck and a past president of the Minnesota Bankers' Association, was recognized for serving as chairman for the past two years of the Minnesota Bankers' Committee for the National 4-H Foundation. Under his leadership Minnesota bankers headed the list of all bank groups in the U.S. in support of the National 4-H Foundation in 1970.

add 1--4-h awards

Miss Stallman was honored for 41 years of service as secretary in the State 4-H Office on the University of Minnesota's St. Paul Campus and for her part in developing the 4-H program.

Mrs. Nelson is professor and extension information specialist in the Department of Information and Agricultural Journalism at the University of Minnesota. She was cited for her contribution to the 4-H program through news releases and press coverage of youth activities over the past 28 years, and through her daily radio program on KUOM, which she has aired since 1944.

Four firms were honored with meritorious service plaques for their contributions in helping to sponsor the annual 4-H banquet and for their role as table hosts over a period of years: Twin City Federal Savings & Loan Assn.; Oliver Farm Equipment Co.; Colwell Press; and Super Valu Stores, Inc.

Four distinguished 4-H alumni also received plaques at the banquet: Mrs. Betty Rantanen, Middle River; George R. Conzemius, state senator and farmer, Cannon Falls; John W. Torgelson, Willmar, president of Willmar State Junior College; and Mrs. Harold Davy, Brownsville.

The State 4-H Leadership Conference continues until Friday noon on the State Fair grounds, with election of State 4-H Federation officers scheduled for Friday morning. Some 600 4-H members are attending the event.

# # #

109-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minn. 55101 Tel. 373-0710  
June 15, 1971

Immediate release

#### FIVE GOPHER STATE TEENS IN 4-H CARAVAN

Five Minnesota girls will leave Sunday (June 20) on the overseas 4-H Teen Caravan program, which is designed to give teenagers an opportunity to learn about 4-H in another country, 4-H and youth development leaders at the University of Minnesota said.

Taking part in the 4-H Teen Caravan will be Christine Berge, 16, 6701 Winnetka Ave. N., Minneapolis; Bonnie Schilling, 17, Newport; Yvonne Bauman, 18, Oak Park; Vicky Erickson, 18, Viking, and Sue Ray, 17, Pipestone.

The Teen Caravaners will live with a host family in one country for about six weeks and spend several weeks on an educational guided tour of nearby countries. Miss Berge and Miss Erickson will stay with host families in Austria; Miss Schilling will go to Barbados, Trinidad and Tobago; Miss Bauman to Denmark and Miss Ray to Italy.

Teen Caravan is one of the international programs conducted by the National 4-H Foundation in behalf of the Agricultural Extension Service to increase world understanding at the family level.

# # #

110-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 15, 1971

Immediate Release

### THREE MINNESOTANS SET FOR OVERSEAS PROGRAMS

Three young Minnesotans will leave Saturday, June 19 to take part in overseas programs of the International Farm Youth Exchange (IFYE) and Youth Development Project, 4-H and youth development leaders at the University of Minnesota have announced.

Wayne Odegaard, 25, St. Peter, will work in Jamaica for 14 months in the Youth Development Project. Odegaard received a bachelor of science degree in animal science from the University of Minnesota and has been an assistant extension agent in Nicollet County since Jan. 1, 1970. He is formerly from Crookston.

Margaret K. Trahms, 22, Route 2, Janesville, will spend five months with farm families in Thailand. She received a bachelor of science degree in 1969 in biological science and education from the University of Minnesota.

Mike Holmberg, 21, Avoca, will spend four months with farm families in the Netherlands. He has attended the University of Minnesota and served in 1969 and 1970 as a summer assistant extension agent in Pipestone County working with 4-H programs.

The International Farm Youth Exchange and the Youth Development Project international programs conducted by the National 4-H Foundation in behalf of the Agricultural Extension Service to increase world understanding at the family level.

108-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 15, 1971

(Fifth of six stories)

SUNFLOWER FARMING,  
PROCESSING EXPECTED  
TO EXPAND

Sunflower may become a major state crop. The acreage of sunflowers could double and the total income to sunflower growers more than double this summer over that of 1970 if growing and market conditions remain favorable, according to a University of Minnesota agronomist, R. G. Robinson.

Last summer nearly a quarter million acres in Minnesota and eastern North Dakota were planted to sunflower. The income to Minnesota farmers alone was \$3½ million, but much more was returned to the Minnesota economy because sunflower seeds are processed in the state for human consumption, bird feed, or oil, he explained. Processing from farmer to retailer is accomplished by Minnesota labor and industry. Consequently that \$3½ million is multiplied several times.

The demand for sunflowers has had a long term upward trend which may continue. Bird feed usage is expected to increase with population increase and greater interest in conservation and recreation. Human food usage is expected to increase as the public becomes informed that sunflower nut meats are one of the cheapest and most nutritious nuts available, Robinson said.

Sunflower oil is recognized by industry as a top quality edible oil and the only thing preventing nationwide distribution is insufficient production, he said.

Sunflower and also pinto beans and grain sorghum have demonstrated potential for production on Minnesota irrigated sandy soils at the University of Minnesota's Sand Plain Experimental Field located near Elk River, Minnesota.

add 1--sunflower farming

Robinson's experiments there with sunflower, pinto beans and grain sorghum are aimed at providing Minnesota farmers with alternative crops and techniques for farming the state's 8 million acres of sandy soils. He has been looking for new crops for irrigated soils that would provide more than \$100 per acre gross income, require minimum labor, could be easily and safely stored, and have ready markets.

"Corn and infrequently soybeans meet these requirements, but most of the other crops on Minnesota's irrigated acres are perishable crops such as potatoes, vegetables, and small fruits. These perishable crops are often profitable, but they may require much labor, specialized equipment, expensive storage, and troublesome marketing procedures," he said.

Use of irrigation and fertilizer on sunflower, pinto beans and grain sorghum at Elk River resulted in very high yields and demonstrated that relatively cheap, sandy land could be made highly productive.

Sunflower grown on irrigated, fertilized plots produced an average of 2,397 pounds per acre compared to untreated plots' production of 506 pounds per acre and the 1969-1970 state average of 914 pounds per acre.

Pinto beans grown on irrigated, fertilized plots produced an average of 2,576 pounds per acre compared to 503 pounds per acre on untreated plots and 1,150 pounds per acre for the 1969-1970 state average.

Grain sorghum production was increased from 1,434 pounds per acre on untreated plots to 5,611 pounds per acre on irrigated and fertilized plots.

Sunflower, pinto beans, and grain sorghum are potential new crops for some of the state's irrigated farms and all are possible rotation crops, Robinson said. Prices of these crops vary from year to year, so relative price will be an important factor in choice of crop, he said.

# # # #

Next week: U Scientists 'Turn On' Females

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 17, 1971

SPECIAL

#### HARRY KITTS, UM AG EDUCATOR, DIES

Word has been received here that Harry W. Kitts, 57, University of Minnesota professor of agricultural education, died at his home Tuesday (June 15).

Funeral arrangements have not yet been made.

Kitts was well known and honored for his work in agricultural education throughout the United States and abroad in Thailand and Brazil.

He is survived by his wife, three sons, one daughter and five grandchildren.

He was born in Gouverneur, New York in 1914. After joining FFA there in 1928, he went on to become a local, district and state officer and was the state public speaking contest winner in 1931. He also represented New York as official delegate to the third National FFA convention that year.

After taking his bachelor's degree from Cornell University, Ithaca, New York, he served as a lieutenant colonel in the army from 1942 to 1946.

Kitts was an instructor at Cornell University from 1946 to 1948 and received his Ph.D. there in 1948.

Kitts was appointed to University of Minnesota staff in 1948. He was granted leave from 1962 to 1964 to serve as Technical Advisor to Director-General of Vocational Education, Thailand, in the Agency for International Development. Later he was granted leave to serve as Chief of Party in an agricultural education program in Brazil sponsored by the Ford Foundation and the University of Minnesota.

-more-

add 1--kitts dies

In 1958, Kitts was awarded the National FFA Honorary American Farmer degree, highest recognition given by the organization.

Kitts was presently serving as editor of the Agricultural Education Magazine. He was also a member of the Southeast Asia Treaty Organization's Advisory Committee for Vocational Education.

Kitts was an advisor to Successful Farming Magazine and was District Governor of Kiwanais.

He held membership in the professional groups Gamma Sigma Delta, Phi Delta Kappa, Alpha Tau Alpha, Phi Kappa Phi; the national organizations, American Association of Teacher Educators in Agriculture; National Vocational Agriculture Teachers Association; American Vocational Association and various state organizations.

###

bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 17, 1971

Immediate Release

## FIRST NORTHERN ART EXHIBITION SCHEDULED

A first for Grand Rapids will be a regional exhibition of the works of non-professional artists and college art students in the area Aug. 13-15 in the Grand Rapids High School. Crafts and arts workshops will be held during the art event.

The Northern Art Exhibition will be one of four art events covering the entire state, according to Huldah Curl, extension arts coordinator at the University of Minnesota. The Northern Exhibition will be sponsored by the University's Agricultural Extension Service and General Extension Division, the Grand Rapids Performing Arts Council, the Itasca Art Association and Itasca State Junior College. The event is being held in conjunction with the Summer Arts Study Center.

Non-professional artists beyond high school age from 24 counties in northeastern, northern and northwestern Minnesota, as well as college art students in the area, will be eligible to enter one or two original paintings, drawings, prints or sculptures completed within the last year. Paintings, prints and drawings must be framed for hanging. Between 200 and 300 works will be accepted for the show.

add 1--northern art exhibition

First, second, third and merit awards will be given. Award-winning work will be displayed in the spring of 1972 at the statewide Town-Country Art Exhibition on the University's St. Paul Campus.

One- and two-day workshops to be held during the exhibition include woodblock printmaking, silk screen printmaking, macrame, backstrap weaving, batik and tie dye. Professional artists and skilled craftsmen who are on the staffs of the University and various art schools will conduct the workshops. Tuition for the workshops will be \$7.50 per day.

The workshops are open to anyone interested. Information on the workshops and registration and entry forms for the art exhibition are available from county extension offices.

July 24 and July 25 have been scheduled as entry dates for all art exhibits.

# # #

111-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 17, 1971

Immediate Release

#### SCLB EXPECTED SOON IN MINNESOTA

Southern corn leaf blight (SCLB) has not yet been found in Minnesota, but is expected before long, according to a University of Minnesota extension plant pathologist, Herbert G. Johnson.

Suspected corn plants are now being checked, he said.

SCLB is building up in the central corn belt and most widespread reports are from Illinois where the disease is now in about 25 counties. One 20 acre field there has been plowed down because of early and severe infection.

Increasing but fewer occurrences of SCLB are reported from Ohio, Iowa and Nebraska.

The source of the fungus spores in all of these cases is believed to be from local corn refuse of the 1970 crop.

Once SCLB occurs in Minnesota, the severity of the disease will then depend upon the weather. Hot, wet conditions will promote the disease, but either cool or dry weather will slow it down.

The seedling wilt phase of the disease which occurs from infected seed has been found in test plots in Minnesota where known infected seed was planted. Seedling wilt does not result in leaf spot, but stand is reduced.

###

113-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 17, 1971

Immediate Release

#### BRANCH STATION FIELD DAYS PLANNED BY U

Minnesota farmers will have a chance to take a look at the latest in agricultural research at field days planned this summer by the University of Minnesota's Agricultural Experiment Station.

The summer field days at branch agricultural experiment stations will feature research on crops economically important to Minnesota. Many of the branch stations will also have special programs to answer questions and acquaint the public with agricultural research.

The following lists the dates and programs for the respective branch stations:

June 29--Southern Experiment Station, Waseca. Tours are scheduled from 8:30 a.m. to 3 p.m. of corn and soybean research plots, small grain varietal and fertilizer trials, forage research, corn tillage systems, corn rootworm, and corn borer research, and livestock facilities. A special women's program is included as well as a program for students interested in attending the new Technical College which opens this fall.

-more -

add 1--field days

June 30--Southwest Experiment Station, Lambertson. Tours of small grain varieties, weed control corn rootworm, fertilizer and tillage projects are scheduled from 9 a.m. to 2 pm. There will be a special clinic for visitors to bring in their problem questions. A special feature will be the dedication of the new Office and Continuing Education Center.

July 8--West Central School and Experiment Station, Morris. Tours will be conducted showing chemical weed control in corn and soybeans, varietal trials in small grains, fertility trials in corn and soybeans, and row spacing and weed control in small grains. A plant pest clinic will be available to assist farmers with weed and disease problems and to assist in plant identification.

July 14--Northwest Experiment Station, Crookston.

July 15--North Central Experiment Station, Grand Rapids. Tours will take everyone attending from 9 a.m. to 12 a.m. through agronomy, forestry and horticulture areas. In the afternoon there will be a special seminar emphasizing alfalfa culture in northern Minnesota as it relates to disease resistance. During the afternoon session, groups will also be taken to the livestock area and forestry plantations.

August 15--Southern Experiment Station, Waseca. From 2 p.m. to 5 p.m., tours will be held of flower and vegetable displays, horticulture research plots, orchard and berry plots, landscape materials and the Bob Hodgson Memorial Arboretum.

# # #

112-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 17, 1971

Immediate Release

#### UM HORTICULTURIST PHILLIPS TO RETIRE

Robert A. Phillips, 5401 Woodlawn, Minneapolis is scheduled to retire June 30 from the University of Minnesota's Department of Horticultural Science where he has served for the past 28 years.

Phillips, an assistant professor of horticulture at the University, has played an important role in developing roses, chrysanthemums and other garden perennials for northern climates.

Phillips is well-known for his garden column in the St. Paul Dispatch and Pioneer Press, which he has written for 21 years. He is also the regional editor for the Flower and Garden Magazine and is author of numerous popular horticultural publications.

He is widely known to the adult gardening population of the Twin Cities area for his continuing education classes in gardening.

Phillips has been in charge of the rose breeding program at the University for 22 years and has also worked on the chrysanthemum breeding project for many years.

Among the most recent roses Phillips has been responsible for developing is Viking Queen, an everblooming climber introduced to the public by the University in the summer of 1962. He played an important role with University horticulturist, Richard E. Widmer, in the development of Golden Jubilee, a gold chrysanthemum and numerous other chrysanthemums.

Before joining the horticulture staff at the University, he had charge of the botanical greenhouse and gardens on the Minneapolis Campus.

Phillips received both bachelor's and master's degrees from the University of Minnesota.

He holds membership in professional societies including the American Society for Horticultural Science, Professional Men's Institute, and the Garden Writers of America.

114-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 21, 1971

To all counties

ATT: Extension Home Economists

Immediate release

TURKEY TOPS  
PLENTIFUL FOODS  
LIST FOR JULY

Turkeys are showing up as strong on the plentiful foods list of the U. S. Department of Agriculture for July as they did last November.

The big supply means plenty of turkeys for the barbecue at reasonable prices for \_\_\_\_\_ County consumers.

Other foods expected to be abundant in July are eggs, fresh and frozen salmon, fresh plums, watermelon, cranberry sauce and juice, rice and fresh vegetables from home and market gardens.

These are foods to keep in mind as you do your marketing during the month, since they should carry reasonable price tags, says \_\_\_\_\_, \_\_\_\_\_ County extension home economist.

July marketings of turkeys are anticipated to be about 4 percent larger than last year and cold storage holdings exceed those of a year ago.

Egg production in July will probably be more than 1 percent higher than it was a year ago, and retail prices may also be more attractive than in 1970.

The demand for fresh and frozen salmon usually equals or exceeds the supply, but because of the large 1970 catch of 397 million pounds, the current supply is way ahead of demand. The big stocks of frozen salmon on hand assure abundant supplies in the coming months.

If you're looking for an easy and refreshing dessert for your summer picnics, take along fresh plums. About 106,000 tons of plums are expected from this year's crop--approximately the same as the 1968 harvest. Movement of the current crop will be heavy from mid-June and throughout July.

-more-

add 1--plentiful foods

Another favorite summer dessert is watermelon. A heavy volume of melons should be coming to market in July from the southeast and south central states--plenty to satisfy the appetities of children and adults.

For cold refreshing summer drinks, have a supply of cranberry juice cocktail on hand. And don't forget the cranberry sauce to accompany your barbecued or roast turkey. The past season's heavy crop of cranberries is responsible for the big supplies of cocktail and cranberry sauce on grocers' shelves.

Homemakers can turn to versatile rice for many summer dishes to accompany poultry, meats and fish or to serve as dessert. The long-grain variety is preferred for fluffy rice with grains separate. The short-grain variety is especially good for puddings or rice rings, since particles cling together.

Whether the family favorite is Corn-on-the-Cob or a big crisp tossed salad, July will provide the makings.

Fresh vegetables from home and market gardens will give consumers the opportunity to add plenty of color, texture and delicious flavor to family meals. Sweet corn, tomatoes, cucumbers, carrots, cabbage and celery are among the vegetables expected to be in generous supply during the month.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 21, 1971

(Last of six stories)

#### U SCIENTISTS "TURN ON" FEMALES

Scientists are using chemicals to "turn on" cucumber plants, making the female flowers, known as pistillate flowers, bloom earlier, resulting in increased yields sooner in the growing season.

Use of plant growth regulating chemicals is all part of "total crop control," according to University of Minnesota horticulturist Paul E. Read. Experiments with growth regulators at the University's Sand Plain Experimental Field near Elk River, Minn., point to the near future when growth of crops will be controlled at will for convenient crop harvest, and quality, he said.

Growth regulators that are now used commercially include TIBA which is sprayed on soybeans to increase yield, and affect the shape of the plant so that the leaves intercept more light.

Another growth regulator, Alar, is used on fruit crops such as apples, peaches and cherries to intensify fruit color and improve storage quality characteristics.

On a pickling cucumber plant, the staminate or male flowers normally appear first and several weeks later, the pistillate, fruit-bearing flowers appear. By using the growth regulator, Ethephon, the pistillate flowers bloom sooner and the early yields on experimental plots are boosted about 10-25 percent, Read explained.

The growth regulating chemicals have also boosted yields on cucumber plant varieties that have all pistillate flowers on the same plant. Alar boosted yields 10 percent and another growth regulator, designated NIA 10637, boosted yields 25 percent in experimental plots.

Ethephon is also being used on an experimental basis on tomatoes. With the chemical, the green tomatoes ripen faster and harvesting with a mechanical harvester can be done earlier with less wasted fruit, he said.

Other growth regulators are being used to increase potato yield and enlarge the size of potato tubers.

add 1--u scientists

Some regulators have increased snap bean yield up to 25 percent. Others have affected pod quality and pod size.

Eventually, chemicals will be used to "turn crops off and on at will," Read said. So in the early stages of growth, a chemical might be used to induce a plant to be prolific and withstand the stress of early growth. Another chemical might later be used to hasten maturity of the crop.

Growth regulators are another tool to be used with other cultural practices to control plant growth and make a more desirable product, Read said. Although the experimental growth regulators are not legal for use now, many may be added to the list of present chemical growth regulators, he said. Regulators must be cleared by the Food and Drug Administration before they can be legally marketed for use on commercial crops.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 21, 1971

IMMEDIATE RELEASE

## CORN BLIGHT SPREADS

Southern Corn Leaf Blight (SCLB) has now spread to 124 counties in 18 states, according to the National Federal-State Information Center on Corn Blight.

SCLB has not yet been found in Minnesota, but plant pathologists here expect its occurrence soon. Minnesota corn plants suspected to have the disease are now being checked.

The new states where SCLB has been identified include: Virginia, Michigan, South Carolina, Indiana, Delaware and Wisconsin.

The most frequent reports of infection in corn planted this spring are from Illinois where occurrence of the disease has been greatest in the southern part of the state.

Plant pathologists are quick to point out, however, that the crop in corn belt states is reported to be in generally good condition.

Pathologists also say that in most counties, the disease is only in trace amounts and primarily in volunteer seedlings.

In those cases where the disease has been identified in 1971-planted corn, indications are that the infection may have spread from volunteer plants, field debris or as a result of corn being shelled or handled near susceptible fields.

In the southern corn-producing states, development of SCLB is substantially behind the same period a year ago as a probable result of cold, dry weather throughout much of the area this spring in addition to increased planting of blight-resistant seed.

###

115-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 21, 1971

To all countries

Immediate release

LIQUID STORAGE SYSTEMS  
BEST FOR HANDLING MANURE

Properly planned and managed liquid manure storage systems offer dairymen the most satisfactory means of dealing with animal waste, according to a University of Minnesota scientist.

Even though initial cost of liquid manure systems may be highest, the benefits are great. Systems which have long-term storage capacity permit disposing of manure on the land at appropriate times, said a University agricultural engineer, D. W. Bates, who spoke this week at the 66th Annual Meeting of the American Dairy Science Association at Michigan State University, East Lansing, Michigan.

Liquid manure systems can offer a substantial savings in labor, straw used for bedding, and allow the farmer a wider range of management alternatives for manure wastes, Bates said.

Liquid manure systems research at the University includes a research project at the Northwest Experiment Station at Crookston, Minn., where a storage tank 30 feet wide, 90 feet long and 8 feet deep was constructed by a modern, 60-cow, barn. All wastes were dropped into the tank which had no mechanical distribution system.

Poured-in-place cow mats were installed in the barn which decreased the amount of bedding needed for a cow from 16 to 2.9 pounds per day. The savings for the 60 cows was 12.3 tons per month, or \$2,214 for the year, Bates said.

Savings in labor cost resulting from periodic hauling of the liquid manure compared to daily hauling required for dry waste systems are estimated at \$300 per year, he said.

Results of research with the liquid manure storage system showed that:

\* Manure stored in a large tank, approximately 150,000 gallons of usable capacity, can be agitated and removed without difficulty under proper management.

add 1--liquid storage systems

Manure with little bedding deposited in one end of a tank 90 feet long will distribute itself sufficiently under its own weight so a conveyor is not necessary.

\* A full tank of stored manure can be completely agitated, partially emptied, reagitated and completely emptied without difficulty.

\* Waste heat from the dairy barn ventilation system is a valuable resource in preventing freezing in a covered external manure storage tank.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 21, 1971

To all counties

Immediate release

PLAN CAREFULLY  
WHEN TRANSFERRING  
FARM PROPERTY

If you're planning to transfer ownership of farm property, University of Minnesota specialists suggest following these pointers:

- \* Discuss the problem with all concerned family members.
- \* Consider ways of treating family members equitably.
- \* Transfer as much of the farm property to the farming son before the parent's death as is in keeping with the financial security and income needs of the parents and the son's ability to pay for it.
- \* Keep the change of ownership from father to son on a businesslike basis.
- \* Provide at the beginning for the unexpected death of either father or son.
- \* Plan to transfer ownership of livestock and equipment before transfer of ownership of land and buildings.
- \* Give consideration to income taxes and possible use of gifts.
- \* Hire a lawyer to handle the legal problems involved.
- \* Review the plan occasionally to insure that it is still consistent with your goals and circumstances.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 21, 1971

To all counties

Immediate release

IN BRIEF. . . .

Test for Phosphorus. Test soil for phosphorus if your lawn is located near a lake. Your county agricultural extension agent can provide you with information on soil tests. If your lawn contains phosphorus, use a fertilizer without phosphorus, such as 20-0-10, to eliminate the possibility of phosphorus being carried by runoff water to the lake. Always be careful when fertilizing turf near lakes or streams so that chemicals aren't deposited in the water. For more information, read "The Home Lawn," available from the \_\_\_\_\_ County Extension Office or the Bulletin Room, University of Minnesota, St. Paul, 55101.

\* \* \* \*

Check Fan Performance Rating. When purchasing fans for a dairy barn ventilation system, insist on seeing a performance rating that gives fan discharge in cubic feet per minute (c.f.m.) against a 1/8 inch static pressure when tested under the Standard Test Code adopted by the Air Moving and Conditioning Association, Inc. Minimum capacity of the entire ventilation system should be 25 c.f.m. for each 1,000 pounds of animal weight. Free air delivery rating and diameter of the fan are unreliable indicators of fan exhaust capacity.

\* \* \* \*

Chemical Mix Given. Most insects that attack garden plants above ground can be controlled with a mixture of malathion and methoxychlor, according to John A. Lofgren, University entomologist. Carbaryl (Sevin) or diazinon also control most common garden insects, although carbaryl is not very effective in controlling aphids. Mix your own insecticide with these chemicals or buy one already prepared. Add a fungicide to the mixture to control or prevent plant diseases. Fact sheets on controlling insects and diseases in home vegetable gardens are available from the \_\_\_\_\_ County Extension Office or the Bulletin Room, University of Minnesota, St. Paul., 55101.

\* \* \* \*

-more-

add'l--in brief

Control Garden Weeds. Control vegetable garden weeds easily by stirring the soil with a garden rake early in the season as the weed seeds germinate. Since weeds are easily killed when they are small, start cultivating as soon as the vegetable seedlings emerge and mark the rows. Cultivating at weekly intervals or as soon as the soil is dry enough after a rain keeps weeds controlled. Don't cultivate or hoe too deeply around the plants if vegetable plant roots are injured. They cannot absorb the water and nutrients made available to them by weed removal.

\* \* \* \*

Watch for Aster Yellows. Aster yellows, a disease spread by the aster leafhopper, affects tomatoes, carrots, lettuce, onions, potatoes and many other plants. Control the leafhoppers with insecticides during the first half of the growing season. Don't expect complete control of the leafhopper, especially during seasons with large populations of this insect. Severe leafhopper infestations occur at irregular intervals, so watch for news reports.

# # # #

*Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 21, 1971

To all counties

ATT: Extension Home Economists

Immediate release

TAKE THE GOOD  
STORAGE TEST

For each weather season in Minnesota homemakers have to put away clothing from one season and get it out for the coming one. This means that closets, drawers and shelves must be gone over and checked each season.

When you have put away the winter clothes, why not take the "Good Storage" test? It asks three simple questions:

Are items in your drawers and closet and on shelves.

Easy to see?

Easy to reach?

Easy to remove?

If you scored 100 percent that's fine. However, if your score was low, remember to:

Get rid of things you don't need

Store things where you use them

Store together things you use together

Store within easy reach things you use most often.

Of course, only clean clothes and items are stored for another season.

-1sn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 21, 1971

To all counties  
4-H NEWS  
Immediate release

4-H'ERS PUT  
"I CARE" THEME  
INTO ACTION

"I Care" is the theme 4-H'ers are putting into action in \_\_\_\_\_ County and throughout the state.

Delegates from \_\_\_\_\_ County attending the recent statewide 4-H Junior Leadership Conference in St. Paul reported that the theme of the conference, "I Care," was put into action as well as carried out in discussions. Showing that they care about people, many of the 4-H'ers visited hospitals and nursing homes in the Twin Cities, entertaining patients with talent numbers. Other delegates, showing their concern for the environment, organized clean-up crews to pick up trash in city parks.

These same concerns for people and for the environment are evident in the projects of \_\_\_\_\_ County 4-H'ers as well as other 4-H'ers throughout the state. Regular visits to nursing homes and to hospitals are part of the programs of many clubs. 4-H'ers enrolled in the Youth for Natural Beauty Program, the Conservation project and the Wildlife Habitat Improvement program have indicated in many ways their involvement in improving the appearance of local neighborhoods and towns. They have cleaned up neglected town parks, lakeshores and abandoned lots, have planted flowers around town halls, have developed and helped to maintain wayside picnic sites, have beautified their own yards. In their conservation project they plant trees, provide cover for pheasants and deer and other wildlife and in many other ways try to preserve the natural environment.

Many 4-H meetings are devoted to talks and demonstrations on conservation and beautification. But more important, the 4-H'ers practice what they preach.

-jbn-

NOTE TO AGENT: You may want to rewrite the last paragraphs, substituting specific accomplishments of local 4-H'ers. At least localize by adding information on what your county 4-H'ers are doing in the projects mentioned.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 21, 1971

IMMEDIATE RELEASE

## TRUST IN PEOPLE IMPORTANT FOR CHILDREN

How can parents bring up children with unprejudiced attitudes?

The key is to provide a warm, supportive, democratic home environment in which the child is able to feel trust for people, says Ronald Pitzer, extension family life specialist at the University of Minnesota. Such an environment will provide him with a foundation for living and working with them.

Research shows that a home that is suppressive, harsh or critical--where the parents' word is law--is more likely to prepare the groundwork for prejudice. Evidence is strong that children are more likely to be prejudiced if they have been brought up by parents who insist on absolute obedience and who are harsh disciplinarians.

The University family life specialist says that helping children to acquire humane values and unprejudiced attitudes involves the patient, persistent teaching of concepts such as these:

· All people are individual human beings who are worthy of dignity, are interesting and important. If children are to grow up with a sense of their own dignity, they must learn to think of all other people as individuals with dignity and that it is wrong to judge any man because of race, color or faith.

-more-

add 1 -- trust in people

- All over the world people have similar basic needs.

- At the same time, all people are different. Differences between people are as important as likenesses. Our likenesses make us human, our differences make us individuals. It is the value of the individual that is important, regardless of the group he may come from.

- This is one world. Each person is in some way affected by what happens in other parts of the world.

- People need each other. The concept that each person has a role and makes a contribution to the community is one which can help children realize the worth of each person. Each community is richer because of the different endeavors of people--the skilled and less skilled, the mechanic, the artist, the professional.

###

117-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 23, 1971

Immediate Release

## USE CREDIT EFFECTIVELY

Using credit as a means in transacting business is here to stay, but its effectiveness depends on how it is used.

Careless use can have damaging results on the family's economy for many years, says Edna Jordahl, extension home management specialist at the University of Minnesota.

However, if you plan your use of credit wisely, these advantages are evident:

- \*Early use of goods may help increase income, although goods are not paid for.

- \*Consumption can be increased to meet greater family satisfaction.

- \*Payments on several debts can be simplified to one payment.

- \*Other resources may be used to better advantage through the use of credit.

- \*Credit is a way of accumulating goods and increasing net worth when cash is short.

But credit costs money. Often the cost is greater than the buyer realizes. Overspending is also a danger when credit is readily available. Future income is committed to payments. If these cannot be met, you may lose merchandise.

Being forearmed with information about where to get credit and what it costs may save frustrations when it is needed, Mrs. Jordahl says. One necessary precaution is to protect your credit rating. However, it's important to remember that credit is available to you in time of emergency.

120-jbn-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 28, 1971

TO ALL COUNTIES  
4-H NEWS  
IMMEDIATE RELEASE

4-H DISTRICT  
SHARE-THE-FUN  
SLATED FOR JULY

The district Share-The-Fun show will be held in \_\_\_\_\_  
(Place-city, location)  
on July \_\_\_\_\_.  
(Date)

\_\_\_\_\_ will take part in the district event from \_\_\_\_\_  
(4-H club individuals) (Name)

County as one of some 15 acts from counties in the district. (Finish this paragraph with information about the participating club's act and the 4-H'ers involved.)

Darrol Bussler, former 4-H member and former International Farm Youth Exchange Delegate, will direct all district Share-The-Fun programs.

Eighteen acts from the six district shows will be invited to participate in the state show scheduled for Wednesday night during the State Fair, the 4-H Market Show and other 4-H activities throughout the year.

All shows are free and the public is invited to attend.

The program is sponsored by Cargill, Inc. and the Agricultural Extension Service of the University of Minnesota.

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 28, 1971

4-H NEWS

ALL COUNTIES

IMMEDIATE RELEASE

4-H'ERS TO HAVE  
REGIONAL DOG SHOW

\_\_\_\_\_ County 4-H'ers enrolled in the 4-H dog project may participate  
(Name)  
in the regional dog show \_\_\_\_\_ in \_\_\_\_\_.  
(Date & Time) (Location)

The 4-H'ers will compete in four classes, pre-beginner, beginner, novice and graduate novice. Pre-beginners have no formal obedience training through classes. Beginners have participated in one or more obedience training sessions for the first year. The novice 4-H'er and his dog have participated in obedience training sessions for two or more years. The graduate novice members and dogs have previously participated in the novice class at a regional show or wish to enter this advanced class due to previous training.

Awards in each class will be divided into blue, red and white groups with a trophy presented to the winner of each class. Purple and lavender rosettes will be awarded the overall point champion and the reserve.

A fee of \$1 per entry will be collected at registration from 11 a.m. to 12:30 p.m. on the day of the dog show. A member will be able to exhibit one dog per class but may enter more than one dog if he has worked with another project dog at another class level.

A veterinarian will be on hand to check the rabies certificate at the time of registration. All participants are strongly urged to have their dogs vaccinated for hepatitis and distemper in addition to rabies.

If you're interested in participating at the regional shows, contact  
County Agent \_\_\_\_\_ at the county extension office before  
(Name)  
\_\_\_\_\_.  
(Date)

Private individuals and organizations throughout the state are sponsoring the regional shows.

## *Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 28, 1971

To all counties

Att: Extension Home Economists

Immediate release

### SAVE BY BEING A GOOD SHOPPER

You can save time, energy and money if you are a good shopper. Why not try following some suggestions as you do your weekly shopping:

First, know your store. It doesn't take many shopping trips to know the best place for you to shop. If possible, leave your children with a friend. You can watch her children while she shops. Children can be distracting and make your shopping unpleasant. However, children can be taught to be good shoppers and help you.

Allow plenty of time. Hasty, hurried shopping during the rush hour can result in poor choices.

Shop from a list. Read your newspaper or listen on radio and television for specials to help you know what is being featured at stores in the area. Of course, in season foods that are plentiful are usually cheaper at that time.

Compare brands as you try to decide which is the better buy. The label will tell you total weight and sometimes number of servings. Try dividing the cost by number of servings suggested. For instance, a can of corn priced at 24¢ may serve only three, costing 8¢ per serving. However, a can priced at 36¢ may serve six, costing 6¢ per serving. The larger size is not always the best buy, though. Also on the label you may find a recipe or serving suggestions.

-more-

*Food for Better Health Program*



An Expanded Food  
and Nutrition Education Program  
in Home Economics Extension

add 1--save by

Remember that some convenience foods are better buys than those made from "scratch." For instance, chocolate cake mix is cheaper than a chocolate cake made from "scratch." Frozen orange juice concentrate costs less than fresh-squeezed orange juice. Canned and frozen peas are usually cheaper than fresh ones. And instant dry milk that you mix with water costs less than regular milk. Each homemaker must decide for herself.

-1sn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 28, 1971

To all counties  
Att: Extension Home Economists  
Immediate release

DECIDE ON  
VACATION TRAVEL  
BEST FOR YOU

Vacation often brings up the question of how to travel--by car or plane.

When going short distances, especially with a family, it is generally a decided financial advantage to drive, says Mrs. Edna Jordahl, extension home management specialist at the University of Minnesota. This may not be true when thousands of miles are involved, however.

To decide which method of travel is less expensive, compare the costs. When flying, there are bus or cab fares plus tips, besides the cost of the ticket. When driving there are meals and snacks, lodging and tolls, besides the running cost of the car, which is often figured at 4.5 cents per mile. When adding depreciation, the cost is 10 cents to 12 cents a mile.

There may be other advantages of either mode of travel, for example, time saved by air travel or opportunities to stop at scenic points when driving, Mrs. Jordahl points out.

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 28, 1971

To all counties

ATT: EXTENSION HOME ECONOMISTS

Immediate release

### BODY MEASUREMENTS ARE CHANGING

Everything changes--even dress sizes. This change means women are no longer as slender as they were, say, about 30 years ago.

At that time a size 12 dress meant that your measurements would have been 34-25-36. Today you call yourself a size 12 if you are 35-26-37. That's a full inch difference in measurements.

Three decades ago a junior size nine measured 32-23½-33½. Today those measurements have changed to 33-23½-35.

The National Bureau of Standards, which has come out with these findings, is updating the sizing of women's apparel to fit the woman of today.

According to a manager of a large mail order house, there has been a general increase in bust, hips and waist. He gives as a reason the fact that women are more sedentary. Because they sit more, hips spread. But industry designers say the dictates of fashion are causing the sizing changes.

"The change in women's bodies is essentially due to what fashion says they should look like," says the director of the design department of a pattern company. She adds: "Now women have gone back to the natural look."

-jbn-

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 28, 1971

To all counties  
Immediate release

IN BRIEF . . . .

Last Year's Insect, Weed Losses High. Minnesota's 1970 agricultural economy suffered an estimated loss of \$135 million from insect and weed crop damages and costs of control measures. A University of Minnesota agronomist, G. R. Miller says losses from weeds and costs of control measures for 1970 are well over \$85 million. The State Department of Agriculture's 1970 insect loss estimates which include insect control costs are 48.4 million. The biggest loss to insects was \$45.6 million on field corn from the European corn borer, corn rootworm, cutworm, wireworm and other insects.

\* \* \* \*

"Pest Strips" Ordered Removed. "Pest Strips" have been ordered removed from food handling facilities by Minnesota Department of Agriculture inspectors because of a label warning. The pest strips may be more harmful to human health than the nuisance household insects they are intended to kill, Agriculture Commissioner Jon Wefald says. The strips, commonly called vaponettes, are the modern replacement for fly paper, made of plastic impregnated with a pesticide, for control of flies, mosquitoes, gnats, other small flying insects and to reduce the infestation of silverfish.

\* \* \* \*

Beet Tops Prove Tasty. You'll find the tops of surplus beets and turnips make very fine greens for the table, Orrin C. Turnquist, University horticulturist, says. Thinnings of lettuce and chards also can be used as food. Radishes and onions can be left in the ground until the ones to be thinned are large enough to eat.

\* \* \* \*

-more-

add 1--in brief

Observe Fertilizer Rules. Never apply more than a pound of actual nitrogen fertilizer per 1,000 square feet of lawn at any one time, Donald B. White, University of Minnesota horticulturist, says. Spread fertilizer in two directions. Apply mixed fertilizer and pesticide formulas only when you are sure the particular pesticide is needed. Use a cyclone or rotary type fertilizer spreader, which can fertilize most lawns in about 20 minutes. Spread fertilizer carefully, keeping it off the driveway and street. Sweep up any fertilizer that lands on paved surfaces. Never apply fertilizer to frozen ground and wet grass. Always water your lawn immediately after fertilizing, White says.

\* \* \* \*

Use Sharp Mower on New Lawn. University Horticulturist Donald B. White says you should mow your new lawn to a height of 2½ inches when it reaches three to four inches high. Use only a sharp mower. The second mowing may be to two inches and the third to 1½ inches, if you want it that short. An established bluegrass-fescue lawn should be maintained at 1½ inches or higher. Elite bluegrass can be maintained at three-quarters to one inch.

\* \* \* \*

Remove Surplus Plants. Surplus plants in a vegetable garden are like weeds--they should be removed. Thin your garden by hand soon after the plants germinate, when the soil is moist so the surplus plants can be removed easily without injuring remaining plants. Early thinning is especially important in root crops such as carrots, parsnips, beets, rutabagas, onions and turnips. Thin corn, cucumbers, melons and squash to three plants per hill where several seeds are planted in hills.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 28, 1971

To all counties  
Immediate release

HORTICULTURIST SUGGESTS  
WAYS TO MAINTAIN VACATION  
CARE FOR HOUSE PLANTS.

Have a friend water your plants while you're away on vacation, Jane McKinnon, extension horticulturist at the University of Minnesota, recommends.

If you have only a few plants, it may be easier to move them to a friend's home or to place them outdoors in a protected location.

If neither of these suggestions is practical for you, wrap the pots in polyethylene plastic and fasten the plastic around the base of the plant to reduce water loss from the soil. Be sure to water the soil thoroughly before wrapping up the plants.

Another method is to place your house plants in a group, water them thoroughly and surround the pots with moist sphagnum or acid peat moss. This procedure increases the humidity of the surrounding atmosphere and keeps the soil moist for some time.

See the illustrated booklet, "Care of House Plants," for more information. It's available from \_\_\_\_\_ County Extension office or the Bulletin Room, University of Minnesota, St. Paul 55101.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul, Minnesota 55101  
June 28, 1971

To all counties  
Immediate release

'BAN ALL PESTICIDES'  
LOGIC WARNED AGAINST

"One pesticide leaves residues, therefore all pesticides should be banned" is an overgeneralization that a University of Minnesota scientist warns against.

"Considering our growing population pressures and limited resources, herbicides are essential to utilizing land, water and labor resources efficiently," University agronomist G. R. Miller says.

The use of herbicides for weed control is vital to economic food production and our way of life, Miller says. If man is going to produce food, he cannot refuse to control the weeds that plague crops and livestock forage year after year. In experiments at the University of Minnesota, herbicides and cultivation have increased net returns to the farmer about \$25 per acre for corn and about \$9 per acre for soybeans. In addition, labor requirements for the crops as well as risk in crop production are greatly reduced.

"This is why Minnesota farmers now use herbicides on three-quarters of the 4.5 million acres of corn, over one-half of the three million soybean acres, three-fifths of the five million acres of small grains, and practically all of the 150 thousand acres of sugarbeets," Miller says.

Alternatives to chemical control of weeds don't look promising. Biological controls, the use of plant diseases or certain insects for weed control, have had limited success. Furthermore, the disease or insect may wipe out the weeds and then itself become a pest on desirable crops. Using hand labor for weed control is not practical either.

"Not too many people are interested in weed-pulling jobs, especially in five million acres of small grains," he says.

add 1--ban all

Use of tillage to kill weeds is not the answer. Tillage methods are expensive and sometimes necessitate taking land out of production for a time.

The greatest potential for solving weed problems in the near future is improvement of chemicals and careful use of them, he says. Field trials in 1970 have revealed several new promising herbicides that could solve some of the present problems in using them. New herbicide mixtures and additives have made it possible to reduce rates of chemical application thus reducing soil and residue problems.

The second area of solving our weed control problems is in education. More regulation and surveillance of pesticide usage is coming, which means that applicators will have to be knowledgeable and responsive to legal requirements, Miller says.

# # # #

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 29, 1971

Immediate Release

#### UM PROMOTES EXTENSION STAFF MEMBERS

Promotions in academic rank for extension agents were announced recently by Roland H. Abraham, director of the University of Minnesota's Agricultural Extension Service.

Thirteen county extension agents and thirteen extension home economists received promotions in academic rank on the University's staff. Eleven county agents were promoted from assistant to associate extension agent. Such promotions do not affect the agents' local responsibilities. The agents will continue to serve in the counties where they are now located.

All county extension agents and extension home economists are University faculty members. The promotions are based on their contributions to the betterment of Minnesota through the continuing education programs of the Extension Service.

Promoted from associate professor to professor were Clarence O. Quie, Dakota County; Matthias P. Metz, Wabasha County; Vernon Hoysler, McLeod County; and Julia Bartlett, Hennepin County. Quie, Metz and Hoysler are extension agents and Bartlett is an extension home economist.

Extension agents promoted from assistant professor to associate professor include Erven W. Skaar, Isanti County; Reuben M. Boxrud, Murray County; James L. Edman, Swift County; Ronald Seath, Mower County and Larry A. Tande, Steele County.

-more-

add 1 -- UM promotes

Extension home economists promoted from assistant professor to associate professor are Naomi R. Freuchte, Houston County; Audrey V. Tolzmann, Nicollet County; I. Pauline Nickel, Cottonwood County; and Jeannette Hauschild, Lincoln County.

Promoted from instructor to assistant professor are extension agents, Larry R. Corah, Roseau County; Thomas A. Powell, south St. Louis County; Henry C. Bollum, Faribault County; Gordon R. Shafer, Becker County; and Denzil D. Cooper, east Otter Tail County.

Extension home economists promoted from instructor to assistant professor include Catherine A. Nelson, Ramsey County; Barbara Jessen-Klixbull, Stearns County; Jean R. Hatch, Martin County; Kathleen M. Lagerstrom, Rice County; Karen M. Vrieze, Wabasha County; Sharon S. Knutson, Norman County; Kay N. Klicker, south St. Louis County; and Elizabeth Russell, Chippewa County.

Assistant county agents promoted to associate county agents include Charles F. Leifeld, McLeod County; Loren L. Kitchenmaster, Renville County; Lowell K. Cook, Washington County; Carl D. Wegner, Itasca County; Lonnie K. Johnson, Brown County; Richard B. Lambert, Martin County; Wayne M. Odegaard, Nicollet County; Dennis M. Crowley, Wabasha County; Roger Bultman, Cottonwood County; John P. Cunningham, Redwood County; and Richard K. Arnston, west Polk County.

###

116-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 29, 1971

Immediate Release

#### PUBLIC TO TOUR SAND PLAIN SITE TUESDAY

A first hand look at experimental work aimed at improving Minnesota agriculture will be offered the public Tuesday (July 6) at the University of Minnesota's Sand Plain Experimental Field near Elk River.

The field day starts at 10 a. m. with periodic tours throughout the day.

About 25 University scientists are conducting research at Sand Plain, where the overriding purpose of experiments is to overcome the disadvantages and utilize the advantages of Minnesota's sandy soils by manipulating the environment.

Experiments at Sand Plain in asphalt barrier research have shown that irrigation waters can be prevented or slowed from percolating through sandy soils and away from root zones. Scientists at the Elk River site also are studying the application of fertilizer through irrigation water. Other Sand Plain research includes the breeding of new potato varieties for early market use.

###

121-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 29, 1971

Immediate Release

#### GOODING NAMED ACTING COLLEGE OF AGRICULTURE DEAN

John A. Goodding has been named acting dean of the University of Minnesota's College of Agriculture effective Thursday (July 1), according to Sherwood O. Berg, dean of the Institute of Agriculture.

Goodding will take the post held by Hubert J. Sloan, who retired Wednesday (June 30) after 35 years of service at the University.

Goodding has served as assistant dean of the College of Agriculture since October, 1970, and before that time was the assistant director of resident instruction for the College of Agriculture, Forestry and Home Economics for nearly 10 years. In June, 1970, the Institute was reorganized into three separate units, one of which is the College of Agriculture.

Goodding came to the University in January of 1961 from the University of Nebraska, Lincoln, Nebr., where he had been assistant professor of agronomy.

A native of Lincoln, Goodding received a B.S. degree from the University of Nebraska, an M.S. degree from Kansas State University and a Ph. D. degree from Washington State University.

###

123-daz-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 29, 1971

Immediate Release

## CORN BLIGHT DISCOVERED IN STATE

Corn blight has been discovered in trace amounts in Minnesota's Dodge, Brown and Murray counties, according to Herbert G. Johnson, plant pathologist at the University of Minnesota.

More corn leaves with spots are being checked for southern corn leaf blight (SCLB) as corn field inspection intensifies from now on, he added.

Some corn in Minnesota is now sufficiently large enough to cover the ground. This will increase the length of time of free moisture on leaves and will promote additional infection to a greater extent than on smaller corn.

Future prevalence and severity of corn blight in Minnesota will depend upon the weather. Warm, moist conditions will promote the disease and either cool or dry conditions will slow it down.

SCLB has now spread to 124 counties in 18 states, according to the National Federal-State Information Center on Corn Blight. The most frequent reports of infection in corn planted this spring are from Illinois where occurrence of the disease has been greatest in the southern part of the state. One 20-acre field has been plowed down because of early and severe infection.

Plant pathologists said the disease is only in trace amounts in most places and the crop in Corn Belt States is reported generally in good condition.

###

124-bjc-71

Department of Information  
and Agricultural Journalism  
Institute of Agriculture  
University of Minnesota  
St. Paul 55101 Tel. 373-0710  
June 29, 1971

Immediate Release

## CHOOSE QUALITY MEAT FOR OUTDOOR COOKING

If you wonder what meats are best for barbecuing, the answer is that practically any cut of beef or pork you would normally broil or roast with dry heat can be cooked outdoors on the grill.

Richard Epley, extension specialist in meats at the University of Minnesota, points out that cuts of meat for outdoor barbecuing should be those that are considered tender because outdoor cooking is a method of dry-heat cooking--and dry heat does not tenderize meat.

The U.S. Department of Agriculture grade is one of the best guides to selecting high-quality beef. Because USDA Choice Grade beef is young and tender, it is especially well suited to outdoor cooking. For pork practically any cut will do since tenderness is very seldom a problem.

When choosing steaks for outdoor cooking, it's best to select them at least an inch thick. Thin steaks are likely to dry out during barbecuing.

To grill, put meat, poultry or fish 3 to 8 inches from the heat. Grease the rack first to help prevent the food from sticking. Slash the fat around edges to prevent curling.

The thinner the meat and the rarer you want it, the closer it should be to the heat. However, since meat, poultry and fish quickly lose juiciness, especially if pieces are thin, they should not be cooked close to the heat for more than a few minutes. If longer cooking is needed, move the food a little farther from heat and finish cooking.

To check the doneness of meat, insert a sharp, pointed knife near the center and observe the inner color. Cook fish until it flakes easily when you test it with a fork.

# # #

122-jbn-71