

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 3, 1967

To all counties

Immediate release

**WEEDS IN SHELTERBELTS
SHOULD BE CONTROLLED
FOR BEST TREE GROWTH**

Without effective weed control a high percentage of trees in windbreaks and shelterbelts often die in the first years of growth and many surviving trees may be stunted and deformed, says Marvin Smith, University of Minnesota extension forester.

Early spring is the best time to spray for full season weed control. However, Smith says farmers should plan on spraying now if weeds in shelterbelts, windbreaks and forest plantations were not controlled earlier in the season.

The herbicide simazine can be used effectively if the windbreak and shelterbelt is cleaned and cultivated, and the chemical applied on the cultivated ground.

At recommended rates, simazine acts against a broad spectrum of grasses and broad-leaved weeds. It is safe to use around most tree and shrub species. However, it is not recommended for use on any species of poplar(cottonwood) and willow.

Simazine does not injure tree foliage, so no particular caution is required during application. But direct as much chemical to the ground surface as possible to get maximum benefits from spraying.

Do not use simazine more than once a year, Smith cautions. And, simazine is not recommended for use when trees are under three years of age, including years grown in the nursery.

The chemical amazine can be used on small weeds in the early part of the growing season or before weeds have matured and gone to seed. It should not be used on tall, mature weeds. Instead, mow the tall weeds as close to the ground line as possible and remove. Then spray the regrowth with amazine as it appears.

Amazine is a combination of a postemergence herbicide and simazine. It is effective in cleaning up plantations and shelterbelts where trees have become overgrown with annual weeds and grasses.

The postemergence herbicide in amazine kills existing grasses and broad-leaved weeds, and the simazine acts as a preemergence herbicide to kill germinating seeds which otherwise would reinvade the treated area.

Use amazine only as a directed spray on the weeds, Smith says. Amazine can damage foliage of conifers and hardwoods. It destroys chlorophyll and causes the affected leaves or needles to turn white and die.

For further information ask your county agent for University of Minnesota Forestry Fact Sheet 6, "Weed Control in Shelterbelts and Forest Plantations." Or, write the Bulletin Room, University of Minnesota, St. Paul, Minnesota, 55101.

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Immediate release

CATTLE CHOOSE SUN OVER
CLOSED BUILDINGS EVEN
IN SUB-ZERO WEATHER

Cattle would rather stand in the sun than in a closed building, even when the temperature is below zero, according to studies by two Minnesota agricultural engineers.

Russell E. Larson, investigations leader in farmstead engineering for the U. S. Department of Agriculture, and J. H. Pomroy, associate professor of agricultural engineering, both at the University of Minnesota, conducted the studies at the University's Agricultural Experiment Station near Rosemount.

The purpose of the research was to determine the feasibility of converting loose-housing loafing barns in cold climates to free-stall, slat-floor cattle buildings, retaining the outside feeding system.

"In pilot-sized units of ten animals each, the use of free-stalls and slat-floors in an open loose-housing building operated satisfactorily for about eight months of the year," they reported.

During the four coldest months, with prolonged periods of sub-freezing weather, the manure on and under the slats froze so that it could not be pumped.

In a second unit it was found that closing the building and adding insulation and ventilation was not entirely effective because the animals did not spend enough time inside during the day to keep the temperature above freezing. As a result, the manure in the unit's pit was frozen for only one month less than that in the uninsulated unit.

"The animals preferred to stand in the sun rather than in the closed building, even in sub-zero weather," they said. "Usually they went inside this unit only if it was windy, snowing, or cloudy outside."

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UM FORESTRY SCHOOL GRAD WINS 1967 AWARD

Robert Megraw, who received his Ph.D. degree this year from the University of Minnesota School of Forestry, has been named winner of the annual Wood Award Contest.

Announcement of the award was made Monday (July 3) by Arthur Muschler, president of the Forest Products Research Society, and Jack Koellisch of Wood and Wood Products magazine.

The contest is sponsored each year by Wood and Wood Products magazine. The winner is selected on the basis of his thesis work.

Megraw, formerly of Rochester, Minnesota, received the \$500 award and plaque at the annual meeting of the Forest Products Research Society at Vancouver, British Columbia. The title of his winning paper is "A Hydrodynamic Particulate Approach to Measuring Pore Size in Wood."

In his study, he used certain disease causing viruses which are submicroscopic and uniform in size. He forced these through wood in order to determine for the first time the pore size of wood by direct measurement.

Megraw is currently employed by the Weyerhaeuser Pioneering Research Laboratory in Seattle, Wash.

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Immediate release

FOUR UM AG COLLEGE REUNIONS SCHEDULED

Four district reunions for alumni and former students of the University of Minnesota's School of Agriculture have been scheduled throughout the state for July and August.

Representatives of the School of Agriculture Alumni Association and staff members of the Institute of Agriculture will be present. Each meeting will begin with a potluck picnic dinner at 12:30 p.m., followed by a program at 2 p.m.

The schedule of reunions is as follows:

District I, Southeastern Minnesota--Sunday, July 9 on the west side of Silver Lake Park on the north edge of Rochester off Broadway Avenue. Representing the Board of Directors of the School of Agriculture Alumni Association will be Virginia Barwise, St. Paul. Officers of the District Association are James Dose, Wabasha president; Laverne Vangness, Kenyon, vice-president; Mrs. Elaine (Asleson) Mulder, Lake City, treasurer.

District II, Southwestern Minnesota--Sunday, July 16 at the Sportsmen Club 4-1/2 miles south of Gibbon. University Regent George Rauenhorst, Olivia, will address the alumni. Representatives of the School of Agriculture Alumni Association will be Gertrude Esteros, member, Board of Directors of the School of Agriculture Alumni Association. Officers of the District II Association are: Cletus Franta, Lafayette, president; Homer Berlin, Gibbon, vice-president; Mrs. William Paulson, Redwood Falls, secretary-treasurer.

District III, Northern Minnesota--Sunday, July 23 at the Lake Koronis Community Park south of Paynesville on the south shore of the lake. Representatives of the School of Agriculture Alumni Association will be Graydon McCulley, president of the School of Agriculture Alumni Association. Officers of District III are: Ronald E. Uter, Waverly, president; Donald Olson, Sauk Rapids, vice-president; and Mrs. Lyle Bishman, Dassel, secretary-treasurer.

District IV, Twin Cities area--Sunday, August 6 at the University's Landscape Arboretum near the junction of Minnesota Highway 41 and Minnesota Highway 5 in Hennepin County west of Minneapolis. Presiding officer for this reunion will be Graydon McCulley, Maple Plain, president of the School of Agriculture Alumni Association. Arrangements chairman will be Gertrude Esteros, St. Paul.

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IN BRIEF.

Egg Prices Expected to Drop. Egg prices for the 12 month period starting July 1 are expected to average three cents a dozen below prices for the preceding 12 months, says the Poultry Survey Committee of the American Feed Manufacturers Association. The committee, composed of leading economists from universities, industry and the USDA, also said that with normal growing weather, lower feed prices may reduce egg production costs about one cent per dozen during the same period. Mel Hamre, University of Minnesota extension poultry specialist, says egg producers should remember that, while lower prices are forecast, that during a large part of last year egg prices were high. By looking at prices received last year for eggs, poultry producers can roughly predict what prices they may expect to receive next year, he said.

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Potassium Increases Alfalfa Yields. Potassium will increase alfalfa yields significantly when applied to sandy soils that test low in potassium or have a pH value below 6.3, says Curtis Overdahl, University of Minnesota extension soil specialist. The potassium must be applied yearly for best results. In tests since 1963, University researchers have shown that plots treated experimentally with potassium in 1963 and for three successive years showed significant results compared with fields that received a potassium application only in 1963. The field treated only one year produced higher yields that year and possibly the next, but then declined. Observations in 1967 showed that the potassium applied only in 1963 had no effect four years later.

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College of Agriculture Reunions. Four district reunions for the University of Minnesota's School of Agriculture alumni and former students are scheduled through the state in July and August. The schedule of reunions is: District I, South-eastern Minnesota--Sunday, July 9, on the west side of Silver Lake Park, Rochester; District II, Southwestern Minnesota--Sunday, July 16 at the Sportsmen Club 4½ miles south of Gibbon; District III, Northern Minn.--Sunday, July 23 at the Lake Koronis Community Park south of Paynesville; District IV, Twin Cities area--Sunday, Aug. 6 at the University's Landscape Arboretum near the junction of Minnesota Highway 41 and Minnesota Highway 5 west of Minneapolis.

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To all counties
ATT: HOME AGENTS
Immediate release

**WISE SHOPPING
RECOMMENDED
FOR APPLIANCES**

If you're looking for a gift for a friend or for a bride, consider the convenience of small appliances.

Even though their objectives are the same, different brands of small appliances have individual patents and may do different jobs. Therefore, wise shopping is important, says Glenda Humphries, extension household equipment specialist at the University of Minnesota.

Here are some general considerations to keep in mind when buying small electrical appliances:

- Check the construction. The appliance should be heavy enough to set on the table or counter top and not tip easily. A smooth finish and properly fitted parts are other considerations.

- Look for easy-to-understand controls that are also easy to reach and operate. Check the handles for heat resistance, stability and safety.

- Avoid appliances with hard-to-clean crevices and corners.

- Consider what the appliance will do. Appliances which do several jobs are the most useful.

- Look for the Underwriters' Laboratory seal which indicates the appliance has been checked for safety from fires and shocks. Careful engineering often builds in other safety features also, such as safety catches and finger guards.

- Understand the warranties and service at the time you buy. Know the location of the nearest service and repair shop.

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4-H NEWS

Immediate release
(Last in series on
livestock showmanship)

GROOM PIGS
NOW FOR FAIR

Some 12,000 4-H boys and girls will be competing for top showmanship honors with their pigs at Minnesota county fairs this year.

A pig which has had plenty of exercise is strong, healthy and vigorous, says Robert Jacobs, extension specialist in animal husbandry at the University of Minnesota. Pigs which have lacked exercise cannot be shown satisfactorily.

To insure exercise as well as to reduce the cost of production, provide good pasture for the pigs. Some time before the show, drive the pig a short distance every day, stop for awhile and then drive it in another direction. This is a good time to teach your pig to respond to a small whip or cane. At the fair, pigs should also be exercised, preferably during the cool of the day.

Three or four weeks before the show, trim the toes of the pig by putting the pig in a crate and using a knife, a fine rasp or a coarse file. Trim the underside and be careful not to cut into the quick. About a week before the show, trim hair from the ears and tail. When trimming the tail, clip the hair from the switch to the body, leaving about 2 inches of long hair at the switch end.

Before the show, scrub the pig with warm water and soap, rinse thoroughly and dry. To dress the pig for the show, apply No. 10 machine oil, olive oil or sweet oil to red or black pigs. Use just enough oil to add luster to the skin and hair. For white pigs dust on unscented talcum powder or soapstone.

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Immediate release

THINNING OUT OF GRASS AND
DRY, BROWN AREAS ON LAWNS
MAY BE CAUSED BY A FUNGUS

Lawns in Minnesota are showing signs of melting-out disease, says Joe Vargas, director of the University of Minnesota's extension plant disease clinic.

The disease, caused by a fungus, is characterized by a thinning out of grass in scattered areas. Large, irregular areas of lawn turn brown and may be killed as the fungus spreads.

Brown or purple spots, or brown spots with a purple border are seen on the infected grass blades. The spots may be round or oblong and parallel to the leaf blade.

The fungus is especially prevalent on Kentucky Bluegrass in Minnesota.

In many cases the dry, brown diseased areas may revive when the temperatures turn cool in the fall. But if the fungus is not controlled it will reappear in the same spot the following summer. Vargas says the fungus survives the winter in the infected debris and tissues of living plants.

If the melting-out is too severe, the entire lawn may be permanently lost.

Control measures include proper watering practices, removal of lawn clippings and a spray program.

Do not keep grass continuously wet, or allow it to become excessively dry, Vargas says. Usually a lawn should be watered only once a week if the soil is soaked to a depth of six inches each time. Frequent light watering causes shallow roots to develop which makes the grass more susceptible to drought.

add 1 -- thinning out of grass

Remove lawn clippings after each mowing. The disease organism will develop in the lawn clippings that are left on the ground, and will attack the leaf sheath and crown of plants.

If the fungus is left unchecked, the organism will develop spores that will spread the disease to other areas.

Proper watering practices and removal of lawn clippings will not stop the fungus development if the outbreak of the disease is severe. In such cases it is necessary to spray.

For best control, the homeowner should start a spray program in the spring shortly after the grass turns green. The fungus may have increased and caused extensive damage if the lawns are not sprayed until midsummer.

And, it is difficult to control the fungus in midsummer because it is firmly established in the crowns, roots and rhizomes of the grass. However, proper spraying in midsummer, can reduce further spread of the disease to remaining healthy lawn, and the remaining non-infected lawn will progress satisfactorily through the rest of the growing season. It also will help reduce the severity of the disease the following spring and summer.

A number of good fungicide sprays are available. Check with your garden store dealer for more information, or ask your county agent for a copy of North Central Regional Extension Publication No. 12, "Lawn Diseases in the Midwest." Or, write for copies to the Bulletin Room, University of Minnesota, St. Paul, Minnesota, 55101.

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UM AGRONOMIST REVIEWS HERBICIDE MIXTURES AT FIELD DAY

WASECA--Mixtures of two or more weed control chemicals can often offer definite advantages over a single herbicide, said a University of Minnesota agronomist speaking at the Southern Experiment Station's field day here.

Gerald R. Miller told visitors today (July 6) that certain herbicide mixtures can control more kinds of weeds than single herbicides, give more consistent performance under varied soil and weather conditions, last longer to give full season weed control, plus result in less carryover and reduce the chance of crop injury.

Miller reviewed some registered and experimental mixtures that University plant scientists are studying here and at branch experiment stations throughout Minnesota.

The following herbicide mixtures for weed control in corn have been approved by the United States Department of Agriculture (USDA).

Atrazine and linuron: The combination of atrazine and linuron (Lorox) has given good weed control in Minnesota as a preemergence treatment on corn. The mixture cuts atrazine carryover and corn tolerates the combination better than linuron alone.

The atrazine-linuron combination controls weeds as well as equivalent rates of atrazine alone and better than linuron alone. The chemicals can be mixed by the user or bought already mixed.

Rates vary from 1/2 to 1-1/2 pounds per acre of active ingredient of each chemical in a one-to-one ratio. Miller says to make sure to use the rate specified for your soil.

The mixture is not recommend as an early postemergence treatment because the linuron may kill the corn. And against quackgrass, the combination has not been as effective as atrazine alone.

(more)

add 1 - herbicide mixtures

Atrazine and CP31393: Another combination registered for preemergence use on corn is atrazine and CP31393 (Ramrod). But keep in mind a general rule for all mixtures with CP31393 or CP31393 alone: Use only on corn grown for grain or seed, but not on corn for silage.

Compared with atrazine alone, this combination reduces carryover and gives more consistent weed control under varied soil and weather conditions. The atrazine-CP31393 mixture also controls broad-leaved weeds better than CP31393 alone.

Linuron and CP31393: A mixture of linuron (Lorox) and CP31393 (Ramrod) used as a preemergence treatment on corn has given better control of broad-leaved weeds than CP31393 alone and less corn injury than linuron alone.

Miller notes that atrazine, linuron and CP31393 are all wettable powders and require continuous agitation to keep them in suspension while spraying.

Atrazine-Oil-Emulsifier: Special oils with an emulsifier combined with atrazine and water have improved atrazine performance as an early postemergence spray against both grasses and broad-leaved weeds in corn. Use only those oils labelled for this purpose.

By mixing oil and emulsifier with the spray, the amount of atrazine can be cut down about one-third from the usual two to four pounds per acre. One to two gallons of the oil is added per acre.

Miller says this early postemergence mixture seems best suited to areas where preemergence atrazine applications give poor or inconsistent weed control. Included are areas with fine-textured, high-organic-matter soils, and in western Minnesota where adequate rain is less certain.

Farmers should not use mixtures that have not been tested and approved by USDA, points out Miller. Results can be disastrous. For example, adding 2, 4-D to the atrazine-oil mixture has caused severe corn injury.

For complete weed control information, ask your county agent for the current issue of Extension Folder 212, "Cultural and Chemical Weed Control in Field Crops."

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UM RESEARCHERS DISCUSS ANIMAL NUTRITION AT WASECA FIELD DAY

WASECA--Dairy steers showed better gains when fed a high-hay ration until they hit 750 pounds and finished on a high-grain ration, than when they were kept on a high-grain ration for the entire feeding trial.

At the Southern Experiment Station field day here today (Thursday, July 6), visitors heard University of Minnesota animal scientists report on animal nutrition research projects being conducted at the station and discuss how research findings can be worked into a practical feeding program.

In the series of feeding trials, dairy steers fed the high-hay ration until reaching 750 pounds and then finished on the high-grain ration gained faster and more efficiently and produced higher return over feed and initial costs than steers fed either high-hay or high-grain rations throughout the trial.

The three ration treatments given to different groups of steers were:

- 1) high-grain (11:1 concentrate-to-roughage ratio) for the entire trial.
- 2) high-hay (1:3 concentrate-to-roughage ratio) throughout the trial.
- 3) high-hay (1:3 C:R ratio) until 750 pounds, then switch to high-grain (11:1 C:R ratio) to finish.

The Holstein calves started at about 400 pounds and were sold when they reached about 1,000 pounds. All were implanted with 12 mg. stilbestrol at the trial's start and reimplanted with 24 mg. when they hit 750 pounds.

(more)

add 1 - animal nutrition

K. P. Miller and E. C. Frederick of the Waseca station, and J. C. Meiske, C. W. Young, C. L. Cole and R. D. Goodrich of the University's animal science department conducted the trials.

Average daily gains were 2.82 pounds for steers receiving the high-hay ration until they weighted 750 pounds and then finished on the high-grain ration, 2.56 for those fed the high-grain ration only, and 2.37 for steers fed the high-hay ration throughout the period.

The researchers noted that steers fed the high-hay ration for the entire trial gained slower and graded lower. But this group had the lowest feed costs per 100 pounds of gain and gained surprisingly well on the high-hay ration.

Marbeling scores and fat depths over the rib eye, as well as carcass grades and rib eye area, were slightly higher for the cattle fed rations with greater proportions of grain. But these carcass measures were not significantly different among the three groups of steers.

The animal scientists suggest that the findings show cattle on high-roughage diets can make economical gains, but need to be fed to heavier weights to improve carcass grade.

Return over initial and feed costs was \$62.18 for steers that were switched from the high-hay to high-grain ration at 750 pounds, \$40.74 for steers on the high-grain ration for the trial, and \$51.93 for those fed the high-hay ration throughout the period.

The dairy steer feeding trials are a continuing project at the station. University animal scientists are now investigating how steers will perform when corn silage, instead of hay, is fed as the roughage.

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USE PROPER TECHNIQUES IN FREEZING BEANS

Green beans are among the most popular vegetables to freeze at home; yet many women complain that the resulting product is not as high quality as it should be.

Mrs. Shirley Munson, in charge of the food processing laboratory in the University of Minnesota's Department of Horticultural Science, says that the reasons for poor quality may be faulty techniques--all of which can be corrected.

In the first place, she points out, planting a good variety for freezing such as Tendercrop or Tendergreen is of utmost importance. She urges that homemakers who intend to plant vegetables for freezing next year remember to choose varieties that freeze well.

Mrs. Munson gives some further pointers on freezing for top quality:

- . Pick the beans at the right stage of maturity--when they are at the best stage for table use. Over-mature beans are not desirable for freezing.

- . Wash and process the beans immediately after harvesting. "Run from the garden to the freezer" is good advice. If it's impossible to process them as soon as they are picked, keep the beans in ice cold water until processing time. Snip off the tips and cut or break the beans into 1-1/2 inch lengths. Small beans may be frozen whole. Discard any off-colored or blemished beans.

- . Scald the beans the recommended length of time in boiling water, using 1 gallon of water for each pound of vegetable. Bring the water to a rolling boil, place a pound (about 4 cups) of the prepared beans in a wire basket or large loose cheesecloth bag and submerge it into boiling water. Keep the kettle covered during scalding and keep the heat on high. Scald beans for 3-1/2 minutes, counting scalding time from the second you put the vegetable into the boiling water.

- . Chill the scalded vegetable immediately in running cold or ice water for about the same length of time as the scalding. Test coolness by biting into the vegetable. When it is cool to the tongue, it is ready to pack. Do not chill any longer.

Drain the beans, package them, label with name of product and date and freeze immediately.

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HERE ARE TIPS ON REMOVING SUMMER STAINS FROM WASHABLE FABRICS

Perspiration stains on Dad's shirt, grass stains on Junior's trousers, spots from fresh fruit on the tablecloth--these are among the problems that face Mom on a typical wash day in summer.

Although summer does bring special problems from clothing stains, these stains are not likely to be permanent if they are treated promptly and properly, according to extension clothing specialists at the University of Minnesota.

They give these tips on treating special stains on washable fabrics:

Perspiration. Wash or sponge the stain thoroughly with warm water. If perspiration has changed the color, try to restore it by applying ammonia to fresh stains or vinegar to old stains. Follow with a rinse of clear water. Remove any yellow discoloration with a chlorine or a peroxygen bleach.

Grass. Work detergent into the stain and rinse. Or sponge with alcohol if the article is colorfast, diluting the alcohol with two parts water for acetate fabrics. On stubborn stains try hydrogen peroxide or a chlorine or sodium perborate bleach, but never use chlorine bleach on wool, silk, spandex or on a wash-and-wear cotton with resin finish.

Fruit. Sponge the spot immediately with cool water or soak the stain in cool water for half an hour or overnight. If a stain remains, pour boiling water through it from a height of 1 to 3 feet. If necessary after that, work a detergent into it and then rinse. A chlorine or peroxygen bleach may still be needed.

For fresh peach, pear, cherry and plum stains, first sponge the stain well with cool water; then work glycerine or a soapless shampoo into the stain, rubbing lightly between the hands. Do not use soap, as it may set the stain. Let stand several hours, then apply a few drops of vinegar, allow to remain for a minute or two and then rinse thoroughly in water.

Ice cream and milk drinks. Sponge with cool or lukewarm water or soak half an hour or longer. Then launder in warm, soapy water. If a greasy stain remains, sponge with grease solvent. If a colored stain remains, use a chlorine or peroxygen bleach.

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EMERGENCY CROPS CAN STILL BE PLANTED

Farmers who have had crops destroyed or severely damaged by hail, wind, or excessive rain still have time to plant emergency crops to finish the season, says Oliver Strand, University of Minnesota extension agronomist.

However, Strand says that at this time in the season, a careful evaluation of the crop damage must be made to determine whether the remaining crop should be salvaged or whether emergency crops planted.

Besides plant emergency crops, the farmer could utilize what is left as forage if it will not produce a good grain crop, utilize what is left of the crop for the original purpose, or fallow the land if the crop is a complete failure and it is too late in the season to plant other crops.

A number of emergency crops can be planted in midsummer. Early or medium maturity soybeans, such as Merit, Ottawa Mandarin, Flambeau, Acme and Portage, can be planted up to July 15.

Sudangrass for pastures or silage, forage sorghum for silage, sorghum-sudangrass hybrids and millet for silage or hay can be planted as late as August 1.

(more)

add 1 - emergency crops

Winter rye for pastures can be planted after August 1, and alfalfa-brome can be planted for pasture, silage, or hay before August 15.

Late summer seeding of alfalfa and grasses without a companion crop after August 1 but before August 15 has been successful in Minnesota, Strand says. This schedule offers a chance to establish needed pasture and hay crops.

It is not recommended to plant corn, rape or buckwheat after July 1.

The same considerations apply for replanting or planting an emergency crop that applied to the original planting. Prepare a good seedbed and select high quality seed of adapted varieties. Do not plant if the moisture is insufficient for germination and good growth, or if the moisture is excessive for good seedbed preparation.

Strand says most grain crops can be harvested for forage if pasture or hay crops fail. Small grains, corn, or soybeans can be grown for silage, and silage can be made from these crops after hay loss. Small grains and soybeans can be harvested as hay. Add preservatives when ensiling high moisture, low carbohydrate crops.

Strand says late crops usually do not have the same yield potential as those planted at normal dates.

See your county agent for further information on emergency crops. Ask for a copy of Agronomy Fact Sheet 7, titled "Emergency Crops." Or, write to the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101.

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Late summer seeding of alfalfa and grasses without a companion crop after August 1 but before August 15 has been successful in Minnesota, Strand says. This schedule offers a chance to establish needed pasture and hay crops.

It is not recommended to plant corn, rape or buckwheat after July 1.

The same considerations apply for replanting or planting an emergency crop that applied to the original planting. Prepare a good seedbed and select high quality seed of adapted varieties. Do not plant if the moisture is insufficient for germination and good growth, or if the moisture is excessive for good seedbed preparation.

Strand says most grain crops can be harvested for forage if pasture or hay crops fail. Small grains, corn, or soybeans can be grown for silage, and silage can be made from these crops after hay loss. Small grains and soybeans can be harvested as hay. Add preservatives when ensiling high moisture, low carbohydrate crops.

Strand says late crops usually do not have the same yield potential as those planted at normal dates.

See your county agent for further information on emergency crops. Ask for a copy of Agronomy Fact Sheet 7, titled "Emergency Crops." Or, write to the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101.

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67-177-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 5, 1967

Immediate release

USE PROPER TECHNIQUES IN FREEZING BEANS

Green beans are among the most popular vegetables to freeze at home; yet many women complain that the resulting product is not as high quality as it should be.

Mrs. Shirley Munson, in charge of the food processing laboratory in the University of Minnesota's Department of Horticultural Science, says that the reasons for poor quality may be faulty techniques--all of which can be corrected.

In the first place, she points out, planting a good variety for freezing such as Tendercrop or Tendergreen is of utmost importance. She urges that homemakers who intend to plant vegetables for freezing next year remember to choose varieties that freeze well.

Mrs. Munson gives some further pointers on freezing for top quality:

. Pick the beans at the right stage of maturity--when they are at the best stage for table use. Over-mature beans are not desirable for freezing.

. Wash and process the beans immediately after harvesting. "Run from the garden to the freezer" is good advice. If it's impossible to process them as soon as they are picked, keep the beans in ice cold water until processing time. Snip off the tips and cut or break the beans into 1-1/2 inch lengths. Small beans may be frozen whole. Discard any off-colored or blemished beans.

. Scald the beans the recommended length of time in boiling water, using 1 gallon of water for each pound of vegetable. Bring the water to a rolling boil, place a pound (about 4 cups) of the prepared beans in a wire basket or large loose cheese-cloth bag and submerge it into boiling water. Keep the kettle covered during scalding and keep the heat on high. Scald beans for 3-1/2 minutes, counting scalding time from the second you put the vegetable into the boiling water.

. Chill the scalded vegetable immediately in running cold or ice water for about the same length of time as the scalding. Test coolness by biting into the vegetable. When it is cool to the tongue, it is ready to pack. Do not chill any longer.

Drain the beans, package them, label with name of product and date and freeze immediately.

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67-178-jbn

HERE ARE TIPS ON REMOVING SUMMER STAINS FROM WASHABLE FABRICS

Perspiration stains on Dad's shirt, grass strains on Junior's trousers, spots from fresh fruit on the tablecloth--these are among the problems that face Mom on a typical wash day in summer.

Although summer does bring special problems from clothing stains, these stains are not likely to be permanent if they are treated promptly and properly, according to extension clothing specialists at the University of Minnesota.

They give these tips on treating special stains on washable fabrics:

Perspiration. Wash or sponge the stain thoroughly with warm water. If perspiration has changed the color, try to restore it by applying ammonia to fresh stains or vinegar to old stains. Follow with a rinse of clear water. Remove any yellow discoloration with a chlorine or a peroxygen bleach.

Grass. Work detergent into the stain and rinse. Or sponge with alcohol if the article is colorfast, diluting the alcohol with two parts water for acetate fabrics. On stubborn stains try hydrogen peroxide or a chlorine or sodium perborate bleach, but never use chlorine bleach on wool, silk, spandex or on a wash-and-wear cotton with resin finish.

Fruit. Sponge the spot immediately with cool water or soak the stain in cool water for half an hour or overnight. If a stain remains, pour boiling water through it from a height of 1 to 3 feet. If necessary after that, work a detergent into it and then rinse. A chlorine or peroxygen bleach may still be needed.

For fresh peach, pear, cherry and plum stains, first sponge the stain well with cool water; then work glycerine or a soapless shampoo into the stain, rubbing lightly between the hands. Do not use soap, as it may set the stain. Let stand several hours, then apply a few drops of vinegar, allow to remain for a minute or two and then rinse thoroughly in water.

Ice cream and milk drinks. Sponge with cool or lukewarm water or soak half an hour or longer. Then launder in warm, soapy water. If a greasy stain remains, sponge with grease solvent. If a colored stain remains, use a chlorine or peroxygen bleach.

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UM RESEARCHERS DISCUSS ANIMAL NUTRITION AT WASECA FIELD DAY

WASECA--Dairy steers showed better gains when fed a high-hay ration until they hit 750 pounds and finished on a high-grain ration, than when they were kept on a high-grain ration for the entire feeding trial.

At the Southern Experiment Station field day here today (Thursday, July 6), visitors heard University of Minnesota animal scientists report on animal nutrition research projects being conducted at the station and discuss how research findings can be worked into a practical feeding program.

In the series of feeding trials, dairy steers fed the high-hay ration until reaching 750 pounds and then finished on the high-grain ration gained faster and more efficiently and produced higher return over feed and initial costs than steers fed either high-hay or high-grain rations throughout the trial.

The three ration treatments given to different groups of steers were:

- 1) high-grain (11:1 concentrate-to-roughage ratio) for the entire trial.
- 2) high-hay (1:3 concentrate-to-roughage ratio) throughout the trial.
- 3) high-hay (1:3 C:R ratio) until 750 pounds, then switch to high-grain (11:1 C:R ratio) to finish.

The Holstein calves started at about 400 pounds and were sold when they reached about 1,000 pounds. All were implanted with 12 mg. stilbestrol at the trial's start and reimplanted with 24 mg. when they hit 750 pounds.

(more)

add 1 - animal nutrition

K. P. Miller and E. C. Frederick of the Waseca station, and J. C. Meiske, C. W. Young, C. L. Cole and R. D. Goodrich of the University's animal science department conducted the trials.

Average daily gains were 2.82 pounds for steers receiving the high-hay ration until they weighted 750 pounds and then finished on the high-grain ration, 2.56 for those fed the high-grain ration only, and 2.37 for steers fed the high-hay ration throughout the period.

The researchers noted that steers fed the high-hay ration for the entire trial gained slower and graded lower. But this group had the lowest feed costs per 100 pounds of gain and gained surprisingly well on the high-hay ration.

Marbeling scores and fat depths over the rib eye, as well as carcass grades and rib eye area, were slightly higher for the cattle fed rations with greater proportions of grain. But these carcass measures were not significantly different among the three groups of steers.

The animal scientists suggest that the findings show cattle on high-roughage diets can make economical gains, but need to be fed to heavier weights to improve carcass grade.

Return over initial and feed costs was \$62.18 for steers that were switched from the high-hay to high-grain ration at 750 pounds, \$40.74 for steers on the high-grain ration for the trial, and \$51.93 for those fed the high-hay ration throughout the period.

The dairy steer feeding trials are a continuing project at the station. University animal scientists are now investigating how steers will perform when corn silage, instead of hay, is fed as the roughage.

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Immediate release

UM AGRONOMIST REVIEWS HERBICIDE MIXTURES AT FIELD DAY

WASECA--Mixtures of two or more weed control chemicals can often offer definite advantages over a single herbicide, said a University of Minnesota agronomist speaking at the Southern Experiment Station's field day here.

Gerald R. Miller told visitors today (July 6) that certain herbicide mixtures can control more kinds of weeds than single herbicides, give more consistent performance under varied soil and weather conditions, last longer to give full season weed control, plus result in less carryover and reduce the chance of crop injury.

Miller reviewed some registered and experimental mixtures that University plant scientists are studying here and at branch experiment stations throughout Minnesota.

The following herbicide mixtures for weed control in corn have been approved by the United States Department of Agriculture (USDA).

Atrazine and linuron: The combination of atrazine and linuron (Lorox) has given good weed control in Minnesota as a preemergence treatment on corn. The mixture cuts atrazine carryover and corn tolerates the combination better than linuron alone.

The atrazine-linuron combination controls weeds as well as equivalent rates of atrazine alone and better than linuron alone. The chemicals can be mixed by the user or bought already mixed.

Rates vary from 1/2 to 1-1/2 pounds per acre of active ingredient of each chemical in a one-to-one ratio. Miller says to make sure to use the rate specified for your soil.

The mixture is not recommended as an early postemergence treatment because the linuron may kill the corn. And against quackgrass, the combination has not been as effective as atrazine alone.

(more)

add 1 - herbicide mixtures

Atrazine and CP31393: Another combination registered for preemergence use on corn is atrazine and CP31393 (Ramrod). But keep in mind a general rule for all mixtures with CP31393 or CP31393 alone: Use only on corn grown for grain or seed, but not on corn for silage.

Compared with atrazine alone, this combination reduces carryover and gives more consistent weed control under varied soil and weather conditions. The atrazine-CP31393 mixture also controls broad-leaved weeds better than CP31393 alone.

Linuron and CP31393: A mixture of linuron (Lorox) and CP31393 (Ramrod) used as a preemergence treatment on corn has given better control of broad-leaved weeds than CP31393 alone and less corn injury than linuron alone.

Miller notes that atrazine, linuron and CP31393 are all wettable powders and require continuous agitation to keep them in suspension while spraying.

Atrazine-Oil-Emulsifier: Special oils with an emulsifier combined with atrazine and water have improved atrazine performance as an early postemergence spray against both grasses and broad-leaved weeds in corn. Use only those oils labelled for this purpose.

By mixing oil and emulsifier with the spray, the amount of atrazine can be cut down about one-third from the usual two to four pounds per acre. One to two gallons of the oil is added per acre.

Miller says this early postemergence mixture seems best suited to areas where preemergence atrazine applications give poor or inconsistent weed control. Included are areas with fine-textured, high-organic-matter soils, and in western Minnesota where adequate rain is less certain.

Farmers should not use mixtures that have not been tested and approved by USDA, points out Miller. Results can be disastrous. For example, adding 2, 4-D to the atrazine-oil mixture has caused severe corn injury.

For complete weed control information, ask your county agent for the current issue of Extension Folder 212, "Cultural and Chemical Weed Control in Field Crops."

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 10, 1967

To all counties

Immediate release

**SLOW MOVING VEHICLE
EMBLEM REQUIRED BY
NEW MINNESOTA LAW**

All slow moving vehicles on roads in Minnesota must display a slow moving vehicle emblem (SMV) by January 1968 according to a recent state law. The emblem, a 14-inch high triangle with a fluorescent orange center and a reflective red border, must be mounted on the rear of all farm tractors and machinery, slow moving construction and highway maintenance equipment, and other vehicles designed to operate at a maximum speed of 25 miles an hour on public roads or highways.

The law requiring the use of the emblem is a safety measure to help reduce the number of accidents involving slow moving vehicles by warning motorists that the maximum speed of the vehicle they are approaching is 25 miles per hour.

Glenn Prickett, former University of Minnesota farm safety specialist, says such an emblem is needed for slow moving vehicles. The Minnesota Highway Department's Safety Division reports that there were 245 accidents involving farm tractors and equipment on Minnesota roads and highways in 1966. Of these, 216 involved other moving vehicles. And, of the 216, 107 were rear end collisions where a faster moving vehicle collided with the farm equipment.

The slow moving vehicle emblems have been sold for several years but were not required by law. Prickett urges farmers to practice wise safety and use the emblem before January 1968.

The inexpensive emblems can be obtained at implement dealers and many 4-H clubs and FFA chapters.

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Department of Information
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Institute of Agriculture
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St. Paul, Minnesota 55101
July 10, 1967

To all counties
Immediate release

HOMEOWNERS SHOULD
BE ALERT NOW FOR
CEDAR-APPLE RUST

Homeowners and farmers who have apple and cedar trees should be alert for cedar apple rust. The rust, caused by a fungus, appears on many types of apple trees and on Eastern Red Cedar and its varieties and Rocky Mountain Juniper and its varieties.

Cedar-apple rust usually doesn't seriously damage cedars, but it can reduce the yield, value and quality of apples, says Joe Vargas, director of the University of Minnesota's plant disease clinic.

The fungus spreads from cedar trees to apple trees in the spring and early summer, and it spreads from apple trees to susceptible cedars in late summer and early fall.

The disease first appears on apple trees as small yellow spots on the leaves. The spots enlarge during the summer and the fungus grows down through the leaf to form a spot on the lower side.

On cedar trees the disease appears as small, brown, wartlike galls that produce large, bright orange gelatinous horns or tendrils in late May and early June. Spores from these horns or tendrils infect apple trees.

Cedar-apple rust can be controlled by planting rust-resistant varieties of cedars and apple trees, and by spraying.

Cedars can be sprayed from July to early September. Remove dormant galls during the fall, winter and early spring to prevent the infection from spreading from the cedar to apple trees. And, spray apple trees in the spring beginning with the pink through petal-fall stages of bloom.

See your county agent for more information. Ask for Plant Pathology Fact Sheet 4, "Cedar-Apple Rust." Or, write the Bulletin Room, University of Minnesota, St. Paul, Minnesota, 55101.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 10, 1967

To all counties
Immediate release

**FIRE PREVENTION IS
IMPORTANT PART OF
GOOD FARM SAFETY**

Good fire prevention is an important part of farm safety, says Glenn Prickett, former University of Minnesota farm safety specialist.

During 1966, 861 farm fires were reported to the State Fire Marshal's office. The fires caused an estimated loss of over three and a half million dollars on Minnesota farms. Of the 861 reported fires, 265 occurred in barns and 261 in farm dwellings. And, Prickett notes, ten lives were lost in farm fires in 1966.

The leading reported causes of farm fires were faulty or misused electrical equipment, defective, overheated or exploding heating and cooking units, and defective chimneys. Other causes were rubbish and grass fires, lightning, children with matches, spontaneous ignition, careless handling of petroleum fuels and careless smoking.

Prickett urges farm families to inspect the farm premise and remove fire hazards during National Farm Safety Week, July 23-29. And, keep an approved fire extinguisher in home, farm buildings, car and on the tractor.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 10, 1967

To all counties
Immediate release

**SAFETY PRECAUTIONS
CAN REDUCE ACCIDENTS
INVOLVING FARM CHILDREN**

Farm accidents involving children can be reduced if the following suggestions from the National Safety Council are followed, says Glenn Prickett, former University of Minnesota extension farm safety specialist.

* Do not permit children to ride on farm machinery. A sudden turn or lurch can throw the child under the wheels of a tractor or in the path of other equipment. Do not let younger children even play near farm machinery, and remove the keys from tractors when not in use.

* Teach children to respect animals and how to handle them properly. Keep small children away from newborn animals and other livestock, and make sure pets are gentle.

* Keep all medicines and chemicals locked and out of reach of small children. Do not store farm chemicals in pop bottles or in areas that are easily accessible to children. Label all medicines and chemicals properly.

* Teach the child how to swim, and caution him to swim only with a buddy and only in supervised areas. Farm ponds, stock watering tanks, lakes streams and rivers are dangerous because there usually is no supervision. These areas are especially dangerous to smaller children.

* Keep guns unloaded, locked up, and out of sight and reach of exploring youngsters. Teach older children gun safety.

* And teach your children the rules of safe bike riding.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
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To all counties
Immediate release

IN BRIEFS...

Farm Safety Week, July 23-29. National Farm Safety Week is July 23-29. The emphasis on farm safety is important, says Glenn Prickett, former University of Minnesota farm safety specialist. Farm and home accidents cost time, money, suffering and sometimes life. Many of these accidents can be prevented with proper use of farm equipment, proper storage of chemicals, wise planning of work that needs to be done, by correcting hazards promptly, and learning to live with hazards that can't be corrected.

* * * *

Farm Machinery Safety Is Important. In 1966, 37 deaths occurred in Minnesota as the result of farm accidents involving farm machinery. Glenn Prickett, former University of Minnesota farm safety specialist, offers these safety tips when using farm machinery: Shut off power before unclogging, adjusting or oiling machinery; keep shields in place; keep children off and away from machines; hitch equipment only to the drawbar when pulling equipment with a tractor; be cautious on grades and slopes; drive at a safe speed for ground conditions; use the slow moving vehicle emblem when on public roads; and equip your tractor with a protective frame to protect the operator if the tractor should tip.

* * * *

Bankers to Study Rural Problems. Bankers from Minnesota, North Dakota and South Dakota will improve their understanding of farm and home financial planning by attending a special Rural Banking School July 23-28 on the University of Minnesota Morris Campus. The one-week school, sponsored by the bankers associations of the three states, is being held primarily for bankers involved in agricultural lending. Topics to be discussed by nationally prominent bankers and agricultural specialists include the rural community in transition, the agricultural economy of the Upper Midwest and financial management in tomorrow's agriculture. The bankers also will study livestock and cropping systems, farm credit analysis and agricultural research in progress.

-MORE-

Turkey Prices for Producers May Rise. Turkey growers may average about 21.5 cents for their turkeys during the August-November marketing season, says the Poultry Survey Committee of the American Feed Manufacturers Association. This is one cent above the current national average of 20.1 cents, but one cent under the price a year ago. A large early crop of turkeys has contributed to the lower prices this year, says Robert Berg, University of Minnesota extension poultry specialist. Although there has been only a five to six percent increase in the total turkey crop this year compared with 1966, the production of early turkeys was up about 25 percent over last year. Most of this increase will be marketed by mid-September. Berg says turkey prices will rise as the season progresses and a smaller late crop of turkeys is marketed.

* * * *

Cabs and Frames on Tractors Can Reduce Fatalities. A study of 55 fatalities from tractor accidents showed that over 75 percent could have been prevented if proper protection had been given the tractor operator, says the National Safety Council. A protective frame or a heavily constructed cab will prevent a tractor from rolling more than 90 degrees in most cases. Cabs on tractors also protect the driver from flying objects such as broken chains from machines and wind-blown objects such as sand, chaff, rain and hail. Properly constructed cabs also reduce the noise level which can contribute to operator fatigue, a common cause of tractor accidents. A seat belt used with tractors which have a protective frame or heavily constructed cab will give added protection by keeping the operator in the seat during an upset. A seat belt should be used only when the tractor has a cab or frame, warns Glenn Prickett, former University of Minnesota farm safety specialist.

* * * *

Dairy Calves on Pasture Need Hay. Dairy calves under eight months old cannot eat enough pasture to grow normally because pasture is low in dry matter, says Bill Mudge, University of Minnesota extension dairy husbandman. Good hay should be available at all times if young calves are in pasture. Up to four pounds of grain per head per day should be fed depending on the flesh of the calves.

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Department of Information
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University of Minnesota
St. Paul, Minnesota 55101
July 10, 1967

To all counties
4-H NEWS
Immediate release

WATER SAFETY
ENCOURAGED BY
4-H MEMBERS

Each year some 7,000 persons die from drownings in the United States -- more than half of them unable to swim.

Because more and more farm ponds and swimming pools are being built, it seems probable that the drowning toll will remain critical, says Earl Bergerud, assistant state 4-H club leader at the University of Minnesota.

During National Farm Safety Week, July 23-29, 4-H'ers urge safety practices in and around farm ponds and pools.

Any pool, pond, lake, stream, or river can be a potential hazard. Make the area in which you swim as safe as possible by following these rules:

- Remove all trees, stumps, rocks, and brush within the swimming and boating area when building a pond.
- Mark the safe swimming areas, placing warning signs at danger points and deep water.
- Build a safety post that provides a ring buoy, rope and long pole as lifesaving devices plus instructions on first aid and resuscitation.
- Fence the pool and small pond, if possible, and lock the gate.
- Encourage all children to learn to swim. One out of every two persons cannot swim 50 feet.
- Never allow anyone to swim alone.
- Don't allow children to play in or around the pool or pond without adult supervision.
- Remind swimmers to stay out of farm ponds during storms.
- Buy and use boats that will float if swamped or capsized.
- Find out what your community or state laws say about liability in case of accident or death. You may need to protect yourself with insurance if you are building a pool or farm pond.

Department of Information
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Institute of Agriculture
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St. Paul, Minnesota 55101
July 10, 1967

To all counties
ATT: HOME AGENTS
Immediate release

CARPET ROLLS INTO KITCHENS

Installing carpet in the kitchen was practically unheard of a few years ago, but now its popularity is increasing.

Carpeting in the kitchen has many advantages, according to Mrs. Myra Zabel, extension home furnishings specialist at the University of Minnesota. The chief benefit is comfort for the homemaker's feet and the luxurious "feel" of the carpet. Carpeting also helps to absorb kitchen noises. Vacuuming rather than washing and waxing the floor may be considered a convenience by many homemakers, Mrs. Zabel adds.

Because spills and stains are common in the kitchen, carpeting can be somewhat of a disadvantage. Any food spills will be harder to mop up from the carpet than from a hard, smooth surface material. But since almost all stains can be removed from a carpet when they are fresh, it is important to treat any stains immediately.

Three main types of carpets are suitable for kitchens.

Indoor/outdoor olefin fiber polypropylene is a felt-like material and the least expensive. It can be loose-laid so that when it is soiled it can be rolled up, taken outside and shampooed or hosed down, then dried in the sun. However, because moisture may collect underneath the carpet, mildew may be a problem in summer.

A second type of carpet for kitchens is a more expensive, regular tufted carpet of olefin fiber.

The high-density nylon carpet is rubber backed and cemented to the floor-like resilient flooring. Since the carpet pile is very shallow, it is easy to vacuum up crumbs and sand. Some types may have a vapor barrier between the pile and backing so that moisture spilled on the surface can be blotted up. But a lighted cigarette, hot fry pan or any hot material dropped on this carpet may melt the spot where it falls. A melted or burned area, however, could be cut out and replaced with a new patch. The patching will not show if it is done properly.

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FOR RELEASE: Wednesday, July 12

EFFECT OF SULFUR ON CROP YIELDS SHOWN AT FIELD DAY

PARK RAPIDS--The striking effect of sulfur applications on alfalfa yields was shown to visitors attending the field day program today (Wednesday, July 12) at the University of Minnesota's sulfur research plots near here.

A. C. Caldwell, E. C. Seim and G. W. Rehm, soil scientists at the University, told field day visitors that sulfur treatments have also been tried on small grains, corn, potatoes and clover-brome mixtures, but that alfalfa has shown the most striking and consistent yield increases.

In experiments near Park Rapids, plots treated with sulfur applied either as gypsum or elemental sulfur have produced up to three times, and in most tests about twice, as much alfalfa as the untreated check plots.

The researchers pointed out that these increases can't be expected throughout the state because other soils may not be as low in sulfur as the sandy loam soils in about a 10-county area around Park Rapids.

In general, University studies indicate that soils in north central and northeastern Minnesota are relatively low in sulfur, while soils in southern and western parts of the state are relatively high.

In the experiments, University soil scientists studied the effect of sulfur applications made annually, and the residual effect of applications made in 1962.

For the annual applications, results from 1966 show gypsum at 50 pounds per acre gave the greatest alfalfa yields for three cuttings. Elemental sulfur at 25, 50 and 100 pounds per acre also produced significant yield increases over the untreated plots.

(more)

add 1 - effect of sulfur

The residual applications produced significant increases in alfalfa yields over the untreated plots. Treatments of 100 pounds elemental sulfur per acre and gypsum at 1,000 pounds per acre in 1962 continued to maintain alfalfa yields at near maximum levels during 1966.

The researchers said the yield difference between check and treated plots increased with each successive cutting in the season. This indicates that sulfur from natural sources is rapidly exhausted after the first cutting.

For sulfur applications to increase alfalfa yields, it is also important to add complete applications of phosphorus and potassium in amounts determined by soil tests.

In studying the effect of sulfur on small grain yields during 1966, the soil scientists found that 10 pounds per acre of elemental sulfur, gypsum or sodium sulfate (Na_2SO_4) increased barley yields 4-11 bushels per acre. Sodium sulfate was most effective, followed by elemental sulfur and gypsum.

Oat yields were boosted four to eight bushels per acre with additions of 10 pounds of sulfur per acre and wheat yields were increased from about two to six bushels per acre over the untreated plots.

With corn and potatoes during 1966, the sulfur treatments did not produce significant yield increases compared with untreated plots.

The University's continuing program of sulfur research on soils and crops in Minnesota was begun in 1962. Funds for the program are from the Sulfur Institute and the Tennessee Valley Authority.

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Immediate release

UM PROF DISCUSSES TURKEY DISEASE PROGRAM

Dallas, Texas--Results of a five-year control program against infectious sinusitis, a respiratory disease in turkeys, show that infection free breeder flocks can be maintained under practical conditions, a University of Minnesota veterinarian said here Monday (July 10).

B. S. Pomeroy, professor and head of the department of veterinary bacteriology and public health, reviewed the Minnesota program in a talk at the 104th annual convention of the American Veterinary Medicine Association.

Infectious sinusitis, scientifically known as Mycoplasma gallisepticum, causes respiratory infections in both chickens and turkeys. In chickens the infection is known as chronic respiratory disease.

"While the organism is generally egg transmitted, it may also be spread from an infected flock to neighboring flocks (lateral transmission)," Pomeroy said.

The intensified control program, supported by the Minnesota Turkey Growers Association and the U. S. Department of Agriculture, involved testing of all the birds in every one of the breeder flocks in Minnesota.

A blood test was used to qualify flocks for the program. When necessary, supplemental laboratory tests and examinations were made on individual birds followed by flock inspections.

"Approximately 3,600 flocks and 3.5 million birds were involved in the five-year program. Following a reported outbreak of infectious sinusitis, an epidemiologic study was made. During this period, 33 primary outbreaks were reported in breeder flocks which qualified under the program," Pomeroy said.

Although the sources of the infection were not determined in all flocks, laboratory tests revealed three probable sources. These were contaminated live-virus vaccine, lateral spread from chickens, and infected turkey grower flocks.

Over all, lateral spread resulted in the involvement of 1.2 million market birds, he said. Mycoplasma-infected chicken flocks served as the source of the infection to 250,000 birds, while outbreaks involving infected, imported turkey eggs accounted for infection in 175,000 turkeys.

The elimination of infected turkey breeder flocks is essential in order to prevent egg transmission of the disease. However, Pomeroy warned that infected chicken flocks may still serve as a potential hazard to clean turkey flocks.

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St. Paul 55101--Tel. 647-3205
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Immediate release

4 UM OFFICIALS LEAVE FOR CHILE

Four University of Minnesota officials left earlier this week for Santiago, Chile, where they will meet with representatives from the Ford Foundation and officials of the Chilean government to review the University's agricultural project there.

The project is sponsored by the Ford Foundation under a three-year grant which ends in October.

Included in the University group are Sherwood O. Berg, dean of the Institute of Agriculture; John Blackmore, director of International Agricultural Programs; Roland Abraham, associate director of the Agricultural Extension Service; and Harry Foreman, associate dean of International Programs.

They will meet for 10 days with Ford Foundation representatives, members of the University specialist staff stationed in Chile and officials of the Ministry of Agriculture. The group will review the program and discuss plans for a two-year renewal of the present grant.

The main purpose of the University's Chile project is to improve food production by training a specialist staff to help get technical research information to farmers in the country.

The major thrust of its efforts so far, Blackmore says, has involved work with corn production, mainly because research in Chile has provided good technical data on adapted varieties, fertilization requirements and weed control methods.

At last harvest, corn yields had increased about 20 percent over last year. The top yield was 243 bushels per acre on an irrigated farm near Santiago.

The project is being carried out by five University specialists located in Chile. They are Charles Simkins, party leader; Eugene Pilgrim, farm management specialist; Milton Morris, communication specialist; and Herman Vossen and Thomas Trail, both specialists in animal husbandry.

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Immediate release

IF THE HOME FREEZER STOPS RUNNING, HERE'S WHAT TO DO

When power goes off during electrical storms--as was the case in the Twin Cities area on June 30--the question always comes up: how long will food keep in the home freezer? And is it possible to salvage thawed or partially thawed food?

The first precaution to take if the electricity goes off is to keep the freezer door closed, advises Mrs. Shirley Munson, in charge of the University of Minnesota's food processing laboratory in the Department of Horticultural Science. Moving the food to a locker plant or adding dry ice are also possibilities.

During the first 12 to 20 hours the power is off, relatively little thawing occurs if the freezer is fairly full of food stored at about 0° F. In large chest-type freezers filled with frozen foods, it may take 50 hours or more for food in the top layer to reach 32° F. and 85 hours for the rest.

Food will thaw more quickly in an upright freezer. There's little need for worry, however, if the electricity comes on in a matter of hours. In any case, don't open the freezer door unnecessarily, Mrs. Munson warns, because by doing so you will be letting in warm air and raising the inside temperature.

If the power is off for more than a day or two, dry ice can help keep the food frozen. Dry ice will be most effective if you saw a 50-pound chunk into smaller pieces and set these on cardboard on top of the frozen food packages. Wear gloves while handling the dry ice to keep it from touching your skin.

If you have arranged in advance with a local freezer plant to transfer your frozen foods there in an emergency, pack them in cardboard boxes with crumpled newspaper around them to protect them from thawing.

But supposing you come home from a vacation to find that the power has been off and much of the food has already thawed? Mrs. Munson gives some guidelines to help you decide whether the food can be salvaged.

(more)

add 1 -- if home freezer stops running . . .

Often the odor indicates when spoilage has started. If the smell of thawed food is questionable, always destroy the food.

Be sure to examine each package of meat carefully, because meats and poultry are unsafe to eat when they begin to spoil. If the meat still contains some ice crystals, it is safe to refreeze it, although the quality may not be as good. When meat is completely thawed but is still very cold, it is wiser to cook it thoroughly at once rather than to refreeze it.

Do not refreeze cooked foods such as casseroles, ice cream and shellfish that have thawed completely. Shellfish products especially spoil quickly and it is difficult to tell by odor or appearance whether they are safe to eat.

If thawing has not changed the taste or odor of fruits, you can refreeze them or use them for jams or preserves. A little fermentation will not make fruits dangerous to eat, but it may spoil their flavor. Fruit juices that have thawed may be refrozen but they will separate when reconstituted and will lose some flavor.

To refreeze foods in your freezer, rearrange them so the warmer packages are against the refrigerated surface. Allow space for the air to circulate around the packages.

If your freezer is full of partially thawed foods, it's best to take all of them to a commercial locker plant for a quick refreezing.

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67-185-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 12, 1967

Immediate release

For Field Day Visitors:

UM AGRONOMISTS REVIEW RESEARCH ON WEED CONTROL IN SMALL GRAINS

MORRIS--Weeds continue to be one of the major factors limiting yields and profits for Minnesota's small grain producers, according to University of Minnesota weed control specialists speaking at the West Central Experiment Station's field day here.

Visitors to the field day today (Thursday, July 13) heard Richard Behrens and Gerald Miller, University agronomists, discuss findings from the continuing research projects on chemicals and cultural practices for controlling weeds.

The agronomists said proper timing is probably the most important factor for effective chemical control of weeds in small grains. For example, the recommended application time for dicamba on wheat and oats is between the two- and five-leaf stage. Later applications have caused malformed heads and yield reduction.

They noted that the two oldest herbicides cleared for use on small grains-- 2,4-D and MCPA--are still the most widely used for broad-leaved weed control by small grain farmers. University researchers have evaluated these chemicals for more than 10 years.

During the growing season, wheat and barley are less sensitive than oats to 2,4-D. As seedlings, all three crops are sensitive. Wheat and barley are relatively tolerant from the five-leaf to early boot stage.

Recommended rates of 2,4-D control most broad-leaved weeds without serious crop injury, but avoid spraying wheat, barley or oats in the boot stage. Also, some injury can be expected to oats, however, weed control usually more than offsets losses from chemical injury.

Small grains show more tolerance to MCPA than to 2,4-D. With MCPA, small grains can be sprayed during the two- to five-leaf stage and up to boot stage.

MCPA applied at 1/4 pound per acre of amine or 1/6 pound of ester will control small mustard plants. Other broad-leaved weeds or larger mustard may require up

(more)

add 1 -- weed control in small grains

to 2/3 pound amine or 1/2 pound ester per acre. However, on oats don't apply more than 1/2 pound amine per acre.

Two more recently-developed herbicides cleared for use on small grains--dicamba and bromoxynil--have been under University evaluation for about five years and are coming into wide use by farmers.

Behrens and Miller said use of dicamba is growing rapidly mainly because it controls hard-to-kill broad-leaved weeds such as wild buckwheat, smartweed and Canada thistle that are resistant to 2, 4-D and MCPA.

The agronomists said oats are most tolerant to dicamba, followed by wheat, while barley is least tolerant. Best time for application is from the two- to five-leaf stage. Dicamba is cleared for use on wheat and oats, but not for spring barley. Don't let livestock graze or feed on forage or threshings from small grains treated with dicamba. And don't allow dicamba to drift onto nearby soybeans.

Bromoxynil also controls most annual broad-leaved weeds, including those resistant to 2,4-D. However, being relatively new, it is still quite expensive.

Some combinations of these herbicides have shown promise for improved weed control. A mixture of 2,4-D amine at 1/4 pound and dicamba at 1/8 pound per acre has given much better control of all broad-leaved weeds than the 2,4-D amine at 1/2 pound per acre.

Combining MCPA and dicamba has given better control of mustard than dicamba alone. However, the MCPA-dicamba mixture will kill legumes.

Behrens and Miller said a major part of University research on weed control chemicals is now being devoted to finding chemicals that will control weeds and still not injure legumes undersown in small grains. They explained that seeding small grains as a companion crop is one of the main ways of establishing legumes in west central Minnesota.

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67-183-def

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University of Minnesota
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Immediate release

STUDY REPORTS FOOD SHOPPING HABITS OF UPPER-INCOME FAMILIES

Wives generally take the major responsibility for grocery shopping in upper-income Minneapolis and St. Paul families, according to findings of a University of Minnesota study.

Their total expenditures in food stores, including non-food purchases, averaged \$54 per family in a week, or an average of somewhat less than \$10 per shopping trip.

These were among findings of a study on food shopping practices directed by Marguerite C. Burk, professor of agricultural economics and home economics at the University of Minnesota. The survey was made of 257 families in upper-income levels in the Twin Cities in April-July 1965 by the Department of Agricultural Economics to obtain knowledge related to demand for food and for types of food marketing services supplied by retail stores. To be included in the survey, husband and wife families had to have a minimum gross income level of \$8,000 in 1964 and larger families had to have \$10,000.

The husband was involved in only a fourth of all food shopping trips of the families studied. High social position practically precluded shopping by the husband, reflecting perhaps long hours worked by men in professional and managerial positions. In families with young children, the wife usually took the children along on at least some shopping trips. In families with no children at home, joint shopping by husband and wife was more common.

Small shopping trips of less than \$2.50 were frequent, representing about a third of all shopping trips. Less than a tenth of all shopping trips showed expenditures of \$25 or above.

(more)

add 1 -- food shopping study

Upper-income families were heavy users of chainstores. But about 40 percent of the families shopped at independent grocery stores at least once during the week. A fourth visited bakery or dairy stores. Shoppers spent more per family in two high-quality independent grocery stores than did shoppers in chainstores.

Choices among types of stores were moderately influenced by the family's social position, the wife's employment and the family's position in the family life cycle. Compared to other families, patrons of discount stores tended to rank lower in occupational and educational levels, have lower incomes, belong to larger families and have relatively low per person food expenditures. Wives in these families had somewhat lower educational levels and many of them were employed part-time.

Patrons of independent stores specializing in high-quality lines were in the highest social positions, had higher incomes and were in relatively small households. Husbands had predominantly managerial or professional occupations and few of the wives were gainfully employed.

Members of large households shopped more often than the average, and employed homemakers and older women shopped less often. Large, young families with full-time homemakers shopped frequently, spreading their shopping over most parts of the week but tending to shop heavily in the middle of the week. Medium-size families whose heads were under 45 years of age shopped more in the early part of the week than other families. Higher social position and a high level of education of the wife seemed to be associated with shopping early in the week.

Fridays and Saturdays, however, were the most popular shopping days. Older families, which were generally of smaller size and had experienced shoppers, tended to shop heavily on Friday. The heavy weekend shopping may be related both to weekend specials and to weekly paydays. The higher incomes of some families apparently permit them to ignore weekend specials.

Time of day when shopping was done was distributed fairly equally. In the group surveyed 28 percent shopped before noon, 24 percent from noon to 3 p.m., 30 percent from 3 to 6 p.m. and 18 percent after 6 p.m. Morning shopping was associated with higher social placement. Families with young children were also likely to shop in the morning. Families without children tended to shop in late afternoon or evening. Wives employed full or part time were major evening shoppers.

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Immediate release

CHILDREN'S DIETS LOW IN VITAMINS A AND C, STUDY SHOWS

Although most American children are fairly well fed, if not overfed, a recent study shows that their diets may be low in two vitamins important to good health-- A and C.

The study, by a University of Minnesota home economist, showed also that food attitudes of both mother and children, size of family income and the amount of parent education all played a part in determining the intake of these vitamins.

Lois Lund, associate professor of home economics at the University of Minnesota, made the study in cooperation with Marguerite Burk, professor of agricultural economics and home economics. Funds for the study were provided under a cooperative agreement between the University of Minnesota Agricultural Experiment Station and the U. S. Department of Agriculture Consumer and Food Economics Research Division.

Detailed eating patterns of 136 fourth graders, 9 to 11 years old, were studied in Maplewood and North St. Paul. Various socioeconomic data were collected as well as information about the mother's knowledge of nutrition and the parents' and children's attitudes toward certain foods. Dietary data were collected from the children, and parents and teachers were interviewed individually.

The children's vitamin A intake had a high degree of relation to their feeling toward certain dark green and yellow vegetables which are rich in vitamin A such as broccoli, squash and spinach. Children who were unfamiliar with these vegetables or did not care for them were likely to have diets low in vitamin A. But the way children reacted to these vegetables was also affected by the mother's attitude and how often she felt these vitamin A-rich vegetables should be served and eaten. In some individual cases, practically no vitamin-rich fruits or vegetables had been consumed within the week of the survey. Apparently neither the mothers nor the children were aware of the necessity for including them in the diet.

Several educational, sociological and economic factors were associated with the vitamin C intake. In families where the mothers had some knowledge of nutrition, where the father had a higher than average income and educational level, the children were likely to have a satisfactory intake of vitamin C-rich foods.

(more)

But if the mother had little knowledge of nutrition or if the father had a low income, the intake of vitamin C was usually below recommended levels.

Vitamins A and C are problem vitamins all through life, Miss Lund concludes. Food patterns established in childhood appear to follow a person into adult life.

She suggests a number of ways in which the diets of children can be improved by including the important vitamin C- and vitamin A-rich foods. First of all, improvement in children's vitamin C intake might be achieved by supplementing family purchasing power available for food. But any increase in family purchasing power must be accompanied by nutrition education programs for both adults and children. Parents must be made aware of children's nutritional needs and must give their children broader experience with new foods to increase their familiarity with and acceptance of them.

In any nutritional program for adults, Miss Lund continues, an objective should be to include special emphasis on parental attitudes toward vitamin-rich fruits and vegetables. Parents, especially mothers, should also be made aware of the effect their own food attitudes have on their children.

Vitamins A and C are necessary in the diet because they perform specific functions important to health. Vitamin A is needed to help keep mucous membranes firm and resistant to infection, to help keep skin smooth and soft and to protect against night-blindness. It is found in yellow fruits, dark green and yellow vegetables, whole milk, butter and liver. Vitamin C helps to resist infection and prevent fatigue, assists in healing wounds and broken bones and makes walls of blood vessels firm. Citrus fruits, strawberries, cantaloupe, tomatoes, broccoli and raw cabbage are among fruits and vegetables high in vitamin C.

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Immediate release

TREAT GREASE STAINS IMMEDIATELY ON PERMANENT PRESS FABRICS

Grease stains on washable permanent press fabrics--a laundry problem for many homemakers--can be removed fairly easily if they are treated when they are fresh.

Immediate treatment is one of the keys to any stain removal, say extension clothing specialists at the University of Minnesota.

The simplest way to remove a spot or two of salad oil, margarine or butter, the specialists suggest, is to place the fabric face down on a tissue, paper towel, blotter or terry towel and sponge the spot with a clean cloth moistened with a cleaning solvent, working from the underside. Work from the outside of the spot toward the center so as not to spread the stain. If a ring remains, work liquid detergent into the stain area and launder in warm water.

An alternate method of removing light oils from washable permanent press fabrics is to pour liquid detergent directly on the stain and then soak the garment in water. A soak of 10 minutes may be enough, or, if the stain is stubborn, you may need to extend the soak to half an hour or even overnight.

To remove body oils on shirt collars and cuffs, pour liquid detergent on the soiled areas and allow to set for a few minutes. Then launder in the usual way.

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67-187-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 17, 1967

SPECIAL
Immediate release

PUBLIC DISCUSSION ON FOOD, FIBER REPORT SCHEDULED

MORRIS, Minn.-- The first public discussion of recently announced findings and recommendations of the National Advisory Commission on Food and Fiber will be held here Tuesday (July 25) on the University of Minnesota Morris Campus.

The meeting, which is being held in conjunction with the week-long Rural Banking School, will begin at 8 p.m. in Edson Hall Auditorium. The public is invited.

Featured speaker at the meeting will be Jimmye S. Hillman, executive director of the Commission. He will discuss details of the Commission's final report, which was submitted to President Johnson last week. A question and answer session will follow his speech.

The Commission was appointed by President Johnson in 1965 to evaluate U.S. agricultural and related foreign trade policies. Sherwood O. Berg, dean of the University of Minnesota Institute of Agriculture, is Commission chairman.

Hillman, who is also head of the Department of Agricultural Economics at the University of Arizona, has served as consultant to the U.S. Department of Agriculture, the Agency for International Development, and the Organization of American States.

He earned his bachelor's degree from Mississippi State College, his master's in rural sociology from Texas A & M College, and his doctor's in agricultural economics from the University of California at Berkeley. He taught at Mississippi State before joining the faculty in Arizona in 1950, and has been department head since 1961.

The Rural Banking School for bankers from Minnesota, North Dakota and South Dakota is being sponsored by the bankers associations of the three states. Cooperating are the three agricultural extension services, the West Central Experiment Station and the University of Minnesota Morris.

SPECIAL NOTE TO COUNTY AGENTS

The attached news release is based on information from a recent Extension Service publication dealing with Minnesota's changing population picture from 1960-1965.

The report is based on a study by John S. Hoyt and James H. Hanson, agricultural economists. This study is part of a larger project sponsored by the Department of Agricultural Economics, the Extension Service and the Agricultural Experiment Station.

If you have not already received copies of this report on "Minnesota's Population," you should receive them very shortly. Would you please see to it that each weekly newspaper in your county receives a copy of the report for background information or possibly for a special release or editorial. Copies are being sent to all daily newspapers and radio and television stations in your area.

Also, you may wish to include in the attached release a paragraph or two telling about population shifts affecting your county.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 17, 1967

To all counties

Immediate release

AGRICULTURAL ECONOMISTS
REPORT STATE POPULATION
TRENDS FOR 1960 TO 1965

Minnesota's rural population declined by about 4 percent per year between 1960 and 1965, while the state's urban population increased by 2 percent per year and the rural nonfarm population increased by 1.2 percent per year.

During this period the state's total population increased about 141,000. This was an annual growth rate of eight-tenths of a percent, which was below the national annual average growth rate of 2 percent for the same period.

John Hoyt, Jr. and James H. Hanson, University of Minnesota agricultural economists, say the declining trend in rural farm population was evident throughout the United States. They attribute the decline to a decrease in the number of farms, a lack of adequate alternative employment opportunities in rural areas, and declining labor requirements for agriculture brought about by both increased mechanization and farm consolidation.

National figures show a total loss of 7.5 percent in rural farm population during the five-year period while in Minnesota the rural farm population declined 18 percent. This is not surprising, the economists say. Minnesota had a larger rural farm population in 1960 in percentage terms and a larger urbanization movement than the nation as a whole.

While the rural farm population was declining, Minnesota's rural nonfarm population increased by 63,000 over the five years. This results from people moving from rural farm residence to nonfarm residences in or near the larger cities. Some rural farm residences also have changed in classification to rural nonfarm residences.

add 1 -- population trends for 1960 to 1965

The Northeast Region of Minnesota was the only area to suffer a loss in rural nonfarm residents. The decreased importance of labor in industries in this area, especially in St. Louis County, probably contributed to this trend.

Many of the counties which experienced a declining population are in the predominantly agricultural regions of the state. These are areas that have relatively small urban population concentrations and apparently could not provide the necessary jobs and housing for an influx of people from surrounding rural areas.

Some counties that showed a declining population between 1940 and 1960 showed a population increase from 1960 to 1965. Most of these counties are in the North Central and Western Regions of the state where the relatively small urban centers apparently accommodated the migration of the rural farm population.

Twenty-five counties, largely in the central part of the state, showed increases in total rural population from 1960 to 1965. But this was because gains in the rural nonfarm sector more than offset losses of farm residents.

Future state population trends are likely to closely follow the trends established in the 1960 to 1965 period, with the exception of the Southeast Region which may increase instead of maintaining its present stable or decreasing population trend. The greatest increases will occur around urban centers that can handle the migrating nonfarm population.

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St. Paul, Minnesota 55101
July 17, 1967

To all counties
Immediate release

FUNGUS THAT SERIOUSLY
DAMAGES CONIFERS FOUND
IN MINNESOTA NURSERIES

A fungus which causes serious root rot disease of conifer seedlings has been reported in six nurseries in Minnesota, says Harold Scholten, instructor in forestry at the University of Minnesota. In some beds as high as 80 percent of young conifers have been killed.

The most obvious symptom of the disease--wilting of the needles on new growth--is noticeable in the spring and early June. It may look like drought or frost injury. Trees that survive to this time of the summer may have a sickly yellow color.

The fungus attacks both live and dead roots on young seedlings and transplants up to three or four years old. There have been no reports of serious damage to older trees in the field. The disease causes seedling blight, damping-off, and root-rot.

The only effective control measure to date has been fumigating the seed beds in August with methyl bromide. Fumigation can cost \$400 an acre or more, and will hold only for a year or two.

Scholten has been experimenting with a control method using organic matter. He reports that organic matter from ground cobs reduced the mortality rate of the disease in greenhouse experiments. It is still necessary to try this treatment in the nursery. If ground cobs will reduce disease losses in the nursery, it would be a more economical control measure than fumigation.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 17, 1967

To all counties
Immediate release

PORK PRODUCERS
REALIZE VALUE OF
IMPROVEMENT RECORD

Minnesota pork producers are beginning to realize the value of swine improvement records, says Charles J. Christians, University of Minnesota extension animal husbandman.

Last year over 450 market pigs were tested in Minnesota Swine Evaluation Stations, sponsored by the Minnesota Swine Producers' Association, as part of the Minnesota Swine Improvement Program. This was a fourfold increase over 1958, the program's first year.

One of the most significant improvements made since the program's beginning has been in the size of the loin eye area. In the program's first year the loin eye area averaged $3\frac{1}{2}$ square inches while in 1966 the average was slightly over 4 square inches.

The growth rate did not change during the test period, but the pigs reached 200 pounds six days earlier in 1966 than in 1958. This, however, was because the pigs weighed more when they were started on text.

During the past nine years the backfat thickness did not change appreciably, but the percentage of ham and loin on the live weight basis increased by about 5 percent. Feed efficiency also has improved. In 1958, 303 pounds of feed were required for each 100 pounds of gain while last year only 292 pounds of feed were needed.

Since only a few pigs from each herd were evaluated, a sound on-the-farm testing program must supplement the data obtained from the central evaluation station, Christians says.

Last year over 100 breeders participated in the program which is conducted mainly at the Minnesota Swine Evaluation Stations in Austin and New Ulm.

Christians urges producers to sign up now for the Minnesota Swine Improvement Program. If you wish to enter pigs in the fall tests, contact Charles J. Christians, Supervisor of the Minnesota Swine Improvement Program, 101 Peters Hall, University of Minnesota, St. Paul, Minnesota 55101.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 17, 1967

To all acounties
Immediate release

IN BRIEFS . . .

Production Records Are Necessary For Dairy Herd Improvement. Do you want to triple the labor returns from your cows? Bill Mudge, University of Minnesota extension dairy husbandman, says the labor returns of the average DHIA herd were more than three times those of the average untested herd in 1966 in Minnesota. Production records are necessary to improve feeding, breeding and management of the herd. See your county agent or DHIA supervisor to start your herd on test.

* * * *

Dairy Steers Gain Better on Hay and Grain. In feeding trials by University of Minnesota researchers, dairy cows that were fed a high-hay ration until they reached 750 pounds and then were finished on a high-grain ration gained faster and more efficiently than steers fed either high-hay or high-grain rations only. The steers fed the high-hay and then finished on the high-grain ration also produced higher return over feed and initial costs, says J. C. Meiske, associate professor of animal science at the University of Minnesota.

* * * *

Records Are Important In Egg Production. Good records are an important part of efficient egg production management, says Robert W. Berg, University of Minnesota extension poultry specialist. Farmers engaged in commercial egg production should have a budget or cash flow statement to obtain credit as well as effectively plan their business. For example, Berg says 20-week-old ready-to-lay pullets will not produce income for a month, and then will give the farmer only a small income the following month. This limited income until birds are in production must be considered in egg production management. Most credit agencies require a projected income and expense statement so they can see a definite plan for repayment of loans.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 17, 1967

To all counties

4-H NEWS

Immediate release

**POISON IVY
THREAT TO
SUMMER FUN**

If you're planning a camping trip this summer, beware of the pesky poison ivy plants you may find at camp grounds, parks, playgrounds and summer resorts.

Poison ivy plants contain the poisonous, slightly volatile yellow oil which occurs in the resin ducts of leaves, flowers, fruits and the bark of stems and roots, says Herbert G. Johnson, extension plant pathologist at the University of Minnesota. This oil causes skin irritation and inflammation.

The plant varies in growth habit from dwarf and erect forms to strangling or climbing vines. The leaves alternate on the stems and are divided into three leaflets, each oval-shaped, pointed at the tip and tapered to the base. The leaves are glossy or dull green and smooth or somewhat hairy. The white flowers bloom in the spring and then develop into white berries that may last for the rest of the year.

To control poison ivy, mow close to the ground in midsummer, then plow and harrow. For smaller patches, the roots may be grubbed out and burned. Never stand in the smoke of the fire in which poison ivy is burned because the oil will stick to the particles of soot and thus be carried to the skin where severe irritations can occur.

During July chemical sprays, called herbicides, are effective against these plants. The most effective spray contains 2,4D or 2,4,5T, amitrole or ammonium sulfamate. Wear gloves when spraying for protection from plants.

Contact with poison ivy causes inflammation and swelling of the skin, followed by intense irritations and blisters. Symptoms may appear from 12 to 24 hours after contact although some vary from a few hours to several days.

If contact with poison ivy is known or suspected, lather immediately with a strong alkali (laundry soap) and rinse to prevent inflammation and blistering. The alkali soap emulsifies the oil and after thorough rinsing, the oil is removed from the skin.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 17, 1967

To all counties
ATT: HOME AGENTS
Immediate release

FALLS ARE NO. 1
HOME ACCIDENT
KILLER IN MINNESOTA

Falls in Minnesota homes killed more than 200 people last year, disabled and injured hundreds of others.

Among Minnesota residents who were killed in falls, 210 died in falls from different levels, 32 from falls on the same level, according to provisional figures from the Minnesota Department of Health.

Falls continue to be the number one killer in home accidents -- particularly of persons in the 65 and older age group. Many of the falls occur from ladders which are in poor repair or are used improperly, on stairs which are cluttered, on throw rugs, in bathtubs and showers. Hurry is a frequent cause of falls. Carrying loads so large they block your view is often responsible for tripping and falling.

National Farm Safety Week, July 23-29, is a good time to start eliminating the hazards that cause falls in the home, suggests Glenn Prickett, former extension safety specialist at the University of Minnesota.

Here are some positive steps he urges every family to take:

- . Keep stairways and passagesways clear of stumbling hazards such as toys and housekeeping equipment.
- . Avoid loose scatter rugs.
- . Be sure there are no loose carpet edges on which to trip. Fasten rugs securely.
- . Wear low heels while doing housework.
- . Wipe up spills immediately.
- . Install grab bars over the bathtub. Use a rubber bath mat in the tub.
- . Provide adequate lighting in halls and on stairs. Use a night light in or near the bathroom.
- . Keep ladders in good repair. Place them firmly on ground or floor when you are using them and don't reach too far.
- . Use a sturdy step stool to reach high places in the home. For better balance do not stand on the top step of the stepladder.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota
July 17, 1967

To all counties
Immediate release

EFFICIENT BREEDING
DEPENDS ON NOTICING
WHEN COW IS IN HEAT

The farmer's failure to find a cow in heat is a major cause of poor breeding efficiency, says B. J. Conlin, University of Minnesota extension dairy husbandman.

A University of Minnesota study showed that nearly 90 percent of heat failures in dairy cows resulted from the farmer's failure to observe the cow in heat, while only ten percent of heat failures were due to abnormal conditions in the cow's reproductive tract.

Absence of heat may occur before or after breeding. Heat failures after breeding cause the largest economic loss because these cows are usually thought to be with calf. Many costly pregnancy days are lost before the problem is recognized.

Heat normally lasts about eighteen hours, but can vary from four to forty hours. A good heat detection program is the best way to prevent heat failures. Conlin suggests these steps: (1) know the signs of heat and be aware of the variations in heat signs among cows; (2) observe the cows for heat frequently and closely for 15-30 minutes each time; (3) record all heat dates, calving dates, breeding dates and other events in your records; (4) use your records to anticipate the next heat; and (5) have a veterinarian diagnose and treat problem cows and determine pregnancy.

By following such a program a farmer has a good chance of finding each cow in heat and timing the breeding for maximum fertility.

For further information, ask your county agent for a copy of Extension Pamphlet 222, "Heat Detection and Time to Breed." Or, write the Bulletin Room, University of Minnesota, St. Paul, Minnesota, 55101.

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Department of Information
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Institute of Agriculture
University of Minnesota
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July 17, 1967

Immediate release

UM FORESTRY RESEARCH FEATURED AT GRAND RAPIDS FIELD DAY

GRAND RAPIDS--Parks are usually used for relaxation and recreation, but the D. M. Gunn Memorial Park, about four miles north of here, is different. Part of it is devoted to research that may someday contribute to the improvement of Minnesota forests.

Visitors to field day activities at the University of Minnesota's North Central Experiment Station here today (Tuesday, July 18) toured the University's Forest-tree Improvement Arboretum which makes up part of Gunn Park on the west side of Prairie Lake.

The arboretum, established in 1956, is the only one in Minnesota maintained especially for research. The forest trees at the arboretum have been collected from locations in North America, Europe and Asia to be used for tree breeding projects.

University researchers have also established seed source studies in the park. Evaluations are made periodically to study how adaptable and useful the trees can be for producers of forest products in the state.

(more)

add 1 -- forestry research

Specialists from the University's School of Forestry conduct research at the park in cooperation with the University's North Central Experiment Station, Blandin Paper Company, Diamond International Corporation, the Minnesota Department of Conservation, the U. S. Forest Service and other agencies.

Scott S. Pauley of the School of Forestry and William H. Cromell of the North Central Experiment Station explained to visitors that the main purpose of the arboretum is to provide a source of tree genes for breeding purposes.

Scientists can use the plants to make crosses and produce lines or hybrids that may be better adapted to the state's climate, grow faster, or prove more useful to manufacturers of forest products.

The Japanese larch is one of the trees under study that may prove valuable for forest plantings in the north central region of the United States, said Pauley. The native range of the species is limited to Honshu Island, Japan.

Seedlings planted in 1960 are now in their tenth growing season and average about 12 feet in height. He said the chief uses of this rapid-growing conifer would be for poles and piling, and possibly pulp.

Most of the arboretum is planted to poplar and birch collected from a wide range of sources. The poplar varieties have come from locations that include Alaska, Ontario, Czechoslovakia, Italy, Poland, Spain, Norway and Japan.

However, the major portion of the park area devoted to tree improvement research has been used to establish seed source studies. Included in these experiments are geographical sources of white spruce, red spruce, Norway spruce and several pine species.

Pauley said results of the white spruce studies indicate that trees from high latitude sources are characteristically dwarfed when planted here and should be avoided as seed sources for Minnesota plantations.

In general, white spruce from Minnesota sources have performed well here. But some evidence at this time indicates that white spruce from certain sources in southeastern Ontario may outstrip the trees from Minnesota sources in height and diameter growth.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 18, 1967

FOR RELEASE: Thursday, July 20

NEW SOYBEAN VARIETY RELEASED IN MINNESOTA

A new soybean variety developed in Iowa and tested for growth in Minnesota has been released by the University of Minnesota Agricultural Experiment Station.

The new variety is named Corsoy and was developed at the Iowa State University Agricultural Experiment Station in cooperation with the U. S. Department of Agriculture and several state experiment stations.

Corsoy was developed from a cross made in Iowa in 1952. Its superior performance in Iowa tests from 1959 to 1961 prompted its entry into regional Uniform Tests by researchers in other Upper Midwest states.

Jean W. Lambert, professor of agronomy and plant genetics at the University of Minnesota, conducted trials on the new soybean variety in Minnesota for the past four years.

(more)

add 1 -- new soybean variety

In regional tests Corsoy showed superiority in yield compared with other varieties in its maturity class. This superiority is especially true in the southern counties of Minnesota, Lambert said.

In tests in Minnesota, Corsoy gave an average yield of 38.6 bushels per acre, compared with Amsoy, which yielded an average of 33.9 bushels per acre, Harosoy 63 which averaged 33.1 bushels an acre, and Lindarin 63 which averaged 31.6 bushels.

Corsoy is susceptible to phytophthora root rot. However, Lambert said this disease is not common in Minnesota fields, and the increased yields from Corsoy more than compensate for any effect of this disease. Overall, he said, Corsoy shows definite advantages in yield over rot resistance varieties like Harosoy 63 and Lindarin 63.

Corsoy is between Amsoy and Harosoy 63 in lodging resistance, and the protein content of Corsoy is slightly higher than Amsoy. Its oil content is also good.

Corsoy is a late maturing variety with about the same maturity as Harosoy 63. It has purple flowers, gray pubescence, yellow seeds and yellow hila with a dull seed luster.

Seed supplies of the new variety are being increased in 1967 and will be distributed to certified seed growers through the appropriate foundation seed organizations in the participating states. Minnesota seed will be available to registered and certified seed growers in 1968, and to farmers in 1969.

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67-190-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 18, 1967

Immediate release

FARM SAFETY WEEK 'KICK OFF' SET FOR JULY 19

Farm Safety Week activities in Minnesota will begin Wednesday noon (July 19) with a special "kick off" luncheon at the University's St. Paul Campus Student Center.

National Farm Safety Week this year is July 23-29. The theme for this year is "Think and Act Safely."

The purpose of the luncheon, held each year for the past 13 years, is to bring together persons and representatives of organizations interested in promoting safety and in preventing farm and home accidents, according to Ray Wolf, extension information specialist and program chairman.

Maynard Speece, WCCO farm service director, will be the master of ceremonies for the luncheon program. The noon program will feature displays of proper mountings for slow moving vehicle (SMV) emblems and short talks on SMV safety. Luncheon speakers will include Donald Mitchell, Minnesota representative from Round Lake, who authored Minnesota's new SMV law, John J. Harbinson, chief, Minnesota Highway Patrol, and Julian O. Newhouse, President Retail Farm Equipment Association of Minnesota and South Dakota.

Farm Safety Week is sponsored in Minnesota by the Agricultural Extension Service and the Farm Section of the Minnesota Safety Council.

Hosting the Wednesday noon luncheon is the Minnesota Retail Farm Equipment Association.

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67-191-jbg

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 18, 1967

FOR RELEASE: Wednesday, July 19

Field Day Visitors Told

RED PONTIACS SHOW GOOD CAPACITY TO OUTGROW EARLY HAIL DAMAGE

CROOKSTON--Red Pontiac potatoes have a considerable capacity to recover from hail damage that occurs relatively early in the growing season, according to results of an experiment at the University of Minnesota's Northwest Experiment Station here.

Bruce C. Beresford, agronomist at the station, discussed findings from the hail damage study with visitors attending the station's field day program today (Wednesday, July 19). He based his comments on the three-year experiment just concluded.

Beresford collected information on Red Pontiacs from 1963 through 1965 and planted the potatoes in plots at the experiment station using cultural practices common to the Red River Valley. He simulated hail damage by using a hand flail over the tops and sides of the plants.

The experiment showed that severe simulated hail storms late in the season heavily influenced crop yields and the size of the Red Pontiacs produced.

In general, Beresford found Red Pontiac yield losses were highest when damage occurred late in the season and the simulated hail was severe. These conditions increased the production of small size potatoes and decreased the number of large size potatoes in the yield.

Results showed the Red Pontiac has a strong capacity to recover from hail storm damage between the time tubers begin to form and the time when the plant is 50 percent past full bloom.

However, hail damage at later stages of growth prevented the plants from producing normal yields, apparently because conditions in the Red River Valley don't give the plants enough time to recover before frost occurs in the fall.

Beresford's experiment with Red Pontiacs showed yields dropped most when hail storms caused defoliation within two to four weeks after full bloom. This contrasted with earlier experiments on other varieties, such as Burbank and Kennebec in Idaho and Maine which found yield loss was greatest when hail damage struck at full bloom.

University researchers at the station have also studied the effect of hail damage on flax and sugar beet yields. The program of research on simulated hail damage began four years ago and is financed by funds from the Hail Adjusters Insurance Association, Chicago.

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67-184-dcf

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minn. 55101
July 20, 1967

Immediate release

RURAL BANKING SCHOOL BEGINS SUNDAY

MORRIS, Minn.--More than 100 bankers from Minnesota, North Dakota and South Dakota will meet here Sunday (July 23) for the opening session of a special week-long Rural Banking School on the Morris Campus of the University of Minnesota.

The School is designed primarily for bank executives responsible for agricultural lending. Faculty members will include nationally prominent bankers and agricultural specialists from business, government and universities.

The bankers will spend Sunday afternoon at registration and orientation sessions and on tours of the University's West Central Experiment Station. Rodney Briggs, dean of the Morris Campus, will deliver the keynote address at an evening dinner.

Classes start Monday (July 24) and continue through Friday (July 28) to give the participating bankers improved skills for community service and leadership in rural areas, and to improve their ability in farm and home financial planning.

The school will definitely not follow so-called "bankers hours." Each day is tightly scheduled beginning with breakfast at 7:15 a.m. and the first class an hour later. With breaks only for lunch, coffee and dinner, the students will wind up each day after a seminar starting about 7:30 p.m.

(more)

add 1 -- rural banking school

James Nielson, chairman of the Department of Agricultural Economics at Washington State University, will be the first principal speaker for the week-long schedule of classes. He will address the group on "Changes in Agriculture and the Challenge for Farmers and Bankers."

The entire Monday session will concentrate on the importance and complexity of financial management in tomorrow's agriculture. The classes will consider financial decision making, changes in agricultural technology and how to apply economic principles of budgeting and planning to case farm examples.

The evening seminars scheduled Monday through Thursday will analyze the rural communities and agricultural economy of the Upper Midwest region. Vernon Ruttan, head of the University's department of agricultural economics, will direct the Monday seminar on changes in the region's agriculture.

The Tuesday evening seminar, covering the role of Upper Midwest agriculture in meeting world food needs, will be conducted by Jimmie Hillman, chairman of the agricultural economics department at the University of Arizona and executive secretary of the National Advisory Commission on Food and Fiber.

The session Tuesday evening will be open to the public, and will be held at 8 p.m. in Edson Hall Auditorium. It will be the first public discussion of the findings and recommendations of the Food and Fiber Commission, which recently submitted its report to President Johnson.

Leading the Wednesday evening seminar on the growth and decline of rural communities will be Eber Eldridge, agricultural economist at the University of Iowa and state economist for Iowa.

Theodore D. Brown, president of Security State Bank in Sterling, Colo., and chairman of the agricultural committee of the American Bankers Association, will be featured in the Thursday evening seminar on the role of bankers in rural change and development.

(more)

add 2 -- rural banking school

On Tuesday morning, bankers will study in two groups--those interested in the corn-feed grain areas of Minnesota and the eastern Dakotas, and those interested in the wheat-feed grain areas of northwest Minnesota and western Dakotas. Classes will focus on guidelines for profitable crop production, selection of cropping enterprises and machinery, and crop farm financing.

Sessions on current developments in the Upper Midwest livestock industry, production and consumption trends, financing and evaluation of livestock enterprises will take up Tuesday afternoon.

Farm credit analysis will be the topic of lectures and workshop laboratory sessions on Wednesday and Thursday. Bankers will study the importance of financial records, cash flow analysis, factors affecting farm earnings, budgeting and comparative analysis, and the application of computer systems.

A series of seminars Friday will consider the role of bankers in the changing rural community. The speakers and panel members will examine the attitudes of rural residents toward change, and how to deal with problems of improving income, educational opportunities, employment and business expansion. An evening banquet will conclude the School.

This is the first year the School has been offered, and participants this year will attend a second one-week session next year to complete the course of study. A new group of bankers from the three states will begin the course next year.

Bankers associations of Minnesota, North Dakota and South Dakota are sponsoring the School in cooperation with the Agricultural Extension Services of the three states, the West Central Experiment Station at Morris, and the University of Minnesota Morris.

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67-192-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 20, 1967

Immediate release

UNIVERSITY HOME ECONOMISTS PROMOTED

Two staff members of the University of Minnesota School of Home Economics have been promoted to new positions, Louise A. Stedman, director, has announced.

Roxana Ford, professor of home economics education, will assume the new title of associate director of the School of Home Economics after serving as assistant director since 1959. Lois Lund, associate professor of foods, has been named assistant director of the School.

As associate director, Miss Ford will be responsible for development of the home economics curriculum. Miss Lund will serve as coordinator of the home economics core studies program, a multi-disciplinary teaching and research program.

Earlier this year Miss Ford was recipient of the 1967 Standard Oil Foundation-Horace M. Morse award and a \$1,000 cash prize for her outstanding contribution to undergraduate education at the University of Minnesota--one of six University faculty members selected for the honor. A member of the University staff since 1947, she had been head of the home economics education division since 1956. She received the Miss Betty award from home economics students in 1953 for her excellence in teaching.

She has been president of the Minnesota Home Economics Association and the Minnesota Vocational Association.

A native of Texas, Miss Ford taught in Texas schools before coming to Minnesota. She holds a Ph.D. from Iowa State University, Ames.

Miss Lund holds Ph.D., M.S. and B.S. degrees from the University of Minnesota. She was awarded a General Foods Fund fellowship in 1959 to carry on research toward her doctor's degree in food economics.

A native of Thief River Falls, she joined the University of Minnesota home economics staff in 1955 after teaching at the University of Iowa, Iowa City, for four years. She has the distinction of receiving the Miss Betty award from University home economics students three times for her excellence in classroom teaching, interest in students and enthusiasm for her field of work.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 20, 1967

Immediate release

FARM SAFETY STRESSED AT KICK OFF LUNCHEON

Traffic accidents involving farm vehicles last year in Minnesota claimed 12 lives and injured 197 people, a Minnesota Highway Patrol officer said yesterday (July 19) at a luncheon at the University's St. Paul Campus.

John J. Harbinson, chief, Minnesota Highway Patrol, told safety group representatives that over one-third of these accidents occurred between 4 and 7 p.m.

Harbinson was one of several safety officials to speak at the Thirteenth Annual Farm Safety Week Kick Off Luncheon held at the University's St. Paul Campus Student Center.

He pointed out that of last year's 245 farm vehicle traffic accidents over one-half were rear end collisions while nearly one-fourth involved vehicles entering the roadway.

Another luncheon speaker was Donald Mitchell, Minnesota representative from Round Lake, who authored Minnesota's new slow moving vehicle (SMV) law. Mitchell cited research done by Ohio State University which showed that over 90 percent of farm vehicle accidents occurring on the highway occurred in daylight hours.

The SMV law, passed by the 1967 State Legislature, will become effective January 1, 1968, for vehicles such as farm tractors and machinery. The new law will require the mounting of a special SMV emblem on all vehicles designed to travel less than 25 miles per hour. This emblem must be visible from at least 500 feet away.

Also speaking at the luncheon was Julian O. Newhouse, President Retail Farm Equipment Association of Minnesota and South Dakota, and Robert G. Rupp, President, Farm Section, Minnesota Safety Council.

Rupp, who is also managing editor of The Farmer, showed a film on tractor safety. The film stressed the importance of tractor "roll guards" and seat belts as a means of minimizing death and injury from tractor roll overs.

"Think and Act Safely" is the theme of this year's National Farm Safety Week which runs from July 23-29. Farm Safety Week is sponsored in Minnesota by the Agricultural Extension Service and the Farm Section of the Minnesota Safety Council.

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67-193-jbg

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

To all counties
Immediate release

GENETIC IMPROVEMENT IN
CATTLE REQUIRES A LONG
RANGE BREEDING PROGRAM

Since the rate of genetic improvement in beef cattle is slow, a long range breeding program is a must for the purebred breeder, says Charles J. Christians, extension animal husbandman at the University of Minnesota.

Recognizing this need, various state and national organizations have initiated beef improvement programs based on the selection and mating of top bulls with the best cows available.

In order to better meet the needs of Minnesota breeders the Minnesota Beef Improvement Program was began in the spring of 1965. During the program's first year, over 1,800 calves were evaluated from 42 herds. In 1966, three times as many breeders participated in the program and evaluations were made on over 4,000 calves.

The Minnesota program emphasizes several traits of major economic value to the beef producer. These include birth record and identification, weaning weight, conformation score and reproduction records.

Christians emphasizes the role of herd records as a means of beef improvement. For example, the records obtained on four sires in one farmer's herd showed the following differences. The top bull sired calves weighing 575 pounds at 205 days and grading average choice, while the lowest sire's offspring weighed 404 pounds at 205 days also and graded choice.

At 30 cents per pound live weight, this difference equals \$51.30 per calf. If we project this situation over three years, with 33 cows being bred to each bull per year and assuming a 90 percent calf crop, the top sire would produce a \$4,571 greater return than the other sire.

County agent _____ reports that _____ breeders are currently enrolled in the Minnesota Beef Improvement Program from _____ County.

Christians urges beef producers to make sure that they have their cows and calves identified now for evaluation at weaning time. For further information on the Minnesota Beef Improvement Program contact your county agricultural agent or Charles J. Christians, 101 Peters Hall, University of Minn . St. Paul, Minn. 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

To all counties
Immediate release

FHA PROVIDES
EMERGENCY LOANS
TO FARMERS

Farmers Home Administration Emergency loans are available to eligible farmers where natural disasters such as floods, wind storms, drought, and hail have brought about a temporary need for credit not available from other sources. Loans may be made for the purchase of feed, seed, fertilizer, replacement of equipment, buildings, livestock and other items needed to maintain normal operations.

Coupled with this authority, USDA's Farmers Home Administration is authorized to make loans to aid farm families who would become victims of radioactive fallout resulting from a nuclear attack or disaster.

The FHA, together with other local USDA agencies is represented on the _____ County USDA Defense Board. It cooperates with local (county) defense officials to organize and conduct programs that can help farmers recover from natural or nuclear disasters.

In _____ County, _____ is the FHA (county) (full name) representative. For more information on emergency credit and other types of agricultural loans, contact him at _____ (office address).

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

To all counties
Immediate release

IN BRIEF.....

Insect Pests of Poultry Can Be Controlled. Effective control of insects on poultry depends on good management and the proper use of the right insecticides. John Lofgren, University of Minnesota extension entomologist, offers these suggestions: Follow directions and precautions on the labels when using insecticides; Do not contaminate feed or water; Use recommended rates of application and observe the required intervals between treatment and slaughter or marketing. And, overall sanitation is essential. This includes the weekly removal of manure, proper drainage of dropping pits, prevention of leaks or overflows in watering systems, and constant removal of spilled feeds. For detailed information on the control of insect pests of poultry ask your county agent for Entomology Fact Sheet 17, "Insect Pests of Poultry."

* * * *

Modern Cage Unit for Egg Production Profitable. Because the egg industry lends itself to automation, a modern cage unit can make egg production more pleasant and economical by using automated feeders, inplant washing, automatic washing and cleanout, and other specialized equipment. Robert W. Berg, University of Minnesota extension poultry specialist, says a modern cage unit with a neat office and egg cooler requires an investment of \$20,000 to \$30,000. In most cases this building can be paid for in five years.

* * * *

Egg Quality Can Be a Problem in Warm Weather. Egg producers should pay more attention to egg quality problems during warm weather, says Mel Hamre, University of Minnesota extension poultry specialist. Gathering the eggs more frequently during warm weather can reduce the rates of interior quality decline and thus improve payments to the producers. Producers also should be sure the ventilation systems in poultry houses are working properly. Maintaining a favorable environment will reduce stress on the birds and result in better egg quality.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

To all counties
Immediate release

FALL FERTILIZATION
CAN EASE FARMER'S
SPRING WORK LOAD

Farmers can balance their seasonal work load by fertilizing in the fall instead of the spring, says Curtis Overdahl, University of Minnesota extension soil specialist. Research at the University of Minnesota indicates that, with a few important exceptions, fall fertilization is a good practice.

Fall fertilization allows the farmer to stay off the fields in the spring when the ground is wet and easily compacted. And, wet soils in the spring often make it difficult to finish spring application before planting time. Overdahl says it is undesirable to permit delayed planting of corn, sugar beets, or small grains in order to apply fertilizer, because early planting usually gives a high yield.

Fall fertilization should be done when the soil temperatures get down to 50 or 55 degrees. This is usually in October. But, farmers should begin planning for fall fertilization soon.

Nitrogen fertilizers are supplied in either the ammonia or nitrate form. Ammonia fertilizer will not leach from the soil as long as it remains in the ammonium form. Warm early fall temperatures allow soil organisms to convert ammonium to nitrate. If it is applied late in the fall after soil temperatures are cool little loss of the fertilizer is to be expected because the conversion is slow.

Nitrate forms are readily leachable. This is not a serious problem, however, on medium and heavy textured soils, especially in areas which usually have below 25 inches annual rainfall.

add 1--fall fertilization

Where corn will follow corn, nitrogen applications following corn picking are safe. On the other hand, Overdahl says, fertilizer application immediately after small grain harvest is too early.

Fall application of nitrogen on sandy loams or coarser soils is not recommended. Sidedressing or topdressing the growing crop in early summer is better on these soils than spring applications of nitrogen.

In areas where crops usually suffer from a nutrient deficiency, such as the serious potassium deficiency in sandy areas, fall applications are essential to reduce winter kill and obtain desirable profits from next season's crops.

The results from fall broadcast applications of phosphate and potash are generally the same as fertilizer applied broadcast in the spring. Although, Overdahl says, there is some evidence of a time lag in obtaining a response to topdressed potash. Hence fall application on legume crops may be better than spring application in some areas for next years crop.

Farmers should consult with their county agent regarding micro-nutrient needs such as boron or zinc for individual soils.

Fertilizer applied broadcast before plowing is desirable. There is good evidence that greater root development occurs in the area where the fertilizer is concentrated. Thus, plowdown fertilizer for moderately deep rooted crops such as corn should be good drouth insurance. Surface applications on fields not to be plowed should be disked to decrease risk of fertilizer loss due to wind or water erosion.

Even with broadcast fertilizer it is important to use starter. This is particularly true for corn.

Rates, grades and type of fertilizer should be applied according to recommendations from the soil test for the most economical return. If soil test results are not obtained, use the general recommendations by soil areas given in Extension Pamphlet 194, "Crop Production Guide for Minnesota."

Ask your county agent for a copy of this guide, or write to the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

To all counties
Immediate release

HERD DIFFERENCES
AFFECT PRODUCTION
RECORDS OF COWS

Herd differences can affect milk production records of dairy cows, says B.J. Conlin, University of Minnesota extension dairy husbandman. About 30 percent of the variability in milk production records of cows in different herds can be associated with the herd in which they are members.

Of the 30 percent variability in milk production, only about three percent can be traced to genetic differences between herds. The remaining 27 percent of variability is associated with the skilfulness of the man responsible for milking and feeding the herd. Some of the most obvious causes of these differences are the quality and amounts of feed, milking practices, disease conditions and reproductive performance.

In general, Conlin says, these herd differences provide a good explanation of why cows purchased from a high producing herd never produce as much in a mediocre herd, or produce much more in a high herd when purchased from a mediocre herd.

The herd average can be a useful guide in helping a dairyman recognize problems. If his herd average is below the average for his association, he should make a careful evaluation of his feeding and management practices.

The herd average also can be a useful tool in making a comparative evaluation of cows in different herds. A seasonal herd average is used in evaluating sires to remove the effects associated with a particular herd and season of the year.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

To all counties
ATT: Home Agents
Immediate release

**COUPLES SHOULD
CONSIDER HOME
FURNISHINGS**

Before the wedding bells ring, an engaged couple should give serious thought to the furnishings they will need for their new home.

The first step before buying any piece of household equipment or furniture is to take inventory of what is on hand and then work out a long-range plan, suggests Mrs. Virginia Nagle, assistant professor of related art in the University of Minnesota's School of Home Economics.

An inventory should include what each partner will bring to the new home, including wedding gifts and previous purchases. Family attics can be a welcome source of furniture for the couple starting out. The attic might supply a bookcase, a small table, a cane chair, a rocker or a necessary chest of drawers.

The advantage of a long-range plan is that it will help newlyweds work toward the kind of atmosphere they want in their home. For example, newlyweds should consider if they prefer their dining to be formal or informal, if they want a family room, a library, perhaps even a sewing room or a handyman's shop in their future home. They can start making a few purchases for their first home that will help contribute to a long-range plan without committing themselves to one single period or style. A bed or couch purchased now can always be used in the guest room or in the family room later.

When you begin to furnish your first apartment or house, keep in mind that the purchases should fit in with your budget, Mrs. Nagle cautions. Even inexpensive furniture can satisfy needs, yet be good in design.

To make the new home attractive to both young husband and wife, Mrs. Nagle adds another bit of advice: the new bride needs to consider her partner's taste as well as her own. In fact, during the first one or two years of marriage, it may be necessary to work out an adjustment or compromise between both masculine and feminine taste.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

To all counties
4-H NEWS
Immediate release

ARRANGING FLOWERS
PROVES ENJOYABLE

Raising your own flowers can bring the satisfaction not only of watching them grow but of providing materials for your own flower arrangements.

Through the 4-H horticulture program, members learn how to use art principles and gardening fundamentals to create flower arrangements, says Home (County) Agent _____.

Before you start to arrange flowers, you will need to consider the types of containers and arrangement plans.

Select containers for cut flowers with the same care you use in selecting the flowers. Use containers large enough to hold the flowers without crowding the stems and deep enough to hold plenty of water.

The shapes and textures of the flowers and foliage often help in choosing a container with the proper lines. Be sure to use light, fragile, smooth-textured containers for small, delicate flowers. Choose bold, sturdy and heavy appearing containers for large, coarse flowers.

Flower holders --to make the flowers "stay put" in the containers--can be of many kinds. Needlepoint flower holders come in all shapes and sizes and are weighted. Modeling or floral clay fastens the flower holders to the containers. For a tall container either vermiculite or styrofoam makes a good holder.

add 1 -- arranging flowers

Before you make an arrangement, draw a mental plan and select the container, holder, flowers and foliage for the job.

Establish the mainlines of the arrangement by selecting the tallest flower or branch with the smallest bloom and fasten it securely into the holder. The correct height for this stem is $1\frac{1}{2}$ times that of an upright container or $1\frac{1}{2}$ times the length of a low flat container. Use flowers and foliage with stems of different lengths to fill in the arrangement. Let each bloom show. Light-colored flowers, buds and partly opened blooms should be used at the top of the arrangement with large, open, dark-colored flowers at the bottom for a focal point. Never cross the stems.

With imagination you can create many interesting flower arrangements.

-smd-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

Note to Extension Agent - This
suggested release may be localized
and used after your county 4-H
tractor operators' contest.
Please complete and retype before
distributing to media.

Use if suitable

SKILLED 4-H TRACTOR
OPERATORS ADVANCE
TO STATE FINALS

_____, _____, _____, today was judged the best
(name) (age) (address)
4-H tractor operator in _____ county. With this honor, he earned the
right to demonstrate his skill at the state event _____, _____
(date) (place)
_____, county _____-agent announced.
(agent's name) (title)

Young _____ literally drove to victory in the contest held at
(last name of boy)
_____. He has satisfactorily completed a 4-H tractor project,
emphasizing safety, servicing, care and maintenance, and has become proficient
in operating a farm tractor, the agent said.

Winning the county contest puts young _____ one step closer to the
goal ... participation in the Western United States 4-H Tractor Operators'
Contest sponsored by the Cooperative Extension Service and American Oil
Foundation. The event will be held Oct. 8-10 at the University of Nebraska,
Lincoln, Nebraska. More than twenty states are expected to enter champion
operators.

_____ is the son of Mr. and Mrs. _____, who operate a
_____ acre farm near _____. He has been a 4-H Club member for _____ years
and has completed _____ years of 4-H tractor projects. Young _____
acquired his operating skill on the home farm where he is responsible for
servicing farm machinery and doing a substantial part of the field work.

(Names of other contestants and winners may be added)

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 24, 1967

Note to Extension Agent - This suggested release may be localized and used preceding your county 4-H tractor operators' contest. Please complete and retype before distributing to media.

Use if suitable

4-H TRACTOR OPERATORS
IN COUNTY
ELIMINATION EVENT

_____ county 4-H youths will demonstrate skill in handling farm tractors at the Annual 4-H Tractor Driving Contest _____. More than _____ (date) boys who have completed one or more years of 4-H tractor projects are eligible to participate in the contest at _____, _____, according to _____, (time) (date) (agent's name) county _____ agent. (title)

This is the first of several elimination events to select a state representative for the Western U.S. 4-H Tractor Operators' Contest, Oct. 8-10, Agent _____ pointed out. The regional contest sponsored by the Cooperative Extension Service and the American Oil Foundation, is expected to draw more than 20 state 4-H operators for competition at the University of Nebraska, Lincoln, Neb.

Contestants entering the county contest, must have satisfactorily completed work in tractor safety, care and maintenance, and gained experience at home in servicing and operating a farm tractor. Each contestant will demonstrate his ability in each of these areas in the contest. The boys will be quizzed on the steps in servicing a tractor, and demonstrate operating skill with both a two- and a four-wheel wagon attached. Skill in maneuvering the rugged course, safety precautions, and time required will determine the score, the agent said.

The boy with the lowest penalty score is the winner.

The operators' contest climaxes the 4-H tractor program in _____ county with some _____ boys enrolled in 1967. In addition to taking part in the tractor operators' contest, each of the boys who finishes the 4-H tractor project competes for county medal awards and state and national recognition provided by American Oil Foundation, the agent added.

The public is invited to attend this year's 4-H tractor operators' contest.

Adults who have served as 4-H tractor project leaders this year are:

(list name and address)

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 25, 1967

Immediate release

FARMERS CAN BENEFIT FROM NEW TAX LAW

Agricultural producers in Minnesota can benefit from property tax reductions in 1968 as a result of the new tax bill passed during the last session of the state legislature.

Charles Cuykendall, agricultural economist at the University of Minnesota, says it is possible for farmers to obtain tax relief in amounts that can equal and exceed the three percent excise tax on purchases.

The new bill has eliminated personal property taxes on livestock, farm machinery and inventories beginning with the 1967 tax that was to be paid in 1968.

According to Cuykendall, farmers will have to pay the three percent tax on farm implements, hand tools and trucks if purchased new or used from a dealer after August 1.

He adds, however, that farmers may find economies in the purchase of used machinery, equipment and tools sold at auctions, since they will not come under the new tax. Purchases made after August 1 from people not regularly engaged in the business of selling goods will be exempt from the tax regardless of the item involved in the transaction.

(more)

add 1 -- new tax law

The State Department of Taxation recognizes as tax exempt only those advanced contracts that have the following provisions before August 1: First, the item sold must be in existence and clearly identifiable by serial number, banding or the like; second, there must be a binding contract between the seller and purchaser; and finally, the item must be set aside for delivery after August 1.

Farm items exempted include farm fertilizer (not lawn fertilizer), seeds, feeds, chemicals, fuels, petroleum products and lubricants. Likewise, electricity, steam and gas used in agricultural production will not be taxed.

While the new tax will be charged on items used for power for lighting, space heating and household purposes, Cuykendall suggests that farmers consult with local power companies to determine the percentage of power costs that can be claimed on the exemption certificate for agricultural production.

Farmers should consider the opportunity costs of capital to be used for items purchased before August 1. Short-run gains can be obtained only if the opportunity cost of capital or interest is less than the three percent sales tax.

Cuykendall reminds farmers that the sales tax is deductible on their income tax returns. A booklet of computed sales tax paid by various income groups will allow farmers to either take a standard reduction or insert their own figure, provided they have itemized receipts to back up their claim.

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67-199-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 25, 1967

Immediate release

NEW APPOINTMENTS ANNOUNCED IN U SCHOOL OF HOME ECONOMICS

Appointments of two new staff members in the University of Minnesota's School of Home Economics have been announced by Louise Stedman, director.

Mrs. Emma Whiteford will join the staff as professor and chairman of home economics education Sept. 1 as a joint appointee of the School of Home Economics and the College of Education.

Joan Gordon has been named professor of foods, effective Sept. 1. She will do teaching and research and work with graduate students.

Mrs. Whiteford comes to Minnesota from the University of Illinois where she held the rank of professor of home economics. For five years she was director of the School of Home Economics at the University of Cincinnati. She has also been head of home economics education at Florida State University and associate professor of home economics at Bowling Green State University.

She has a B.S. from North Dakota State University and master of science and doctor of education degrees from the University of Illinois. She is a native of Illinois.

She holds memberships in the American Home Economics Association, National Council on Family Relations, the American Vocational Association and the American Association of University professors, among other professional organizations.

A native of Pine Island, Minn., Miss Gordon has bachelor's, master's and Ph.D. degrees from the University of Minnesota. She joined the University of Minnesota staff as research assistant in 1945, was promoted to instructor in 1947, to assistant professor in 1954 and to associate professor in 1955. She left the University of Minnesota in 1960 to accept an appointment as professor of home economics at Penn State University, a position she has held until this time.

Miss Gordon is a member of the Institute of Food Technologists, the American Chemical Society and the American Dietetics Association and the American Home Economics Association.

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67-197-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 25, 1967

Immediate release

FARM CHEMICAL SHORT COURSE SCHEDULED AT WASECA

Members of Minnesota's fertilizer and agricultural chemical industry will attend a fertilizer and farm chemicals short course Monday, July 31 through Friday, August 11 at the University of Minnesota Southern School and Experiment Station at Waseca.

The purpose of the two-week short course is to provide technical training in Agronomic areas to men employed in fertilizer and chemical production and sales.

Topics to be discussed include pesticides, soil nutrients, fertilizer materials and merchandising. Field trips will be conducted to relate classroom information to practical applications in the field.

Experts from the staffs of the University's Departments of Soil Science, Entomology, Fisheries and Wildlife, and Agronomy and the Agricultural Extension Service will participate in the short course along with experienced government and industry personnel.

The course is being sponsored by the University's Institute of Agriculture in cooperation with the Minnesota Plant Food Association.

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67-198-jbg

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 25, 1967

Immediate release

RED RIVER VALLEY POTATO PRODUCTION DISCUSSED

PRESQUE ISLE, MAINE--A Minnesota agricultural economist said Monday (July 24) that potato production in the Red River Valley increased steadily from 1900 to 1950 while the national market remained stable. Since 1950, however, potato production in this area has only maintained its share of the total U.S. market while the national market has been expanding in step with population growth.

John K. Hanes, agricultural economist at the University of Minnesota, described the structure of potato marketing in the Red River Valley of Minnesota and North Dakota at the Seventeenth Annual National Potato Utilization Conference at Aroostook State College here.

He said the volume of potatoes produced in the Red River Valley increased steadily from an annual average of 9.8 million cwt. between 1920-24 to 21.6 million cwt. for the period from 1965--66.

Potato production in this area now accounts for 85 percent of the Minnesota--North Dakota production and 7.3 percent of the total United States potato production.

The Valley potato industry produces for the tablestock, processing and certified seed markets. The processing markets include freezing and drying operations and chipstock.

(more)

add 1 -- Red River Valley

The percentage of potatoes sold for tablestock dropped from 83 percent in 1956 to 52 percent in 1965. This drop was largely due to the increased amounts of potatoes being used in food processing operations. Nationally, however, the Valley's share of the tablestock market is almost the same for the two comparison periods of 1956 and 1965.

Freezing and dehydrating operations got off to a late start in the Valley, and have not reached the level of importance equal to that of other producing areas in the country.

On the other hand, the Valley potato industry had outstripped other areas in chipstock production.

Recent dramatic changes in the size and composition of the potato market has caused major adjustments in the Red River Valley. The number of production and market units declined sharply, while the size of typical production and marketing firms is increasing rapidly.

Potato acreage in this area increased from 137,000 acres in 1954 to 160,000 acres in 1964. During the same period the number of farms producing potatoes declined from 4,600 to 1,300, and the average size of the unit increased from 30 to 122 acres.

Hanes said that "while the most striking recent development has been the advent and rapid growth of potato processing, the changes in procurement practices of large, integrated retail organizations also have had a major impact on the potato industry. Because these large-scale buyers often have differing specialized product requirements, they must turn to a relatively few large sellers who can accept their specifications."

There are no indications, he said, that the economic forces causing these changes have moderated, and even greater adjustments may occur in the future.

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67-196-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 25, 1967

Immediate release

MINNESOTA YOUTH TO ATTEND 4-H LEADERSHIP CAMP

Two young people will represent 54,000 Minnesota 4-H'ers as delegates to the American Youth Foundation Leadership Training Camp at Camp Miniwanca, Shelby, Mich., next month.

They are Pauline Kasper, 18, Ellendale, and Dennis Hjelle, 18, Argyle.

Selection as a delegate to the leadership camp is one of the highest honors that can come to a 4-H'er, according to Leonard Harkness, state 4-H club leader at the University of Minnesota. The two young people were chosen because of their service to their local 4-H clubs and county organizations as officers and junior leaders, as well as for their achievements in project work.

Miss Kasper will attend the camp July 31-Aug. 14; Hjelle, Aug. 14-28. Their camp scholarships are provided by the Ralston Purina Co., St. Louis, Mo.

Miss Kasper is a graduate of Ellendale High School. As the oldest of 15 children, she has learned much about homemaking skills and makes most of her own clothes. During the nine years she has been in 4-H she has been enrolled in all home economics projects, in junior leadership, horticulture, dairy, health and photography. She has been president of her local club, treasurer of the Steele County Junior Leaders' Council, a 4-H camp counselor and was named outstanding 4-H junior leader in Steele County.

Hjelle graduated from Argyle High School in 1966 as salutatorian of his class. He has carried four years of junior leadership in his nine years of club work and has been a recipient of the 4-H Key Award for his achievements and leadership. His main projects include poultry, sheep and garden. He has won six trips to state 4-H events to exhibit his sheep and poultry. He has held offices in his local 4-H club and has been a member of the Marshall County 4-H Executive Council. He has also been a 4-H exchange delegate to Georgia.

Miss Kasper has been a student at Austin State Junior College this past year; Hjelle has attended the University of Minnesota Technical Institute at Crookston.

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67-195-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 27, 1967

Immediate release

MINNESOTA 4-H'ERS TO ATTEND EXPO '67

Two Minnesota 4-H youths will be joining a 4-H Teen Caravan to Canada and Expo '67 from Aug. 8 to 14.

They are Marilyn Hansen, 19, Morgan, and Larry Lubben, 18, Norcross. Both are officers of the 4-H Federation. They will be among 85 4-H members from Maine to California who will join the caravan.

Delegates will arrive in Minneapolis on Aug. 7 to meet with assistant state 4-H leaders for an orientation program. Tuesday, Aug. 8, they will fly to Buffalo, N.Y., for a meeting at the Statler Hotel with other 4-H delegates. After touring Buffalo they will board buses for Ottawa and will join a second group of 4-H'ers representing the United States.

The caravan will check in at Notre Dame College in Montreal on Thursday, Aug. 10. They will be luncheon guests of the Canadian Council of 4-H Clubs and will have a guided tour of the agricultural pavilions at Expo '67. A special luncheon is also planned for the Canadian 4-H groups by the United States 4-H'ers.

Miss Hansen is a sophomore at Augustana College, Sioux Falls, S.D. A member of 4-H for 10 years, she has been president of the Redwood County 4-H Federation and has been secretary and clothing project leader in her club. She was a delegate in the Minnesota-Mississippi 4-H exchange program. She now serves as secretary of the State 4-H Federation.

Lubben graduated from Wheaton High School this spring. In high school he had participated in track, national honor society, Future Farmers of America (FFA) and was student body president. He has also been president of the Redpath Redskins 4-H Club, vice president of the Traverse County 4-H Leader's Council and president of the district FFA Chapter. He is vice president of the State 4-H Federation. His 4-H projects have included livestock and crops.

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67-200-smd

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 27, 1967

Immediate release

SIX IFYES TO VISIT MINN. FARMS IN AUGUST

Six rural young people from Asia, South America and Europe will live and work with Minnesota farm families from August to October under the International Farm Youth (IFYE) program.

The exchangees are Uriel Milman, Binyamina, Israel; Jagat Chandra Goswami, Kampur, Assam State, India; Mohan Prasad Acharya, Kathmandu, Nepal; Abdelkader Layagoubi, Rabat, Morocco; Luis Gutierrez L., Cubiro, Venezuela; Flora Benita Spezzini C., Villarrica, Paraguay; Carmen Pereira, Lavalleja, Uruguay; and Mary Elizabeth Tile, Woodbridge, Suffolk, England.

Milman will come to the Twin Cities Aug. 16 after attending a national meeting of beekeepers in Washington, D.C. The rest of the group will arrive Aug. 9 and go to their host counties Aug. 11.

Each IFYE will live and work with three families in two different counties from Aug. 11 to Oct. 6 to gain a better understanding of family relations, farming and community life in America as well as in Minnesota, according to Stanley Meinen, assistant state 4-H club leader at the University of Minnesota. All of the group will attend the Minnesota State Fair.

Before coming to Minnesota the exchangees will attend the IFYE Mid-Point Conference at the University of Nebraska, Lincoln.

The men in the group are interested in learning about agricultural practices and mechanized farming, the women want to learn about home economics projects. All the IFYEs are interested in 4-H clubs, rural community life and improvement programs.

The International Farm Youth Exchange program is a two-way exchange sponsored by the National 4-H Club Foundation and the Agricultural Extension Service to increase world understanding at the family level. Since its beginning in 1948, 69 countries have participated in the program with the United States. This year approximately 200 young people and 35 countries will participate in the exchange.

More than 50 young people from Minnesota have been IFYE delegates to other countries and Minnesota farm families have been host to 234 youths from other lands.

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67-201-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 27, 1967

Immediate release

UM ANNOUNCES EXTENSION STAFF PROMOTIONS

Promotions in academic rank for extension agents were announced last week by Luther J. Pickrel, director of the University's Agricultural Extension Service.

Ten county extension agents, three home agents and two area extension staff members received promotions in academic rank on the University of Minnesota staff. The promotions do not affect the agent's local responsibilities. Each will continue to serve in the county where he is now located.

Every county extension agent is a University faculty member, Pickrel said. The promotions are based on contribution to the betterment of Minnesota through the continuing education program of the Extension Service.

Area extension staff members promoted from assistant professor to associate professor were J. Eugene Ellis, area soils agent for Kandiyohi, McLeod, Meeker, Renville, Sibley and Wright counties, and James R. Hoffbeck, area extension coordinator for Pine, Kanabec, Isanti, Chisago and Mille Lacs counties.

Five agricultural agents were promoted from instructor to assistant professor. They are John Morris, Pope County; Robert Koehler, Nobles County; Harry Burcalow, Winona County; Norman Haugen, Roseau County; and Charles Nelson, Marshall County.

Associate agricultural agents promoted from instructor to assistant professor were Warren Sifferath, Dakota County; Norlin Hein, Redwood County; Dennis Seefeldt, Carlton County; Samuel Bigger, West Polk County; and Daniel Lindsey, Anoka County.

Home agent promotions included Marjorie Hamman, Washington County; Pauline Nickel, Cottonwood County; and Margueriete Green, Sibley County. Each was promoted from instructor to assistant professor.

Pickrel also announced several title changes. Agents whose titles were changed from assistant agricultural agents to associate agents were: Warren Sifferath, Dakota County; Eugene Bromenshenkel, Swift County; Ronald Orth, Waseca County; and Charles Peterson, Marshall County.

Others receiving title changes were: Joyce Baxter and Melva Houtcooper, Ramsey County, from assistant home agent to home agent; J. Eugene Ellis from soil conservation agent to area soils agent; and Harry Burcalow, Winona County, from agricultural agent to county extension agent.

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67-202-jbg

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 27, 1967

Immediate release

INSTITUTE OF AGRICULTURE CALENDAR

AUGUST

July 31 - August 11	FARM FERTILIZER AND FARM CHEMICALS SHORT COURSE, Southern School and Experiment Station, Waseca
4 - 10	AMERICAN INSTITUTE OF COOPERATION, Purdue University, Lafayette, Indiana
8 - 11	SCHOOL LUNCH SHORT COURSE, Southern School and Experiment Station, Waseca
15 - 18	SCHOOL LUNCH SHORT COURSE, University of Minnesota, Duluth
26 - Sept. 4	MINNESOTA STATE FAIR, State Fairgrounds, St. Paul
29, 30	MILK CONCENTRATES CONFERENCE, Grandview Lodge on Gull Lake near Brainerd

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67-204-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 27, 1967

Immediate release

BERG TO SPEAK AT RURAL BANKING SCHOOL

MORRIS, MINN.--Sherwood O. Berg, dean of the University of Minnesota's Institute of Agriculture and chairman of the National Advisory Commission on Food and Fiber, will be featured speaker here Friday evening at the closing session of the week-long Rural Banking School.

Berg will address the more than 100 bankers from Minnesota, North Dakota and South Dakota at a 6.p.m. banquet at the Morris Sportsmen's Club.

He will discuss the findings of the National Advisory Commission on Food and Fiber, particularly as they relate to the rural community in transition.

The Commission, which submitted its report earlier this month to President Johnson, was appointed in 1965 to evaluate U.S. agricultural and related foreign trade policies.

The Friday evening banquet will conclude the first session of the Rural Banking School, which is being held this week on the University of Minnesota Morris campus. The second half of the school will be held at Morris next summer.

The school is designed primarily for bank executives responsible for agricultural lending. It is sponsored by the bankers' associations of Minnesota, North Dakota and South Dakota, in cooperation with the Agricultural Extension Services of the three states, the West Central Experiment Station at Morris, and the University of Minnesota Morris.

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67-205-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
July 28, 1967

Immediate release

CONSOLIDATION SEEN VITAL TO RURAL EDUCATION

MORRIS--The Minnesota Commissioner of Education Friday called for continued consolidation of small high schools as one of the most acceptable means of providing quality education in rural areas.

Duane Mattheis told bankers attending the Rural Banking School here that the educational program that met yesterday's needs in our small high schools is not good enough today and that consolidation is the chief way to correct and improve the situation.

Mattheis spoke at the final day's session of the week-long Rural Banking School held on the University of Minnesota Morris Campus.

"Societal changes are complicating the task of rural education," he said. "We live in an increasingly urban world characterized by baffling rates of change and bewildering technological progress."

"Within this environment, rural youth must compete with those from the city for jobs predominantly in the urban setting. It is imperative that rural youth be prepared for this confrontation in order that the ensuing competition may be waged on a fair and equal basis," he said.

(more)

add 1 -- consolidation

Mattheis pointed out that the vast majority of studies of education quality have found significant differences favoring the larger schools. And on the basis of this overwhelming evidence, he feels it is imperative that efforts to provide quality education for rural youth be both increased and modified to meet current needs.

"Young people from rural areas will continue, increasingly, to migrate to the cities because they will not be needed in agricultural occupations," he said. "The young people must be more adequately prepared, not only in terms of general education and occupational skills, but in the human relations skills necessary in a crowded and complex world. These skills are difficult to learn in an isolated environment with its inherent limitations."

Mattheis told the bankers, who come from Minnesota, North Dakota and South Dakota, that reforms in school district organization have reduced the number of districts in the nation from 125,000 in 1932 to fewer than 25,000 in 1967.

The decrease in the three states was from 13,400 in 1932 to 4,400 last year. Minnesota has 1,400 local districts, South Dakota has 2,400 and North Dakota has 600.

He said that the key factors in determining the optimum size for local districts include enrollment, fiscal resources, staff specialization, comprehensiveness of educational offerings, population density and topography.

"The consolidation of many of the existing small high schools must be accomplished and soon," he said, "so that boys and girls in rural areas and small communities may be guaranteed a higher quality of public education."

The school is designed primarily for bank executives responsible for agricultural lending. It is sponsored by the bankers' associations of Minnesota, North Dakota and South Dakota, in cooperation with the Agricultural Extension Services of the three states, the West Central Experiment Station at Morris, and the University of Minnesota Morris.

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67-206-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 31, 1967

To all counties
Immediate release

MINNESOTA'S DHIA
PROGRAM CONTINUES
RAPID EXPANSION

The DHIA testing program continued to expand in Minnesota during 1966, according to the Dairy Herd Improvement Association Program's annual summary issued recently by the University of Minnesota Agricultural Extension Service.

As of January 1, 1967, the 86 Minnesota DHIA associations had 186,831 cows in 5,965 herds enrolled in Standard DHIA and Owner-Sampler programs.

Ralph Wayne, extension dairyman at the University, said the January figure shows an increase of 2,079 cows and a decrease of 86 herds over the year before. Although there were less herds on test, the percentage of all cows in the state on test rose from 14.6 percent in 1965 to 16.3 percent in 1966.

Twenty counties have between 20--40 percent of all cows on test. They are Ramsey, Dakota, Faribault, Goodhue, Washington, Winona, Martin, Olmsted, Hennepin, Wilkin, Wabasha, Freeborn, Mower, Nicollet, Rice, LeSueur, Meeker, McLeod, Houston and Waseca. Ramsey and Dakota counties had over one-third of all cows on test.

Wayne said 202 supervisors serve the DHIA programs that are designed to improve efficiency of production from each cow. Statewide averages show how the programs are achieving their purpose.

For example, during 1966 the average DHIA cow in Minnesota produced 11,887 pounds of milk, compared to 8,750 pounds per cow for the state as a whole. For the DHIA cow, butterfat output averaged 446 pounds, 140 pounds better than the statewide average.

add 1 -- minnesota's dhia

Also, the average DHIA cow in 1966 provided a gross return of \$2.62 for each dollar paid out for feed, and need \$1.60 worth of feed for every 100 pounds of milk. This average DHIA cow brought her owner \$203 in annual labor income, based on 1966 average manufactured milk prices.

The average Minnesota cow produced 306 pounds of butterfat and returned an annual labor income of \$89 in 1966.

DHIA records help herd owners make culling decisions, Wayne pointed out. The 1966 summary shows low production was the reason DHIA members culled some 49 percent of all cows removed. This was the biggest single reason for culling, accounting for more than 14 percent of all cows on test in 1966.

During 1966 slightly over 28 percent of all cows on test were culled.

The higher market price for cull cows has encouraged increased culling, Wayne said. But more and more dairymen also realize they can afford to keep only the efficient producers.

The growing number of dairymen testing on a continuous basis indicates their satisfaction with DHIA programs, Wayne said. In 1966, 44 dairymen were added to the long list of DHIA members enrolled for 10 or more consecutive years. And 89 members were added to the list of 95 dairymen who have tested continuously for 20 years or more.

DHIA testing started in 1910 in Minnesota when the first association was established in Freeborn County. The state record for continuous DHIA testing is held by John Nahrgang and Son of Lewiston who completed 43 consecutive years of testing in 1966.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 31, 1967

To all counties
Immediate release

FUNGUS DISEASE OF
SPRUCE REPORTED
IN MINNESOTA

A fungus disease of spruce which invades only weakened trees or trees planted outside their natural range has been reported in Minnesota.

The disease, called cytospora canker, is especially common on blue spruce and other introduced spruce varieties, says Joe Vargas, director of the plant disease clinic at the University of Minnesota. The Colorado blue spruce planted in Minnesota is an excellent example of a tree out of its normal range.

The fungus usually invades older trees, and kills the lower branches first. This dying-out develops from the bottom toward the top. Excessive pitch exudation is seen on the dying branches and at a later stage on the main stem. Trees growing on sand or gravel soil and in exposed places such as southwest facing slopes may become infected before they are ten feet high.

Vargas says the only control method is to maintain the trees in as healthy a condition as possible. Ample water and biennial fertilization will help. Any well balanced inorganic fertilizer can be used. It should be applied at the rate of no more than two pounds for each inch of diameter at chest height. A protective layer of mulch will keep the tree healthy.

Ornamental spruce should be planted in good rich soil in a protected place. The cytospora fungus will have an easy time invading spruce planted in sand or gravel soil, or in an exposed site such as a southwest facing slope.

For more information, ask your county agent for Agricultural Extension Service Form PL-2, "Cytospora Canker on Spruce." Or, write for a copy to the Bulletin Room, University of Minnesota, St. Paul, Minn., 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 31, 1967

To all counties
Immediate release

TORNADO PRECAUTIONS
GIVEN BY RURAL CIVIL
DEFENSE SPECIALIST

Be alert for possible tornado warnings on days when the weather is hot and humid with southerly winds and threatening cloud formations, says Cliff Halsey, extension civil defense specialist at the University of Minnesota.

If a tornado approaches seek safety in a storm cellar, vegetable cellar, fallout shelter or other family protection area. If there is no special shelter go to the basement corner most below ground level and nearest the approaching tornado.

If there is no basement, crawl under heavy furniture in the center of the house.

Keep away from all windows. And, stay in a protected area until the danger has passed or until an all clear signal has been given over the radio.

Halsey says that if you are in a car, move away from the tornado's path at a right angle.

If you are in the open, lie down flat in the nearest depression--a ditch, ravine or culvert. Stay there until danger from flying objects has ceased.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 31, 1967

To all counties
Immediate release

CROSSBREEDING HOGS
CAN GIVE MAXIMUM
RETURN TO PRODUCER

Crossbreeding can give hog producers maximum return for dollar invested by increasing litter size, growth rate and ruggedness of the pigs, says Charles Christians, University of Minnesota extension animal husbandman.

Because of the larger litter size, greater growth rates and greater ruggedness of crossbred pigs, a swine producer can find a 12 to 14 percent advantage of crossbred pigs over purebreds in the number of pigs farrowed and weaned. And, the crossbred litter weights will be nearly 35 percent greater than purebred litters.

Crossbreeding must be used with sound nutritional and management practices if maximum return for dollar invested is to be realized. Crossbreeding will not cover up poor management or bad nutritional practices. Similarly, Christians says, a sound nutritional and management program without supplemental crossbreeding will give improvement in swine production only as long as the producer follows these practices.

Permanent improvement is achieved with a breeding program that improves the genetic makeup of the breeding stock. By crossbreeding, the producer can correct faults in his sow herd by purchasing a sire strong in traits lacking in the sows, and he can capitalize on hybrid vigor which utilizes strong points from different breeds.

A successful crossbreeding program depends on the merit of the parent stock, regardless of breed. Both sows and boars must be of a meaty type and have superior performance records. Crossbreeding will not increase meatiness,

add 1 -- crossbreeding

substantially increase feed efficiency, or cover up poor management.

The most common crossbreeding systems are the single breed cross, the two breed cross, and the three breed rotational cross.

A single breed cross, made by crossing two breeds, produces pigs that show hybrid vigor, but this system does not take advantage of the hybrid vigor obtained from the sow. When replacement gilts are needed, the breeder must raise purebred sows or purchase purebred sows from another breeder.

The two breed cross uses boars from two different breeds. The boars are alternated every other year and the crossbred sows are retained for breeding stock. This enables the breeder to capitalize on the sows' hybrid vigor.

With the two breed cross the breeder would start his breeding program with sows from breeds noted for large litters and boars from breeds excelling in muscling and growth rate. Careful selection of boars and gilts is a must.

Special emphasis should be placed on gaining ability and muscling because buyers of these feeder pigs must have rapid gaining pigs that yield saleable end products.

The three breed rotational cross is the most widely used system in Minnesota. The third breed can strengthen certain performance characteristics in the rotation and will give a slight increase in vigor.

In the three breed cross, boars from three different breeds are continually rotated on each generation of crossbred sows. Christians suggests using boars from breeds that excel in litter size--like the Yorkshire, Landrace, and Chester White--that excel in meatiness--such as the Berkshire, Poland China, and Hampshire--and in growth rate--for example the Duroc, Hampshire, and Spotted.

Christians says multiple breed crossing programs do not deteriorate or 'run out' if superior performance tested sows and boars are selected from breeds which cross well.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota 55101
July 31, 1967

To all counties

4-H NEWS

(1st of a series of
State Fair Stories for
use each week before
State Fair)

4-H DEMONSTRATORS
POLISH UP FOR
MINN. STATE FAIR

_____ County 4-H'ers will be among some 3,000 young Minnesotans participating in 4-H events at the Minnesota State Fair August 26 - September 4.

Among the activities in the 4-H Building on the Fair Grounds in which they will take part are the demonstrations, preparation of the county booth and the 4-H Share-the-Fun Festival.

The _____ 4-H boys and girls who have been selected to demonstrate (no.) at the State Fair are busy polishing their demonstrations, since they will be competing for honors with young people from all parts of the state. Some 800 individual and team demonstrations will be given by 4-H'ers during the 10-day period on the first floor of the 4-H Building. Demonstrations are continuous from 8 a.m. until 5 p.m. every day except Sundays and Labor Day. The only demonstrations given Labor Day will be those in the livestock barns using live animals.

"The demonstration program, an important part of State Fair events, helps young people develop poise and confidence, improves their communications skills and gives them the opportunity to share with others what they have learned through 4-H," says Marian Larson, asst. state leader 4-H and youth development at the University of Minnesota.

Representing the county at the State Fair are these 4-H demonstrators (give names, home town and title of demonstrations -- also dates, if you know them):

(more)

add 1 -- 4-H demonstrator at fair

A number of _____ County 4-H'ers will be making their contribution before the State Fair by preparing the county booth. Eighty county booths on the first floor of the 4-H Building will tell the 4-H story to the public. The _____ County 4-H booth depicts _____. It has been planned and built by _____ (give name of club or individuals responsible).

_____ County will also be represented in the Share-the-Fun Festival Thursday, Aug. 31, at 8 p.m. in Erickson Hall in the 4-H Building. _____, _____ (name), _____, will _____. Acts have been chosen from _____ (club and town) _____ (describe act) the six district talent shows for the State Fair event.

Visitors at the State Fair are invited to watch the 4-H demonstrations, view the county booths and attend the Share-the-Fun Festival, says County Agent _____.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 31, 1967

To all counties
ATT: HOME AGENTS
Immediate release

CHILDREN'S DIETS
MAY BE LOW
IN VITAMINS

How well fed are your children? Are they getting the foods which supply nutrients necessary to good health and growth?

It's true that most American children are fairly well fed -- sometimes overfed -- but a recent study by a University of Minnesota home economist showed that their diets may be low in vitamins A and C, two vitamins important to good health.

Vitamin A, found in yellow fruits, dark green and yellow vegetables, whole milk, butter and liver, is needed to keep mucous membranes firm and resistant to infection, to help keep skin smooth and soft and to protect against night-blindness.

Vitamin C helps to resist infection and prevent fatigue, assists in healing wounds and broken bones and makes walls of blood vessels firm. Citrus fruits, strawberries, cantaloupe, tomatoes, broccoli and raw cabbage are among fruits and vegetables high in vitamin C.

Lois Lund, associate professor of home economics at the University of Minnesota, made the study of children's diets in cooperation with Marguerite Burk, professor of agricultural economics and home economics. Detailed eating patterns of fourth graders were studied, and parents and teachers were interviewed.

The study revealed also that food attitudes of both mother and children, size of family income and the amount of parent education all played a part in determining the high-vitamin foods the children ate.

Children who were unfamiliar with or did not care for certain dark green and yellow vegetables rich in vitamin A such broccoli, squash and spinach were likely to have diets low in vitamin A. But the way children reacted to these vegetables

(more)

add 1 -- children's low in vitamins

was also affected by the mother's attitude and how often she felt these vitamin A-rich vegetables should be served and eaten. Some children had eaten practically no vitamin-rich fruits or vegetables in the week of the survey.

In families where the mother had some knowledge of nutrition, where the father had a higher than average income and educational level, the children were likely to have a satisfactory intake of vitamin C-rich foods. But if the mother had little knowledge of nutrition, or if the father had a low income, the intake of vitamin C was likely to fall below recommended levels.

Food patterns established in childhood appear to follow a person into adult life, Miss Lund notes. She suggests two educational and food policy approaches to improvement of children's diets. The first approach would be through increasing the purchasing power available for food by families whose incomes are low. Increase in purchasing power, however, is not effective unless accompanied by nutrition education programs for both adults and children.

Parents must be made aware of children's nutritional needs and must give their children broader experience with new foods to increase their familiarity with and acceptance of them. Mothers, especially, should be brought to realize the effect their personal food attitudes have on their children.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
July 31, 1967

To all counties
Immediate release

IN BRIEF . . .

Virus Infected Raspberry Plants Should Be Pulled. Raspberry plants infected with virus diseases should not be kept in a planting or used for propagation. Joe Vargas, director of the University of Minnesota's plant disease clinic, says virus disease not only weakens the plant, but new plants propagated from an infected plant probably will be infected. Virus diseases on raspberries are recognized by mottling, yellowing and crinkling of the leaves. The only effective control method is to remove the infected plants and all plants within three feet of the infected plants. It is important to control insects also because they can transmit the virus to healthy plants. For more information ask your county agent for Plant Pathology Fact Sheet Number 8, "Raspberry Diseases."

* * * *

Exhibits Can Communicate Effectively. Well planned exhibits can be used effectively to communicate information to audiences at fairs, lectures, schools or meetings, says Gerald McKay, extension information specialist at the University of Minnesota. The impact of any exhibit depends on the skills, attitudes and knowledge of the designer and on the background and attitudes of the audience. For information on constructing effective exhibits, ask your county agent for University of Minnesota Communications Bulletin 27, "Exhibits--Do They Help Us Communicate Effectively?" Or, write to the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101.

* * * *

Control Spur Blight on Raspberry Plants. Spur blight on raspberry plants can be controlled with cultural and chemical practices. Joe Vargas, director of the University of Minnesota's plant disease clinic, says spur blight shows up as purple spots on new canes during the summer and early fall. The spots may be from one-half inch to several inches long. Leaves infected by spur blight will have large dead areas that are light brown. These dead areas may cover half or more of the leaf surface. Remove and burn old canes after harvest, and thin new canes to about six for hill plantings or two per foot for row or hedge planting. See your county agent or garden dealer for information on specific fungicides. Ask for Plant Pathology Fact Sheet Number 8, "Raspberry Diseases."

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 1, 1967

Immediate release

THURNBECK HONORED FOR EXTRAORDINARY SERVICE

Clement N. Thurnbeck, Forest Lake, has received the University of Minnesota Institute of Agriculture's Advisory Council "Award for Extraordinary Service." He was honored in connection with the recent summer meeting of the Council.

Thurnbeck became the third Minnesotan to receive the honor in the Council's 18-year history. Previously recognized were Stanley Folsom, Taylors Falls, and Dr. Fred Gehrman, Wayzata veterinarian. Both served long terms on the Council and have been chairman of the body.

Thurnbeck has served on the Advisory Council as representative of the Poultry Industry Council for the 10 years. He has been chairman of the Council for the past year. During that time the Council has had a significant impact on University plans.

Thurnbeck has been active in church, civic and industry activities for many years. He is a past president of Minnesota Turkey Growers' Association and the National Turkey Association. Thurnbeck Farms is one of the largest turkey operations in the state. He and his brother started the enterprise while in high school.

Thurnbeck has attended the University of Minnesota and was graduated from the University's School of Agriculture.

The Advisory Council, which Thurnbeck heads, has three major responsibilities. They are to: (1) advise the University in keeping informed about the needs of agriculture and related industries, forestry, home economics and veterinary medicine; (2) advise the University on ways and means of improving the effectiveness of its services; and (3) provide a channel of communication between the University and its many publics.

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67-208-hbs

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 1, 1967

Immediate release

AGRICULTURAL EXTENSION CHANGES MADE

Luther J. Pickrel, director of the University of Minnesota's Agricultural Extension Service since 1964, has been granted a leave from the position for 1967-68.

Pickrel will carry out a special investigation of the impact of federal research funding on the University of Minnesota. His study will be conducted in cooperation with the University's Graduate School.

Roland H. Abraham has been named acting director of the Agricultural Extension Service, Sherwood O. Berg, dean of the University's Institute of Agriculture, announced today.

Abraham has been associate director of the Agricultural Extension Service for the past five years and was acting director in 1964.

Abraham has been a member of the University of Minnesota staff since 1938. He served as county agent for 14 years, mostly in Jackson County. He was named district supervisor in 1952, assistant director in 1954 and associate director in 1962.

He is a graduate of the University of Minnesota. Later he received his master's degree in public administration from Harvard University and his Ph.D. from the National Agricultural Extension Center for Advanced Study at the University of Wisconsin.

(more)

add 1 -- Abraham named acting extension director

Abraham has served in many national and regional positions. He has been chairman of the North Central Region Extension Directors and of the National Policy Board for the National 4-H Foundation. He served as a member of the National Advisory Committee on the International Farm Youth Exchange, the executive committee of Livestock Conservation, Inc., and the marketing subcommittee of the Extension Committee on Organization and Policy.

His honors include being elected president of Epsilon Sigma Phi, national Agricultural Extension professional fraternity, and president of the Minnesota Adult Education Association. He is a member of Alpha Zeta and Gamma Sigma Delta.

Pickrel has been on the University staff since 1955. He served as an extension economist in public affairs for seven years in the Agricultural Extension Service. From 1962 to 1963 he was director of the University's Peace Corps activities and from 1963 to 1964 he was assistant to the president of the University.

Before joining the University staff, he had also served with the U.S. government in Germany as county office director, district supervisor for agriculture, agricultural economist and regional agricultural officer.

Pickrel has been active nationally and locally on several public affairs committees and conferences. He is serving on the resource development subcommittee of ECOP (Extension Committee on Organization and Policy) of the National Association of State Universities and Land-Grant Colleges.

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67-209-hbs

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 1, 1967

Immediate Release

EXTENSION HORTICULTURIST APPOINTED

Leonard B. Hertz recently was appointed associate professor and extension horticulturist at the University of Minnesota. He will be in charge of the agricultural extension program in commercial and home fruit production.

Hertz received his B.S. and M.S. degrees from the University of Wisconsin in 1949 and 1950 respectively, and his Ph. D. degree from Wisconsin in 1956.

He was an instructor at the University of Wisconsin from 1953 to 1956. He was assistant professor at Kansas State University from 1956 to 1961, and from 1961 until coming to Minnesota he worked with research and development for the Niagara Chemical Division at Middleport, New York.

Hertz has published articles in several professional journals.

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67-207-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 1, 1967

Immediate release

FAMILY LIFE EDUCATION THEME OF HOME EC TEACHERS' CONFERENCE

Family life education will be the subject of the annual vocational home economics conference for high school home economics teachers in Minnesota Aug. 22-24 at Patrick Henry High School, Minneapolis.

About 750 home economics teachers are expected to attend from all parts of the state, according to Lyla M. Mallough, state supervisor of home economics education.

Duane Mattheis, state commissioner of education, will give the opening address on Tuesday afternoon, Aug. 22, on "The Role of Home Economics Teachers in Family Life Education." James Moore, chairman of the undergraduate program in human development at Purdue University, will give the closing address of the conference on Thursday morning, Aug. 24, on "Issues in Family Life Education."

Preceding the conference program, which opens at 1:30 p.m. Aug. 22, registrants will meet to visit the Patrick Henry High School home economics department and view special exhibits.

At each session during the week presentations on some phase of the family living program will be followed by discussions and demonstrations on use of authentic teaching aids, including films, the short story and tapes. Serving as discussion leaders will be Mrs. Ruth Jewson, executive officer, National Council on Family Relations; Mrs. Sue Fisher, assistant 4-H club leader and Ronald Pitzer, extension family life specialist, University of Minnesota.

Mrs. Connie Eide, 2210 Pascal Ave., St. Paul, chairman of the 1967 state planning committee, will preside at the opening meeting.

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67-203-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
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August 3, 1967

Immediate release

SCALD CORN BEFORE FREEZING IT

Corn-on-the-cob frozen now can add a delightful taste treat to family meals next winter--provided you prepare it properly for freezing.

Scalding the corn before freezing is a must both to preserve the good flavor and the nutrients, Mrs. Shirley Munson, in charge of the University of Minnesota's food processing laboratory in the Department of Horticultural Science, emphasizes.

Some women ask if they can freeze corn satisfactorily in the husks, with no further preparation except to remove the silk. Mrs. Munson strongly discourages this practice. In the first place, she points out, the unscalded corn will quickly take on a cobby taste. Secondly, it will lose some of its nutrients and texture. In the third place, it is hardly a hygienic practice to store in the freezer unwashed corn in husks which may be insect-infested.

For tasty corn-on-the-cob the family can enjoy next winter, Mrs. Munson gives these directions for freezing:

Harvest the corn in early morning if the weather is hot, selecting ears at their prime for eating. Process the corn as rapidly as possible. Unless you refrigerate it, a delay of more than a few hours in processing may mean a definite loss in quality. The advice "Run from the garden to the freezer" applies to corn.

Husk the corn, remove all silks and trim the ends. For scalding, use a large canning kettle or other container holding at least 12 to 15 quarts of boiling water. Keep the kettle covered. Scald small to medium ears 8 minutes, putting not more than 14 ears in the water at one time. Scald medium to large ears 11 minutes, putting not more than 10 cobs in the kettle at one time. Count scalding time from the second you put the corn into the kettle.

When the time is up, remove the corn and chill it thoroughly in cold running or ice water for at least one and a half times the length of the scalding time. Drain, package in aluminum foil or polyethylene bags, label and freeze immediately.

Whole kernel corn to be cut from the cob should be scalded on the ear for 4-1/2 minutes before cutting it.

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67-213-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
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August 3, 1967

Immediate release

MINN. 4-H'ERS TO WASHINGTON

Eighty 4-H'ers representing 23 counties from Minnesota will attend a 4-H Citizenship Short Course in Washington, D. C., in two groups, August 11-19 and August 18-25.

The 4-H'ers, aged 15 to 19, are among a group of about 250 from five other states chosen to attend. Over 4000 4-H'ers are expected to participate in the summer, 1967, series of 4-H Citizenship Short Courses.

Two groups from Minnesota have already attended the short course.

The 4-H Citizenship Short Course is an educational program for youth conducted by the National 4-H Club Foundation. Citizenship Short Courses provide a unique combination of field trips, classroom study and discussion sessions for young people, according to Stanley Meinen, assistant 4-H Club leader at the University of Minnesota.

Each group will assemble on the University of Minnesota's Minneapolis Campus for a pre-departure orientation program, climaxed by a dinner sponsored by the Farmers Union Grain Terminal Association. Highlights of the trip include numerous assemblies with speakers and films. Also included are field trips to historical places of interest. The 4-H'ers will also visit Capitol Hill to meet with congressmen and senators and attend Senate and House committee meetings. They will tour the National 4-H Center and Arlington National Cemetery.

This is the ninth year the 4-H Citizenship Short Courses have been conducted by the 4-H Foundation in behalf of the Cooperative Extension Service of the state land-grant universities and the U. S. Department of Agriculture. The 4-H Foundation also conducts 4-H Leader Forums and multiple 4-H international programs, as well as providing a consultation research service.

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67-212-nlu

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205

Immediate release

HOME-SMOKED FISH MAY BE SOURCE OF BOTULISM

If you're planning to smoke some of the fish you've caught, be sure to follow proper procedures so it's safe to eat.

That warning comes from Edmund A. Zottola, extension food microbiologist at the University of Minnesota. Home-smoked fish are a possible source of botulism, a highly poisonous type of food-borne illness.

Proper smoking procedures and careful handling after smoking can help prevent development of the poison in the fish, however, Zottola says. When smoking fresh, frozen or cured fish, be sure the internal temperature of the fish is at least 180°F. and is maintained at that temperature for at least 30 minutes. Immediately after it is smoked the fish should be cooled to 40°F. or below and maintained at that temperature until it is eaten. The University microbiologist emphasizes that if the smoked fish is to be kept longer than a week, it is a good idea to freeze it.

Botulism in smoked fish is caused by a micro-organism called Clostridium botulinum Type E, a cousin to the bacteria sometimes found in home-canned foods that cause the same illness. Since Type E is not as heat resistant as the other forms, the organism can be destroyed by following the procedure suggested by Zottola.

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67-211-jbn

Department of Information
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Immediate release

AFRICANS ATTEND UM COURSE ON AGRICULTURAL DEVELOPMENT

A group of twenty students from Nigeria and Ghana will attend a three-week course on "Keys to Agricultural Development" at the University of Minnesota Technical Institute at Crookston from August 13 to September 2.

The course is part of the extensive international agricultural program at the University of Minnesota. LaVern Freeh, head of the Department of Agricultural Short Courses, says the objective of the course is to enable the African students to identify, observe and analyze keys to agricultural development in the United States at the local level.

John Blackmore, director and professor of the international agricultural program at the University, will discuss agricultural development with the group during the first week of the session.

The following two weeks the group will meet farmers and businessmen in the Crookston area and observe Minnesota's agriculture at the local level. During these two weeks they will participate in daily seminars to discuss what was observed during the day and how it relates to agricultural development in their own countries.

The course is sponsored by the University's Department of Agricultural Short Courses, in cooperation with the University of Minnesota Technical Institute and the Northwest Experiment Station, both at Crookston, and the Agricultural Extension Service.

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67-210-wobn

TO GET ODORS OUT OF FREEZER, REFRIGERATOR

Many families who came home from vacations to find food spoiled in their freezers or refrigerators because of power failure this summer are still fighting the battle of trying to get rid of bad odors in these appliances.

The procedure for removing the odors is the same for both freezers and refrigerators, says Mrs. Shirley Munson, in charge of the University of Minnesota's food processing laboratory in the Department of Horticultural Science. She gives these suggestions:

Remove the contents from freezer or refrigerator, defrost the unit and wash the interior with a solution of warm water and soda, using about a tablespoonful of soda to a quart of water. Rinse. On plastic parts avoid using water that is too hot for the hands.

Scrub rubber door gaskets with a solution of mild soap and water, rinse well and dry with a soft cloth. Use a vegetable brush to remove any food that sticks to the gasket. Be sure to remove and clean the tray for collection of defrost water under the refrigerator.

If the soda wash does not remove the odor of spoiled food, set two or three shallow bowls of vinegar in the unit and operate it over night. The next morning defrost again and wash out with soda water.

In case the odor still persists, open the door wide and aim an electric fan into the box. Or purchase a can of activated charcoal from the drugstore or a pet store and put the opened can in the refrigerator or freezer.

If an odor remains after all these steps, it probably means that it has gone into the insulation and cannot be removed, Mrs. Munson says. Since "an ounce of prevention is worth a pound of cure," she suggests that families who expect to be gone any length of time ask a neighbor to check on freezer and refrigerator several times a week.

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67-214-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 7, 1967

Immediate release

Suggested Outline for Enclosed Cut:

A visitor taking the "self-guided" tour at the Southern Experiment Station near Waseca passes the main entrance sign and then stops at the speaker-equipped mailbox for a booklet explaining the research projects to be seen on the tour.

"DRIVE-IN" TOUR ATTRACTS VISITORS AT WASECA EXPERIMENT STATION

WASECA--Visitors have always been welcome to tour the University of Minnesota's branch experiment stations, but never has the touring taken less effort than with the unique "self-guided driving tour" in operation at the Southern Experiment Station here.

Now in its fourth season, the "do-it-yourself" tour was developed by Edward C. Frederick, superintendent, and other staff members at the station. Frederick says the driving tour is basically an educational tool to help farm and city visitors learn about results of research conducted at the station.

"The driving tour is a novel way to let people know that the station and research projects here are open for tours at any time. It is a new approach to publicizing and promoting the use of ideas and practices discovered through research," he points out.

At the 598-acre experiment station on Highway 14 south of here, visitors enter past a sign inviting them to "Come as you are, tour the station in your car."

They then stop at a mailbox to pick up a booklet with a map of the station and details about the tour and research projects to be seen. The speaker-equipped mailbox switches on to offer background information about the general activities at the station.

Frederick says the experiment station staff is not large enough to give each visitor a personal tour. And one alternative was to design the self-guided driving tour by locating demonstration and research plots along the main road and putting up signs to explain the research projects.

(more)

add 1 -- drive-in tour

"The main advantage of the driving tour is that it is available at all times and self-guided. Visitors can come at their convenience, follow the tour route as outlined in the booklet and read the signs without getting out of their car."

In 1964, the tour facilities consisted of two mailboxes for the booklets and about 250 signs posted to explain the research and demonstration plots. This year, the mailboxes have speakers plus the tour guides, and visitors can drive along a newly-paved road past some 600 weatherproof signs set up to identify crop varieties, explain the trials and give results.

In addition, six battery-transistorized speaker units are located along the tour to explain some of the major research projects and facilities at the station. University specialists update the tapes periodically.

From these push-button speaker units, visitors can hear about projects involving:

- * research on corn performance, breeding, fertility and management;
- * horticultural trials with fruits, flowers, vegetables, shrubs and trees;
- * swine breeding and nutrition at the station's new air-conditioned swine building;
- * nutrition experiments with dairy steers.

At the official weather station, a speaker unit gives information on recent changes in soil temperature, moisture and evaporation. Another speaker near the Southern School of Agriculture tells about the school's facilities and education progress.

Frederick says the driving tour supplements the station's annual visitor days where persons can take guided tours of facilities and demonstration plots and ask specific questions to University researchers directing the projects. He notes that the driving tour has already increased attendance and interest at the station's visitor days.

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214-dcf

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 7, 1967

To all counties
Immediate release

**POOR BREEDING
EFFICIENCY COSTS
DAIRYMEN PROFITS**

Poor breeding efficiency costs the dairyman money if cows do not calve regularly every 12 to 13 months, if they don't maintain a profitable level of production up to 60 days before calving, and if the first-calf heifers have not dropped their calves and begun paying their way by the time they are 27 months of age.

Joe Conlin, University of Minnesota extension dairy husbandman, says many dairy-men can raise their yearly profits as much as \$60 per cow by improving breeding efficiency through a sound breeding management program.

He offers these tips for more profit from better breeding efficiency:

- . Observe heats closely. For best results watch for heats twice a day and breed 6 to 18 hours after standing heat.
- . Breed between 60 to 90 days after calving. Never breed before 60 days.
- . Control reproductive diseases through vaccination, use of artificial insemination and the services of a competent veterinarian to routinely examine for pregnancy and to treat problem breeders.
- . Provide a good feeding and management program so that heifers are large enough to breed at 15 months of age and problem breeders keep producing profitably up to 60 days before calving.
- . Keep and use accurate and complete breeding records for each cow. Include all heat dates, services, sires used, calving dates, and any abnormal conditions.

For more information, ask your county agent for a copy of Agricultural Extension Service Extension Pamphlet 219, "Extra Money By Improving Reproductive Performance."

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Department of Information
and Agricultural Journalism
Institute of Agriculture
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St. Paul, Minnesota 55101
August 7, 1967

To all counties

Immediate release

PROPER FALL MANAGEMENT
OF ALFALFA IMPORTANT
FOR SPRING GROWTH

The proper management of alfalfa during the fall months is important in maintaining a productive stand of alfalfa in Minnesota, says a University of Minnesota agronomist.

Alfalfa needs to be allowed to grow during September and early October if it is to synthesize carbohydrate reserves for energy to develop cold resistance, live over winter, and begin growth again in the spring. As much as 50 percent of the available carbohydrates stored in roots and crowns in the fall are used by the plant during a normal winter dormancy period.

To help insure a vigorous stand of alfalfa in the spring, it is important that a third cutting of alfalfa not be taken between September 1 and mid-October (or the first killing frost) in Minnesota.

Oliver Strand, University of Minnesota extension agronomist, says if the alfalfa is cut during this period almost a full regrowth occurs. This seriously depletes the root reserves and makes the alfalfa more vulnerable to winter injury with possible loss of stand.

Because of the late development of alfalfa this spring and excessive rain in June, many farmers were not able to make the first and second cuttings of hay at the normal time to permit taking the third cutting by September 1.

Unless the forage is needed for livestock, do not make a third cutting this year, but allow the alfalfa to build up its root reserves to help maintain a vigorous stand for next year.

(more)

add 1 -- fall cutting of alfalfa

If the forage is needed for livestock, cutting or grazing after mid-October is less hazardous than earlier cutting since storage of food for winter is normally completed by this time and substantial regrowth will not occur.

The main disadvantage of late fall cutting is the removal of stubble that helps catch and hold snow for protection to the plants during the winter months. Also, it has been observed that late winter and early spring ice injury is less severe on fields that have not been closely clipped in the fall.

Grazing can be controlled to leave a stubble to catch the snow.

Strand says it is good practice to test the soil fertility level in the fall to determine what nutrients are lacking in the soil. The addition of needed nutrients, particularly potash, is known to strengthen the plant and reduce winter injury of alfalfa.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 7, 1967

To all counties
Immediate release

SLATTED FLOOR HOG
BUILDINGS MEAN LESS
WORK FOR THE FARMER

Warm slatted-floor hog buildings have definite advantages over conventional buildings for the hog producer. Slatted-floor buildings require less space per hog, allow bedding to be eliminated, and reduce manure handling.

Dennis Ryan, University of Minnesota extension agricultural engineer, says a hog producer can afford to pay twice as much for a slatted-floor building as for a conventional building and still break even on the cost per hog with the amount invested.

A slatted-floor building requires only six square feet of space per market hog. This compares with 12 square feet needed per hog in a conventional building.

The problem of bedding is eliminated with slatted-floor construction. This may not seem like a big item, Ryan says, until you consider the storage space required for straw, and the handling, spreading and removal of the straw with the manure. In slatted-floors liquid manure can be removed easily and quickly with an auger or pump. The no-straw method can save hog producers about 50 cents per hog.

And, slatted-floor construction facilitates the handling of manure. This can be a main bottleneck to a hog producer especially in systems where manure must be removed every other day or even once a week from a septic tank. This chore can take much of a producer's time during the busiest part of crop seeding or harvesting. With a slatted-floor manure can be handled monthly or every six months depending on the type and size of pit under the floor.

For information ask your county agent for Agricultural Extension Service pamphlet M-135, "Slatted Floors for Hogs." Or, write for a copy to the Bulletin Room, University of Minnesota, St. Paul, 55101

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 7, 1967

To all counties

Immediate release

NEED CLEAN STORAGE
FOR INSECT CONTROL
IN HARVESTED GRAIN

Clean storage of harvested grain, along with the proper use of insecticides, is necessary in order to supply food that meets today's consumer standards, says Phillip Harein, University of Minnesota extension entomologist.

And it is also illegal to sell contaminated grain, or grain that has been stored under unsanitary conditions.

Harein suggests these methods for keeping stored grain from becoming infested with insects:

. Sweep out and destroy all grain, dust, chaff and webbing from all harvesting machinery, grain hauling equipment and storage bins.

. Apply a residual insecticide bin spray of 2½ percent methoxychlor or a 1 to 1½ percent malathion (premium grade) to the walls and floors of these areas. Use a wet or coarse spray so that bounce or drift can be minimized.

. Apply grain protectants containing either pyrethrine or malathion directly to the grain before it is binned. Applying spray to the surface of the grain after it is binned will help prevent surface infestations of moths.

. Check the condition of the grain to be sure that the moisture content is within the safe limits for storage (11 percent or lower), and that there is little dirt, chaff, weed seeds, or damaged kernels.

. Inspect the grain frequently even after it is in the bin to detect insects, rodents, heating or molds as early as possible.

. Fumigate when necessary to stop an infestation. A "spot fumigation" may be used in a part of a bin for local infestations. Solid, liquid or gas fumigants are available.

For further information ask your county agent for Entomology Fact Sheet number 9, "Insects in Stored Grain." Or, write the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101

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Department of Information
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St. Paul, Minnesota 55101
August 7, 1967

To all counties
Immediate release

FALL SOIL TESTING
CAN HELP FARMER
PLANT SPRING WORK

Soil testing from late summer through the fall can have definite advantages for the farmer.

William Fenster, University of Minnesota extension soil specialist, says the state soil testing lab analyzes about 40,000 soil samples a year. Farmers who take soil samples in the fall can avoid the spring rush to get test results back, and therefore do not have to take a chance on getting their samples returned too late for spring planting.

Also, Fenster notes it gives the farmer time to plan what fertilizers are best to provide the proper amounts of nutrients for maximum yields.

With fall soil sampling it is possible for the farmer to apply these fertilizers in the fall when soils are in relatively good conditions. Often it is difficult to get into the fields to apply fertilizer before planting time in the spring if the ground is wet.

Be sure soil samples are representative of a field because recommendations for lime and fertilizer will be made from the samples. Avoid taking samples from dead furrows, fertilizer bands, urine spots, and old fence rows. Also it is not advisable to take samples too close to crushed rock roads because lime dust will settle on the fields and erroneous lime recommendations may be made.

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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 7, 1967

To all counties
Immediate release

IN BRIEF.

Mastitis Can Be A Problem Near End of Lactation. Mastitis occurs more frequently near the end of lactation--the last month or two--than during the main part of lactation, says Bill Mudge, extension dairy husbandman at the University of Minnesota. Because the cow milks out faster toward the end of lactation, milking machines are often left on too long at this time. Prompt removal of the machine when milk flow stops is necessary to prevent udder irritation which can cause mastitis. Limit milking machines per man accordingly so the person milking can take the cows off the machines promptly when they are milked out.

* * * *

Sow Herd Needs Good Building. Many hog producers use an old building that 'will do' for their sow herd, says Dennis Ryan, University of Minnesota agricultural engineer. But such a building doesn't necessarily have the proper facilities to make it easy to care for multiple groups of sows. Sow herd quarters should have an adequate, continuous water supply, a layout for controlling the amount of feed the sows receive either by hand feeding limited pounds of feed or allowing the sows access to a full feeder for a limited period, and a layout that facilitates cleaning the building. For detailed information on sow herd quarters and farrowing units, ask your county agent for a copy of University of Minnesota publication M-136, "Sow Herd Quarters and Farrowing Units."

* * * *

Feeding of Dairy Cows Should Be Adjusted in Hot Weather. Dairy farmers should adjust the feeding schedules of cows during hot weather for maximum milk production. Bill Mudge, University of Minnesota extension dairy husbandman, says a combination of the body heat of a high producing dairy cow and hot weather reduces the cow's appetite. Consequently, during hot weather the forage consumption is heavier during the night and early morning. Since the amount of feed affects milk production, dairymen should provide plenty of good forage during the night and early morning when feed consumption will be the greatest.

* * * *

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 7, 1967

To all counties

ATT: HOME AGENTS

**IN CANNING,
BE WARY
OF BOTULISM**

Planning to can vegetables this year?

Proper canning techniques are especially necessary for vegetables, not only to preserve flavor but for safety's sake -- to prevent development of botulism in home canned foods, says Edmund A. Zottola, extension food microbiologist at the University of Minnesota.

Botulism is a type of food poisoning associated with canned foods, particularly those of a low-acid nature such as string beans, corn, peas and spinach. The bacteria, *Clostridium botulinum*, which cause the illness are quite commonly found in the soil and therefore are usually present on fresh vegetables.

Because these bacteria are extremely heat resistant, they are not destroyed by boiling. Consequently vegetables such as peas, string beans, corn and spinach must be canned in a pressure cooker for safety. If they are canned in a boiling water bath, the bacteria will not be destroyed. In fact, they will grow in the canned food and produce an extremely lethal poison which can cause death when these canned foods are eaten.

The poison, however, can be destroyed by boiling. For that reason, Zottola advises boiling home-canned low-acid vegetables before use -- even before tasting them. Bring the vegetables to a rolling boil; then cover and boil at least 10 minutes, except for corn and spinach which require 20 minutes. If the food looks spoiled, foams or has an off-odor during heating, destroy it.

Information on proper canning techniques is given in Home Canning Fruits and Vegetables, Extension Folder 100. Additional information on preventing food poisoning is available in Food Microbiology Fact Sheet No. 1, Bacterial Food Poisoning. Both are available from the county extension office or from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul, Minnesota 55101.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 7, 1967

To all counties

4-H NEWS

Immediate release
(Third in series on
State Fair preparation
Stories to come next week
on livestock judging and
livestock exhibits)

'WHY' TAUGHT TO
4-H EXHIBITORS
AT STATE FAIR

4-H members from _____ County who will exhibit in the 4-H Building at the Minnesota State Fair have been invited to attend special educational programs arranged for all 4-H exhibitors.

Among the 4-H'ers who will exhibit at the State Fair and will attend the educational program are: (List names, ages, addresses, clubs and exhibits.)

Participating in the educational program on Monday morning, Aug. 28, are exhibitors in electric, entomology, home improvement-family living, potato, shop and agronomy. They will meet in the 4-H Building on the State Fair grounds.

That afternoon a similar program is planned for exhibitors in clothing, foods, indoor gardening, flower gardening, lawn and landscape design, vegetable gardening and photography.

The program on Friday afternoon, Sept. 1, will be for selected horse project members. It is scheduled for 12 noon in the sheep barn. Another program on Saturday, Sept. 2, will be for poultry and rabbit exhibitors beginning at 8:30 a.m. in the 4-H Building.

The program provides an educational experience for those 4-H members exhibiting at the State Fair in selected projects. The exhibitors benefit through participating in an evaluation activity, an educational tour, and a review of factors that were considered when the exhibits were judged, says Wayne Carlson, assistant state 4-H club leader at the University of Minnesota and assistant superintendent at the State Fair.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 7, 1967

To all counties
4-H NEWS
Immediate release
(Second in series on
State Fair Preparation)

LOCAL 4-H'ERS
WHIRL TO FAIR
IN COSTUMES

_____ County 4-H girls who fashioned winning costumes
(number) _____
will model them in the Minnesota State Fair 4-H Dress Revue.

They are (give names, ages, addresses and, if desired, garments to be modeled.)

Three public dress revues will show some 225 county dress revue winners modeling clothing they have made themselves. The dress revues will be held on Tuesday, Wednesday and Thursday, August 29, 30 and 31 at 3 p.m. in Erickson Hall in the 4-H Building on the State Fair grounds. About a third of the total group will model their garments each day.

_____ County's representatives will take part in the dress revue on
_____.
(date)

Dress revue activities for the 4-H'ers will cover two days and include get-acquainted sessions, modeling helps, self-evaluation and practice for the revue. Participants will also see a Teen Fashion Show at Dayton's.

In evaluation sessions the girls discuss poise and grooming, choice of pattern, texture, color, style and fit in relation to each individual, clothing construction and accessories. They will also select a representative top-ranking group for the Court of Honor.

By careful, critical evaluation of each other's costumes, the girls become more objective in analyzing their own costumes, says Mrs. Sue Fisher, assistant state 4-H Club leader at the University of Minnesota.

Purposes of the dress revue are to provide opportunities for girls to develop poise and confidence, to evaluate costumes and have new experiences in the field of fashion.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 8, 1967

Immediate release

MOWER CO. YOUTH TO NATIONAL MEET

A Mower County youth, Sheldon Sayles, 17, rural Austin, has been selected as Minnesota's delegate to the National Agricultural Youth Institute to be held Aug. 14-25 in Lincoln, Neb.

Purpose of the institute, which is sponsored and financed by the Nebraska Centennial Commission, is to acquaint outstanding young men from every state with opportunities in agriculture and agribusiness, according to Leonard Harkness, state 4-H Club leader at the University of Minnesota. The institute is one of the largest agriculturally oriented events scheduled in Nebraska during the state's centennial year.

During the eight years Brown has been a member of the Enterprise 4-H Club he has been a 4-H junior project leader in swine and agronomy, a member of numerous 4-H committees, junior superintendent of agronomy at the Mower County Fair and a member of the 4-H general livestock judging team.

Also active in the Austin chapter of the Future Farmers of America, he has expanded his original corn project to more than a hundred acres of corn, oats, soybeans and canning crops grown on a crop-share lease with his father.

He is a member of the United Duroc Swine Registry Association and of Mower County Farm Bureau Youth.

After college he plans to continue in agriculture on his family's home farm, which his great-great grandfather bought nearly a century ago.

Along with other delegates from all 50 states and Puerto Rico, Brown will participate in a five-day seminar at the University of Nebraska College of Agriculture and Home Economics. National leaders in industry, farming, government, finance, science and education will lead delegates in workshop discussions. In addition, each delegate will spend a three-day weekend with a Nebraska host family engaged in farming, ranching or an agri-business enterprise.

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67-215-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 8, 1967

Immediate release

CITY-TO-FARM PEOPLE-TO-PEOPLE PROGRAM

Fifty-five inner-city youth from the Twin Cities will find out this weekend what living on a farm is like.

A group of 25 teenagers from Pillsbury House, Minneapolis, will leave Thursday morning, Aug. 10, by bus for Faribault County. They will be met in Blue Earth by 4-H members, their families and representatives of other county groups, will be treated to a corn-on-the-cob feed at noon, taken on tour of a canning company, an ice cream plant and a number of farms. In late afternoon they will go to farm homes in the area to have the evening meal and an overnight stay with their host families. They will have the opportunity to observe and help with evening and morning farm chores.

From St. Paul a group of 30 teenagers sponsored by the North Central Voters' League will go to Winona County on Thursday. They will meet 4-H members, their families and others in Lewiston and will have a program similar to that planned for the group going to Faribault County.

This is the third year of the city-to-farm people-to-people program, according to William Milbrath, associate state leader, 4-H and youth development programs at the University of Minnesota. The first year a group visited Lyon County; last year Otter Tail County played host to a second group.

The program gives inner-city disadvantaged young people the opportunity to visit and live with rural young people and their families, thus helping to develop a deeper understanding of race relations in both city and farm youth through living, working and playing together. The program also gives young people from the city a better understanding of farm life and how food is produced for the consumer and generates lasting friendships between city and farm youth, Milbrath said.

Sponsors of the program are the University's Agricultural Extension Service and community groups.

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67-216-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 8, 1967

Immediate release

COMMERCIAL FLOWER GROWERS' SHORT COURSE SEPT. 19

Speakers from Minnesota, Michigan and California will discuss various aspects and problems of commercial flower growing at the Commercial Flower Growers' Short Course, Tuesday, Sept. 19, at the University of Minnesota, St. Paul. Registration for the one-day course begins at 8:15 a.m.

The program includes talks on vegetable varieties for the bedding plant owner, a review of rigid and plastic films, poinsettias, basic concepts of bulb forcing, seedling geraniums, aerated steam and chemical soil sterilants, carbon dioxide as it affects roses, geraniums, lilies, and poinsettias, and the practical aspects of forcing tulips and hyacinths.

The short course is sponsored by the University of Minnesota's Department of Agricultural Short Courses in cooperation with the University's Department of Horticultural Science.

Commercial flower growers who wish further information on the short course may write to the Department of Agricultural Short Courses, University of Minnesota, St. Paul, Minnesota 55101.

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67-218-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 10, 1967

Immediate release

GRANT GIVEN TO DEVELOP HOME EC INTERNATIONAL PROGRAM WORKSHOPS

A grant of \$12,000 will enable the University of Minnesota's School of Home Economics to develop special workshops and seminars for staff members in a program called "Home economics inter-cultural-international involvement."

Louise A. Stedman, director of the School of Home Economics, says the grant will finance an intensive workshop directed by Dorothy Lee, noted international scholar and lecturer in anthropology in the summer of 1968; seminars with visiting foreign scholars in the fall of 1968 and a program-planning consultant to work with selected home economics faculty members during the winter quarter of 1969.

The grant was made by the University's Office of International Programs.

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67-217-jbn

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 10, 1967

Immediate release

UM SCHOOL OF FORESTRY ANNOUNCES ORGANIZATIONAL CHANGES

Changes in the organization and administration of the University of Minnesota School of Forestry were announced recently by the School's director, Frank H. Kaufert.

Organizational changes include the creation of three divisions. They are forest resources development, forest biology and forest products. The School's Forest Research Center at Cloquet will function as a fourth division under the direction of Superintendent Bruce A. Brown.

Administrative changes include the appointment of Professor Richard Skok to assistant director of the School, and the appointment of Associate Professor Kenneth E. Winsness to assistant to the director for undergraduate education programs.

Skok will have responsibility for resources development, international programs, continuing education and extension within the School. He will continue his teaching and research activities in forest economics and policy. He received his B.S., M.S., and Ph.D. degrees from the University, and has a broad background of teaching and research experience.

Winsness will have responsibility for undergraduate education programs and alumni relations. He joined the School staff in 1952 and for the past 10 years has developed and directed undergraduate programs. He has bachelor's and master's degrees from the University, and in 1966 received the Standard Oil Foundation award for outstanding contribution to undergraduate education.

In announcing the changes, Kaufert explained that they were necessary because of the rapidly growing teaching and research programs of the School, and because of the greater specialization in each of the division areas.

"The changes will materially help the School move ahead in an expanding program of teaching, research and extension on the Twin Cities Campus, at the Cloquet Research Center and throughout the state," he said.

The School of Forestry was established in 1903 and is one of 30 accredited forestry schools in the United States. At present, there are about 500 students enrolled, including about 65 who are engaged in graduate study and research.

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67-219-vak

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 10, 1967

Immediate release

FOREIGN JOURNALISTS TO ATTEND UM SHORT COURSE

Agricultural information specialists from Jordan, Zambia, Cameroon, Indonesia and Ethiopia will participate in an "Agricultural Information technique" short course at the University of Minnesota's St. Paul campus from August 14 to September 2.

The course, sponsored by University's Department of Agricultural Short Courses and the Department of Information and Agricultural Journalism, will acquaint the foreign information specialists with agricultural information programs and community journalism in the United States.

The specialists will spend one week on the University campus in talks and discussions with University information specialists, and over a week observing local rural communities and rural communications in the Worthington, Minn., area. The group will also spend several days at the Minnesota State Fair observing visual and exhibit techniques.

Harold B. Swanson, professor and head of the Department of Agricultural Journalism, said that the program is designed to help these individuals develop skills and techniques in producing and using agricultural visual aids, publications, press, radio and public relations.

Through discussions they will review basic principles in communicating ideas to others, how people learn, the social action process, and the role of the mass media in disseminating knowledge and understanding.

Purpose of the three-week short course is to develop skills in program planning and administration of extension-type communication programs, including study of the role of communications in overall rural development programs and information techniques in extension and other educational programs.

The University's effort is the introductory course which will be followed by other courses at several other land-grant institutions.

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67-220-jbg

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 14, 1967

To all counties
ATT: HOME AGENTS
Immediate release

IS IT SAFE TO REFREEZE FOOD?

How to handle frozen food that has thawed in the home freezer has been a problem with many Minnesota families this summer. So it's important to know what to do.

In some cases families have come home from a vacation to find that the power has been off and much of the food in the freezer has thawed. In other cases, a fuse has blown, the power has been off following an electrical storm, or the door was not shut tightly. Because the freezer was in the basement, several days went by before the homemaker discovered that much of the food was no longer frozen.

How much of the thawed food can you salvage, either by refreezing it or using it immediately?

Mrs. Shirley Munson, in charge of the University of Minnesota's food processing laboratory in the Department of Horticultural Science, says sometimes -- but not always -- the odor is a clue. If the smell of thawed food is questionable, always destroy the food. Here's how to check other thawed foods:

Meat. If meat still contains some ice crystals, it is safe to refreeze it, although the quality may not be as good. When meat is completely thawed but is still very cold, it is wiser to cook it thoroughly at once than to refreeze it.

add 1 -- is it safe to refreeze food

Shellfish. Don't refreeze if it has thawed completely. Shellfish products spoil quickly and it's hard to tell by odor or appearance whether they are safe to eat.

Ice Cream. If it has thawed, don't refreeze.

Casseroles. It's safest not to refreeze thawed cooked foods.

Fruits. If thawing has changed neither the taste nor the odor, you can safely refreeze fruits or use them for jams or preserves. A little fermentation will not be dangerous, though it may spoil the flavor.

Fruit Juices. Orange and other fruit juices may be refrozen but they will separate when reconstituted and lose some flavor.

When refreezing thawed foods in your freezer, rearrange them so the warmer packages are against the refrigerated surface. Allow space for air to circulate around the packages.

In case the freezer is full of partially thawed foods, it's wise to take all of them to a commercial locker plant for a quick refreezing, Mrs. Munson says.

To prevent future trouble, Mrs. Munson urges families to check the freezer every day or every other day -- and keep a thermometer in the freezer so you can see whether the temperature is what it should be. If you expect to be gone on a vacation, have a neighbor come in and check the freezer several times a week.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 14, 1967

To all counties

4-H NEWS

Immediate release
(Fourth in series on
State Fair preparation)

JUDGING TEAMS
TRAVEL TO
STATE FAIR

4-H dairy and livestock judging teams from _____ County will put their knowledge to a real test as they vie for state awards during the Minnesota State Fair, August 26 - September 4.

They will be competing with some 90 other county teams on Thursday, August 31, beginning at 8 a.m. in the Hippodrome.

Members of the dairy judging team are: (include names, ages and addresses). Coach is _____ from _____.

Members of the livestock judging team are: (include names, ages, addresses). Coach of the team is (include name and address).

The dairy judging team winning first at the State Fair will represent Minnesota at the National Dairy Cattle Congress in Columbus, Ohio, in the fall. The state champion general livestock judging team will compete at the International Livestock Exposition in Chicago. Both trips are provided by the Minnesota Livestock Breeders' Association.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 14, 1967

To all counties

4-H NEWS

Immediate release
(Last in series on State
Fair Preparation)

4-H LIVESTOCK
TO ENTER STATE
FAIR COMPETITION

Showing their livestock and poultry at the Minnesota State Fair -- and competing for awards with 1,300 other 4-H members from around the state -- will be an exciting experience for _____ 4-H'ers from _____ County.

Livestock exhibitors will be: (list names, addresses and exhibits).

The 4-H livestock show will follow the open-class show. All 4-H exhibits must be in place in the barns by 2 p.m. on Friday, Sept. 1. The public is invited to see the 4-H livestock exhibits after that time.

All beef and dairy cattle will be judged in the Hippodrome on Saturday, Sept. 2, beginning at 8 a.m., say Earl Bergerud and Osgood Magnuson, assistant state 4-H club leaders at the University of Minnesota and assistant superintendents of livestock exhibits at the State Fair. Judging will start with the calf classes in all breeds except grade Holstein, in which judging will start with the advanced class.

Also on Saturday, Sept. 2, sheep will be judged in the sheep barn beginning at 9 a.m. followed by swine at 1:15 p.m. Judging of chickens and rabbits is scheduled for 9 a.m. in the poultry barn and for ducks, geese and turkeys at 1 p.m.

The dairy showmanship contest will be held at 3:15 p.m., Saturday, Sept. 2. All other showmanship contests will follow judging of the particular livestock classes.

In addition to individual awards, each county will be eligible for a 4-H herdsmanship award based on the herdsmanship work done with the total county livestock exhibits. Each county will be judged throughout the weekend Saturday, Sept. 2 through Monday morning, Sept. 4. The five top counties will receive plaques at an assembly in the sheep barn at 11:30 a.m., Monday, Sept. 4. The counties exhibits are scored on general appearance of exhibits, neatness and storage of equipment, arrangement of livestock, uniformity of exhibits, proper tying of animals, conduct of exhibitors and proper use of feed and straw.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 14, 1967

To all counties

For immediate release

DATES SET FOR FALL
CORN AND SOYBEAN
FIELD DAYS IN STATE

Corn and soybeans, the state's top two row crops, move into the spotlight this fall during four field days at University of Minnesota branch experiment stations.

Dates and locations of corn and soybean field days are:

- * September 12 at the (Southern) Experiment Station, Waseca.
- * September 13 at the Southwest Experiment Station, Lamberton
- * September 14 at the West Central Experiment Station, Morris.
- * September 29 at the Agricultural Experiment Station, Rosemount.

Besides continuous tours of research plots, each experiment station will feature a corn and soybean disease and insect clinic. Farmers can bring specimens of insects and diseased plants. University specialists will be available to identify the specimens and answer questions.

Farmers, as well as growers, seed handlers and agribusiness people, will have an opportunity to learn about the latest developments in corn and soybean production. University bulletins on corn and soybean production will also be available.

Tours start about 9 or 10 a.m. at the stations and continue to about 2 or 4 p.m. Discussions will cover research on corn breeding work, time of planting corn, fertilizer trials, weed control, insecticides, row spacing and population studies.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 14, 1967

To all counties

For immediate release

**SOYBEAN LOSSES CAN
BE CUT WITH PROPER
HARVESTING METHODS**

Soybean harvesting losses can be reduced as much as 50 percent with proper machine adjustment and operation, says John Strait, professor of agricultural engineering at the University of Minnesota.

In Minnesota, this would mean a \$9 million saving annually for state soybean farmers or a saving of \$7.50 for every hour a combine is in the field harvesting.

Harvesting losses average over 10 percent of the total soybean crop or about two bushels per acre in Minnesota. Gathering losses--which include losses due to shattering, lodging, stubble and stalk losses--account for nearly 85 percent of total harvesting losses.

Strait says these losses can be reduced in several ways. One important way is to harvest beans as soon as the moisture content drops below 14 percent. Since moisture penalties are assessed only on beans above this percentage, harvesting while the moisture content is about 13 percent will reduce losses due to shattering and result in greater yields to the producer.

If the moisture content drops to 8 to 10 percent, combine when the beans are tough, such as early morning, or when the humidity is high.

The cutter bar is a major source of gathering losses, Strait says. Depending upon variety and cultural conditions, losses may increase at the rate of 1.4 bushels per acre for each inch the cutter bar is above the ground. Cutter bar height should be low enough to remove as many as possible of the lowest beans yet consideration must also be given to damage to the combine from rocks, ridges and other field objects.

add 1 -- soybean losses

Adjusting the reel speed and height is another important way to reduce losses. The reel action must be aggressive enough to sweep the cutter bar but not so aggressive as to cause excessive losses due to shattering. Except under unusual conditions, the reel speed of a ground driven reel should not exceed the ground or forward speed by more than 10 percent.

If the combine is equipped with a power reel, harvesting at speeds of two to three miles per hour with the reel speed not exceeding 125 percent of the ground speed will come closest to giving minimum shatter losses with reasonable harvesting capacity.

The reel height should be such that the reel goes no lower into the crop than is necessary to perform its function. The lower the reel bats, the more pods struck and shattered. Losses are increased when stalks are carried over the reel.

Preventing quality losses can also increase soybean profits. For example, over threshing will cause split or cracked beans and damaged seedcoats--resulting in lower market grades and poorer germination. To prevent these losses, Strait recommends that farmers adjust cylinder speed and cylinder concave clearances to achieve complete threshing but no more.

Since the combine setting at 11 a.m. may not be the proper setting at 2 p.m. of the same day, adjustments may have to be changed at different times of the day. Strait stresses the importance of the operator's manual as a guide for proper machine adjustment and operation.

A small reduction in harvesting losses can be obtained by proper adjustment of the chaffer, chaffer extension and cleaning sieve.

When beans are very dry, reducing the rate of travel will substantially reduce shattering losses by cutting and gathering devices.

Finally, harvesting losses can be reduced by the use of special guards and reel attachments if lodging is a problem.

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Department of Information
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University of Minnesota
St. Paul, Minnesota 55101
August 14, 1967

To all counties

Immediate release

IN BRIEF.....

Watch Calving Dates So Cows Get Needed Dry Period. Farmers should watch the calving due dates for dairy cows carefully to make sure each cow gets her six to eight week dry period before calving. Bill Mudge, extension dairy husbandman at the University of Minnesota, says cows with no dry period often produce 25 to 30 percent less milk in the next lactation and thus failure to "dry off" the cow can be costly. Thin cows need the full eight-week dry period, while those in good flesh need only six weeks.

* * * *

Farrowing House Should Be A Separate Building. The farrowing house should be a separate building used only for farrowing, says Dennis Ryan, University of Minnesota extension agricultural engineer. When using such a house, hog producers should make sure there is a break of one month between farrowings. During this period no hogs should be in the building. This break should start the day the building is cleaned and disinfected. Hog producers should clean as soon as possible after each batch of hogs is removed. If they wait two weeks to disinfect, the total break would be six weeks.

* * * *

Reproductive Failures Decrease Dairyman's Profits. Reproductive failures mean decreased profits for dairymen. Whether in milk or idle, cows still require the same costly production inputs of room, board and labor. Late entry of first-calf heifers into the milking herd adds to the cost of raising herd replacements and delays the time they can begin making a profit. B. J. Conlin, extension dairy husbandman at the University of Minnesota, says a 12 to 13 month calving interval is recommended. Research shows no beneficial effect of dry periods longer than 60 days, and most cows have neither the genetic ability nor the environmental opportunity to maintain a profitable level of production beyond 10 or 11 months of lactation. A calving interval of 12 to 13 months permits cows to complete a 305-day (10 month) lactation and still have the recommended 60 days of rest before calving.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 14, 1967

To all counties

For immediate release

FARMERS CAN BUY, LEASE
OR CUSTOM HIRE CORN
HARVESTING EQUIPMENT

Farmers should complete plans now for harvesting their corn crop. Charles Cuykendall, University of Minnesota extension agricultural economist, says farmers have the choice of harvesting with their own machinery, hiring custom harvesting, or leasing equipment.

The decision on whether to buy harvesting machinery, custom hire, or lease should be based on machinery cost control and availability of equipment when it is needed.

Many southern Minnesota farmers, for example, have an average of only 23 days to harvest corn in the fall. Farmers who shell and use artificial drying should harvest at 26 to 28 percent kernel moisture for lowest field losses. Delayed harvesting affects the amount of corn marketed. For example, a farmer can expect a 2½ percent additional field loss by harvesting at 21 percent moisture rather than 27 percent. This means sacrificing about \$3.00 worth of shelled corn per acre on a field that averages 100 bushels per acre.

Some farmers buy harvesting equipment which is larger than their present operation justifies, and then spread the fixed costs over more acres by doing custom work. The owner-operator has the advantage of having machinery which can adapt to a growing enterprise and he profits from having the machinery available when it is the proper time to harvest. Also, ownership costs do not change greatly as he does custom work.

Many new farmers, farmers with small acreages of corn, or farmers who are short of labor and time should consider custom hiring of corn picking.

Before making a final decision on custom harvesting, however, the farmer should determine if the equipment is available when he needs it for minimum field losses, and if the operators are dependable and efficient. He should then compare the local custom harvesting rates with the cost of owning a combine or picker.

add 1 -- farmers can buy

Cuykendall says a farmer who is considering buying a combine should consider the annual use costs of depreciation, repairs, interest, taxes, insurance, and shelter. These costs will equal about 20 percent of the original price. These are fixed costs that go on regardless of the amount a machine is used.

The operating cost of the machine and labor must be added to the fixed costs to determine total cost.

In considering custom harvesting, the farmer must consider the related costs such as losses in quality and quantity if the custom operator can't be in his field when harvesting losses would be at a minimum.

Custom hiring has the advantage of providing the labor of an additional man at harvest when help is sometimes difficult to obtain, Cuykendall said. This may free the farmer to handle the harvested corn or start fall plowing.

Custom harvesting also eliminates the risk of equipment ownership. By not investing in machinery the farmer has more operating capital to put into other inputs like seed, fertilizer, and chemicals which are more likely to return a greater percentage per dollar invested.

Many machinery dealers lease new and used equipment. The leasing price depends on the period of use and is rated on a percent of retail price. Leasing allows a farmer to reduce capital investments and yet have control over high cost of seasonal machinery.

Farmers should compare the price of leasing with ownership cost, then add the cost of operating and labor before comparing these alternatives with custom hiring charges.

By using a budget approach or determination of a break-even acreage, a farmer can make a wise decision on whether to buy or lease harvesting equipment, or to hire custom harvesting.

With the general economy pushing toward increased efficiency and specialization it will be necessary to examine all purchases closely and manage inputs in such a way as to keep cost in line with expected returns.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
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St. Paul 55101--Tel. 647-3205
August 15, 1967

Immediate release

To Feed Urban Areas

EMERGING NATIONS MUST DEVELOP EFFICIENT FAMILY FARMS

CROOKSTON-- To feed their fast-growing urban populations, emerging nations must build efficient family farms that are organized to produce for a market economy, a University of Minnesota professor told 20 African students here early this week.

John Blackmore, director of the University's international agriculture program, said much of the world's agriculture is based on the family farm. But most of these are small, tradition-ridden farms that produce primarily for the family unit and the general market receives only whatever products are left over.

"This is not an adequate agricultural base for any country that wants to move into an urban-oriented economy. Growing urban populations cannot be fed adequately by such an agricultural production system," he said.

Blackmore is discussing key factors in agricultural development at the local level with the African students during the first week of a three-week short course on "Keys to Agricultural Development" at the University of Minnesota Technical Institute here.

He pointed out that less than five percent of the United States population now produces food for the rest of the nation. In many emerging nations, 60 to 80 percent of the population is engaged in agricultural production and this is highly inefficient.

The emerging countries need to shift human energy toward a society that is urban-oriented rather than rural-oriented. To accomplish this, he said manpower must shift out of agriculture and more economical use must be made of farm labor, land, production and marketing.

(more)

add 1 -- emerging nations

The critical problem the African students will consider during the course is: "How do you organize a market-oriented, efficient family-based agricultural system in emerging nations, such as those in Africa, without tearing down old systems and building whole new social systems."

"The United States' experience with the family farm shows that agriculture does not have to be organized as big business to be successful. The development of efficient, highly-productive family farming systems is one of the miracles of U.S. agriculture," said Blackmore.

Through the discussions and tours during the course, the African students will be able to apply the principles of agricultural growth seen here to the needs in their own countries.

The students will consider the two major criteria needed for food production--the essentials and the accelerators of agricultural production.

The essentials mean such things as a good market, a science-based technology, local availability of supplies and equipment, production incentives for agricultural growth--such as increased income or tenure relationships between the farmer and landowner--and good transportation.

These essential elements are needed before any of the second set--the accelerators--can be effective. The accelerators of agricultural production are education, agricultural credit, group action through such organizations as cooperatives, opening and improving areas of agricultural land, and national planning.

During the last two weeks of the three-week course, the students will use this framework of essentials and accelerators to look at the agriculture of the Crookston area. They will study how the essential and accelerator elements work at the local level in the United States and how these can work in their own countries.

The course is sponsored by the University's Department of Agricultural Short Courses in cooperation with the Agricultural Extension Service and the University of Minnesota Technical Institute and Northwest Experiment Station at Crookston.

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67-224-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205

Immediate release

BRAINERD HOSTS MILK CONCENTRATES CONFERENCE AUG. 29-30

Dairy technologists, chemists and bacteriologists from across the nation will attend the Eighth Annual Milk Concentrates Conference August 29-30 at Grandview Lodge near Brainerd.

Purpose of the two-day conference is to share information on milk concentrate research and to provide new perspectives on its application to other research problems.

Representatives of government agencies, universities and industry will discuss such topics as storage flavors in milk powder, milk protein stability in dairy processing operations and simulated dairy products and their possible nutritional implications at the conference.

Speakers include S. T. Coulter, E. L. Thomas and Peter Manning of the University of Minnesota, M. J. Pallansch and E. B. Kalan of the U. S. Department of Agriculture, and H. G. Harding of the National Dairy Products Corporation.

This is the first time the national conference has been held in Minnesota. Sponsoring groups are the University's Institute of Agriculture, the American Dry Milk Institute and the Evaporated Milk Institute.

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67-225-jbg

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 15, 1967

Immediate release

THREE MINN. YOUTH TO GO OVERSEAS AS IFYES

Three Minnesota young people will leave in September for overseas to spend six months as International Farm Youth Exchangees (IFYEs) in a cultural program to increase international understanding at the family level.

Mark Zeug, 23, Walnut Grove, will go to India; Bonita Halfmann, 22, Stephen, and Ronald Eustice, 21, Waseca, will go to Uruguay.

They will leave the Twin Cities Sept. 4 for Washington, D. C., where they will spend 10 days in orientation, preparing for their overseas assignment before flying to their respective host countries the middle of September.

They will live and work with rural families in their assigned countries to obtain an understanding of their way of life and at the same time to introduce them to American ideals and customs.

Zeug has a bachelor of arts degree in economics and journalism from the College of St. Thomas. He has held positions on several newspapers and recently has been operating the home farm with his father.

Miss Halfmann received her B.S. from the University of Minnesota in June with a major in sociology and education. For eight years she was a 4-H member in Marshall County where she held various offices in her local club and in the county 4-H Federation.

Eustice is a senior in agricultural journalism and animal science at the University of Minnesota. Last summer he worked at the National 4-H Club Center in Washington, D.C., as a student assistant. A former 4-H member in Steele County, he was a dairy show herdsman in Michigan, Massachusetts and Minnesota for three summers.

Miss Halfmann and Eustice will serve as delegates from the whole nation as well as from Minnesota, since they will be the only American IFYEs going to Uruguay. In the return phase of the exchange, Carmen Pereira from Uruguay is spending several months in Minnesota this summer and fall--in Marshall and Chippewa counties.

The International Farm Youth Exchange program is conducted by the National 4-H Foundation and the Agricultural Extension Service. Minnesota now has one IFYE overseas--Mary Lipke of Stewart, who is in the Netherlands. Eight IFYEs from as many different countries are now on Minnesota farms.

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67-222-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 15, 1967

FOR RELEASE: Wednesday A.M., Aug. 16

UM PROF RECEIVES ASSOCIATION AWARD

GUELPH, Ontario--Vernon W. Ruttan, professor and head of the Department of Agricultural Economics at the University of Minnesota, was honored here last night (Tuesday, Aug. 15) at the annual meeting of the American Farm Economics Association.

Ruttan received the Best Article of the Year Award by the Journal of Farm Economics for his article on "Agricultural Policy in an Affluent Society." The article was published in the December 1966 issue of the Journal.

The editorial staff and the editorial council of the Journal annually choose the most outstanding article published in the Journal during the preceding calendar year.

Last year, Ruttan received an Award for Research from the Association for his book The Economic Demand for Irrigated Acreage.

#

67-223-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 16, 1967

Immediate release

3,000 4-H'ERS TO BE AT STATE FAIR

Boys and girls in green and white will be 3,000 strong at this year's Minnesota State Fair.

They are the 4-H youth, ranging in age from 11 to 19, who have won the honor of representing their counties at the State Fair to compete for further awards.

During 10 event-filled days they will demonstrate, model clothing, display exhibits, show or judge livestock, perform in a talent festival and compete in a tractor operators' contest. Focus of their activities will be the 4-H Building on the State Fair Grounds.

For some 4-H'ers it will mean the first trip to the State Fair and to the city. Others are seasoned demonstrators and exhibitors who may be back for a second or third time. They will sleep in dormitories in the 4-H Building and eat in the 4-H cafeteria on the second floor.

Some 800 of the club members will give demonstrations during the week on seven platforms on the main floor of the 4-H building, beginning at 8 a.m. Saturday, Aug. 26. They will show their knowledge and skill on topics ranging from freezing food or on preparing a lamb for the fair to safe driving tips. On Labor Day, they will give demonstrations in the livestock barns using live animals.

New this year are critiques scheduled every day at 11 a.m. for parents and leaders, when judges and 4-H staff members will evaluate the demonstrations given, explain the demonstration program and its value in development of 4-H members.

Three public dress revues Tuesday, Wednesday and Thursday will feature more than 200 girls modeling coats, dresses and suits they have made themselves. A court of honor will be selected for each of the revues.

(more)

add 1 -- 4-H at state fair

A variety of entertainment by talented 4-H members will highlight the Share-the-Fun Festival in the 4-H auditorium Thursday, Aug. 31. Eight International Farm Youth Exchange delegates visiting Minnesota from as many different countries will be made 4-H members at a special ceremony during the Festival.

Climax of the fair for some 1,300 club members will be the 4-H livestock show on the last Saturday, Sept. 2. Included in this year's exhibits are 730 dairy cattle, 150 gilts, 120 ewe lambs, 130 beef heifers, 150 pens of poultry and 50 pens of rabbits.

Finals in the annual state Tractor Operators' Contest for 4-H'ers and FFA members have been scheduled for Friday, Sept. 1, at 9 a.m.

On view for the public on the first floor of the 4-H Building will be 80 county booths and more than 1,300 exhibits depicting work 4-H members do in a variety of projects. The exhibits represent prize-winners from all counties in the state and include 110 entries in food science and food preservation, 225 in home improvement-family living, 120 in clothing, 75 in electric, 135 shop, 100 agronomy, 85 entomology, 120 potato, 230 in garden and horticultural science.

The 4-H project exhibitors will attend special educational programs during the week to get an evaluation of exhibits, learn what factors are considered in judging and take tours related to their project interest.

Leonard Harkness, state 4-H leader at the University of Minnesota, invites the public to view demonstrations, exhibits, the dress revue, the Share-the-Fun Festival and the 4-H livestock show.

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67-226-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 16, 1967

FACT SHEET ON 4-H AT THE STATE FAIR--1967
August 26-September 4

HOW MANY: More than 3,000 4-H boys and girls will attend the State Fair to exhibit livestock, give demonstrations or participate in the dress revue, Share-the-Fun Festival, tractor operators' contest or livestock and dairy judging contests.

WHERE WILL THEY LIVE: They will eat and sleep in the 4-H Building on the fairgrounds. Since demonstration schedules are set up for counties in three different sections, demonstrators will come and go according to the time of their demonstrations. Dormitories accommodate up to 1,500 4-H'ers at one time.

DEMONSTRATIONS: About 800 demonstrators will perform on seven platforms in the 4-H Building, beginning at 8 a.m., Saturday, Aug. 26, and continuing until about 5 p.m. each day through Saturday, Sept. 4 (and excluding Sundays). Demonstrations will include electrification, shop, clothing, home improvement-family living, junior leadership, safety, health, photography, conservation, entomology, gardening, soil conservation, foods and nutrition, livestock, poultry, and rabbits, agronomy and dog. On Labor Day, only livestock demonstrations using live animals will be given. They will be in the livestock and sheep barns. Purple and blue ribbon winners will be announced daily. Demonstration critiques will be given each day at 11 a.m. on individual demonstration platforms.

LIVESTOCK EXHIBITS: This year about 1,300 club members will exhibit livestock, which will be received beginning Friday, Sept. 1, after 7 a.m. in the 4-H livestock barn. All exhibits must be in place by 2 p.m. Beef and dairy cattle will be judged on Saturday, Sept. 2, beginning at 8 a.m. in the Hippodrome. Sheep, chickens and rabbits will be judged in the sheep and poultry barns Saturday morning (Sept. 2). In the afternoon, swine will be judged in the sheep barn, ducks, geese and turkeys in the poultry barn. Livestock includes: 730 dairy cattle, 150 gilts, 120 ewe lambs, 130 beef heifers, 150 pens of poultry and 50 pens of rabbits.

OTHER EXHIBITS: More than 1,300 exhibits will be on display in the 4-H Building throughout the 10-day period. Exhibits and the anticipated number of entries are: 110 food science and food preservation, 225 home improvement-family living, 120 clothing, 75 electric, 135 shop, 100 agronomy, 85 entomology, 120 potatoes, 280 garden and some horticultural science exhibits.

BOOTH: 80 booths portraying 4-H activities in as many different counties will be on display on the main floor of the 4-H Building. Booths will be judged Saturday, Aug. 26.

DRESS REVUE: Three public dress revues featuring more than 200 girls will be presented Tuesday, Wednesday and Thursday in the auditorium, 2nd floor, 4-H Building, at 3 p.m. A Court of Honor will be chosen at each dress revue. The Court of Honor will be available for pictures each of those days between 1 p.m. and 2 p.m. Check first in 4-H Press, Radio and TV Office, 1st floor.

DAY BY DAY ACTIVITIES

Saturday, Aug. 26

8 a.m.-5 p.m.

4-H demonstrations, 4-H Building

Booth and exhibit judging, 4-H Building

11 a.m.

Demonstration critique

Sunday, Aug. 27

8 a.m.

Ecumenical Church Service, Erickson Hall, open to public

Monday, Aug. 28

8 a.m.- 5 p.m. 4-H demonstrations
8 a.m. (all day) Exhibitors' educational program
8 p.m. Recreation program for 4-H members, 2nd floor, 4-H Building.

Tuesday, Aug. 29

8 a.m.-5 p.m. 4-H demonstrations
3 p.m. Dress revue, group I. Court of Honor available for pictures between 1 and 2 p.m., auditorium, 2nd floor, 4-H Building. Check first with 4-H Radio, Press and TV Office.

Wednesday, Aug. 30

8 a.m.-5 p.m. 4-H demonstrations
3 p.m. Dress revue, group II. Court of Honor available for pictures between 1 and 2 p.m., auditorium, 2nd floor, 4-H Building. Check with 4-H Press, Radio and TV Office.

Thursday, Aug. 31

8 a.m.-5 p.m. 4-H demonstrations
8 a.m. Dairy judging contest, Hippodrome, general livestock judging contest, St. Paul Campus
8 a.m. Tractor Operators' Contest, Machinery Hill
3 p.m. Dress revue, group III. Court of Honor available for pictures between 1 and 2 p.m., auditorium, 2nd floor, 4-H Building. Check with 4-H Press, Radio and TV Office.
8 p.m. 4-H Share-the-Fun show and introduction of eight International Farm Youth Exchange participants from other countries, auditorium, 2nd floor, 4-H Building.

Friday, Sept. 1

8 a.m.-5 p.m. 4-H demonstrations
9 a.m. Tractor Operators' Contest finals in front of 4-H Building.
1 p.m. Educational program for 4-H Horse project members, Erickson Hall.
2 p.m. Livestock exhibits in place, livestock barn
8 p.m. Recreation - games, 4-H Building

Saturday, Sept. 2

8 a.m.-5 p.m. 4-H demonstrations
8 a.m. Livestock judging, Hippodrome
8:30 a.m. Sheep, poultry and rabbit judging, sheep and poultry barns
Exhibitors' education program - poultry and rabbits, Erickson Hall.
1 p.m. Swine judging, sheep and poultry barns

Sunday, Sept. 3

8 a.m. Ecumenical Church Service, auditorium, 4-H Building, open to public.

Monday, Sept. 4

8 a.m.-5 p.m. 4-H demonstrations in livestock and sheep barns
11:30 a.m. Assembly, sheep barn. Presentation of Herdsmanship Plaques.

For FURTHER INFORMATION for press, radio, TV -- BEFORE the fair, call 647-3205
DURING the fair call 4-H Press, Radio, TV Office, 4-H Building, 645-2782, Ext. 85.

UNIVERSITY OF *Minnesota*

August 16, 1967

INSTITUTE OF AGRICULTURE
DEPARTMENT OF INFORMATION AND AGRICULTURAL JOURNALISM
ST. PAUL, MINNESOTA 55101

Dear Editor:

Each year press, radio and television find a wealth of feature material in 4-H youth and their activities at the Minnesota State Fair.

We would like to offer the help of our staff to your roving reporters in lining up 4-H'ers from your area and in suggesting features for you. However, we suggest that you call your county extension office to find out when 4-H'ers from your area will be at the fair so that your reporters will not come to the fair only to find that these 4-H'ers have gone home or have not yet arrived.

As in past years, the University of Minnesota's Department of Information and Agricultural Journalism will have press-radio-TV headquarters in the 4-H Building on the fairgrounds. The office is to your right just past the exhibit case at the west entrance of the 4-H Building. Someone will be there to help you. If you wish to make arrangements before the fair, call 647-3205. During the fair, the number of our office in the 4-H Building is 645-2782, Ext. 85.

We shall be sending out releases on 4-H purple and blue award winners from time to time directly from the State Fair. Or your county agent will supply this information to you. It would help us, however--and you, too--if we knew which counties you are interested in so we can give you proper coverage. For our mutual help, will you please fill out the form below and return it. If you have some special requests, please indicate them.

Sincerely,



(Mrs.) Josephine B. Nelson
Assistant Extension Editor

JBN:lm1

Enclosures (2)

I am interested in receiving releases on 4-H award winners from these counties:

_____, _____, _____, _____

Signed _____

Newspaper, Radio or TV Station _____

Return to: Mrs. Josephine B. Nelson City _____

Extension Assistant Editor
Institute of Agriculture, University of Minnesota
St. Paul, Minnesota 55101

SPECIAL NOTE TO COUNTY AGENTS

The attached news release is based on information from a recent Extension Service publication dealing with Minnesota Wholesale and Retail Trade Sales from 1948 to 1963.

The report is based on a study by John S. Hoyt, Jr., and Surjit S. Sidhu, agricultural economists. This study is part of a larger project sponsored by the Department of Agricultural Economics, the Extension Service and the Agricultural Experiment Station.

If you have not already received copies of this report on "Minnesota Wholesale and Retail Trade Sales," you should receive them very shortly. Would you please see to it that each weekly newspaper in your county receives a copy of the report for background information or possibly for a special release or editorial. Copies are being sent to all daily newspapers and radio and television stations in your area.

Also, you may wish to include in the attached release a paragraph or two telling about wholesale and retail trade trends in your county.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 21, 1967

To all counties

Immediate release

WHOLESALE-RETAIL
TRADE RISES SLOWER
IN STATE THAN NATION

Although both wholesale and retail trade in Minnesota increased from 1948 to 1963, the increase did not keep pace generally with the rest of the nation, according to a recent University of Minnesota study.

During this period wholesale trade establishments in Minnesota increased about 14 percent, as compared with a 27 percent increase for the United States. And, the volume growth in Minnesota's wholesale trade sales increased about 64 percent, compared with a 90 percent increase nationally.

The only exception to this trend was the size of operation of wholesale trade establishments, which, judged from dollar sales per establishment, was larger in Minnesota than in the United States, say John S. Hoyt, Jr., and Surjit S. Sidhu, University of Minnesota agricultural economists.

The number of wholesale establishments increased in all Minnesota regions, except the western and southwestern regions where declines of 13 and 12 percent represented losses of 59 and 55 wholesale operations respectively.

The largest increase in wholesale businesses occurred in the metropolitan region. The smallest increase occurred in the north-central region.

During this same period, retail trade establishments in Minnesota declined about 8 percent, while nationally the number of retail trade businesses increased about 1 percent.

Hoyt and Sidhu say that economic activity, measured by change in volume of total retail sales, also lagged behind in Minnesota as compared with the national average. Total retail trade sales in the state increased about 56 percent from 1948 to 1963, while nationally the increase was about 87 percent.

add 1 -- Minnesota trade

On the other hand, average sales per establishment showed a different aspect of the economic picture. In 1948, retail sales in Minnesota averaged about \$82,000 per establishment compared with a \$74,000 national average. In 1963, Minnesota retail sales per establishment in all regions of Minnesota remained above the national average.

Growth, represented by percentage increase in retail sales per establishment, also was higher in Minnesota than in the United States as a whole. The increase in Minnesota was about 70 percent, compared with a national average increase of about 52 percent.

A decline in the number of retail trade establishments occurred in most Minnesota counties, although many of the counties which form the suburban metropolitan area showed an increase.

This increase, Hoyt says, is related to a simultaneously heavy decline in the number of retail establishments in Hennepin and Ramsey Counties, particularly in the number of establishments located in the central core of the Twin Cities' congested business area. This decline occurred as retail trade establishments moved out from the central city areas to the suburbs.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 21, 1967

FOR RELEASE: Tuesday P.M., Aug. 22

BLOOD PRESSURE MAY BE FACTOR IN TURKEY DISEASE

Durham, N. H.--High blood pressure may be a major factor in the occurrence of natural aortic rupture in turkeys, a University of Minnesota scientist said here today (Aug. 22).

Speaking at the annual meeting of the Poultry Science Association, LaVerne Krista explained that since there is genetic variation in blood pressure it is likely that turkey breeders can reduce the incidence of this disease in their flocks by selecting birds on the basis of blood pressure.

Aortic rupture is a spontaneous and sporadic disease in turkeys, Krista said, and sometimes goes unnoticed. While economic losses due to the disease are not excessive for the turkey industry as a whole, they can be considerable for a single flock.

Krista, who is a research fellow in the University's Department of Animal Science, said that turkeys experience a tremendous increase in blood pressure from about 6 to 20 weeks of age. This is also the time of the highest mortality.

Various strains and varieties of turkeys differ in their average blood pressure, and display some extreme variations within specific groups. These factors suggest that blood pressure may be an inherited condition. Also, male birds have higher blood pressure and a higher death rate than do the females.

In his talk to the poultry scientists, Krista reported on a recent University of Minnesota study which shows a definite relationship between high blood pressure and the incidence of aortic rupture. Working with Krista on the research project were animal scientists Paul Waibel, Bob Shoffner and Jay Sautter.

In their study, three strains of Broad White turkeys were separated into high and low blood pressure groups. Over a three year period, about 7,000 birds from three generations were used.

(more)

add 1 -- blood pressure in turkeys

Results showed that both blood pressure differences and the mortality due to aortic rupture increased in successive generations; and considerably more birds died in the high blood pressure lines with each generation. In the first two generations, three and four times as many birds died due to rupture in the high blood pressure lines than in the low blood pressure lines.

In the third generation over a 12-week growing period, there was a seven percent mortality among the males of the high blood pressure line and no mortality in the group of low blood pressure males.

"At the present time," Krista told the group, "the only known harmful effect from high blood pressure in turkeys is the increase in aortic rupture. Poultry body weight, egg production, percent fertility and hatchability of fertile eggs for both high and low groups are the same in each generation."

Similar Minnesota studies will be conducted in the future to substantiate the experimental data gathered to date, and to attempt to determine if there is an optimum blood pressure for turkeys. The research is a development of the continuing work initiated in 1958 by Paul Waibel and B. S. Pomeroy, who investigated effects of diet and other factors on the cause of aortic rupture.

Krista feels that this research will not only be helpful for the turkey industry, but will also result in acquiring basic information which may help to understand a similar condition in humans.

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67-221-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 21, 1967

Immediate release

CORN, SOYBEAN FIELD DAYS SET

Dates for the corn and soybean field days at four University of Minnesota branch experiment stations have been announced by University officials.

The dates and locations of the field days, which will feature the state's two top row crops, are as follows:

- * September 12 at the Southern Experiment Station, Waseca.
- * September 13 at the Southwest Experiment Station, Lamberton.
- * September 14 at the West Central Experiment Station, Morris.
- * September 29 at the Agricultural Experiment Station, Rosemount.

Besides continuous tours of research plots, each experiment station will feature a corn and soybean disease and insect clinic. Farmers can bring specimens of insects and diseased plants. University specialists will be available to identify the specimens and answer questions.

Farmers, as well as growers, seed handlers and agribusiness people, will have an opportunity to learn about the latest developments in corn and soybean production. University bulletins on corn and soybean production will also be available.

Tours start about 9 or 10 a.m. at the stations and continue to about 2 or 4 p.m. Discussions will cover research on corn breeding work, time of planting corn, fertilizer trials, weed control, insecticides, row spacing and population studies.

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67-227-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 21, 1967

To all counties

Immediate release

DRYING AND STORAGE
DECISION IMPORTANT
FOR SHELLED CORN

The use of the picker-sheller and corn combine in harvesting corn has created added decisions for the farmer on artificial drying and storage facilities for the shelled corn, says Charles Cuykendall, University of Minnesota extension agricultural economist.

For maximum yield and minimum field losses, today's corn for grain should be harvested when the kernel moisture is 25 to 27 percent. Corn harvested in this condition requires artificial or natural drying to avoid spoilage, unless the corn is put into a silo.

A farmer has four alternatives for handling his corn:

- . Buy a dryer and absorb the ownership and operating costs, plus the cost of a storage system;
- . Sell wet corn directly from the field and take the moisture discount from the harvest time price;
- . Custom dry at the elevator and rent storage space there;
- . Place corn to be used as local livestock feed in silos as high moisture shelled corn or as whole plant silage.

Because of the rapid shift to harvesting shelled corn, a larger percent of the corn is moved directly to local elevators, Cuykendall says. These elevators are expanding their facilities, but often can't absorb the increasing harvesting capacities of large combines. The result may be trucks waiting to unload wet corn and large moisture discounts on wet grain taken in.

A moisture discount is put on corn to equalize the value of corn on a dry matter basis and as a charge to the farmer for the extra cost of handling and drying plus a risk factor for corn that is above 15.5 percent moisture.

A farmer can't avoid the shrink no matter how he markets his corn, but he should compare his costs and returns under the various alternatives available.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 21, 1967

To all counties

Immediate release

DHIA SUPERVISORS'
TRAINING COURSE
SET FOR SEPTEMBER

A training course for individuals interested in becoming Dairy Herd Improvement Association (DHIA) supervisors will be held September 11-15 on the University of Minnesota's St. Paul campus.

The week-long, school, sponsored by the University's Department of Agricultural Short Courses, is designed to train persons who want to become DHIA supervisors in Minnesota.

Instruction will include sessions on the DHIA dairy production record system, official testing, rules of the program and information on dairy feeding, breeding, culling and management, and the DHIA electronic central processing program.

Registration will be from 8 a.m. to 10 a.m., September 11, in the Dairy Extension Office in Haecker Hall, University of Minnesota, St. Paul. Classes begin as soon as the registration is completed.

Ask your county agent for more information on DHIA and the training course, or write to the Dairy Extension Office, University of Minnesota, St. Paul, Minn. 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 21, 1967

To all counties

Immediate Release

WINTER SUNSCALD
SHOWS UP ON TREES
DURING HOT WEATHER

The signs of winter sunscald are becoming more noticeable on apple, aspen, maple, mountain ash and white pine during the hot weather, says Joe Vargas, director of the University of Minnesota plant disease clinic.

Winter sunscald is caused by above freezing temperatures on sunny winter days, followed by freezing temperatures at night. It first appears as a split or discolored area on the south, south-west sides of the trunks of smooth-barked trees. During hot, dry weather the bark may begin to peel at this split, exposing the wood underneath.

If the exposed area is not cleaned and treated, insects can enter the wound and loosen more bark. This eventually can kill the tree. Vargas advises removing the loose bark around the split and painting the area with either a tree wound dressing or orange shellac.

Winter sunscald can be prevented during cold weather if the trunks of smooth-barked trees are wrapped with any material that shades the stems or reflects the sunlight, or if the trees are planted where shade from other trees affords protection.

Trees should not be wrapped until the temperatures begin to freeze, and the wrapping should be **removed** in the spring.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 21, 1967

To all counties
Immediate release

IN BRIEF.

Keep Record of Sales Tax Expenses: Minnesota farmers should keep accurate records of how much they pay for sales tax if they plan to deduct it on income tax returns. Charles Cuykendall, agricultural economist at the University of Minnesota, says the sales tax is deductible from state and federal income tax. Farmers can take either the standard deduction or claim the actual amount they paid in sales tax this year. If they claim the actual amount, farmers will have to have itemized receipts of purchases and amount of sales tax paid to back up their claim.

* * * *

Hot, Dry Weather Can Scorch Maples: A sudden loss of water from maple leaves during hot, dry weather may cause leaf scorch, says Joe Vargas, director of the University of Minnesota plant disease clinic. Affected leaves turn yellow or brown around the edge or between the leaf veins. The leaves may either remain on the tree or fall off prematurely. The best control method is to maintain the vigor of the trees through good pest control, spring application of standard garden fertilizers with minor elements when needed, and watering the trees during hot, dry periods.

* * * *

Remodeling Dairy Barn Requires Good Planning: Well-planned remodeling of old dairy barns can provide more comfortable and more adequate stalls for the cows, and make the work arrangement more convenient for the dairyman. However, Donald Bates, University of Minnesota extension agricultural engineer, says that remodeling a dairy barn requires a different approach than planning new construction because the dimensions of the building are already fixed. Farmers should not compromise the stall size recommended for new construction, and gutter width should not be less than 16 inches. Other dimensions, such as the litter alley and feed alley are flexible. For detailed information ask your county agent for University of Minnesota publication M-132, "How to Plan Your Stall Dairy Barn." Or, write for a copy to the Bulletin Room, University of Minnesota, St. Paul, 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 21, 1967

To all counties
ATT: HOME AGENTS
Immediate release

FAT CONTENT OF
HOME-BAKED GOODS
CAN BE CUT

Diet-conscious homemakers can leave up to half the fat out of cake batter, reduce the fat in home-baked muffins and pastry but still produce tasty products, reports Home Agent _____.

A typical cake recipe calls for about one part of fat for every four parts of flour. But now U. S. Department of Agriculture research shows that home cooks can successfully make up a batter with one part of fat for every eight parts of flour.

In tests conducted in the Agricultural Research Laboratories in Beltsville, Md., cakes with half the usual fat content looked as appealing as regular cakes to members of a taste panel. Volume of low-fat cakes was similar to that of standard cakes, indicating that proper rising was no problem. Cake volume dropped, however, when fat content was reduced to one part of fat for every eight parts of flour.

The taste and feel of the cakes with half the usual fat content rated a little lower than that of regular cakes.

Taste and tenderness were highest when the fat used was butter or margarine in the low-fat cake rather than other solid-type shortening.

Muffins and biscuits were also included in the tests. Muffins can be made with half the usual amount of fat, biscuits with two-thirds and pastry with three-fourths as much fat. Although taste panels noted a reduction in tenderness and flavor, they still found the products highly acceptable.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 21, 1967

To all counties
4-H NEWS
Immediate release

AGRONOMY PROJECT
MEMBERS STUDY
CROPS AND SOILS

4-H'ers enrolled in the agronomy project are studying the world of plants and the factors involved in growing and marketing a profitable crop.

Since crop production is big business in Minnesota, young people need to learn all they can about the scientific approach, says Wayne Carlson, assistant state 4-H club leader at the University of Minnesota.

The agronomy project is graded for beginners, intermediate and advanced members. The club member who decides to take the beginning unit in the agronomy project does not need to grow a crop. He may take crop production practice units which include learning to know seeds and plants, building a plant press, collecting weeds, legumes and grasses, making germination tests, soil test sampling and attending crop production field demonstration meetings. Specific requirements are included in each unit.

By the time the 4-H'er has advanced to the intermediate stage, however, he must grow at least 1 acre of corn, soybeans, small grains or forage. He also learns the use of fertilizer recommendations based on soil testing, the selection of the proper crop variety and management practices, the methods of weed control by timely cultivation and effective use of recommended herbicides.

The advanced 4-H'er is required to grow at least 5 acres of any one of the basic crops. He takes units which include methods of planting, rate of seeding and certified seed production.

Larry Hollerich, a 4-H'er from Good Thunder and the 1966 Club Congress delegate to Chicago in agronomy, coordinated a corn demonstration plot of various varieties, fertilizer grades and weed and insect control measure for his local club. He had also been involved in corn root worm surveys for the University of Minnesota, had tested soils, assisted in detasseling corn for a local seed company and had planted grain for wildlife feeding areas.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 24, 1967

Immediate release

TESTED BOAR SALE SET FOR SEPT. 8 AT WORTHINGTON

The Minnesota Swine Producers Association will sponsor another performance tested boar sale Friday evening (Sept. 8) at the Nobles County Fairgrounds in Worthington.

Sixty "on-the-farm" tested boars from all major breeds will be offered at the sale, scheduled to begin at 7:30 p.m.

"This is an excellent opportunity for producers and breeders who missed the Association's first sale at New Ulm in August to purchase top quality boars with complete performance records at reasonable prices," says Charles J. Christians, University of Minnesota extension animal husbandman and supervisor of the Minnesota Swine Improvement Program.

All boars must meet rigid requirements for growth rate, feed efficiency and meatiness to be eligible for the sale, he explains. Littermate market pigs tested at the testing station must have met carcass certification standards of less than 1.6 inches of backfat, more than 29 inches in length, more than four square inches of loin eye area and more than 14 percent ham of live weight.

According to Christians, these market pigs had to weight 200 pounds within at least 175 days and gain 100 pounds with less than 320 pounds of feed.

Sales manager Don Scheid reports that a minimum selling price has been established and no boars will be sold for less than \$85. Another boar sale will be held Sept. 29 at Sauk Centre.

For more information on the Worthington sale, contact either Don Scheid at Delavan, Minn., or Christians at 101 Peters Hall, University of Minnesota, St. Paul, Minnesota 55101.

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67-231-jbg

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 24, 1967

Immediate release

UM SCHOOL OF FORESTRY PUBLISHES CAREERS BOOKLET

Career opportunities in forestry are outlined in a special booklet released this week by the University of Minnesota School of Forestry.

The 10-page booklet, titled "Programs in Professional Forestry," discusses professional opportunities in forestry in four general areas--forest resources development, forest products engineering, forest products merchandising and forest science.

"These career breakdowns correspond to the forestry curriculums at the University," says Frank H. Kaufert, director of the School of Forestry.

"Various options within these curriculums, however, make it possible for students to broaden their training and enhance their employment opportunities."

Topics discussed in the booklet include what is forestry, career opportunities in forestry, the University's School of Forestry, courses of study, information for applicants and employment opportunities.

Under the subject of what is forestry, the booklet explains that forestry is a young profession and involves the art, science and business of managing forest lands.

(more)

add 1 -- forestry careers booklet

"Foresters are responsible for the management of forest, watershed, wildlife, recreation and range lands covering about one-third of the area of the United States," it says. "Graduates of forestry schools are also involved in the harvesting, processing, distribution and merchandising of forest products."

"The graduate forester is a professional--he is both a scientist and an administrator. His training for the first two years consists of a broad background of the liberal arts . . . while the last two years are set aside for professional forestry and forest products courses."

The University's School of Forestry, the only professional forestry school in the state, has a faculty of 30 staff members, and an annual enrollment of 400-450 undergraduate students and 65-75 graduate students.

Kaufert urges persons interested in forestry education to write to the School of Forestry, College of Agriculture, Forestry and Home Economics, University of Minnesota, St. Paul, Minn. 55101. Ask for a copy of "Programs in Professional Forestry."

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67-230-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 24, 1967

Immediate release

ACTIVITY MAY BE KEY TO YOUR WEIGHT

If you're getting nowhere losing those extra pounds because you can't seem to cut enough calories from your diet, try exercise.

Physical activity can be the key to maintaining weight or losing it. If you exercise less, you must eat less if you want to avoid gaining weight, says Grace Brill, extension nutritionist at the University of Minnesota.

On the other hand, regular exercise--which needn't be strenuous--can be effective in maintaining your weight or losing some poundage, and you can still eat enough to be satisfied.

The extension nutritionist gives as an example an overweight woman whose daily food provides her with just enough calories to maintain her weight. If she substitutes for one hour of sitting-down activities an hour of moderately active work around the house, she will use up about 90 more calories a day. If she continues this hour of moderate activity each day and eats as she has been eating, she will lose about 9 pounds in a year, provided there is no other change in her activities.

If she adds a second hour every day of active recreation, shifting from activities done while sitting, she will use up an additional 170 calories a day.

Long hours spent in strenuous exercise are not necessary to keep weight under control; in fact, for many persons they are not recommended, Miss Brill points out. However, she urges everyone to take advantage of daily opportunities to increase activities--for example, walking rather than riding whenever possible.

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67-238-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 24, 1967

Immediate release

UM NAMES MANAGER OF LAKE ITASCA RESEARCH STATION

Louis H. Wetzel, who has served on the Bemidji police force for the past year and a half, assumed duties earlier this week as the new resident manager of the University of Minnesota Lake Itasca Forestry and Biological Station.

Wetzel was appointed to the position by Sherwood O. Berg, dean of the University's Institute of Agriculture. As resident manager, he will be responsible for all phases of Station management.

Wetzel is a former summer resort owner, retail lumber dealer and home builder. Before joining the Bemidji police force, he operated a lodge near Tenstrike, Minn., was co-owner of a lumber yard and a home building firm in Kansas City, Missouri. Before that he was a manufacturing representative for Minnesota Mining and Manufacturing in St. Paul.

A native of North Kansas City, Mo., Wetzel is married and a graduate of Kansas City Junior College with an associate arts degree.

The Lake Itasca Forestry and Biological Station is located in Itasca State Park. It has been operated by the University since 1909, and serves as a year-round research center and as a site for field courses in forestry and biology. The Station was used as a forestry camp until 1934 when its use was increased by adding a summer session in biology.

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67-229-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 28, 1967

To all counties
Immediate release

IN BRIEF.

Pests and Parasites of Hogs Affect Profits. Hog producers should pay careful attention to internal and external pests and parasites of hogs, says Dr. Raymond B. Solac, University of Minnesota extension veterinarian. Hogs infected with pests and parasites are likely to gain poorly and carcasses may be downgraded, resulting in poor profits at market time. The efficient swine producer should take strong measures for the prevention and control of these pests and parasites in his management plans.

* * * *

Herd Evaluation Aids Boar Selection. A commercial breeder must know his herd's strong and weak points when selecting a boar, says Charles J. Christians, University of Minnesota extension animal husbandman. To assist in herd evaluation and productive gilt selection, a producer should consider the following procedures in his breeding program. At farrowing time notch the ears of pigs from outstanding litters and record birthdate. After weaning, enter a pen of market pigs at a testing station to evaluate feed requirement and meatiness of herd, and keep feed requirement information on a representative group or groups of hogs. When pigs reach 175-200 pounds, sort ear-notched gilts from the market herd, reject off-type and unsound gilts, and make final selections on the basis of type and available records.

* * * *

Control Lice in Cattle During the Fall. Farmers should control lice on their dairy cows or beef cattle in the early fall. John Lofgren, University of Minnesota extension entomologist, says lice are costly freeloaders on dairy cows and beef cattle. Bloodsucking and irritating actions of lice result in reduced milk flow and lowered weight gains. Also, heavy infestations of bloodsucking lice cause anemia and often the death of the host animal. To avoid winter problems with lice, farmers should treat the entire herd for lice every fall. For more information ask your county agent for Entomology Fact Sheet No. 5, "Controlling Cattle Lice."

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 28, 1967

To all counties
Immediate release

CHRISTMAS TREE
GROWERS SCHEDULE
MEETING SEPT. 16

Christmas tree management will be the featured topic during the annual meeting of the Minnesota Christmas Tree Growers Association, September 16, at the Pine Edge Inn in Little Falls.

The meeting begins with a business session at 9:30 a.m., followed by a series of talks by Minnesota Christmas tree growers on topics related to Christmas tree management.

Marvin Smith, extension forester at the University of Minnesota, said topics of the speeches include control of competing vegetation, site preparation, care and handling of planting stock, pricing and marketing, and recruiting and management of field labor. In the afternoon a field tour will be conducted to points of local interest.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 28, 1967

To all counties
Immediate release

RULES CHANGED
ON INTERSTATE
HOG SHIPMENTS

Pigs treated with either anti-hog cholera serum alone or anti-hog cholera antibody concentrate alone now can be shipped across state lines under a change in interstate shipping rules, says the USDA.

These revised rules will permit shipments of vaccinated hogs into states where long-term protection is no longer necessary because of progress made in eradicating hog cholera, but where short-term protection is desirable.

However, Dr. Raymond B. Solac, University of Minnesota extension veterinarian, reminds Minnesota hog producers that recent state legislation prohibits the use or sale of modified live hog cholera vaccine after January 1, 1968, except when the Minnesota Livestock Sanitary Board permits use or sale to protect the health of domestic animals or to qualify animals for export to other states and foreign countries.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 28, 1967

To all counties

Immediate release

BE ALERT FOR RABIES
IF ANIMALS SHOW
ABNORMAL BEHAVIOR

Animal owners should consult their veterinarian if a pet or domestic animal shows abnormal behavior or changes in behavior because such changes can be the first sign of rabies.

Dr. Raymond Solac, University of Minnesota extension veterinarian, says there is no easy way to recognize a rabid animal. Without proper veterinary consultation the animal's owner may confuse rabies with other illnesses, thereby exposing himself to needless danger.

Many animals, such as cattle, horses, swine and cats become more vicious when rabid. However, this is not true of all animals.

For example, Solac says the term "mad dog" gives a false picture of rabies in many cases. A dog either may become vicious, or he may appear sleepy and listless and crawl away from his master and other animals. With either symptom, as the disease progresses swallowing becomes more difficult, the lower jaw may drop and saliva drools from the mouth.

Solac suggests these precautions with animals:

- . Make sure pets are vaccinated for rabies and identified by a license tag and a rabies inoculation tag.
- . Keep very young children away from animals. Teach them to handle and care for pets properly, and not to bother animals while eating. And, warn them not to play with strange pets.

-more-

add 1 -- be alert for rabies

. Avoid handling any wild animal, particularly if it appears tame. Skunks and other wild animals often lose their fear of man when rabid, and may actually follow and attack people, pets, and other animals.

. If bitten by an animal, cleanse the wound thoroughly with soap and irrigate with profuse quantities of running water. Contact your physician, board of health, or police department immediately. Confine, do not kill, the animal. And, report any stray dogs to the police or local pound.

. Be careful in helping injured or sick animals.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 28, 1967

To all counties
Immediate release

COMPARE CORN AND
SOYBEAN VARIETIES
FOR 1968 THIS FALL

Farmers should begin thinking about corn and soybean varieties for 1968 this fall when they can see field trials to compare the different varieties.

Harley Otto, University of Minnesota extension agronomist, says successful crop production depends to a considerable extent on selecting the best varieties.

Many county agents and most commercial seed companies have trial plots.

And, Otto reminds farmers of the trials at many state experiment stations. He says the fall corn and soybean field days at these stations will give the farmer the chance not only to compare varieties, but to discuss varieties and crop problems with agricultural specialists from the University of Minnesota.

Dates for fall corn and soybean field days are: September 12 at the Southern Experiment Station, Waseca; September 13 at the Southwest Experiment Station, Lamberton; September 14 at the West Central Experiment Station, Morris; and September 29 at the Agricultural Experiment Station, Rosemount.

Farmers should ask their county agent for further information on the location of demonstration plots. And, ask him for copies of University of Minnesota Miscellaneous Report 24, "Varietal Trials of Farm Crops," and Miscellaneous Report 28, "Corn Performance Trials."

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 28, 1967

To all counties
ATT: HOME AGENTS
Immediate release

**STUDENTS WHO EAT
BREAKFAST ARE
EQUIPPED FOR DAY**

Better Breakfast Month, each year in September, is a reminder to mothers of the importance of sending children off to school with a good breakfast, says Home Agent

"Better breakfasts make better students" is the theme being emphasized this year. Studies of school children and young adults have shown that a good breakfast makes a person more alert, increases the work output and helps prevent the fatigue and decreased mental and physical efficiency experienced by many breakfast skippers or skimpers.

Then why do so many people skip breakfast? Grace Brill, extension nutritionist at the University of Minnesota, says there are many reasons. Breakfast skippers may not realize the importance of breakfast, or they don't allow enough time to prepare and eat breakfast before rushing off to work and school. Many school children who don't eat breakfast say no one prepares it for them.

Yet nutritionists consider breakfast the most important meal of the day. That's because 12 hours or more have elapsed since the last meal; consequently there is need for food to supply calories for energy and to furnish the nutrients needed to carry on the day's activities.

A doughnut and a hurried cup of coffee do not make a good breakfast. A good breakfast should provide from a fourth to a third of the day's food requirements in essential nutrients as well as calories, according to Miss Brill.

Breakfast, she points out, is a good time to include a food rich in vitamin C, the vitamin that must be replenished in the body each day. Citrus fruits, strawberries, cantaloupe and fresh or canned tomatoes all furnish vitamin C. Breakfast should also feature a good source of protein like eggs, meat or milk to help meet the needs for body building and repair. Breads and cereals at breakfast provide the important B vitamins and iron and supply quick energy needed for the day.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 28, 1967

To all counties
4-H News
Immediate release

WEED CONTROL
CONTEST SET
FOR 4-H'ERS

4-H members in _____ County who have controlled weeds effectively on the home farm may be in line for a cash award by entering the 1967 Weed Control Essay Contest, announces County Agent _____.

Any boy or girl between the ages of 12 and 18 (and not over 18 on Dec. 1, 1967) may enter the contest whose family is actively engaged in managing and operating a farm.

Contestants must write an essay on the subject "How We Control Weeds on Our Farm," telling of practices they have used in weed control and plans for the future. The essay should not exceed 1,000 words in length. It should be typewritten or written in ink on one side of the paper only.

The essay will be judged 75 percent on subject matter and 25 percent on the way it is presented.

The manuscript must be in the county office by _____
(date)

The state winner will receive a \$25 award. Winners of the top-scoring essays in the states and Canadian provinces in the North Central Weed Control Conference will compete for a \$300 scholarship.

The North Central Weed Control Conference is sponsoring the contest.

Wayne Carlson, assistant state 4-H leader at the University of Minnesota, suggests some helpful references for contestants: University of Minnesota Extension Bulletin 327, Agricultural and Food Chemicals Today; Extension Bulletin 329, Controlling Canada Thistle; and Extension Folder 212, Cultural and Chemical Weed Control in Field Crops. These publications are available from the county extension office.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
August 28, 1967

To all counties
4-H NEWS
Immediate release

4-H REGIONAL
HORSE SHOWS
THIS MONTH

_____ County will be represented by _____ 4-H exhibitors at the
(No.)
regional 4-H horse show in _____ on Saturday, Sept. 16.

Exhibitors include: (give names and addresses)

The show in _____ will be one of five regional 4-H shows in Minnesota.

Judging will begin at 10 a.m. with the halter class, announces County Agent
_____, but exhibitors should be at the fair grounds by 9:30 a.m.

To exhibit in the regional show, a 4-H'er must have placed in the blue or purple group in either the halter or performance class in a county event. Each club member must exhibit his or her own mare or gelding and may exhibit only one horse.

Exhibitors may enter the halter class, to be shown by breeds, and the performance class, including horsemanship, pleasure and Western riding. The Western riding class is a competition in the performance and characteristics of a good, easy moving ranch horse.

Participants do not enter halter showmanship. Instead, they are selected by the judge during judging of the halter class and are invited to compete in the halter showmanship contest. A trophy will be given to the top halter showman.

Trophies will be awarded to the top exhibitor in halter showmanship and in horsemanship. No special breed ribbons or cash premiums will be awarded.

The public is invited to attend the regional horse show.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 29, 1967

Immediate release

PROMOTIONS ANNOUNCED AT UM INSTITUTE OF AGRICULTURE

Seventeen faculty promotions and four administrative changes in the University of Minnesota Institute of Agriculture were announced today by Dean Sherwood O. Berg.

Professor Richard A. Skok has been named assistant director of the School of Forestry and in the same school Associate Professor Kenneth E. Winsness has been named assistant to the director. In the School of Home Economics, Professor Roxana R. Ford went from assistant director of the school to associate director, and Associate Professor Lois A. Lund became assistant director.

The faculty promotions, by department, are as follows:

Agricultural economics: James P. Houck, Jr., and Dale C. Dahl to associate professor; Charles H. Cuykendall to assistant professor.

Agricultural engineering: Roger E. Machmeier to associate professor.

Agronomy and plant genetics: Lawrence H. Smith to professor; William A. Brun to associate professor.

Animal science: J. William Mudge and Donald E. Otterby to associate professor.

Entomology, fisheries and wildlife: Phillip K. Harein to professor.

School of Home Economics: Margaret P. Grindereng to associate professor in the division of textiles and clothing.

Horticultural science: Robert Mullin to associate professor.

Rhetoric: Edward B. Savage to associate professor; Sarah E. McBride to assistant professor.

Soil science: Russell S. Adams, Jr., and Lowell D. Hanson to associate professor; George E. Ham to assistant professor.

Agricultural short courses: LaVern A. Freeh, head of the department, to professor.

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67-232-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 29, 1967

Immediate release

4-H REGIONAL HORSE SHOWS IN SEPTEMBER

Five 4-H regional horse shows have been scheduled in Minnesota for Saturday, Sept. 16, Wayne Carlson, state 4-H leader at the University of Minnesota, announced today.

The horse shows will be held on the fairgrounds in Pine City, Detroit Lakes, East St. Cloud, Albert Lea and Slayton.

Eligible to enter the regional shows are 4-H members enrolled in the horse project who have won blue or purple ribbons in either the halter or performance class in a county event.

Last year some 4-H members participated in regional horse shows.

The public is invited to attend the regional events.

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67-233-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 29, 1967

Immediate release

DOGS, HORSES TO BE DISCUSSED AT VETERINARY MEETING

Dogs and horses will come under the spotlight during discussions at a special joint symposium and conference for veterinarians October 11-12 on the University of Minnesota St. Paul Campus.

The Gaines Symposium, sponsored by the Gaines Dog Research Center of New York City, will be held in conjunction with the annual Veterinarians Conference for veterinarians from Minnesota and neighboring states.

The 17th Annual Symposium, which has been held at colleges and universities throughout the country, will feature current research on dog diseases, problems and nutritions. Subjects include cancer, shock and reaction to injury, distemper and genetics of hip displasia.

The Veterinarians Conference, sponsored by the University's College of Veterinary Medicine, will be devoted entirely to horses. Subjects to be discussed include wire cuts and lacerations, lameness in pleasure horses and preventative medicine.

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67-234-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 29, 1967

Immediate release

NEW OUTBREAKS OF HOG CHOLERA REPORTED

New outbreaks of hog cholera have been reported in seven Minnesota counties, bringing the total outbreaks this year to 33. This is an increase of 10 cases since late May.

Lincoln County reported three outbreaks, while Redwood reported two outbreaks, and Rice, Freeborn, Fillmore, Dakota and Jackson reported one new case each. No cases had previously been reported from Lincoln, Redwood, Dakota and Rice counties.

Almost all of the counties reporting hog cholera outbreaks are in the southern third of the state.

As of August 24, four cases had been confirmed in Steele County, three in Lincoln County, two cases each in Cottonwood, Yellow Medicine, Nobles, Goodhue, Mower, Waseca, Redwood, Jackson, Freeborn and Fillmore, and one case each in McLeod, Watonwan, Houston, Isanti, Rice and Dakota.

Dr. Raymond B. Solac, extension veterinarian at the University of Minnesota, says most of the hog cholera in Minnesota this year has been of a chronic rather than virulent type. The chronic form results in a somewhat lower death loss.

However, he says the increase in outbreaks shows the need for greater vigilance in controlling this problem. He suggests that hog producers buy replacements only from cholera-free or vaccinated herds. And, consider hog cholera a possibility if any sick pigs are noticed.

Legislation passed by the state legislature this year prohibits the use or sale of modified live hog cholera vaccine after January 1, 1968, except when the Minnesota Livestock Sanitary Board permits use or sale to protect the health of domestic animals or to qualify animals for export to other states and foreign countries.

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67-235-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 31, 1967

Immediate release

COW'S SIZE HAS LITTLE TO DO WITH PRODUCTION, UM PROF SAYS

The widespread belief among dairymen that bigger cows produce more milk does not hold true in studies by University of Minnesota animal scientists.

Research with experimental breeding herds at three agricultural experiment stations in the state shows only a minor relationship between a cow's weight and body measurements and her milk production. Big cows produced only slightly more milk than smaller cows of the same breed.

"This means," says Charles Young, associate professor of animal science, "that dairymen would be wise to select their bulls and replacement females on the basis of production records and let size take care of itself."

At the present time, many breed associations and leading breeders encourage and practice selection for size.

"There seems to be no justification for this," Young says. "If a dairyman makes his selection mainly for size he has less opportunity to select for high production. The result is that he gets bigger cattle, but ones that are less productive."

(more)

add 1 -- cow's size

Young points out, however, that big dairy cows do have certain advantages. For example, since a taller cow is higher off the ground, she is easier to milk. Studies also show that taller cows are less prone to contract mastitis.

It is also believed that large cows tend to stay in the herd longer than small ones. Young says he cannot confirm or refute this point but that it is currently being studied at Minnesota.

Another widespread belief about big cows is that the larger cows consume more roughage and make more milk from feed of lower value. Again, Young says he cannot agree or disagree, but adds that studies to determine whether size and roughage utilization are related are currently being conducted at the Northwest Experiment Station at Crookston.

Results of these studies will not be available for several years since it will take that long to get complete records of feed intake and milk output for big and little cows now being bred.

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67-237-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 31, 1967

Immediate release

PROPER SANITATION NEEDED TO CONTROL FLIES AND BEETLES

Troublesome fruit flies, house flies and picnic beetles can be controlled this time of year with proper sanitation and chemical methods when needed.

During the summer these pests are found on ripening, damaged or rotting fruits and vegetables in the garden. The insects become more of a household problem as garden products are brought into the home and cool weather approaches.

Edmund Olson, assistant extension entomologist at the University of Minnesota, suggests picking all fruits and vegetables as they ripen, and removing and destroying all used fruits and vegetables and canning wastes.

A household aerosol bomb containing Pyrethrins or DDVP spray or DDVP as a plastic resin strip will reduce the number of adult flies in a building.

For control of beetles use a spray of either malathion or carbaryl (Sevin) at the rate of one pound of actual toxicant per acre. For small areas use two tablespoons of 25 percent malathion wettable powder, or one tablespoon of 50 percent Sevin wettable powder per gallon of water, or two teaspoons of 50 percent malathion emulsion concentrate per gallon of water. A four percent malathion dust also may be used.

Handle all insecticides carefully. Avoid spilling, and carefully read and follow directions on the label.

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67-238-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 31, 1967

Immediate release

UM FORESTRY STUDENTS STUDY AT ITASCA STATE PARK

Seventy-seven University of Minnesota forestry students are taking part this summer in a special field training session at the University's Forestry and Biological Station in Itasca State Park near Park Rapids.

The students, all of whom will be juniors this fall in the School of Forestry, are enrolled in either the forest resources development curriculum or forest science curriculum at the University.

The intensive training session on the 30,000 acre tract includes courses in forest botany, field ecology, measurements, soils and recreation area management. In addition, the students attend classroom and laboratory sessions and take trips to public and private forestry operations in the area.

According to Frank Kaufert, director of the School of Forestry, the training session has been held at Itasca State Park each year since 1909. It is designed to provide students with important field biology and management experience, which is prerequisite to much of their course work at the University.

The session began August 21 and will end September 22. In charge is Al Hallgran, University forestry instructor. Faculty members include forestry professors Edward Sucoff and Henry Hansen, instructors Harold Scholten and Sidney Frissell, and Paul Rudolph, who retired recently from the U. S. Forest Service's North Central Forest Experiment Station.

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67-239-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
August 31, 1967

Immediate release

RETIRED UM PROF RECEIVES NATIONAL AWARD

E. C. Stakman, professor emeritus and former head of the University of Minnesota's Department of Plant Pathology, received the exclusive Award of Distinction last week from the American Phytopathological Society at its annual meeting in Washington, D.C.

Stakman, who retired in 1953 after 44 years on the faculty, is recognized as one of the world's foremost authorities on rusts and other diseases of cereal grains.

The Award of Distinction is given only when the awards committee feels the Society has in its membership a distinguished scientist who has made exceptional contributions to plant pathology in particular, and to low food production, biology and science in general.

At the same meeting, M. F. Kernkamp, professor and head of the Department of Plant Pathology, was named to a three year term as treasurer and business manager of the Phytopathological Society.

Earlier this summer, C. J. Eide, professor of plant pathology, was honored by the Potato Association at its meeting in Presque Isle, Maine for his contributions to the knowledge of potato diseases and their control. He was awarded an honorary life membership in the Association.

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67-236-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 1, 1967

To all counties
Immediate release

STALL SIZE IS
IMPORTANT IN
DAIRY BARN

Dairymen who are either building new dairy barns or remodeling old barns should be sure stalls are long enough to allow cows to lie down with their udders well up on the platform.

Donald Bates, University of Minnesota extension agricultural engineer, says small stalls are directly responsible for many teat and udder injuries that can ruin cows.

Farmers should not plan stalls on the basis of minimum stall sizes for their present herd because the average size of a dairy cow is increasing. Stalls that may be adequate now may be too small in a few years.

An easy way to determine the proper length of a stanchion stall is to measure the distance from the shoulder to the tail setting of several representative cows, and add three inches. For example, if the average measured distance is 63 inches, add three inches for the desired platform length for a stanchion stall for that breed. Dairymen may wish to have stalls of two different sizes to accommodate large and medium-size cows.

For chain-tie stalls, add 9 inches to the measured length of the cow.

And, Bates says be sure the platform width is consistent with the length. Stalls of proper width contribute to the cow's comfort and allow the operator freedom of movement while serving the animals at milking time.

As a general rule, platform width should be about 80 percent of the measured length of the cow.

Bates says some manure may be dropped on the platform, but it is a fallacy to put in short platforms with the idea that they will automatically remain clean because of the length.

Clean cows result from the use of plenty of bedding and from reasonable care. The use of properly adjusted cow trainers is essential.

For more information, ask your county agent for a copy of University of Minnesota publication M-132, "How to Plan Your Stall Dairy Barn." Or, write for a copy to the Bulletin Room, University of Minnesota, St. Paul, Minnesota, 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 1, 1967

To all counties
Immediate release

WATCH PERFORMANCE
RECORDS WHEN BUYING
HOG BREEDING STOCK

Hog producers should look at performance records when selecting breeding stock, says Charles J. Christians, extension animal husbandman at the University of Minnesota.

Breeding stock should come from litters with at least eight pigs raised. Boars should reach 200 pounds in 150 days or less, gilts in 165 days or less. Less than 300 pounds of feed should be required for each 100 pounds of gain for boars, while sows should have less than 325 pounds.

Littermates of boars and gilts should have a carcass length of at least 29 inches, a backfat thickness of 1.6 inches or less, and a loin eye area of at least 4 square inches. The percent ham and loin should be at least 25 percent of the liveweight and at least 36 percent of the carcass weight.

The probed backfat should be less than 1.3 inches at 200 pounds, preferably under 1.1 inches for boars, and not over 1.3 inches at 200 pounds for gilts.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 1, 1967

To all counties
Immediate release

IN BRIEF

Control Insects and Other Household Pests. Homeowners can reduce the number of invading insects this fall by caulking cracks in the building's foundation and around doors and windows, by having properly fitting screen doors and windows, and by using a dieldrin or chlordane spray or a 5 to 10 percent chlordane dust. Edmund Olson, University of Minnesota assistant extension entomologist, suggests mixing $\frac{1}{2}$ pint (1 cup) of the 45 percent chlordane or the 15 percent dieldrin emulsifiable concentrate per gallon of water, and applying this liberally to the foundation, especially around basement windows and other openings. This will help control beetles, sowbugs, millipedes, boxelder bugs, clover mites, crickets, ants, and other insects that plague homeowners during the fall and spring.

* * * * *

Improved Swine Breeding Methods Aid Producers. Many important economic traits in hogs can be improved through breeding, says Charles J. Christians, University of Minnesota extension animal husbandman. Such improvement, though often slow, is important because a portion of it is passed on to future generations. When deciding which traits are important in a breeding program, consider these points. Select traits that are highly inheritable such as carcass length, backfat thickness, loin eye area and percent ham (based on a liveweight basis). Emphasize economic traits such as sow productivity, feedlot performance, physical soundness and carcass merit. Select traits that are correlated or related. For example, selection for daily gain gives a corresponding improvement in feed efficiency.

* * * * *

Producing clean eggs from caged layers is not difficult with properly designed cage layout and good management practices, says Melvin Hamre, University of Minnesota extension poultry specialist. An egg producer should pay attention to these points: keep the hen house dry with proper insulation and ventilation; use routine maintenance to correct sagging cages or bent wires which prevent eggs from rolling into the egg trough; prevent breakage and soiling by frequent egg gathering; and reduce the number of eggs with wire marks by routinely brushing the egg trough wires.

* * * * *

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 1, 1967

To all counties
Immediate release

FREEZE BRANDING CAN
BE USED TO IDENTIFY
INDIVIDUAL CATTLE

Under Minnesota branding law, all registered herd brands must be burned into the hide with a hot iron. However, individual cattle can be permanently identified by a new technique called freeze branding.

Charles J. Christians, University of Minnesota extension animal husbandman, says super-cold branding destroys the pigment-producing cells in the animal's skin without destroying the hair follicle. Eventually the new hair regrowth appears white over the branded area.

Freeze branding causes little pain to the animal, and the brand maintains its legibility during all seasons of the year, permitting greater visibility of the animal from a distance.

Further, minimum scar formation is produced with this method, which means less dockage from hide damage in contrast to the hot branding technique. Freeze branding also reduces the possibility of bacterial infection and skin irritation by external parasites.

For further information on freeze branding, ask your county agent for University of Minnesota extension Bulletin 341, "Freeze Branding Cattle." Or, write to the Bulletin Room, University of Minnesota, St. Paul, Minnesota 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 1, 1967

To all counties
ATT: HOME AGENTS
Immediate release

BREAKFAST CAN
BE INTERESTING

"Breakfast! Who wants to eat that dull meal?"

If that's the reaction of members of your family, September Better Breakfast Month is a smart time to review the breakfasts you serve, as well as the family's breakfast habits.

When the family tires of orange or tomato juice, egg and toast or cereal, coffee or milk use your imagination to add some variety to this important first meal of the day, urges Grace Brill, extension nutritionist at the University of Minnesota.

Take advantage of seasonal fruits to serve them at breakfast. Melon in season makes a delicious starter for the day. Half a cantaloupe will provide nearly the day's requirement for vitamin C. Or serve mixed fruits -- oranges and bananas, for example -- or a combination of such juices as cranberry and orange. Fresh peaches or fresh berries can perk up cereals. Dried fruits like apricots, dates and raisins are interesting additions to quick breads.

Hot muffins and other quick breads can stimulate appetites and add pleasing variety to breakfast. They can be made from a mix when time is precious.

For the family member who is in a hurry, an egg nog will supply energy and food value.

Many foods which might be thought of as lunch or dinner foods can be served at breakfast. Miss Brill mentions soup, sandwiches, perhaps made with cheese or left-over beef and chicken and even pie and ice cream.

On Sundays and holidays, make breakfast a special meal by serving some of the foods that take more time to prepare like pancakes, waffles or French toast. A pleasing variation to serve on pancakes is an apple and honey sauce made by blending 2 cups of apple pie filling with $\frac{1}{2}$ cup of honey and $\frac{1}{2}$ cup of butter. Heat and serve over your favorite pancakes.

Department of Informatinn
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 1, 1967

To all counties
4-H NEWS
Immediate release

4-H FILLERS

The national membership in 4-H is now 2,371,500 -- an increase of 8.5 percent over last year. In addition, some 504,747 other youth are served by extension educational programs during the year.

* * * *

Today, some one and a third million members are enrolled in 4-H home economics projects. The 45-year-old national 4-H home economics program stresses consumer education, clothing, foods and nutrition and home improvement-family living.

* * * *

The national 4-H clothing program annually enrolls about three-quarters of a million girls from 9 to 19 years of age. Many mothers of today's members learned to sew when they were enrolled in this program, now in its 27th year.

* * * *

City kids as well as farm kids get a lot of enjoyment out of 4-H photography projects -- in fact more than 70,000 4-H boys and girls are now learning step-by-step techniques of good picture taking.

* * * *

More than 25 million 4-H alumni, one of six American adults, have benefited from their 4-H experience. They are engaged in a wide variety of vacations and avocations and serve as living examples of dependable, purposeful citizens.

* * * *

A Minnesota 4-H club has won an award of Merit from the National Safety Council-- the Subettes 4-H club in St. Louis County. It is one of four 4-H groups in the nation to receive the National Safety Council's youth award for meritorious service in the prevention of accidents.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 5, 1967

Immediate release

INSTITUTE OF AGRICULTURE CALENDAR OF EVENTS

SEPTEMBER

- 7 AGRICULTURAL PESTICIDES SHORT COURSE, St. Paul
- 7-8 AGRICULTURAL ENGINEERING EXPERIMENT STATION
 CONFERENCE, Grand Rapids
- 9 TREE FARM FIELD DAY, Grand Rapids
- 11-12 MINNESOTA NUTRITION CONFERENCE, Holiday Inn Central,
 Minneapolis
- 11-16 D.H.I.A. SUPERVISORS SHORT COURSE, St. Paul Campus
- 12 CORN AND SOYBEAN FIELD DAY, Southeast Experiment
 Station, Waseca
- 12-13 N.E. MINNESOTA JR. LIVESTOCK SHOW, Duluth
- 12-14 DAIRY PRODUCTS INSTITUTE AND SANITARIANS
 CONFERENCE, St. Paul Campus
- 13 CORN AND SOYBEAN FIELD DAY, Southwest Experiment
 Station, Lamberton
- 14 CORN AND SOYBEAN FIELD DAY, West Central Experiment
 Station, Morris
- 16 FRUIT FARM VISITORS DAY, Excelsior
- 16 ANNUAL MEETING MINNESOTA CHRISTMAS TREE
 GROWERS ASSOCIATION, Little Falls
- 19 COMMERCIAL FLOWER GROWERS SHORT COURSE,
 Student Center, St. Paul Campus
- 21 MINNESOTA BEEF CATTLE FEEDERS FIELD DAY,
 Agricultural Experiment Station, Rosemount
- 21 LOGGING EQUIPMENT DEMONSTRATION FIELD DAY,
 Cloquet

(more)

add 1 -- September calendar of events

- 25-27 JR. MARKET LIVESTOCK SHOW, St. Paul State Fairgrounds
29 STUDENT CENTER OPEN HOUSE, 8 a.m. - 10:30 p.m.,
Student Center, St. Paul Campus
30 - Oct. 7 4-H NATIONAL WEEK

MINNESOTA ASSOCIATION OF COOPERATIVES MEETING

- 14 St. Paul
18 Rochester
19 Mankato
20 Fulda
21 Montevideo
22 Cologne
25 Thief River Falls
26 Bagley
27 Pelican Rapids
28 Morris
29 Sauk Centre

REGIONAL 4-H HORSE SHOWS

- 16 Pine City, Detroit Lakes, East St. Cloud, Albert Lea, Slayton

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67-242-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 5, 1967

Immediate release

NICOLLET AND WRIGHT CO. 4-H'ERS WIN LIVESTOCK DEMONSTRATIONS

Two teenage 4-H members won purple ribbons Labor Day at the Minnesota State Fair with their demonstrations using live animals.

Ruth Klossner, 19, New Ulm, showed how to prepare and show a dairy animal to win her demonstration. The Nicollet County 4-H'er is a sophomore at the University of Minnesota.

Mike Carlson, 18, Cokato, gave his winning demonstration on how to block a sheep.

Blue ribbon winners in the final day of 4-H fair demonstrations were:

Dairy (with live animals): Susanne Bruggeman, Thief River Falls; Daniel Deml, Owatonna; Jerome and Robin Booren, Marine-on-the-St. Croix; Gloria Stock, St. Charles.

Livestock (with live animals): Marilyn Rew, Savage; Linda Hayes, Lafayette; Rick Demmer, Ellendale; Marlys Rupprecht, St. Charles; Sandi and Kathy Mueller, Inver Grove Heights; Susan Johnson, Balaton; Jennifer Larson, Rochester; Brian Loose, Pipestone.

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67-241-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 5, 1967

Immediate release

UM TO HOST SESSIONS ON DAIRY PRODUCTS, SANITATION

Manufactured milk products will be the subject of opening-day sessions at the Dairy Products Institute and Sanitarians Conference September 12-14 on the University of Minnesota's St. Paul Campus. Over 250 dairy processors and sanitarians will attend the three-day conference.

First-day speakers will concentrate on current public health problems, quality programs, dairy imports, butter and cheese making, and electronic milk testers. Program speakers include experts in research and development of dairy products from industry, government agencies and universities.

Registration will be at 8:30 a.m. in the Food Science and Industries Building for persons attending the entire course or only first-day sessions. Persons attending only on September 13 or 14 should register on those days at 8 a.m. in the same building. Fee for the whole course is \$9 and \$4 for one day.

(more)

add 1 -- dairy products and sanitation

Second-day sessions focus on market milk and ice cream and feature discussions of simulated dairy products, the keeping quality of fluid milk products, microcrystalline cellulose in frozen desserts, and spray-dried fruit products, plus a clinic on the flavor of lowfat and skimmilk products and another on ice cream.

The Sanitarians Conference runs September 14. During the morning, two sections are scheduled simultaneously--one for fieldmen and one for persons interested in environmental sanitation. A general session will take up the afternoon.

The fieldmen's section will consider milk house planning and construction, farm sewage disposal, programs in controlling abnormal milk and how to increase the effectiveness of fieldmen.

Topics for discussion on environmental sanitation include the microbiology of food dishes in restaurants and cafeterias, air pollution sampling equipment, engineering aspects of fluoridation, and the recent Supreme Court ruling on the right of entry.

Scheduled for the afternoon general session are discussions on communications, milk sanitation in Australia and New Zealand, 1967 state laws on milk and food regulation, and a business meeting of the Minnesota Sanitarians Association.

The Dairy Products Institute is being sponsored by the Department of Food Science and Industries in cooperation with the Agricultural Extension Service and the Department of Agricultural Short Courses.

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67-240-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 7, 1967

Immediate release

WEED CONTROL CONTEST FOR 4-H MEMBERS

The 1967 Weed Control Essay Contest is now open to 4-H members in Minnesota.

Sponsor of the contest is the North Central Weed Control Conference.

Announcement of the contest was made by Wayne Carlson, assistant state 4-H leader at the University of Minnesota.

Any boy or girl between the ages of 12 and 18--and not over 18 on Dec. 1, 1967--may enter the contest whose family is actively engaged in managing and operating a farm.

"How We Control Weeds on Our Farm" should be the subject of the essay which should not exceed 1,000 words. Essays will be judged 75 percent on subject matter and 25 percent on presentation.

Awards include \$25 to the state winner and a \$300 scholarship to the highest scoring contestant in the North Central Weed Control Conference.

Further information on the contest and on closing dates is available from the county extension offices.

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67-243-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 7, 1967

Immediate release

MORE PROMOTIONS ANNOUNCED AT UM INSTITUTE OF AGRICULTURE

Additional faculty promotions and one administrative change in the University of Minnesota Institute of Agriculture were announced today by Dean Sherwood O. Berg.

The administrative change involved the naming of Assistant Professor Harold M. Pellett to assistant superintendent of the Fruit Breeding Farm at Excelsior.

The faculty promotions are as follows:

Southern School of Agriculture, Waseca: Harold C. Matson to associate professor.

Technical Institute, Crookston: David A. Stoppel, chairman of Division of General Education, to associate professor; Herschel H. Lysaker, to associate professor and director of athletics.

North Central School and Experiment Station, Grand Rapids: Joseph W. Rust to associate professor; and Nils H. Grimsbo and Richard H. Anderson to assistant professor.

West Central School and Experiment Station, Morris: Harley E. Hanke and Samuel D. Evans to associate professor.

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67-244-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 7, 1967

Immediate release

C O R R E C T I O N S

Institute of Agriculture Calendar of Events for
September (mailed September 5, 1967):

Fruit Farm Visitors Day scheduled for
September 16 has been cancelled.

Agricultural Pesticides Short Course scheduled
for September 7 has been cancelled.

67-246-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 5, 1967

Immediate release

INSTITUTE OF AGRICULTURE CALENDAR OF EVENTS

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 Cloquet

(more)

add 1 -- September calendar of events

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MINNESOTA ASSOCIATION OF COOPERATIVES MEETING

- 14 St. Paul
18 Rochester
19 Mankato
20 Fulda
21 Montevideo
22 Cologne
25 Thief River Falls
26 Bagley
27 Pelican Rapids
28 Morris
29 Sauk Centre

REGIONAL 4-H HORSE SHOWS

- 16 Pine City, Detroit Lakes, East St. Cloud, Albert Lea, Slayton

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67-242-wobn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 7, 1967

Immediate release

MINNESOTA NUTRITION CONFERENCE BEGINS MONDAY

More than 200 university and feed industry representatives from the north central region are expected to attend the 28th annual Minnesota Nutrition Conference, which begins Monday (Sept. 11) in Minneapolis.

The two-day event will be held in the Holiday Inn Central, 1313 Nicollet Ave., and will include discussions of nutritional problems of swine, poultry and beef animals with major emphasis on recent research.

Featured on the program this year will be three symposia. The conference will begin with a morning symposium on swine nutrition. Participants include R. J. Meade, University of Minnesota, on diet of the young pig and carcass characteristics; H. S. Teague, Ohio State University, liquid and/or paste feeding of swine; and F. C. Wingert, Cargill's Nutrena Research Farm in Elk River, Minn., on developments in brood sow nutrition.

Topics for the afternoon's symposium on chickens in egg production include nutrition of pullet replacements by R. H. Harms, University of Florida; protein requirements of the hen as related to feed intake by L. G. Blaylock, Supersweet Feeds, Minneapolis; nutrient requirements of the hen as related to feed intake and dietary density by E. W. Gleaves, University of Nebraska; and nutrient requirements of the hen as related to aging and strain by Harms.

A special breakfast will be held Tuesday to discuss regionalization of the conference.

(more)

add 1 -- Minnesota nutrition conference

The Tuesday morning session will include P. H. Derse, Wisconsin Alumni Research Foundation, Madison, who will talk on feed composition analyses; H. J. Klosterman, North Dakota State University, on characterization of the vitamin B-6 antagonist in linseed meal; F. M. Crane, Land O'Lakes Creameries, Minneapolis, on calf milk replacers; and J. C. Meiske, University of Minnesota, on beef cows in the corn belt.

R. F. Elliot, manager of animal industry development for the American Cyanamid Company, Princeton, N. J., will review the F. D. A. symposium on the use of medicated animal feeds at the noon luncheon.

Topics for the third symposium, "Feeding the Ruminant", include varying concentrate to roughage ratio for beef cattle by L. B. Embry, South Dakota State University, Brookings; complete rations for dairy cattle by G. C. McCoy, University of Minnesota; dry vs. liquid cattle feed supplements by L. V. Curtin, National Molasses Company, Willow Grove, Pa.; and dietary modification of milk fat in ruminants by L. H. Schultz, University of Wisconsin.

Discussion leaders for the three symposia will be S. M. Aldinger of Yoder, Inc., Kalona, Iowa; D. C. Snetsinger of the Ralston Purina Company, St. Louis; and M. M. Carpenter, Peavey Company, Minneapolis.

The conference is sponsored by the University of Minnesota, the American Feed Manufacturers Association, the Northwest Feed Manufacturers Association and the Northwest Retail Feed Association.

Registration fee for the conference is \$15, and registration for those who haven't pre-registered will begin at 8:15 a.m. Monday.

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67-245-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 11, 1967

Immediate release

At Waseca Field Day

UM ENTOMOLOGIST SAYS CORN BORER TRAITS DIFFER BY LOCALITY

WASECA--For most of the corn growers in Minnesota and the other 11 states of the North Central region of the United States, the habits and characteristics of all European corn borers must seem pretty much alike.

However, entomologists from Minnesota, Iowa and Missouri have found that definite differences exist among the corn borers from different states in the region.

H. C. Chiang, entomologist at the University of Minnesota, reviewed the research findings for visitors attending the Corn and Soybean Field Day at the University's Southern Experiment Station here Tuesday (September 12).

He said entomologists use the term "biotype" to refer to these distinct strains of the same insect species.

"After being established in a location for a certain period, the biotypes often develop different characteristics because the insects adapt to the particular conditions of the area. And thus, the European corn borers in each of the three states have dissimilar traits," said Chiang.

Since 1963, entomologists from the three states have cooperated in a project to study the European corn borer, the number one corn pest in the North Central region.

Corn borer eggs were taken from local populations in Minnesota, Iowa and Missouri and in a three-way exchange, each research team received eggs from every other state.

(more)

add 1 -- corn borer

The experiments found inherent differences among borers from the three states. For example, no matter if they were grown in Iowa, Missouri or their native state, a higher percentage of Minnesota borers went into diapause--an inactive period in which the borers remain larvae over winter and don't become adults until the following summer. Missouri borers showed the lowest rate of diapause.

Thus, most of the Missouri borers pupated readily and a greater proportion became adults and began reproduction for a second generation. In contrast, the Minnesota borers are not as likely to produce a second generation during a single season because a higher percentage go into diapause.

Chiang said the borer's rate of development is regulated by the length of day and temperature. In Minnesota, with its shorter growing season, the corn borers develop faster and mature earlier.

Minnesota borers had the lowest percentage of survival per 100 eggs. And Missouri borers showed a higher rate of survival no matter where they were grown. The survival rate of Iowa corn borers falls between those from Missouri and Minnesota.

The corn borers native to Minnesota had the highest number of tunnels per borer and thus produced more damage to the corn plant. Chiang says this greater amount of tunneling is partly related to the fact that more Minnesota borers went into diapause, meaning more remained larvae and thus have more time to feed.

Chiang noted that the farther north one goes, the longer the summer day length. By late July, the Minnesota borers that were grown in Missouri had already gone into diapause because the day length there was comparable to late August in Minnesota.

He speculated that mixing populations of these various corn borer biotypes may someday offer a way to control them. For example, matings of Minnesota and Missouri borers may produce offspring that are poorly-adapted to the environmental conditions and thus have a higher mortality rate than borers that are native to the area.

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67-248-dcf

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
September 11, 1967

Immediate release

Researcher Says:

HEN'S PROTEIN NEEDS DO NOT DECREASE WITH AGE

MINNEAPOLIS--Recent research indicates that a hen's protein requirement does not decrease with age. Instead, aging hens may even require increased protein levels, a Florida nutritionist told participants at the 28th annual Minnesota Nutrition Conference here Monday.

Speaking at a symposium on laying hen nutrition, Robert H. Harms, chairman of the Department of Poultry Science at the University of Florida, reviewed research on nutrient requirements--especially calcium and protein--of the laying hen as related to aging and breed.

In recent years considerable attention has been given to the possibility of the hen's nutrient requirements changing with age, Harms said. This has led to the concept of "phase feeding"--changing the nutrient content of the feed with different stages of production.

(more)

add 1 -- hen's protein needs

In 1960 the National Research Council suggested that a laying hen needed 2.25 percent calcium in its diet. However, further research indicated that egg shell quality could be improved by increasing the calcium content of the feed during warm weather and possibly during advanced stages of production, he said.

Research conducted at the Florida Agricultural Experiment Station has indicated that increasing the calcium level up to 5.5 percent of the diet improves egg shell quality in older hens, especially during the warmer seasons of the year.

Although the National Research Council has raised its suggested calcium requirements for the laying hen to 2.75 percent, Florida research suggests that this level is still less than the aged layer needs during warm weather.

Speaking about the protein level, Harms said, "Recommendations have generally been to reduce the protein level of the feed as the hen reaches mature body weight and to cut protein even further as egg production decreases."

These assumptions seem logical, however, one point has been overlooked, he said. "If the calcium utilization decreases in older hens, the same would be expected for protein."

Experiments since 1960 over the past 10 years at the University of Florida have indicated that the protein requirements of the hen may actually increase as production declines during the latter part of the laying period.

Also, research along similar lines has shown that different breeds or strains of birds have different protein requirements, he said.

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67-247-jbg

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 11, 1967

To all counties

Immediate release

FALL IS BEST TIME
TO APPLY LIME
FOR SPRING ALFALFA

Farmers who plan on seeding alfalfa in the spring should determine the lime needs of their soil now and apply lime in the fall if it is needed.

Much land used for alfalfa must be limed for both a successful seeding catch and stand maintenance, says Curtis Overdahl, University of Minnesota extension soil specialist. Proper liming will reduce acidic soils to near neutrality, and long-term rotations show that maximum crop yields are produced from soils that are nearly neutral with respect to acidity.

Overdahl advises farmers not to topdress lime on legume sod, and not to wait until the new seeding is planted and then hope that surface applications will benefit the immediate crop.

Changing an acid soil to one neutral enough for alfalfa takes at least six months, even when the lime is well mixed with surface soil.

A set of soil samples should be taken to determine the proper amount of lime for a field. Recommendations on how much lime is needed to correct acid soil conditions can be made fairly accurately from soil samples.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 11, 1967

To all counties

Immediate release

PROPER LOCATION
OF SILO CAN SAVE
FARMER TIME, WORK

A well-planned silo location can save a farmer time and labor in feeding cattle, says Donald W. Bates, University of Minnesota extension agricultural engineer.

Where silage is fed inside the barn, the practical silo location is along one side, opposite a cross alley. With proper arrangement of the stable and the use of one or more carts, silage can be fed much easier than by the common "bushel basket" method. Bates says the use of self-propelled and self-unloading silage carts is increasing, although, complete mechanization of the silage-feeding operation inside the barn is not generally practical.

Year-round dry lot feeding which is rapidly becoming common, usually requires constructing additional silos. For ease of filling, these silos should be located outside the barnyard wherever possible. Plan the feed bunk to run north and south if possible, so the winter sun strikes both sides of it, making periodic cleaning of the paved surface easier.

If you have a good silo beside the barn use it for winter feeding in the barn. But, build new silos and a mechanical bunk in a convenient location away from the barn for outside feeding.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 11, 1967

To all counties
Immediate release

PROPER MANAGEMENT
PRACTICES IMPORTANT
FOR HIGH-PROFIT FORAGE

Management of a high-profit forage crop is a year-round proposition that extends from fall crop selection to improved harvest and storage practices.

Farmers often can more than double their present average yields with top management, which includes adequate fertilization, selection of the best adapted varieties, full stands, proper cutting time, and good storage practices.

Curtis Overdahl, University of Minnesota extension soils specialist, says low forage yields in the Midwest result from neglect of these profit-producing practices. Like other crops, only high-yields of top-quality forages provide maximum profits.

In planning a forage program for 1968, farmers should consider corn silage, grasses and alfalfa.

Corn for silage has high yield potentials and is an outstanding producer of energy. High yields, however, place heavy demands on soil fertility. Because the entire plant is harvested for silage, the fields must be fertilized at a higher rate than those where corn is planted for grain.

Grasses are essential for a complete forage program, Overdahl says. When properly fertilized they grow profitably on land not suited to other crops. Well-managed grass pastures provide early and late season grazing or green chop.

Well-managed alfalfa also has high profit potentials. Its high protein, energy and mineral content makes it one of the best forages.

Adequate fertilization is essential for all three forage crops. Overdahl suggests that in many instances this fertilization can be done in the fall. This is especially important on fields where corn will be planted because of the advisability of early planting in the spring.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 11, 1967

To all counties

Immediate release

NOW IS TIME TO
TROUBLE SHOOT
CORN FIELDS

Fall is a good time to "trouble shoot" corn fields, says a University of Minnesota agronomist. Observations and notes taken in the field now may help in planning a more productive corn crop next year.

Farmers should check "yield determination" factors which can be improved the following season. These include selection of suitable hybrids, achievement of an optimum plant population, use of adequate fertilizer, the effectiveness of the weed control program, and control of insect and disease problems.

Oliver Strand, University extension agronomist, says it is easy to determine if a desirable plant population was achieved in corn fields. If corn ears are unusually large, the stand is probably too thin for maximum yields. On the other hand, if there are a lot of nubbins and barren stalks the stand probably was too thick.

An average ear size of about one-half pound at 15.5 percent kernel moisture is desirable for a good correlation between productivity of the field and the efficiency of the corn plant to utilize light and nutrients.

The optimum number of plants per acre depends on hybrid variety, soil type, inherent fertility level of the soil, the amount of fertilizer needed, available water supply, and climatic conditions.

A plant population of 12,000 to 16,000 plants per acre may be best on light soils, while populations from 18,000 to 22,000 plants at harvest time usually give best yields on heavier soils.

Planting rates should be adjusted next spring if populations are too thick or too thin. However, if plant populations are too thin, Strand says farmers should determine if the losses in the stand are due to improper planting techniques or from pests or other factors.

add 1 -- trouble shoot corn

Check soil fertility needs if the ears and plants are poorly developed and if drouth or other factors beyond the farmer's control have not contributed to this poor development.

A 150 bushel corn crop removes about 200 pounds of nitrogen, 75 pounds of phosphate and 195 pounds of potash per acre. A soil test will help assess existing soil nutrient levels and serve as a guide for fertilizer use.

Farmers also should evaluate weed control results this fall. If weed control is not adequate, determine whether the main weed problem is broadleaf or grass weed species and plan a more effective control system next year.

Make sure weeds are properly identified. Some herbicides handle certain weed species only. And, Strand says farmers should remember that timely tillage and cultivation plus herbicides give better weed control than chemicals alone.

Fall also is the best time to determine if corn rootworms or other insect problems are present. And, check for corn diseases such as stalk rot, excessive smut, or ear and kernel rot.

University of Minnesota Fact Sheets are available from your county agent on these specific problems, their causes and control.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 11, 1967

To all counties

4-H NEWS

4-H INVITES
YOUTH TO JOIN

"Join 4-H: a World of Opportunity" -- that slogan will appear on posters, in window exhibits and you'll hear it repeated by 4-H members this month as they prepare for National 4-H Week September 30 - October 7.

For young people 9 to 19 years of age the "world of opportunity in 4-H" means fellowship and fun with others the same age, the adventure of learning new skills and new knowledge, the stimulation of competition.

The 4-H program is constantly adapting and changing to meet the needs of young people of today.

Whatever a boy's or girl's interests may be, 4-H has something to offer through a wide variety of projects ranging from home economics to automotive and livestock, from photography to career exploration. All of these projects emphasize "learning by doing" and give young people the satisfaction that comes from learning and achievement. At county achievement days, county fairs, the state fair and market livestock shows members have an opportunity to show what they have done and enter into friendly competition with others.

By taking part in meetings each month, members learn how to conduct parliamentary business, and have an opportunity to serve on committees and hold office.

(more)

add 1 -- 4-H invites youth

Recreation is an important part of each monthly meeting, says County Agent _____. In addition, picnics, parties, softball and basketball tournaments are included on the schedule for many clubs.

New this fall is an exciting 4-H TV Science Club, especially for 4th, 5th and 6th graders. They may join simply by watching a series of science programs beginning _____ on Station _____. The county extension office can furnish information on these programs and how to join the Science Club.

For those who are not interested in year-round programs, 4-H offers short-term projects and activities. (Here discuss the short-term projects you have offered and continue to offer.)

For information about joining 4-H this fall, stop in at the county extension office or see a 4-H member or a leader. Anyone 9 to 19 years of age is invited to join a 4-H club in _____ County, says _____.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 11, 1967

To all counties

ATT: HOME AGENTS

LOOK FOR DURABLE
PRESS ON TAG

It's back to school for the children -- and with that comes a mound of washing and ironing for mother.

Thelma Baierl, extension clothing specialist at the University of Minnesota, suggests that you reduce your ironing time by making sure that durable press is written on the tag of the clothes you buy for the children this fall.

Durable press is a finish that has been introduced in the last two years. It was developed as an improvement over the wash and wear fabrics of the 1950's. A garment with a good durable press finish can be worn and laundered without ironing. When it begins to lose its fresh, crisp feel a quick once-over with a steam iron will restore the crispness, says Miss Baierl.

Fabrics that are durable pressed are processed with resins similar to those used in wash-and-wear. The garment is then cut out and completely made and cured in an oven to set the press and make it long lasting. The seams are pressed flat, the pleats of the skirt are in to stay and the creases in slacks won't come out.

Much of our sportswear for men, women and children is now durable pressed, including pants, shirts, blouses, skirts, parkas and raincoats. There are slips and housecoats for girls and women; dress shirts for men and boys; work clothes and uniforms of all kinds. Practically every type of fabric from lightweight batiste to heavy corduroy is being used in durable press garments.

Durable press looks and wears best when it is made from fabrics containing at least 50 percent polyester fibers for strength. The polyester fibers used are Dacron, Fortrel, Kodol, Vycron, and Blue C. It has been found that 100 percent cotton garments that were durable pressed were weakened by the resin and the temperature used in curing.

-more-

add 1--look for durable press on tag

With all the durable press clothing on the market, time spent caring for clothing can be reduced considerably, says Miss Baierl, but you must buy with a cautious eye.

Shoppers should inspect durable press articles for wrinkles. If there are any wrinkles in the garment they will probably stay there. Don't buy a garment if there are puckers at the seams, pockets, collars or cuffs. They will not iron out, because they are durable, too.

Miss Baierl also cautions that you choose durable press garments in the right size so no alteration is needed. If changes must be made, take a larger size rather than a smaller one. You can usually shorten a garment, but the crease line will show if you lengthen it.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 11, 1967

To all counties
Immediate release

IN BRIEF.....

Maintaining Interior Quality in Eggs. Interior quality losses in eggs can be reduced with proper handling. Melvin Hamre, University of Minnesota extension poultry specialist, suggests these guides for better egg quality: Keep the temperature in the egg cooler between 50 and 60 degrees and the relative humidity between 70 and 80 percent; gather eggs two or three times a day; keep eggs under refrigeration at all times; wash eggs as soon as possible after they are laid; keep only eggs in the cooler because they absorb odors readily; prevent mold growth in the cooler because mold imparts off-flavors to eggs; and use clean, pre-cooled packing materials.

* * * *

Tips on Cleaning Bulk Milk Tanks. When washing a bulk milk tank dairymen should add water to the tank before the detergent. Vern Packard, University of Minnesota dairy industries specialist, explains that corrosion of the stainless steel may occur if the detergent is added first. An alternative method is to make up the solution in a plastic bucket, place the bucket inside the tank and work from the bucket with a hard-bristled brush. A dairy cleaner should be used for the detergent. Packard warns that household detergents may cause off-flavors in the milk. Never use rags or metal sponges for cleaning equipment.

* * * *

Caution Necessary When Grazing Cattle on Sudan. Extreme caution is necessary when grazing cattle on regrowth of sudan or sorghum-sudan hybrids, says Oliver Strand, University of Minnesota extension agronomist. These grasses are high in prussic acid which can poison and kill cattle if proper grazing practices are not followed. Prussic acid accumulations are greatest in young, vigorously growing plants, and after a hard frost. Don't graze plants less than 18 inches tall, don't graze regrowth from previously harvested plants until it reaches this height, and don't graze immediately after a hard frost. The prussic acid levels will return to pre-frost levels about two weeks after freezing.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 12, 1967

Immediate release

LANDSCAPE ARBORETUM FEATURES FALL WALKING TOURS

Guided walking tours at the University of Minnesota Landscape Arboretum have been scheduled each Saturday in September at 10 a.m. and will continue through October 7 to give visitors an opportunity to enjoy the autumn color.

The guided walking tours will last about an hour and a half. They will start from the parking lot across from the picnic shelter, according to Mervin Eisel, assistant extension horticulturist.

The tours are open to the public free of charge. However, there is a charge of 50 cents per car on Saturdays, Eisel said.

Purposes of the tours are to give visitors the opportunity to see the many varieties of chrysanthemums and annual flowers in bloom, fruiting shrubs and trees, as well as the fall color of the arboretum. Home owners who expect to do some landscaping can also see plantings of evergreens, other trees and shrubs that would be suitable for home yards.

The landscape arboretum now has more than 15,000 cultivated plants representing some 3,000 species and cultivars in the various plant collections, in addition to some 400 native species. An important objective of the arboretum is to carry on research in testing and developing hardy ornamentals for home landscaping.

The University arboretum is located 4 miles west of Chanhassen on State Highway 5.

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67-249-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 12, 1967

Immediate release

At Field Day

UM PLANT SCIENTISTS REVIEW 1967 SOYBEAN DISEASES

LAMBERTON--Two fungus diseases--Phytophthora root rot and brown stem rot--have infected south central Minnesota soybeans somewhat more severely during the 1967 growing season than in most years.

University of Minnesota plant scientists told visitors to the Corn and Soybean Field Day, Wednesday (September 13), at the Southwest Experiment Station here that conditions this year have been especially favorable for these two diseases.

They said the unusually high amounts of rain and cool temperatures during June were mainly responsible for the severity of Phytophthora root rot. In most fields, only scattered plants were infected. Occasionally, large areas were diseased and in a few fields, losses may run 10-15 percent. Drier areas in western Minnesota were unaffected.

Phytophthora root rot is caused by a fungus that lives in the soil on decaying organic matter and infects only soybeans. The disease kills the roots and stems of seedlings. On older plants, leaves turn yellow and wilt and the lower stem and tap root become dark brown.

In most cases this year, the symptoms showed up on older plants in low, poorly-drained areas where the soil was compacted. The plant scientists point out that 1967 conditions were very unusual. And if the disease didn't appear this year, it probably won't in years with normal weather.

(more)

add 1 -- soybean diseases field day

The scientists noted that Hark, a soybean variety released in 1966, is susceptible to Phytophthora root rot. But in tests at University branch experiment stations in southern Minnesota, Hark has outyielded the resistant varieties--such as Chippewa 64, Harosoy 63 and Lindarin 63--by two to five bushels per acre.

Thus growers may find it worthwhile to risk some disease loss to take advantage of Hark's higher yield potential. The risk will probably pay off in the long run because most years won't have a rainfall pattern like 1967 which was favorable for the Phytophthora root rot fungus. Hark seed will be available for general purchase in time for the 1968 growing season.

Another fungus-caused soybean disease, brown stem rot, has also been aided by the unusual weather this year. The disease is limited in Minnesota most years and usually appears late, about three weeks before the beans reach maturity.

But with the cool August temperatures this year, brown stem rot appeared earlier, was more prevalent and more severe. The soil-borne fungus passes through the roots to infect the lower stem, turning the healthy white stem tissue to brown, and cuts off water to the seeds.

All varieties are susceptible. The only sure way to check for brown stem rot is to split the lower six inches of stem to see if the tissue is brown or white. If all the soybeans in a field are infected with brown stem rot, yields may drop 25 percent.

The plant scientists say the best control measure against brown stem rot is crop rotation to prevent the buildup of the fungus in the soil. Wait at least three years between soybean crops on fields known to be infected with brown stem rot.

Now is a good time to check soybeans for Phytophthora root rot and brown stem rot. If the fungi are present in the fields at all, disease symptoms should show up after the favorable weather conditions of this year.

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67-250-dcf

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 12, 1967

Immediate release

STATE 4-H MARKET LIVESTOCK SHOW SET FOR SEPTEMBER

Minnesota 4-H'ers with market livestock projects will show their stock at the State 4-H Market Livestock Show September 25-27 on the State Fairgrounds in St. Paul.

All entries will be those that qualified by placing in county shows. Live judging and carcass judging are on the agenda for the annual show.

Livestock exhibited at the show will be consigned to commission firms at the South St. Paul Stockyard, where the top quality animals stand to return their young owners top market prices.

Judging of live animals is set for Tuesday, September 26 at 8:30 a.m., and Wednesday, September 27 at 8:00 a.m. Steers will be judged in the Hippodrome and sheep and swine will be judged in the Swine Barn. Sheep and swine breed champions will be judged in the afternoon beginning at 1 p.m. Beef champions will be judged at 11:30 a.m. Wednesday.

This year marks the 49th anniversary of the show, which is sponsored by the University of Minnesota Agricultural Extension Service, and the Minnesota Livestock Breeder's Association.

Aside from the class prizes awarded by the sponsors, the various breed associations will award prizes to the top animals in the breeds. Business donors provide additional cash awards to exhibitors placing in the blue and red ribbon groups.

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67-251-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 13, 1967

Immediate release

UM RESEARCH EXAMINES CORN MANAGEMENT SYSTEMS

MORRIS--Plant scientists at the University are searching for a "management system" that will squeeze the maximum profit out of corn production in the southern half of the state.

The agronomists, plant disease specialists and soils experts are working together on the corn management research project. The experiment got underway last spring with corn plantings at University branch experiment stations near Morris, Lamberton and Waseca.

Visitors to the Corn and Soybean Field Day Thursday (September 14) at the University's West Central Experiment Station heard the plant scientists explain that the corn management project will study how various factors can be combined to give maximum yields.

(more)

add 1 -- corn management

This is the first year of the experiment that will run for several years and no results are available yet. Some of the management factors under investigation are: date of planting, variety plant population per acre, and nitrogen rate.

The six hybrids under evaluation have maturities that vary from 115 to 80 days. Plant population ranges from 16,000 to 28,000 plants per acre at both Morris and Lamberton and from 18,000 to 30,000 at the Waseca station. Planting dates under test range from April 20 to June 5 and nitrogen levels vary from 50 to 250 pounds per acre.

Experiments in other Corn Belt states have shown a large yield response when corn was planted earlier than normal. And University scientists believe the yield response to nitrogen levels and other management factors may be different with early-than late-planted corn.

The project is designed to study a number of management factors in combination, rather than singly, to investigate how each factor influences the others and to find out which of the combinations give the optimum corn production.

Certain management factors are held constant for all research plots. For example, sufficient phosphorus and potassium is applied to prevent deficiencies. Row width is 30 inches and insects are controlled only if corn follows corn. A combination of chemicals and cultivation is used as needed to control weeds.

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67-252-dcf

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 14, 1967

Immediate release

EASY CARE FOR DURABLE PRESS CLOTHING

Easy is the word when it comes to caring for durable press clothing.

That is, easy is the word if you follow a few simple rules regarding the care of durable press clothing, says Thelma Baierl, extension clothing specialist at the University of Minnesota.

If durable press garments are cared for properly they can be worn and laundered without ironing. When the fabric begins to lose its freshness, says Miss Baierl, a quick once-over with a steam iron will restore its crispness.

The first rule to remember with durable press garments is that they will look their best only if they are frequently machine washed and dryer dried. Oftentimes homemakers tend to put off washing durable press garments because of their crisp, unmussed appearance. However, soil that is allowed to remain in the fabric becomes much harder to remove.

Miss Baierl also suggests that additional wrinkles be kept from forming by putting soiled clothes loosely in the hamper instead of packing them in. This is even more important if the clothes are damp.

A third point she stresses is that it is important to check all garments for stains before washing them. Oil and grease stains should be pretreated by rubbing a liquid detergent on the stain before laundering. A stain-resistant finish that has been added to the fabric will make laundering even easier. Several manufacturers of durable press clothes are now introducing a soil releasing process which provides easy removal of oily stains when the fabrics are washed.

The way in which durable press garments are washed is also important. Many new automatic washers have a durable press setting. This is a slower, shorter wash period and a cool rinse. If your washer doesn't have this setting, Miss Baierl suggests that you choose the wash temperature suitable for the color and weight of the fabric and use a fairly cool rinse. For best results wash durable press garments in small loads and use a water conditioner if the water is hard.

Proper drying is important for best wrinkle free garments. Don't overload the dryer, Miss Baierl warns. Durable press clothes need plenty of room to move around. And take the clothes out of the dryer as soon as they are dry to avoid wrinkling.

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67-253-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 14, 1967

FOR RELEASE Friday p.m. 9-15-67

UM PROF HEADS AMERICAN FISHERIES SOCIETY

TORONTO, Ontario--Lloyd L. Smith, Jr., professor in the Department of Entomology, Fisheries and Wildlife at the University of Minnesota, was installed this afternoon (Friday) as president of the American Fisheries Society during the group's annual meeting here.

Smith was elected by a mail ballot of the Society's nearly 5,000 members from 66 countries.

Other officers include Elwood A. Seaman, Virginia, president-elect; C. J. D. Brown, Montana, first vice president; and Robert M. Jenkins, Arkansas, second vice president.

Smith has been at the University for 20 years, during which time he has played a leading role in fishery research and training. He is a member of several national advisory committees dealing with water pollution and fishery problems.

The American Fisheries Society is composed of fishery scientists, fishery managers, pollution biologists and fishery administrators. Among the group's many functions are the promotion of scientific fishery policies on state and national levels, and the maintenance of technical excellence among professional fishery workers.

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67-254-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 14, 1967

Immediate release

OCTOBER 14 IS ARBORETUM DAY

Open house at the University of Minnesota's Landscape Arboretum near Excelsior has been set for Saturday, October 14.

Sponsors of Arboretum Day are the University of Minnesota and the Minnesota State Horticultural Society. The event is open to the public.

The date has been set for mid-October so visitors can enjoy the autumn color of trees and shrubs and the chrysanthemum plants which should be at their height of bloom, according to L. C. Snyder, head of the Department of Horticultural Science at the University and director of the Landscape Arboretum.

Trailer tours will start at 10 a.m. and continue throughout the day. An informal program has been set for 1 p.m. to report on the progress and accomplishments of the Arboretum.

The University arboretum is located 4 miles west of Chanhassen on State Highway 5.

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67-255-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 14, 1967

Immediate release

ROSEMOUNT BEEF CATTLE FEEDERS DAY SCHEDULED SEPTEMBER 21

Results of current research on beef cattle nutrition will be reviewed during the 15th annual Minnesota Beef Cattle Feeders Day September 21 at University of Minnesota's Agricultural Experiment Station near Rosemount.

The program will run from 9:15 a.m. to about 3:30 p.m. It starts with informal observation of cattle experiments, pastures and facilities. At 10 a.m., University plant and animal scientists will present results of current research projects.

The talks will cover projects on urea supplements, comparison of haylage and corn silage for finishing cattle, whole and rolled high moisture shelled corn, nutritional value of immature corn, sorghums for forage, "vacuum bag" silage, sulfur for urea-containing rations, and the value of urea and biuret ensiled and fed in supplements.

After noon lunch, four University professors will speak on topics of special interest. R. E. Jacobs, animal scientist, will cover the subject of "Finish Weight--How Heavy?" A talk titled "Get New Cattle Started" will be given by animal scientist J. C. Meiske. P. R. Hasbargen, agricultural economist, will deal with "The Future of Cattle Feeding in the Corn Belt." R. D. Goodrich, animal scientist, will speak on "Stilbestrol--A Sure Profit Booster."

Other University branch experiment stations will have beef cattle feeders days in November and December. The schedule is as follows:

- * Lamberton, Southwest Experiment Station, November 29.
- * Morris, West Central Experiment Station, November 30.
- * Crookston, Northwest Experiment Station, December 6.
- * Waseca, Southern Experiment Station, December 19.

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67-256-dcf

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 18, 1967

Immediate release

UM PROF TO EVALUATE STUDENT EXCHANGE PROGRAM ON EUROPEAN TRIP

The director of the University of Minnesota's European student exchange project will become an "exchange student" himself during a trip that will take him through seven countries of western Europe to evaluate the student exchange program.

LaVern A. Freeh, head of the Institute of Agriculture's Department of Agricultural Short Courses, left the United States Monday (September 18) for a month of travel through Germany, Finland, Sweden, Norway, Denmark, The Netherlands and England.

He has been invited on the tour by organizations that sponsor the student exchange in each of the participating countries. He will meet with representatives of the sponsoring organizations, former exchange students, their parents and employers, and educators.

During the trip, Freeh will discuss the goals of the exchange program which the Institute of Agriculture has conducted with the European countries since 1949. He will gather information on the selection process and study ways to improve the educational and cultural effectiveness of the program.

Freeh will explore possibilities for expanding the exchange by bringing more United States students into the program. His study will also help serve as a basis for deciding whether to establish more exchange programs between the Institute of Agriculture and developing countries, especially in Africa and Latin America.

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67-257-dcf

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 19, 1967

Immediate release

TESTED BOAR SALE SET FOR SEPTEMBER 29 AT SAUK CENTRE

The Minnesota Swine Producers Association will sponsor a performance tested boar sale Friday evening (Sept. 29) at the Stearns County Fairgrounds in Sauk Centre.

Fifty "on-the-farm" tested boars from all major breeds will be offered at the sale which begins at 7:30 p. m.

This is an excellent opportunity for producers and breeders who missed the Association's earlier sales to purchase top quality boars with complete performance records at reasonable prices," says Charles J. Christians, University of Minn. extension animal husbandman and supervisor of the Minnesota Swine Improvement Program.

All boars must meet rigid requirements for growth rate, feed efficiency and meatiness to be eligible for the sale, he explains. Littermate market pigs tested at the testing station must have met carcass certification standards of less than 1.6 inches of backfat, more than 29 inches in length, more than four square inches of loin eye area and more than 14 percent ham of live weight.

According to Christians, these market pigs had to weigh 200 pounds within at least 175 days and gain 100 pounds with less than 320 pounds of feed.

Jim Parish, Hampshire breeder from Long Prairie, Minn., will enter two boars in the sale. These boars were sired by the same sire whose pen of four market pigs indexed 215 points at the New Ulm Swine Evaluation Station. This is the highest indexed pen to come off test since the testing system began in 1957.

The average carcass measurements of this pen were: Carcass length, 30.6 inches; backfat thickness, 1.17 inches; and loin eye area, 5.08 inches. In addition, these pigs averaged 200 pounds in 134 days and gained 100 pounds with 268 pounds of feed.

For more information on the Sauk Centre sale, contact either Donald Scheid, sales manager, at Delavan, Minn., or Christians at 101 Peters Hall, University of Minnesota, St. Paul, Minn., 55101.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 19, 1967

Immediate release

UM NAMES EXTENSION PROCESSING ENGINEER

Eugene H. Sander, formerly with General Mills, Inc., Minneapolis, has been named Extension processing engineer at the University of Minnesota, according to Roland Abraham, acting director of the Agricultural Extension Service.

Sander will have academic rank of associate professor under a joint appointment with the Agricultural Extension Service and the Department of Food Science and Industries.

He will work closely with other extension specialists and Minnesota food processors on problems involved in the processing agricultural products.

Sander was group leader in the Research Division of General Mills since 1962. Also, during the past year he served as lecturer in the Department of Food Science and Industries.

A native of Bowmanstown, Pa., Sander received his B.S. degree in 1956 from Delaware Valley College in Doylestown, Pa., and his M.S. and Ph.D. degrees in 1959 and 1962 from Iowa State University. He is a member of the Institute of Food Technologists.

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67-259-vak

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
September 19, 1967

Immediate release

700 4-H'ERS TO ATTEND STATE MARKET LIVESTOCK SHOW

Over 700 Minnesota 4-H'ers will show their market livestock projects at the State 4-H Market Livestock Show next week (Sept. 25-27) on the State Fairgrounds in St. Paul.

The show will begin Monday and run through Wednesday. Livestock exhibited will be consigned to commission firms at the South St. Paul Stockyard.

Monday is entry day with registration from 8 a.m. to 4 p.m. in Erickson Hall, the 4-H Club Building. In the evening, an educational and entertainment program will be held in the 4-H Club Building.

Judging of swine and sheep begins Tuesday at 8:30 a.m. in the Swine Barn. At 1 p.m., the top swine and sheep showmen will be selected. Selection of breed championships will begin at 2 p.m. for swine and at 2:30 p.m. for sheep.

In the forenoon, beef exhibitors will take an educational tour to South St. Paul. In the evening, exhibitors will either see Cinerama or participate in an evening bus tour of the Twin Cities.

Beef classes will be judged Wednesday, beginning at 8 a.m. with the champion beef showman to be selected at 11 a.m. and the grand championships to be selected at 11:30 a.m. Swine and sheep exhibitors will tour South St. Paul in the forenoon.

All exhibitors will attend an awards luncheon sponsored by the St. Paul Area Chamber of Commerce at the Prom Center beginning at 1:00 p.m. Awards to be announced at the luncheon are 4-H Livestock Achievement Awards, County Herdsmanship, and Premier County Award.

Carcass Contest data will be collected from cooperating packers from September 27-30. Final determination of carcass contest winners will be announced October 6.

The annual show is sponsored by the Minnesota Livestock Breeder's Association in Cooperation with the Minnesota Agricultural Extension Service.

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67-260-vak

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and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 18, 1967

To all counties
Immediate release

TROUBLESOME STANDS OF
QUACKGRASS SHOULD BE
CONTROLLED THIS FALL

Troublesome stands of quackgrass can be controlled this fall by using cultural practices and chemicals, says Gerald Miller, University of Minnesota extension agronomist.

Fall control of quackgrass has these advantages: Fall cultivation and herbicide applications have given better quackgrass control than spring applications fall soil and weather conditions usually are more favorable for getting into the fields; fall quackgrass control doesn't delay early spring planting, and reduces the work load in the spring at planting time; and there is less chemical residue in the soil from fall chemical applications to affect following crops.

An effective control program should begin immediately after harvest while the quackgrass is still growing.

Fall tillage exposes rootstocks which generally are killed by freezing temperatures during the winter. It is important to expose as many rootstocks as possible by tillage in the late fall. Miller advises tillage as frequently as new growth appears, leaving the surface rough to reduce erosion.

Atrazine, which is the most effective herbicide for quackgrass control, can be applied from September to freezeup. Preplow applications to quackgrass sod in the fall have given nearly complete elimination of quackgrass stands.

add 1 -- quackgrass control

Areas treated with atrazine should be plowed and planted to corn only, because other crops may be injured by chemical residue. In some areas corn should be planted for two years to avoid possible carryover injury.

Split applications of two pounds of atrazine on quackgrass sod in the fall and one to two pounds per acre on corn as a preemergence or early postemergence treatment controls annual weeds as well as quackgrass.

TCA and dalapon also can be applied in the fall, but usually give less quackgrass control than atrazine.

However, TCA and dalapon residues will not damage many crops the following summer, and normal growth of crops sown or planted in the spring following fall application of these chemicals can be expected from flax, potatoes, sugar beets, oats, and corn if normal rainfall has occurred. All crops may be injured if applications of the chemicals are followed by a dry period. Before planting a specific crop, farmers should be sure that chemical residues will not affect the crop.

Dalapon is more effective than TCA when applied to a good growth of foliage. Fall treatment of 12 to 15 pounds per acre, followed in a week or two by plowing or similar soil preparations, will give good control the following year. Control is best when rain occurs between treatment and plowing.

Repeated treatments with dalapon in following years are necessary to eradicate quackgrass.

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St. Paul, Minnesota 55101
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To all counties
Immediate release

LAWNS SHOULD NOT
BE FERTILIZED ANY
MORE THIS YEAR

Lawns in Minnesota should not be fertilized this fall if homeowners want to control possible outbreaks of fusarial patch (snow mold or scald), says Joe Vargas, director of the University of Minnesota plant disease clinic.

The disease, caused by a fungus, usually appears in winter or early spring in wet, shaded areas or where the snow is slow to melt. It is characterized by circular, dead, bleached areas from one inch to several feet in diameter. Affected grass may be first covered by a dense, whitish-pink or dirty gray to almost black mold growth. A crust-like mat of light brown foliage may form where the grass has been left long.

For proper control of this fungus, lawns should not go into the winter growing at a fast rate, which can happen if the lawns are fertilized after September 15.

Vargas also suggests keeping the lawn cut in the fall to the normal growing summer height to prevent a mat of grass from forming. And, a fungicide spray can be applied before the first heavy snow or before cold, drizzly weather.

All grasses are susceptible to snow mold, but bentgrasses are more severely attacked than coarser lawn grasses.

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To all counties
Immediate release

PROPER VENTILATION IN
LAYING HOUSES CAN
PREVENT HIGH MOISTURE

The problem of high moisture in laying houses during the fall and winter months can be prevented with proper ventilation, says Melvin Hamre, extension poultry specialist at the University of Minnesota.

High moisture may contribute to general stress and increased spread of respiratory diseases which in turn lowers production. Also, more dirty eggs, intolerable ammonia odors and excessive condensation on the walls occur from it.

The primary cause of this problem is droppings. One-hundred high producing hens excrete 4 to 5 gallons of water daily. About half of this becomes free water in the air. Only small amounts of moisture in the hen house are caused by water vaporization from the hen's lungs and from spillage and evaporation at the drinking fountains.

Frequent removal of the droppings will remove moisture problems. However, a more practical solution to the problem is proper ventilation.

The hen house should not be closed up when temperatures drop, because a continual supply of fresh dry air prevents moisture from accumulating. As air enters the house, it is warmed and its water holding capacity is increased.

There is roughly a 5 percent increase in the moisture-holding capacity of air for each one degree rise in temperature. Thus, air warmed from 15 to 55 degrees can hold considerably more moisture at the higher temperature.

If the hen house temperature is lowered below 50 degrees, the effectiveness of both the increased air movement and the efficiency of feed utilization decreases. Eventually egg production will also decline.

Proper ventilation should move enough air through a properly insulated house to remove the moisture and keep the temperature from falling too low. If the temperature does fall below 50 degrees with proper ventilation, supplementary heat or more insulation must be added.

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IN BRIEF...

Fall Sanitation Can Prevent Plant Diseases. Good sanitation and cultural practices around trees and plants are important this fall to control diseases in the spring and summer. Many organisms which start new infections the following spring are carried over the winter in dead plant parts. Joe Vargas, director of the University of Minnesota plant disease clinic, suggests these fall sanitation practices: remove and burn all dead plant parts which are of no use; rake and burn all fallen fruits and leaves; treat open wounds on trees by cleaning the open area well and applying a tree-wound dressing; and prune dead wood on trees. When pruning make the cut flush with the main branch and paint over the area with tree-wound dressing or orange shellac.

* * * *

Order Shelterbelt Seedlings in Fall or Early Winter. Seedlings for shelterbelt and field windbreaks should be ordered in the fall or early winter, says Marvin Smith, University of Minnesota extension forester. Planting stock is available in lots of 500 from nurseries operated by the Minnesota State Division of Forestry or from commercial nurseries. Smith advises farmers to order at least 10 percent more seedlings than required. This enables farmers to cull poor, scrawny or damaged seedlings. Seedlings should be purchased from reliable sources that are as close to home as possible. Such stock is better acclimated, more suited to local soil conditions, can be delivered quicker in early spring, and costs less to ship.

* * * *

Well-Grown Heifers Have Less Trouble Calving. Heifers of all sizes and ages have more difficulty calving than animals that have calved previously. But, Joe Conlin, University of Minnesota extension dairy husbandman, says well-grown heifers that are at least 24 months old at calving time usually have minimal difficulty. The V-shaped nature of the pelvic girdle and smaller birth canal in young heifers under 24 months increase the incidence of birth difficulties. And, underfed heifers have increased calving problems even though they were older than the well fed animals at calving time.

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Department of Information
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St. Paul, Minnesota 55101
September 18, 1967

To all counties

SUGGESTED EDITORIAL FOR

National 4-H Week
September 30 - October 7
or the week preceding

HATS OFF
TO 4-H

"Why don't you say something good about us for a change? Why talk and print news only about juvenile delinquents?"

That question is echoed by teenagers all over the country -- youths who are making their mark in school, in extracurricular activities, in jobs they hold after school and during summer -- the young people who are the citizens of tomorrow.

National 4-H Week, September 30 - October 7, is an appropriate time to give a pat on the back to nearly 3 million young people throughout the nation who are members of 4-H, the youth organization which is a part of the national educational system of cooperative extension work which the U. S. Department of Agriculture, the state land-grant colleges and the counties share. Our hats are off also, to the 372,000 adults who volunteer their time and energy to work with 4-H boys and girls in their local clubs.

Wherever they are, 4-H members strive individually and with each other for better citizenship, better living, better family cooperation and better world understanding.

Even a brief visit to the 4-H Building during the State Fair gives a visitor an impressive picture of the accomplishments of these young people. Their exhibits ranging from their own home canning to well designed and constructed clothing, from collections of insects to handsome home furnishings they have made, all attest to the skills they have learned. A stop at a platform where a 4-H'er is demonstrating will give you the impression of a well poised youngster who is developing confidence in speaking before a crowd.

-more-

add 1 - Hate off to 4-H

Many a family has benefited from the improved practices a 4-H'er has learned -- whether in the home, the city or on the farm. But communities, too, have felt the beneficial effects of this group of energetic young people. Throughout the year 4-H stress citizenship through interest and participation in community activities. This past year, for example, thousands of 4-H'ers in Minnesota have carried on a beautification campaign, cleaning up litter, establishing roadside parks, making nature trails, planting windbreaks. To make their own communities safer, they have topped corn at blind crossroads to improve visibility, reflectorized thousands of bicycles and pieces of farm machinery, conducted hundreds of home and farm hazard hunts.

No longer is 4-H designed only for the rural boy and girl. It is finding a place in the city and adapting its program to meet the needs and interests of the city as well as the small town and farm boy and girl. Programs in science, photography, home economics, agriculture, career exploration -- long-term and short-term -- these are part of the modern look 4-H is assuming.

Approximately 750,000 Minnesota 4-H alumni, now adult citizens, attest to the training 4-H has given them, and the part it has played in their character development.

National 4-H Week seems a good time for any young person 9 to 19 years of age to consider joining a local 4-H club -- and being admitted to the "world of opportunity" it has to offer.

-jbn-

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To all counties

For use: before or during

National 4-H Week

THE FACE OF 4-H
IS CHANGING

4-H is changing to keep up with the times -- and to meet the interests of today's boys and girls, whether they live in the town or the country.

Teenagers who are looking for help in buying more wisely are getting assistance in the money management program. Sessions on career exploration are opening up new possibilities for high-schoolers who are thinking ahead to training for the world of work. Photography is attracting an increasing number of young people who want to know how to operate a camera effectively.

A look at many other projects that have been added to the 4-H program will show how the appeal of 4-H is broadening, says County Agent _____. Plant Pathology, veterinary science, entomology, crafts, camping, dog, horse, even fishing are projects which have become popular with youth in many counties.

Home economics, livestock, horticulture, safety and shop programs still head the list in popularity among projects in Minnesota, however, _____ says. Nearly half of Minnesota's 54,000 4-H members had livestock projects last year -- learning care and management of poultry, sheep, swine, cattle, horse or rabbits.

Nearly 23,000 4-H'ers in the foods projects are learning to prepare nutritious meals for the family. More than 17,000 Minnesota girls in the clothing project are turning out well constructed, well designed garments for themselves and others.

Some 19,000 boys and girls are developing an increased appreciation of plants through flower and vegetable gardening, indoor gardening, lawn care and learning and carrying out landscape design. Many of the youth in the horticulture projects are also taking an active part in efforts to beautify America.

Information about 4-H and the many programs it offers may be obtained from the county extension office or any 4-H member. 4-H is open to anyone 9 to 19 years of age. National 4-H Week, September 30 - October 7, is a good time to join, says _____.

Note: You may want to change Minnesota figures to county figures.

-jbn-

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To all counties

ATT: HOME AGENTS

Immediate release

C O R R E C T I O N

Please do not use the first item on page 3 of the September 15 issue of Helps for Home Agents - - entitled "The Bugs Worked Out of Wash and Wear."
There were some omissions and erroneous implications in the item as printed.

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To all counties
ATT: HOME AGENTS
Immediate release

"CHARGE IT" BECOMES
MUCH-USED PHRASE

"Charge it" is a phrase that has become nearly a necessity to many Americans, says Mrs. Edna Jordahl, extension home management specialist at the University of Minnesota.

Today more and more Americans are using charge accounts as a convenient way to "buy now--pay later" for not only luxury and large purchases, but groceries, gasoline and even clothing.

Charge accounts are a convenience, especially for busy people. Shopping is easily done over the telephone or the buyer can shop without cash or without waiting for change. At the end of the month he has a record of his purchases and the account can be balanced.

But convenient as credit buying is, it has two decided disadvantages, Mrs. Jordahl says. Unless the charger is cautious it's easy to overbuy. A second part to consider is that stores usually charge for the service of buying on credit, or their prices are higher to help cover the cost of this service.

Many stores have several kinds of charge accounts. The one often used when buying small, less expensive items is the 30-day charge. This allows the customer one month to pay at a cash rate for a purchase. If paid for within the 30 days, there is usually no additional charge for this service.

If a longer than 30-day period is required, it is generally considered a revolving, flexible or budget account. The store will generally charge 1-1/2 percent on the unpaid balance at the beginning of the billing period. This is 18 percent per year.

Contracts are used if the amount purchased is a large sum, as in the case of home improvements, appliances and some luxuries. Many stores are charging 7.2 or 8.4 percent as their contract interest rate. Others have their charge on a sliding scale. They might charge \$10 for anything under \$100, \$15 for a contract between \$100 and \$150. A few stores charge a flat rate. This is added to the amount owed and the total is divided by the number of payments to be made.

Before signing a contract, Mrs. Jordahl advises finding out, in dollars and cents, exactly what the charge will be. She also says it is wise to compare services at various stores before buying.

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To all counties
ATT: HOME AGENTS
Immediate release

**FREEZE SEASONAL
FRUITS, VEGETABLES**

If you'd like to preserve some of the freshness of fruits and vegetables now being harvested in home and market gardens, freeze some of them for use next winter.

But don't try to freeze fresh tomatoes and cucumbers, warns Mrs. Shirley Munson, in charge of the University of Minnesota's food processing laboratory in the Department of Horticultural Science. They lose their texture in freezing and are mushy when thawed.

Mrs. Munson gives these suggestions for freezing other fruits and vegetables in season:

. Green peppers. To freeze pepper halves for stuffing, scald them in water for 3 minutes, then cool in ice water, drain and package. Do not stuff until ready to use. Finely chopped peppers for hot dishes may be frozen without scalding.

. Herbs. Prepare garden herbs such as parsley and chives for freezing by washing a few sprigs, draining them and packaging in foil, film bags or storing in glass jars in the freezer.

. Winter squash. Bake or steam pieces of squash, mash or put through a ricer package, label, date and freeze.

. Muskmelon. Cut flesh into cubes or balls. Pack in a sugar syrup using 2 cups sugar to 1 quart water. (Do not cook the sirup.) Label, date and freeze. Be sure to serve muskmelon while it is partially frozen; otherwise it will be mushy.

. Green grapes. Sort, stem, wash and drain grapes. Pack Thompson seedless grapes whole or halved; remove seeds from Tokays and pack halved or quartered. Pack in a sugar syrup using 3 cups sugar to 1 quart water. Package, label and freeze.

. Apples. One of the most satisfactory ways to freeze summer apples is to put them in a pie and freeze the pie. Bake the pie before freezing, however. Cool the pie, wrap and freeze. Baked pies usually store well for 4 to 6 months.

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UM STILBESTROL STUDIES REVIEWED AT CATTLE FEEDERS DAY

ROSEMOUNT--Eight years of research on the value of stilbestrol as an ingredient in finishing rations for beef cattle was reviewed here Thursday (Sept. 21) by a University of Minnesota animal scientist.

Speaking at the 15th annual Minnesota Beef Cattle Feeders Day at the Rosemount Agricultural Experiment Station, Richard D. Goodrich discussed conclusions and recommendations drawn from 10 finishing trials conducted here and at the Experiment Station at Crookston.

These trials showed that gain was increased from 2.21 to 2.54 lb. per head daily by stilbestrol. This was about a 15 percent increase in growth rate due to stilbestrol. Cattle receiving stilbestrol consumed 4.1 percent more feed than untreated cattle but were 9.3 percent more efficient in converting feed to gain, Goodrich said.

With a feed cost of 2.2 cents per lb., this improved feed efficiency would increase gross profits by \$1.78 per 100 lbs. of gain or \$8.90 if the cattle gained 500 lbs.

"Carcass grade was only slightly lowered--from 11.4 to 11.0--by feeding stilbestrol. Since 11 is equivalent to high good and 12 is low choice, this difference is equivalent to one-eighth lower grade due to stilbestrol," he explained. However, examination of the data from various trials showed that grades were lowered to the greatest degree when cattle were marketed at weights of less than 1050 lbs.

(more)

Dressing percentage was lowered 1.7 percent by stilbestrol administration. The lower dressing percentage may have been due to smaller amounts of carcass fat or to a larger fill, since stilbestrol-treated cattle consumed more feed, Goodrich said.

Summarizing the experiments, Goodrich said that the results show little difference between cattle fed or implanted with stilbestrol with respect to rate of gain or feed efficiency. However, it appears that cattle treated with the 36 mg. implant produce carcasses with lower grades, less fat in the "rib eye" muscle and significantly lower total carcass fat.

With the exception of the 36. mg. stilbestrol implant, stilbestrol treatment, either oral or implant (10, 20, 24 and 30 mg.), did not greatly affect carcass grade, rib eye area, fat depth, cooler shrink, color or chemical composition of the rib eye muscle, or total carcass composition, he said.

Additional recommendations made by University of Minnesota animal scientists include: Remove stilbestrol from the ration at least 48 hours before animals are marketed; if cattle are implanted with stilbestrol, reimplant after 120-140 days; do not give stilbestrol to heifers intended for breeding; to obtain maximum response make sure the ration is adequate in protein, energy, minerals and vitamin A; and use stilbestrol either as an implant or in the daily ration.

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Immediate release

MINNESOTA AGENTS RECEIVE OUTSTANDING SERVICE AWARDS

OMAHA--Three Minnesota extension agricultural agents were honored for outstanding service and received Distinguished Service Awards during the annual meeting of the National Association of County Agricultural Agents here Sept. 17-23.

J. Eugene Ellis, Buffalo, area soils agent for Kandiyohi, McLeod, Meeker, Renville, Sibley and Wright counties; David S. Johnson, Clarkfield, extension agricultural agent for Yellow Medicine County; and Arnold F. Wiebusch, Red Wing, Goodhue County soil conservation agent.

Ellis received his B. S. degree from Iowa State University in 1941 and his M. S. degree in soil science from the University of Minnesota in 1959. He was Wright County soil conservation agent for 13 years before appointment to his present position this year. He has academic rank of associate professor.

Before joining the Minnesota extension service, Ellis served as county club agent, county extension director and soil conservation agent in Iowa.

Johnson has academic rank of assistant professor. He received his B. S. in 1941 from the University of Minnesota. Before becoming an agricultural extension specialist in farm management in 1947, he was vocational agricultural instructor at Freeborn and Albert Lea.

In 1955, Johnson was appointed assistant agricultural agent for Yellow Medicine County and within the same year became the county's extension agricultural agent.

Wiebusch was named soil conservation agent for Goodhue County in 1951 and for three years before that was assistant soil conservation agent in the county. He attended the University of Minnesota for three years.

From 1928 to 1945, Wiebusch farmed near Lake City and then served as a Soil Conservation Service aide for two years at Red Wing. He was farm instructor at Red Wing High School from 1948 to 1951.

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Immediate release

MIDWEST CONSERVATION EDUCATION CONFERENCE OPENS OCT. 12

Problems of expanding and improving conservation education will be examined during the Midwest Conservation Education Conference October 12-14 at Camp Courage near Maple Lake, Minn.

Conference participants from 10 Midwest states will hear Paul Brandwein, nationally prominent administrator and conservation educator, trace the origins of public policy in conservation education in his keynote address. Brandwein is research director of natural and social science instruction for Harcourt, Brace and World, Inc.

Host for the conference is the Minnesota Association for Conservation Education. On Thursday and Friday, conference participants will divide into five workshop groups for intensive study of five major topics. Speakers that will discuss the topics at general conference sessions are:

* George Donohue, head of the University of Minnesota's rural sociology department, speaking on the problem of public apathy toward conservation education.

* Craig Fullerton, assistant superintendent of instruction, Omaha Public Schools, will examine how to integrate conservation instruction into public school curriculums.

* Neil Salisbury, geography department, University of Iowa, will cover economic and geographic influences in developing effective conservation education programs.

* Arthur Jorgenson, Wisconsin Conservation Department, will discuss how state organizations can cooperate to promote conservation education.

* Frank Nikoley, Wisconsin legislator and attorney, will speak on the political implications of legislative relating to conservation education in Midwest states.

On Friday evening, Dan Saultz, chief of conservation education with the U.S. Department of Interior, will give an overview of present conservation efforts. The workshop groups will give summary reports and recommendations on Saturday morning. A business meeting and noon award luncheon will wind up the conference.

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To all counties
Immediate release

UM SCHEDULES MEETINGS
FOR SEED, FERTILIZER
AND CHEMICAL DEALERS

The schedule for a series of January meetings for Minnesota retail dealers in seed, fertilizer and agricultural chemicals was announced this week by Phillip K. Harein, University of Minnesota extension entomologist.

The meetings are conducted each year by the University's Agricultural Extension Service. The purpose is to acquaint dealers with the latest research findings in the areas of crop varieties, seeds, soils, fertilizers, insect, weed and disease control, and agricultural chemicals.

The schedule is as follows:

- Jan. 2 -- Mankato, Inn Towne Motel; Montevideo, Montevideo Golf Club.
- Jan. 3 -- Owatonna, Inn Towne Motel; Alexandria, American Legion Club.
- Jan. 4 -- Rochester, Holiday Inn; Willmar, Fireside Inn.
- Jan. 8 -- New Ulm, Tropicana Club; Isanti, Rum River Country Club.
- Jan. 9 -- Fairmont, Agricultural Center; Park Rapids, Citizen National Bank.
- Jan. 10-- Slayton, Club Royal; Thief River Falls, Legion Club
- Jan. 11-- Hutchinson, Garden Supper Club; Moorhead, Holiday Inn.

The meeting at Park Rapids will begin at 1:30 p.m. and run until 5 p.m. The other meetings are scheduled from 3:30 to 9 p.m.

Retail dealers who would like further information on the meetings should contact their county agricultural agent or write to Phillip K. Harein, 300 Coffey Hall, University of Minnesota, St. Paul, Minn. 55101

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To all counties
Immediate release

STORAGE ROTS REDUCE
FEEDING VALUE AND
MARKET GRADE OF CORN

Storage rots, which reduce both the feeding value and market grade of corn, may develop on cribbed ear or binned shelled corn if the kernel moisture content is above 13 percent and if the air is warm enough for fungi to grow.

Herbert G. Johnson, University of Minnesota extension plant pathologist, says badly rotted corn is worthless for seed or feed, and occasionally certain rot-producing fungi form toxins and hormones that seriously affect livestock.

Storage rot first appears on ear corn as a mold growth on and between kernels and at their base. However, the kernel's interior may be damaged before the mold is visible.

When storage rots develop in shelled corn, the kernels often cake together to form a crust at the center and top of a bin. Mold growth often is extensive and infested bins have a musty odor. If aeration is inadequate, spoilage of the surface grain may be intensified as moisture migrates to the upper layers.

Johnson says there are more than 25 fungi species that cause storage rots by attacking corn over a wide range of moistures and temperatures. Generally the higher the temperature and moisture content, the faster rotting occurs. Insects, which are common in spoiled grain, take advantage of and contribute to the heat and moisture given off by the molds.

-more-

add 1 -- storage rots

Ordinarily storage rots will not occur in ear corn if it is harvested at a moisture content below 20 to 23 percent and is stored in well-ventilated, covered cribs.

Ears may become moldy in the field if it is too wet for proper maturing and drying. Such corn should be artificially dried when harvested to a moisture content low enough to stop mold growth.

Storage molds in shelled corn can be controlled if the grain is dried to a moisture content of 12 percent or less. Stored grain should be probed frequently for "hot spots" which indicate spoilage.

If a hot spot or a crust of moldy grain is found, remove the rotted and moldy grain, check the moisture content of the remaining corn, and turn this corn (or stir it mechanically) and thoroughly mix it to redistribute moisture and allow heat to escape.

Fans sometimes can be used to move small amounts of air through the grain to help maintain a uniform temperature and prevent "wet" spots. For this treatment to be effective the initial moisture content and temperature of the grain can't be very high, and the relative humidity and temperature of the outside air must be relatively low.

Corn with 25 to 30 percent moisture can be stored safely in airtight silos or other structures that are free of air leaks. Respiration of molds and grain soon use up the oxygen, halting the growth of harmful fungi. The corn may contain yeast fungi, however, which together with the high moisture content make it suitable only for feed.

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BREED DAIRY HEIFERS
ONLY TO DAIRY BULLS,
SAYS UM SPECIALIST

Dairy heifers always should be bred to dairy bulls, says Joe Conlin, University of Minnesota extension dairy husbandman. Many farmers make the mistake of breeding dairy heifers to beef bulls to produce smaller calves and have fewer calving problems.

Conlin says that the advantage of fewer calving problems, however, does not offset the loss in both future herd replacements and potential genetic improvements in the herd that occurs when dairy heifers are bred to beef bulls.

And, since crossbreeding studies show that the dam has more influence on calf size than the sire, crossbred dairy-beef calves are only slightly smaller than straight-bred dairy calves.

Both the size and quality of the heifer replacement crop will be limited if beef bulls are bred to heifers because the resulting calves will not be replacement material. Also, the opportunity to cull low producers will be decreased.

Conlin suggests using known sires of small calves when breeding dairy heifers to dairy bulls. Calving problems with heifers can be kept minimal by having the heifers well-grown at the time of calving and by the dairyman being available to assist with any calving difficulties.

Calves produced by the youngest animals in the herd usually have the highest potential producing ability when superior production sires are used.

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IN BRIEF.....

Soybean Meal Provides Protein in Pig Rations. Soybean meal is one of the best sources of supplemental protein to be fed to swine along with cereal grains. The amino acids in soybean meal protein are excellent for supplementing those amino acids which are deficient in grains. Amino acids are the "building blocks" of protein. Ray Arthaud, University of Minnesota extension animal husbandman, says other protein supplemental feeds such as tankage and meat meal work well in combination with soybean meal and can be used when the cost per unit of protein doesn't exceed that of a pound of protein from soybean meal. These other protein feeds should usually replace no more than 40 percent of the soybean meal. For more information on swine rations, ask your county agent for Animal Husbandry Fact Sheet 7, "Complete Rations for Growing and Finishing Swine."

* * * *

Separate Barn for Dairy Calves. Many dairy barns have insufficient space for calves, and what space there is may be damp, drafty and not healthy for the calves. Donald Bates, University of Minnesota extension agricultural engineer, says this problem can be corrected by building a separate barn for dairy calves that is dry, draft free, well ventilated, reasonably warm, and conveniently planned so the animals can be given good care with a minimum amount of labor. For more information on barns for dairy calves, ask your county agent for University of Minnesota pamphlet M-130, "Build A Separate Barn for Dairy Calves." Or, write to the Bulletin Room, University of Minnesota, St. Paul, Minn., 55101.

* * * *

Drain and Dry Milking Equipment Before Storing. Milking equipment should be thoroughly drained and completely dry before being stored, says Vern Packard, University of Minnesota extension dairy industries specialist. Small numbers of bacteria, which can reduce the price received for the milk, can multiply many times between milkings if there is any moisture or water in the tank.

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To all counties
ATT: HOME AGENTS
Immediate release

TEXTILE LABELING
AIDS THE CONSUMER

Do you oftentimes find it hard to know what you are buying because you don't understand the terms used in textile labeling?

Thelma Baierl, extension clothing specialist at the University of Minnesota, suggests that knowing labeling terms is important because they indicate to the consumer what performance can be expected from the article.

Miss Baierl says that some textile labeling is legislated by the Textile Fiber Products Identification Act. This act specifies that the fiber content must be given on every textile product sold by generic name and percentage.

Fiber producers sell their products to manufacturers in three ways: unbranded fibers, branded or trademarked fibers and under a licensing agreement. Understanding these terms might help the consumer make a decision on the quality of the product.

When unbranded fibers are sold, the label on the garment indicates the fiber only, such as rayon, polyester or acetate. Because no fiber trademark is used, the fiber producer is not legally obligated to maintain the fiber quality.

If you see Dacron polyester, Fortrel polyester, Vycron polyester, or Kodel polyester, you know that these are trademarks. They indicate that the quality of the fiber produced is being controlled. Although most fiber producers consider it their responsibility to maintain quality controlled fibers, the final responsibility actually rests with the manufacturers.

Under the licensing agreement, a particular trademark is owned by a fiber producer and it is granted only to manufacturers whose fabrics pass a specific test. This is called a licensed trademark. Examples would be Fortrel(T) polyester or Dacron(R).

Miss Baierl says that licensed trademarks are important for the consumer. Firms which license their trademarks control the quality of the product on which the trademark appears. As a result the consumer has assurance of the quality of the product.

Fiber content alone does not assure that the end product will perform well, Miss Baierl says. But most reliable trademarked brands are backed up by testing programs. If the product does not perform as claimed, complaints can be channeled effectively to their source.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
September 25, 1967

To all counties
4-H NEWS
Immediate release

4-H FILLERS

The 4-H idea now circles the globe. About 75 other countries around the world have 4-H-like groups and organizations. The nearly five million young people who are members of these organizations strive for better homes and communities, better citizenship and better world understanding.

During National 4-H Week, September 30 - October 7, young people 9 to 19 years of age will have special opportunities to join 4-H clubs in their own communities. County extension offices, 4-H members or local club leaders can furnish information about joining.

Nearly 13,000 adults in Minnesota volunteer as organizational, activity and project leaders in some 2,000 4-H clubs in the state.

The H's in 4-H stand for Head, Heart, Hands and Health. The green four-leaf clover with the white H in each leaf is the national emblem of 4-H clubs.

Private enterprise annually contributes several million dollars to the 4-H program for educational trips, training aids, awards and recognition.

More than 25 million men and women in the U. S. today -- about 750,000 in Minnesota -- were former 4-H members. Among them are many of the nation's leaders.

Nearly 23,000 Minnesota 4-H members are enrolled in the beginner, junior and advanced 4-H foods programs, learning both the art of cookery and the basics of good nutrition.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101-Tel. 647-3205
September 26, 1967

Immediate release

1,000 CATTLE FEEDERS TO ATTEND TRACY CLINIC

Over 1,000 cattle feeders from Minnesota, Iowa and South Dakota are expected to attend the 14th annual Southwestern Minnesota Cattle Feeders' Clinic Thursday, Oct. 5, at Tracy.

The theme for this year's clinic is "Is There a Future in Feeding Cattle?"

The program will begin at 4 p.m. at the Central Feeder Yards. Various grades of feeder cattle, their availability, costs and profit prospects will be demonstrated and discussed by University of Minnesota specialists and Francis Anderson, who is in charge of Central's stocker and feeder operations.

A free barbeque beef supper will be served at 5:30 p.m. by the Production Credit Associations of Mankato, Worthington, Redwood, Madison, Windom and Marshall.

The evening program, which will be held in the Tracy Armory, will begin at 7:30 p.m. with a color movie on parasite control.

"Estimating Livestock Numbers" will be discussed by Eldon Johnson, statistician for the State-Federal Crop and Livestock Reporting Service. Paul Hasbargen, extension economist at the University of Minnesota, will appraise the "Corn-Belt Cattle Feeding Outlook."

"Using Cattle Futures" will be presented by Ken Egertson, University extension economist, and Robert E. Jacobs, University extension animal husbandman, will discuss "When to Quit Feeding Cattle."

The evening program will be followed by a question and answer session.

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September 26, 1967

Immediate release

FARM INCOME TAX SHORT COURSE SCHEDULED OCT. 23-25.

The 25th annual Farm Income Tax Short Course, designed for persons who help prepare state and federal income tax returns, is scheduled October 23-25 at the Hotel Lowry in St. Paul.

A special opening day session will review fundamental requirements for filling out income tax returns. Other reports on the program will detail current changes in federal and state tax laws and answer questions on the sales tax and its effect on the income tax.

The course is sponsored by the University of Minnesota's Institute of Agriculture and will feature a question and answer booth with state and federal tax officials available to give advice on specific tax problems.

Workshop sessions will take up two days of the course. Topics to be covered include: refunds and credit, installments and deferred sales, small business corporations, investment credit, foreclosures and repossession, and resources to help resolve income tax problems.

For more information and course enrollment material, write to: The Department of Agricultural Short Courses, University of Minnesota, St. Paul, Minnesota, 55101.

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Immediate release

NO MIRACLE TREES FOR HOME YARDS

Don't fall for advertising that promises you a "miracle" tree for your home yard.

That warning comes from Mrs. Jane McKinnon, extension horticulturist at the University of Minnesota.

The "Robinia" is now being widely advertised by direct mail as a new and unusual "miracle" tree for home planting. In fine print in the advertising the so-called "miracle" tree is identified as Robinia pseudo-acacia. This is actually the black locust, known in Minnesota for decades and used most commonly in erosion control and for fence posts.

The black locust is attractive but is thorny and given to developing many suckers. It is also susceptible to borers which cause tops of trees to die back.

Before ordering any trees or shrubs for the home yard, Mrs. McKinnon advises that you consult a local nursery to be sure of getting plants that are adapted to Minnesota conditions. Or check the listing in Extension Bulletin 267, "Woody Plants for Minnesota." Copies are available free of charge from Bulletin Room, University of Minnesota, St. Paul, Minn. 55101.

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Department of Information
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Immediate release

INSTITUTE OF AGRICULTURE CALENDAR OF EVENTS

OCTOBER

- Sept. 30 - Oct. 7 NATIONAL 4-H WEEK
- Oct. 2 RESORT MANAGEMENT INSTITUTE, Quadua Mt., for
 Itasca, Cass, Crow Wing and Aitkin counties
- 3 RESORT MANAGEMENT INSTITUTE, Hojalglade Resort
 at Wahkon, for Mille Lacs, Morrison, Kanabec and
 Aitkin counties
- 5 BEEF CATTLEMEN'S INSTITUTE, Agricultural Experiment
 Station, Crookston
- 9-11 FEDERATED GARDEN CLUBS LANDSCAPE DESIGN SHORT
 COURSE,
 St. Paul Campus Student Center
- 12 MIDWEST CONSERVATION EDUCATION CONFERENCE,
 Camp Courage, Maple Lake, registration at 10:30 a.m.
- 18 LIVESTOCK AND DAIRY FIELD DAY, Agricultural Experi-
 ment Station, Grand Rapids
- 18 NORTH CENTRAL CHEESE INDUSTRIES ASSOCIATION
 MEETING AND SHORT COURSE
 9:30 a.m. registration, Hotel Radisson, Minneapolis
- 23 - 25 FARM INCOME TAX SHORT COURSE, 8:00 a.m. regist-
 ration on the 23rd, Main Ballroom, Hotel Lowry, St. Paul
- 25 DAIRY DAY, Agricultural Experiment Station, Crookston
- 30 - 31 MINNESOTA ASSOCIATION OF COOPERATIVES ANNUAL
 MEETING, Hotel Radisson, Minneapolis

MINNESOTA ASSOCIATION OF COOPERATIVES

- 9 Braham
10 Aitkin
11 Virginia
12 Cloquet

LIVESTOCK OUTLOOK MEETINGS

- 3 Mora, for Kanabec, Pine, Aitkin and Mille Lacs counties
- 4 Truman, for Blue Earth, Watonwan and Martin counties
- 4 Fergus Falls, for East and West Otter Tail counties

(more)

Add 1 -- Calendar of events

- 5 Tracy, for Lyon, Lincoln, Redwood, Cottonwood, Murray
and Yellow Medicine counties
- 5 St. Cloud, for Stearns, Meeker, Wright, Benton, Todd,
Morrison and Sherburne counties
- 9 Plainview, for Wabasha and Olmsted counties
- 10 Lake City, for Wabasha and Goodhue counties
- 10 Luverne, for Rock county
- 10 Zumbrota, for Goodhue and Dodge counties
- 11 Pipestone, for Pipestone county
- 11 Faribault, for Rice county
- 12 Worthington, for Nobles and Jackson counties
- 12 So. St. Paul, for Dakota, Washington, Carver, Anoka,
Scott and Hennepin counties

OUTLOOK MEETING AND BEEF MANAGEMENT

- 16 Roseau
- 17 Lake of the Woods
- 18 Thief River Falls
- 19 Clearwater

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Immediate release

TOP WINNERS NAMED AT 4-H MARKET LIVESTOCK SHOW

Dale Meyer, 15-year-old 4-H member from Ellsworth won the grand champion beef award at the Minnesota 4-H Market Livestock Show Wednesday (Sept. 27) afternoon.

His Angus steer topped all entrants in the beef division. This is Meyer's fourth year at the show. He has had both beef and swine projects during his four years in 4-H and exhibited the champion shorthorn in the 1966 livestock show.

Some 750 4-H'ers from throughout Minnesota showed livestock at the show on the State Fair Grounds, September 25-27.

The reserve champion beef was a Hereford steer shown by Marilyn Hansen, 18, Jackson, who has been in 4-H nine years and was attending her sixth market show. Richard Kramer, 19, Worthington, won the champion beef showman award. He has been in 4-H for 10 years. Gene Gilman, 17, Garden City, was reserve champion beef showman in his fifth year at the show.

Tom McMonagle, 15-year-old 4-H member from Madelia, received the grand champion lamb award as his Crossbred topped the lamb division. This was his first year at the show. McMonagle has had the lamb project for four of the six years he has been in 4-H.

Add 1 - Top Winners

The reserve grand champion lamb was a Hampshire exhibited by Kendall Bogue, 13, Farmington. He had the reserve champion lamb carcass in 1966. Bonnie Frame, Northfield, was named champion sheep showman. Picked as reserve champion sheep showman was Jim Herr, 18, Brownsdale, who has been in 4-H and had the lamb project for 10 years.

Carolyn Miller, 12-year-old 4-H'er from Glenville won the grand champion swine award with her purebred Hampshire barrow. She has had the swine project for two of her three years in 4-H. This was her first year at the market livestock show.

Reserve grand champion hog was a Poland China shown by Mark Peterson, 15, Northfield. David May, 19, Farmington, was selected champion swine showman in his fourth year at the show. He won the livestock achievement award in 1966. Picked as reserve champion swine showman was Karen Annexstad, St. Peter.

Breed champions within divisions were as follows:

BEEF: ANGUS--Dale Meyer, 15, Ellsworth; HEREFORD--Marilyn Hansen, 18, Jackson; and SHORTHORN--Barbara Vancura, 18, Lakefield.

HOGS: BERKSHIRE--Janet Rollings, 16, Lake Crystal; CHESTER WHITE--Eugene Lutteke, Alden; DUROC--Kenneth Akkerman, 15, Brownsdale, for the second straight year; HAMPSHIRE--Carolyn Miller, 12, Glenville; POLAND CHINA--Mark Peterson, 15, Northfield; SPOTS--Leon Spronk, Edgerton; YORKSHIRE--Dianna Gast, 16, Argyle; and CROSSBRED--David Engen, 12, Glenville.

SHEEP: HAMPSHIRE--Kendall Bogue, 13, Farmington; SHROPSHIRE-- Duane Steele, 16, Windom; SOUTHDOWN--Janet Halstad, 17, Detroit Lakes; SUFFOLK--Jim Resch, 15, Jackson; OTHER BREEDS--Brian Nystuen, 17, Kenyon; and CROSSBRED--Tom McMonagle, 15, Madelia.

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St. Paul 55101-Tel. 647-3205
September 28, 1967

Immediate release

TOP COUNTIES HONORED AT 4-H MARKET LIVESTOCK SHOW

The Dakota County 4-H delegation walked off with two special awards and another went to Jackson County members during a banquet hosted by the St. Paul Area Chamber of Commerce as the Minnesota 4-H Market Livestock Show closed Wednesday (Sept. 27) afternoon.

About 750 4-H members from throughout the state showed livestock at the show on the State Fair Grounds, September 25-27.

Dakota County 4-H'ers won the Premier County Livestock Award for outstanding livestock exhibits. Freeborn County placed second, Nobles took third and the Pipestone County delegation ranked fourth.

As winner of the Livestock Award, the Dakota County group received a trophy donated by the South St. Paul Rotary Club. The award is based on points the 4-H exhibitors earn in herdsmanship, showmanship and individual placings, plus a handicap score to compensate counties that enter fewer than average numbers of livestock.

The Jackson County 4-H members received the Tellier trophy for the best exhibit of shorthorn cattle. The 4-H Market Livestock Show donated the trophy.

The Dakota County 4-H members also won herdsmanship honors and a trophy from the Central Livestock Association. County delegations receiving blue ribbons were Freeborn, Lincoln, Lyon, Martin, Murray, Pope, Redwood, Steele and Yellow Medicine.

Each year the herdsmanship trophy goes to the county delegation doing the most thorough job of keeping animals, stable and equipment both clean and orderly during the show.

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SPECIAL

Immediate release

IN BRIEF. C O R R E C T I O N

The In Brief, "Drain and Dry Milking Equipment Before Storing," sent out on September 25, should read:

Drain and Dry Milking Equipment Before Storing. Milking equipment should be thoroughly drained and completely dry before being stored, says Vern Packard, University of Minnesota extension dairy industries specialist. Small numbers of bacteria can multiply many times between milkings if there is any moisture in the tank. These bacteria may get into the milk supply, resulting in high bacteria counts in the milk. This high bacteria count can result in a lower price received for the milk.

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Department of Information
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St. Paul 55101-Tel. 647-3205
September 28, 1967

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FOR RELEASE: After 7 p.m. Sept. 29, 1967

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FARIBAULT 4-H'ER RECEIVES 1967 BROWN SWISS AWARD

NEW ULM--Steven Drewitz, 17, Faribault, who has built his dairy herd to 12 animals, is the 1967 winner of the 4-H Brown Swiss Award.

As state Brown Swiss winner, the Rice County youth was awarded a watch by the Brown Swiss Breeders Association at its annual meeting here tonight (Friday, Sept. 29).

Steve has had Brown Swiss projects all nine years of his 4-H work and has exhibited at the State Fair five years.

He is a senior at the Southern School of Agriculture, Waseca, and considers his 12 purebred Brown Swiss cattle the beginnings of a strong dairy herd. Steve would like to enter dairy farming after graduation from high school.

Swiss bells, provided by the Brown Swiss Association, will be presented to six 4-H Brown Swiss Canton winners this fall at county 4-H achievement programs. Canton winners are: Canton 1, Rodney Read, Mower county; Canton 2, Steven Drewitz, Faribault; Canton 3, none; Canton 4, Vickie Lee Sonsteby, Clearwater; Canton 5, Rosella Mort, Mille Lacs county; Canton 6, James Arvidson, East Otter Tail county; Canton 7, Jane Rantanen, Middle River.

Winners were selected on the basis of their performance on written report forms, according to Earl Bergerud, assistant state 4-H club leader at the University of Minnesota.

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Immediate release

CHANGES IN 4-H NOTED AS MEMBERS OBSERVE NATIONAL 4-H WEEK

Last year the University of Minnesota's Agricultural Extension Service reached more than 76,000 youths with 4-H educational programs, Leonard Harkness, state 4-H leader, reported today.

Some 54,000 of this number were boys and girls 9 to 19 years of age who are members of the 2,121 organized 4-H clubs in Minnesota. But more than 22,000 were enrolled in special short-term 4-H programs such as career exploration and bicycle safety.

Nearly 13,000 adults acted as volunteer leaders this past year, assisting 4-H'ers with club organization, activities and projects.

Harkness made his report as 4-H'ers throughout Minnesota prepared to observe National 4-H Week Sept. 30 to Oct. 6.

The trend toward more short-term programs is one of the many changes taking place in 4-H today, Harkness noted. Many of these short-term programs have been a phase of 4-H Operation Expansion, which has adapted 4-H projects and activities to meet the needs of more suburban, urban and rural non-farm youths. Minnesota was one of six pilot states in the nation taking part last year in this experimental new, broader and more adventurous approach to 4-H work.

A further example of the attempt in Minnesota to extend the appeal of 4-H is the 4-H TV Science Club, with its emphasis on scientific knowledge of importance to today's youth. As one of the requirements for membership, boys and girls will watch 10 weekly half-hour programs on science, shown on eight television stations in Minnesota beginning Oct. 1.

4-H continues to be a "learn-by-doing" program, Harkness says, but many of the traditional projects in home economics and agriculture are taking on a new look as stress is placed on both economic and scientific aspects -- the "why" rather than merely the "how."

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Immediate release

SCIENCE FEATURE OF PROGRAMS FOR CHILDREN

Thousands of young people in Minnesota will learn about the wonders of science during the next 10 weeks as they take part in a new venture called the 4-H TV Science Club.

The 4-H TV Science Club will be made up of boys and girls, 9 years old or over-- most of them in the 4th, 5th and 6th grades -- who will watch 10 half-hour programs on science each week in their own homes.

The 4-H TV Science Club represents one of the steps taken in the 4-H program to keep with the times and broaden the appeal of 4-H as a youth education program, according to Leonard Harkness, state 4-H leader at the University of Minnesota.

Sponsored by the University of Minnesota Agricultural Extension Service, the science programs will be carried on eight television stations in Minnesota. The 10 programs will feature material on the science of fire, animal skeletons, astronomy, plants, archeology, physics, behavior, microbiology, meteorology and chemistry.

An important part of each program will be an explanation of experiments which each club member can carry out in his own home, such as making a sundial or simple fire extinguisher. A special 4-H TV science manual will suggest easy-to-do experiments and help members understand some of the basic principles in various sciences.

Boys and girls need not be presently enrolled in 4-H in order to join the 4-H TV Science Club, Harkness says. Boys and girls, 9 years or over, preferably in the 4th, 5th or 6th grade may obtain a membership card and a Science Club booklet by sending their name, age, address and county to: 4-H TV Science Club, State 4-H Office, University of Minnesota, St. Paul, Minn. 55101.

Schedules for viewing the 4-H TV Science series are as follows: KAUS, Channel 6, Austin, each Sunday at 4 p.m. beginning Oct. 1; KTCA, Channel 2, St. Paul, WDSE, Channel 8, Duluth, KWCM, Channel 10, Appleton, Mondays at 5:30 p.m. beginning Oct. 2; KEYC, Channel 12, Mankato, Mondays at 5 p.m. beginning Oct. 2; WTCN, Channel 11, Minneapolis, Saturdays at 9:30 a.m., beginning Oct. 7; KCMT, Channel 7, Alexandria, and KNMT, Channel 12, Walker, Sundays at 8:30 a.m. beginning Oct. 8.

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Immediate release

RICE COUNTY 4-H'ER WINS LIVESTOCK ACHIEVEMENT AWARD

Eddie W. Smisek, Jr., 19, of Lonsdale received a \$100 U. S. savings bond as 1967 state winner of the livestock achievement award at the close of the 49th annual State 4-H Market Livestock Show.

The award was presented at a banquet Wednesday (Sept. 27) afternoon given by the St. Paul Area Chamber of Commerce at the Prom Ballroom in St. Paul.

Second place achievement winner was Mike E. Carlson, 18, Cokato, who received a \$50 savings bond. Jim Sherwood, 17, Magnolia, was named third place winner and received a \$25 bond. The St. Paul Union Stockyards Company donated the awards.

Livestock achievement awards are based on the 4-H members' overall excellence in livestock projects, knowledge of animal production, and application of management principles and approved techniques for care and feeding of livestock.

A 4-H member for 11 years, Smisek is in his last year of 4-H and owns a flock of 50 Southdown and Hampshire ewes. He has had both sheep and swine projects every year since starting in 1957.

A consistent award winner at the Rice County Fair, Smisek had the champion late market lamb from 1961 through 1965 and the champion early market lamb in 1961, 1963 and 1965. He was the county fair's top sheep showman in 1963 and 1966 and showed the champion trio of lambs in 1964 and 1965.

Add 1 - Achievement awards

A junior leader for six years, Smisek has served as local club treasurer and vice president and has received the Minnesota 4-H Key Award. In 1965, he represented the state at the National 4-H Club Congress in the sheep project. He has given two purple ribbon lamb demonstrations at the Minnesota State Fair.

Carlson has been in 4-H for nine years. He started with two orphan lambs eight years ago and has now expanded his flock to 30 ewes, 50 market lambs and a registered ram. He has twice shown champion lambs and been champion sheep showman at the Wright County Fair and in 1967, gave a purple ribbon lamb demonstration at the state fair.

A Minnesota 4-H Key Award winner, Carlson has been a junior leader for four years. He has served as secretary, vice president and sheep project leader of his local club and has been a delegate to the State 4-H Junior Leadership Conference for two years.

Sherwood has been a junior leader for four of his nine years as a 4-H club member and has been in meat production projects since starting with a weather project in 1959. He now has four sows with 35 little pigs, 10 bred sows, three boars and 13 market pigs, plus a sheep flock of five ewes and a ram.

In 1966, Sherwood received the Minnesota 4-H Key Award and served as treasurer of his local club. He has also been president of his local 4-H club, has conducted livestock judging sessions and served on numerous county and club 4-H committees.