University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 1, 1960

HELPS FOR HOME AGENTS
(These shorts are intended as fillers for your radio programs or your newspaper columns. Adapt them to fit your needs.)

In this issue:

HOME FURNISHINGS

Summer Furniture To Suit Your Needs

If you are buying summer furniture for your yard or patio, first decide exactly what you want. Then shop until you find the best type to fit your needs, suggests Mrs. Myra Zabel, extension home furnishings specialist at the University of Minnesota.

Must the furniture be left outside all the time? If so, the finish and padding covers should be waterproof. Plastic webbing is a good waterproof material, but be sure it can be replaced when necessary.

If the furniture will be moved around a lot, it should be lightweight. Storage is important, too. If space is limited, you may want to buy folding pieces. Some picnic tables have folding legs similar to card tables.

Pieces light in scale will make small patios or porches seem larger, and leave more room. Some of the metal furniture with enameled frames and plastic-covered seats and pillow backs is attractive enough for living room furniture. Young couples may want to consider buying this "child-proof" furniture for their living area. When it is replaced later, it can be moved to a family room or porch.

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Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

SUMMER CLOTHING

Wear Cool Clothes For Summer

When the temperature soars you'll feel degrees cooler if you wear cool styles, fabrics and colors. The following suggestions for summer clothes are from Shirley Erickson, extension clothing specialist at the University of Minnesota.

* Pick styles with stand-away collars, lowered necklines, no sleeves or full, open sleeves and full skirts.

* Wear white and pastel colors. They reflect light and will feel and look cooler than dark colors.

* Choose wrinkle-resistant fabrics for easy care. In any fabric, prints, checks, stripes and plaids show wrinkles less than solid fabrics.

* Nylon, acetates and polyesters are good summer choices. They pack well, wash and dry quickly and are light weight.

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Winter Clothes Need Right Summer Retirement

Winter clothes must be immaculately clean before they are put away for summer storage. Clean clothes are insured against the discoloring or fiber deterioration which spots and stains might cause over the summer.

Permanently mothproofed woolen and worsted fabrics (done when the material is manufactured) are the best protection against moths. Moth repellents in flake, crystal or ball form are also available. These are most effective when used in an air-tight container. Be sure to follow the directions for their use.

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Vacation Clothes Can Help You Relax

Plan the clothes you will take on your vacation carefully. Make a list of your probable activities and the clothes you will need. Don't include any non-essentials, cautions Shirley Erickson, extension clothing specialist at the University of Minnesota.

For the lake or ranch take lots of sports clothes. For the city keep your outfits simple. Use basic garments that can be mixed or matched and dressed up or down with a variety of easy-to-pack accessories. Wash and wear garments will also save time and energy in clothes care and allow more time for enjoying your vacation.

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FOODS AND NUTRITION

Keep Picnic Foods Cool

Take special care to keep picnic foods refrigerated, warns Verna Mikesh, extension nutritionist at the University of Minnesota. Some favorite picnic foods may develop food poisoning from standing in the warm sun or in a hot car.

Keep these foods in the refrigerator until time to pack the lunch: potato salad, deviled eggs, egg salad, sandwiches, chicken or fish casseroles and salads, fried chicken or other cooked meat. Carry them in a chilled or insulated food container.

Custard and cream pies, and cakes or cream puffs with cream pudding filling should never be taken on a picnic because of great danger of food poisoning.

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Tips For Summer Salad Greens

Salad greens are a nutritious and refreshing addition to summer meals. Here are some suggestions for the storage and preparation of greens from extension nutritionists at the University of Minnesota.

* Store greens and salad vegetables in a crisper or on the lower shelves of the refrigerator.

* Slip a paper towel into bags of washed greens; they will absorb any extra moisture left after drying or draining. Replace towels when they are damp.

* Use your kitchen shears for cutting green onion tops and chives, mincing parsley or snipping ribs for romaine leaves.

* Give a pretty new look to celery slices. Cut them slantwise--and save time by slicing several stalks at once.

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Long, Slow Cooking Best For Poultry Barbecuing

For tasty barbecued poultry keep the grill high and use a small amount of charcoal. Poultry needs long, slow cooking, says Milo Swanson, associate professor of poultry husbandry at the University of Minnesota.

On homemade grills Swanson recommends the grill rack be about 24 inches from the charcoal. Portable bowl-type grills usually cannot be raised enough to allow this distance but they should be kept as high as possible. This raised grill plus a minimum amount of charcoal will give the slow cooking necessary for well cooked poultry.

(Note: National Farm Safety Week is July 24-30)

HOME SAFETY

Home Falls Cause Deaths

Almost half of the deaths from home accidents occur from falls, according to Glenn Prickett, extension safety specialist at the University of Minnesota. About one-fifth of the falls occur in bedrooms, but other areas are dangerous as well--living and dining rooms, kitchens, stairs, and bathrooms in that order.

Causes for these home falls include: old, sloped, cracked or splintered floors; a clutter of materials on the floor, particularly liquids or toys; unanchored scatter rugs; inadequate lighting; wearing shoes with loose soles or runover heels.

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Helps For Cooking Safety

Accidents can happen, even when you are cooking in your own kitchen. Here are some tips for safer cooking from Glenn Prickett, extension safety specialist at the University of Minnesota.

* When removing lids from hot cooking utensils, lift the far side first so steam does not escape toward you. Drain cooked foods by the same method so that both hot liquid and steam are directed away.

* Avoid carrying pans filled with hot food and liquid across the kitchen.

* Fill a pan only one-third full of fat when deep frying.

* Dry food thoroughly before deep-fat frying so water will not cause the fat to spatter.

* Keep small children away from the area where hot foods and utensils are being handled.

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If Fire Strikes

If fire strikes your home, immediate action can save lives and property. Right now, plan possible routes to the first floor from all upstairs bedrooms. Know the location of the fire alarm box nearest your home. Have the fire department number posted at your telephone.

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Cyclists Must Be Old Enough To Understand Highway Rules

There is no age limit when children can ride bikes. But Glenn Prickett, exten- safety specialist at the University of Minnesota, says bicycling should be limited to those youngsters old enough to know, understand and obey the rules of the road.

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SPECIAL

Immediate Release

ALUMNI GROUP ELECTS NEW OFFICERS

New officers were elected this week by the Alumni Association of the University of Minnesota's College of Agriculture, Forestry and Home Economics.

Elected president was Owen K. Hallberg, Eau Claire, Wis., who is a 1946 graduate in agriculture.

Mrs. Ann Richter, Wadena, 1937 home economics graduate, was named vice president and Jerald A. Mortenson, Minneapolis, 1950 forestry graduate, was elected secretary-treasurer.

The election was held during the association's regular board meeting.

The association was organized in 1959 and held its second annual reunion on the St. Paul campus in May.

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* For release at 1 p.m. *
* Wednesday, July 6 *
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VALUE OF WHEEL-TRACK CORN PLANTING NOTED AT FIELD DAY

ROSEMOUNT--Wheel-track corn planting is a good practice for nearly any type of soil, but it's no panacea for all corn-growing problems.

So said a University of Minnesota soil researcher today during the Field Day at the Rosemount Agricultural Experiment station.

George Blake said University research and experience of hundreds of farmers around southern Minnesota show wheel-track planting works well on most heavy soils. He refuted the idea that the method is suited only for sandy fields.

The wheel-track method--a form of minimum tillage--means planting corn in tractor tracks on soil which has been plowed but disked and dragged very little or not at all. It saves time and money--reducing costs up to $5 per acre.

Blake listed other advantages, too. In a spring like 1960, he said, it helps get young corn plants up in a hurry. On moist, freshly-plowed soil, a farmer can plant the seed shallow. That makes for ideal germination.

Second, Blake said wheel-track planting reduces erosion. In Illinois research, corn fields plowed, disked and dragged before planting lost 14 times as much soil and five times as much water as fields wheel-track planted.

Farmers using wheel-track planting this year weren't pinched as much by the late, wet spring. Those who did the usual disking and dragging wasted valuable time.

Blake said wheel-track planting can help control weeds, because seeds don't germinate as well in the loose soil between the rows.

He warned, however, that wheel-track planting is no cure-all, but is merely one more way to reduce costs and help control weeds and erosion.

The method does have some limitations. Farmers often see individual areas that need extra working. Fields plowed in fall usually need to be disked once before planting. Also, Blake said, in some years good spring plowing is impossible because of the soil condition. If plowing is too rough, disking may again by necessary.

60-216-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 5, 1960

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* For release at 11 a.m. *
* Wednesday, July 6 *
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CHEMICAL HELPS LICK QUACKGRASS

ROSEMOUNT--Atrazine may be the quackgrass-killing chemical which corn producers have been looking for, Field Day visitors at the University of Minnesota's Agricultural Experiment station were told today.

Agronomist Richard Behrens said that in recent research, broadcasting 3 or 4 pounds of atrazine per acre in the fall or early spring killed nearly all of the quack.

In fact, he said, atrazine showed more promise in dealing with quackgrass than any other method developed to date. This weed has historically been one of the most difficult to control in corn. Most other chemicals won't affect it.

However, Behrens noted some limitations to using atrazine this way.

First, he said, it must be used only in fields where corn will be grown the following year or two. Grain or forage crops might be damaged by the left-over chemical in the soil.

Second, the treatment is costly--about $15 per acre. Yet, the cost can be justified. In fields heavily infested with quack, that value in corn yields could be saved the year the chemical is applied. And Behrens said once the quack is killed out, the field probably won't need treating for another 5 years or more.

Atrazine also is a good chemical for pre-emergence spraying in corn at planting time, according to Behrens. However, when used this way, the chemical kills annual grass weeds but has less effect on quack than it does when used earlier in the spring or the fall before.

Here's why. Atrazine kills quackgrass slowly, and is most effective when sprayed directly on the grass foliage. Behrens says a field shouldn't be plowed or disked for planting for at least three weeks after application if the quack is to be controlled.

When atrazine is used at planting time, the field will have been recently plowed or disked and the chemical won't be as effective on quack that emerges later. Also, since the chemical kills quack slowly, the grass will live long enough to still harm corn during the early stages of growth.

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University Farm and Home News
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July 5, 1960

A FARM AND HOME
RESEARCH REPORT

Immediate release

COOKING METHOD AFFECTS AMOUNT OF VITAMIN C IN VEGETABLES

The way you cook your vegetables will affect the amount of vitamin you get from them.

Though most people think of citrus fruits as the main sources of vitamin C or ascorbic acid--the vitamin that has to be replaced in the body every day--green vegetables such as broccoli, Brussels sprouts, cabbage and cauliflower are also valuable sources.

Research by home economists at the University of Minnesota shows that the method used in cooking vegetables has a definite bearing on the vitamin C content. One study by University scientists Joan Gordon and Isabel Noble showed that asparagus, broccoli, Brussels sprouts and cauliflower lost more vitamin C when cooked in boiling water in an open pan than when cooked in a pressure saucepan, a tighly covered saucepan or a steamer. The vegetables did not all lose the same percentage of vitamin C when cooked in boiling water, but all lost a substantial amount. Asparagus and broccoli retained the most vitamin C when cooked in a pressure saucepan--80 and 82 percent respectively. Brussels sprouts and cauliflower retained most in a steamer--86 and 71 percent.

(more)

But further study on cabbage, cauliflower and broccoli showed that homemakers will sacrifice flavor for nutrition if they decide to use the steam cooking methods. These vegetables are milder in flavor when cooked in boiling water than when cooked in steam.

Color changed, too. All of the green vegetables except asparagus were greener when cooked in boiling water or in a pressure saucepan than when cooked in a tightly covered saucepan or steamer.

Another study showed that cabbage, cauliflower and broccoli prepared in an electronic range retained more vitamin C than when cooked in boiling water or in a pressure saucepan on a conventional range. But electronically cooked vegetables were stronger in flavor and less green than when cooked in boiling water.

Freezing, too, has its effect on the vitamin C content of vegetables. All of the vegetables studied by Misses Gordon and Noble--asparagus, broccoli, Brussels sprouts, cauliflower, green beans--lost some vitamin C during the process of blanching, freezing and storage. However, the amount of loss varied from vegetable to vegetable.

A serving of cooked frozen broccoli supplied about 25 percent of the recommended daily allowance, according to one study. A serving of fresh broccoli supplies about 50 percent. Fresh green beans supply seven percent of the daily need, but after freezing supply three percent.

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University Farm and Home News
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University of Minnesota
St. Paul 1, Minnesota
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SPECIAL

Immediate release

NEW SOUTHWEST EXPERIMENT STATION TO HOLD FIELD DAY FRIDAY

The University of Minnesota's new Southwest Experiment station near Lamberton will hold its first annual Field Day Friday afternoon, July 8, according to W. W. Nelson, station superintendent.

Visitors will be shown crops and soils research in progress on more than a thousand individual plots. Reports will cover crop varietal trials, weed control, fertilizer rates and procedures, corn breeding, soil compaction and other topics.

Principal speaker will be H. J. Sloan, Agricultural Experiment station director for the University, who will address the visitors at 12:30 p.m. Wagon tours of the station research plots will begin shortly after 1 o'clock.

Field day activities will be preceded by a morning meeting at the station of the Southwest Minnesota Crop Improvement association.

This is the first year the station has been in operation. The site includes 200 acres which formerly was the Roger Frank farm and another 40 which was purchased from William Behrens.

The station was established to conduct research on crops and soils problems affecting farmers in a 14-county area of southwest Minnesota.

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To all counties

For immediate use

FARM FILLERS

Don't let your cows get leg-weary searching for food in a woodland pasture. It won't help the cows, the woods, or your pocketbook, according to Parker Anderson, extension forester at the University of Minnesota. He points out that grass in woodlands has less feed value than in open fields. Cattle have to walk farther to fill their stomachs. And besides, grazing damages good timber, hurting your future forestry income. All in all, as several studies show, the daily cost of producing beef or milk on woodland pasture is much greater than on improved forage land.

* * * *

It pays to have cows in good flesh at calving time. That means dry cows should be well fed this summer--about the same as the milking cows. Some grain is usually a must. And Ralph Wayne, extension dairyman at the University of Minnesota, says fresh water and shade are important too.

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Here's a note on stopping internal parasites in sheep. From July 15-31, treat the animals with a copper sulfate and nicotine sulfate solution. R. E. Jacobs, extension livestock specialist at the University of Minnesota, says you can make the solution this way: Dissolve 4 ounces copper sulfate in a quart of hot water. Add enough boiled water to make 3 gallons of solution. Then add 3 ounces of nicotine sulfate. Treating dose should be: lambs up to 40 pounds, three-fourths ounce; 40-60 pounds, 1 ounce; 60-80 pounds, 2 ounces and yearlings and older, 4 ounces.

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Farmers are earning about $250 every minute in interest from their U. S. Savings Bonds. And the Bonds Division says that's only an eighth of the total income to all U. S. citizens from bonds--which amounts to $2,083 per minute.

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SPECIAL

Immediate release

SOILS STUDENTS AWARDED SCHOLARSHIPS

Seven soils students at the University of Minnesota have been appointed to Smith-Douglass company, Inc. scholarships for the year 1960-61, Keith N. McFarland, director of resident instruction for the College of Agriculture, Forestry and Home Economics, announced today.

Receiving $100 scholarships are: Charles M. Berigan, 4724 36th ave. S., Minneapolis; Roy O. Bratlien, Hawley; Larry E. Hillesland, Nelson.

Awarded $200 scholarships are: Roy D. Colver, 3801 Yates ave. N., Minneapolis; Wayne W. Marzolf, Preston; Alan E. Olness, Kenyon; Gary A. Steen, Ortonville.

The objective of these scholarships, provided by the Smith-Douglass company, Inc., Norfolk, Va., is to help competent and deserving students to obtain college training aimed at the conservation and improvement of the productivity of the soils of this country.

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To all counties

For immediate use

POINTERS GIVEN ON INSULATION FOR BUILDINGS

Insulating a new farm building means much more than having a "dead air space" between two walls.

In fact, the idea of a dead air space being a good insulator isn't necessarily correct, according to a University of Minnesota extension agricultural engineer.

D. W. Bates explains that air tends to fall on the cold side of an air space and rises on the warm side. Therefore, the air circulates and carries heat away from the warm side.

However, if the space is filled with a light, fluffy material, millions of tiny air pockets will form and trap the air. Then, the air is really "dead" as far as movement is concerned, and resists passage of heat.

For any building, you have a wide choice of insulation materials. In recently-issued plan sheet M-129, from the Minnesota Agricultural Extension Service, Bates lists thermal resistance values of different materials.

Bates says there are four general types of thermal insulation--rigid, flexible, loose fill or "pour," and reflective.

Rigid insulation, in addition to blocking passage of heat, has structural strength. But the stronger the material, the less its insulation value. So strictly from the standpoint of insulation value, rigid insulation is quite expensive. It should be used mainly where its structural strength is needed.

Flexible insulation comes in bats or blankets that fit between studs or ceiling joists of common spacings. Blanket insulation, for example, usually comes in thicknesses of 1 or 2 inches and in rolls of 50 or more square feet. It usually is made

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up of vegetables or mineral fiber between two sheets of paper, with paper on one side being a vapor barrier.

Fill, or pour, type insulation may be either home processed--sawdust, wood shavings or chopped straw--or commercial material.

Reflective insulation, Bates explains, has no bulk. Its value instead comes from its ability to reflect radiant heat. To be most effective, the bright surface must face an air space 3/4 inch or more in width. Reflective material will not insulate when both sides contact the building or other insulating materials.

A complete discussion of different kinds of insulating materials and the amount to use is in Plan Sheet M-129, "How Much Insulation Do I Need?" You can get a copy at the county extension office.

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To all counties

For immediate release

APHIDS CAUSING
LITTLE TROUBLE
THIS SUMMER

Two major kinds of aphids have moved into grain fields around Minnesota this summer, but neither one has caused any major problem so far.

The only real worry now is whether corn leaf aphids will damage late-planted barley fields, according to John Lofgren, extension entomologist at the University of Minnesota.

Corn leaf aphids are sap-sucking insects which, like green bugs, transmit the yellow dwarf virus to grain. They seem to like barley, but later on move into corn. They secrete a large amount of honeydew, which leaves sticky plants in heavily-infested barley fields.

Barley starting to head out now probably won't be damaged much. The only danger is in later fields. Where infestations are heavy, you can spray the barley with a pound of actual malathion per acre. Or if the job is to be done by aerial application, you can use a fourth pound of parathion per acre.

Don't be too hasty about spraying barley for corn leaf aphids. Even if the aphids are carrying the virus, they may be widely distributed and the virus will be spread throughout the field before you can control the pests. The only reason for spraying is to stop further spread of the aphids and the disease when the insects initially hit a localized area of the field.

Green bugs, the other main type of aphid in grain, did turn up in oats fields this year in most areas of the state. However, most infestations were light and only a few fields were noticeably damaged.

Now, with most oats fields heading out, Lofgren says there no longer is much reason to worry about the red leaf disease which the aphids might have been carrying. Red leaf in oats is caused by the same virus which produces yellow dwarf in barley.

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University Farm and Home News
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July 5, 1960

To all counties

For immediate release
(with mat)

FARM SAFETY WEEK
SET FOR JULY 24-30

Farm work accidents in Minnesota are on the rise this year--after steadily declining during the past decade.

With that sobering thought, Glenn Prickett reminds Gopher state citizens of National Farm Safety Week, July 24-30. Prickett is extension farm safety specialist at the University of Minnesota.

From January through May, there were 19 deaths from farm work accidents in the state. That's compared to 15 in the same period of both 1959 and 1958.

There's a bright spot, though, Prickett adds. Farm home accidents declined sharply in early 1960, after increasing steadily during the past five years.

Here's what the trend has been like: Farm work accidents caused 73 deaths in 1950, 57 in 1955 and 48 in 1958. Farm home fatalities totalled 107 in 1950, 81 in 1955 and 111 in 1958.

How do these deaths occur? During May, 1960--just 31 days--18 Minnesota farm residents died in accidents relating to the farm and home. Eight of the fatalities involved farm tractors. Truck accidents killed two more. Two deaths resulted from livestock--a bull and a number of hogs.

A farm fall and a home fall accounted for two more deaths. One farmer was killed by lightning. Two children died from strangulation and suffocation. And a young man died through improper gasoline handling.

With haying still in progress and other harvesting coming up, Prickett says extra precautions are a must. The mower, baler, field chopper, silage wagon, power shaft and pitchfork are all potential killers. So always keep shields in place over moving parts. Stop machines to grease or adjust them.

Theme of Farm Safety Week is "Enjoy Farm Life--Practice Safety." It's a good one to follow.

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July 5, 1960

To all counties
ATT.: Home Agents

For use week of
July 11 or after

NOW'S TIME TO
PREVENT MILDEW

An ounce of prevention is worth a pound of cure when it comes to mildew.

Preventive treatment is a must in combating mildew, which can cause damage to clothing, shoes, books and even wood in hot, humid weather. Mildew discolors fabrics, leather and paper and often rots both fabrics and wood. It also leaves a musty odor.

Though many man-made fibers are resistant to mildew, the molds that cause mildew grow on cotton, linen, wood and paper, silk, leather and wool. These molds develop in muggy summer weather, especially if the house has been closed. They flourish wherever it is damp, warm, poorly aired and poorly lighted -- in cellars, closets, on draperies and rugs in basement recreation rooms, on shower curtains, in damp clothes rolled up for ironing.

Here are some suggestions from Shirley Erickson, extension clothing specialist at the University of Minnesota, on ways to prevent mildew:

* Keep garments and storage places clean. Soil on articles can supply enough food for mildew to start growing when moisture and temperature are right. Since clean clothing is less likely to mildew than soiled clothing, be sure to clean all clothing before storing it away. Keep closets, dresser drawers, basements -- any place where mildew is likely to grow -- as clean as possible.

* Keep rooms and clothing aired and dry. Good ventilation is important to remove moisture from cooking, laundering and bathing. Ventilate the house when outside air is drier than that inside. Run an electric fan in places that can't be exposed to outdoor breezes such as closets. Hang garments so air circulates around them. Keep shoes and suitcases off the floor.

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In closed closets and chests, special water-absorbing chemicals give good protection against mildew.

Mechanical dehumidifiers are successful in getting rid of dampness in the air but should be used only with doors and windows closed.

Dry soiled clothing and towels before putting them into the hamper, and dry all clothing wet by rain or perspiration before hanging it in a closet.

* Get rid of musty odors. They usually indicate mold growth. Anti-mildew sprays containing a chemical to stop mold growth are effective in removing mustiness from closets and small areas.

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NOTE TO AGENT: If you have a sufficient supply of USDA Leaflet No. 322 (Bureau of Human Nutrition and Home Economics), Preventing and Removing Mildew, you may want to offer copies.

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To all counties
4-H News

For release before
county fair

THREE GRAINS
TO BE EXHIBITED
FROM 1959 CROP

If you are exhibiting 4-H corn, flax, or soybeans at the fair this year, they must be from your 1959 crop.

This is the first year these three crops will be exhibited from the previous year's harvest, says B. V. Beadle, district 4-H club leader at the University of Minnesota. Such an exhibit of corn, flax or soybeans must be accompanied by its 1959 crop record plus one crop record of any crop grown this year as a 4-H project.

Other small grains such as barley, oats, wheat and rye must be 1960-grown and be accompanied by their current project record.

Corn exhibits must contain 20 ears of corn grown in 1959. Ten of these will be displayed as ears and 10 will be shelled at the fair. A total score of the judging on both will determine final placing. Corn judging at the State Fair will be done on the basis of five districts: northern, north central, central, south central and southern.

For other small grains, a four-quart exhibit is required. Be sure to note any other labeling or exhibiting requirements.

Grain exhibits should be free from impurities such as weed seeds, inert material and grains of other varieties or crops, says William Hueg, extension agronomist at the University of Minnesota. Specimens should be sound, that is, not diseased, weathered, discolored or shrunken.

Uniform size, shape and color are important for grain exhibits as is proper maturity, adds Hueg.

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St. Paul 1, Minnesota
July 6, 1960

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* For release at noon, *
* Thursday, July 7 *
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CONTINUOUS CORN SHOWS FAVORABLE YIELDS

WASECA--A farmer can plant corn 5 or more consecutive years in the same field, without losing a single bushel in yields.

That opinion was stated this morning by University of Minnesota soil scientists A. C. Caldwell and J. R. Kline, during the annual visitors' day at the Southern Experiment station, Waseca.

Visitors at the station Thursday saw plots planted to corn every year since 1956. They also saw a rotation of corn for two years followed by a year each of soybeans, oats and alfalfa. So far, continuous corn yields are about equal to corn grown in the rotation.

Despite a drier-than-average season in 1959, continuous corn yields ranged from 91 to 125 bushels per acre.

For farmers thinking of trying continuous corn, Caldwell and Kline gave this advice:

Select fields that are nearly level to avoid soil erosion. Use minimum tillage, as few trips as possible over the field to prepare the seed bed and to cultivate.

Test the soil, then add lime and fertilizer as needed. Continuous corn on the Waseca plots has responded best to phosphorus, paid little attention to nitrogen or potassium application. Experience with plots in other areas shows nitrogen to be an important factor.

Plant a heavy stand, at least 16,000 plants per acre; the plots at the station carry 20,000.

Keep soil insects and weeds under control. Aldrin is an effective soil insect control. Randox applied as a band spray on the row at planting time holds back weeds.

A good stand of continuous corn can yield enough stalks and leaves to return as much organic matter to the soil as a legume.

60-219-hrs

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* For release at 1 p.m. *
* Friday, July 8 *
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EXPERIMENT STATION PURPOSE OUTLINED AT FIELD DAY

LAMBERTON--The purpose of the recently-established Southwest Experiment station here is to give farmers new information--not merely demonstrate ideas proven before.

That statement was made today at the station's first annual field day, by H. J. Sloan, Agricultural Experiment station director for the University of Minnesota.

To do what it's intended for, he said, a research station must dig into unsolved questions, answers to which farmers most seriously need. Already, he said, some 75 different research projects are under way on more than a thousand individual plots at the station.

If the station did nothing more than show things already known, it would fail in its task, Sloan stated. He explained the very reason the Lamberton site was selected in early 1959 was because soil and climatic conditions here are representative of a wide area in southwestern Minnesota.

He listed a variety of problems to be attacked by research at the station--crop varietal trials, corn spacing and population, effect of corn and sorghum on soil, weed control, continuous corn, soil compaction and forage production.

Part of the regional flax nursery will be at the station, according to Sloan. Extensive conservation studies will be conducted in cooperation with the new U. S. Department of Agriculture Soil and Water Conservation laboratory at Morris.

Sloan pointed out that the 14 counties served by the station produce 36.1 percent of all Minnesota corn, 36.8 percent of the state's soybeans, 21 percent of the oats and 34.3 percent of the flax.

Superintendent of the station is W. W. Nelson, formerly agronomist at the University's Northeast Experiment station near Duluth.

Funds for purchasing the Southwest station were furnished by the 1957 legislature. However, the site was not purchased until early 1959, Sloan said, because the University felt it necessary to first examine a number of locations. Also, funds for operations were not available until July 1959--which explains why this is the first year of full-scale operation.

60-220-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 6, 1960

A FARM AND HOME
RESEARCH FEATURE

Immediate release

SCIENTISTS AT MINNESOTA, PUERTO RICO TEAM UP IN RUST STUDIES

Mountainous fields in Puerto Rico are isolation wards for plant disease studies that could lead to rust-resistant wheat varieties for Minnesota.

It's all part of a special grain testing program organized in recent years by the U. S. Department of Agriculture, in cooperation with plant scientists from a number of states.

Purpose of the plan is to test new grain selections for disease resistance without risking accidentally spreading the disease to commercial fields in the states. Here is how it might work.

Let's say University of Minnesota scientists want to learn whether a new wheat selection is susceptible to a new type of wheat rust recently discovered in Texas.

Should they import rust spores from Texas, put them on wheat here and see if the disease develops? Or should they send the seed to Texas and try it out there?

Their answer would be no to both choices. If you bring the spores to Minnesota, you would risk introducing a new rust to the entire spring wheat region.

Under the second choice, if the wheat did turn out susceptible you might hasten spread of the disease in the Lone Star state.

(more)

Here's where Puerto Rico comes in--located as it is, about a thousand miles off the southeast coast of Florida where there is little danger of spreading grain diseases. Puerto Rican farmers don't raise small grains commercially. And besides, the island is so mountainous there is little risk of rust spores blowing from one part of the island to another.

However, Puerto Rico works nicely for grain testing because wheat, oats and other small grains thrive in winter there if protected from insects and weeds. So a grain sample harvested in St. Paul this summer can be sent to Puerto Rico this fall and the test will be completed before planting season begins here next spring.

This whole project is discussed by E. R. Ausemus, USDA agronomist, in the current issue of Minnesota Farm and Home Science, issued by the University's Agricultural Experiment station.

Ausemus says about 25,000 total rust plots are being studied at four different places in Puerto Rico. Several hundred different grain samples from Minnesota have undergone tests on these plots in recent years.

Disease organisms used in the testing are actually produced in greenhouses in continental U. S. All test plantings are inoculated with the test spores in mid-winter and scientists know by March or April whether the strain or selection being tested is resistant to the disease.

60-221-pjt

University Farm and Home News
Institute of Agriculture
University of Minnespta
St. Paul 1, Minnesota
July 6, 1960

Immediate release

MODACRYLIC, ACRYLIC NEW WORDS ON TODAY'S CLOTHING LABELS

Modacrylic and acrylic are new words that are appearing on many of today's clothing labels.

Their presence is the result of a new textile labeling law, effective since the first of March. The new law requires all clothing labels to identify the fibers in fabrics according to the generic group to which they belong.

Modacrylic and acrylic are two of these generic groups. In the modacrylic family are fibers under the trade names of Verel, Fiber "T" and Dynel.

An outstanding characteristic of the modacrylics is their luxurious, cashmere-like texture.

You'll find these fibers in deep-pile fabrics, fleece and fur-like fabrics and in blends for clothing.

Trade names in the acrylic group include Orlon, Acrilan, Creslan and Zefran. Like the modacrylic fibers they resist wrinkling, dry fast and are resistant to damage from moisture and moths.

Acrylic fibers are excellent for curtains, sweaters, blankets, carpets and fur-like pile fabrics.

Extension clothing specialists at the University of Minnesota say that modacrylic and acrylic fabrics should be washed in moderate temperature water with a non-soap detergent or mild, neutral soup. High temperature causes yellowing. Water-borne stains can be wiped or washed off easily. Oily stains are more difficult to remove. They should be pretreated and removed before washing. Rinse thoroughly.

Garments may be drip-dried or dryer dried with controlled heat for a short time. If ironing is necessary, use a low setting.

60-222-sah

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 7, 1960

SPECIAL TO MINNESOTA DAILY

Immediate release

TWO FORESTRY STAFF MEMBERS TO TAKE PART IN NORTH CAROLINA INSTITUTE

Two staff members in the University of Minnesota School of Forestry will take part in a special Field Institute in Forest Biology, July 25-Aug. 19, at North Carolina State college, Raleigh, N. C.

They are Scott S. Pauley, professor, and Egolfs V. Bakuzis, research associate. They will join forestry teachers and researchers from 21 other institutions in teaching the special course.

-pjt-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 8, 1960

SPECIAL

Immediate release

MINN. INSTITUTE FOR TOWN AND COUNTRY CHURCHES TO BE NOV.29-Dec. 1

Rural clergymen from around Minnesota will attend the second annual Minnesota Institute for Town and Country Churches, Nov. 29-Dec. 1 on the University of Minnesota's St. Paul campus.

Theme of the Institute is "Rural Families Face the Future," according to Marvin Taves, head of rural sociology and program chairman for the event.

Speakers will include staff members from the University, the U. S. Department of Agriculture, other public agencies and general farm organizations in Minnesota.

Topics Nov. 29 will include changes in the rural family, the rural family and its social network and values in rural living.

Talks on Nov. 30 will cover the rural family and its local network, economic pressures, decision making and career exploration. A panel of representatives from the Minnesota Farmers Union, the Minnesota Farm Bureau federation and the State Grange will discuss solutions to problems facing the rural community.

On the final day, speakers will discuss guiding communities to better family living and development of industry for rural communities.

The Institute is sponsored cooperatively by the University, the Minnesota Council of Churches, Lutheran churches of Minnesota, Catholic churches in the state and the Association of Evangelicals.

For more information, contact Marvin Taves, Rural Sociology, University of Minnesota, St. Paul 1.

-pjt-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 8, 1960

SPECIAL
For release at 11 am
Thursday, June 7

WASECA TEST PLOTS SHOW BENEFITS OF MINIMUM TILLAGE

WASECA—A saving of time and labor and a lower cost of cultivation—that's what minimum tillage can do for you.

This advice to persons attending visitor's day at the Southern School and Experiment Station, Waseca, came from Curtis Overdahl, extension soils specialist at the University of Minnesota. A comparison of test plots begun at the station in 1957 shows no danger of reduction in yields when minimum tillage practices are used.

Minimum tillage simply means fewer trips over the field in preparing the seed bed and cultivating the crop.

Wheel track planting has been the most satisfactory method. Grass and weeds grow fastest in the tractor wheel track. By planting row crops in the track and using a band spray over the row to control annual grasses the weed control problem has been greatly reduced.

Overdahl cites these advantages of minimum tillage: Reduced soil compaction, greater moisture holding capacity, less run-off resulting in better erosion control, poorer weed growth in the loose, cloddy soil between the rows and, most important, the time and money saved by less tillage.

Minimum tillage is being worked into farm plans by the SCS as a soil conservation measure, according to the specialist. Studies have shown a decrease in soil loss as great as 40 percent when minimum tillage practices are followed/

here

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 11, 1960

Special to Cottonwood county

(with mat)

IFYE FROM GERMANY TO COUNTY

A young farmer from Germany will be in this county for six weeks to learn about rural life in the United States as an International Farm Youth exchangee (IFYE), according to County Agent _____ _____.

Bernhard Bremer, 25, Gut Haslback, Post Regensburg 6, Germany, will be in this county September 21-November 3. From August 2 to September 18 he will be in Aitkin county.

While here Bremer will visit the _____ family, _____ and the
(name) (address)
_____ family, _____. Bremer will live and work with these families
(name) (address)
to learn about farming methods and the way of life in rural America.

Bremer manages a farm owned by his father, a large part of which is irrigated. Crops include wheat, barley, sugar beets and potatoes. The farm also has livestock—dairy, beef cattle, swine and poultry. Bremer is a graduate of a one-year course at Advanced Agricultural school

This young man is one of five IFYEs coming to Minnesota this year. Two others will arrive in St. Paul on August 1: Rolf W. Derpsch of Chile and Peter M. Withy of New Zealand. Two Minnesota 4-H'ers are in Venezuela and the Philippines this summer and fall in the return phase of the program.

The IFYE program strives to further world peach by increasing understanding among peoples at the grass roots level. The International Farm Youth Exchange program is sponsored by the National 4-H Club Foundation and the Federal Extension Service of the U. S. Depastment of Agriculture, with assistance in Germany from the Rural Youth Advisory service and the Federal Ministry of Food, Agriculture and Forestry.

-rlr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 11, 1960

Special to: Carlton county

(with mat)

IFYE FROM CHILE TO COUNTY

A student from Chile will be in this county for one month to learn about rural life in the United States as an International Farm Youth exchangee (IFYE), according to County Agent _____ _____.

Ralph W. Derpsch, 22, Santiago, Chile, will be in this county August 2-31. From September 4 to October 3 he will be in Faribault county.

While here Derpsch will visit the Conrad Nickelson family, Moose Lake, and the Merlyn Knudson family, Kettle River. Derpsch will live and work with these families to learn about farming methods and the way of life in rural America.

Derpsch is a student in college at Santiago where he is majoring in the humanities. He holds the title of Skilled Agriculturist earned in school at Osorno, Chile. Derpsch plans to work as a dairy technician and is particularly interested in dairy husbandry, diary industry and livestock production.

This young man is one of five IFYEs coming to Minnesota this year. Two others will arrive in St. Paul on August 1: Bernhard Bremer of Germany and Peter M. Withy of New Zealand. Two Minnesota 4-H'ers are in Venezuela and the Philippines this summer and fall in the return phase of the program.

The IFYE program strives to furhter world peach by increasing understanding among peoples at the grass roots level. The International Farm Youth Exchange program is sponsored by the National 4-H Club Foundation and the Agricultural Extension Service.

-rlr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 11, 1960

Special to: Faribault county

(with mat)

IFYE FROM CHILE TO COUNTY

A student from Chile will be in this county for one month to learn about rural life in the United States as an International Farm Youth exchangee (IFYE), according to County Agent _____ _____.

Ralph W. Derpsch, 22, Santiago, Chile, will be in this county September 4-October 3. From August 2 to August 31 he will be in Carlton county.

While here Derpsch will visit the _____ family, _____ and
(name) (address)

the _____ family, _____. Derpsch will live and work with these
(name) (address)
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This young man is one of five IFYEs coming to Minnesota this year. Two others will arrive in St. Paul on August 1: Bernhard Bremer of Germany and Peter M. Withy of New Zealand. Two Minnesota 4-H'ers are in Venezuela and the Philippines this summer and fall in the return phase of the program.

The IFYE program strives to further world peace by increasing understanding among peoples at the grass roots level. The International Farm Youth Exchange program is sponsored by the National 4-H Club Foundation and the Agricultural Extension Service.

-rlr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 11, 1960

Special to: Beltrami county

(with mat)

IFYE FROM NEW ZEALAND TO COUNTY

A young farmer from New Zealand will be in this county for one month to learn about rural life in the United States as an International Farm Youth exchangee (IFYE), according to County Agent _____ _____.

Peter M. Withy, 25, Whakatane, New Zealand, will be in this county August 2-31. From September 3 to September 11 he will be in Chippewa county.

While here Withy will visit the _____ family, _____ and the
(name) (address)
_____ family, _____. Withy will live and work with these families
(name) (address)
to learn about farming methods and the way of life in rural America.

Withy is a dairy farmer in New Zealand, and has always lived on a farm. His livestock includes dairy cattle and swine, and he rasies maize, turnips, hay and silage. Withy is pasticularly interested in farm and farm safety methods.

This young man is one of five IFYEs coming to Minnesota this year. Two others will arrive in St. Paul on August 1: Bernhard Bremer of Germany and Rolf W. Derpsch of Chile. Two Minnesota 4-H'ers are in Venezuela and the Philippines this summer and fall in the return phase of the program.

The IFYE program strives to further world peace by increasing understanding among peoples at the grass roots level. The International Farm Youth Exchange program is sponsored by the National 4-H Club foundation and the Agricultural Extension Service, with assistance in New Zealand from the Federation of Young Farmers Clubs and the New Zealand Producers Boards.

-rhr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 11, 1960

Special to: Chippewa county

(with mat)

IFYE FROM NEW ZEALAND TO COUNTY

A young farmer from New Zealand will be in this county for one week to learn about rural life in the United States as an International Farm Youth exchangee (IFYE), according to County Agent _____ _____.

Peter M. Withy, 25, Whakatane, New Zealand, will be in this county September 3-11. From August 2 to August 11 he will be in Beltrami county.

While here Withy will visit the Roy Gunter family, Clara City. Withy will live and work with this family to learn about farming methods and the way of life in rural America.

Withy is a dairy farmer in New Zealand, and has always lived on a farm. His livestock includes dairy cattle and swine, and he raised maize, turnips, hay and silage. He is particularly interested in farm and farm safety methods.

This young man is one of five IFYEs coming to Minnesota this year. Two others will arrive in St. Paul on August 1: Bernhard Bremer of Germany and Rolf W. Derpsch of Chile. Two Minnesota 4-H'ers are in Veneauela and the Philippines this summer and fall in the return phase of the program.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 12, 1960

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* For release at noon, *
* Thursday, July 14 *
* * * * * * * * * * * * * * * *

VALUE OF GRAIN SORGHUM REPORTED AT MORRIS FIELD DAY

MORRIS--Grain sorghum can be good crop insurance in years of low rainfall and for soil that dries out quickly, a University of Minnesota agronomist said today.

R. G. Robinson told a Visitors Day audience at the West Central Experiment station that sorghum won't quite match corn yields when there's plenty of rain. But let a drouth come along, and sorghum can outdo corn completely.

Robinson said 1957-59 average yields at three locations in Minnesota were 81 bushels per acre for corn and 73 for sorghum. However, during last summer's severe drouth at the Morris station, sorghum hybrids went 36-45 bushels per acre, while corn averaged only 12.

Sorghum, Robinson explained, is no complete replacement for corn. But sorghum is a good bet for light, drouthy soils or for areas that stay unusually wet. Also, sorghum might be wise for the small farmer who wants to save on machinery. With other grain and sorghum, rather than corn, one drill and one combine would do all planting and harvesting. With corn, a farmer would also need a planter and a picker.

For best results, Robinson said, farmers raising sorghum should:

1. Use good hybrid varieties. The old, open-pollinated varieties simply don't yield as well.

(more)

2. Use chemical weed control. Recommended treatment is 4 pounds Randox per acre at planting time, to control annual grass weeds. If broadleaved weeds show up later, a 2,4-D amine application may be necessary.

3. Dry sorghum grain artificially. The maximum moisture limit for sealing under the government loan program is 13 percent, and 15-16 percent is the maximum for safe home storage in winter. Since sorghum rarely has less than 20 percent moisture when harvested, it must be dried to avoid spoilage.

Extensive experiments on sorghum growing practices are being conducted at the Morris station, in cooperation with Roy Thompson, station agronomist, Robinson said. Being studied are different row spacings (10, 20, 30 and 40 inches), different populations and drilling vs. row planting.

Lowell Hanson, extension soils specialist, told visitors of another new experiment launched this year at the Morris station. The new project, he said, is aimed at comparing different combinations of new crop management techniques.

The trials, also under Thompson's supervision, will involve studies on fertilizer, weed chemicals, minimum tillage, different seeding rates, narrow rows in soybeans and corn, different cropping sequences and continuous corn, and different management levels.

Four crops--corn, soybeans, oats and alfalfa--will be involved in the new project, Hanson said.

Also during the Field Day, the station opened its new 120-acre conservation demonstration area, established to test practices that would be used on farms in western Minnesota. One feature of the area is an artificial pond to be used for livestock watering and experiments on fish for farm ponds.

Also to be studied in the conservation area are fencing procedures, trees and shrubs, contour strip cropping, pasture renovation and soil maintenance. The research will be done in cooperation with the Stevens county soil conservation district.

60-223-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 12, 1960 Immediate release

MILDEW IS THREAT IN HOT, MOIST WEATHER

When muggy summer weather sets in, beware of mildew!

Mildew can damage clothing, shoes, books and even wood in hot humid weather.

Molds that cause mildew flourish wherever it is damp, warm, poorly aired and poorly lighted--in cellars, in closets, on draperies and rugs in basement recreation rooms, on shower curtains, on damp clothes rolled up for ironing. Though many man-made fibers are resistant to mildew, it can develop on cotton, linen, rayon, silk and wool.

As the molds grow, they cause considerable damage and often leave a musty odor. They discolor fabrics and sometimes eat into them so severely that the fabrics rot and fall to pieces. They cause wood to decay and discolor leather and paper.

Preventive treatment is imperative in combating mildew. Of primary importance, says Shirley Erickson, extension clothing specialist at the University of Minnesota, is keeping things clean and dry in order to discourage the growth of molds that cause mildew odor and damaging stain.

Miss Erickson gives these suggestions on preventing mildew:

. Keep garments and storage places clean. Clean clothing is less likely to mildew than soiled clothing. That is one reason for cleaning all clothing before

(more)

storing it away. Keep closets, dresser drawers, basements--any place where mildew is likely to grow--as clean as possible. Soil on articles can supply enough food for mildew to start growing when moisture and temperature are right.

. Keep rooms and clothes aired and dry. Good ventilation is important to remove moisture caused by cooking, laundering and bathing, which may add 2 or more gallons of water to the air in a house within a day. Ventilate the house when outside air is drier than that inside. Run an electric fan in places that can't be exposed to outdoor breezes.

Ventilation is necessary in linen and clothes closets. Since poorly ventilated closets get damp and musty in continued wet weather, articles stored in them are likely to mildew. Hang garments so air circulates around them. Store shoes and suit cases on shelves off the floor.

In closed closets and chests, special water-absorbing chemicals give good protection against mildew.

Mechanical dehumidifiers are successful in getting rid of dampness in the air but should be used only with doors and windows closed.

. Get rid of musty odors. They probably indicate mold growth. Anti-mildew sprays containing a chemical to stop growth of molds are effective in removing mustiness from closets.

Miss Erickson gives this further advice: Never let clothing or linens lie around damp or wet. Dry soiled clothing and damp towels before putting them into the laundry hamper. Spread out wet shower curtains. Sprinkle for ironing only as many articles as you can iron in a day. Shake out and dry those you haven't time to iron. And be sure to dry all clothing wet by rain or perspiration before hanging it in a closet.

Information on preventing and removing mildew is given in a U. S. Department of Agriculture bulletin, Preventing and Removing Mildew, available from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul 1.

60-224-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 12, 1960

To all counties

For immediate use

CORN LEAF SPOT WON'T CAUSE MUCH DAMAGE

Those spotted corn leaves in many fields this summer are the result of a bacterial disease spurred on by cool, wet weather, according to plant pathologists at the University of Minnesota.

Fortunately, however, the disease isn't likely to have any effect on corn yields. With normal weather in July, the corn will outgrow the effects of the disease.

Corn leaf spot shows up here and there around the state every year. It's ordinarily such a minor disease that nobody pays much attention to it. This year, however, cool, damp weather favored rapid spread of the bacteria and leaf spot in corn is more common than it has been for many years.

The spots caused by the bacteria are about 1/4 inch wide. They appear on lower leaves first and then move up, but rarely reach the top leaves.

The weather has produced some other conditions in corn, too. Silver areas have shown up on the undersides of leaves in some fields. This condition is probably a result of too much water, rather than a disease.

Also, some corn leaves have turned purple, which again may be a result of cold, wet weather. This is no disease, either. The problem is that in unfavorable weather, the corn plant can't use up all the sugar which it manufactures and instead turns the sugar into purple pigment.

Don't confuse this purpling, though, with phosphorus deficiency. When the soil lacks phosphorus, purpling usually starts at the edge of the leaf. When the cause is wet weather, the whole leaf turns purple at once.

Neither the silver spots nor purpling are cause for worry. If there's good growing weather from now on, both effects will probably disappear.

# # # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 12, 1960

To all counties

For immediate use

A Farm and Home Research Report

SPECIAL CORD KILLS HOUSE FLIES IN COW BARN

One promising way to control house flies around the dairy barn is to hang up a special chemically-treated cotton cord.

Such a cord knocked out flies by the score last summer in trials at the University of Minnesota's Northwest School and Experiment station.

E. C. Frederick, station dairy husbandman, designed the experiments in connection with L. K. Cutkomp, University entomologist. The cord used in the trials is treated before sale with a parathion-diazinon compound. Frederick put the cords in rows three feet apart, about six and a half feet above the floor.

The test started on June 11 in one barn and on August 1 in another.

From June through July, a "check" in the calf barn with the cord installed never had more than three flies on it at once -- and usually only one or none. Ceiling counts showed similar results; an area four feet square never had more than two flies on it at any one time during that period.

By contrast, in the barn without the cord the check animal had 6 flies on June 25. 12 on July 2 and 19 July 9. Fly counts on the four-foot square of ceiling in this barn varied from 5 to 42 flies during the two months.

When the cords were put up in the second barn in early August, fly counts dropped to usually no more than 2 per animal or 4 on the ceiling square from then to mid-September.

The cotton cord is now under further test. One important limitation is that it affects house flies primarily -- many biting flies do not rest on the cord.

The cord used in the Crookston tests was red in color, and was developed by the U. S. Public Health Service in Georgia. The poison kills house flies on contact when they land on the cord. And there's some indication that flies are especially attracted to the cord because of its texture, position, and color.

# # # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 12, 1960

To all counties

For use immediately

FARM FILLERS

Would irrigation pay on your farm? To answer this question, one thing you need to know is the long run likelihood of drought during the growing season. University of Minnesota researchers have made some calculations for different areas of the state and have reported their findings in a new technical bulletin, "Agricultural Drought and Moisture Excesses in Minnesota." For example, they found that on a sandy loam in McLeod county, you can expect a total moisture deficiency of 4.5 inches or more during 3 out of every 10 years. You can make similar checks for other types of soil and other areas by using the bulletin. The county extension office has copies.

* * * *

Here's a thought for Farm Safety Week, July 24-30: Tractor fuel has the explosive power of dynamite. And the danger of fuel explosions always picks up in hot weather. A hot manifold, a spark from the tractor ignition, or a cigarette can touch off a conflagration. So Glenn Prickett, extension farm safety specialist, says always fill the tractor tank when the engine is stopped and cooled off.

* * * *

We may be closer than ever to a good anti-quackgrass weapon. Last fall, agronomist Richard Behrens at the University of Minnesota sprayed 3 or 4 pounds atrazine per acre on a quack-infested field intended for corn this year. Control averaged 90 percent or better. Spraying in early spring worked, too. Cost runs $15 per acre, but often that value in corn yields is saved the year the chemical is applied. One shot should be enough for 5 years.

* * * *

Don't put new grain in bins crawling with insects. Clean the granary out first, then spray the walls and floors with a premium grade of malathion or methoxychlor bin spray. That tip is from John Lofgren, extension entomologist at the University of Minnesota.

# # # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 12, 1960

To all counties

For immediate use

TURKEY PRICES TO REMAIN UP TILL LATE 1960

Turkey prices will probably hold up quite well until the last three months of the year, according to W. H. Dankers, extension economist at the University of Minnesota.

But from October through December, an expected increase in heavy turkeys on the market will most likely lower prices to producers -- several cents per pound below prices for the same period of 1959.

Dankers points to a number of trends behind this outlook. Minnesota -- now the nation's number one state in turkey numbers -- is shifting toward more small turkeys for the year-around market. State producers are raising more of the so-called large white turkeys, which may be sold as mature birds or as broilers or fryers.

From 1945-49, Minnesota turkeys at market weight averaged 18.2 pounds each -- the same as those from other states in this region and about a pound and a half lighter than those in the West.

By 1958, however, average market weight of Minnesota birds had dropped to 15.4 pounds, compared to 16.9 for the entire region and 19 for the West.

Last summer, turkey prices were rather moderate, prospects for 1960 were modest and producers reduced the number of laying hens for breeding. By January 1, 1960, producers had 3 percent fewer heavy breed hens and 30 percent fewer light type hens -- or 8 percent fewer total turkey hens -- than a year earlier.

However, interest in turkeys picked up with the sharp price rise in late fall, 1959. Poult orders increased and hatching from January through April of this year was actually 8 percent higher for the whole country than in the same months a year earlier.

- More -

Add one - Turkey Prices in 1960

Early 1960 hatching actually decreased among light breeds, but that was more than offset by the increase in heavy breeds. This means fewer small turkeys will reach the market as broilers and fryers and turkey prices from now to October should be above the same period of 1959.

In late 1960, however, turkey meat tonnage marketed will be much above a year earlier.

The turkey outlook is made a bit uncertain by the "heavy white" turkeys -- and the fact they can be sold as good quality broilers and fryers before maturity, or as heavy mature birds for later markets. Dankers points out that if large numbers of these birds hit the market in late summer, much of the expected overload of heavy birds in late 1960 could disappear.

# # # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 12, 1960

To all counties

ATT: HOME AGENTS
For use during Farm Safety
Week, July 24-30

YOUR KITCHEN MAY BE DANGEROUS

Did you know your kitchen is probably the most dangerous room in your house?

Roughly 30 percent of all the nation's accidents happen in the house, and kitchens are the rooms where the most occur, says Glenn Prickett, extension safety specialist at the University of Minnesota.

A good slogan for families to keep in mind during National Farm Safety Week, July 24-30, is "Safety begins at home," he said.

Your kitchen is a workshop with many tools and supplies which are potentially dangerous: poisons, gas, electricity, high heat, sharp tools and perhaps flammable liquids.

Prickett suggests the following precautions to prevent kitchen accidents:

* Select cooking utensils carefully. They should be flat-bottomed pans which are well-balanced, with firmly attached handles that do not conduct heat.

* Check the cords and plugs of electrical appliances frequently, and be sure to disconnect appliances when you leave the room.

* Store knives in slotted wall racks or in drawers out of the reach of children. Wash and dry knives singly, keeping the sharp edges turned away from your hands.

* Keep all poisonous materials away from children. Label poisons or dangerous compounds such as lyes, bleaches or insecticides, and store them in a locked cupboard or on a high shelf. Many common household products which are not poisonous may also be dangerous if children swallow them.

* Never keep flammable or explosive cleaning fluid such as gasoline in the house. Use nonflammable cleaning fluids only and do the cleaning outside to prevent breathing dangerous fumes.

* If you smell a gas leak, turn off all the range burners, ventilate the kitchen and call a serviceman. Never hunt for leaks with a match or lighted candle.

* If a grease or fat fire should start in a pan or on the range, smother it with a metal cover (held with a long-handled tool), or pour generous amounts of salt or baking soda over the fire. Never use water; it may spread a grease fire. The best protection is a portable carbon dioxide or dry powder fire extinguisher.

-rlr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 12, 1960

4-H NEWS

To all counties
For release week of
July 18 or after

Note: National Farm Safety Week is July 24-30

USE REFLECTIVE TAPE TO PREVENT TRACTOR MISHAPS

Reflective tape to light up farm equipment on the highway at night will save lives and prevent many injuries.

4-H'ers are applying reflective material to tractors and other equipment as part of the 4-H safety campaign to stop highway farm equipment accidents.

Most new farm tractors are equipped with front and rear lights and with facilities for a tail light on towed equipment. But the National Safety Council estimates that 37 million pieces of unlighted farm equipment are on farms today, according to Glenn Prickett, extension safety specialist at the University of Minnesota.

Prickett urges that farmers and 4-H'ers continue to purchase the reflective material and use it on any tractors or other equipment without rear reflectors or tail lights.

Reflective tape should be applied in positions that best outline the outer edges of the equipment. On every piece of equipment at least some of the reflective material must be mounted at a place not less than 20 inches or more than 72 inches from the ground.

Prickett gives the following instructions for applying reflective sheeting and strips to tractors and other equipment:

- Be sure the surface of the tractor or equipment is clean and free of wax.
- Remove the protective paper backing from the reflective sheeting or strip.
- Place the reflective material in position and rub firmly across the entire sheet. Be sure the edges adhere well to the surface.
- Material should be applied when the temperature is about 60° F.

Where reflective material must be applied to a wood surface, use the aluminum-backed reflective pieces. Simply screw or nail the metal-backed piece to the vehicle.

Information about the cost of reflective material and where it may be purchased is available at the county extension office.

-rlr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 13, 1960

ATT: Agricultural Agent
Home Agent
4-H Club Agent

GARDEN FACT SHEET FOR JULY

by O. C. Turnquist
C. Gustav Hard
Extension Horticulturists

Vegetables -- O. C. Turnquist

1. Keep your vegetables sprayed or dusted with methoxychlor for control of chewing insects. This material is safer to use on edible plants than DDT and is less toxic to the plants themselves.

2. Tomato foliage diseases can be controlled with Maneb (Manzate or Dithane M-22). Apply 2 tablespoons per gallon of water to the plants every 10 days.

3. Remember it is easier to prevent damage than control the pest afterwards. An ounce of prevention is worth a pound of cure.

4. Mulch tomato plants now to smother weeds and control moisture. When weeds are removed by hoeing,the roots of vegetable plants are cut off in the process. As a result of this root pruning of tomatoes, blossom-end rot may develop on the underside of the fruit. Two or three inches of clean straw, ground corncobs, or sawdust will help prevent this trouble.

5. Stop harvesting rhubarb and asparagus now to assure good top growth for food for next year's crop.

6. Hand weed the rows of carrots, beets and onions. Thin the plants so that carrots are 1-2 inches, beets 2-3 inches and onions 2-4 inches for best development.

7. Temperature of water makes little difference when used for irrigating vegetable plants. Thoroughly soak the soil to a depth of at least 6-8 inches when needed.

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

Fruits - O. C. Turnquist

1. June-bearing strawberries should be renovated now after harvest. Cut or mow the plants down and rake out all leaves and straw. Narrow the rows down to 8-10 inches with a hoe or cultivator. Thin out the remaining band of plants so plants are 12-18 inches apart. Finally, fertilize along the sides of the row, using one pound of a high nitrogen fertilizer for each 25 feet of row.
2. Apple thinning usually pays off with varieties like Haralson that are known to cluster. Space the fruits about 6 inches apart and leave only one fruit per cluster.
3. Keep raspberries cultivated to remove weeds and suckers. Keep the rows below 12 inches wide at the base.
4. Continue to spray apple trees with a combination of methoxychlor, malathion and captan. Applications made at 10-day intervals will assure cleaner fruit free from insects and disease at harvest.
5. If raspberry plants appear to dry up, the trouble may be mosaic. This is a virus disease which is controlled by eliminating the diseased plants. Leaves have a yellow mottled appearance and berries are often small.

Ornamentals - C. Gustav Hard

1. A summer mulch can make gardening easier during hot weather and during vacation time. A good mulch will help control weeds as well as conserve moisture.

   Many perennials will develop better storage roots because of the cooler soil temperature. Many materials are available for mulching: compost, chopped straw, pulverized corn cobs, buckwheat hulls, commercial peat, sawdust, wood shavings. Where acid soil is preferable in a wild flower garden use composted oak leaves, acid peat or evergreen needles.

2. July is the time to watch for red spider. Drouth is often blamed for red spider injury.

The usual sequence of symptoms of red spider is: wilting of the plants or shrubs, yellowing of the foliage followed by graying of the foliage. Russetting of the lower side of the leaf is also common. A positive check for red spider is to hold a piece of white paper beneath the foliage and gently tap the foliage. If the pest is present, it can usually be seen moving on the paper. Red spider can be controlled by spraying or dusting with Aramite, Ovex, malathion, Dimite or Kelthane.

3. Iris may be divided and transplanted in late July. Clumps that are crowded or diseased can be rejuvenated by rhizome (underground stem) division.

Iris like plenty of sun and a good soil. Plant in a location where they are sheltered from high winds. Enrich the soil by adding well rotted manure or compost. A complete fertilizer (N-P-K) at the rate of 2 pounds per 100 square feet of area is helpful.

Iris may be planted in rows or in clumps. For planting in a row, make a trench about 4 inches deep and 8 inches wide. In the bottom of the trench make a slight mound. Place the rhizome on the mound and spread the roots on either side. Firm the soil for good anchorage. When planting iris in a clump, turn the fleshy portion of the rhizome toward the center of the clump so that the new growth is away from the center.

4. The flower garden and lawn are often a problem during vacation. Weeds take over and diseases and insects run rampant. The following suggestions should help: Water the garden and lawn thoroughly before you leave; prune off dead flowers and those about to mature; use an all-purpose insecticide-fungicide spray or dust to control garden pests; apply a soil mulch to control weeds and conserve moisture. Don't start new seeds of annuals or perennials before you leave. They usually need special attention.

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 14, 1960

Immediate release

PROBLEMS FACING RURAL CHURCH TOLD BY SOCIOLOGIST

WASHINGTON, D. C.--Rural churches may need to specialize to meet the changing needs of their congregations, a University of Minnesota rural sociologist said this week.

Marvin J. Taves said at the American Country Life association meeting that it may be better for a church "to do a few things well than many things poorly."

He pointed out that young people nowadays look to schools, commercial establishments and other social organizations--rather than churches--for most social and recreational activities. "To compete," he stated, "the rural church may well have to specialize in a limited number of functions and professionalize its personnel."

On the other hand, he warned that churches which narrow their services to spiritual guidance only may lose to others which serve a wider diversity of needs--"much as the corner grocery loses to the supermarket."

Taves noted a number of current changes affecting the rural church, which he defined as any in a community of less than 25,000 population, outside big city areas.

1. Between now and 1965, the church will deal with a society in which marriage and family are more popular than ever. A higher proportion of the population is varied, and people are marrying at younger ages--about 20 for women and 22 for men.

2. Rural young people are becoming better educated, a fact that raises the question of whether present educational background of local church leaders (particularly the clergy) is sufficient to provide spiritual and social counsel.

(more)

3. Farming and other rural enterprises are becoming strictly businesses; many of the values formerly associated with the family farm and the family business are largely "figments of the imagination." By 1965, decisions (on whether to farm) will be based on economic decisions, cultural advantages and social opportunities, unless new values are developed for rural living.

4. Rural population is declining, meaning that rural leadership must be improved if these areas are to continue to be given the hearing they formerly had. "The church provides more opportunities for leadership experience than any other single social group in rural America."

Taves said "The new patterns of suburban cooperativeness, friendliness and emphasis on quality of facilities and public services may show the way to a renewal of rural living values." The church, he continued, should be most competent to foster development of such values.

Farmers who have boosted their own production efficiency will probably expect increased efficiency from their churches, according to the sociologist. Recent self appraisals by Catholic, Jewish and Protestant groups show that rural churches by 1965 will probably become more efficient.

To better serve rural areas, Taves said churches can, while devising a new system of values, give more meaning to all activities of rural life. Churches can aid in adjustment of rural-urban differences, "especially in the rural-urban fringe, where blue, gray and white collars intermingle."

Taves said churches could strength personal guidance activities, as through family and youth counseling. They can help develop effective rural leadership, such as by helping young people choose education and training for adulthood.

"In all of this," he concluded, "it will be essential for the church to go out to the community and to the people, not only physically but spiritually and mentally. This means bringing religion to people in their everyday life, as well as in their devotions and worship. Basic function of the church, of course, is spiritual inspiration and guidance."

60-225-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 14, 1960 Immediate release

WATERMELON, EARLY ELBERTA PEACHES ON MARKET LIST

Watermelon--favorite fruit of youngsters--tops the list of fruits in liberal supply in Minnesota this week.

Early Elberta peaches from California are plentiful, according to S. H. Sevier, federal-state market news reporter. The early Elbertas are recommended by frozen foods experts at the University of Minnesota as among the best varieties of peaches for freezing.

News for home canners is that apricots are now available at fruit counters. Thompson seedless grapes are increasing in supply and good-quality homegrown raspberries are beginning to come to markets.

Consumers can select from a variety of plentiful vegetables this week, including vine-ripened tomatoes, homegrown bunched beets, leaf lettuce, green onions, cabbage and radishes.

60-226-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 14, 1960

Immediate release

HERE'S HOW TO REMOVE MILDEW STAINS

If you discover mildew stains on clothing or household articles during hot, muggy weather, treat them immediately. Otherwise you'll be giving the mold growth a chance to weaken or rot the material.

Extension clothing specialists at the University of Minnesota say the first step is to brush off as much mildew as possible outdoors to avoid scattering the spores in the house. Next, launder washable fabrics and sun-dry them. If any stain remains, bleach it with lemon juice and salt, sodium perborate or other bleach suitable to the fabric. Before using bleach on colored fabrics, test a sample first. Have nonwashable fabrics dry cleaned promptly.

A new U. S. Department of Agriculture publication, How to Prevent and Remove Mildew, gives detailed information on how to protect and remove mildew from clothing and such household fabrics as shower curtains, draperies, slipcovers and mattresses, as well as shoes and other leather goods, paper and wood. Copies are available from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul 1.

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60-227-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 14, 1960

A FARM AND HOME RESEARCH REPORT

Immediate release

MILK PLANTS COULD MAKE INTER-PLANT TRANSPORTATION SAVINGS

Most milk plants in Minnesota could make important savings in costs of hauling milk from receiving stations to central processing centers.

University of Minnesota agricultural economists say the savings could be made in three ways:

* Through full use of inter-plant tank trucks.
* By investing in more efficient loading and unloading equipment.
* Through better scheduling and planning of the truck fleet.

Russell G. Thompson and E. Fred Koller base these conclusions on a study of 10 large milk-drying plants around the state. Each plant had a truck fleet of 5 to 16 vehicles, varying in model, size and kind of fuel used.

Truck costs were estimated from records of 5 plants. Importance of making full use of trucks became apparent. For example, a 28,500-pound unit driven 3,000 miles per month cost 17.83 cents per mile. As mileage went up, costs went down. At 9,000 miles, the cost per mile was 12.91 cents.

Trucking costs vary with the size of the unit, too. The cost per hundred pounds of milk per mile continually dropped as truck capacity was increased from 13,000 to 38,700 pounds. Above 40,000, however, costs went up.

The economists checked time use by 88 drivers covering 214 inter-plant routes. They found that if a driver has a truck with 29,000 pounds capacity, makes one stop per load, and uses the most common size of loading and unloading lines, he can cover a 50-mile route in an average time of 169 minutes. That included 72 minutes driving, 35 minutes loading, 20 unloading, and 42 minutes on "fixed" tasks, like connecting and disconnecting lines.

Neither driving nor fixed time varied with the size of the load--meaning that transportation costs could be minimized by using the largest tank trucks and trailers that can be operated on the highway. It cost .1237 cents per hundredweight-mile to haul milk with a 13,500-pound unit, and .0775 cents--37 percent less--for a 41,300 to 43,000-pound unit.

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60-228-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 15, 1960

HELPS FOR HOME AGENTS
(These shorts are intended as fillers for your radio programs or your newspaper columns. Adapt them to fit your needs.)

In this issue:

SAFETY

Charcoal Cookery--The Safe Way

A charcoal fire cooks a tasty steak or chicken but it can be dangerous, too.

Make your cookout a safe one by using special care in lighting the charcoal fire.

Glenn Prickett, extension safety specialist at the University of Minnesota, suggests that the safest way to kindle charcoal is to light dry, crumpled paper or excelsior which has been placed under the pile of charcoal. When you see gray or whitish spots around the edge of the charcoal, it has started burning.

If you use a charcoal-lighting fluid, follow the directions exactly. The fluid should be soaked into the charcoal briquets before starting the fire. Never use gasoline, kerosene or other highly combustible fluid to kindle charcoal.

Prickett adds these suggestions for safe charcoal cookery:

. Don't be fooled by the gray ash covering charcoal. Any piece of charcoal showing even a tiny fleck of gray ash can cause a serious burn.

. Wear heavy fireproof gloves when cooking with charcoal fire. A fireproof or fire-resistant apron is a good safety measure, too.

. Cook with long-handled utensils: fork, tongs, skewers, skillets and saucepans. And use long-handled swabs or brushes for basting with barbecue sauce.

-rlr-

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

SAFETY

Protect Your Health in Summer Heat

Whatever your summer includes--housework, gardening, help on the farm or sunny beach vacation, your health needs special care when it's hot.

Heat not only tires you, but may harm your health. Glenn Prickett, extension safety specialist at the University of Minnesota gives these suggestions for summer living:

* Take short frequent rests. They're more refreshing than a few longer ones.

* For outside work, wear a hat or sun helmet with good ventilation. It's cooler than a close-fitting cap or scarf.

* Take time for leisurely eating on sultry summer days. Light meals at noon with dinner in the evening may help you withstand the afternoon heat.

* Drink plenty of liquids.

* * * * * *

Is Your Basement Fire-Safe?

Many home fires start in basements. Fire feeds on stacks of magazines and papers, discarded furniture, old rags and other combustibles found in basements.

Summer is a good time to make your basement fire-safe by cleaning out accumulated rubbish. Glenn Prickett, extension safety specialist at the University of Minnesota, points out two ways to eliminate potential hazards:

. Have the furnace cleaned for the summer and take care of necessary repairs.

. Clear paints or varnish away from furnace or water heater. Pilot lights may ignite paint fumes.

* * * * * *

Safety First with Kitchen Utensils

Choose top-of-the-range utensils that are well balanced, with flat bottoms and secure handles which won't overheat. Keep the handles turned in from the edge of the stove to prevent tipping and possible scalding of youngsters.

* * * * * *

Avoid using inexpensive sheet tin-plated utensils which have sharp corners and sharp exposed edges.

* * * * * *

The safest kind of can opener is a motion opener--wall mounted, or hand-held. Never use a knife to open cans. It may cut your hand and will damage the knife.

* * * * * *

Keep a pair of kitchen tongs in your kitchen and use them to turn frying food or to remove food from hot water.

-rlr-

CLOTHING

Damp Clothing Invites Mildew

When the weather turns hot and muggy, never let clothing or household linens lie around damp or wet. If you do, you're likely to find mildew stains. You can detect mildew by the musty odor and discoloration of the fabric. Take these tips from extension clothing specialists at the University of Minnesota.

Dry soiled clothes before putting them into the laundry hamper.

Wash out dishcloths and hang them to dry.

Spread out washcloths and damp towels.

Stretch out wet shower curtains. It's the wet curtain left bunched together or sticking to the wall or tub that's most likely to mildew.

Sprinkle for ironing only as many articles as you can iron in a day. Shake out and dry those you haven't time to iron.

* * * * * *

To Remove Mildew

If you've discovered mildew stains on some of your clothing or household fabrics, treat them immediately to stop the mold from eating into the fabric.

Extension clothing specialists at the University of Minnesota give these directions:

Brush off as much mildew as possible outdoors to avoid scattering the spores in the house. Launder washable fabrics at once with soap and water and dry in the sun. If any stain remains, use a suitable bleach or bleach the stain with lemon juice and salt. Simply moisten the stain with a mixture of lemon juice and salt and spread the garment in the sun to bleach. Then rinse thoroughly and dry. One caution: use this treatment with care on colored fabrics.

* * * * * *

Take Good Care of Summer Knits

Knit dresses and separates are basic to summer wardrobes, but they need the right care, according to extension clothing specialists at the University of Minnesota.

Follow the care directions on the label of all knit articles. Many of them can be washed in the machine, using the normal washing cycle. When handwashing knits, squeeze them; don't wring or rub.

Machine dry cottons according to the directions. If there is no tag on the article, dry it 20-35 minutes. Remove knits from the dryer when they are still slightly damp. Dry knits flat, smoothing them into shape with special attention to the hems, necklines and sleeves.

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SUMMER FOODS AND NUTRITION

Keep Cool with Frozen Cereal-Ice Cream Balls

When children want a hot-day treat, Cereal-Ice Cream Balls may be the answer. You'll like them too for a quick summer dessert.

Combine three cups cereal with one 3½ ounce can of flaked coconut. You may use plain, cocoa- or fruit-flavored corn puffs, unsweetened wheat or oat cereal or cocoa-flavored rice cereal.

Shape three pints of ice cream into large balls. Roll each in the cereal mixture until the ice cream is completely covered. Place on a tray in the freezer to harden until serving time. Do not store longer than six hours.

Serve plain or with ice cream sauces. Yield: 6 to 9 large servings.

* * * * * *

Summer Quickie Meal Tricks

Here are some time-saving cooking tricks from extension nutritionists at the University of Minnesota to speed up meal preparation on warm and lazy summer days.

. Cook potatoes in their skins. It saves time, flavor and food values.

. Start vegetables in boiling water. Cook only until tender.

. For quick fruit cobblers, roll out the crust and bake it. Cook and thicken the fruit, then lay the crust on top of the fruit and serve.

. Wash and trim vegetables before storing them in the crisper so they'll be ready to prepare when you take them out.

. Plan menus carefully and spend less time shopping for food. Do it only once a week if possible.

. Keep an emergency shelf of easily prepared foods so you can get at least one meal in a hurry. Store canned foods so you know at a glance what's on hand.

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Round Dogs

Here's a quick and easy frankfurter sandwich for summer lunches.

Partially slit frankfurters several times. Then fry or broil them, and they will curl into a circle. Serve the "Round Dogs" in hamburger buns with relishes or sauerkraut and mustard in the center of the hole.

Pep up lagging summer breakfast appetites with this special treat: Serve golden brown waffles topped with scoops of vanilla ice cream and fresh berries.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 18, 1960

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* For release at noon, *
* Tuesday, July 19 *
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FLAX BREEDING RESEARCH REPORTED AT CROOKSTON

CROOKSTON--Flax varieties from foreign lands may eventually give Minnesota flax growers an answer to the dreaded aster yellows disease.

Another possible solution to the virus might be chemicals which, if applied to flax seed before planting, kill the leaf hoppers that carry the disease.

The report was made to Crops and Soils Day visitors at the University of Minnesota's Northwest Experiment station today. U. S. Department of Agriculture agronomist V. E. Comstock said flax selections which show some resistance to aster yellows may be used in development of new varieties.

Aster yellows is a constant threat. While losses haven't been severe in the past two years, the disease wrecked 20 to 30 percent of the Minnesota flax crop in 1957. Severity depends on numbers of 6-spotted leaf hoppers early in May, and whether the hoppers carry the virus. Not all of the hoppers do.

Comstock said aster yellows-resistant varieties won't be available for several years, but the remarkable thing is that such varieties might be developed at all. Until recently, such resistance wasn't thought to exist.

The first break came when Canadian scientists found resistance in two selections from the World Flax Collection at St. Paul. Later tests by Comstock and R. A. Frederiksen, USDA plant pathologist, confirmed these findings.

One of the selections is from Ethiopia and the other is from North Dakota. However, the battle against aster yellows is far from over. Even the most promising

(more)

of the two resistant selections wouldn't do as it is. It doesn't resist rust or yield well. So the aster yellows resistance of this flax must be combined with favorable characteristics of other varieties--which scientists are now trying to do.

In addition to breeding resistant varieties, Comstock said research is being done on controlling leafhoppers--and therefore the disease, too--by use of systemic insecticides. This technique would involve treating either the soil or the seed with a chemical which later produces in the flax plant a substance poisonous to hoppers. This method, however, is only experimental and needs further testing before it can be recommended.

A University horticulturist said flower growers in northwestern Minnesota may soon have new chrysanthemum varieties especially adapted to this area. R. A. Phillips reported that new varieties will probably be introduced in a year or so.

Advance selections developed at the St. Paul campus are now being tested at the Crookston station by B. C. Beresford, station horticulturist.

'Mums now available usually do not bloom early enough to escape frost in the northwestern area of the state.

Phillips added, however, that even when new varieties are available, 'mum growers will need to take special precautions to bring plants through the winter. He said overwintering chrysanthemums calls for either cold frames, cellars or protective mulches.

Research is also being done, Phillips said, to develop more new rose varieties which are as winter hardy as Prairie Fire, introduced earlier this year by the University.

Prairie Fire rose plants survived most recent winters without special protection. However, a 12-inch leaf or hay mulch was necessary for the variety to live through the 1958-59 winter, when there was much cold weather and little or no snow protection. Therefore this mulch is a recommended procedure.

60-229-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 18, 1960

Immediate release

ACCIDENT RE-ENACTMENT SET FOR FARM SAFETY WEEK LUNCHEON

Two grim types of farm accidents--both far too common in the state--will be re-enacted during the Farm Safety Week Kickoff luncheon Friday, July 22, on the University of Minnesota's St. Paul campus.

National Farm Safety Week is July 24-30.

Using dummies and actual farm machinery, extension safety specialist Glenn Prickett will show how several farmers have fallen from tractors, to be run over by towed implements. He will also demonstrate an accident in which several youngsters were injured and one killed in a fall from a tractor-mounted loader, and will point out ways to avoid these mishaps.

In another demonstration, Prickett and St. Paul campus herdsmen will show ways to handle livestock safely. Also present will be Thore Hokanson, Zumbrota, who was gored by a bull in December, 1958.

Hokanson will explain how his accident happened and ways it could have been avoided.

The luncheon preceding the demonstration is sponsored by Minneapolis Moline and will be held in the St. Paul campus Student center.

Luncheon speakers will be Thomas F. Gallagher, state Supreme Court Justice and president of the Minnesota Safety Council; Kenneth Austin, Owatonna, general manager of the Minnesota Implement Dealers association; L. E. Petter, representative of Minneapolis Moline; and Hokanson.

Prickett will briefly report on farm accident trends in Minnesota, comparing the record so far in 1960 with previous years.

The luncheon will be at noon and the demonstration will begin at 1:30 in the parking lot behind the agricultural engineering building.

60-230-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 18, 1960 Immediate release

USE DIFFERENT TECHNIQUES TO SEW ON NEW FABRICS

Making a dress from one of the new wash-and-wear fabrics?

In that case, you'll need to change some of your sewing techniques if you expect to turn out a professional-looking garment.

Whether you choose one of the synthetic fabrics like nylon or Dacron or a cotton treated with a resin finish, here are some suggestions for sewing on these fabrics from Athelene Scheid, extension clothing specialist at the University of Minnesota:

* Check the grain on the bolt of cloth before you buy. Many treated fabrics are permanently off grain. With plain fabrics you can disregard the crosswise grain, but with plaids or prints, you can't. Unroll about a yard of fabric and fold it back. Match the selvages carefully. If the design parallel to the folded line is noticeably off grain, don't buy the fabric.

* Use Dacron, nylon or mercerized cotton thread. Cut the end on the diagonal for easier threading. A felt pad under the spool on the spindle of the sewing machine will prevent spilling.

* Use sharp needles and scissors.

* Set the sewing machine for a medium-to-long stitch or about 10 or 12 stitches per inch.

* Check the tension on the machine. It should generally be looser for wash-and-wear fabrics than for untreated natural fibers.

* If a sleeve pattern is more than an inch larger than the arm hole, reduce the space to one inch by making a small pleat in the pattern at each easing notch.

* Press seams and folds only after you are sure of the seam line. Once seams or folds are pressed, creases may be impossible to remove.

60-231-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960 Immediate release

SIX FROM 4-H AND UNIVERSITY TO MICHIGAN LEADERSHIP CAMP

Six Minnesota young people representing state 4-H'ers and the College of Agriculture, Forestry and Home Economics at the University of Minnesota will attend a leadership camp in Michigan in August.

They will go to the American Youth Foundation Leadership Training camp at Camp Miniwanca in Shelby, Michigan. The boys' camp will be August 1-14 and the girls' camp, August 18-29.

Representing Minnesota's 50,000 4-H'ers will be Karen Schutte, 17, Osseo, and Wayne Marzolf, 20, Preston.

Freshman and junior representatives from the College of Agriculture, Forestry and Home Economics at the University of Minnesota are: Judith Ann Filk, 19, Hutchinson, freshman in home economics; Roy D. Colver, 18, 3801 Yates ave. N., Minneapolis, freshman in agriculture; Julie M. Dupere, 20, 4242 Upton ave. N., Minneapolis, junior in home economics education; and Richard O. Lyman, 20, Excelsior, junior in agricultural economics.

Miss Schutte, who has been a 4-H club member for nine years, graduated from Osseo high school in June and plans to attend college this fall. Marzolf, an eight-year club member will be a junior in the University of Minnesota's College of Agriculture, Forestry and Home Economics. Both were selected on the basis of outstanding 4-H work.

Miss Dupere and Lyman will also spend two weeks in St. Louis as guests of Ralston Purina company visiting home economics and agricultural businesses as a part of their junior award.

The camp scholarships are presented annually by the Danforth foundation and Ralston Purina company, St. Louis, Mo., to a 4-H club girl and boy in the state and to selected University agriculture and home economics freshmen and juniors.

60-232-rlr

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960

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* For release at noon, *
* Wednesday, July 20 *
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RADIO-TRACKING METHODS FOR WILDLIFE RESEARCH SHOWN AT CLOQUET

CLOQUET--How radio tracking methods are being used in wildlife research was demonstrated here today at the University of Minnesota's Forest Research center.

Scientists showed how they harness a matchbox-size, 1 1/2-ounce, radio transmitter to a porcupine, turn the animal loose, and then follow its movements with directional radio antennae.

Making it work on porcupines represents an important break through in wildlife research.

Biologists W. H. Marshall, Gordon Gullion and Robert Schwab, in charge of the studies, have kept continuous radio contact since June 13 with a mother porcupine and her daughter in the Cloquet Research center forest.

Already, they have found the technique far superior to older methods for getting detailed information on habits of wild creatures. Numbered tags, colored bands and other devices have been helpful, but do not allow researchers to positively locate animals without handling them.

Originally, the scientists planned to use two fixed radio receivers, which were set up with directional antennae on towers. However, they soon found that a light, portable receiver gave them additional flexibility, making it possible to walk up to the animals and watch them closely. Fixed receivers can pick up signals at least a mile from the animals and exact location is left up to the portable unit.

(more)

Here are some findings already made with the radio-packing porcupines:

* The animals can be located within as little as 15 minutes in the 5-square mile forest, even when they're in dens, brush or trees. Since the study began, the researchers have made 150 "contact records" with the two porcupines. A contact record is each time the animal is tracked by radio, then actually found.

* The young porcupine doesn't stray far from its mother, usually keeping within 200 feet or less. The little one apparently got lost for 8 or 10 days, but in that time the mother seemed to be searching for the offspring as hard as the researchers were.

* During the summer, porcupines do most of their feeding at night, on the ground and in swamps. In clear weather, they move back to uplands during the day, and climb trees to sleep and escape mosquitoes. In rainy weather, they use the nearest fallen tree, brush pile or underground dens.

* Porcupines apparently don't move very far. One animal stayed within one 40-acre area during a one-month period.

* The animals tend to avoid mature pine stands, and instead prefer young mixed hardwood forests with dense hazel underbrush. They have definite preferences for different tree species, but the preference varies from one porcupine to another.

The biologists point out that information on movements, feeding habits and family relationships will help give a better understanding of the porcupine and its role in forest management. Knowing how far the animals move, for example, would help foresters tell when to control them, in areas where the porkies eat so much bark that control is needed.

However, the researchers used porcupines mainly because they made such good research animals for developing the radio-tracking technique. They move slowly, are fairly easy to catch, release and recover, are big enough to carry the tiny radio transmitters, aren't apt to be killed by predators, and tend to run up trees when research men approach, making them easy to find.

(more)

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960 Immediate release

FAMILIES OF EMPLOYED HOMEMAKERS SPEND MORE FOR FOOD

The households where Mother works outside the home aren't the ones that use the most convenience foods--such as prepared flour mixes, frozen foods, frozen complete meals and soups.

Principal users of these convenience items are the women who stay home all day, according to a U. S. Department of Agriculture study of several thousand representative families of all sizes and incomes throughout the United States.

The employed homemakers interviewed in the survey apparently didn't do much baking, either "from scratch" or with the aid of a mix. They bought ready-baked bread, rolls and cakes from the store instead. There was no evidence that they used such convenience items as frozen vegetables, fruits and juices, canned soups and jams and jellies any more consistently than nonemployed homemakers.

Families with working homemakers generally had higher incomes than the others, on the average, and spent more for meals away from home. An exception was at the top income level, where expenditures for meals eaten at restaurants were at least as great as for households with nonemployed homemakers.

For all incomes, families of employed homemakers averaged over a dollar more for each person weekly for food used at home. These families used more luncheon meats and other types of meats, more poultry, fish and bakery goods, but less flour and other cereal products than families of nonemployed homemakers.

Whether Mother worked outside the home or not, there were no consistent differences in adequacy of diets for income classes below $6,000. But in the group with incomes of $6,000 or more, fewer of the employed homemakers than the nonemployed provided family diets meeting nutritional recommendations in calcium, thiamine and riboflavin.

The employed group did not use sufficient milk to provide the required calcium and riboflavin, and it is likely that not enough of the grain products they used were enriched, restored or whole grain to provide enough thiamine, according to Mrs. Eleanor Loomis, extension consumer marketing agent at the University of Minnesota. Though employed homemakers probably did not lack funds for an adequate diet, less knowledge of nutrition, less interest in meal planning or greater reliance on paid help may have accounted for the difference, Mrs. Loomis said.

60-234-jbn

Now that the method has proven workable, Marshall hopes it can find use with dozens of other wildlife species--bear, deer, foxes and so on. He earlier tried attaching the transmitters to ruffed grouse, but these birds were apparently too small and excitable and seemed to fight the transmitters. The porkies apparently don't mind the equipment.

The research hasn't been without problems. The first time a porcupine was released carrying the transmitter, the battery ran down and the antennae broke. Fortunately, the researchers found her in a den, grabbed her by the tail, and started over.

Despite their formidable quills, porkies are actually quite agreeable creatures for research men. It's a tricky business, but researchers have a way of catching and holding them by the tail--without injury to either creature or man.

The daughter of the mother-daughter team has been cooperative enough. When Gullion finds her while making a contact record, he checks the harness and radio attachment, takes readings on the battery with a voltage meter, and replaces the radio if the battery is run down. The mother, though, is harder to work with; she often has to be taken down bodily from tree tops.

Another problem is that radio signals bounce off certain kinds of vegetation, making locating difficult. Automobile ignition systems sometimes interfere.

The transmitters used in the research were developed by Minneapolis Honeywell Regulator Co. The study is being done in cooperation with the Minnesota Department of Conservation and the National Science foundation.

60-233-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960

To all counties

For immediate release

DAIRYMEN OBSERVE
FIFTIETH YEAR
OF DHIA TESTING

Four and a half thousand Minnesota farmers and their 127,000 cows are celebrating 50 years of Dairy Herd Improvement association work this month.

Farmers, DHIA supervisors and the University dairy staff will observe the occasion Friday, July 29 on the St. Paul campus of the University of Minnesota. They'll spend the day looking ahead with dairy research but they'll also take time to look back with pride on the first 50 years of DHIA testing.

In 1910 the average production per cow in the Pioneer association was 189 pounds of fat. Each cow gave her owner back $27 over the cost of her feed. Last year the average Minnesota cow on DHIA test produced 400 pounds of fat and returned her owner $228 over the cost of her feed. Average production for all cows in the state was only 267 pounds of fat.

Two world wars and an economic depression slowed DHIA growth for a time. After each setback the program seemed to come back stronger than ever. Today 185 supervisors under the direction of extension dairymen Ralph W. Wayne and Clifford L. Wilcox test over 4,500 herds.

The whole thing began back in 1910 when 28 Freeborn county farmers, anxious to improve their dairy herds, formed the first DHIA group in the state.

The Albert Lea dairymen banded together under the direction of Theodore Sexauer, then high school agriculture instructor, to hire a test supervisor. The supervisor--H.C. McMurray--visited each farmer once a month to weigh and sample each cow's milk, test the milk and fill out the record form. Members used the records to select their most profitable cows and as a guide for culling out the poor ones.

The idea of cow testing as a means of herd improvement began to catch on. Three new units started operating in Freeborn county within the next year.

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In 1912 the Agricultural Extension Service was formed and Will McKerrow became the first extension dairyman. McKerrow set to work organizing other testing units and by 1916 there were 22 active associations.

In those days test supervisors were expected to give considerable advice in dairy cattle feeding along with testing the milk. They were trained by the Agricultural College of the University of Minnesota and paid $1 to $1.25 per cow a year. Most associations had 350 to 450 cows.

The number of cow testing associations in the state remained about the same until just after World War I. Then dairymen picked up the idea in earnest.

The Agricultural Extension Service continued to work closely with DHIA, with first McKerrow and then L. V. Wilson active in organizational work. E. A. Hanson joined the extension staff in 1921 and helped set up new associations.

Hanson, working with Wilson and H. R. Searles, saw the associations grow from 23 in 1921 to 87 in 1925. That year Ramer Leighton joined the staff as DHIA fieldman. Leighton was later put in charge of DHIA work and worked closely with the program until his retirement this year.

Over the years herds have grown larger, feeding methods have changed and production of cows on test has more than doubled. But DHIA members say the reason for testing still remains the same: To help make a better profit from the dairy herd.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960

To all counties

For use immediately

FARM FILLERS

Turkeys, like any other livestock, need plenty of water. Temperature is important, too; Robert Berg, extension poultryman at the University of Minnesota says the waterers should be under shade, if possible. Another idea is to cover the water tanks with several thicknesses of burlap and soak the burlap at each filling. As the water evaporates from the burlap, it helps keep the water in the tank cool.

* * * *

Don't take chances with farm animals--tame as they may seem. Between January and May, 1960, six Minnesotans were killed in livestock accidents--four by bulls, one by a cow, and one by hogs. Scores of injuries could be added to this toll, says Glenn Prickett, extension farm safety specialist at the University of Minnesota. Animals won't learn to protect you, so you have to be on guard against them. Even the gentle cow can become a raging beast.

* * * *

After cleaning the grain bin, spraying it and making sure the grain is dry, use a protectant as you put the grain in. One recommended by John Lofgren, extension entomologist at the University of Minnesota, is a pint of 50 percent premium grade malathion emulsion concentrate, in 30 to 5 gallons of water per 1,00 bushels. Another is 60 pounds of 1 percent premium malathion wheat flour dust per 1,000. Or you can use synergized pyrethrum grain sprays or dusts as labelled.

* * * *

Grain sorghum may be good crop insurance, especially for low rainfall areas and drouthy soils. University of Minnesota agronomist R. G. Robinson says sorghum won't quite match corn yields when there's plenty of rain. But in case of drouth, sorghum can outdo corn handily. For success, though, grain sorghum growers need to stick to hybrids, use chemical weed control and dry the grain artifically.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960

To all counties

A Farm and Home Research Report

FERTILIZER UPS PROTEIN CONTENT IN CORN GRAIN

Fertilizer can definitely boost the total protein content in corn. And, up to a point, the increase can mean a cost saving in protein supplements for hogs.

However, the matter isn't as simple as it may sound. High-protein corn may require less protein supplementing, but it may also require a different kind of supplement than corn with normal protein levels.

A pair of University of Minnesota scientists, J. M. MacGregor in soils and R. J. Meade in livestock research, explain the situation this way.

Protein is made up of 20 or more amino acids. Ten of these amino acids are essential for normal growth in hogs and must be present in adequate amounts in the diet.

In several years of research at the University, corn fertilized with nitrogen averaged more than 11 percent total amino acids, compared to around 9 for unfertilized corn.

But here's the catch: The bulk of the increase was in non-essential amino acids, rather than in the essential ones that count most in planning rations. In other words, as protein content of corn goes up because of fertilizing, its overall quality actually goes down as far as hogs are concerned.

MacGregor and Meade say a hog producer can't ignore this unequal effect of fertilizer. Corn higher in total protein has relatively less lysine, tryptophan, and methionine--all essential amino acids--per unit of protein than corn with normal protein levels.

This means that to take advantage of fertilized corn and hereby reduce supplement costs, a producer must choose protein supplements which are high in the essential amino acids which the corn lacks.

-more-

add 1 protein supplements

Fortunately, such inexpensive supplementing is possible. In one study, corn averaging 10.75 percent protein was supplemented with 6 or 7 percent of protein supplemental feeds. When mixed together, the total ration then contained 14 percent protein.

Pigs in this trial were divided into three groups. The supplement was fish meal for one group, fish meal and solvent soybean meal for the second, and a combination of soybean meal and blood meal for the third group.

In each case, the pigs gained more than 1.7 pounds each daily--a good average. Each supplement added enough of the essential amino acids which were deficient in the corn.

In other research, corn containing as much as 11 percent protein was supplemented with soybean oil alone. Total rations averaged either 14 or 16 percent protein, and both levels gave good results.

Meade says there's probably a practical limit to the amount of protein one should try to have in corn or other grain for hogs. At present, he feels, 11 or 12 percent is high enough. Corn with more than that will call for nearly as much protein supplement, because as total protein content of the corn goes up, deficiencies of certain essential amino acids are even more pronounced.

In time, Meade says, crystalline amino acids might be used to supplement corn which contains high percentages of low quality protein. However, these amino acids are not available as yet or are too expensive to be practical in most cases.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960

To all counties

For immediate use

PROTECT WOODLAND
TO MAKE MORE
TIMBER DOLLARS

Good farm woodland--if you keep the cows out--is like a bank investment that pays you a higher rate of interest every year.

Extension forester Parker Anderson at the University of Minnesota says the larger a tree gets, the more wood it lays on annually.

For example, a tree 6 inches in diameter at breast height has a total marketable volume of only 10 board feet. A tree less than twice that big in diameter--11 inches--has more than eight times that much lumber volume.

And when you get up to trees 16 inches in diameter, volume soars to 246 board feet.

In terms of money value, the 11-inch tree is worth $1.50 or maybe slightly more on the stump, depending on the market. The 16-inch tree is worth around $3.70 on the stump, again varying with the market, quality, and volume of marketable trees per acre.

So do a little pencil work, and you'll find pasturing those valuable woods simply doesn't pay. Cattle can prevent and slow up normal growth of trees, but won't get enough feed from the wooded area to fill up the milk pail.

Also, Anderson says good woodlots safeguard water supplies, put low processing acres to work and provide a haven for game.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960

To all counties

ATT: HOME AGENTS
For immediate release

CHILDREN NEED FOOD VARIETY FOR HEALTH

Balanced meals are as important for the little tots in the family as for grown-ups.

That a child eats the right food doesn't mean that he cannot get sick. "But if your children eat enough of the kinds of food they need, they are more able to ward off many diseases. And if they do get sick, they have a better chance to get well quickly," says University of Minnesota extension nutritionist Verna Mikesh.

Children need food that will make them grow -- food that builds muscle, bones, blood and sound teeth. They need food that will keep their bodies in good running order, as well as food that gives them energy.

No single food will do all of this, Miss Mikesh points out. Like adults, children need a variety of foods to get everything they need. A suggested plan for children from 1 to 6 years is to include each day foods from the four food groups in these amounts: milk and milk products, 3 to 4 cups a day, to drink and in food; meat, poultry, fish, eggs, 2 small servings a day; fruits and vegetables, 4 to 5 small servings a day -- one green or yellow vegetable, one citrus fruit, two or three other fruits or vegetables; bread and cereals, 4 small servings a day. Simple desserts may be included in the children's meals occasionally in small amounts.

These four food groups should also be used as the basis for planning meals for the whole family.

After babyhood, children usually have the right kind of food only when the whole family is well fed. Remember, however, Miss Mikesh warns, that highly spiced foods do not suit young children, nor do tea, coffee and fizzy soft drinks.

One of the best ways to get children started with good eating habits is to practice them yourself and to encourage other family members to do the same. Children learn by imitating those around them.

- jbn -

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960

To all counties:

ATT: HOME AGENTS
For use during or after Farm
Safety Week, July 24-30

KEEP CHILDREN
SAFE AT HOME

Guard your children carefully against the household dangers lurking nearby.

Over a third of accidental deaths occur in the home, and children are frequent victims, according to Glenn Prickett, extension safety specialist at the University of Minnesota. Since children don't understand the importance of safety, or when and where to be cautious, parents must often do the safety thinking for them.

Mothers like to have children with them during the day; yet the kitchen is one of the most dangerous spots in the house, says Prickett. He suggests the following precautions:

Store poisonous and flammable materials in a special cabinet with lock and out of reach of children. Store in original containers which are clearly labeled.

Keep matches in a covered fireproof box. Teach older children the dangers of using matches and store matches out of the reach of younger children.

Teach children to be cautious when washing sharp knives. Wash and dry knives one by one, keeping the sharp edge turned away. Never leave them in the dishpan under water.

Turn pot handles away from the edge of the range, out of the reach of active children.

Never leave children unattended or locked up in the house. Arrange for a mature, dependable baby sitter to stay with the children while you are away.

Teach older children how and whom to telephone when an emergency arises. Attach a card near each phone with the phone numbers of the doctor, hospital, fire station, police, Dad's office, and a neighbor's home.

- rlr -

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 19, 1960

4-H NEWS

To all counties
For release week of or after

WATER AND CAMP SAFETY TIPS

Note: National Farm Safety Week is July 24-30

Safety is your best companion for summer water and camping fun.

Caution while you are vacationing this summer will prevent the injuries which could ruin your boating, swimming or camping fun, according to Glenn Prickett, extension safety specialist at the University of Minnesota.

Here are some tips on camping outlined by Prickett to add safety to your plans for summer fun.

Know the beach where you are swimming. There should be no drop-offs or dangerous boulders and other obstructions in the water. Check the depth before you start swimming. If possible, there should be a lifeguard on duty. When several people are swimming together, use the buddy system and never swim beyond your limit.

When boating, observe the recommended number of passengers for your boat. Don't allow anyone to stand or move around to exchange places while in the boat. Never water ski or speed near swimmers or fishing boats. When wind and waves are high stay off water. Be sure your boat is properly licensed.

Choose a safe campsite where there are no dangerous cliffs or poisonous plants. Be careful when lighting campfires and use water, sand or dirt to put out the fires when you leave camp. Keep your food supply safe from insects and animals. Use a portable cooler for foods which need refrigeration. Take along a first aid kit and care promptly for even minor injuries.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 20, 1960

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* For release at noon, *
* Thursday, July 21 *
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JACK PINES PUT IN EXTRA HOURS AT GRAND RAPIDS

GRAND RAPIDS--As far as daylight is concerned, one forest plot at the North Central Experiment station here is practically in the land of the midnight sun.

University of Minnesota forestry researchers today said they are using floodlights to stretch the daylight hours in a stand of 96 jack pines. One eventual result could be a better jack pine variety for Minnesota woods.

Station forester Bill Cromell made the report at the station's annual Field Day. He said the studies already show that longer days make jack pines grow taller--about 10 percent higher than their unlighted neighbors.

Cromell and Thomas D. Rudolph, forestry researcher at the University of Minnesota, hope their study will lead to a better knowledge of the effect of light on growth functions of the tree.

The foresters begin the floodlighting in early May as the growing season begins. A control turns the lights on for about an hour a day at first, gradually increases to nearly three hours per day by June 21, then gradually cuts the light to an hour a day by mid-September when the growing season ends.

This approximates day length for the same period at 55 degrees north latitude, or the area around the southern part of Hudson's Bay.

Conservative by nature, the jack pine begins to grow early in May, grows for about 65 days, then stops growing in height. It continues to lay on wood but the branches begin to get ready for winter dormancy.

(more)

add 2 jack pines

Researchers hope the study will give them greater knowledge of the effect of day length on the seasonal growth pattern and the inheritance of this response on jack pines. If so, they may some day be able to manipulate the genes--units of inheritance--by controlled mating and artificial selection.

This could lead to development of a variety for this latitude which would grow for a longer period each season and produce more fiber than present varieties.

Agronomist H. L. Thomas told Field Day visitors that a hundred pounds of nitrogen can pay off well on grass pastures in this area. He said that in recent studies at the Grand Rapids station, pastures receiving 50 pounds of fertilizer nitrogen produced 2,643 pounds TDN (total digestible nutrients) per acre, and 100 pounds nitrogen brought 3,572 pounds TDN. At 200 pounds, the TDN yield was 4,318 pounds per acre.

In contrast, grass with no fertilizer yielded only 1,551 pounds TDN per acre. TDN is a measure of total feed value in forage or any other feed.

The cost of producing each additional 100 pounds of TDN was 70 cents for the 50-pound rate of nitrogen, 81 cents for the 100-pound application and $2.01 for 200 pounds. Therefore, Thomas said, the 100-pound rate would be most practical for farmers in this area.

Thomas also said that repeated field trials at the station show that Dollard and Lakeland are the best medium red clover varieties for this area. Both yield well and have the most resistance to northern anthracnose and virus diseases. The trials have been supervised by C. H. Griffith, station agronomist.

60-235-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 20, 1960

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* For release at noon, *
* Friday, July 22 *
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DAIRY HERD WORK REPORTED AT DULUTH

DULUTH--From a 300-pound herd average in 1953 to 500 pounds in 1960--that's the production story of the Guernsey herd at the University of Minnesota's Northeast Experiment station, Duluth.

Only 133 Minnesota herds on DHIA test averaged over 500 pounds of fat per cow in 1959.

Selective breeding and good management practices get credit for the Duluth herd's increase, Ralph Grant, station superintendent, told visitors at the station's annual field day today.

He said Duluth station experience shows dairymen can follow these pointers for dairy herd improvement:

Have cows bred only to the best proved sires available. Sire provings are made by comparing the production of the sire's daughters with the production of their dams. Look at the average production of a sire's daughters and the increased production of the daughters over their dams. The comparison will give you a good picture of his transmitting ability.

Follow a regular schedule of milking and feeding. Cows are creatures of habit. They usually show their displeasure with an irregular schedule by cutting back on production.

Do everything you can to take care of your forage crops. They're still your cheapest raw material for milk production. Cut your hay early. Hay cut too late can lose 40 percent or more of its food value. Use a hay conditioner just after cutting to break the stems and speed drying.

A forced air drying system can be a big help, too. It lets you put up hay when moisture content is still high. You save more leaves and get the hay in the barn sooner.

The Duluth station is cooperating in a University of Minnesota dairy breeding project headed by C. L. Cole, dairy husbandry department head, and Charles W. Young, dairy cattle breeder. The Guernsey herd at the Grand Rapids station and Holstein herds at Rosemount, Morris and Crookston stations are also involved in the breeding project.

60-236-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 20, 1960

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* For release at 1 p.m. *
* Friday, July 22 *
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FARM ACCIDENT REPORT MADE AT SAFETY LUNCHEON

Farm home accidents so far in 1960 have dropped markedly, in comparison to the first half of 1959, a University of Minnesota extension farm safety specialist said today.

Glenn Prickett said 42 persons were killed in farm home accidents from Jan. 1 to June 30, 1960. That is compared to 59 such fatalities in the same period a year earlier.

Prickett reported the trends during the Farm Safety Week kickoff luncheon on the St. Paul campus.

Farm work accidents, however, killed 23 persons during the first 6 months of this year, compared to 21 in the same period of 1959.

Prickett said the long-term trend in farm work accidents is encouraging. The number of fatalities from these mishaps totalled 73 in 1950, 57 in 1955 and 48 in 1958.

Of 39 farm work accident fatalities in 1959, Prickett said 27 were accounted for by tractor accidents. Other farm machinery caused 2 and livestock killed 3.

In the home, most accidental fatalities result from falls, according to Prickett. Falls in the home last year caused 224 deaths, ranking second to the automobile as a cause of accidental deaths. Also, falls injure close to 1,000 Minnesotans every year.

How can farm people avoid accidents? Prickett listed two essential points. "First," he said, "people must become aware of dangers around the farm and home, and they must accept the dangers as real to themselves. They must reject the idea that 'it can't happen to me.' Second, people need to slow down and think, and teach others by example."

60-237-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 20, 1960 Immediate release

MINNESOTA DHIA TO OBSERVE 50TH ANNIVERSARY OF DHIA

Dairymen, test supervisors and dairy researchers will observe the golden anniversary of Dairy Herd Improvement association work in Minnesota Friday, July 29, on the St. Paul campus of the University of Minnesota. The celebration marks 50 years of testing milk cows for production by state DHIA members.

The day-long program will begin at 9 a.m. with tours of research projects. Tour groups will be formed as guests arrive during the forenoon.

Dairy husbandry researchers will explain their current breeding and feeding projects and discuss the latest work with antibody milk.

Tours will move next to the Dairy Industries building. Demonstrations there will explain research developments and techniques in dairy products and dairy bacteriology. Near the end of the tour visitors will test the flavor of milk fortified with extra milk solids.

The program continues at one o'clock with a nostalgic glance at the past and then a bright look ahead as dairy researchers discuss plans for the future. The 1959 summary of DHIA work in Minnesota will be presented by the dairy extension department.

Dairy pioneers, who in 1910 organized the first Minnesota DHIA unit in Freeborn county near Albert Lea, will be special guests. One of them, 89-year-old Alfred Berglund, was president of the first association.

Three University staff members who retired June 1 after giving Minnesota dairymen more than a century of combined service will receive special recognition. They are W. E. Petersen, dairy researcher, Ramer Leighton and H. R. Searles, both extension dairymen.

L. V. Wilson, Owatonna, former extension dairyman, will discuss advances in Minnesota dairying. Petersen will give the closing address.

60-238-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 20, 1960

SPECIAL to U. S. Information Agency

CHILEAN VISITOR STUDIES DAIRYING IN MINNESOTA

Minnesota dairy methods may soon be transplanted to Chile, thanks to 30-year-old Hernan B. Julio.

Julio, a veterinarian with the livestock improvement section of the Ministry of Agriculture, Santiago, Chile, has been studying all phases of Minnesota dairying since July 4. With dairy specialists from the University of Minnesota he has visited dairy farms and cattle shows, toured dairy processing plants and studied the dairy research program at the University.

Julio, whose specialty is milk control, plans to take his Minnesota experiences back to Chile and put them to work.

"Our great problem is to teach farmers modern dairy methods," he says. "If we can develop a dairy extension program to work cooperatively with farmers, such as Minnesota has, we will begin to make real progress."

Julio is impressed by the close cooperation between Minnesota's dairy researchers, processors and farmers, "by the eagerness with which they work together to solve problems of dairy cattle care, milk handling and sanitation."

He gives this background of the present dairy industry in Chile:

In 1955 the Ministry of Agriculture through the livestock improvement section, set up a program to develop the country's dairy industry. A dairy industry improvement law was put into effect to provide funds for building and equipping dairy processing plants. As plants are completed they are sold to a group of local farmers who are given a long-term, low interest loan.

(more)

In order to get more plants in operation and establish a wider market for milk, the program was altered in 1958 so that individuals could also take out loans to purchase the plants.

Bank loans for the purchase of cattle and supplies are also made available to farmers for a long term at low interest.

Julio has shown special interest in Minnesota milk drying plants. "Because most of our milk must travel a long distance from plant to consumer, drying is the most practical means of processing," he explains. Condensed milk is also an important product and fresh milk is packaged in glass bottles for nearby markets. Julio believes paper cartons will soon replace bottles to reduce shipping cost and space.

"We have very modern plants and a good sanitation program worked out," Julio says, "but we need more trained people to do the work.

"Our farmers expecially need a better knowkedge of sanitation practices and dairy herd care. Our dairy cows average only about 3,000 pounds of milk per year. Most of their feed comes from forages--hay and silage. We plan to introduce machinery that will help our farmers harvest their forages and preserve their quality. But at present, machines are still too expensive to replace hand labor."

Julio spent several days of his Minnesota stay visiting dairy farms, cattle shows and county fairs with Robert Pinches, assistant state 4-H club leader, and Ralph W. Wayne, extension dairyman.

"Your 4-H program is wonderful," Julio comments. "I believe a strong 4-H program with special emphasis on dairying will give our young people a better knowledge of up-to-date methods. It is one of the best ways to improve my country for better dairying."

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University Farm and Home News
Information Service
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 21, 1960

GEHRELS NEW
COUNTY AGENT

Fritz Gehrels, veteran Aitkin county agent, will become Beltrami county agent September 1. His appointment was approved last week by the Beltrami extension committee.

Gehrels has been county agent in Aitkin county for the past 11 years. During his years in the county he developed a strong 4-H program, with a steady increase in enrollment and club activities.

As agent he worked closely with other agricultural agencies and with vocational agriculture and other teachers in the school system. This strengthened the extension program in the county.

Although the only agent in the county, he was able to develop a strong overall program and still carry on special projects, such as close work with the dairymen and turkey producers. When Aitkin county was flooded several springs ago, he led efforts to make agricultural and home adjustments.

Gehrels has been recognized by his fellow agents through election as director for Northeastern Minnesota in the Minnesota County Agricultural Agents' Association.

All county agents in Minnesota are joint employees of the county, the University of Minnesota, and the U.S. Department of Agriculture. Thus, they carry

academic rank on the University staff. Gehrels was recognized for his contributions to extension work by promotion from instructor to assistant professor in 1957. He will continue to have the assistant professor rank in Beltrami county.

A native of Alpena, South Dakota, and Pipestone, Minnesota, Gehrels is a graduate of Pipestone High School and South Dakota State College. After graduation from high school, he served in the U. S. Navy for three years.

At South Dakota State College he specialized in crops and soils. While attending college he worked for the college plant breeders on the agronomy farm and later managed a hog farm at Brookings.

He has also taken further college work during a summer session at Colorado State University at Fort Collins.

Gehrels is married and has three children, two boys and a girl. As a hobby he has been especially interested in raising gladioli.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960 Immediate release

THREE IFYE'S TO MINNESOTA IN AUGUST

Three young men from Chile, Germany and New Zealand will arrive in St. Paul on August 1 to begin their stay in Minnesota as International Farm Youth (IFYE) delegates, Wayne Bath, district 4-H club leader at the University of Minnesota, announced today.

The IFYE's are Bernhard Bremer, 25, Germany; Rolf W. Derpsch, 22, Chile; and Peter M. Withy, 25, New Zealand.

Exchangees visit Minnesota farms where they live and work with farm families to increase their understanding of American farming methods and people. Bremer will visit farms in Aitkin and Cottonwood counties; Derpsch will go to Carlton and Faribault counties; and Withy to Beltrami and Chippewa counties.

Bremer manages his father's farm in Germany, a large part of which is irrigated. On the farm Bremer raises wheat, barley, sugar beets, potatoes and a variety of livestock.

Derpsch attends college in Santiago, Chile, and plans to be a dairy technician. He is interested in dairy husbandry, industry and livestock production.

A dairy farmer in New Zealand, Withy has always lived on a farm. He raises both dairy cattle and swine. Withy is particularly interested in farm and farm safety methods.

A total of five youths from other countries will spend the summer in Minnesota under the International Farm Youth exchange program. Aurelia G. Rodriguez of the Philippines arrived in May, and Jacques P. Gilbert of France came to the state in June.

The IFYE program is sponsored by the National 4-H foundation in cooperation with the Agricultural Extension Service to promote better world understanding.

Two 4-H youths from Minnesota are living and working with families in Venezuela and the Philippines this summer in the return phase of the program.

60-239-rlr

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

Immediate release

INSTITUTE WINS INFORMATION AWARDS

The informational program of the University of Minnesota's Institute of Agriculture has won five top or blue ribbons and two red ribbons in national competition.

The competition was held in connection with the annual meeting of the American Association of Agricultural College Editors, held at Oregon State college, Corvallis, Oregon, recently.

The entries were made by the Institute's Information Service. The following entries received blue ribbons:

1. University Farm and Home News, an informational news service. This includes news releases to daily and weekly newspapers, radio stations and farm press; a weekly news service to county agents; and the columns, "Home Garden Tips" and "Our Land." Phillip Tichenor, information specialist, and Mrs. Josephine Nelson, extension assistant editor, prepare the service.

2. "Farm-City Week" radio program presented over the University's station, KUOM, and by several other Minnesota radio stations.

3. "4-H'ers In Action," a series of black and white pictures used for exhibits at the Minnesota State Fair. The pictures featured Wright county 4-H'ers and were taken by Gerald R. McKay, extension specialist in visual education.

4. "Grain Sanitation," a television film planned by Harold Pederson, extension agricultural economist, and filmed and directed by Gerald R. McKay.

5. "Grain Marketing," a television program script prepared by Ray Wolf, extension radio specialist, for use on KTCA-TV.

Red ribbons went to two entries:

1. "Radio Shorts," a special weekly news service to Minnesota radio stations.

2. "Reaching Rural People with Information Tools," a monthly training letter to county agents, prepared by the Information Service staff.

60-240-hbs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

Immediate release

WARNING ISSUED AGAINST JAPANESE BEETLES

Japanese beetles may hitch-hike into Minnesota within the next few weeks--unless travelers are especially careful.

According to John Lofgren, extension entomologist at the University of Minnesota, heavy numbers of the beetles are building up in eastern states.

Persons travelling into areas infested by the insects are urged to guard against bringing the pests back in luggage, clothing, cars or public vehicles.

Japanese beetles are destructive to a wide variety of ornamentals, fruit, vegetables and farm crops. Lofgren says every effort should be made to keep them out of this area as long as possible.

Japanese beetles are about a half inch long. Their bodies are dark, metallic green with six white spots along each side. The insects have bronze colored, shell-like wing covers.

Any pests suspected of being Japanese beetles should be sent to the University for identification. Specimens should be in a preservative such as rubbing alcohol, and should not be sent alive. The beetles may be taken to any county agent, or may be sent directly to the Entomology Department, University of Minnesota, St. Paul 1.

60-241-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960 Immediate release

SOIL MOISTURE RESERVES HIGH OVER MOST OF MINNESOTA

Most Minnesota counties have higher soil moisture reserves than they've had in July for many years.

That's based on a statewide soil moisture survey as of July 18, according to Donald Baker, soil climatologist at the University of Minnesota.

Baker says topsoil moisture seems to be adequate over most of the state. Exceptions are the area north of a line between central Carlton county and western Roseau county, and some localized areas in the central and west central part of the state.

Rainfall was generally less than normal over Minnesota in June, but subnormal temperatures helped conserve the supply of soil moisture. Although July rainfall has been above normal over most of the state, some areas, including Todd, Morrison and Wadena counties, have had little rain.

Lowest moisture reserve found in the survey was 4.5 inches at Beardsley in Big Stone county. On August 10 last year, the reserve there was only 1.7 inches. Maximum level in the soil layer at Beardsley is around 10 inches.

Olmsted, Waseca and other southeastern Minnesota counties have a moisture reserve of 80 to 100 percent of soil holding capacity.

Plants usually draw between 0.14 and 0.17 inch of water per day from the soil at this time of the year. That means the reserve moisture supplies in most areas should be able to carry corn and soybean crops through August with little additional rain.

The survey was conducted cooperatively by the University soils department, U. S. Soil Conservation Service and the state climatologist for the U. S. Weather Bureau.

60-242-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

To all counties

* * * * * *

CORRECTION

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Two typographical errors turned up in one sentence in the FARM FILLERS sent you last week. In the third item (on cleaning grain bins), the second sentence should read ".....in 3 to 5 gallons of water per 1,000 bushels."

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

To all counties

For immediate use

CHEMICALS STOP BRUSH GROWTH IN NEW TREE AREA

Don't let hazel brush, aspens and other wild shrubs and trees crowd out those new evergreens.

A good spraying with a mixture of 2,4,5-T and 2,4-D between now and late August can give good brush control in young pine tree plantations, according to foresters at the University of Minnesota.

Spraying can be done from the ground or air. For large areas, aerial spraying is probably cheaper--around $5 per acre total cost.

In 1957, University foresters sprayed brush in a red pine plantation set out in 1955 at the North Central Experiment station, Grand Rapids. The mixture was 2,4-D and 2,4,5-T, mixed with water at 3 quarts chemical per 100 gallons.

Application rate was 70 gallons per acre. Spraying in this case was done with a tractor-mounted sprayer, using a fine mist.

Aspen and hazel brush were almost entirely killed out. So were most of the berry bushes in the area. Probably the biggest weakness of the chemical is that it had little effect on maple growth.

The red pine trees showed little or no damage from the spray.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

To all counties

For immediate release

A Farm and Home Research Report

FREE AMINO ACIDS MAY BE RELEASED BY SOIL TREATMENT

Every time you spread manure or plow under a green crop, you may be releasing free amino acids in the soil.

The effect on crops, whatever it may be, is probably all to the good.

Amino acids are components of proteins. And the fact they can occur free in the soil--not as part of a complete protein--has only recently been discovered, according to E. L. Schmidt, soil microbiologist at the University of Minnesota.

The free amino acids don't last long in the soil, but at times they may total up to 200 pounds per acre.

Why do manure or plowed-under forage release them? This material adds carbohydrates to the soil. The carbohydrates in turn step up activity of certain microorganisms that turn the amino acids free.

While the practical implications of this finding aren't entirely clear yet, the principle is another important finding in this type of research.

Schmidt says it's theoretically possible that certain plants might directly absorb amino acids, if they occur near the roots. In that case, there might be an increase in protein content of the plant.

Other effects, however, are more likely. Certain soil microbes beneficial to plants might be helped along by certain amino acids. Most microbes produce their own but some--like those involved in forming root nodules on legumes--must get some of these growth factors from outside sources.

(more)

Schmidt and other researchers made these studies by adding glucose (a natural sugar) to soil. The sugar stepped up activity of soil microorganisms, which in turn released the amino acids in a free state--as any carbohydrate source would.

At the recent meeting of the North Central Branch of the American Society of Agronomy in St. Paul, Schmidt said studies of the synthetic activities of microorganisms as they grow in soil is difficult. But modern research methods help.

Schmidt also pointed to the importance of isolating microorganisms from soil. "Synthetic powers of microorganisms are largely unknown," he said "but of considerable potential significance. Even small amounts of certain biologically active substances produced by a microorganism in the soil could conceivably exert important effects on the soil, on neighboring microorganisms, or even on plant roots in the vicinity."

Microorganisms have been isolated from the soil, he said, for the purpose of producing alcohols, acids, organic solvents, enzymes, antibiotics, and other materials.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

To all counties

For immediate release

FARM FILLERS

If you have sweet corn in your garden you'd better treat it to control corn earworm. The ears may be badly damaged if you don't. John Lofgren, extension entomologist at the University of Minnesota, says treatment should begin when silks first appear. Sprinkle the silks with DDT powder every two or three days from the time they appear until they dry up. Market corn and commercial growers may treat their fields with a special DDT-mineral oil earworm spray or with Sevin. Late corn especially needs treatment, the earworms usually hit it hardest. Husks, stalks and leaves from corn treated with DDT shouldn't be fed to livestock but plant parts from corn treated with Sevin may be fed to stock seven days after treatment.

* * * * * *

Hot August days are a good time to remember the frost that collected on the walls and ceiling of your barn last winter. The barn will probably be just as damp and frosty again this winter if you don't plan now for a good ventilating system. Extension bulletin 253 has tips on insulating and ventilating animal shelter buildings. The county extension office has copies.

* * * * * *

Pocket gophers seem to have a weakness for poison grain at this time of the year. Parker Anderson, extension forester at the University of Minnesota, suggests this recipe for grain bait: Put three-fourths of a quart of corn in a quart glass jar. Add one level teaspoon of strychnine sulphate crystals. Then add enough water to cover the corn. It's a good idea to add vegetable coloring to show the corn is poisoned. Let the mixture stand for 12 hours, pour off the water and spread the bait to dry. Label the corn immediately.

* * * * * *

Minnesota cows on DHIA test averaged 400 pounds of fat in 1959. The average production of all cows in the state was only 267 pounds. Tested cows returned their owners over three times as much money per hour of labor as their untested sisters, according to Ralph W. Wayne, extension dairyman.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

To all counties

For immediate release

GRASSHOPPERS HIT CERTAIN STATE AREAS

Grasshoppers which begin their lives in idle land may get the jump on some Minnesota farmers.

John Lofgren, extension entomologist at the University of Minnesota, says there are a few real "hot spots" of hopper infestation, especially in west central and northwest Minnesota counties.

Undisturbed soil bank fields and other non-cultivated areas are a choice breeding ground for the 'hoppers. As young 'hoppers grow they move to crop land nearby. The problem is mostly local, but very serious in some areas.

Best way to stop the 'hopper threat is to treat the non-crop areas. The cheaper insecticides, aldrin, heptachlor, dieldrin and toxaphene, can be used. There are no residue limitations when treated areas are not grazed or harvested for forage.

Farmers whose crops are being damaged have little problem of control if they own the idle land. However, there may be a problem if 'hoppers come in from other non-crop areas. And although the owner of soil bank land is required to control weeds there's no law which says he must control grasshoppers.

Some farmers get permission from owners of soil bank land to spray a barrier strip -- at least five rods wide -- at their own expense. This keeps the 'hoppers from coming over to the crop land.

Grasshopper control on crop and pasture land does have spray residue limitations. See your county agent for current recommendations.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

To all counties

ATT: HOME AGENTS

For immediate release

PEACHES, TURKEYS ARE AUGUST PLENTIFULS

Peaches and turkeys lead the list of foods due to be plentiful in August, according to the U. S. Department of Agriculture.

The U. S. peach crop is about 20 percent above average. Most of the increase over last year is in California, where the Freestone crop is the second largest on record.

More turkeys will be available in August than a year ago, and the tonnage will be greater since more heavy breed birds are in this year's flock. Homemakers can take advantage of this big supply by serving cold roast turkey, turkey sandwiches and turkey salads often for hot weather meals.

Broiler-fryer chickens are also on the U. S. Department of Agriculture's list of plentiful foods for August. About 12 percent more of these tender young birds are expected to be marketed in August than a year ago.

Homemakers will have a big variety of summer vegetables to choose from, including tomatoes, lettuce, onions, green beans, cabbage, broccoli, green peppers and sweet corn. Onions are in heavy supply.

Watermelon tailor-made for warm weather fare, continues to be abundant and of high quality. Weight watchers will be interested to know that a half slice of watermelon (3/4 by 10 inches) has only 45 calories.

Peanut butter and scallops are other plentiful foods for August.

-jbn-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 26, 1960

To all counties

4-H NEWS

For immediate release

PLAN WARDROBE FOR NEW FALL CLOTHES

Ready to go shopping for new fall clothes?

Before you do, take some time to plan your fall wardrobe. Here's a three-step wardrobe plan to help you from Shirley Erickson, extension clothing specialist at the University of Minnesota:

* Start by making a "need" list of the clothes you should have for your activities this year such as school, dating, church, shopping and sports events, plus any others.

* Next make a "have" list of articles already in your wardrobe which will be usable this year. This is a good time to note which clothes will need mending and cleaning before they are wearable.

* Compare what you have with what you need. The result is a list of clothes you will want to add to your wardrobe for fall.

Now if you are wondering how to stretch your budget, here's the way a wardrobe plan can help.

Combine some of your necessary purchases into one if you can. If you need date shoes plus flats, maybe a pair of the new low-heeled shoes will do for both. Often a scoop-neck dress has a jacket to adapt it for church or shopping trips.

Plan for blouses and sweaters that can be mixed and matched for variety. Look for clothes that can be worn in more than one way, such as dresses that can be changed by adding a belt, a scarf or some other accessory. The more double-duty clothes you have, the more economical your wardrobe is.

Pick a color you like that is becoming to you and combines well with other colors. It's often best to buy your major garments such as coat or shoes in this color. Then build the rest of your wardrobe in colors to go well with this color already selected.

Choose styles that are attractive for you. It's fun to keep up with fashions, but select from fashion only the styles that look nice on you. When you are deciding to buy or make a dress, always ask yourself, how will the dress look on me?

Now that you have planned your wardrobe, give as much consideration to the way in which your money will be spent. Decide carefully how much should be spent on material and ready-made clothes.

Now it's time to go shopping -- and stick to your good plan!

-rlr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 28, 1960

Immediate release
(with mat)

NEW STATE 4-H AGENT

Mrs. Delphia Dirks, Brookings, S. D., will join the University of Minnesota staff as state 4-H club agent August 1, Skuli Rutford, director of the University's Agricultural Extension Service, has announced.

For the past three years Mrs. Dirks has been a state 4-H club agent on the staff of South Dakota State college, Brookings. Previous to that time she taught home economics for a year in Madison, South Dakota.

She holds a bachelor of science degree from South Dakota State college, with a major in home economics. She is a member of Phi Upsilon Omicron, national professional home economics organization.

For five years she was an active 4-H club member in Pennington county, South Dakota, where she grew up on a 3500-acre ranch.

60-243-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 28, 1960

Immediate release

HOME ACCIDENTS ON DECLINE

Fewer Minnesota residents died in home accidents during the first six months of 1960 than in the same period a year ago.

If this decline continues throughout the year, it will reverse the trend of the last five years when home accidents have been on the increase, Glenn Prickett, extension safety specialist at the University of Minnesota, said today.

From January 1 through June 30, 1960, 218 Minnesotans were killed in home accidents, according to provisional figures released by the Minnesota Department of Health. Last year home accidents took a toll of 242 lives the first six months--24 more than this year. Minnesota farm homes have been the scene of 42 fatal home accidents this year as compared with 59 at this time last year.

Falls are still the number one killer in home accidents, especially of older people. Fires and burns, the number two killer, take their highest toll among children under five years of age. Poisonings, suffocations and firearms are other leading causes of accidental deaths.

Though home accidents are decreasing, the number is still far too high, the University safety specialist declared. He urged homemakers to give more attention to removing hazards in the home and to do everything possible to protect young children and older people against the hazards that are responsible for death and crippling injuries to so many in these age groups.

60-244-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 28, 1960 Immediate release

ALFALFA FIELDS SHOW SERIOUS BORON DEFICIENCY

If you're growing alfalfa on soil that's sandy or low in organic matter you'd better check it today. The legume may be boron-hungry.

Curtis Overdahl, extension soils specialist at the University of Minnesota, recently found serious boron shortages in alfalfa fields in Aitkin, Cass, Crow Wing, Mille Lacs, Morrison, Sherburne, Todd and Wadena counties.

Overdahl also found many fields short of potassium, but that was no surprise.

The boron shortage can be expected east and north of a line along highway 52 from the Iowa border north to Osakis and east of a line from Osakis northward.

Boron needs vary with plants. Alfalfa needs seven to ten times more than corn or grain crops.

Symptoms of born deficiency in alfalfa are yellow leaves and stunted growth. Affected fields show a general yellowing of the plant tops and a slight purplish cast of the upper leaves. The internodes (branches) at the top of the plants aren't spaced normally but are bunched one atop the other. When the deficiency is serious, plants won't blossom.

The yellowing lowers the nutritive value of the plant and stunted growth will cut yields, especially during dry weather. Boron starvation severely limits alfalfa seed production. Also, winter kill may be severe if the deficiency isn't corrected soon.

Best way to get boron into the soil is to broadcast special boron-containing fertilizers. They are designated by the letter "B" following the potash analysis, as 0-12-36B.

Since potash and some phosphate is usually needed, the 0-12-36 fertilizer will help reduce winter kill and give economical returns on the 1961 crop.

Another way is to use a straight potash fertilizer and hand mix borax or fertilizer borate. The mixture should provide 20 to 30 pounds of borax or borate per acre. Higher rates are not recommended. More than 80 pounds of borax per acre may injure plants.

60-245-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
July 28, 1960

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* For release at 2 p.m. *
* Friday, July 29 *
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FORMER UNIVERSITY DAIRYMEN HONORED AT DHIA ANIVERSARY CELEBRATION

Three University of Minnesota staff members who retired July 1 were recognized today for outstanding service to Minnesota dairymen.

W. E. Petersen, H. R. Searles and Ramer Leighton were awarded service scrolls by the Minnesota Purebred Dairy Cattle association. Petersen was a dairy husbandry researcher, Searles and Leighton both served as extension dairymen.

The presentation was made on the St. Paul campus during the 50th anniversary of Dairy Herd Improvement association (DHIA) work in Minnesota.

University dairy specialists at the day-long golden anniversary program took a look into the future.

Ralph W. Wayne, extension dairyman, predicted a bright future for DHIA testing. Wayne said the production testing program will expand rapidly with the greatest growth coming from the owner-sampler program.

In a few years all DHIA records will be centrally processed with electronic calculators. The machines will provide better records for culling, feeding, breeding and management, and also for research.

The records, for example, will be used to locate outstanding brood cows so they can be mated to the best sires in the country, to produce sires for artificial breeding.

Wayne also pointed out the possibility of a complete, low-cost farm business record service for DHIA members using the electronic calculators.

Electronic processing of DHIA records began with 11 pilot herds in 1957. The present program got under way in March, 1958. About 600 of the 4,500 state herds on test are now using the central processing service.

C. L. Cole, head of the dairy husbandry department, reported University research in breeding, feeding, reproduction and milk secretation.

(more)

Breeding projects involve dairy cattle at Rosemount, five branch stations and seven cooperating state institutions. Researchers are working with Holstein, Guernsey and Milking Shorthorn herds to develop lines of cattle with greater feed conversion efficiency and higher production.

One eventual result could be development of lines of sires whose daughters' production can be closely predicted.

Cole said feeding research will be directed towards roughage production because of Minnesota's great forage producing potential. Reproduction research will be mainly in artificial insemination (AI) and ova transplant.

One objective is a semen extender (diluting material) that will keep sperm cells healthy for several days. Present extenders limit use of fresh semen to one to three days. Since most semen is collected only once or twice a week, dairymen often can't get semen from certain bulls when it is needed.

With an extender that keeps semen useful for several days, dairymen would regularly get service from specific bulls without using frozen semen.

Studies with ova-transplant--transfer of a fertilized egg from one female animal to another--have been conducted in the past two years, Cole said. If transplant techniques are perfected, outstanding cows may furnish eggs for several calves each year.

Cole also said more research in milk secretion would be concerned with production of antibody milk. He said researchers have found cows can produce antibodies in their udders at any stage of the lactation period. Work is now being directed towards greater specificity of the antibodies.

Samuel T. Coulter, dairy industries department head, predicted that solids-not-fat will become an increasingly important factor in the utilization of milk. He bases his prediction on the growing importance of the solids-not-fat fraction of milk in nutrition.

Coulter said greater solids-not-fat use may be reflected by: increased use of skim milk products, increase in solids-not-fat content of certain dairy products, as milk and cream, and by production of dairy products with lower fat content. For example, a cheese lower in fat content than present varieties.

60-246-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 1, 1960

HELPS FOR HOME AGENTS
(These shorts are intended as fillers for your radio programs or your newspaper columns. Adapt them to fit your needs.)

In this issue:

HOME FURNISHINGS

Fall Color Forecast

A dramatic revival of purple -- that's the fall color forecast for home furnishings.

Many homemakers have been interested in using purple and lavender in their homes, but the purple family hasn't been really important in home furnishings for nearly 20 years. Now 1960 brings it back.

The favorite shade for this fall with be a bright, slightly-blued purple. It's good with period furniture or antiques, yet unusual and striking with contemporary styles, too.

Purple can be combined with lavenders, blues and whites for a cool and quiet color scheme, or with any of the following colors for different moods and effects: rose beige, creamy white, gold, fern green, turquoise and red.

-rlr-

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

CONSUMER MARKETING

Tenderized Beef on the Hoof

Your beef may soon be tenderized on the hoof.

A startling new way of tenderizing beef has been announced by a major packing company, according to Mrs. Eleanor Loomis, extension consumer marketing agent at the University of Minnesota.

A protein-affecting enzyme from the papaya plant is injected into the livestock a few minutes before slaughter. It is believed this will make the cheaper cuts as tender as some more expensive cuts. Prices of tenderized cuts are expected to be about the same as non-tenderized cuts.

* * * *

Concentrated Tomato Juice Will be Graded

New grade standards for concentrated tomato juice have been proposed by the U. S. Department of Agriculture. If they are accepted, the production and marketing of this juice may increase rapidly. For several years the product has been marketed by a few firms under temporary permits.

Concentrated tomato juice is made from whole tomatoes and concentrated to between 21 and 25 percent of salt-free tomato solid. It is reconstituted by adding three parts of water.

* * * *

U. S. Grade A Poultry is Meatier Now

Now when you buy U. S. Grade A poultry, you're getting a meatier product than you did before July 1.

Revised standards for poultry call for more flesh on the breast of A quality birds, according to Mrs. Eleanor Loomis, extension consumer marketing agent at the University of Minnesota.

* * * *

Frozen Potatoes Top Peas

The top selling frozen food was once frozen peas, but since 1957, frozen potatoes have climbed from 220 million pounds to 370 million pounds for 1959--an increase of 69% in two years! Potatoes now have taken over the lead as the top selling frozen food.

* * * *

Green Bean Sticks

A new frozen vegetable product will soon be on the market--frozen green bean sticks. To make the sticks, green snap beans are precooked, chopped into small pieces, pressed into molds and frozen. They are then cut stick-size, breaded, fried in deep fat and refrozen. Green bean sticks are ready to serve after heating 10-15 minutes at 400°F.

-rlr-

CLOTHING

Fashion News for You

Fashion news for fall brings fresh color and style. But fashion just suggests, it doesn't rule. There are new styles to flatter every figure, complexion and personality. Athelene Scheid, extension clothing specialist at the University of Minnesota, points out that you don't need to accept a new style just because it's high fashion. Make sure it's right for you, too!

Colors will be exciting and add to your appearance, if they are really best for you, says Miss Scheid. Remember, grayed and dark colors minimize size, while light, bright colors make your figure appear larger.

Complement yourself by choosing colors which do the most for your skin, hair and eye coloring. For example, grayed colors, light or dark, are kinder to mature complexions than the light, bright colors.

Choose your fall clothes to fit your personality -- that's the way to make fashion right for you!

* * * *

Laundering Wash and Wear Garments

Most of the lessons you've learned about your regular laundering will help in successfully laundering wash-and-wear garments.

Wash-and-wear garments should be washed frequently, says Athelene Scheid, extension specialist in clothing at the University of Minnesota. Once these fibers are heavily soiled they won't clean easily.

Crowding clothes in the washer by overloading causes wrinkles. When you are using a dryer, be sure not to dry garments too long. Use the medium or the wash and wear setting, suggests Miss Scheid. It also helps to remove garments from the dryer while they are still slightly damp.

* * * *

Pressing Tips

Different fibers and fabrics require different amounts of moisture and pressure when they're ironed or pressed. Here is a guide from Athelene Scheid, extension clothing specialist at the University of Minnesota:

Heavy linen	use pressure and heavy moisture
Sheer linen and cotton	use some pressure and added moisture
Wool	press lightly with added moisture
Silk, rayon	press lightly with slight amount of moisture
Acetate	press as lightly as possible while quite damp
Dacron, nylon, Acrilan, Orlon and Dynel . . .	press lightly with slight amount of moisture

-rlr-

FOOD AND NUTRITION

Snacks for Tots

Milk, fruit, a small peanut butter or chopped vegetable sandwich are good snacks to give your children. But remember that if it's too close to the next meal, a snack spoils their appetite.

* * * *

Foods With Child Appeal

Children like lukewarm, soft foods. Favorite meats are hamburger, meat loaf and wieners. Foods children can pick up in their fingers -- bite-size pieces of raw vegetable, pieces of meat and fruit slices -- appeal to them. And children like their meals at the same time every day.

* * * *

About Sweets

Don't offer sweets as a bribe to children for eating needed foods. You'll only make sweets much more appealing to them. After all, most children develop a strong liking for candy, cake and carbonated beverages without coaxing.

Usually it's wise to offer sweets to small children only at the end of a meal. Dentists, physicians and nutritionists give two excellent reasons for this rule: 1) Many studies have shown that when sweets are eaten excessively between meals, the child's appetite is not good at mealtime. The result is that he probably won't get the other foods his body needs. 2) Sweet foods damage the teeth when small amounts are left in the mouth. So encourage children to brush their teeth after they have eaten sweets. If that's not possible, drinking a glass of water is next best.

* * * *

Freeze Raspberries in Sugar Sirup

Freezing raspberries? Shirley Trantanella of the University of Minnesota's food processing laboratory says a sugar sirup helps to preserve both flavor and shape of the berries better than dry sugar.

Simply dissolve 3 cups of sugar in 1 quart of cold water. Don't heat the sirup. Put the washed raspberries in the containers and pour the sirup over them. Leave about half an inch at the top of the container for expansion. Freeze immediately -- for good eating next winter!

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minn.
August 1, 1960

(with mat)

NEW HOME AGENT
FOR COUNTY

Marguerite Nuytten of Marshall will join the county extension staff on September 1 as home agent.

She is a June graduate of the College of St. Catherine, St. Paul, where she received her bachelor of science degree in home economics. After graduating from Marshall high school, she spent six years working as manager of the home farm in Lyon county.

In college she was active in the Home Economics, Players and French clubs. She is a member of the American Legion auxiliary.

As home agent, Miss Nuytten will work with homemakers in the extension home program and direct the home economics phases of 4-H club work.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 1, 1960

ATT: Agricultural Agent
Home Agent
4-H Club Agent

GARDEN FACT SHEET FOR AUGUST

by O. C. Turnquist
C. Gustav Hard
Extension Horticulturists

Vegetables - O. C. Turnquist

1. One of the best materials for controlling late blight on tomatoes is maneb. This is sold under the trade names Manzate and Dithane M-22. Follow directions on the package and apply every 7-10 days to keep your tomato plants healthy.
2. Continue to apply methoxychlor to your garden plants for control of leaf-eating insects. Plants like cabbage, broccoli, cauliflower, cucumbers, squash, and melons should be sprayed frequently for insect control.
3. Blossom-end rot of tomatoes can be prevented by applying a mulch of grass clippings, clean straw, corn cobs, or sawdust around the plants. This will avoid any root pruning through cultivation and will conserve moisture.
4. The first part of August is a good time to sow seed of radish, lettuce, spinach and kohlrabi for fall harvest. These crops will make good growth and quality during the short cool days of fall.
5. Water your garden thoroughly to a depth of 6 inches or more about once each week if water is available. Cold well water does not appear to injure vegetable plants. Frequent, light sprinkling will cause more surface roots to develop and more wilting may result when the soil becomes dry again. Deep thorough watering encourages deep roots that will make better plants that will withstand dry conditions without wilting.
6. Harvest vegetables often to obtain a greater production of good quality produce. Green beans, cucumbers and tomatoes will bear longer if they are picked just as soon as the fruit is ready for use.

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

7. Much distortion of tomato leaves can be attributed to 2,4-D this season. Tomatoes are extremely sensituve to fumes of this weed killer. Usually only the maturity of the plant is delayed and the plants will not die unless sprayed with the weed killer directly.

Fruit - O. C. Turnquist

1. Prune your raspberries now as soon as they are through bearing. Cut out all canes that bore fruit and thin out new canes. Don't leave more than 3 or 4 canes per foot of row or 6 to 8 canes per hill.
2. Everbearing raspberry plants like September bear new as well as old canes. When pruning is done, remember to cut out only the old canes. Of course, some of the new canes are thinned out also.
3. Remove water sprouts and suckers coming up from the ground around apple trees. These are the shoots that grow straight up along the trunk or along main branches.
4. Keep plum suckers removed by cultivation. When these are allowed to develop, they will take needed moisture and nutrients away from the original plum tree. The result usually is a wild plum thicket rather than a good plum variety.
5. Continue spraying apple trees with methoxychlor for insect control every 7 to 10 days.
6. Raspberry canes are often infected with a disease called anthracnose. This causes white sunken spots on the canes, leaves, and fruit. It is easily controlled by applying the fungicide ferbam (Fermate) after harvest.
7. Remove late-formed runner plants from June-bearing strawberries. The rows should not be over 2 feet wide and plants spaced about 8 inches apart within the row for best results.

Ornamentals - C. Gustav Hard

1. Late August or early September is a good time to start a new lawn or renovate a poor lawn. When starting a new lawn be sure to provide a high level of nutrients by adding 40 to 50 pounds of a complete fertilizer (10-10-10) per one thousand square feet of lawn area. This amount of fertilizer should be cultivated into the

upper 6 inches of the soil before planting.

Always use a good grade of lawn seed and one that is adapted to your particular set of conditions. For a sunny lawn, the bluegrasses are recommended; for a shady or sandy lawn, a high percentage of the fescue grasses. For a lawn where there is going to be hard use such as a playground, higher percentage or a blend of the fescues and bluegrass is best. A good grass seed mixture will have a high percentage of the permanent grass seeds.

After planting, watering is essential for quick germination. Keep the soil moist by sprinkling several times a day. Once the grass has attained a height of 2 to 3 inches, begin mowing.

2. Late August or early September is time to transplant or plant peonies. If you plant new varieties, select a variety of the double, Japanese and single types. Note that the different varieties of peonies bloom at different times. Check with your nursery to obtain a variety of plants.

   Proper planting of peonies is essential. Remember that peonies will grow in the same location for many years. Therefore, a high level of nutrients is essential. Dig a hole about 18 inches deep and place about a 3- to 4-inch layer of well rotted manure or compost in the bottom of the hole. Cover this layer with about 6 inches of a good garden soil. The peonies should be planted at a depth of about 2 inches. To be sure this is possible lay a board or a shovel handle across the hole and measure from the lower side to the top of the peony. Firm the soil so that the roots will not sink as the soil settles the first season.

3. Fall care of chrysanthemums should include a side dressing with a complete fertilizer. Usually fertilizing after the buds are showing will help to force them into earlier bloom. Regular watering is important.

4. Iris can be transplanted during mid-August. Lift the old clump with a spading fork, being careful not to break off too many of the tender roots of the plants. Only the very tips of the iris should be used. Cut the growing point which is usually farthest from the center of the clump with a sharp knife. Be sure there

is no disease or insects on the new plants. Reset the peonies in a shallow trench about 3 to 4 inches deep and about 6 to 8 inches wide. Make a shallow mound at the bottom of the trench, place the new plants on the mound, spreading the roots on both sides of the mound. Cover the roots with soil and firm the soil around them to give support to the plant.

After transplanting, apply a complete fertilizer at the rate of about 4 to 5 pounds per 100 square feet. Water the plants so they will adapt themselves to their new location before winter begins.

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960 Immediate release

GOOD BUYS IN AUGUST PLENTIFUL FOODS

Appetizing foods for hot weather meals will be plentiful in August.

Since the best bargains in food are usually among the ones in abundant supply, consumers will be wise to check the U. S. Department of Agriculture's list of plentiful foods for August, says Mrs. Eleanor Loomis, extension consumer marketing agent at the University of Minnesota.

Peaches top the list of plentifuls for the month. This year's crop of peaches is nearly 8 million bushels or 20 percent above average. Most of the increase over last year is in California, where the Freestone crop is the second largest on record.

Turkeys are also high on the list of abundant foods. More turkeys will be available in August than a year ago. Heavy birds predominate this year.

Broiler-fryer chickens will be arriving on markets in greater quantity than last year at this time. These tender young chickens are especially well suited to outdoor barbecuing, Mrs. Loomis points out.

Scallops continue to be in large supply. Landings and storage holdings of this seafood have been well above a year ago. Now the world's largest scallop bed has been discovered off the east coast of Florida--just up from Cape Canaveral.

Watermelon of high quality will continue to come to markets because the crop in important growing areas has been delayed by weather conditions. As a dessert, watermelon is tailor made for weight watchers, since half a slice, 3/4 by 10 inches, has only 45 calories.

Consumers will have a big choice in summer vegetables from home and market gardens in August. In good supply will be onions, lettuce, green beans, cabbage, broccoli, sweet corn and tomatoes.

For sandwich spreads for the youngsters, don't forget peanut butter. Jars of creamy smooth and crunchy types of peanut butter will be stacked high on grocers' shelves in August.

60-247-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

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* For release at noon, *
* Wednesday, August 3 *
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EGGS TREATED WITH OIL ON FARM KEEP FRESH APPEARANCE LONGER

DAVIS, CALIF.--Eggs treated on the farm with processing oil are more apt to still have that fresh look when the housewife breaks them in the skillet.

University of Minnesota poultry researchers G. W. Froning, M. H. Swanson and J. H. Skala made that claim today at the annual meeting of the American Poultry Science association. They said the finding gives one more good reason why it pays egg producers to use the oil.

Earlier Minnesota studies had shown that on-the-farm spraying with oil kept eggs at grade A level much longer than untreated eggs. The more recent findings show that spraying helps retain fresh appearance, too.

Both results can mean more acceptable eggs to consumers and more profits for producers. At present, about 5 percent of all Minnesota eggs are treated on the farm.

In the current studies, researchers sprayed eggs with oil six hours after laying and left others untreated as a check. Some eggs in each group were stored for 14 days at room temperature and the rest were held 30 days at 55 degrees.

In each case, oiled eggs after storage had whites that stood up better than untreated ones. Treated eggs didn't spread out as much in the fry pan and showed less change in protein composition from when they were fresh.

Processing oil protects egg quality through keeping the natural carbon dioxide in eggs for a longer time. Normally, carbon dioxide gradually escapes through the shell, and loss of this gas causes quality to drop. The oil leaves a film that prevents carbon dioxide from escaping.

General recommendation for producers is to use 3 or 4 grams of oil on every "filler flat" of eggs in the packing case, within a day after gathering. With a hand sprayer, this means about a gallon of oil for 95 cases of eggs containing 30 dozen each. The oil also comes in aerosol pressure bombs.

60-248-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

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* For release at 3 p.m. *
* Wednesday, August 3 *
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DEHYDRATED FISH SOLUBLES OK FOR CHICKS, RESEARCH SHOWS

DAVIS, CALIF.--One way poultry producers can save on feed costs for rapidly growing chicks was reported today by Elton Johnson, head of the University of Minnesota poultry husbandry department.

Johnson said at the American Poultry Science association meeting that fish solubles dehydrated without a "carrier" material--such as soybean meal--are just as effective as solubles that have the carrier.

Carrier-free dehydrated solubles are cheaper in the long run; the carrier would raise transportation and storage costs.

Fish solubles are fed because they contain "unidentified growth factors" important in speeding up gains. In the past, dehydration always meant using a carrier, like soybean oil meal, to preserve these unknown factors.

Recently, however, a new process was developed for dehydrating without a carrier. The question then was whether the solubles would still have their growth-boosting effect. Johnson's studies showed they did.

In three-week studies with chicks, Johnson and P. E. Waibel found that birds getting 1 percent dehydrated fish solubles without carrier gained 5 percent more than chicks without solubles. In comparison, a ration containing 2 percent fish solubles dehydrated on soybean meal brought a 3.2 percent increase.

At lower levels of supplementing with fish solubles, the response was proportionately similar.

Fish solubles include material left over after fish processing. The new dehydrating process, Johnson said, will provide a compact source of the material. Freight costs will be cut in half for the same amount of unknown factors, compared to drying on soybean meal.

60-249-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

Immediate release

MINNESOTA RURAL POPULATION DECLINE MAY END

Minnesota may soon see the end of its long decline in farm population.

The prediction that farm population will not go much below that of the late 1950's was made today (Wed., August 3) with the publication of the book, The Minnesota Community--Country and Town in Transition by the University of Minnesota Press. Lowry Nelson, one of the natinn's leading rural sociologists and for many years head of rural sociology on the St. Paul campus of the University, is the author.

Nelson also feels that town and country will continue to be more and more closely integrated and that understanding between the two will continue to grow.

"While the number of large farms may continue to increase, this trend will be largely offset by an increase in small farms for part-time farming," Nelson says.

Some of his prediction is based on the hope that world tension will lessen in the next quarter century and that we will have spent less on defense, he says. This, along with the immense number in the labor force, will produce problems of employment which may drive more people to, or keep them in, agriculture.

Factors that may favor a continued decline in farm population include the continued advance in farm technology and the pull of nonfarm employment opportunities.

Factors that favor maintaining present farm populations include the hold of farm life, the growth of part-time farming, the growth of U. S. and world population, the high birth rate of farm people, possible industrial slowdowns and public policies aimed at keeping people on the farm.

Nelson's new book traces changing rural life and rural-urban relationships in Minnesota. It covers such subjects as nationality groups, rural standard of living, education, governmental trends and church membership. It devotes an entire section, "The Cutover: Our Rural Problem Area," to the special problems of northeastern Minnesota.

60-250-hbs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

To all counties

For immediate use

BEEF PRICES WILL VARY AMONG GRADES

Price variations from one beef cattle grade to another will be even greater than usual this fall.

That's the prediction from Ray Arthaud, extension livestock specialist, and Kenneth Egertson, extension marketing economist, at the University of Minnesota.

Here's what the spread means to beef producers. Cattle grading "good" or lower should go to market as soon as possible, to avoid the peak marketings of grass-fed cattle and other low-grade animals later on. It won't pay to finish cattle to a higher slaughter grade than their conformation grade.

Producers will probably cull heavily on cattle this year, anticipating lower prices. Result: More low grade cattle on the market.

Prices for better quality cattle will probably remain steady through the fall. These cattle can be marketed whenever they are properly finished, but shouldn't be carried to extremely heavy weights. Arthaud says every pound of gain above 1,150 will likely bring less than it cost the producer. This is especially true in hot weather, when fat cattle gain little, if any.

Heavy prime cattle, even though they usually top the market, are in only limited demand. Most large chain and independent stores doing most meat retailing prefer carcasses from cattle at 1,150 pounds or less, and of choice, rather than prime grade.

Retailers also want cattle heavily muscled and free of excess and internal fat.

Here's a tip for hot weather: keep cattle as comfortable as possible, if you want them to gain. They need shade--where there's as much air movement as possible.

Keep loose salt in a box. Have plenty of fresh water at all times. Set up back-rubbers and keep them filled or soaked with insecticide to help control annoying flies.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

To all counties

For immediate release

A Farm and Home Research Report

TURKEY INDUSTRY CHANGES NOTED

Nowhere in Minnesota has agricultural change been more striking in the past 20 years than in the turkey industry.

How striking the changes have been and how they have occurred is shown by a recent University of Minnesota survey, reported in the current issue of Minnesota Farm Business Notes, an agricultural extension publication.

Minnesota's turkey production increased from 4 million birds in 1950 to about 15 1/2 million in 1960--making the state first in the nation in number of turkeys.

Economists Turner Oyloe and Darrell Fienup surveyed 800 members of the Minnesota Turkey Growers association. Half of these members had quite raising turkeys in the last few years. But of the rest, 20 percent had sold 10,000 or more birds in 1955, 34 percent sold that many in 1959, and about 42 percent will reach that level this year.

In other words, the number of large-scale turkey producers is climbing rapidly. Only 1 percent sold 50,000 or more birds in 1955. This year, 10 percent will reach that level of production.

While growing in size, the turkey operations have become more specialized. Of producers marketing 10,000 or more birds in 1959, half had no other source of income. And of the large producers who did have other enterprises, most depended on turkeys for the major share of returns.

Small producers weren't quite as specialized. Of those marketing under 10,000 birds annually, three fourths said turkeys accounted for half or less of their income.

Oyloe and Fienup also surveyed hatcheries and processors. Three hatcheries in 1958 turned out more than half of the total hatch and 11 accounted for more than 75 percent.

-more-

Processing has been more concentrated, with more than 75 percent done by 10 plants in 1958. Turkey production, hatching and processing have become spread more evenly around the year. In 1957, only 76 percent of Minnesota turkeys were hatched in the first 6 months of the year, compared to 94 percent in 1951.

Oyloe and Fienup note three forces behind the shift from seasonal turkey production. First, consumers' habits have changed. Turkey is no longer simply a holiday treat. Second, farmers, hatcheries and processors are trying to spread their operations over a longer period to more fully use their investments.

Third, the industry has found it easier to adjust production to market needs and opportunities through vertical integration--linking two or more stages of the marketing process under one firm or management. The processor-grower contract is an example. Another is turkey flocks owned and managed by hatcheries and processors. And some turkey growers have established hatcheries or built processing plants.

Growth of the turkey industry is due to many incentives. Efficiency has shot up. Turkey death rates have dropped. Credit has been widely available; only 18 percent of the growers surveyed provided all their own financing.

The shift of retail marketing to chain stores and other large retailers has helped concentrate turkey production among a rather small number of producers, hatcheries and processors. Large producers are best able to furnish supplies, uniform quality and even size which these retailers want.

A big problem now is that turkey production seems to have outrun effective demand. Although farmers sold 269 million pounds more turkeys in 1958 than in 1952, the income from birds sold fell $39 million. Part of the decline can be explained by the 13 percent drop in all farm prices. However, turkey prices in the same period fell 22 percent.

The decline, Oyloe and Fienup say, might tighten the amount of credit available and the degree of control creditors will want in turkey operations. Although such control in the past has been limited to advice, there may be a stronger movement to extend this control if prices drop further.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

To all counties

For immediate use

FARM FILLERS

If you're travelling into eastern states this month, be sure Japanese beetles don't hitch-hike back with you. According to John Lofgren, extension entomologist at the University of Minnesota, the pests may enter the state in luggage, clothing, cars or public vehicles. They can raise havoc with a wide variety of ornamentals, fruit, vegetables and farm crops. They are about a half inch long. Bodies are dark, metallic green with six white spots along each side.

* * * *

With some important exceptions, most Minnesota counties had good soil moisture reserves in July. A survey reported by Donald Baker, University soil climatologist, showed that Olmsted, Waseca and other southeastern counties had reserves of 80 to 100 percent of soil holding capacity. Lowest reserves found were in Big Stone county. July rainfall was above normal over most of the state, except in Todd, Morrison, Wadena, and a few other counties.

* * * *

Those yellow leaves falling from elm trees are probably victims of a leaf spot disease called anthracnose. Herbert Johnson, extension plant pathologist at the University of Minnesota, says infection by a fungus occurred last spring and heavy spring rains made it worse. Generally, though, infection isn't severe in following years and no control is needed.

* * * *

About 80 percent of all beginning farmers recently studied in a number of north central states received a good share of family help. Of those who didn't get family support, most used crop-share releases. A number of findings on young farm families are reported in North Central Regional Extension publication No. 8, "Getting Started and Established in Farming." The county extension office has copies.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

To all counties

For immediate use

AIM HOGS FOR PEAK MARKET

Hog prices are nearing the peak for the year. You can expect them to start declining some time in late August or early September.

That means hogs nearing market weight now shouldn't be held to excessively heavy weights, according to Ray Arthaud, extension livestock specialist, and Kenneth Egertson, extension marketing economist at the University of Minnesota.

Better ship the animals before they reach 220 pounds. If you hold them longer, you may miss the top prices and take a cut for heavy weights, besides.

Hog marketings in August will be around 12 percent under a year earlier, and somewhat lighter than in July. The farrowing pattern indicates that the year's low in marketings will probably be reached about mid-August. From then on, you can look for a seasonal pickup in marketings.

Barrow and gilt prices should reach a peak of $19 to $20 in August, Egertson believes. Prices will weaken after that, but should hold relatively steady through August. A sharper downward trend probably won't occur before September. And since an 8 to 10 percent reduction in pork supply is expected this fall, compared to 1959, prices shouldn't go below $15 in late November and early December.

Naturally, with the peak just ahead, feeding for fast gain now is important. Give hogs plenty of corn. Those above 150 pounds will eat 6 to 8 pounds shelled corn--or an equivalent amount of other grain--daily.

Don't be stingy on protein. Eleven percent protein is about right for finishing hogs. They can get it from either soybean oil meal properly supplemented with minerals and vitamins or from some other good supplement.

Finally, keep the hogs cool. Shade or showers for hogs can mean 8 or 10 pounds greater gain in a 6-8 week period of hot weather -- even in Minnesota. That could mean a better chance of hitting that peak market.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

To all counties

ATT: HOME AGENTS

For immediate release

QUICK TREATMENT NEEDED FOR MILDEW STAINS

Treat mildew stains as soon as you discover them on clothing or household articles. Otherwise the mold will eat into the fabric.

First step in the treatment is to brush off as much mildew as possible outdoors to avoid scattering the spores in the house. Extension clothing and home improvement specialists at the University of Minnesota say the next step is to launder washable fabrics and sun-dry them. Moisten any remaining stain with lemon juice and salt, spread in the sun to bleach, then rinse and dry. Or use a bleach that is suitable to the fabric. Before using lemon juice or bleach on colored fabrics, however, test the material first.

If mildew appears on upholstered articles, on mattresses or rugs, vacuum the surface after you have brushed it. If possible, sun and air the article to stop mold growth. If mildew remains on upholstered furniture, wipe it with a cloth wrung out of dilute alcohol (1 cup denatured or rubbing alcohol to 1 cup water). Dry the article thoroughly.

For leather goods that has mildewed, use the alcohol treatment and then turn an electric fan on the article to dry it. If mildew remains, wash with a thick suds of mild soap or saddle soap. Wipe with a damp cloth and dry in an airy place. Polish leather shoes and luggage with a good wax dressing.

Paradichlorobenzene, widely recommended for moth control, will control mildew on clothing packed in trunks or garment bags.

Make sure that shower curtains, awnings, tents and sails are treated with a mildew-resistant finish before using them.

For more information on treating mildew stains, get a copy of the U. S. Department of Agriculture bulletin, How To Prevent and Remove Mildew, from your county extension office.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 2, 1960

To all counties

4-H NEWS
For release week of
August 8 or after

COUNTY KEY AWARD WINNERS TO BE HONORED

Representatives of the _____ county 4-H'ers who have received the 4-H key award will be among approximately 500 to be honored at a luncheon during the Minnesota State Fair, according to Leonard Harkness, state 4-H club leader at the University of Minnesota.

The sixth annual luncheon to honor the key award winners will be held on Tuesday, August 30, at the University of Minnesota's Student center on St. Paul campus. During the seven years the key award has been offered, _____ 4-H'ers from
(no.)
_____ county, 3,700 in Minnesota, have received the awards.

The award, a gold key on a necklace for girls and a key mounted on a gold tie clasp for boys, is a means of giving recognition to outstanding 4-H club members who have provided leadership in their local clubs and in their county.

To be eligible for consideration for a key award, a 4-H member must be 16 years old, have completed three years of active junior leadership and five years of 4-H club work.

Harkness outlines the objectives of the key award program as follows: to encourage the growth of 4-H projects, to broaden the program of 4-H activities over the years and to develop outstanding citizens.

The University of Minnesota Agricultural Extension Service and the Cities Service Oil company sponsor the program.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 4, 1960 Immediate release

MINN. FRUIT GROWERS TO MEET

Minnesota and Wisconsin fruit growers will hold their annual orchard tour Friday, Aug. 12, at the Jay Spittler orchard, Galesville, Wis.

The tour will begin at 10 a.m., according to an announcement from J. D. Winter, secretary of the Minnesota Fruit Growers' association.

Staff members of the University of Minnesota and the University of Wisconsin and from the state departments of agriculture of both states will discuss orchard problems in the morning. Equipment dealers will give demonstrations of machinery in the afternoon.

60-251-jbn

TOMATOES ON YOUR POTATO PLANTS?

Small green fruits developing on your potato plants aren't tomatoes, though they may resemble them.

O. C. Turnquist, extension horticulturist at the University of Minnesota, assures puzzled gardeners that potatoes and tomatoes don't cross. The small, tomato-like fruits are actually potato seed balls.

Appearance of these seed balls, a natural phenomenon, is fairly common this year on certain varieties of potatoes. The seed balls have no value in producing another crop and they cannot be eaten. On the other hand, they will not interfere with the productivity of the plant, Turnquist says.

60-252-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 4, 1960 Immediate release

WATCH TOMATOES FOR DISEASES

Check the tomatoes in your garden for signs of blossom-end rot or blight. University of Minnesota horticulturists and plant pathologists warn that both diseases are prevalent at this time of year.

If the undersides of the fruit show evidence of decay, you have a case of blossom-end rot on your hands. The remedy is to apply a mulch of grass clippings, clean straw, corn cobs or sawdust around the plants, according to O. C. Turnquist, University extension horticulturist. He recommends mulching the plants after a rain or after irrigating, to conserve moisture.

Lack of moisture is the usual cause of blossom-end rot. Hoeing tomato plants so much that roots are cut off is another common cause. Tomatoes that are mulched rarely have blossom-end rot.

Tomato blight, another common midsummer disease, reduces both yield and size of fruit. When the disease is severe, leaves turn yellow and fall off.

Herbert Johnson, University extension plant pathologist, points out that tomato blight is caused by at least three different fungi, each of which produces a different type of leaf spot. Signs of early blight are brown spots with concentric rings on the leaves. Small spots, usually not over 1/8 inch in size on the lower leaves, are evidence of Septoria leaf spot, another type of blight. Late blight produces very large, irregular spots on the leaves.

As a preventive throughout the season or at the first signs of blight, he recommends spraying with a maneb fungicide (available commercially as Manzate or Dithane M-22). Follow directions on the package for amount to use and apply at 7-to 10-day intervals.

60-253-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 4, 1960 Immediate release

INTEREST GROWS IN NEW TECHNICAL CERTIFICATE PROGRAM

High school graduates from rural areas are showing increased interest in the new Technical Certificate Program to be offered this fall by the College of Agriculture, Forestry and Home Economics at the University of Minnesota.

According to Ralph E. Miller, student adviser for the new program, scores of young men have already shown strong interest in the plan, and about 75 will probably enroll this fall. The program is especially suited for men who want some college training to better train them for farming.

The Technical Certificate plan, which replaces the former School of Agriculture course, provides 60 credits of college level instruction. A student may complete study for these credits in four quarters, which normally involves six months during each of two years on the St. Paul campus.

All 60 credits can be applied toward a full program for the B. S. degree, in case the student decides at any time to complete four years of study.

Under the former School of Agriculture, students took special courses but did not receive college credit.

Students in the Technical Certificate program will register along with regular college students, must meet the same entrance requirements and will be housed in the same dormitories. In other words, the new program provides a full-fledged college curriculum in every sense, except that it is completed in a shorter time.

Courses include agronomy, animal husbandry, dairy, forestry, horticulture, mechanized farming, poultry, soils, economics, communications and others.

Interested high school graduates can get further information from vocational agriculture teachers, county agents, high school principals or counselors. They may also write directly to the College Office, University of Minnesota, St. Paul 1.

60-254-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 4, 1960

A FARM AND HOME
RESEARCH FEATURE

Immediate release

SOCIOLOGISTS LEARN CHARACTERISTICS OF WELL ADJUSTED RETIRED FOLKS

Meet the retired Minnesotan who's getting the most enjoyment out of his later years.

He's 71 or under, thinks of himself as middle-aged or elderly, rather than "old" and considers himself in good or excellent health.

This well adjusted senior citizen isn't necessarily rich or even well-to-do, but feels his income is enough to meet his needs. He's more apt to be fully employed than fully retired and likes it that way. He prefers the work or activity in which he is taking part now to switching to something else.

He did some advance thinking about retirement and now has health insurance for himself and his family. He lives in his own home and takes part in community organizations, either as a leader or as a member.

This profile came out of a preliminary report of a study of 300 farmers. The survey was directed by Marvin Taves and Gary Hansen, rural sociologists at the University of Minnesota.

Whether a person is well adjusted in retirement doesn't depend on amount of income, total net worth, financial planning and investing for old age, how much land he owns or where he lives. Nor does it matter whether he's married, single or widowed. And retired women are likely to be just as happy as retired men.

Taves and Hansen also studied 1,020 persons 65 or older living in towns or cities. Six out of 10 thought that social security should include hospitalization coverage--even though it would mean higher social security tax.

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Fewer than 30 percent of the urban retired citizens had any complaints about their living arrangements. Those who did were concerned about things like stairs or steps, lack of privacy, poor floor plans and poor condition of houses.

Two-thirds of the persons had annual housing costs of under $1,000, and the rest paid up to $2,000.

Most senior citizens were keeping up contacts with other people. Seventy percent reported they had visitors at least once a week and only 4 percent said nobody ever stopped by to see them.

Only 17 percent said their income definitely wasn't enough to live on. One-third said they had just enough to get by on. Another third reported just enough to meet all needs comfortably.

About 60 percent said they had made no financial plans for after age 65. But of those who did make plans, more than half had been able to carry the plans out completely or almost completely.

The sociologists noted a general lack of preparation for retirement. Nearly two-thirds had no medical or surgical insurance, 49 percent had no hospital insurance and 57 percent had no life insurance.

What community services or activities would the retired people like? Most common answer to this question was free or low-priced health clinics, given by slightly more than half of the retired persons. Nearly as many said "visiting." Other comments, each given by a third or slightly less persons, were card games, social or recreational clubs, homemakers' service and movies and adult education classes.

Nineteen percent were interested in outdoor sports, 16 percent would like indoor sports and 12 percent listed dances.

A more thorough summary of the study is now being completed by the sociologists.

The study of retired farmers was done by professional interviewers. The second was sponsored by the Minnesota Committee of the White House Conference on Aging and was carried out mostly with volunteer help, especially from the American Association of University Women and several other groups.

60-255-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 4, 1960

SPECIAL

Immediate release

DAIRY STUDENTS AWARDED SCHOLARSHIPS

Six dairy industries students at the University of Minnesota have been awarded Minnesota Dairy Industry scholarships for the year 1960-61.

Receiving $300 scholarships are: Thomas O. Amren, St. Hilaire; James J. Dee, 2063-D Hoyt ave., St. Paul; Robert P. Israels, 2051 Knapp st., St. Paul; David L. Jarl, 2171-J Folwell, St. Paul; H. Douglas Johnson, 312 Harvard S.E., Minneapolis; and Peter E. Larson, 1105 Sunset drive, Mandan, N. D.

The Minnesota dairy industry provides these scholarships to aid students who plan a career in dairy industry.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 4, 1960

SPECIAL

Immediate release

MINN. AND ONTARIO PAPER CO. FELLOWSHIP AWARDED TO FORESTRY STUDENT

A Minnesota and Ontario Paper company graduate research fellowship of $1500 has been awarded to Richard C. Trochlil, a 1959 graduate of the University of Minnesota School of Forestry.

Announcement of the award was made jointly by George Amidon, woodlands director for the company, and F. H. Kaufert, director of the School of Forestry.

Trochlil will carry on research studies on application of aerial photography to forest inventory and classification under the direction of Merle P. Meyer, associate professor of forestry.

Now in its fourteenth year, the Paper company's fellowship provides for forest research on state, county and privately owned lands, including those of the Minnesota and Ontario Paper company.

Research work by past fellowship winners has been in such fields as disease control in black spruce, development of reproduction in spruce and balsam fir, determination of logging damage in various types of tree stands and continuous forest inventory techniques. The results have been described as highly beneficial.

Trochlil has worked for the U. S. Forest Service at St. Ignace and Manistique, Mich., since his graduation from the School of Forestry in 1959. He has been an assistant ranger on the Upper Michigan National forest. He served in the U. S. Army from 1955 to 1958 as an infantry officer in the U. S. and Alaska.

He is a native of Springfield, Minn.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 4, 1960

Special to Minnesota Alumni News

AGRICULTURAL UTILIZATION RESEARCH--New markets, new products, and ways to make old products better.

A Minneapolis housewife reaches into the grocery store self-service counter, selects a package of Nuworld cheese and puts it in her shopping cart.

A worker at a northeast Minnesota timber products plant drops a half dozen sticks from a load of pulpwood into a water tank, making a new type of wood measurement.

A 10-year-old bites into a slice of fresh bread, made from Red River Valley wheat.

All three occurrences have one common and vital element. Each might never have taken place were it not for utilization research at the University of Minnesota.

Nuworld was a joint development by Minnesota and Wisconsin researchers, to produce a cheese tasting like blue cheese, but which wouldn't have the blue mold. The pulpwood measuring system was developed by University of Minnesota foresters, to give timber buyers a more accurate check on what they buy. Wheat from which the bread flour was made underwent extensive baking tests by agricultural biochemists at the University.

Utilization studies account for about a fifth of all research on the St. Paul campus. Some 40 utilization projects are under way, involving more than $400,000 in Agricultural Experiment Station funds.

Not all utilization research, however, is involved directly in development of new products. Far from it. Many studies are involved in fundamental chemical, physical and biological processes, which must be well understood before the processes may be applied in new or improved products.

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Drop in at a few St. Paul campus departments and you'll see how utilization research is done. Over in agricultural biochemistry, Fred Smith will show you a string of beads that represent a corn starch molecule. He will tell how he is trying to modify this molecule to produce a synthetic plant gum.

If that can be done, it will be a major break-through--possibly resulting in a wider market for corn, now a surplus crop. It could provide a more reliable and cheaper supply of plant gums for American industry. Gums--currently imported--are widely used for adhesives, pharmaceuticals, food, paper, and mineral ore separation.

In the biochemistry building basement, you'll find the ovens where technicians run the bread baking tests, checking out every type of bread flour sold in the Midwest.

It would take days to hear of all the biochemistry findings of recent years in utilization projects. W. F. Geddes, department head, showed that yeast extract is one of the most satisfactory nutrients for brews in breadmaking. That is another finding that can mean better bread. Irvin Liener is studying proteins called hemagglutinins, which his studies indicate are probably the cause of poor nutritive value of raw soybeans. His findings led to a possible means of testing soybeans to see if they have been heated properly; if they have, the nutritive value is improved.

D. R. Briggs and his co-workers are studying biocolloids--proteins, polysaccharides, nucleic acids and complex lipids--to get a better understanding of these substances. Their ultimate goal is to improve production, processing and use of agricultural important biocolloids for use in medicine, nutrition and industry.

For example, Briggs reports that it is possible to extract and purify a protein from soy flour that has no taste and very little color. It can be used to

(more)

enrich bread without altering the taste, and may possibly be used in other foods. Such studies can be expected to increase use of soy proteins for food and industrial purposes.

Fats and oils are getting close attention from W. O. Lundberg. One thing he is after is information on the best oil compositions for paints and other protective coatings. Robert Jenness is doing experiments to learn how heat treatment of skim milk powder. Also, Jenness is studying effects of heat on milk coagulation by rennet (as in cheese making) and effects of heat on milk salts and casein coagulation in concentrated milk products.

Just a short while ago, Jenness discovered a milk whey protein which he calls "component 5," and which is at least partly responsible for the undesirable loaves which unheated milk causes in bread. Heating, though, overcomes the trouble.

Next, visit the dairy industries department. Besides the Nuworld development are a number of other utilization-type projects. One big goal now is to develop a suitable dry whole milk--one acceptable to consumers and economical to manufacture. S. T. Coulter, department head, and C. H. Pyne are making big steps in this direction.

Research after World War II led to design of two spray driers, which have since been used commercially.

E. L. Thomas and his assistants recently found that ice cream in self-service compartments stays high in quality longer if it's wrapped in alumnium-foil packages. Thomas also found that certain ice cream stabilizers are better than others in preventing ice crystal growth in the product in refrigerators. Similar findings have been made with cottage cheese.

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Milk itself--despite its already popular taste--might attract even more appetites if it contained more non-fat solids than it has when it first flowers into the milk bucket. Coulter found that fortifying milk with non-fat solids up to 11.5 percent by weight, gave milk a sweeter flavor. More than two-thirds of the people who recently tried it preferred the fortified product to regular milk.

Howard Morris found a simple way to predict melting quality of cheddar cheese. It involves measuring pressure needed to push a wire through a cheese sample. The less pressure needed, the shorter the melting time and the better the quality. Meaningful results--especially if you like cooked foods containing cheese.

Up in Green Hall, School of Forestry staff members are working hard to find better uses for what many people consider "waste" trees. One of their targets is more uses for aspen--the most common tree in the state. They recently found some clues to why aspen lumber often develops waviness when dried. These findings could lead to drying methods which will avoid the waves and result in better aspen lumber for wider markets. Other studies are being made on the chemical structure of aspen, and how its composition could affect new product development.

Work on the new measuring method for pulpwood could be valuable to the entire pulp industry. It could mean a better pricing system for the man selling wood. The old system, the "cord" measurement, simply isn't accurate enough.

Around the campus are other examples of utilization research. Home economists have information which could help clothing manufacturers improve cotton fabrics for boys' denim jeans.

In the University's frozen foods laboratory, the departments of horticulture and animal husbandry are studying the effectiveness of different packaging materials in maintaining quality of frozen meat. The laboratory recently found a number of

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sweet corn varieties good for home freezing--information which could mean more extensive use of this vegetable. Methods for freezing whole apples were developed.

Then there's varietal development. Horticulturists have introduced a total of 65 new fruits over the years.

Poultry scientist Milo Swanson found several years ago that spraying with processing oil at the farm can maintain egg quality longer. The result, again, is more assurance of a good product for consumers. Swanson and his co-workers also are studying ways to protect quality of processed poultry and poultry products.

W. J. Aunan in animal husbandry is working on better ways of evaluating quality of livestock carcasses, and how quality is affected by different production practices.

Plant pathologists and plant breeders are working closely to develop new grain varieties--many of which will be important from the market point of view. Take wheat for example: it must meet dozens of stiff baking standards before a new variety can be recommended to growers. A durum must meet many processor requirements. Any grain must have suitable test weight to do well on the market.

All such characteristics must be bred into a new variety.

Then there's the problem of grain storage--long studied by agricultural biochemists, plant pathologists, and entomologists. These scientists have carefully specified conditions for safe storage of all grains, to protect against insects, mold, and other damage. These procedures have been widely used in the grain industry.

Controlling plant diseases is important in maintaining product quality. Plant pathologists are engaged in a number of studies on ways of preventing and controlling outbreaks of diseases that harm forest trees, ornamentals, and horticultural and field crops.

PJT

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960

To all counties

For immediate use

FARM FILLERS

Having lambs in late February or early March means breeding ewes early in September. Ray Arthaud, extension livestock specialist at the University of Minnesota, says fertility rate will be higher if you shear the rams and worm the ewes two weeks before breeding begins. Use an ounce of actual phenothiazine per ewe. And give rams and ewes good pasture or grain before and during breeding.

* * * *

Hog producers: if your replacement gilts are mature enough and you have good facilities, this seems to be the year to have pigs born in December and January. Extension economists Hal Routhe and Kenneth Egertson at the University of Minnesota look for expansion in late spring farrowings. The price peak will probably come in June or early July of 1961, rather than in August. So if you plan your farrowings to hit the early peak, you may be hundreds of dollars ahead.

* * * *

Here's a point for farmers who have series E and H Savings Bonds. The U.S. Savings Bonds division says such bonds bought more than a year ago probably won't have correct values on the back. Interest rates increased last year, so bonds may be worth more than you think. Check with your banker for exact value.

* * * *

Army worms have shown up in localized areas of western Minnesota--in lodged grain, corn, and flax. Most small grain is far enough along to escape damage, according to John Lofgren, extension entomologist at the University of Minnesota. But there will be some head clipping in late grain. Some young corn may be damaged, especially in edges of fields near small grains. Worms may also clip bolls in flax. Where control is needed in corn, use 2 pounds toxaphene or 1/4 to 1/2 pound dieldrin per acre. Don't feed treated stalks, husks or leaves to dairy cows. Toxaphene-treated forage may be fed to beef cattle, not dairy. The corn grain is okay for any livestock. For small grain, wait 7 days after treating before harvesting.

# # # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960 Immediate release

MINNESOTA FARM CALENDAR

AUGUST

22-26 Home Economics Teachers' conference, St. Paul campus.

27-Sept. 5 State Fair

SEPTEMBER

12-13 Animal Nutrition and Health Short Course, St. Paul campus.

12-17 Dairy Herd Improvement Association Supervisors' Training School, St. Paul campus.

13-15 Dairy Products Institute, St. Paul campus.

14-15 Graduate Veterinarian Conference, St. Paul campus.

15 Cattle Feeders' Day, Northwest Experiment station, Crookston.

15-17 4-H Conservation camp, Itasca State park.

18-21 4-H Health camp, Itasca State park.

20 Fall Field Day, Southwest Experiment station, Lamberton.

21-22 Midwest Poultry Breeders' Cnnference, St. Paul campus.

22 Beef-Grassland Field Day, Rosemount Agricultural Experiment station.

30 Cattle Feeders' Clinic, Tracy.

30 Editors' Short Course, St. Paul campus.

OCTOBER

3-6 Junior Livestock Show, South St. Paul.

10-11 Farm Income Tax Short Course, Hotel Lowry, St. Paul.

For more information, contact the Information Service, University of Minnesota, St. Paul 1.

60-256-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960 Immediate release

HERE ARE WEEK'S GOOD BUYS FOR MARKET BASKET

Looking for good meat buys this week? Take your choice among frozen chicken parts, turkey, chuck or club steaks, pot roast and hams.

Try broiling a two-inch thick chuck steak over charcoal outdoors for excellent flavor at low cost. For an economical buy in pot roast, select the blade, which is about 10 cents less a pound than the arm.

For really inexpensive meals, pork hocks served with cabbage, lamb hearts or kidneys for steak and kidney pie can fill the bill. These suggestions come from Mrs. Eleanor Loomis, extension consumer marketing agent at the University of Minnesota.

Eggs, frozen smoked whitefish, herring, haddock, perch fillets, scallops and shrimp are other good protein buys.

Best buys in fruits this week are Elberta peaches and Thompson seedless grapes. Also available are blueberries, Duarte plums, lemons, limes, bananas, watermelon and cantaloupe. This weekend will probably mark the close of the homegrown raspberry season.

Homemakers who are interested in making pickles will find an abundance of high quality cucumbers on the market for both dill and sweet pickles. Other plentiful locally grown vegetables are red potatoes and Gem russets, green onions, radishes, mustard and beet greens, endive and escarole. Demand for Minnesota-grown sweet corn is running high this week. Minnesota-grown tomatoes are appearing on markets but are high priced.

This is the time to look for specials in canned and frozen vegetables and fruits for the emergency shelf as stocks are being cleared for the new pack, Mrs. Loomis says.

60-257-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960

A FARM AND HOME
RESEARCH FEATURE

Immediate release

ABSORPTION POSSIBLE IN PLANT LEAVES AS WELL AS ROOTS

Roots and leaves may not be such specialized plant organs as was once thought--at least not where absorption of gases and nutrients is concerned.

University of Minnesota scientists have found that soybean roots can absorb carbon dioxide gas--something once thought possible only in leaves. And they have also helped show that radioactive phosphorus can be readily taken in through leaves of oats and wheat plants.

Again, mineral absorption at one time was considered something only roots could do.

St. Paul campus botantists T. W. Sudia, A. J. Linck and R. D. Durbin did this recent research.

They point out that other scientists--including, by the way, some Russians--originally discovered the fact that these functions could be interchanged. The Minnesota men confirmed the earlier findings and gathered some more information.

For one thing, Sudia and Linck found that carbon absorbed through the roots as carbon dioxide was present in above-ground plant parts by two hours after the roots were exposed to the gas. Similarly, they found that phosphorus started to penetrate the outer covering of the leaves of wheat and oats within five seconds after liquid containing the mineral was applied.

Translocation time for carbon and the absorption time for phosphorus turned out to be shorter than any of the other scientists had reported.

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Both findings were made with radioactive tracers. The botanists exposed the roots to carbon dioxide which contained "tagged" or radioactive carbon. Then they checked movement of the carbon throughout the plant with a Geiger counter. Movement of radioactive phosphorus applied to grain leaves was checked the same way.

Apparently, then, the absorption of compounds by plant parts seems to be partly a matter of circumstances and partly native ability. Roots may absorb carbon dioxide in nature but the significance of this avenue of entry for carbon is not known. Similarly most minerals are available from the soil and although some foliar absorption may occur in nature, the importance of this phenomenon is also not known.

As the botanists see it, a plant is much like a sponge--able to absorb and dispel most any material from any part, if the situation makes it possible.

What does all this information mean? At this point, it adds mainly to understanding of how plants live and grow. And it points to further avenues to research. For example, Sudia and Linck found that carbon from carbon dioxide is translocated rapidly, but isn't distributed evenly to different plant parts.

In other words, some "remote control" mechanism within the plant is directing the movement of these particles, and scientists now hope to find what it is.

From a practical point of view, the fact that leaves can absorb minerals is important in at least two ways. First, it shows that leaf feeding mineral solutions may be a practical way of supplying fertilizer to plants. Second, it gives scientists additional information on absorption of radioactive fallout and how it moves within the plant. Earlier studies, for example, showed that radioactive strontium, like phosphorus, can move from leaves to other plant parts.

60-258-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960

To all counties

For immediate use

GOOD EGGS MEAN CAREFUL STEPS IN MANAGEMENT

Where bad eggs are concerned, one thing is certain: They can't be made good.

So to market good eggs, you need to produce good eggs and keep them that way say Robert Berg, extension poultry specialist, and W. H. Dankers, extension marketing economist at the University of Minnesota.

They list a half dozen main steps to marketing top quality eggs. Select good chicks. Feed the flock well--you get what you give. Give the birds a chance to produce well, through good management. Protect quality of eggs after they're laid. Pack them with care. And market them as soon as possible.

These pointers are spelled out in recently-revised Extension Folder 80 "More Income from Eggs." Here's what the folder--written by Dankers and Berg--has to say about feeding for quality.

First, the specialists say good feeding is a must for early sexual maturity, high production and good market quality eggs. Second, top egg flavor and uniform yolk color means confining hens and feeding a uniform ration. Some feeds give unpleasant flavors and off colors, especially feeds that chickens might pick up around the yard.

For strong shells, feed the birds good shell-building materials--calcium, phosphorus, manganese and vitamin D. Put the shell hoppers where hens can eat shell freely. Keep hens cool; high temperatures cause thin shells.

Keep hens healthy. Certain diseases weaken egg shells and lower quality. Don't keep old hens; they usually lay thin-shelled eggs.

Have enough feeders. Berg and Dankers recommend two 6-foot troughs for each 100 hens, or three 6-foot troughs with free-choice feeding. Keep a good mash before hens at all times. And feed grain as needed for the type mash used.

Extension Folder 80 has dozens of other tips on egg quality. You can get a copy from your county agent or from the Agricultural Bulletin Room, University of Minnesota, St. Paul 1.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960

To all counties

For immediate use
A farm and home research report

ENGINEERS DEVELOP DESIGN METHOD FOR GRASS WATERWAYS

Here's welcome news on designing grass waterways--especially since this is the month to establish them.

Agricultural engineers at the University of Minnesota have worked out new design procedures for waterways. The new methods give more accurate information on waterway shape, width and depth. The principles have led to new design charts now in use for the first time in Minnesota.

Soil Conservation Service men have had waterway design charts before; the new ones are simply more accurate. They were worked out by University engineers Curtis Larson and Deane Manbeck and SCS engineer Karl Klingelhofer, based on the most current water flow data available.

An example of how the chart works: Suppose you need a waterway to handle runoff water from 50 acres on a 4 percent slope. And suppose that the water velocity (speed of movement) should be no more than 4 feet per second.

The chart tells you that the waterway should be 1.4 feet deep at the center and 26 feet wide. It's as simple as that.

This system is only for waterways with rounded bottoms. The only other designs are the V-shape, for extremely small waterways, and the flat bottom, for unusually large ones. The chart is based on grasses common to Minnesota and takes into account both mowed and long grass. This is important; different grasses and different heights have varying effects on waterway capacity.

The waterway is one of the most common--and most valuable--soil conservation practices. They're needed on most farms with slopes--even as little as 1 or 2 percent. Farmers who put them in testify to their value in saving soil and stopping gullies.

Here are some tips on putting in grassed waterways. Start any time between now and September. Shape the waterway according to your SCS planner's advice. Broadcast lime and fertilizer, disk it in and use a packer. Seed heavily, but shallow. A good seed mixture is 15 pounds bromegrass and 8 pounds Kentucky bluegrass per acre. If the waterway is apt to be wet from seepage, use some Red Top or Reed canary grass in the mixture. A bushel of rye per acre is a good companion crop.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960

To all counties

For immediate use

CANADA THISTLES CAN BE HIT NOW

Those Canada thistles are most vulnerable right now; so it's time to step in and deliver the knockout punch.

William Hueg, extension agronomist at the University of Minnesota, says thistles can be controlled in stubble of canning peas, sweet corn and small grains not seeded down.

Here's what to do: First, clip the stubble to encourage vigorous regrowth. Several weeks after harvest, the thistles will be making good regrowth and will be easy to spray. Hit them when the regrowth is 8 inches high or more.

You can use 2,4-D amine or 2,4-D ester, at 1 pound (acid equivalent) per acre. Or, you can use amitrol at 8 pounds (50 percent strength) in 20 gallons of water or more per acre.

For knapsack sprayers, mix 6 level tablespoonfuls of amitrol per gallon of water. Amitrol is more expensive than 2,4-D but is usually more effective, too.

The treated area can be plowed two or more weeks after application to improve control. There is no problem of residues, so any crop can be planted in the field the following spring.

# # # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960

To all counties

ATT: HOME AGENTS

Immediate release

TIME SPENT ON CAREFUL BUYING IS WORTH IT

You can cut expenses and make more satisfactory purchases if you shop carefully.

The time you spend planning your shopping, watching sales and reading labels can pay off in purchases that will fit into the budget and at the same time satisfy your needs, according to Mrs. Edna Jordahl, extension home management specialist at the University of Minnesota.

Mrs. Jordahl gives the following suggestions for wise buymanship:

* Do out-of-season buying. Try to buy well ahead of or after each seasonal rush. The exception is food, which is usually lower priced when purchased in season. Buy clothes when they go on sale at the end of the season if your clothing budget is tight. Avoid the Christmas rush and save money by shopping for gifts after or well before the holiday season.

* Be sale conscious. Watch for sales throughout the year. Know the original price and quality of sale merchandise. Then buy only things you know you need that are reduced in price.

* Make a systematic shopping list. Keep a memo pad handy to make a list of items you need. Arrange your list in logical order before shopping--for example, grocery lists according to food departments. For articles of clothing, add to the list sizes and color preferences.

* Buy--don't be sold. Don't buy under pressure from a sales clerk. Such impulse buying without planning beforehand may lead to the purchase of items you don't want or need.

* Beware when buying for others. A gift must be selected wisely to be useful and really appreciated. Be sure each gift you buy harmonizes with the tastes and possessions of the person who is to receive it.

* Read informative labels carefully. Brand names can be a helpful guide when you are familiar with them. Clothing labels will give information on fiber content and care.

* Learn the cash and credit terms of the store where you are buying. Each store has its own system and you will want to understand the terms completely. Remember the store retains title to merchandise until payments have been made in full.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 9, 1960

To all counties

4-H NEWS

Immediate release

LOCAL 4-H'ERS PREPARE FOR STATE FAIR TRIP

_____ county's delegation to the Minnesota State Fair August 27 - September 5 will include _____ (no.) 4-H members, who are busy making preparations for an event which comes as the climax to a successful club year.

The county club members will be among some 2,500 other 4-H'ers taking part in State Fair activities. All of them have won county honors in demonstrating, exhibiting, livestock or dairy judging or in the dress revue.

Local boys and girls who will give demonstrations on the platforms on the first floor of the 4-H building on the State Fair grounds are: (give name and address or club)

About 1,000 Minnesota 4-H'ers will compete in agriculture and home economics demonstrations.

_____ (name), _____ (4-H club), _____ county's champion 4-H pie baker, will vie for the state pie baking title on _____ (day, date).

Local 4-H'ers will also participate in the 4-H Share the Fun festival scheduled for Wednesday at 8 p.m. in the 4-H auditorium. (Give names and acts)

_____ (name), _____ (address), county dress revue queen, will take part in the state dress revue on Thursday, September 1, at 2:30 p.m. in the auditorium on second floor of the 4-H building.

At the livestock show in the Hippodrome on Saturday, Sept. 3, _____ (no.) county club members will be among more than 1,250 who will exhibit their animals. Local exhibitors include:

Other highlights of the State Fair for 4-H members will be the luncheon for 4-H Key Award winners on Tuesday noon, Aug. 30, and the annual 4-H banquet given by the Minneapolis Chamber of Commerce Thursday, Sept. 1.

All demonstrations, the Share the Fun Festival, the dress revue and the livestock show will be open to the public.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 10, 1960

Immediate release

NEW DIVISIONS ESTABLISHED IN HOME ECONOMICS

Establishment of seven official divisions in the University of Minnesota's School of Home Economics was announced today by Louise Stedman, director.

The new divisions, formerly called sections, are now established as official administrative units and cover seven subject-matter areas. Names of the new divisions are: nutrition and food service management; home management and family living; household equipment; food; related art; textiles and clothing; and home economics education (also a department in the College of Education).

The following have been appointed chairmen of divisions: Florence Ehrenkranz, household equipment; Isabel Noble, food; Gertrude Esteros, related art; Mrs. Charlotte Baumgartner, textiles and clothing; Roxana Ford, home economics education. Chairmen for the divisions of nutrition and food service management and home management and family living are still to be appointed.

60-259-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 10, 1960

Immediate release

STATE WINNERS NAMED IN 4-H FARM FIRE SAFETY PROGRAM

A Pope county girl and an Olmsted county boy are state winners in the 4-H farm fire safety contest.

They are Carol Peterson, 16, Villard, and Gary Berg, 16, Byron.

For their work in making farm and home fire inspections and in removing hazards the two teenagers will receive a trip to the National Safety congress in Chicago Oct. 16-19, Leonard Harkness, state 4-H club leader at the University of Minnesota, has announced.

A junior in high school, Carol has been a member of the Villard Livewires 4-H club for nine years. This is the third year in succession that a member of the Villard Livewires has been a state winner in the 4-H farm fire safety contest. In seven farm inspections which Carol made, she found 72 fire hazards and brought about correction of 38 of them.

Gary found 28 hazards in the 12 farm inspections he made and was instrumental in bringing about removal of 12 of the hazards. A junior in high school, Gary has been a member of the Salem Sailors 4-H club for four years.

The farm fire safety program is sponsored by the University of Minnesota Agricultural Extension Service and the State Association of Farmers' Mutual Insurance companies.

60-260-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 10, 1960 Immediate release

SUCCESSFUL SALES SHOPPING BEGINS AT HOME

Do I need it? Do I want it?

These are questions to ask yourself before you go bargain hunting when a sale is advertised, says Mrs. Edna Jordahl, extension home management specialist at the University of Minnesota. "A bargain isn't a bargain unless it meets a real need," she points out.

Mrs. Jordahl has some suggestions for women on how to get satisfaction and savings when shopping sales.

Successful shopping begins at home--by making a detailed list of shopping needs, according to Mrs. Jordahl. This list should include sizes and color preferences of garments when shopping for various members of the family. With a specific list to follow, it's easier to develop resistance to impulse buying, which often results in purchase of articles you neither want nor need.

Planning ahead is important, if you want to take full advantage of sales that will give substantial markdowns. For example, a good time to replenish the stock of sheets and towels is in August and January during annual white sales, when regular stock is reduced in price. Other annual sales offer worthwhile price markdowns in furniture, housewares and other departments.

Clearance sales of clothing at the end of a season generally offer the largest savings. Such sales can be a genuine help to the clothing budget since they are a good opportunity to buy clothing at markdown prices, especially for growing children in the family.

Whatever type of sale you are shopping--special purchase sales, where standards may or may not be good, dollar days, storewide anniversary sales--read the labels on merchandise before buying. Brand names can be a helpful guide when you are familiar with them. Labels on clothing give information on fiber content and care.

Avoid rush hours when you go shopping, if possible. You'll make better choices if you are not tired or hurried.

60-261-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 10, 1960

Immediate release

NET CASH FARM INCOME DOWN FOR 1959 IN TWO MANAGEMENT GROUPS

Members of two Minnesota Farm Management associations had somewhat lower net cash incomes in 1959 than in 1958.

In the Southwest association, net cash farm income (total sales minus actual purchases) was $5,487 per farm in 1959, compared to $5,561 in 1958. In the Southeast group, the figure was $5,291 for 1959 and $6,248 for the previous year.

Extension farm management specialists and economics researchers at the University of Minnesota recently reported the results for each association.

They warn, however, against attaching too much significance to income rises and declines in individual years. In the Southwest, for example, the drop reflects two years of drouth, lower cattle feeding margins, lower hog prices, rises in costs and heavy fertilizer purchases.

Many factors, though, point to an increase in net cash income this year in both associations. For example, hog prices are higher and crops are doing better.

Also, some of the variation reflects a change in membership. The Southwest association now has 136 members and the Southeast has 172. Each has a turnover of up to a dozen or more members annually.

When you dig into the reports, you find many examples of how farmers adjust to changing situations. Take the Southwest group. Total farm sales averaged $37,075 in 1958 and $36,112 in 1959. At the same time, these farmers lowered total expenses almost a thousand dollars per farm in 1959 over the year before.

(more)

Not all expenses went down, though. Because of the 1959 drouth and poor crops, the Southwest farmers upped their feed purchases by nearly $300 per farm over 1958. They spent less for beef cattle and hogs, new machinery, custom work, new buildings and hired labor.

In the Southeast association, the net cash income drop reflects mostly a rise in expenses; total sales changed less than $350 per farm from 1958. Here, the major expense increases were in cattle purchases, feed and new buildings.

Although net cash income in the Southeast dropped more than in the Southwest, the Southeast farmers actually came out better when you consider net labor earnings. This is a measure often used by economists in helping farmers plan their operations. It shows the remainder after paying all operating expenses, deducting a 5 percent interest charge on all farm capital and accounting for capital increases and decreases.

Using this net labor earnings figure, the economists found that farmers in the Southwest group actually averaged a net loss of $773 per farm in 1959. One big reason is that, partly through pessimism and partly through lower inventories of livestock and feed, these farmers reported a $1,652 average decrease in inventory value over the previous year.

Since an inventory decrease is subtracted directly from labor earnings, it explains much of the drop in labor returns in the Southwest group.

In the Southeast association, members reported an increase in farm capital of $680 per farm and had labor earnings averaging $2,826.

The economists also point out that the 5 percent interest deduction on total capital is made in figuring labor returns, whether the capital has been paid for or not. Therefore, a farmer making small debt payments might have a high deduction for interest in a given year without suffering a drop in cash income.

60-262-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 10, 1960

Bond

Special to Marshall
County Extension Office

KASPERSON NAMED
NEW AGENT IN
MARSHALL COUNTY

Martin C. Kasperson, Sioux Falls, S. D., has been named agricultural agent in Marshall county, starting Aug. 16.

He will replace William Henderson, who resigned earlier this summer.

Kasperson grew up on an 800-acre farm in eastern South Dakota, and attended South Dakota State College at Brookings, where he majored in agricultural economics. He received his B. S. degree in 1948 and later did some graduate work.

Kasperson has had a good deal of experience with livestock--both as a farmer and as an extension agent. He dealt with western range cattle and feeder cattle programs while serving as an assistant county agent at Huron, S. D., from 1949-51 and while being county agent at Madison, S. D. from 1951-53. He was also active in crop production and marketing, soils and youth work.

He then was a state 4-H club agent at South Dakota State College from 1953 until early this year. For the past five months, he has been a life insurance agent at Sioux Falls.

He served in the U. S. Army from 1941-45. He is married and has an 11-year-old son and a 3-year-old daughter.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 11, 1960

* * * * * * * * * * * * * * *
* For release at 4 p.m. *
* Friday, August 12 *
* * * * * * * * * * * * * * *

ECONOMIST EXPECTS SEPARATION OF HOG AND CORN PRODUCTION

AMES, IA.--Hog and corn production may some day be separate enterprises for different farms, the American Farm Economics association was told today.

Oswald Blaich, U. S. Department of Agriculture economist at the University of Minnesota, said many factors which originally made combined corn and hog production successful are now being destroyed. He foresaw specialized hog farms, with trained managers, special veterinarian service and professional feed advisors.

However, he added, the hog farm of the future probably won't be a vertically integrated setup, but instead will be a highly specialized operation.

Blaich felt that "vertical integration of hog production with feed manufacturing is likely to be weak and transitional" until the "new entrepreneurs of the hog producing industry" take over.

He predicted that in the transition to hog specialization, "some of the weaker forms" of vertical integration would appear," but that "such vertically integrated structures may fall under the pressure of specialization.

"There is already a tendency for some feed dealers to specialize by engaging only in growing and fattening, and to depend on the feeder pig market for their supply."

Blaich pointed out that multiple farrowing is changing hog production from a part-time to a full-time job. Labor and management for hogs can no longer be drawn from off seasons in corn production. Research is lowering the disease risk.

However, he added, the trend toward specialization would probably be slow. Specialized hog producers would need more capital and would be likely to form or

(more)

integrate with separate corporations to acquire it. Experienced managers, at first, would be hard to find.

Hogs won't necessarily leave the corn belt, according to Blaich. He said it's more likely that hog farms will concentrate around packing house locations in the Midwest.

Initially, Blaich said feeder pig sales may increase somewhat. In other words, specialization may go only part way to a temporary split between feeder pig production and growing and fattening. However, he questioned whether seasonal feeder pig production would satisfy markets rapidly changing to year-round production with more emphasis on quality.

Will hog producers be more likely to enter contracts with feed manufacturers in the future? Not necessarily, Blaich said. He stated that so far, the likeliest candidate for contractual operations is the producer "who has not acquired the latest techniques nor the necessary managerial skills for a successful operation. As a result, he has probably also suffered the problem of capital acquisition." In such a situation, Blaich said a feed contract may be quite attractive; it helps the producer make up for deficiencies. However, the economist felt the attraction may be temporary. "In time, these producers learn the essentials of efficient production and their dependence on the feed manufacturer is reduced."

Promotional activities of feed manufacturers are likely to continue to intensify, Blaich said, at least until the potential market for hog feed is exhausted. He concluded that how fast feed manufacturers spread new technology and aid in financing will influence the rate at which hog production practices change.

60-263-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 11, 1960

Immediate release

HOME ECONOMICS TEACHERS TO MEET

More than 400 Minnesota high school home economics teachers are expected to attend their annual conference on the University of Minnesota's St. Paul campus Aug. 22-26.

"Building for Breadth and Depth in Home Economics Education" is the theme of the conference.

Conference leaders will be Anna Carol Fults, chairman, department of home economics education, Southern Illinois university, Carbondale, Ill.; and three staff members of the University of Minnesota's School of Home Economics, Mrs. Marie Christenson, Florence Ehrenkranz and Lura Morse.

Monday, Aug. 22, will be devoted to committee meetings and educational tours to test kitchens, furniture showrooms and the Walker Art center.

Keith McFarland, director of resident instruction, College of Agriculture, Forestry and Home Economics, University of Minnesota, will welcome the group at its opening session on Tuesday, Aug. 23, in Green hall auditorium. Also scheduled for the opening program is a symposium led by Genevieve Johnston, consultant in home economics, Minneapolis public schools; Mrs. Mildred Gute, home economics instructor, Medford; and Muriel Lehman, University of Minnesota, Duluth. The remainder of the week will be given over to workshop sessions.

The meeting is sponsored by the Minnesota State Department of Education and the University of Minnesota.

Florence Stater, home economics instructor, Blooming Prairie, is chairman of the planning committee for the conference.

60-264-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 11, 1960

A FARM AND HOME
RESEARCH REPORT

Immediate release

POTATO FERTILIZING BRINGS WHOPPING YIELD INCREASES

Extra-heavy doses of fertilizer may bring potato farmers bigger profit increases than they ever dreamed possible.

Last summer, adding 500 pounds of phosphate per acre nearly doubled yields of Pontiac potatoes in University of Minnesota trials. The increase paid an extra $53 per acre above the fertilizer cost, figuring potatoes at $1 per hundred pounds.

Besides, contrary to some fears, fertilizer didn't harm potato quality.

The trials were conducted at the University's Red River Valley Potato Research farm at East Grand Forks, by A. C. Caldwell, soils researcher.

In the past, 60 to 100 pounds fertilizer phosphate was considered a strong application on potatoes. While that much helped, Caldwell recently decided to try unusually heavy rates.

He varied phosphate rates from 100 to 500 pounds per acre on different plots, but applied 60 pounds of nitrogen and 40 pounds potash to each. Results were similar among four varieties tested, but the greatest response was from Pontiacs.

Potatoes of that variety yielded 227 bushels of No. 1 spuds per acre where Caldwell applied no fertilizer and 320 bushels were he put on 100 pounds of phosphate. As the rate increased, the yield went up steadily until, at 500 pounds, the Pontiacs went 417 bushels per acre.

This is the first solid evidence that such high rates can pay off. Specific gravity values--a standard measure of potato quality--were practically identical at all fertilizer rates.

At the 100-pound fertilizer rate, increase in return over investment, compared to no fertilizer, was $35 per acre. At 500 pounds, the increased return was $53.24, or a return of 88 percent above investment. Actual fertilizer cost at that rate was $60.40 per acre.

Apparently, 500 pounds phosphate was the upper limit, along with 60 pounds of nitrogen and 40 pounds potash.

Increasing the nitrogen and potash, and boosting phosphate to 1,000 pounds per acre, did not bring further increases large enough to pay the added cost.

60-265-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 11, 1960 Immediate release

MINN. 4-H GIRL TO WEST BERLIN FAIR

Marilyn Schugel, 18, New Ulm, is one of three 4-H members in the nation selected to attend the Berlin Industries Fair in West Berlin Sept. 13-27, Leonard Harkness, state 4-H club leader at the University of Minnesota, has announced.

The 4-H members are among some 30 American high school students from all parts of the country chosen to attend the fair. Most of the students are German-speaking. All are outstanding in such fields as science, agriculture and home economics, fine arts, photography, industrial arts or related subjects.

The students will show an estimated million visitors how American youth live, work, play and receive an education in the United States. They will participate in the exhibit, "American Youth," the U. S. government's entry in the Berlin fair. Developed by the U. S. Information agency in cooperation with the Department of Commerce, the exhibit will feature displays on the educational and social development of young people in the United States.

Marilyn was selected from among a group of German-speaking Minnesota 4-H members who were interviewed about a month ago. Though she speaks German, she is busy improving her knowledge of the language with the help of a tutor before she leaves.

A 4-H club member for eight years, Marilyn has given demonstrations every year in various projects and has won four consecutive trips to the State Fair on her demonstrations. Last year she was named state champion 4-H health demonstrator. She has taken part in the state 4-H dress revue and in the 4-H radio speaking contest. In 1959 she served as secretary and song leader of the Brown county 4-H leaders' council.

She directs the summer church choir, is summer church organist and does some solo work.

This next year she plans to attend the College of St. Scholastica, Duluth. She was valedictorian of her high school class.

She is the daughter of Mr. and Mrs. Anthony Schugel.

Marilyn will fly to Washington, D. C., August 20. Along with other American students participating in the Berlin fair, she will have a nine-day orientation course at the National 4-H Club Foundation center, Chevy Chase, Md. The students will leave for Europe by plane about Aug. 30 and will return to the United States Sept. 28.

60-266-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 12, 1960

Special to Aitkin County Agent

For immediate use

HOFFBECK NAMED

COUNTY AGENT

James R. Hoffbeck, assistant agricultural agent in Morrison county since 1958, has been named Aitkin county agent starting September 1.

He succeeds Fritz Gehrels, who has accepted the county agent position in Beltrami county.

A Minnesota native, Hoffbeck grew up on a 200 acre farm in Yellow Medicine county. He served in the U. S. Marine Corps from 1950-54, and was discharged with a Sgt. rating.

He entered South Dakota State College at Brookings in 1954 and received his bachelor of science degree there in 1957.

While in Morrison county, he has worked with the county agent in all phases of agriculture.

Hoffbeck has been especially active in dairy herd improvement work, in educational work in soil conservation and in work with the county 4-H program.

He is married and has two children.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 12, 1960

SPECIAL

Immediate release

DAIRY PRODUCTS INSTITUTE SET ON ST. PAUL CAMPUS

Up-to-date ideas on dairy products, quality control and dairy sanitation will be featured during the annual Dairy Products Institute Sept. 13-15 on the St. Paul campus of the University of Minnesota.

Some 300 representatives of the dairy industry will hear a number of dairy researchers, public agency representatives and other industry men discuss current developments and problems.

In addition to an opening general session, Sept. 13 meetings will cover butter, ice cream and cheese manufacturing. Special sessions will be held for dry and concentrated and market milk Sept. 14 and special conferences for sanitarians and fieldmen will be held Sept. 15.

Opening speakers at the Sept. 13 general session will be Sherwood O. Berg, University agricultural economics head, who will discuss the dairy outlook. H. T. Scott, biological laboratory director for the Wisconsin Alumni Research foundation will talk on American dietary habits and J. C. Olson, Jr., University of Minnesota dairy bacteriologist, will discuss milk houses on dairy farms. Vernal Packard, extension dairy products specialist, will talk on his program.

At the Sept. 14 general session, J. L. Harvey, U. S. Food and Drug Administration official, will report on the current status of pesticides in relation to milk supplies. J. J. Jezeski, University dairy bacteriologist, will discuss antibiotics and B. L. Larson, University of Illinois dairy scientist will report on radioactive fallout in connection with milk.

Guest speaker at a Sept. 14 evening dinner will be L. A. Zahradka, manager of the Falls Cities Cooperative Milk Producers associatinn, Louisville, Ky.

(more)

At the Sept. 15 general session, Karl Mohr, Green Bay, Wis., deputy health commissioner, will discuss a certification program for chemical sanitizers. Zahradka will talk on "practical psychology for the sanitarian."

Talks at the butter manufacture session will cover the general outlook, bacteriological problems, developments in butter spreadability and recent butter research.

Ice cream session topics will include recent developments involving the Federal Food, Drug and Cosmetic Act, continuous high temperature pasteurization of ice cream mix and a look at the future in ice cream manufacturing.

Cheese session reports will be an evaluation of hydrogen-peroxide treatment of milk for cheese making, case histories of cottage cheese problems and the cheese and rennet situation.

At the session on dry and concentrated milk and market milk, reports will cover stainless steel discoloration, ultra-high temperature processing, case histories of "off flavor" problems and research on whole milk fortification.

Persons attending the sanitarian's conference will hear discussions of herd management improvement, new developments in dairy cattle housing, new techniques for evaluating milk quality and some ideas on milking machine care.

Topics for the food and environmental sanitarians' section include housing standards, air polution problems and current developments in environmental sanitation.

Added features of the institute will be two educational exhibits. Manufacturers may send two half-gallon samples of stock vanilla ice cream and vanilla ice milk for the ice cream exhibit and four containers of stock cottage cheese may be sent in for the cottage cheese exhibit. Ice cream and ice milk samples should be packed in dry ice and shipped to arrive Sept. 1. Cottage cheese samples may be brought to the dairy industries building on Sept. 13 by 9 a.m.

Copies of flavor reports for entries in both exhibits will be given the manufacturers.

For more information on the institute, contact the Director of Agricultural Short Courses, University of Minnesota, St. Paul 1.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 15, 1960

HELPS FOR HOME AGENTS
(These shorts are intended as fillers for your radio programs or your newspaper columns. Adapt them to fit your needs.)

In this issue:

Farm Young People at College

Only a third of this year's high school seniors living on farms have definite plans to attend college compared with about half of the high school seniors who live in cities.

According to a recent survey, a large proportion of farm youths don't finish high school. Fewer farm youths ever attend college than in a similar city group.

About one of every five farm males enrolled in college in 1959 was majoring in engineering, and the same number was majoring in business. Two of every five girls were preparing for teaching.

Women Graduates

What happens to women college graduates?

The U. S. Department of Labor polled a sampling of graduating classes and found the following information six months after graduation:

. About 80 of every 100 graduates were employed.

. Most of the other 20 of every 100 were continuing their schooling.

. Of the 80 of every 100 employed, 61 had their first jobs as teachers.

. One-third of all the graduates were married.

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Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

CLOTHING

Colorful, Bulky, Relaxed Look for Small Fry

The small fry are fashion conscious, too. Colorful, bulky, relaxed, old fashioned, the peasant look -- these are words to describe fashions for the younger set.

The split-level look is popular, but so is the coordinated look, says Shirley Erickson, extension clothing specialist at the University of Minnesota. The split level look is achieved with extra tunics, jumpers, aprons, smocks and pinafores. Dyed-to-match sweaters or blouses and skirts give the coordinated look.

Many of the new fall dresses are made in princess style. Many have dropped waistlines; others have overblouses. Skirts are more likely to be pleated than straight.

Puff sleeves are back, and large collars have appeared on clothes for youngsters as well as for adults.

Pile fabrics, sometimes masquerading as fake furs, will rate an A in importance with fashion conscious youth. Youngsters, like their elders, will be wearing knits.

Plaids and checks continue to be fashion favorites.

* * * * *

For Young Men

The fall 1960 look for young men is the slim look in trousers and jackets. Trouser legs are narrow and cuffless; lapels are narrow. Colorful vests are newsworthy. Fingertip-length suburban coats continue to be popular, often in cord or corduroy with knit trim. Sweaters have a bulky. handknit appearance.

* * * * *

Stain-Repellent Treatments

A real advance in easy-care fabrics has come with the addition of stain-repellent treatments. You'll find table linen, upholstery fabric, and coat fabrics protected by stain-repellent treatments. Shirley Erickson, extension clothing specialist at the University of Minnesota, says now some leather and even some nylon velvet shoes are protected by a stain-repellent treatment so they resist soil and water-borne stains and can be washed with soap and water.

-jbn-

HOME MANAGEMENT

Reading Instruction Book Saves Money

Did you ever think of reading the instruction book for your new electrical appliance as a way of saving money? It is. It's a way to save time, too. Twenty-five percent of all service calls made for household appliances are merely information calls. In other words, they would not have been necessary if the homemaker had read her instruction book carefully and become acquainted with her appliance.

The only way to get your money's worth of any appliance is to know how to use every feature it offers. Would you think of driving down the street if you have never driven a car? A modern appliance doesn't take the same amount of skill as driving a car, but it does have a big job to do and it takes some know-how to do it.

That instruction book contains a lot of information about your appliance you may never have discovered if you hadn't read it.

* * * * *

Installing a Built-In Oven?

If you're planning to install a separate built-in oven, Mary Muller, extension home improvement specialist at the University of Minnesota, suggests that two good locations are opposite the mix and sink centers or next to the serve center. Be sure to have counter space next to the oven for setting down food.

Don't install the oven too high. Place it so the open oven door is about 3 inches below elbow level. If it's much higher than that, it's hard to remove pans and the danger from burns increases. When the floor of the oven is at counter height, it's easy to move baking dishes from oven to counter.

* * * * *

Frost Build-Up

High humidity and heat of summer will cause a build-up of frost in the manually defrosted freezer sections of your refrigerator. In between defrostings -- or to speed defrosting -- scrape the light frost with a rubber spatula or with Dad's plastic windshield scraper for ice.

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HOME FURNISHINGS

Furniture Coasters

A new type of furniture foot coaster is available to prevent dents in rugs and carpeting.

The coaster is a disc with blunt-ended plastic needles on the bottom. The "needles" sink down into the pile of the carpet and distribute the weight of the furniture over a large enough area to prevent crushing the carpeting or rug.

* * * * *

Brides Like Gifts of Furniture

Summer and fall brides will appreciate the little furniture wedding gifts that complete the furnishings of an apartment or first house.

If a couple has two or three of the basic pieces from a furniture collection, the smaller pieces, such as an end table or coffee table, will be a most welcome addition. If such a piece of furniture is more than you can afford, get several friends together to finance the gift.

Here are some other suggestions for furniture gifts from Mrs. Myra Zabel, extension home furnishings specialist at the University of Minnesota:

. Folding snack tables.

. Small occasional tables to be used separately or in groups for a coffee table.

. Folding cardtable and chairs.

. Hostess cart.

. Television stand.

. One unit of a group of storage pieces to which others can be added later.

Late Summer Relaxation

Hammocks -- an old favorite yard accessory -- are back this August for late summer relaxation.

A hammock hung from trees, walls, posts or a special hammock stand is a spot every family member will enjoy. Children love hammocks for play and it's good relaxation for Mom and Dad, too.

Try one of the new extra large size ones or put up two together for sociability. Stretch hammocks tight for more spring and bounce.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

* * * * * * * * * * * * * * * *
* For release at 2 p.m. *
* Wednesday, August 17 *
* * * * * * * * * * * * * * * *

NITROGEN FERTILIZER AFFECTS PHOSPHATE UPTAKE

MADISON, WIS.--Corn plants take up fertilizer phosphorus more rapidly when the fertilizer also contains nitrogen in ammonium form, the 7th International Soil Science congress was told today.

Soils scientist A. C. Caldwell from the University of Minnesota said the principle holds true both when ammonium compounds and superphosphate are mixed together and when some nitrogen is chemically combined with the phosphorus, as in ammonium phosphate.

He emphasized, however, that applying the two plant nutrients at the same time but separately won't affect phosphate usage.

Caldwell and his co-workers had mixed ammonium nitrate with superphosphate and applied the combined fertilizer as a starter on one set of corn plots at planting time. On another set of plots, they applied the superphosphate and ammonium compounds separately--one on one side of the plant and one on the other.

In every case, the phosphate was radioactive, so the researchers could check uptake in the corn plant with a Geiger counter. In early growth, both where the two compounds were mixed together and where ammonium phosphate was used, about 60 percent of the phosphorus in the plant came from the fertilizer.

Where the two compounds had been applied separately, the fertilizer accounted for less than 25 percent of the phosphorus in the corn plant.

The principle also held true with ammonium sulfate and ammonium chloride; both affected phosphate uptake only when the two compounds were mixed. However, nitrogen in the nitrate form--calcium nitrate and sodium nitrate--did not increase phosphorus absorption even when mixed.

Just what caused the effect on phosphate uptake isn't entirely known. But Caldwell said it was more likely a result of chemical interaction between nitrogen and phosphorus, rather than physiological effects of nitrogen on the plant.

60-267-pjt

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University of Minnesota
St. Paul 1, Minnesota
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For more information on the institute, contact the Director of Agricultural Short Courses, University of Minnesota, St. Paul 1.

60-268-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

A MINNESOTA
FARM FEATURE

Immediate release

CHISEL PLOW REPLACES MOLDBOARD TYPE ON WESTERN MINN. FARM

MADISON, MINN.--Armand Fernholz hasn't turned a furrow with a moldboard plow during his past 18 years of farming.

Yet, his 80 acres of corn produce yields above average for this area and his other crops do equally well.

Fernholz uses a chisel plow, a pull-type unit with nine or 10 heavy steel teeth, spaced a foot apart. The teeth dig about 7 inches deep, but do not turn the soil over. The machine closely resembles what many farmers call a field digger.

Chisel plows are widely used by grain farmers farther north, but Fernholz is one of few who uses such an implement for corn and other crops. He is thoroughly pleased with the machine and would like to see other farmers give it a try. He explains why:

"It saves moisture. Instead of turning under all the organic matter, the chisel plow leaves the material on top as a mulch, which helps keep the soil from drying out.

"You don't get as much compaction, the soil stays loose and it soaks up moisture better during a rain." He finds other advantages, too. He no longer has dead furrows or back furrows in his fields. There are no poorly-tilled "headlands" along the edges. Plow scouring problems are over. And he says the "plow sole"--a hardpan that used to exist 7-10 inches under the soil surface--has disappeared.

Yields haven't suffered. Fernholz says that last year--a severe drouth season in this area--his corn averaged around 70 bushels per acre. On an Extra Yield fertilizer demonstration plot, set up in cooperation with county agent George Gehant and assistant agent Bob Leary, the corn yielded 109 bushels per acre.

(more)

Wheat on the Fernholz farm went 47 bushels per acre in 1958. Alfalfa does well, too. And in a new venture this year, the family is raising a fine potato crop--also on land tilled with the chisel plow.

In effect, Fernholz' use of the chisel plow is a form of minimum tillage. To many farmers, minimum tillage means plowing the usual way, but doing less disking and dragging.

Fernholz eliminates the moldboard plow entirely. He prefers to chisel plow the field once or twice in the fall. Then in spring he hitches a drag behind the disk, goes over the field once again and plants the crop.

Normally, corn on this farm follows alfalfa. But is there a problem from stalks where corn follows corn? Not at all. Fernholz uses a chopper on the stalks and the result is a nice, moisture-saving mulch which he feels is better left on top than turned under.

He first used the chisel plow on a trial basis in 1943; a local dealer had one and "doubted if anyone would want to buy it." But Fernholz found it worked so well on 43 acres that he's used it on all 219 acres of his cropland since.

Based on this experience, Armand's brother Pete started using a chisel plow 11 years ago and a third brother, Jerry, started in 1957. Now the three brothers own two chisel plows jointly, in addition to a corn picker, field chopper and blower, a combine and other machinery.

Each chisel plow requires at least a 3-plow tractor. "It really pulled hard the first few years until we got the ground loosened up," Fernholz says. "But now it goes much easier."

60-269-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

SPECIAL

Immediate release

NORTHWEST PAPER FOUNDATION FELLOWSHIP AWARDED TO FORESTRY STUDENT

A Northwest Paper Foundation fellowship for $2,500 has been awarded to Myron Grafstrom, Roseau, a 1960 graduate of the University of Minnesota School of Forestry.

The award was announced jointly by T. Schantz-Hansen, professor emeritus of forestry and former director of the Cloquet Forest Research center, and by A. R. Boquist, director-treasurer of the Northwest Paper foundation at Cloquet.

Grafstrom will carry on research studies on forest succession following the Badoura and Bemidji fires of 1959 and 1960. He will work under the direction of H. L. Hansen, professor of silviculture.

Grafstrom will study natural tree reproduction and other plant growth following the Badoura and Bemidji fires which covered 14,000 and 1,500 acres, respectively. Permanent sample plots will be established for additional observations in the future.

The Northwest Paper fellowship, now in its third year, has previously supported research studies on cone characteristics of jack pine, as related to management, and on the continous forest inventory system.

Grafstrom was a member of the varsity hockey team at the University of Minnesota from 1956-60 and co-oaptain in 1960.

-pjt-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

To all counties

For immediate use

FARM FILLERS

Overheated sows can mean underfed baby pigs. So keep the sows cool both before and after farrowing, advises R. J. Meade, livestock scientist at the University of Minnesota. Feed the sows little if any the first day after farrowing, but give them fresh water. Then feed a ration which is fairly bulky. University researchers use a feed with 25 to 30 percent bran or, in some cases, 5 percent linseed oil meal and 10 percent wheat bran. They feed these rations until 5 to 7 days after farrowing, then work the sows over to a concentrated ration.

* * * * *

If you're selling timber on a lump sum basis, you're losing profits and probably damaging the future growth potential of the woodland. Parker Anderson, extension forester at the University of Minnesota, recommends improvement cuttings, proper thinning, and weeding out inferior trees. Such practices increase the total amount of total growing stock. And remember that markets are widening; wood is no longer just boards. It is food, clothing, plastics, and 5,000 other things important to the American way of life.

* * * * *

Does it pay to incorporate a farm? A number of economists in 13 area states discuss that question in a new north central regional publication, "The Farm Corporation," now available at the county extension office. While there are still few farm corporations in operation (fewer than 100 in Minnesota) the idea is gaining interest. The new publication lists types of corporations, effect on taxes, steps in incorporating, and possible advantages and disadvantages.

* * * * *

University of Minnesota scientists may some day come up with better lines of Holsteins, Guernseys and Milking Shorthorns. The goal is cattle which make better use of feed and produce more. Lines of sires may be developed whose daughters' production can be more closely predicted.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

To all counties

For immediate use

CHEMICALS HELP IN CLEARING STUMPS

The best way to get rid of a tree stump is to kill the tree with chemicals before cutting it down.

Otherwise, fresh sprouts may grow from the stump and make it hard to get rid of. So says Marvin Smith, extension forester at the University of Minnesota.

Chop a ring of gashes around the tree at about stump height. Be sure to cut through through the inner bark and slightly into the sapwood. Then pour a solution of 2,4,5-T in oil or ammonium sulfate in water into the gashes. Be sure the cuts are made so they'll retain some of the solution.

Use either one pint of 2,4,5-T in 3 gallons of fuel oil or 4 to 6 pounds of ammonium sulfate crystals (sold as "Ammate") in a gallon of water to make the solution.

Trees under 6 inches in diameter can be killed by soaking the ground line and the lower 2 feet of the trunk with the 2,4,5-T mixture.

The herbicide will kill the tree at any time of the year but the best sprout control comes when it is applied from July to October.

If you have to cut down a living tree and want to kill the stump later, either solution will still work. Spray or brush the mixture on the top and sides of the stump. You can use ammate crystals alone if you wish. Just let them dissolve on top of the stump.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

To all counties
For immediate use

A Farm and Home Research Feature

UNIVERSITY STUDIES SIMPLIFIED TYPE OF HAY DRYER

An experimental, inexpensive hay drying unit is being studied this summer at the University of Minnesota's Northeast Experiment station, Duluth.

The unit is a "batch" dryer, constructed of wood and big enough to dry up to five loads of baled hay at a time. Apart from the blower itself, materials for the structure cost only $300. A farmer could put one up in a day or so.

The structure offers real help to farmers hoping to get hay in quicker and with less loss of hay leaves. Here's how it works:

A farmer cuts the hay, goes over with a conditioner, and bales it the following day at 35 to 45 percent moisture. He then hauls the bales to the dryer, puts them in by elevator, and turns the blower on.

With heated air, the hay is dryed down to about 15 percent moisture by the following day. Drying time varied from 10 hours for hay put in at 30 percent moisture to 22 hours for other hay put up at 45 percent. Then the bales are moved by elevator from the drying unit to the barn mow for permanent storage.

The structure, made of a 2 x 4 frame with plywood inside the members, is 12 feet wide, 12 feet high, and 24 feet long. Drying air comes from a portable dryer, a type common in Minnesota.

Air blows in from one end under a slatted floor, rises through the hay and escapes at the top. The structure is open at the top and during drying is loosely covered by a tarpaulin.

John Strait, agricultural engineer, designed the structure in cooperation with Ralph Grant, station superintendent.

-more-

One limitation of the structure is its size. It dries one batch of hay -- 12 to 15 tons -- in one day. A farmer with a large acreage could be limited in how fast he gets his hay harvested.

However, the structure perhaps could be made at least 12 feet longer with little or no loss in drying ability. In that case, the unit could handle 6 or 7 loads at a time.

The structure as it is now has a flat slatted floor. Grant and Strait say it may be modified to have sides slanting in, with a conveyor down the middle. That way, the bales after drying could be moved out and into an elevator entirely by mechanical power.

Bales used in the studies are small, 20-pound bales which don't need to be stacked. They are left as they fall in the unit, in a random arrangement. They dry uniformly and much faster than the larger, 50-60 pound bales.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

To all counties
For immediate use

A Farm and Home Research Report

FERTILIZER AFFECTS CORN ROOT GROWTH

How you fertilized your corn--in kind and amount of fertilizer and where you placed it--may have a lot to do with how the roots grew.

And how good a root system the corn has may determine whether the corn lodges or is able to seek out moisture in a dry year.

Paul Burson, University of Minnesota soils researcher, last year tried different fertilizer treatments on corn before or at planting time, then checked the root development in August.

If the roots grew a heavy mass of fibers in a small area, he called it an "intensive" system. If the roots spread out over a wide area, he called the system "extensive." Some root systems were both.

The first thing he found was that applying up to 600 pounds of 8-24-22 per acre, in a band application as a starter, did not injure corn germination and stand.

He also found that using up to 120 pounds nitrogen per acre in the starter stimulated an intensive growth of roots. And root growth was much greater when he applied a high amount of starter nitrogen in relation to phosphate, compared to the other way around.

For example, Burson found an intensive mass of fibrous roots where he applied 3 pounds of nitrogen as starter for every pound of phosphate. In contrast, he found limited root fibers in the fertilizer band, but extensive growth farther away when the starter ratio was reversed and the nitrogen was applied later as sidedressing.

This extensive root growth could be an advantage.

Where the roots showed extensive growth, corn lodging was never above 26 percent of all plants. Those which were intensive had as much as 52 percent lodging.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

To all counties

ATT: HOME AGENTS
For immediate release

GROWTH FEATURES IMPORTANT IN SCHOOL CLOTHES

Look for growth features in the back-to-school clothes you buy for the children in the family.

Or, if you're making clothes for them, add features for growth or expansion to make the garments last more than a few months or a year. Children's garments are often outgrown before they are worn out.

Growth is usually up rather than out. Actually there is little change in chest or waist measurement from year to year. For that reason it's wise to look for ways to add length, says Shirley Erickson, extension clothing specialist at the University of Minnesota.

She suggests these growth features to look for in ready-to-wear clothing or to incorporate in clothes made at home:

WIDE HEMS.

PRINCESS or other style with no waistline seam. A wide hem to turn down is usually not enough for the growing child, because growth takes place in the trunk as well as the legs. If the waistline is too high, letting out the hem may make a dress seem so out of proportion that it is no longer attractive. Dresses without waistline seams will allow for over-all growth.

SASHES on dresses with waistline seams. A sash will cover up a waistline that is too high.

CAP OR DOLMAN SLEEVES. This type of sleeve will still fit even though there is growth in width of the shoulder.

-more-

add 1 Growth Features in Clothing

BOXY-STYLED JACKETS. A boxy jacket will be attractive whether it is long or short.

LONG SLEEVES ON SUIT JACKETS. Sleeves may be worn three-quarter length if the arms outgrow the long sleeves.

ADJUSTABLE STRAPS OR ELASTIC ON THE WAISTBAND ON SKIRTS. When growth demands, buttons on straps can be lowered or the straps can be replaced later by buttonholes on skirt waistband and buttons on the blouse. Elastic in the waistband will permit expansion in size of the waist.

LONG TAILS ON BLOUSES to allow for growth in height.

PLEATS INSTEAD OF DARTS for waistline fit on blouses. Pleats can be moved easily down to the natural waistline and thus give blouses longer life in the growing child's wardrobe.

-jbn-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

To all counties

ATT: HOME AGENTS
For immediate release

WARNING AGAINST
USE OF BORIC ACID
IN CANNING

The mistaken notion that boric acid should be used in canning corn has been making the rounds of some circles of homemakers.

Canning powders and such drugs as boric acid and aspirin should never be used in canning, warn extension nutritionists at the University of Minnesota. Canning powders are neither effective nor reliable as preservatives unless used in amounts which change flavor and may be harmful. Boric acid and aspirin are not preservatives.

Heat is the only preservative to depend on in canning, the University nutritionists say. But some foods need more heat than others. Foods containing acid -- fruits and tomatoes -- may be processed in boiling water. But for safety's sake temperatures hotter than boiling are required for all other vegetables, as well as meats and fish. To bring the temperature above the boiling point a pressure cooker is necessary for canning non-acid vegetables, meat and fish.

Since many _____county homemakers are now canning corn, University extension nutritionists give these directions:

Husk corn and remove the silk. Then wash the corn. Cut the corn from the cob at about two-thirds the depth of the kernel. For the raw pack method, pack the corn loosely to 1 inch of the top of the jar and fill to the top with boiling water. Place jars on rack in pressure cooker containing 2 to 3 inches of boiling water. Fasten canner cover securely. Let steam escape 10 minutes or more before closing the petcock. Process at 10 pounds pressure for 55 minutes for pints.

For the hot pack method, prepare the corn in the same way but to each quart of corn add 1 pint of boiling water and heat the mixture to boiling. Pack the mixture of corn and liquid loosely in pint jars to 1 inch of the top. Process at 10 pounds pressure for 55 minutes for pints.

Since the processing time for quarts would have to be so much longer that the corn would be over-processed, it is best to can corn in pint jars.

Home Canning Fruits and Vegetables, Extension Folder 100, gives information on canning, including processing timetables. Copies are available from the county extension office.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 16, 1960

To all counties

4-H News
Immediate release

COUNTY TO SEND
DELEGATE TO
4-H HEALTH CAMP

_____ _____, _____ county's 4-H health champion, will be among nearly 100 4-H'ers chosen to attend the State 4-H Health camp September 18-21 at the University of Minnesota's Forestry and Biological station in Itasca State park.

4-H delegates to the camp were selected not only on the basis of their personal health records but for the work they have done in improving health conditions in their homes and communities and for their ability to bring back useful health information to fellow club members.

_____'s health activities include ----------

(Give brief account of your delegate's health activities)

The camp will open with a cookout Sunday evening, September 18. The Rev. Lyle T. Christianson, pastor, First Methodist church, Bemidji, will give a talk on "Mental Health and Youth" at the evening assembly.

Two days of the camp will be devoted to workshop sessions on grooming for good health, dental health, personality development and home sanitation for healthful living. Leaders of the workshops will include Mrs. Dorothy Berg, health education director, Minnesota Tuberculosis and Health Association; William Jordan, chief, section of dental health, and Myhren C. Peterson, supervisor, district sanitation activities, Minnesota Department of Health; and Charles Martin, extension family life specialist, University of Minnesota.

Banquet speaker Tuesday, September 20, will be Genevieve Damkroger, mental health consultant, Minnesota Department of Health. She will relate her experiences on a bus trip in Russia. Announcement of the state health achievement champion for 1960 will be made at the banquet.

The camp is being sponsored for the eighth year by the University of Minnesota Agricultural Extension Service in cooperation with the Minnesota Tuberculosis and Health Association and the Minnesota Department of Health. The Folger Coffee company, Kansas City, Missouri, provides funds for the camp.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 18, 1960 Immediate release

2500 4-H'ERS TO STATE FAIR

Some 2,500 4-H members from all parts of Minnesota will invade the Minnesota State Fair grounds to demonstrate, exhibit or judge livestock or to take part in the dress revue during the 10 days of the State Fair.

All these young people have won county honors which entitle them to compete for further awards on a state level.

About a thousand of them will perform on seven platforms in the 4-H building, giving home economics and agricultural demonstrations. The demonstrations will begin at 8:30 a.m. Saturday, Aug. 27, and continue until 5 p.m. each day except Sundays.

More than 1,250 club boys and girls will exhibit livestock in the barns on Saturday, Sept. 3. Their exhibits will include 745 dairy cattle, 155 pigs, 126 sheep, 102 beef heifers, 152 pens of poultry and 25 pens of rabbits. Judging will begin at 8 a.m. Sept. 3.

Eighty county booths in the 4-H building will portray 4-H activities. A center display, also in the 4-H building, will develop the theme, "4-H - Town and Country." Pictures and models will depict activities and projects suited to boys and girls in town and carried out in the country. 4-H junior leaders will be on duty near the display to give information on the club program.

Among special events planned for 4-H'ers attending the State Fair will be the luncheon Tuesday, Aug. 30, for club members who have received key awards for leadership and outstanding service. The Minneapolis Chamber of Commerce will give its annual banquet for 4-H'ers on Thursday, Sept. 1.

The statewide Share the Fun festival is scheduled for Wednesday, Aug. 31, at 8 p.m. in the 4-H auditorium. Eighteen different counties will present acts.

Minnesota's 1960 dress revue queen will be selected Thursday, Sept. 1. County dress revue queens will compete for the title in the annual dress revue at 2:30 p.m. in the 4-H auditorium. They will model garments they have made themselves.

Forty Ontario 4-H club members and leaders will visit the State Fair for 3 days, Aug. 28 to 31, observing Minnesota 4-H'ers demonstrate and exhibit. They will present a program at the 4-H assembly on Tuesday, Aug. 30, at 7:30 a.m. Other guests of Minnesota 4-H'ers during the fair will be three International Farm Youth exchangees from Chile, Germany and New Zealand.

60-270-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1,. Minnesota
August 18, 1960 Immediate release

FACT SHEET ON 4-H AT THE STATE FAIR--1960

HOW MANY: Approximately 2,500 4-H boys and girls will attend the State Fair to exhibit livestock, give demonstrations or participate in the dress revue.

WHERE WILL THEY LIVE: They will eat and sleep in the 4-H club building on the fair grounds. 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 1,000 demonstrators will perform on seven platforms in the 4-H building, beginning at 8:30 a.m. Saturday, Aug. 27, and continuing until 5 p.m. each day except Sundays. These will include demonstrations in forestry, electrification, farm and home shop, bread making, dairy foods, clothing, home-making assistance, home furnishings, safety-health-conservation, gardening, soil conservation, food preservation, food preparation, livestock, poultry and rabbits, crops and gardening, home yard improvement, tractor. On Labor Day livestock demonstrations will be given in the sheep barn and selected blue ribbon demonstrations from other classes will appear in the 4-H building.

LIVESTOCK EXHIBITS: This year more than 1,250 club members will exhibit livestock, which will be received beginning Friday at 10:00 a.m., Sept. 2, in the 4-H livestock barn. Livestock will be judged Saturday, Sept. 3. Livestock includes: 745 dairy cattle, 155 pigs, 126 sheep, 102 beef heifers, 152 pens of poultry and 25 pens of rabbits.

BOOTHS: 80 booths portraying 4-H activities in as many different counties will be on display in the 4-H building. Booths will be judged Saturday, Aug. 27.

DAY BY DAY ACTIVITIES

Saturday, Aug. 27

8:30 a.m. - 5 p.m. -- 4-H demonstrations
8:00 a.m. -- Pie contest (1st division)

Sunday, Aug. 28

12 noon -- Reunion of former National 4-H Conference delegates - cafeteria, 4-H building
7:30 p.m. -- Song fest - 4-H building

Monday, Aug. 29

8:30 a.m. - 5 p.m. -- Demonstrations
7:30 p.m. -- Assembly program
8:45 p.m. -- Get acquainted party - 4-H building

Tuesday, Aug. 30

7:30 a.m. -- Assembly featuring Canadian 4-H'ers
8:30 a.m. - 5 p.m. -- Demonstrations
12 noon -- Key award luncheon to be attended by about 500 club members who have received 4-H key awards for leadership and outstanding service - Coffman Memorial Union, U of Minn., Minneapolis
6:40 p.m. -- 4-H members parade to grandstand

(more)

Wednesday, Aug. 31

8:00 a.m. - 12 noon -- Pie contest (2nd division)
8:00 a.m. - 3 p.m. -- Judging of dress revue contestants - 2nd floor, 4-H building
8:30 a.m. - 5 p.m. -- Demonstrations
8:00 p.m. -- 4-H Share the Fun Festival - 4-H building

Thursday, Sept. 1

8:00 a.m. - 4 p.m. -- Dairy judging and livestock judging team contests - hippodrome and sheep barn
8:30 a.m. - 5 p.m. -- Demonstrations
2:30 p.m. -- Dress Revue - 4-H building auditorium. Dress revue queen and attendants available for pictures at 3:45 p.m., 4-H auditorium, 2nd floor.
6:00 p.m. -- Annual 4-H banquet by Minneapolis Chamber of Commerce, Coffman Union

Friday, Sept. 2

8:30 a.m. - 5 p.m. -- Demonstrations
8:30 p.m. -- Assembly. Three International Farm Youth exchangees from Chile, Germany and New Zealand will be made members of the 4-H club at a special ceremony in the 4-H auditorium. They are Rolf Derpsch, 22, Chile; Bernhard Bremer, 25, Germany; and Peter Withy, 25, New Zealand. IFYEs will be available for pictures and interviews if you make advance requests.
9:00 p.m. -- 4-H party (E. Lukaszewski and his orchestra)

Saturday, Sept. 3

8:00 a.m. - 12 noon -- Pie contest (3rd division)
8:00 a.m. - 6 p.m. -- Judging of all classes of livestock - hippodrome
8:30 a.m. - 5 p.m. -- Demonstrations
3:00 p.m. --Symphony of Fashions Style Show presented by The Farmer magazine - 4-H auditorium
7:30 p.m. -- Dairy and livestock awards program and dairy showmanship contest - hippodrome

Sunday, Sept. 4

4-H livestock winners available for pictures by appointment (4-H office or livestock barn.)
6:40 p.m. -- 4-H members parade to grandstand

Monday, Sept. 5

8 a.m. -- Livestock demonstrations in sheep barn
11:30 a.m. -- Herdsmanship awards presented - sheep barn
9:30 a.m. - throughout the day -- Selected demonstrations from blue ribbon groups in 4-H building

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For FURTHER INFORMATION --

BEFORE the fair: Call INFORMATION SERVICE, Institute of Agriculture, University of Minnesota, St. Paul 1.--MI 6-4616, Ext.205.

DURING the fair: Call 4-H PRESS OFFICE, 4-H Building, State Fair Grounds

60-271-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 18, 1960

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* For release at noon, *
* Friday, August 19 *
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CHELATE COMPOUNDS STILL PROBABLY BEST ANSWER TO IRON DEFICIENCY

MADISON, WIS.--Despite their cost, iron chelates (KEY-lates) are still probably the best answer to iron-deficiency chlorosis in soybeans, a University of Minnesota soils researcher said today.

R. G. Burau said at the 7th International Soil Science Congress that other cheaper compounds developed from Minnesota peat deposits don't seem to solve the chlorosis problem.

Chlorosis occurs in many high-lime soils of western and northwestern Minnesota. The lime ties up the soil iron, keeping it in a chemical form which plants can't use. As a result, plants turn yellow and may go down in yield or even die.

Chelates are compounds which hold iron in a form available to plants. Minnesota trials in past years have shown that applying a pound of chelated iron per acre would correct the yellowing from chlorosis and therefore prevent the yield loss.

The problem, though, has been cost. Chelate treatments might cost up to $20 per acre.

Burau said he recently compared two different chelates with humates--iron compounds from peat--as treatments for chlorosis. He used soil from areas where chlorosis is a problem and used radioactive "tagged" iron in all compounds so he could check its uptake in soybean plants.

If the humates worked, they would provide a cheaper source of iron. However, the chelates resulted in much more iron uptake by the soybeans than the humates and therefore meant better recovery from chlorosis.

Burau suggested that it might still be possible to develop chelate treatments which would do the job with less expense. For example, further research may show that localized low-rate application of chelates may be enough to carry soybeans through the spring growth period when chlorosis is the greatest problem.

60-273-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 18, 1960

* * * * * * * * * * * * * * *
* For release at noon, *
* Saturday, August 20 *
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EXCESS COMPACTION LOWERS CROP YIELDS

MADISON, WIS.--How overuse of heavy field machinery can pack the soil and lower crop yields was reported today at the International Soil Science Congress.

George Blake, University of Minnesota soil physicist, said that experimentally packing the soil surface in recent field trials lowered potato yields 54 percent.

Packing reduced wheat and sugar beet yields 13 percent, and corn 7.5 percent.

Where both surface and the plow bottom layer were packed, corn yields went down 14.5 percent.

Also, Blake said, packing tended to harm crop quality. He found twice as many crooked, misshapen beets in fields with a compacted soil surface. Potato tubers had lower specific gravity--and therefore lower cooking quality.

In two years of these tests, Blake packed the soil surface with a heavily loaded truck, and packed the plow layer with a special weighted wheel. The resulting compaction was similar to that which occurs from excessive use of field machinery; compacted soils had less air space and were harder to penetrate.

The results, he said, produce further evidence of the value of minimum tillage--working the soil as little as possible.

Many farmers have already accepted the idea, particularly in corn production. Thousands in Minnesota nowadays plant corn in wheel tracks on soil which has been plowed but tilled very little or not at all otherwise.

60-272-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 18, 1960

SPECIAL TO WEEKLIES

Immediate release

"U" ST. PAUL CAMPUS LISTS EVENTS FOR COMING MONTH

Some of the major problems in modern livestock production and the dairy industry will be viewed at four key events within the next month at the University of Minnesota's St. Paul campus.

Scheduled are the Animal Nutrition and Health short course, Sept. 12-13; the annual Dairy Products institute, Sept. 13-15; the Beef-Grassland Field day at the Rosemount Agricultural Experiment station, Sept. 22; and the Minnesota Postgraduate Conference for Veterinarians, Sept. 14 and 15.

At the Animal Nutrition and Health short course, staff members from the University and representatives of public and commercial agencies will discuss three major topics. They will be feed quality problems, feeding and egg quality and nutritional problems in quality of beef and pork.

The Dairy Products institute will feature reports by dairy researchers, public agency men and industry representatives. Topics at general sessions will include the dairy outlook, milk houses on dairy farms, American dietary habits, drugs and fallout in relation to milk and sanitizer programs. Special sessions will be held for ice cream, butter and cheese manufacturing, for dry and concentrated and market milk and for sanitarians and field men.

The Conference for Veterinarians will feature two general topics. The first on Sept. 14, is specific pathogen-free pigs and their relationship to control of infectious diseases of swine. The second day will be a conference in ophthalmology--structure, functions and diseases of the eye.

Beef-Grassland Field day visitors will hear reports of several recent feeding trials conducted by the University. One report will cover amount of hay to given fattening steers and heifers fed corn silage and corn. Another will be results of wintering low-grade calves on early and medium-cut oat silage and alfalfa-brome silage. Feed additives, stilbestrol, antibiotics and vitamin A will also be discussed.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 18, 1960

SPECIAL

Immediate release

SCHOOL OF FORESTRY STUDENT RECEIVES GRADUATE FELLOWSHIP

George M. Blake, a graduate student at the University of Minnesota School of Forestry since September, 1959, has been awarded the $2,500 Wood Conversion foundation Graduate fellowship for 1960-61.

The announcement was made jointly today by T. Schantz-Hansen, retired professor of the School of Forestry, and E. W. Davis, president of the Wood Conversion foundation.

Blake, a native of California, is a 1957 graduate of the University of Idaho School of Forestry. He served with the U. S. Forest Service at Moscow, Idaho from June, 1957 until he came to Minnesota last year.

Purpose of the fellowship is to support graduate research in the field of forest-tree genetics and tree improvement. The long range objective of this research is to improve the quality of aspen, which now makes up almost 40 percent of all pulpwood produced in Minnesota.

Blake's specific objective will be to develop some of the basic principles of aspen genetics. He will study sex-associated characteristics such as vigor, rate of growth and density.

Studies of the form and structure of leaves, bark and wood are also planned. Paper chromatography, a new and promising research technique, will be used in an attempt to develop a simple chemical test for sex determination of immature aspen.

Blake's research should provide a better understanding of how heredity and environment influence the yield and quality of aspen in northeastern Minnesota.

Blake will conduct his study under the direction of Scott S. Pauley, professor of forestry. Most of the work will be done at the Cloquet Forest Research center.

-pjt-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 19, 1960

SPECIAL

Immediate release

Caption for mat: Research on beef cattle pastures will be reported at the annual Beef-Grassland Field Day, September 22, at the University of Minnesota's Rosemount Agricultural Experiment Station.

BEEF DAY FEATURES RESEARCH, DEMONSTRATION

Beef feeding research and expert ideas on feeding cattle of different grades will be featured at the annual Beef-Grassland Field Day, Sept. 22.

The event will be at the University of Minnesota's Rosemount Agricultural Experiment station. Now in its 8th year, the day has become the traditional occasion for reporting all University beef research for the past 12 months.

Reports on drylot feeding studies will cover grass silages, antibiotics and stilbestrol implants for wintering calves; energy levels for steers; corn silage with limited hay; shelled corn with limited hay and vitamin A feeding.

Pasture topics include fertilization and management, renovation and mixtures, and beef produced on pasture.

Guest speaker will be A. L. Neumann, animal science professor from the University of Illinois, who will discuss the vitamin A problem in beef cattle.

L. S. Doran, manager of stocker and feeder operations for the Central Order Buying company, South St. Paul, will give a "show ring" demonstration of different grades of beef cattle, and will discuss the profit outlook for each. R. E. Jacobs, extension livestock specialist at the University, will discuss recommended feeding plans for each grade.

The program begins at 10 a.m. with tours of the cattle feedlots, pastures and research facilities at the Rosemount Soils farm. Research reports begin at 11, and the student Block and Bridle club will serve a noon lunch.

-pjt-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 22, 1960

Special to Faribault Co. Register

Immediate release

Rollo L. Ehrich, son of Mr. and Mrs. Harry Ehrich, Blue Earth, and recent graduate of the University of Minnesota, has been awarded $100 for outstanding scholarly works by the American Farm Economics association.

The award was presented during the Association's annual meeting at Iowa State university.

Ehrich's M. S. thesis "An Economic Analysis of Cash-Future Price Relationships of Hard Red Spring Wheat," was one of three theses selected for the award.

Ehrich received his M. S. degree from the University in 1959. He is now at Stanford university, Palo Alto, Calif.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 23, 1960 Immediate release

ALEXANDRIA BUILDING TO BE DEDICATED TO T. A. ERICKSON

ALEXANDRIA, MINN.--A 4-H livestock judging pavilion will be dedicated this Saturday (Aug. 27) at 7:30 p.m. to the father of 4-H club work in Minnesota, T. A. "Dad" Erickson.

Erickson will be present at the dedication, one of the closing events of the Douglas county fair. The grand old man of 4-H, nationally known for his youth work, will be 89 years old Sept. 2.

Named Erickson pavilion, the building will be located on the Douglas county fair grounds. It will be used for livestock events throughout the year. Seating capacity is 750. Room is provided under the bleachers for housing poultry and ponies.

Douglas county fair board and county 4-H clubs shared costs of erecting the $12,000 building. Members also donated labor.

Erickson was born and reared on a farm near Alexandria and as a young man taught in country schools near his home. For 10 years he was county superintendent of schools in Douglas county. It was largely in reoognition of his work with farm boys and girls of the county that he was appointed the state's first 4-H club leader and a member of the University of Minnesota staff in 1912. Under his leadership the first 4-H clubs were formed and membership grew to 47,000 in 28 years.

Following his retirement from the University in 1940, he spent 14 years as consultant on rural services for General Mills, Inc., preparing 4-H club and other material for national use.

In 1956 the University of Minnesota Press published Erickson's memoirs, My Sixty Years with Rural Youth.

Erickson has received the Outstanding Achievement Award of the University and many other honors, including selection as one of Minnesota's "100 living great men." He is chairman of President Eisenhower's 4-H People-to-People executive committee.

60-274-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 23, 1960

To all counties

For immediate use

FARM FILLERS

Agriculture is the only major industry in which total employment is actually expected to decline between now and 1970. The U. S. Department of Labor predicts a drop of more than 15 percent in farmers and farm workers during the decade. Meanwhile, service workers, skilled workers, clerical and sales workers and proprietors will all increase in number by more than 20 percent and semi-skilled workers will increase by about 18 percent. Biggest increase, an expected 40 percent or more, will be in professional and technical personnel.

* * * * * *

Put those fall pigs on a good starter feed. They should gain about a pound for every 1.35 pounds of starter they eat between two and eight weeks of age. R. J. Meade, livestock scientist at the University of Minnesota, says pigs that haven't had a bout with some disease should average about 40 pounds at eight weeks. Then they're all ready for the growing-finishing lot.

* * * * * *

No matter how good your layers were during the past year, it probably won't pay to keep them much longer. Robert Berg, extension poultryman at the University of Minnesota, explains that old hens lay 15 to 20 percent fewer eggs than pullets. Feed cost per dozen eggs is higher, too. And egg quality is lower. Hens normally produce well for 14 months, but not much longer. With low egg prices, pullets are a much better bet.

* * * * * *

Face flies--insects looking much like houseflies--have shown up on some farms in southern Minnesota. They feed around and in the eyes, nostrils and mouths of cattle, annoying the animals in the process. Sprays that control other flies aren't too effective against these new pests. But John Lofgren, extension entomologist at the University of Minnesota, says Pyrethrins plus fly repellents in a white oil which doesn't burn the cows' eyes may be applied daily. A bait containing DDVP may also be applied with a brush. County agents have details.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 23, 1960 Immediate release

SEVERAL PROJECTS INVOLVING ATOMIC ENERGY UNDER WAY AT UNIVERSITY

Atomic energy is the subject of more than a dozen research projects on the University of Minnesota's St. Paul campus.

How some of this research is being conducted--and what it means to farmers and citizens in general--will be shown to the public in a special University exhibit at the Education building at the State Fair, Aug. 27-Sept. 5.

St. Paul campus scientists are dealing with radiation in two general ways. One involves radiation as a research tool--such as for "tagging" chemical particles and then following the movement of these particles inside plants which absorb them.

The other type of study involves radiation itself--such as how fallout may be picked up by crops and how radiation affects livestock and plants.

Here's a brief look at a number of these studies.

Soils scientists are surveying strontium 90 content of soil in 8 different Minnesota areas. The study will show the accumulation of fallout since nuclear tests first began. A second related study will involve soil from four farms in the Brainerd area--two farms which have had a relatively high strontium 90 content in milk and two with a low content. Purpose will be to determine how much of the fallout particles come from the soil.

Veterinary scientists and biochemists have studied the effects of gamma radiation on calves and ways the effects can be counteracted. Gamma radiation--

(more)

Horticulturists are tracing the movement of radioactive iron through the runners of strawberry plants. They are also irradiating cherry seeds to see what happens to the seedlings. Similarly, they are irradiating raspberry roots to study effect on the plants that grow from them.

Veterinary scientists are using radioactive lead to study effectiveness of treatments for lead poisoning. The idea is to see whether certain "chelating" (KEY-lating) agents will effectively remove lead from the bodies of poisonned animals. By giving experimental animals radioactive tagged lead, the researchers can tell whether and how completely the chelate removes it.

Agronomists are using atomic particles to produce genetic changes in cereal grains. Their ultimate aim is to be able to control genes, the units which govern inherited characteristics. In some states, plant geneticists have crossed commercial wheat with wheat grass and, through use of radiation, have transferred desirable characteristics from the grass to the wheat.

St. Paul campus botanists are conducting a major study of the absorption of strontium 90 and other radioisotopes by farm crops. They are checking the rate of accumulation of nuclear particles in edible parts of plants and how this rate is affected by different levels of strontium 90, time of year and weather. Also being studied are possible approaches to the fallout problem, such as giving plants elements at levels which may reduce strontium absorption.

Staff members in plant pathology and botany are also using radioisotopes to produce mutations in microorganisms, in studies on basic genetic processes in fungi. Corn seed is being irradiated with gamma rays to study effects of radiation in growth and survival of corn in the field. Radioactive tracers are being used to study movement of amino triazole, a chemical weed killer, within weed plants.

60-275-pjt

one of the most common kinds from nuclear fallout--at certain levels stops production of red and white blood cells in the bone marrow. In severe cases, this kills the animal. The scientists have studied one possible way of dealing with this condition. They removed a small amount of bone marrow from a group of calves, and they exposed the same calves to 250 roentgens of gamma radiation--normally a fatal dose for calves. A few hours later, they injected the marrow intravenously into the same calves. Nine of 15 calves treated in this manner survived.

Burros are being used in studies on the effect of gamma radiation on the central nervous system. Researchers in the College of Veterinary Medicine and the College of Medical Sciences selected this animal because its mass--total body material--is about the same as a man. The studies are aimed at determining what the effects of radiation are, why it causes nervous disturbance and the amount, duration and intensity of radiation needed to produce such disturbances.

Radioactive iodine is being used by biochemists in studies on animal thyroid glands. These glands produce such a small amount of hormone that, in the past, scientists found it almost impossible to study how it is produced. However, they now can feed an animal a small amount of radioactive iodine, which will be built into the thyroid hormone. Then the hormone becomes radioactive and can be easily followed by use of radiation detectors.

Entomologists are studying the effect of radiation on the structure and development of living insects.

Radioactive tracers have been used to establish the life span of red blood cells involved in bovine porphyria, a cattle disease.

Agricultural engineers are using radioactive isotopes as tracers for checking the rate and extent of water uptake by plants. This information is needed in designing and operating irrigation systems, and knowing how much irrigation water to apply.

(more)

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota

To all counties
For immediate use

August 23, 1960

EARLY CUTTING AND FERTILIZER HELPS ALFALFA

You can do two things this fall that will give your alfalfa stand a better chance to survive the winter and get an early start next spring.

Make your last cutting early -- no later than the first week in September. And, if you haven't already done so, fertilize your alfalfa.

William Hueg, extension agronomist at the University of Minnesota, says a 1959 survey of alfalfa growers showed a greater loss of stand for each week that cutting was delayed after September 1. The heaviest loss came when stands were cut between September 15 and 30.

Reason is that alfalfa plants should go into the winter with good food reserves in the roots, if they're to survive. Late cutting causes the roots to give up their food reserves so the plant can regain its growth. If cutting is late and a killing frost comes early the roots don't have a chance to stock up with food. Hueg says the survey also showed that farmers who fertilize their alfalfa stands each year get good results. In addition to heavier yields, these farmers report only a slight plant loss due to winter injury.

Your alfalfa can still get a lot of good from a fall application of fertilizer containing phosphate and potash. You'll get best results if you fertilize according to a soil test. If you don't test, apply at least 200 pounds 0-12-36 or 0-10-30 per acre.

If you're growing alfalfa on soil that's sandy or low in organic matter you'll have more insurance against boron deficiencies if you use special boron-containing fertilizer. They are designated by the letter "B" following the potash analysis, as 0-12-36B.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota

Special to counties in
Northwest district
For immediate use

August 23, 1960

USDA MEN STUDY EFFICIENCY IN HANDLING SPUDS

Here's a note on efficiency for the potato industry at harvest time.

U. S. Department of Agriculture scientists say pallet boxes can be more efficiently filled with Irish potatoes at the warehouse rather than in the field.

They came to that conclusion after studies at the Red River Valley Potato Research Center at East Grand Forks, Minnesota.

They found that the same number of workers are needed for harvesting, field filling, and placing pallet boxes in storage as are needed for harvesting, filling at the warehouse (yard filling) and placing boxes in storage.

True, field filling calls for one less worker at the warehouse. But that saving is cancelled by the need for one more man in the field. Also, field filling in the USDA tests didn't speed up movement of spuds to the warehouse. Six pallet boxes weighing a ton each could be filled from a bulk truck and put in storage in less time than is needed to remove six field-filled boxes from a truck, put them in storage, and put six empty ones back on the truck.

Field filling didn't lower equipment costs. It meant a bit less equipment at the warehouse, but resulted in extra cost for special equipment on the harvester.

Finally, yard filling doesn't mean any more potato injury. The USDA men accomplished it with as little as 0.2 percent grade defects.

Many growers of Irish potatoes now use pallet boxes for storage. This practice is costlier than bulk storage, but makes for fast and easy handling of processing spuds. Most growers have always filled the boxes at the warehouse or storage site. Others, however, have filled the boxes directly from the harvester in the field, believing the high cost of box handling can be reduced.

The USDA tests, however, show field filling does not result in such a reduction.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 23, 1960

To all counties

For immediate use

INTEREST GROWS
IN "DISEASE FREE"
BABY PIG TECHNIQUE

Minnesota hog producers will probably hear more and more about SPF (specific pathogen-free) hogs in the future.

SPF pigs are the result of a new technique in swine disease control. The pigs are taken from their dams a couple of days before normal farrowing time by hysterectomy, and are raised under disease-free conditions for the first month.

The idea is to then put them on farms which have been cleared of all hogs for at least a month, and thereby "break the chain" in either or both of two serious diseases--virus pneumonia and atrophic rhinitis. It's possible other diseases may be affected, too.

According to Raymond B. Solac, extension veterinarian at the University of Minnesota, infection from both pneumonia and rhinitis apparently is passed from the mother pig to the young through her breath shortly after birth. Under normal farrowing conditions, a sow infected with rhinitis is almost certain to infect the baby pigs.

However, when pigs are removed by hysterectomy, infection is eliminated, since the young are kept free from the air the sow exhales.

SPF hogs are sometimes called "disease free." That term is a bit misleading, Solac says, since many ailments are not affected and evidence is unclear on many, except for pneumonia and rhinitis.

Here's how a hog producer might use the SPF technique. Suppose his herd has a long history of atrophic rhinitis, he wants to get rid of it, but doesn't want to lose the benefit of his breeding stock. First, he selects his best sows, has them bred, and about 2-4 days before farrowing time sends them to the laboratory which performs the hysterectomy. Six laboratories have already been established in the state.

The laboratory men take the sows to a local slaughter house, and surgically remove the complete uterus. The sow is slaughtered for food.

(more)

The baby pigs are taken from the uterus and are raised in incubators for a month, receiving a sterile ration. At about a week of age, they start getting regular feed and are adapted to ordinary outside conditions.

At four weeks of age, the pigs are vaccinated against cholera and are taken by the farmer to a place which has been cleared of all hogs for at least a month. The pigs are then raised as breeding stock, and are kept entirely free from pigs not born by this method. All replacements, gilts or boars must also come from pig laboratories or other SPF herds, to avoid re-introducing virus pneumonia or atrophic rhinitis.

The hysterectomy technique was developed by George Young, formerly a veterinary physiologist at the University's Hormel Institute and now veterinary division head at the University of Nebraska. The technique is controlled by a University of Minnesota patent, and all laboratories performing it are licensed.

Research already conducted shows that SPF swine herds can be kept free of pneumonia or rhinitis for at least three years--and possibly indefinitely.

However, Solac points out some limitations. SPF hogs are no better than their inherited characteristics. The hysterectomy technique can't replace a good breeding program. Daily gains, feed efficiency, and carcass quality depend primarily on inheritance and general management during the growing period.

Naturally, SPF hog production will face some problems. One will be in developing and maintaining SPF breeding herds of superior performance. Another will be setting up a system for health and performance certification of SPF swine.

Currently, representatives of at least five hog breeds are taking part in the SPF program, along with commercial cross-bred herds.

Solac advises producers considering SPF hogs to get advice from their veterinarians before starting the program. And if they choose the program, they will need continuing advice on keeping the herd free from disease.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota

To all counties
For immediate release

August 23, 1960

NEW WINTER RYE PRODUCING WELL IN STATE FIELDS

Elk winter rye is giving a good account of itself in Minnesota fields.

A University of Minnesota extension agronomist, Harley Otto, says Elk is a good variety for farmers to plant early in September. Recommended seeding date for any winter rye is about September 1 in northern Minnesota and September 5-20 in southern counties.

In northern areas, Elk has consistently outyielded Adams and Caribou, the other recommended varieties, by about 12 bushels per acre.

The difference isn't as great farther south. Elk is ahead by 2 or 3 bushels per acre in southeastern counties. And since it's less winter hardy, Elk yields no more than the other two varieties in southwestern Minnesota fields.

Caribou is the most winter hardy of all three and Adams is in between.

Elk is slightly later maturing than the other two, has larger kernels, has medium height and good lodging resistance.

Otto says seeding rates should be based on seed size. Since Elk has large seed, he recommends 6 or 7 pecks per acre of that variety, compared to 5-6 pecks of Adams or 5 for Caribou.

Certified Elk seed is available now. Producers are listed in the Certified Seed Directory now available from the Minnesota Crop Improvement association office on the St. Paul Campus of the University. The county extension office also has copies.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 23, 1960

To All Counties

ATTN: Home Agents
For Immediate Release

NURSERY FURNITURE DESIGNS PRACTICAL

This year's nursery furniture is both attractive and useful.

New designs in nursery furniture are stressing usefulness for a child's growing years, say Mrs. Myra Zabel, extension home furnishings specialist and Charles Martin, extension family life specialist at the University of Minnesota.

The baby crib is the only piece of furniture intended distinctly for the nursery. Dressers and chests resemble adult furniture and are well adapted for service throughout a child's growing years. In some sets drawers and door panels are reversible, with painted colors on one side and a more sophisticated cane finish on the other.

A new crib with tubular steel frame has nylon sides which fold down so Mother can sit on the edge of the bed to dress the baby. The sides have safety locks on the outside. Headboard and footboard are covered with washable plastic.

New materials play an important part in making children's furniture useful. Plastic tops and finishes on play tables and dressers protect them from stains and scratches. Soil-resistant fabrics or vinyl upholstery make children's chairs easy to keep clean and attractive.

Safety is an important consideration to keep in mind when buying children's furniture. The University specialists suggest that you make these checks for safety:

. Be sure crib and playpen sides are "wedgeproof." Spindles or bars should be close enough together so that a baby cannot put his head between them.

. Check mesh playpen or crib sides to be sure the baby cannot get a foot hold in them, causing a fall.

. See that high chair legs are angled to prevent tipping.

. Look for broad, firm straps on high chairs and bathinette tops.

. Ask about the amount of lead in paint on any painted furniture. Paint should contain less than one percent of lead. Lead poisoning is serious and can cause death or permanent brain injury.

-rlr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 23, 1960

To all counties

4-H NEWS
For immediate use

COUNTY 4-H'ER
WINS TRIP TO
CONSERVATION CAMP

Activity in conservation has won for a _____ county 4-H member,

_____ _____, _____ a trip to the state 4-H conservation camp in
(name) (town)

Itasca State park September 15-18.

(Insert paragraph here on the conservation activities of your delegate.)

The State Conservation camp is being sponsored for the 27th year by the University of Minnesota Agricultural Extension Service in cooperation with Charles L. Horn, president of the Federal Cartridge Corporation. It will be held at the University of Minnesota's Itasca Forestry and Biological station.

Two mornings of the camp will be devoted to classes in land conservation, forestry, Minnesota plants and shrubs, outdoor living and water safety. At other sessions David Yaeger, Federal Cartridge Corporation, will demonstrate gun safety; Glenn Prickett, extension safety specialist, University of Minnesota, will discuss conserving yourself and others; and Roger Harris, University extension soil conservation specialist, will explain the new 4-H conservation project.

A park tour, conservation treasure hunt and a kittenball tournament have also been scheduled for the camp.

Banquet speaker Saturday evening, September 17, will be Parker Anderson, extension forester at the University of Minnesota. He will speak on "The Role of 4-H in Developing Conservation in Minnesota." Anderson has been a camp staff member each year since the camp was started 27 years ago.

Conservation camp is held each year to help 4-H members increase their appreciation of the importance of conservation and to help them recognize the part they can play in conservation work.

Some _____ Minnesota 4-H boys and girls are enrolled in the conservation and forestry projects.

-jbn-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 25, 1960

Immediate release

MORRISON CO. 4-H CLUB WINS AWARD WITH OPERATION MUDHOLE

Morrison county's Gay-Blades 4-H club has been named state 4-H Conservation Club of the Year, Wayne Bath, district 4-H club leader at the University of Minnesota, has announced.

"Operation Mudhole" has been the principal conservation activity of the club during the past year. This project has involved development of 80 acres of land for wildlife conservation. The land belongs to one of the club's adult leaders, Bert LeBlanc, Little Falls.

At intervals during winter and spring, club members worked at clearing a part of the land, piling brush they had cut for shelters at the edge of the field for pheasants, rabbits and other wild game. Once the land was cleared, they planted corn, cane and soybeans and left them standing for game. On another section of land they planted 3,000 Scotch pine trees to prevent soil erosion.

One of their most ambitious projects was building an artificial lake on a section of low marshland. The lake is fed by a nearby creek. Eventually they will plant fish in the lake. They planted wild rice in a small natural lake near the artificial lake.

Still another club activity was feeding and caring for 108 Chinese ringneck pheasants which were distributed to club members late in June. The birds will be released when they are eight weeks old.

Because the club has been selected as state winner in conservation, two of its leaders will receive a trip to the State 4-H Conservation camp in Itasca State park Sept. 15-18.

60-276-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 25, 1960 Immediate release

TOMATOES AT PEAK FOR CANNING

Buy your tomatoes now for canning, homemakers were advised today.

Tomatoes are at the peak of supply, of uniformly good quality and reasonably priced by the bushel and half bushel, according to Mrs. Eleanor Loomis, extension consumer marketing agent at the University of Minnesota.

Use only fresh, firm, red-ripe tomatoes for canning. Discard those with decayed spots and cracks. Scald the tomatoes just long enough to loosen the skins. Dip quickly into cold water. Cut out the hard core and peel the tomatoes, trimming off any green spots. Cut large tomatoes into halves or quarters if desired, but leave small tomatoes whole.

Either the raw pack or the hot pack is satisfactory for canning tomatoes, but extension nutritionists at the University of Minnesota say the cold pack is somewhat easier and gives superior flavor.

For the raw pack, put the peeled tomatoes into hot, scalded jars to 1/2 inch of the top. Press the tomatoes together gently until the spaces fill with juice. Add 1/2 teaspoon of salt to pints and 1 teaspoon to quarts.

For the hot pack, cut peeled tomatoes in quarters and bring them to a boil. Pack in hot, scalded jars to within 1/2 inch of the top. Add salt as for raw pack.

Wipe top and threads of the jar before adjusting the closure. If you use the self-seal closure, follow manufacturer's directions. Put lids on jars and screw the bands firmly tight. Lower the jars into the hot water bath and process pints for 35 minutes and quarts for 45 minutes. Count time when the water begins to boil. Keep the water at a rolling boil. As soon as the processing time is completed, remove the jars. Don't disturb lids on self-seal jars, but tighten closures on all others. When jars are cold, examine the seal, label the jars and store in a cool, dark place. Bands may be removed from jars about 12 hours after processing.

For the boiling water bath, the University nutritionists recommend a utensil that has a close-fitting cover and is deep enough to allow jars standing on a rack to be covered at least an inch with boiling water. Water should be hot but not boiling when jars are put into the canner. Add boiling water if necessary to bring the water level to 1 or 2 inches over jar tops.

60-277-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 25, 1960

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* For release at 10:30 a.m. *
* Monday, August 29 *
* * * * * * * * * * * * * * * * * * *

NEW STRAWBERRY DISEASE REPORTED BY MINN. PLANT PATHOLOGISTS

GREEN LAKE, WIS.--Minnesota strawberry growers have a new bacterial disease to contend with--angular leafspot.

The new disease was described today by two University of Minnesota plant pathologists at the annual meeting of the American Phytopathological society.

Angular leafspot was first identified in Minnesota in 1959. The disease was then found in 9 of 26 commercial berry fields examined in southeastern Minnesota. This year it has been found as far north as Crookston and Grand Rapids.

It cuts berry yields by reducing the photosynthetic activity--the manufacture of plant food in the leaves--of the plant and by causing a general decline in plant vigor.

Bill W. Kennedy and T. H. King, now studying the disease, said all commercial varieties of berries tested are susceptible to it.

Angular leafspot gets its name from the dark green, watersoaked, angular spots which first appear under the surface of the leaves. The disease later becomes visible on the upper leaf surface as red or brown spots of varying size.

The spots are covered with a milky slime when wet and have a thin, clear, scaly covering when dry.

Factors that promote vigorous plant growth seem to aid the disease. Plants with lush growth are usually first to be infected. Run-down plants appear to be the most resistant.

The disease apparently winters in dead leaves and spreads on droplets of moisture. Leaf loss becomes greatest when humidity is high. Consequently, infection is usually most severe in fields where sprinkler irrigation is used.

There's evidence that the disease, although discovered but recently, has been around a long time. Kennedy and King have identified the leaf spot on strawberry leaves collected in 1949. They found water extracts made from these leaves could infect wet leaves of growing plants.

This indicates the disease can survive in dead leaves for at least 10 years.

60-278-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 25, 1960

A FARM AND HOME
RESEARCH FEATURE

Immediate release

REPORT ISSUED ON EFFECTS OF GAMMA RADIATION ON BURROS

A preliminary report on how gamma radiation affects the central nervous system of burros was issued this week by researchers in the University of Minnesota's College of Veterinary Medicine.

Dr. Francis A. Spurrell reported results of studies in which five burros were subjected to 1,000 roentgens and six were irradiated at the 400-roentgen level. In each case, the radiation was aimed at the brain region.

The 1,000-roentgen level killed all five burros, within 4 and 24½ hours after irradiation.

This dosage of radiation had several effects. The burros before death all showed a change in rate of heart beat. Circulating blood showed a drop in white blood cells.

However, the radiation damage was apparently confined to the brain area itself. The researchers found no serious lesions in tissue sections from parts of the body not in the radiation field.

All burros receiving the 400-roentgen dose have survived so far. They showed the same type of neurological damage as animals receiving the heavier dose, but the damage wasn't as pronounced. Similarly, those irradiated with 400 roentgens also showed a drop in white blood cells, although the drop again wasn't as pronounced as in those getting the higher level.

(more)

When the scientists compared the burros irradiated at the lower level with burros receiving no radiation, they found psychological differences. The radiated burros reacted differently to tinkling bells and other stimuli.

Burros are used in this research because their total mass is about the same as a man. "Mass" refers to the total amount of body material. These burros average about 250-300 pounds each, which is similar in general size to humans.

Mass is important in determining radiation effects. Whether radiation will affect structures deep within the body often depends to a great extent on the animal's size. In larger animals, surface mass absorbs many types of radiation.

Also, the anatomical arrangement of the central nervous system and brain of the burro makes it possible to study local irradiation of these tissues.

The tests conducted so far are only preliminary. Further research will be aimed at determining effect of several different levels of radiation and what other effects each level will have on the animal.

The studies are conducted jointly by the College of Veterinary Medicine and the College of Medical Sciences, using the gamma irradiation facility on the Minneapolis campus. The burros are housed in accordance with rules for experimental animal care established by the American Medical association.

60-279-pjt

AGRICULTURAL EXTENSION SERVICE
INSTITUTE OF AGRICULTURE
UNIVERSITY OF MINNESOTA
ST. PAUL 1, MINNESOTA

University of Minnesota
U. S. Department of Agriculture
County Extension Services
Cooperating

Cooperative Extension Work In
Agriculture, Home Economics
And 4-H Clubs

August 25, 1960

TO: County Agricultural Agents

SUBJECT: Fall Cattle and Hog Outlook Meetings
(Counties listed on attached schedule)

We have completed a schedule for the Fall Cattle and Hog Outlook Meetings. A copy is attached. These meetings have been set up as evening meetings and the program to be covered by the specialist teams will be sent you later.

Will you check the dates and if they are not satisfactory, let me know right away? If at all possible, I hope you can accept them since it is very difficult to make changes.

We are enclosing mats of the specialists to appear on the program and news releases that can be used in advertising the meetings. Also enclosed, is a letter from Mr. Egertson that you may find of value in setting up your outlook meeting in auction barns.

Sincerely

Robert M. Douglass

Robert M. Douglass
State Leader, Program Planning

RMD:ms
Enc.

FALL OUTLOOK MEETINGS

Date	County	Specialists
September 13	Swift	Routhe and Hasbargen
September 14	Chippewa	Routhe and Hasbargen
September 15	Nobles	Routhe and Hasbargen
September 16	Murray	Routhe and Hasbargen
September 19	Lincoln	Routhe and Pederson
	Martin	Egertson and Thomas
	Big Stone	Hasbargen and Arthaud
September 20	Rock	Routhe and Pederson
	Freeborn	Egertson and Thomas
	Lac qui Parle	Hasbargen and Arthaud
September 21	Renville	Routhe and Pederson
	Mower	Egertson and Thomas
	Pipestone	Hasbargen and Arthaud
September 22	Redwood	Routhe and Pederson
	Fillmore	Egertson and Thomas
September 26	Brown	Routhe and Egertson
	Dakota	Thomas and Jacobs
	Todd	Hasbargen and Pederson
September 27	Jackson	Routhe and Egertson
	LeSueur	Thomas and Jacobs
	Grant	Hasbargen and Pederson
September 28	Faribault	Routhe and Egertson
	Blue Earth	Thomas and Jacobs
	Wilkin	Hasbargen and Pederson
September 29	Rice	Routhe and Egertson
	Wright	Thomas and Jacobs
	E. Otter Tail	Hasbargen and Pederson
September 30	Lyon (Tracy)	Routhe, Egertson, Jacobs
October 7	Clay	Hasbargen and Jacobs
October 10	Traverse	Hasbargen and Egertson
	Dodge	Thomas and Arthaud
October 11	Goodhue	Thomas and Arthaud
	Meeker	Hasbargen and Egertson
October 17	Norman	Hasbargen and Jacobs
October 18	W. Polk	Hasbargen and Jacobs
October 19	E. Polk	Hasbargen and Jacobs
October 20	Pennington and Red Lake	Hasbargen and Jacobs

AGRICULTURAL EXTENSION SERVICE
INSTITUTE OF AGRICULTURE
UNIVERSITY OF MINNESOTA
ST. PAUL 1 MINNESOTA

University of Minnesota
U. S. Department of Agriculture
County Extension Services
Cooperating

Cooperative Extension Work in
Agriculture, Home Economics,
and 4-H Clubs

August 22, 1960

TO: County Agricultural Agents having fall outlook meetings

Enclosed are a couple of suggested news articles and a circular letter which may help you publicize your coming outlook meeting. Add or delete information as you see fit. We suggest that you use one article per week for two weeks before the meeting and mail the circular the week prior to your outlook meeting. Your own personal remarks on radio or television shows will, also, be an effective way to publicize this meeting.

We are also sending mats of speakers which can be used in your local newspapers.

Sincerely

K E Egertson

Kenneth E. Egertson
Extension Economist in Marketing

Phil Tichenor

Phillip J. Tichenor
Extension Information Specialist

KEE:PJT:js

Enclosures

Suggested circular letter for Farm Outlook Meetings

BEEF -- HOG

OUTLOOK MEETING

# # #

PLACE

# # #

DATE

* What's ahead for hog prices? Beef prices?

* Which is the better choice--calves or yearlings?

* When will fat stock markets hit the 1961 peak?

* How will consumer demand affect livestock profits?

* What's the most profitable feeding system for cattle?

Dear Friend

What will happen to beef and hog profits in 1961? Where are market prices headed? Are choice feeders a better bet than common ones? And will good returns of 1960 mean a glut of cattle next year?

No one has a perfect crystal ball, but there is a way to base your decisions on a careful analysis of the livestock outlook.

We're inviting you to a _____ County Farm Outlook Meeting, (place and date).
Two University of Minnesota Agricultural Extension men who specialize in market trends will help you answer all these perplexing questions.

The specialists will be (names and positions).

Major emphasis will be on the outlook for beef cattle and hogs. Printed information on other farm enterprises will also be available.

*Here's a bonus feature: In a special demonstration, the specialists will explain profit prospects and feeding programs for each grade and class of beef cattle. They will use live animals as examples, and the cattle will be on display before the meeting if you'd like to look them over.

We believe every farmer can benefit from this meeting. Making the right decisions can easily determine whether you can buy more land, a new tractor or that new freezer the family wants.

We hope to see you there. So, plan to come and bring a neighbor too.

Sincerely

County Agent

* This paragraph should be deleted or changed if you are not planning to have cattle on display.

Outlook Meeting Story #1

FARM OUTLOOK MEETING SET

Will beef cattle and hogs be good profit-makers in 1961?

Here's an opportunity to hear what the specialists have to say about it. A discussion on beef and hogs will highlight the _____ County Farm Outlook meeting (date and place), according to County Agent_____.

The program will also feature an interpretation of supply and demand, forecasts of expected prices, profit possibilities and management tips.

Major emphasis will be put on cattle and hogs, but printed outlook information on other farm enterprises will also be available and questions relating to these enterprises will be welcomed.

* An added attraction at the meeting will be a demonstration of cattle of various grades and classes--including the profit outlook for each, how they should be fed and when they should go to market. The cattle will be on display before the meeting starts.

Speakers at the session will be (names and positions).

# # # # # # #

* This paragraph should be deleted if you are not having an outlook meeting with cattle on hand.

Outlook Meeting Story #2

BEEF AND HOG PICTURE TO BE VIEWED AT OUTLOOK MEETING

Will feeder cattle prices come down this fall? Or is this a year to buy early and aim for a peak market? Will hog prices hold up in 1961? Or are we in for a year of heavy supplies and lower prices?

This type of question will get some thorough discussion at the (county) County Hog and Beef Outlook meeting (date and place).

A pair of University of Minnesota extension men, (name and position) and (name and position) will analyze short-term and long-run trends in the beef and hog industries. They will then explain how these trends affect individual farmers' plans.

Here are some of the main questions for discussion:

1. Cattle herds have been building up for three years. How will this trend affect beef prices and cattle feeders' incomes in 1961?

2. How much effect will consumer demand have on 1961 beef prices?

3. Will high hog prices and favorable feeding ratios of 1960 trigger a boost in farrowing next year?

4. What are the profit prospects for different grades and classes of cattle in 1961? and what income can hog farmers expect in the future?

Other questions will also be taken up. Hog producers and cattle feeders will be encouraged to take part in the discussion and bring up any questions they wish.

* A cattle display and demonstration on grades, profit prospects and feeding programs will also be held. Cattle producers may visit the display before the meeting.

All _____ County farm families are invited to the meeting. It starts at _____.

# # # # # # # #

* This paragraph should be deleted if you are not having an outlook meeting with cattle on hand.

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 25, 1960

For release to hometown
newspapers week of Aug. 29

LOCAL TEACHER ATTENDS HOME ECONOMICS MEETING

_____ _____, home economics instructor in _____ high
(your name)
school, was one of more than 400 high school and college home economics teachers who attended their annual conference on the University of Minnesota's St. Paul campus Aug. 22-26.

The meeting was sponsored by the Minnesota State Department of Education and the University of Minnesota.

"Building for Breadth and Depth in Home Economics Education" was the theme of workshops on teaching various aspects of home economics and of the keynote speech by Anna Carol Fults, chairman of the department of home economics education, Southern Illinois university, Carbondale, Ill.

"When we help students to discover, become aware of and more sensitive to problems in all areas of home and family living, we create an opportunity for achieving depth as students are challenged in the analyses and solutions of problems," Miss Fults declared.

Conference leaders, besides Miss Fults, were three staff members of the University's School of Home Economics, Mrs. Marie Christenson, Florence Ehrenkranz and Lura Morse.

-jbn-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 26, 1960

SPECIAL
* * * * * * * * * * * * * * * *
* For release at 2 p.m. *
* Saturday, August 27 *
* * * * * * * * * * * * * * * *

T. H. FENSKE NAMED NATIONAL FRATERNITY PRESIDENT

EAST LANSING, MICH.--T. H. Fenske, associate dean of the Institute of Agriculture at the University of Minnesota, today was named 1960-62 president of Alpha Gamma Rho, national agricultural fraternity.

The announcement was made during the fraternity's 36th annual convention on the Michigan State university campus.

Fenske has been a first vice president of the fraternity for the past two years.

Alpha Gamma Rho has 17,000 members in 37 college and university chapters around the country. Main function of the fraternity is to provide a college home for students and stimulate development of character and leadership.

Fenske has held his current position at the University of Minnesota since 1956, and has been on the St. Paul campus since 1947. He is a native of Bemidji, received his B. S. in 1929 from the University, and was superintendent of the University's West Central School and Experiment station, Morris, from 1938 until coming to St. Paul. He first joined the faculty at the West Central school in 1929.

He earned his M. S. from the University in 1939 and in 1954 received an honorary Doctor of Science degree from the University of North Dakota.

-pjt-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 29, 1960

SPECIAL
* * * * * * * * * * * * * * * * * *
* For release at 10:30 a.m. *
* Tuesday, August 30 *
* * * * * * * * * * * * * * * * * *

SULPHUR AFFECTS PLANT DISEASES

GREEN LAKE, WIS.--Maybe the best way to get rid of plant fungus diseases is to starve them to death. At least that idea is supported by findings reported today by University of Minnesota plant pathologists.

W. A. Haglund and T. H. King said some fungi that attack canning peas depend on sulphur for food. The parasite gets its sulphur supply from the plant it lives on.

The researchers tried growing the fungus on different concentrations of sulphur-containing compounds.They found if a reduced form of sulphur wasn't available the fungus did not grow.

This gives plant scientists two possible new ways to deal a blow against fungus diseases. One way is to look for plants that produce quantities of available sulphur so low that the fungus can't survive. Another way is to develop new plant varieties that don't produce available sulphur at all.

Haglund and King spoke at the annual meeting of the American Phytopathological society.

Preliminary results by Haglund and King indicate that the sulphur requirement may have something to do with the resistance of canning peas to fungus root rot. Field tests have shown that root rot alone can cause up to a 40 percent loss in yields and is one of the limiting factors in the production of canning peas in Minnesota.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960

To all counties

For immediate use

BOXELDER BUGS ASSEMBLE FOR HOME INVASION

Calk up the cracks in your house foundation and make sure your windows, screens and doors have a good, snug fit. One of the biggest invasions of boxelder bugs in years is set for a move to winter quarters.

When cool weather comes Minnesota home owners will become unwilling hosts to millions of the half-inch long, black-and-red visitors.

John Lofgren, extension entomologist at the University of Minnesota, says boxelder bugs have had a good year. The warm season has been ideal for their development.

The bugs spend the summer outdoors and feed mainly on young seeds of the boxelder tree. Now they're about ready to crawl into any crack or crevice they find that offers a protected place to spend the winter.

Their search leads them into basements, garages and houses. Although the insects do no damage to homes or furnishings they become nuisances just by their presence.

Normally the bugs are inactive and hibernate during the winter but when they find themselves in a heated building they crawl around all winter long.

Lofgren says the boxelder bug is hard to kill with insecticides. Common household bug killers have little effect on bugs inside the house; best treatment for them is a broom and a dust pan.

You may get fairly good results by spraying bugs as they congregate on outside walls or tree trunks before moving to the house. Use a one percent solution of Diazinon or dieldrin. Spray residues will also kill some of the bugs that crawl over treated surfaces.

When using insecticides, be sure to follow the directions and precautions on the label.

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-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960

To all counties

For immediate use

A Farm and Home Research Report

LAYING FLOCK PROFITS FALL IN MINNESOTA

Even though hens are laying better than ever, returns from farm laying flocks have dropped sharply in Minnesota.

As a result, many farmers have dropped their poultry operations, say G. A. Pond and S. A. Engene, University of Minnesota agricultural economists.

They found that in the Southeast Minnesota Farm Management association, return over feed cost rose from $.99 per hen in 1930-34 to $1.46 in the 1940-44 period. In 1955-59, however, the return was down to $1.39 and in 1959 was only 39 cents.

In the Southwest association, the return figure fell from $1.72 in 1940-44 to a mere 9 cents last year.

Yet, annual egg production had jumped by 4-5 dozen per hen during the last 15 years in both associations.

Return over feed cost is what the farmer has left to pay for labor, shelter and equipment, other cash costs, and to provide a return on his investment.

The major reason for the low return over feed costs has been the small rise in price of eggs, compared to other farm products. Nor do the economists hold out much hope for this situation to improve in the near future. They feel that only farmers with high efficiency will be able to keep farm laying flocks.

Because of changing price levels, the economists found it more meaningful to compare return over feed cost with other items. For example, in 1930-34 the average return over feed cost per hen paid the wages of a man for about 5 hours.

The typical farmer then spent about 2 hours per hen, leaving a value of 3 hours per hen as a return for his other costs. Since 1950, the return over feed cost has been equal in value to 2 hours or less of labor.

Therefore, only farmers with high labor efficiency or higher-than-average returns per hen have received good returns for labor and other costs.

# # # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960

To all counties

For immediate use

A Farm and Home Research Report

FEEDER CATTLE COST, RETURNS ARE REPORTED

How much profit are feeder cattle bringing farmers in Minnesota?

A summary of costs and returns from 67 feeder cattle lots in southern Minnesota gives you some idea. University of Minnesota agricultural economists D. E. Erickson and T. R. Nodland took a close look at feeding efficiency, gains, labor and feed costs, prices, and other records.

One thing they checked was return above every $100 worth of feed for different type cattle. The return averaged $135 for 20 lots of short-fed yearlings and two-year olds, the same amount for long-fed yearlings, and $123 for long-fed calves.

With each type, however, results varied widely. Take the long-fed calves, for example. The 23 above-average lots returned $142 per $100 feed, while the 16 below-average lots returned only $96.

One important difference was prices paid for the calves. The farmers with above-average returns had paid about 32 1/2 cents per pound for their feeder calves, compared to nearly 35 cents for those with below-average returns.

Farmers making above-average return on calves also did better on gain per head daily, selling price (more than $1 per 100 pounds above the low-return lots) and feed efficiency.

For each 100 pounds gain, farmers in the above-average return group fed 547 pounds grain, 38 pounds supplement and 274 pounds roughage. In comparison, these with low returns had fed 580 pounds grain, 89 of supplement and 426 pounds roughage.

Similar differences separated the high and low return producers of yearlings and two-year-olds. In each case, farmers whose cattle made faster gains had lower feed requirements and better returns over feed cost.

# # # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960

To all counties

For immediate use

FARM FILLERS

Overseas markets are no small matter to farmers. The U. S. in 1958 had 17 percent of the total world trade in agricultural products, according to agricultural economists at the University of Minnesota. Our share has been that high since 1956. Lowest in the last decade was 12 percent in 1953. Out biggest foreign markets for farm goods are the United Kingdom, Canada, Japan, the Netherlands and West Germany, in that order. The U.K. bought $425 million worth of U. S. farm exports in 1959 and Canada took $385 million.

* * * *

Keep your eyes open for blind corners, a University of Minnesota extension safety specialist advises. Glenn Prickett warns that corn, weeds, bushes and trees are shutting off the view at intersections throughout the state. Result: more danger on country roads. So why not cut off the corn at corners and give both livestock and drivers a break? If bushes and trees are in the way, cut them or tell the road supervisor. As a rule, there should be a clear view of 300 feet down the road as the driver approaches the intersection.

* * * *

Mange mites, lice, roundworms and lungworms can take a big slice out of hog profits--unless you act against them. Ways to deal with all these critters are spelled out in a new University of Minnesota extension folder, "Pests and Parasites of Hogs." Authors are J. A. Lofgren, extension entomologist and R. B. Solac, extension veterinarian. The county agent's office has copies.

* * * *

A new bacterial disease of strawberries is being watched closely by University of Minnesota plant pathologists. It is called angular leafspot and was found in several areas of the state this year, after being seen for the first time in 1959. It apparently winters in dead leaves and spreads on moisture droplets. Studies now are aimed at finding which varieties are resistant.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960

To all counties

ATT: HOME AGENTS
For immediate release

GOOD EATING AHEAD FOR SEPTEMBER

Many of the foods that have been welcome additions to August menus will continue plentiful during September.

Broiler-fryers are right at the top of the U. S. Department of Agriculture's list of plentiful foods for September. About 5 or 6 percent more frying and boiling chickens are expected to be marketed than a year ago. These young birds are excellent for barbecuing outdoors, but they are equally delicious barbecued in the oven or baked whole or cut in pieces. Oven baking takes only about an hour.

Turkey is also due to be plentiful in September. Heavy birds will be in largest supply.

Prices of lamb should average considerably below those of a year ago. Supplies are above those of last year.

Melons will steal the headlines among plentiful fruits. There's a heavier than usual supply of cantaloupe, watermelon and honeydew melon from the mid-summer and late summer crops. The late summer crop of watermelon is running 57 percent above average. Persian, Cranshaw and casaba melons will also be on markets.

Cantaloupe rates high in vitamins A and C, according to University of Minnesota extension nutritionists. Half of a large cantaloupe may provide the vitamin C you need for the day.

County on lots of late summer vegetables from home or local market gardens to pep up September meals. Sweet corn, tomatoes, peppers and green beans, onions, cucumbers, squash, carrots, cabbage, eggplant, potatoes and lettuce are among vegetables that will be in large supply to give variety to the dinner menu.

Grocery shelves will be well stocked with peanut butter, smooth or crunchy, ready for the back-to-school demand.

-jbn-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960

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* For release at 9:35 a.m. *
* Wednesday, August 31 *
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MUTATION AND INTERMINGLING PRODUCE NEW RACES OF STEM RUST

GREEN LAKE, WIS.--Further proof that new races of wheat stem rust can be produced without any help from the barberry bush has been reported at the annual meeting of the American Phytopathological society.

Wheat stem rust spends the summer on wheat, winters in a dormant spore form and moves to the barberry in the spring. New races can be produced by mating and crossbreeding only during the time spent on the barberry.

For years plant breeders believed the period on the barberry was the only time that new races could be produced. However, plant scientists are finding other ways that races can originate.

J. B. Rowell, University of Minnesota plant physiologist, has experimentally produced new races by mutation. His work indicates that mutations can occur fairly often in the large plant populations in a farmer's field.

Rowell worked in cooperation with USDA scientists W. Q. Loegering, Maryland, and H. R. Powers, North Carolina.

W. N. Garrett, another Minnesota scientist, found that in heavy rust infections rust hyphae (threadlike structures) of two races can intermingle and transfer genetic material to form a new race.

This means that wheat is in constant danger of attack by new races of rust which originate during the growing season.

These findings also give weight to the idea that genetic make-up of both plant and rust determine a plant's rust resistance. Among its genes (units of inheritance) the rust has several which determine its ability to attack wheat. Wheat, on the other hand, has matching genes which regulate its ability to resist attack.

When new rust races develop by mutation or intermixing, chances are that the complement of genes governing disease reaction will be altered. Wheat varieties which were previously resistant may then be in danger of attack.

These findings give plant scientists a better concept of the principles governing the genetic relationship between rust and wheat. This knowledge could aid in the development of new wheat varieties with a wider range of rust resistance.

Since 1950 rusts have destroyed nearly 500 million bushels of small grains in the U. S. Most of the loss has been in Minnesota, North Dakota, South Dakota and Montana.

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60-280-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960

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* For release at 1:30 p.m. *
* Wednesday, August 31 *
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TATTLE-TALE PLANT REPORTS SICK CLOVER

GREEN LAKE, WIS.--A tattle-tale plant long used to identify virus infection in potatoes, is giving Minnesota scientists a speedy way to detect virus diseases in red clover.

Red clover plants seem ashamed to admit they're victims of a virus and often don't show disease symptoms for a month or more after they're infected. Gomphrena globosa, a clover-like plant of tropical origin, has no qualms about admitting sickness. When the plant comes in contact with sap from infected clover its leaves break out in spots within three days.

Therefore, Gomphrena offers a fast detection method to test new clover varieties for virus resistance in days instead of weeks.

R. W. Goth and Roy D. Wilcoxson, plant pathologists at the University of Minnesota, reported the new detection technique at the annual meeting of the American Phytopathological society.

The scientists point out that temperature has an effect on the speed with which Gomphrena reacts to clover virus. The reaction comes within three days at 85 degrees. At 65 degrees it takes 12 days.

Also, Gomphrena isn't selection in its reactions. Different strains of virus produce different effects on red clover but Gomphrena treats them all alike. It gives the same reaction to each one.

However, these peculiarities don't limit the usefulness of Gomphrena for infection detection.

Virus diseases in clover cost Minnesota farmers a lot of money each year by crippling plants enough to seriously cut seed and forage yields. Some Minnesota fields have a virus infection rate of 50 percent or more.

Best solution to the problem is the development of new clover varieties with resistance to the virus. Gomphrena stands ready to help.

60-281-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960

* * * * * * * * * * * * * * * *
* For release at 2 p.m. *
* Wednesday, August 31 *
* * * * * * * * * * * * * * * *

TEMPERATURE AND LIGHT AFFECT WHEAT STEM RUST SHOWN

GREEN LAKE, WIS.--Temperature and light have a lot to do with how well a wheat variety can resist attack by a race of stem rust.

While a farmer can't do much about changing these conditions for his fields, these findings should help plant breeders check rust resistance of new wheat varieties.

Another possible result is the development of wheat varieties "tailor made" for certain climatic conditions.

C. W. Miller, University of Minnesota plant pathologist, reported these findings today at the annual meeting of the American Phytopathological society.

Problem has been that under some conditions wheat varieties considered moderately resistant to wheat stem rust have developed severe rust infections.

Miller and Helen Hart, another plant pathologist, studied the reaction of four races of wheat stem rust on Kubanka wheat. They found at 1,500-foot candles (daylight) and 85 degree temperature, all four of the races developed spores on just about all of the seedlings tested. At 100-foot candles (twilight) and 65 to 80 degree temperatures almost no rust spores were produced.

But somewhere between these light conditions and at some temperature in the 65 to 80 degree range, each race of rust had a certain combination of temperature and light which favored its attack on wheat.

By using strictly controlled temperature-light combinations, plant breeders can now test the rust resistance of a wheat variety more accurately than ever before.

Also, under some growing conditions two or more races of stem rust may look and act alike. By changing temperature and light conditions, the races may be separated and identified.

60-282-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
August 30, 1960 Immediate release

BEEF CATTLE-GRASSLAND FIELD DAY TO BE SEPT. 22

Better rations for higher beef profits will be explained to visitors at the Beef Cattle-Grassland Field Day Thursday, Sept. 22, at the University of Minnesota's Rosemount Agricultural Experiment station.

An expected 500 cattle feeders, farm leaders and others will hear results of the University's most recent beef cattle feeding research.

Several key questions on beef feeding will be discussed. For example, O. E. Kolari, livestock scientist, will report on amount of hay to feed fattening steers and heifers on silage and corn. He will report trials in which hay has been limited to none, 2 pounds, 4 pounds and 5 pounds daily.

Researcher J. C. Meiske will report results of wintering low-grade calves on early-cut and medium-cut oat silage and alfalfa-brome silage.

Other topics will include performance on fertilized vs. unfertilized pastures, effect of feed additivies such as stilbestrol, antibiotics and vitamin A, and energy levels for steers.

Reporting on the vitamin A problem will be A. L. Neumann, noted authority on beef cattle nutrition from the University of Illinois.

A special demonstration on the kind of cattle to feed this year will be conducted by L. S. Doran, manager of stocker and feeder operations for Central Livestock Order Buying company, South St. Paul. Some tips on how to feed different grades will be listed by R. E. Jacobs, extension livestock specialist from the University of Minnesota.

The Field Day program starts at 10 a.m. The student Block and Bridle club will serve a noon barbecue lunch.

60-283-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 1, 1960

SPECIAL

Immediate release

INTEREST GROWS IN "DISEASE FREE" BABY PIG TECHNIQUE

Minnesota hog producers will probably hear more and more about SPF (specific pathogen-free) hogs in the future.

SPF pigs are the result of a new technique in swine disease control. The pigs are taken from their dams a couple of days before normal farrowing time by hysterectomy, and are raised under disease-free conditions for the first month. Six laboratories that perform the operation have already been established in the state.

The idea is to then put the pigs on farms which have been cleared of all hogs for at least a month, and thereby "break the chain" in either or both of two serious diseases--virus pneumonia and atrophic rhinitis. It's possible other diseases may be affected, too.

According to Raymond B. Solac, extension veterinarian at the University of Minnesota, infection from both pneumonia and rhinitis apparently is passed from the mother pig to the young through her breath shortly after birth. Under normal farrowing conditions, a sow infectedwith rhinitis is almost certain to infect the baby pigs.

However, when pigs are removed by hysterectomy, infection is eliminated, since the young are kept free from air the sow exhales.

SPF hogs are sometimes called "disease free." That term is a bit misleading, Solac says, since many ailments are not affected and evidence is unclear on many, except for pneumonia and rhinitis.

Here's how a hog producer might use the SPF technique. Suppose his herd has a long history of atrophic rhinitis and he wants to get rid of it, but doesn't want to lose the benefit of his breeding stock. He selects his best sows, has them bred, and sends them to the laboratory about 2-4 days before farrowing time.

(more)

The laboratory men take the sows to a local slaughter house, and surgically remove the complete uterus. The sow is slaughtered for processing.

The baby pigs are taken from the uterus and are raised in incubators for a month, receiving a sterile ration. At about a week of age, they start getting regular feed and are adapted to ordinary outside conditions.

At four weeks of age, the pigs are vaccinated against cholera and are taken by the farmer to a place which has been cleared of all hogs for at least a month. The pigs are then raised as breeding stock, and are kept entirely free from pigs not born by this method. All replacements, gilts or boars must also come from pig laboratories or other SPF herds, to avoid re-introducing virus pneumonia or atrophic rhinitis.

The hysterectomy technique was developed by George Young, formerly a veterinary physiologist at the University's Hormel institute and now veterinary division head at the University of Nebraska. The technique is controlled by a University of Minnesota patent, and all laboratories performing it are licensed.

Research already conducted shows that SPF swine herds can be kept free of pneumonia or rhinitis for at least three years--and possibly indefinitely.

However, Solac points out some limitations. SPF hogs are no better than their inherited characteristics. The hysterectomy technique can't replace a good breeding program. Daily gains, feed efficiency and carcass quality depend primarily on inheritance and general management during the growing period.

Naturally, SPF hog production will face some problems. One will be in developing and maintaining SPF breeding herds of superior performance. Another will be setting up a system for health and performance certification of SPF swine.

Currently, representatives of at least five hog breeds are taking part in the SPF program, along with commercial cross-bred herds.

Solac advises producers considering SPF hogs to get advice from their veterinarians before starting the program. And if they choose the program, they will need continuing advice on keeping the herd free from disease.

60-286-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 1, 1960

Immediate release

RURAL COMMUNITIES NEED SELF-ANALYSIS, SOCIOLOGIST SAYS

What's ahead for the rural community? Will it grow, decline or stay the same?

Each village, town or city must answer these questions for itself, according to George Donohue, extension rural sociologist at the University of Minnesota.

He says communities needn't sit back and be run over by the "steam roller of social change." They can determine their own destiny, if they'll make a careful self-analysis of their interests, goals on which local people agree and steps needed to reach these goals.

However, Donohue has this warning: Communities without carefully defined goals and values may continue, as many have, as loose coalitions of splintered interests, buffeted about by population and economic changes.

The challenge is clear. It's up to citizens and community leaders.

So far, Donohue feels, the challenge hasn't been accepted in enough communities. Too often, they are content to drift along with social change and accept its consequences. More time must be spent by individuals and community groups reflecting on where they want to go and why.

In general, communities of under a thousand people in the past 20 years--except for unique cases--have tended to stand still or decline. Some have disappeared.

Communities with between 1,000 and 2,000 people, however, may expect to grow into more complex centers or go the way of smaller ones. Still larger centers are even more likely to survive.

In spite of the growth in national population, rural communities as a whole in Minnesota, have changed little, with the major population increases occurring around big cities. That pattern of growth will probably continue through 1960.

(more)

Therefore, rural communities can't quietly wait for more people. According to current predictions, agriculture is the one industry that will see a decline in employment potential. But Donohue says this decline still doesn't mean a hopeless case for rural centers struggling to keep their people.

Partly offsetting the drop in numbers of full-time farmers is an increase in rural home owners and part-time farmers. Most of the second two groups work in service-type businesses, which will probably grow much faster than agriculture and other production industries.

The U. S. Department of Labor predicts that by 1970, about 10 million persons in the nation will be employed in service occupations, compared to about 5 million in agriculture. Back in 1954, both occupations had about the same number of people--about 7 million each.

This trend is important to rural communities--most of which sell services rather than produce goods. Now, the increased size and efficiency of farms has brought a need for even more services. More people are needed to store, process and distribute farm products.

With fewer people in farm production and more in service employment, rural communities can look forward to more and more differences among their people. Goals and desires of farm, rural non-farm and town people will have to be jointly accommodated.

Such diversity in interests, however, needn't spell weakness and disintegration. In fact, Donohue says diversity may very well contribute to a stronger and more ideal community. It already has in cities. Whether the differences can be accommodated in rural areas depends on the communities themselves. They must assess these interests to find where they conflict with, complement or supplement each other. And they must find the common thread that provides a unifying force.

60-284-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 1, 1960

HELPS FOR HOME AGENTS
(These shorts are intended as fillers for your radio programs or your newspaper columns. Adapt them to fit your needs.)

In this issue:

HOME FREEZING

Frozen Muskmelon

Families with home freezers can take advantage of the bountiful supplies of muskmelons on markets this fall by freezing some for use in fruit cups this winter.

Select firm-fleshed ripe melons with well developed netting. If the melon is slightly immature, quality when frozen will be inferior.

Here are directions for freezing from the University of Minnesota food processing laboratory: Wash the melons, halve them and remove the seeds. Cut the flesh into cubes or balls the size of large marbles. Pack in freezer containers and cover with cold sirup made in the proportion of 1 cup of sugar to 2 cups of water.

Be sure to serve the melon partly frozen.

* * * * * *

Frozen Watermelon Not Satisfactory

Though muskmelon freezes well, frozen watermelon is not a very satisfactory product. University of Minnesota frozen foods specialists say watermelon loses flavor in freezing. If you want to experiment by freezing some watermelon to use in a melon ball cup, be sure to serve it icy. If it's completely thawed out, it is mushy and flavorless.

-jbn-

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

CLOTHING

Fashions for the Young

Young back-to-schoolers will sport aprons, pinafores and overskirts this year. The corduroy jumper has taken a new fashion twist in tunic jumpers worn over complete dresses, thus combining a classroom fashion with an after-school one.

* * * * * *

Corduroy Coats for College

For college, designers use wide wales in luxurious coats, often lined and collared in deep pile, dyed to match. Made water repellent, these coats offer the bonus of a warm raincoat for late fall and early spring.

* * * * * *

Most Becoming Skirt Length

The skirt length becoming to most women is mid-calf. Athelene Scheid, extension clothing specialist at the University of Minnesota, explains that mid-calf is actually an area of about 3 inches, which allows us to blend fashion and becomingness into a pleasing length.

Hence, when fashion says skirts are just below the knee, as it does this fall, we can shorten our skirts 1½ inches above mid-calf, be in style and still have an attractive length. When skirts are long, we can have them 1½ inches below mid-calf and still find the length becoming.

* * * * * *

Lengths for Straight and Full Skirts

Should all your skirts and dresses be the same length?

No, says Athelene Scheid, extension clothing specialist at the University of Minnesota. Slim skirts are usually ½ to 1 inch longer and full skirts are ½ to 1 inch shorter than the established length for the season. Coats should be just long enough to cover the longest fashionable-length dress or suit in your wardrobe.

-jbn-

HOME FURNISHINGS

News in Tableware for Fall

New colors and styles are appearing in both dinnerware and glassware this fall.

The lavender and purple shades are as important for tableware as they are for other home furnishings. From plastic dishes to fine china, and from stemware to kitchen tumblers, shades of purple and lavender are available to complement your use of these colors in your house this fall.

Delightful, too, are the royal and other blues, the olive and kelly greens in dull satin glass from Italy. Mrs. Myra Zabel, extension home furnishings specialist at the University of Minnesota, says you'll find dull satin glass in goblets, water glasses, bowls and vases -- even in bathroom accessories.

* * * * * *

Furniture Designs Feature the Curved Look

Some of the designs in furniture for the coming year will emphasize rounded contours and curved lines rather than the trim, thin look of the past year.

Most dramatic use of the rounded look will be in furniture groups of traditional or period styles, according to Mrs. Myra Zabel, extension home furnishings specialist at the University of Minnesota. The molded curves are apparent in the outlines of backs, arms and fronts of furniture pieces.

The lush soft look will be emphasized by wider, deeper seats and thicker cushions. Detailing in chair and sofa skirts will often be scalloped, again picking up soft curved lines.

* * * * * *

Wormy Woods

Two woods gaining in popularity -- wormy chestnut and wormy ash -- give importance to the textured look in wood. Long favorites for picture frames, these woods now are available in a variety of furniture pieces. The interesting texture of these woods is from tiny holes and an irregular mottling, resembling worm-eaten woods.

# # # # # #

FOOD AND NUTRITION

Whole Milk For Children

Most pre-school children need whole milk rather than reconstituted dry skim milk.

Both skim milk and whole milk provide high-quality protein and are our best source of calcium, needed for bones and teeth. But, in addition, whole milk furnishes vitamin A which children need for growth, normal vision and healthy condition of skin and other tissues, according to Verna Mikesh, extension nutritionist at the University of Minnesota.

Studies show that many children get less vitamin A than they need. Some of our fruits and vegetables are good sources of vitamin A, but many children do not eat enough of these foods to get the necessary vitamin A. That's why it's important for children to have whole milk rather than skim milk.

* * * * * *

Temperature of Milk Important to Children

The amount of milk a pre-school child drinks is often related to the temperature of the milk. The child of 2, 3 or often 4 years prefers his milk lukewarm, not icy cold.

University of Minnesota extension nutritionists say that mothers should give special attention to temperature in giving milk to children 2 to 6 years old. By the time they are 5 or 6 years, however, many children come to appreciate cold milk. A study in two large nursery schools revealed that when the milk was at room temperature, each child drank 8 ounces of milk at a meal without any urging. But when the milk was served ice cold, the children drank far less milk.

* * * * * *

Give Toddlers Small Glasses of Milk

Small glasses that hold about three-fourths of a measuring cup of milk when full are easiest for young children to handle. When such a glass is poured about two-thirds full, the amount looks possible for the child to drink. Toddlers will usually drink one glass with the main part of the meal and one with dessert.

Children also like to set their own goals by pouring their milk from small pitchers. Often they will drink more when they pour it themselves.

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University Farm and Home News
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University of Minnesota
St. Paul 1, Minnesota
September 1, 1960 Immediate release

COMMERCIAL FEED USE UP IN MINNESOTA

Minnesota livestock and poultry are eating up more commercial feed than ever.

Average annual sales of commercial feeding stuffs from 1955-58 were up a fourth over the 1949-54 period, according to Harold Pederson, extension economist at the University of Minnesota.

In the same period, total U. S. commercial feed sales increased by a fifth.

Yet, in spite of the increase, the average number of grain-consuming animal units in the country stayed about the same during the two periods.

Biggest single type commercial feeds sold in Minnesota during 1958 was poultry, using 37 percent of the total. Other uses were hogs, 19 percent; dairy cattle, 14 percent; milling by-products, 23 percent; and miscellaneous feeds, 7 percent. Poultry and by-products uses as a percent of the total decreased in the 1955-58 period, compared to 1949-54, while percentage of dairy and hog feed sales increased.

Although numbers of laying hens dropped sharply in Minnesota, the total amount of commercial poultry feed sales went up. The reason is that the drop in layers was largely offset by an increase in commercial broilers and turkeys. Because of this shift, sales of poultry scratch feeds declined while concentrate mashes increased markedly.

Since 1953, both dairy and hog feed sales have increased. Amount of calf meals sold went up 100 percent from 1953-58 and dairy concentrates went up about 140 percent--even though cow numbers declined slightly.

Hog feed sales fluctuate more from year to year, but the trends for all hog and pig feeding stuffs is definitely upward, Pederson reports. Hog concentrate sales, for example, were 55,000 tons in 1953, 102,000 in 1955 and 141,000 in 1958.

Feed concentrates, by the way, have shown the most consistent growth in annual sales of all commercial feeds in Minnesota. Dairy, pig and hog concentrates together totalled less than 37,000 tons in 1949, but increased to over 250,000 by 1958. Turkey mashes jumped from 55,000 to 111,000 tons and soybean oil meals went from 46,000 to 80,000 tons.

60-285-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 1, 1960 Immediate release

4-H DRESS REVUE QUEEN IS FROM LYON COUNTY

Minnesota's 4-H dress revue queen is 16-year-old Betty Green of Lynd. She is the daughter of Mr. and Mrs. Robert M. Green.

Crowned dress revue queen at the Minnesota State Fair today (Thurs.), she won her regal title in competition with 87 other 4-H sewers, all of whom modeled dresses they made themselves.

The Lyon county girl modeled a one-piece textured brown wool dress with blouson back and slotted seam detail at shoulder line and below the waist. Sleeves were three-quarter length. The dress was styled with a detachable off-white linen collar. Queen Betty completed her outfit with brown shoes and gloves and a tiered pillbox hat which she had made of wool to match her dress.

Betty has been in club work for seven years and has carried the clothing project all of that time. This past year she has remodeled or made 16 garments. She makes most of her own clothes.

Queen Betty's award will be a trip to the National 4-H Club Congress in Chicago in late November.

Selected attendants to the queen were Shirley Schmidt, 17, Sherburn; Rochelle Swee, 18, Pine Island; Arlys Klukken, 17, Osakis; Jean Stenerson, 16, Rothsay.

Shirley's costume was a black two-piece heather wool dress with a small black feather hat, black suede pumps and wrist-length white gloves. Her dress, accented with a red flower, featured an overblouse with fitted waistband and contour-pleated skirt. The neckline and edge of the sleeves were outlined with white pique.

She has been a member of the Jay Jets 4-H club in Martin county for six years and has taken the clothing project for five.

Rochelle modeled an ensemble of a green one-piece wool basketweave dress and tan camel's hair coat set off by a leopard fur-fabric hat and purse and brown gloves. Her dress was fashioned with slotted seam detail and patch pockets.

(more)

This is the second year in succession the Goodhue county girl has been an attendant to the state dress revue queen. She has taken the clothing project for all nine years she has been a member of the Lena Sparks 4-H club. This past year she made 40 garments. Experience in sewing during those nine years has taught her a lot about sewing with wool, designing patterns and choosing accessories, she says. She has made almost every type of garment.

Last year her achievements in the clothing project won for her a $100 scholarship which she will use when she enters the University of Minnesota as a freshman this fall to study home economics.

Arlys wore a one-piece wool crepe dress in shades of brown and bittersweet with a bittersweet flower as an accessory. Brown leather pumps and spice-colored wrist-length gloves completed her costume.

Because she makes all of her own clothes, the Todd county girl is convinced that she can choose patterns and materials better suited to her personality and features than would be the case if she had to buy her clothing. She figures she saved at least $90 last year by sewing her own clothes. This past year she made 20 new garments.

Jean's winning outfit was a green and black floral print cotton shirtwaist dress with roll-up sleeves. Her accessories were a gold pin, gold earrings, black gloves and shoes. Jean has taken the clothing project for six of the eight years she has been a member of the Carlisle 4-H club in Ottertail county.

Blue ribbon winners in the 4-H dress revue were Joan Gessele, Detroit Lakes; Susan Wild, Bemidji; Phyllis Rogotske, Springfield; Cynthia Rucker, Walker; Janet Berglund, Scandia; JoAnn Odegaard, Gonvick; Vonnie Satter, Revere; Katherine Kloehn, Garfield; Gladys Buendorf, Alden; Judy Uherke, Hopkins; Kathy Albee, Caledonia; Donna Jean Molenaar, Raymond; Idelle Boraas, Appleton; Marlys Wilmer, Drayton, N.D. (Marshall Co.); Sandra Longhenry, Glencoe; Barbara Saxon, Worthington; Carole Olin, Lockhart; Cynthia Kringen, Rochester; Jeanette Brockberg, Jasper; Marlyas Ellingson, Farwell; Mavis Meyer, Sanborn; Sandra Runck, Fairfax; Ruth Ann Zabel, Plainview; and Joan Hunstad, Butterfield.

60-286-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1 Minnesota
September 1, 1960

To selected counties
For immediate use

(with mat)
Caption: A good windbreak plan, used on many farms.

SHELTERBELT FOR FARMSTEAD AREA CAN BE PLANNED NOW

If snow drifts made the going tough around your farm buildings last winter, your farmstead shelterbelt probably needs some doctoring up. Or you may need a completely new belt of trees to ward off the wind.

Of course you can't set the trees out now. But Marvin Smith, extension forester at the University of Minnesota, mentions a number of things you can do. You can plan the belt. Plow the area--if it isn't sod. And order the trees now.

You may have an old shelterbelt that has become too drafty to be effective. Many trees may have died out. Or maybe the older, tall trees no longer give much protection at ground level. The belt also may be so close to buildings it hinders farm operations.

To fill in the close-to-the-ground gaps, Smith suggests a row of shrubs, like common lilac, honeysuckle or shrub willows. These shrubs will eventually fill in the bottom 10 to 15 feet. In an old grove, you can plant several rows of tall or medium-height trees next to the old ones.

If you're planting a completely new belt, Smith suggests one with 8 rows--two each of shrubs and broadleaf trees, pines and spruce or red cedar. The shrub rows go in at the outside, with the taller ones near the buildings.

Figure at least 100 feet from the closest buildings, with the tree belts along the north and west of the building area.

If the land for the shelterbelt is now in sod, don't plot it this fall for planting next spring. Instead, it should be fallowed through a complete summer to prevent heavy grass competition for young trees. If it was in grain or a row crop this year, fine; plow it up and it will be ready to disk up and plant to trees next spring.

You can order trees through the county extension office or Soil Conservation Service. Smith says transplants are the best choice among evergreens; seedlings don't do too well. For broadleaf trees, select those 18-24 inches high. There's more detailed information on Extension Bulletin 196, "Planting the Farmstead Shelterbelt." The county extension office has copies.

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niversity Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minn.
Sept. 1, 1960

Special to Houston County

(with mat)

NEW HOME AGENT
TO COUNTY
THIS MONTH

Florence Briggs, Hastings, will join the county agricultural extension staff Sept. 16 as home agent.

For the past four years she has taught home economics in high school -- for three years in Brewster, Minn., and last year in Eureka, Utah. She holds a bachelor of science degree from the University of Minnesota, with a major in home economics education.

From Sept. 6 to Sept. 15 Miss Briggs will serve as assistant home agent in Freeborn county, receiving training in extension methods and techniques.

As home agent in Houston county, she will work with county women in the extension home economics program and will be responsible for the home economics phase of 4-H club work.

-jbn-

(with mat)

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 2, 1960

ATT: Agricultural Agent
Home Agent
4-H Club Agent

GARDEN FACT SHEET FOR SEPTEMBER

By O. C. Turnquist
C. Gustav Hard
Extension Horticulturists

Vegetables - by O. C. Turnquist

1. Now would be a good time to sow a cover crop of winter rye on areas where crops have already been harvested. This will aid in controlling erosion during the winter months and will provide good organic matter to the soil when it is plowed or spaded next spring.
2. If frost is predicted, cover the tomato plants with paper or plastic to prevent damage. Large plastic covers from the dry cleaners are useful for this purpose.
3. If tomatoes are harvested when the fruits are a very light green or almost white, they can be kept from one to six weeks if the temperature in the room is 50°F.
4. Don't harvest your beets and carrots for storage until the storage room is cold. They will stand several frosts without damage to the roots.
5. Onions are mature when the tops break over at the neck. At this stage they can be pulled and topped. Let the bulbs cure in mesh bags or crates in an airy room or outdoors for three to four weeks.
6. Squash and pumpkin should be mature before harvest. The skin should be hard to the pressure of the thumbnail at the stem end. Cure in piles in the garden for about two weeks. If frost danger threatens, cover the fruits for protection.
7. Keep spraying and dusting with methoxychlor for chewing insects and malathion for aphids. Insects are especially troublesome on members of the cabbage family this time of the year.

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

Fruits - O. C. Turnquist

1. Prune out the old fruiting canes from your raspberry planting if you haven't done so. Thin out the new canes to 8 to 10 per hill and 3 to 4 per running foot of row.
2. Weed out the spring-planted strawberries so that the patch will be clean. Remove all late formed runner plants also. These late plants have no fruit buds and instead of producing fruit next spring they will act like weeds and compete with the other plants for moisture, food and sunlight.
3. Black and purple raspberries can be propagated by tip layering. Bend the tips of the canes over and cover with soil. New plants will form at the tips. Currants and gooseberries can be propagated by mound layering. Sear the lower branches and throw soil around the base of the plants.
4. Delay harvest of winter varieties of apple until mid-October. If left on the tree until the seeds are black they will also have a waxy coating that keeps them from shriveling. Apples can withstand several light frosts but they should be picked before the temperature drops to 27°F.
5. Grapes should ripen on the vine unless severe frost is predicted. Cut off the clusters with a knife or shears and handle them carefully.
6. Don't cover strawberries and raspberries until late October or early November.

Ornamentals - C. Gustav Hard

1. Lawns may be seeded during early September, though the chances for success are much less. When planting lawns this month, be sure the seed is kept moist for fast germination. Sodding of new lawns may go on throughout the month of September.
2. Bring in the house plants from out of doors for the winter. Be sure to inspect the plants for disease and insect problems. Most troublesome on house plants would be the mealy bug, red spider and thrip. These can be controlled either by dipping the plant in a mixture of malathion or using a good insecticide-miticide for their control.

3. Tender bulbs such as gladiolus, dahlia and Canna may be dug late this month or after the tops have been killed by frost. Proper curing of the bulbs is essential for storage over winter. Do not place the corms or rhizomes in full sun. Very often the temperatures become too high for proper curing. After the bulbs are dug, wash off excess soil from the bulbs so they are clean. Dry the bulbs in a well ventilated warm place from one to two weeks.

   Glad corms should be dusted with a five percent DDT dust to control thrip. Store glads in a shallow crate or onion sacks at a temperature of 32-40 degrees. Be sure there is good air circulation.

   Dahlia roots are stored under cool, moist conditions at temperatures around 40-45 degrees. Regular inspection during the winter is important to detect any rotting of the bulbs.

4. The compost pile can be started with a layer of leaves about 1 foot thick. Tramp them down and soak them well with water. A pound of superphosphate and 2 pounds of high nitrogen fertilizer sprinkled over each 6 by 10 feet of area will hasten decay and increase the fertilizer value of the leaves. Several inches of dirt should be thrown over the leaves, repeating with successive layers of dirt and leaves as the pile progresses. It is important to keep the compost pile moist. It's best to have the top of the pile concave to form a basin to catch normal rainfall. If you make the compost pile of a combination of leaves, soil and fertilizer you should be able to use the compost in the garden the following spring.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960 Immediate release

CHICKEN GOOD BUY THIS MONTH

Broiler-fryer chickens are headliners among foods that will be plentiful in September.

Supplies of these tender young birds are expected to be larger than last year at this time, reports Mrs. Eleanor Loomis, extension consumer marketing agent at the University of Minnesota.

Since demand for frying chicken tends to drop after the summer season of barbecuing, prices are expected to be unusually attractive to consumers.

Turkey also has a prominent place on the U. S. Department of Agriculture's list of plentiful foods for the month. Heavy birds will continue in largest supply.

Lamb is another of the abundant protein foods consumers can feature in September meals. Supplies are likely to continue above last year's at prices more attractive than usual.

Though some of the fruit crops marketed in September are smaller this year, the melon supply will be bountiful, Mrs. Loomis says. Minnesota-grown cantaloupe will be coming to market this month, along with cantaloupe from California's record-large crop. The late crop of watermelon is larger than last year's and 57 percent above average. Also on markets will be honeydews from a big California crop, Persian, cranshaw and casaba melons.

Mrs. Loomis reminds homemakers that cantaloupe rates high in vitamins A and C. Half of a large cantaloupe may provide the day's requirement of vitamin C. She suggests that cantaloupe star at breakfast and be served frequently for other meals in salads, fruit cups and as dessert.

September is the month when late summer vegetables are particularly abundant. Sweet corn, tomatoes, onions, cabbage, green peppers, green and lima beans, squash, carrots, potatoes and lettuce can add color and pleasing variety to dinner menus.

Smooth and crunchy peanut butter will be in ample supply on grocers' shelves to meet the back-to-school demand.

60-287-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960 Immediate release

4-H CONSERVATION CAMP AT ITASCA PARK

The 27th annual State 4-H Conservation camp will be held Sept. 15-18 at the University of Minnesota's Forestry and Biological station at Itasca State park.

More than 100 4-H members have won trips to the camp for their accomplishments in the 4-H conservation and forestry projects.

The camp is sponsored each year by the University Agricultural Extension Service in cooperation with Charles L. Horn, president of Federal Cartridge corporation. Horn provides funds for the camp.

The program for the camp will include classes in land conservation, forestry, Minnesota plants and shrubs, outdoor living and water safety, demonstrations on gun safety, a park tour and a conservation treasure hunt.

Wayne Bath, district 4-H club leader at the University of Minnesota, is in charge of arrangements for the camp. Staff members from the University of Minnesota Agricultural Extension Service and Federal Cartridge corporation will conduct classes and special sessions.

Banquet speaker Saturday evening, Sept. 17, will be Parker Anderson, extension forester at the University of Minnesota. Anderson has been a camp staff member each year since the camp was started 27 years ago.

Purpose of the camp is to help 4-H members increase their appreciation of the importance of conservation and to help them recognize the part they can play in conservation work.

Some 6,000 4-H members are active in forestry, wildlife, soil and water conservation projects. This past year they planted more than 47,000 trees, 31,544 shrubs and 923 windbreaks; they established 123 forest tree nurseries; they set up nearly a thousand game and feeding areas and set out nearly 2,000 bird feeders. In addition, they used soil conservation practices on 25,000 acres of land.

60-288-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960 Immediate release

ANIMAL NUTRITION AND HEALTH SHORT COURSE TO BE SEPT. 12 AND 13

Livestock authorities from Minnesota and other parts of the nation will discuss preparing high-quality feeds and feeding for quality products, during the Animal Nutrition and Health short course, Sept. 12-13 on the St. Paul campus, University of Minnesota.

The event was announced today by J. O. Christianson, director of agricultural short courses. C. L. Cole and J. D. Donker of the University dairy department are program co-chairmen.

Sessions of the course will cover feed quality, animal nutrition and the effect of nutrition on the quality of milk, eggs, veal, beef and pork.

Workshop sessions on Tuesday afternoon, Sept. 13, will furnish an opportunity for discussion of various management feeding-nutrition problems.

Among the speakers will be R. E. Bergman, state chemist, Minnesota Department of Agriculture, St. Paul; R. Wornick, chemical engineer, Chas. Pfizer & Company, Inc., Terre Haute, Indiana; A. Harris Kenyon, district manager of the Federal Food and Drug administration, Minneapolis; and Paul Thornton, professor of poultry husbandry, Colorado State university.

Several speakers from the University of Minnesota are also on the program.

All interested persons are invited. For more information, contact the Director of Agricultural Short Courses, Institute of Agriculture, University of Minnesota, St. Paul 1.

60-289-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960 Immediate release

SOIL SAMPLE CAMPAIGN TO BE LAUNCHED AGAIN THIS YEAR

A special campaign urging farmers to test their soil this fall is being launched in Minnesota again this year.

As in the past, the campaign is called "Minnesota's Fall Soil Sample Roundup," and will be conducted jointly by farmers, county agents, fertilizer dealers, industry representatives and the University of Minnesota.

Last fall, a similar campaign boosted by 1,300 the number of samples sent to the University's soil testing laboratory during September, compared to the same month of 1958. In October, total number of samples tested was 4,096 in 1959, compared to 3,261 in 1958 and 2,811 in 1957.

Also, total samples tested by the University in 1959 went over 30,000 for the first time. But soils men say even more should be sent in.

Lowell Hanson, extension soils specialist and coordinator for the campaign, says soil testing in the past has been done mostly in early spring. Now, however, he urges farmers to take samples in the fall, for these reasons:

First, sampling is easier. Getting them right after corn harvest isn't as much of a problem as in early spring when the soil is wet. Second, you avoid the spring rush; by sampling now, you're more certain to get results back in time to order fertilizer. County agents have more time to write individual recommendations.

Also, some fertilizing can be done in the fall--and fertilizing always pays more when done according to soil nutrient needs as shown by soil test.

Farmers and gardeners can get soil sample boxes and information sheets from their seed and fertilizer dealers, county agents or vocational agriculture teachers. Samples are then sent to the University for testing. One sample can be used to test an area of up to 10 acres.

60-290-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

SPECIAL
* * * * * * * * * * * * * * *
* For release at 3 p.m. *
* Wednesday, Sept. 7 *
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FORESTRY BENEFITS FROM EDUCATIONAL PROGRAMS NOTED

SEATTLE--Forest owners in the U. S. have reaped large benefits from public and industry-financed education programs, a University of Minnesota forester said today.

Frank H. Kaufert said these programs have resulted in much better forest fire prevention and control--the first need in applied forest management. Other management benefits, especially on small woodlands, may be less evident but are still important, he added.

Kaufert, who is director of the University's School of Forestry, said "it should be possible to achieve the same general improvement in forestry practices on the small woodlands as has been accomplished in fire prevention." This he based on the the assumption that small woodlands will be needed in the future to at least as great an extent as at present--or even greater.

"Progress in the small woodlands fields, as in every field of forestry, will be determined by markets available for products produced," according to Kaufert. "Without continuation and expansion of present markets and development of new markets for products, progress can be expected to be much slower.

Education and service programs affect 4 million U. S. farmers and other land owners, Kaufert said. The most important public programs, he continued, include Extension Forestry, Private Forest Management Service, Cooperative Fire Control, Soil Conservation Service, Agricultural Conservation Program, Tennessee Valley Authority, Vocational Agriculture Education and 4-H programs.

Major industry-financed programs which Kaufert cited are American Forest Products Industries, Trees for Tomorrow and regional forest products industries.

"The abundance and similarity of objective of many of these progams raises the question of greater coordination and possible combination into larger and possibly more productive efforts," Kaufert concluded.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
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September 6, 1960

SUMMARY OF ALL CHAMPIONS IN 4-H EXHIBITS AT MINNESOTA STATE FAIR

These have been covered in more detail in previous releases throughout the Fair.

TOP WINNERS IN 4-H EXHIBITS, BOOTHS AT STATE FAIR

Winners in 11 different 4-H club exhibits at the 1960 Minnesota State Fair have been announced by Leonard Harkness, state 4-H club leader at the University of Minnesota.

Exhibits and champions in each class are:

4-H booths--Brown, Martin and Olmsted counties.

Clothing--Elizabeth Clark, Barrett, Grant Co., for rust tweed suit.

Corn--Allen Hanson, Osakis, Todd Co.

Electric--Alvin Borchert, Blooming Prairie, Steele Co., electric hack saw.

Food preservation--Diana Wooner, Chatfield, Olmsted Co., for canned fruit; Sylvia Reynolds, Pipestone, Pipestone Co., for canned vegetables; Ramona Sorenson, St. James, Watonwan Co., for canned meat; Karen Opalinski, Holdingford, Morrison Co., for preserves.

Garden--David Olin, Lockhart, Norman Co.

Grain--John Vanyo, Warren, W. Polk Co., for exhibit of Lakota Durum wheat.

Home improvement-family living (junior division)--Barbara Amdahl, Mabel, Fillmore Co. for luncheon set

Home improvement-family living (senior division)--Carol Lindquist, Lafayette, Nicollet Co., for refinished walnut lamp table.

Potato--David Carlson, Cohasset, Itasca Co.

Shop--Roy Nisbet, East Grand Forks, West Polk Co., for small garden tractor with mower and cultivator attachments.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

SUMMARY OF ALL 4-H LIVESTOCK WINNERS AT MINNESOTA STATE FAIR

These have been covered in more detail in releases at the Minnesota State Fair.

TOP 4-H LIVESTOCK EXHIBITORS AT FAIR

Milton Jan Schwanz, Jr., 18, Plainview, was named Minnesota's outstanding 4-H club dairy member and winner of top honors in 4-H livestock competition at the Minnesota State Fair.

To gain this honor, Milton had to have an entry in the livestock exhibits, had to pass a rigid oral test given by University of Minnesota dairy specialists and had to have an outstanding long-time record in 4-H club projects.

There were 1194 4-H livestock entries at the State Fair including 663 dairy cattle, 18 dual purpose cattle, 87 beef heifers, 122 sheep, 147 swine, 136 poultry and 21 rabbits.

The 4-H'ers show only breeding stock at the Fair. Fat stock is shown at the Junior Livestock show in So. St. Paul, Oct. 3-6.

Here is a list of the top livestock exhibitors at the Fair.

DAIRY CATTLE

Best county exhibits of dairy cattle in order: Holsteins--Dakota, Hennepin, Nicollet, Faribault and Rice; Jerseys--Dodge, Meeker, West Ottertail and Todd.

Best dairy showman: Willard Thompson, 19, Richville.

Champion dairy judging team: Meeker county including Donald Rick, 21, and his sister Betty, 16, Litchfield; Dennis Berquist, 17, Dassel; and Ronnie Schmidt, 17, Darwin.

High individual dairy cattle judge: Ronney Thompson, Albert Lea.

Herdsmanship award: Olmsted county.

Dairy project winners: Milton Schwanz; George E. Dambowy, Pierz; Henry Schroeder, Rochester; and Robert Wermerskirchen, Jordan.

Holsteins
- Champion purebred: Billy Blank, 19, Janesville.
- Champion grade: Dean Franz, 14, Bingham Lake.

Guernseys
- Champion purebred: Wayne Sommars, 16, Verndale.
- Champion grade: Marie Jarvinen, 19, Zumbrota.

Jerseys
- Champion purebred: Joanne Honken, 17, Nicollet.
- Champion grade: Louis Ackman, 16, Faribault.

Brown Swiss
- Champion purebred: Donovan Bode, 20, Courtland.
- Champion grade: Jane Thon, 14, Brainerd.

(more)

add 1 Top Livestock Exhibitors at State Fair

Ayrshire

Champion purebred: Darlene Nesbit, Winona.

Champion grade: Duane Ernster, 20, Caledonia.

Dual Purpose

Champion purebred: Jerry La Voi, 18, Fosston (milking shorthorn).

Champion grade: Larry Hackett, 18, Rice (milking shorthorn).

Beef heifer

Grand champion: Thomas Burke, 17, Blooming Prairie.

Champion beef showman: Thomas Burke.

Champion girl beef showman: Connie Shulstad, Barnesville.

Breed champions: Hereford--Kenneth Werk, 13, Herman; Hereford reserve champion: Kathy Gronseth, 13, Rothsay; Angus champion--Thomas Burke; Angus reserve champion--Richard Leary, 16, Caledonia; Shorthorn grand champion--Margaret Swanson, 13, Hastings; Shorthorn reserve champion--Jay Mitchell, 20, Westbrook.

Livestock judging team--Steele county including James Gute, 18, and his brother Donald, 16, William Kriesel, 17, all of Owatonna.

High individual judge: Loyal Sip, Ada.

HOGS

Grand champion: Joseph Deters, 14, Eitzen, with a Poland China.

Reserve champion: Michaeline Lofgren, 17, St. James, with a Chester White.

Champion hog showman: Donald Storlie, 19, Lakeville.

Breed champions: Berkshire--Don Victor, Stillwater; Chester White--Michaeline Lofgren; Duroc--Joseph Hardy, Alexandria; Hampshire--Lee Kallsen, Jasper; Poland China--Joseph Deters; Yorkshire--Robert Espeseth, Benson; Landrace--Gaylen Lerohl, Sacred Heart; Crossbred--Robert Ahlers, Gibbon.

SHEEP

Grand champion ewe: Tommy Klaseus, 12, Westbrook, with a Southdown.

Reserve champion: Roger Tersteeg, 18, Olivia, with a Hampshire.

Champion showman: Keith Daudt, 15, Zimmerman.

Breed champions: Hampshire--Roger Tersteeg; Southdown--Tommy Klaseus; Shropshire--Billy Johnson, Lakeville; Suffolk--James Hulteen, Clearbrook; Columbia--James Marti, Sleepy Eye; Crossbreds--Kenneth Coleman, Rochester.

POULTRY

Grand champion: Diane Barten, 16, Belle Plaine, with leghorns.

Champion chicken: Diane Barten.

Champion duck: Lyle Strike, 14, Isanti.

Champion turkey: Dianne Holder, Aitkin.

Breed champions (chickens) Leghorn--Diane Barten; White Rocks--Carol Johnson, Argyle; Rhode Island Reds--Bonita Rolf, Norwood; New Hampshire Reds--David Johnson, Brainerd; and crossbred, hybrids and other breeds: Joane Englert, Rosemount.

RABBITS

Grand champion: Curtis Anderson, 12, Farmington, with a pen of New Zealand Whites.

Reserve champion: Ronnie Houwman, 13, Grand Rapids, with a pen of California rabbits.

EDITOR: We have a complete list of all blue ribbon winners available for all classes. You may have a copy by writing to the Information Service, Institute of Agriculture, University of Minnesota, St. Paul 1, Minnesota.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

SUMMARY OF ALL CHAMPIONS IN 4-H DEMONSTRATIONS AT STATE FAIR (except livestock)
These have been covered in more detail in earlier releases during the Fair.

TOP DEMONSTRATORS AT MINNESOTA STATE FAIR

Top demonstrators among the 1,000 Minnesota 4-H club members who vied for honors at the Minnesota State Fair received awards ranging from purple ribbons to gold watches and national trips.

The demonstrators -- all of them county champions -- gave "how to do it" information in agriculture and homemaking on seven different platforms in the 4-H building during the Fair.

Named state champions in 4-H demonstrations (excluding livestock) were:

Home economics demonstrations

Bread

(silent individual)-- Peggy Bryan, 18, Jasper.

(oral individual)--Margaret Boots, 17, Redwood Falls.

(oral team)--Rose Marie Lueck, 15, and Jean Kraft, 14, Brewster.

Clothing

(junior)--Leslie Paschke, 12, Delavan.

(senior individual)--Marilyn Smisek, 18, Lonsdale.

Dairy Foods

(individual)--Jean Thompson, 17, Ulen.

(team)--Anita, 19, and Sharon Smisek, 15, Lonsdale.

Food preparation

(junior)--Judy Jensen, 14, Stephen.

(senior individual)--Ann Vogel, 17, New Ulm.

Food preservation--Patty Anderson, 15, Fosston.

Home Assistance--Lillian Risch, 17, Halloway.

Home Improvement - Family Living--Nancy Glas, 15, Hutchinson.

(more)

add 1 State Fair 4-H Demonstrations

Special home economics contests

Dress revue--Betty Green, 16, Lynd, dress revue queen.
Attendants: Shirley Schmidt, 17, Sherburn; Rochelle Swee, 18, Pine Island; Arlys Klukken, 17, Osakis; and Jean Stenerson, 16, Rothsay.

Pie contest--Janet Pomerenke, 17, Odessa.

Agricultural and other demonstrations

Conservation--Marlene Thorston, 16, Springfield.

Corn
(individual)--Tom Hovde, 16, Hanska.

(team)--Richard Vrieze, 16, and Wesley Clark, 17, Spring Valley.

Electric--Dean Lindeman, 16, Glenville.

Entomology--Rosalie Royce, 17, Rochester.

Fruit--Joseph Erickson, 16, Farwell.

Garden--Donald Untiedt, 15, Edgerton.

Health
(Individual)--Craig Shulstad, 17, Barnesville.

(team)--Dean Schutte, 15, and Don Walter, 16, Osseo.

Home yard improvement--Brian Johnson, 15, Borup.

Junior leadership--Anita Worm, 15, and Pamela Novotny, 16, New Prague.

Safety
(individual)- Edward Smisek, 12, Lonsdale.
(team)--Arnold, 15, and Delvin Ellefson, 17, Barnesville.

Shop--Robert Blasey, 15, Ada.

Small Grain--Ronald Biss, 18, Elbow Lake.

Soil and Water Conservation--Michael Brown, 16, Appleton.

Tractor--Kenneth Stark, 15, Kensington.

NOTE TO THE EDITOR: We have a complete list of blue ribbon winners available for all classes. You may get a copy by writing to the Information Service, Institute of Agriculture, University of Minnesota, St. Paul 1, Minn.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

SPECIAL

FINAL LIST OF CHAMPION 4-H DEMONSTRATORS NAMED

Six champion 4-H demonstrators in recent State Fair competition were named this week by Leonard Harkness, state 4-H club leader.

Top dairy demonstrator was Howard Kittleson, Blooming Prairie, who showed "How to Milk a Dairy Cow."

Caryn Hultgren, Raymond, was champion of all beef demonstrators with his explanation of "Cuts That Count." Champion in livestock loss prevention was Jim Folkerts, Jasper.

"Hog Grading- No Guessing," brought top pig demonstration honors to Jerry Hawton, Redwood Falls, and "Fitting a Lamb For Show," topped all sheep demonstrations for David Hoff, Perley.

Champion poultry demonstrator was 13-year-old Kenneth Christensen, Atwater, who showed how to "Design for Decision."

Blue ribbon winners were:

DAIRY--David Baker, Kiester; Mark Flom and Gyles Randall, Kenyon; Warren Sylling, Caledonia; Rita Ubel, Williams; Kay Albrecht and Ruth Klossner, New Ulm, Roger Sonnenberg, Vergas; Kathleen and Margo Ophoven, Kimball; DiAnn and Ruth Vollmers, Chokio.

BEEF--Keith Kyistero, Montevideo and Mary Chase, Chatfield.

LIVESTOCK LOSS PREVENTION--Gene Rouse, Olivia and Donald Theunick, Marshall.

PIG--Craig Howerter, Granada; Larry Koenig, Swanville; G. Erick Doughty, Rochester; Carl Bisson, Jasper.

SHEEP--Stephen Anderson, Forest Lake; Lottie Fae Seaton, Russell; and Richard Holm, Rose Creek.

POULTRY--Terry Timko, Jackson; Lynn Hanson, Dawson; and Roger Johnson, Racine.

HORSE--Lynn Nelson, Dassel.

RABBIT--Howard and Richard Meyer, Starbuck.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minn.
Sept. 6, 1960

Special to Chippewa Co.

(with mat)

ROMELL JOHNSON IS
NEW HOME AGENT

Romell Johnson, Farwell, will join the Chippewa county Agricultural Extension staff as home agent on Sept. 16.

She will take over the position of Jean Lovdokken, who has accepted the post of supervisor of Minnesota's extension home economics program in the northwestern district. Miss Lovdokken will be a member of the University's state Agricultural Extension Service staff and will have headquarters on the St. Paul campus.

Miss Johnson is a June graduate of the University of Minnesota, with a major in home economics education.

While at the University she was president of the Home Economics association, was vice president of the Student Center Board of Governors, social chairman for Beta of Clovia, 4-H sorority and served on the Social Service council. For her campus activities she received the All-University Congress Leadership award and the Student Council leadership award.

During the summer of 1958 she was a 4-H assistant in Benton county.

For 10 years she was a 4-H club member in Douglas county, where she grew up on a 300-acre dairy farm. As a club member she took home economics, dairy and junior leadership projects, held offices in her local club and was president of the county 4-H leaders' council.

In the summer of 1955 she was a high school exchange student to Denmark.

As home agent Miss Johnson will assume responsibility for directing the extension home economics program and working with 4-H members on home economics projects.

jbn

Special

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minn.
Sept. 6, 1960

Special to Mahnomen Co.

ASS'T EXTENSION
AGENT WORKS WITH
INDIAN FAMILIES

Mahnomen county's new assistant county extension agent, Mrs. Mae Kersting, works primarily with Indian families, particularly with youth of 4-H club age and with women.

Mrs. Kersting holds one of two positions which are being made possible in Minnesota for work in agriculture and home economics among the Indian people. She assumed her post the middle of August.

The new assistant extension agent has a background of teaching experience in Fairview, Montana; Scarville, Iowa; Akeley andHuntley, Minnesota.

Active in community affairs, Mrs. Kersting has served as a member of the executive board of the Mahnomen county Hospital Auxiliary; has been township chairman of cancer and heart drives; and chairman of the Home Council. She has been president of the Trinity Lutheran church Ladies' Aid and has held other offices in church organizations. For four years she has been a 4-H club leader.

She has taken work at Moorhead State college and at Pestalozzi Frobel Teachers' college in Chicago.

Mrs. Kersting will work out of the Mahnomen county Agricultural Extension office.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

To all counties
For immediate use

VETERINARY EXPERT LISTS HINTS ON TURKEY VACCINATION

Vaccination is one of the major guardians of the $70 million turkey industry in Minnesota.

But vaccination at best is a supplement for good management and sanitation, according to a University of Minnesota veterinary scientist, Dr. C. T. Larsen.

He says the first step is keeping facilities and buildings clean and free from contagion. Then he advises tailoring the vaccination program to the area. In Minnesota, the three worst diseases that we should vaccinate for are Erysipelas, Fowl pox and Newcastle disease. All can be real troublemakers.

Erysipelas--the same organism which is involved in swine and sheep--usually hits turkeys between 4 and 7 months old, often in fall. Males are more susceptible than hens. The material used for immunizing turkeys against this disease is a killed product and won't spread the malady.

On farms with a history of erysipelas, breeder flocks should be vaccinated before the birds begin laying. Males may need revaccination during the breeding season if erysipelas seems to be developing. One vaccination usually carries hens through a laying period.

Fowl pox calls for a live virus vaccine, which could be a source of infection to other birds near by. Therefore, it should be used only where fowl pox is definitely a problem. Vaccination is usually done twice, once when turkeys go to range and once before production.

Two cautions with fowl pox vaccine: Birds should be vaccinated at least 8 weeks before marketing, because it usually takes 4 to 6 weeks for the reaction to disappear. Also, the disease may be transmitted during the reaction period.

For Newcastle, several vaccines may be used. The disease isn't too common in Minnesota, so Dr. Larsen says the killed product is best in this state. It can be used on poults of any age and won't spread the disease. Broiler-type birds should be vaccinated at 2-3 weeks of age and heavier types at 6-8 weeks.

# # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

To all counties

For immediate use

FARM FILLERS

The average farm woodlot produces only one-third of its potential growth because good trees lack growing space. This is due to competition from low quality trees and brush. Parker Anderson, extension forester at the University of Minnesota, says cull trees and brush steal water, sun and nutrients from high-quality trees. Get rid of unwanted growth by cutting it out or by using chemical tree and brush killers.

* * * * *

Last year 133 Minnesota dairy herds on DHIA test averaged 500 pounds of fat or more per cow. To reach this high average a herd owner must use good management practices. Ralph W. Wayne, extension dairyman at the University of Minnesota, says feeding, breeding and herd health are top factors in high dairy production. Complete records, study of the records and action according to the story records tell have a lot to do with achieving a high yearly herd average.

* * * * *

Total farm output for 1960 is now indicated as an all-time record, 5 percent above the 1957-59 average and 27 percent larger than the 1947-49 average, according to the USDA. The parity ratio in July was 80. That's up 1 percent from June but 1 percent below July, 1959.

* * * * *

September 30 is the last day to apply for refund of federal tax on gasoline used for farm purposes during the 12 months ended June 30. File form 2240 with the District Director of Internal Revenue. If you didn't get a form in the mail or misplaced the one you got, you can pick one up at the county extension office.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

To all counties
For immediate use

A Farm and Home Research Report

ABSORPTION OF ANTI-WEED CHEMICAL IS CLUE TO EFFECTIVENESS

Whether a chemical kills a certain weed may depend partly on how fast the plant takes it up.

University of Minnesota botanists R. A. Herrett and A. J. Linck reached that conclusion after studying effect of amitrol on Canada thistles and field bindweed.

Canada thistle is quite susceptible to amitrol, while bindweed is more resistant. Herrett and Linck wanted to find out why. So they started by studying penetration of amitrol from the leaf surface to the interior.

They applied the chemical to bindweed and Canada thistles under a variety of conditions, both in "controlled weather" chambers and in greenhouses. Then they checked the amount of chemical still on the leaf surface at regular intervals after application, to see how much was absorbed.

While amitrol was still in solution, both weeds absorbed it at about the same rate. Once the solution on the leaf dried, though, uptake was much slower in bindweed than in the thistle. By 12 hours after application, absorption on the thistle was more than twice as great as on the bindweed. This, then, seemed to be one key to why the chemical was more effective on thistle; it got inside to do the job.

If the uptake difference proves to be important in further studies, it may provide a way of predicting effect of chemicals like amitrol on different weeds.

Herrett and Linck also found something else. The chemical on each plant was absorbed mostly through the cuticle, or outer covering of the leaf. It was not taken in through the stomata, or tiny openings in the leaf surface, as some had suspected.

# # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

To all counties
For immediate use

PLAN TO ORDER
GRAIN SEED
THIS FALL

Order your grain seed now and you can scratch one more "last-minute-rush" item from next spring's calendar.

And while you're at it, order certified seed of recommended varieties. You'll get better disease resistance, grain that stands better, and fuller bins next fall.

Extension agronomist Harley Otto at the University of Minnesota points out that certified seed comes from a known pedigreed source. It gets both field and laboratory inspections to make sure it doesn't have off-type kernels. Weed seed content is limited by law and by standards set by the Minnesota Crop Improvement Association. Certified seed must also stand up to definite standards on germination.

The fact is, you can't afford poor seed. And that from your own bin may be the poorest you can get. In spring, 1956, the Minnesota Department of Agriculture surveyed the seed which farmers were putting in drill boxes. Where farmers were using their own seed, 22 percent of the samples contained so many weed seeds that, had the seed been up for sale, it would have violated state law.

Of seed from neighbors, 24 percent would have violated the weed statute.

In spite of this evidence, only about 5 percent of all small grain and oil crops grown in Minnesota comes from certified seed. Much more should be used.

It's easy to find certified seed sources. They're all listed in the new Minnesota Directory of Certified Seed. You can get a copy from the county extension office or from the Minnesota Crop Improvement Association, University of Minnesota, St. Paul 1.

The directory lists growers of varieties which are approved for Minnesota. Some of these varieties are recommended. Others are varieties still being considered for possible recommendation.

# # #

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

To all counties

ATT: HOME AGENTS
For immediate release

GET WARDROBE READY FOR FALL

A few new accessories and some touches of 1960 high-style colors will give last year's wardrobe new sparkle.

Since there is no radical change in the silhouette this fall, emphasis will be on color and fabric, according to Shirley Erickson, extension clothing specialist at the University of Minnesota.

A reptile leather purse or shoes, a soft suede tie belt, a collar of fur or fake fur are among accessories that have the autumn 1960 look. A velvet pillbox or high-crowned hat of fur -- especially leopard -- will add a fashionable touch to the fall wardrobe.

Buy a rope of beads and wear them with last year's cardigan or dress with a stand-away neckline for an inexpensive but effective touch. Jet and jewel-toned beads are especially good this fall.

Even a plum-colored scarf can make an old suit or dress look new.

If you like purple and are fond of bright colors, this is the year to feature them in your wardrobe, Miss Erickson says. Fall collections fairly shout color. Purples and reds are popular, as are gold, teal blue, blackened browns and black. To sharpen last year's clothes, add accessories to point up new color combinations -- red with purple, brown with black, green with gold and for sportswear black and white.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 6, 1960

To all counties

4-H News
Immediate release

First in series of stories
for enrollment program

4-H CLUBS NOW TAKING NEW MEMBERS

_____ county boys and girls who want to "learn by doing" in a variety of projects, have the fun of taking part in recreational activities and of meeting young people their own age will have an opportunity to join a local 4-H club this fall.

The _____ county extension office and 4-H adult and junior leaders are encouraging youths between 9 and 21 years of age to enroll as soon as possible to get an early start in project work and to be included in fall activities.

Taking at least one project is a requirement of 4-H membership. But 4-H'ers may choose what they will enjoy from a wide variety of projects offered in junior leadership, shop, gardening, conservation, safety, as well as in homemaking and farming. In each project they "learn by doing" skills they can put to use immediately, as well as in later life.

Recreation at monthly meetings, parties, outings and trips give the members an opportunity to have fun and to meet young people their own age. They make new friends at meetings, at county fairs and camps.

The chance to hold office, to plan and conduct meetings and to demonstrate before a group develops leadership abilities and self-confidence.

Boys and girls interested in joining a 4-H club should see their local club leader or county extension agent. The county extension office can supply the names of leaders and clubs in different areas of the county.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 7, 1960

Special To Extension Service Review

USING LONG RANGE PLANNING IN CHIPPEWA COUNTY

By Eugene F. Pilgram, Chippewa county agent

Long range planning has been an effective blueprint for Extension action in Minnesota's Chippewa county.

We may have had some reservations about such planning at the start. But after two years of turning planning into action, we have become convinced that long range planning is one of the best approaches we have ever attempted.

The County Extension Committee was the guiding force. Aiding them was the study and recommendations committees, made up of rural and urban volunteers.

Agents sat down with these local people for a careful look at past and present situations in farming and homemaking. Together, they projected trends, stated problems and listed recommendations. Nearly a year passed from the start of long range planning until a final report in booklet form was presented to the people of Chippewa county.

Six program areas were selected for study. They were crops and soils, livestock production and consumption, growth and education, family living, farm and home organization and management and community development and public affairs.

The important thing from this intensified planning was that we involved more than 80 community leaders in the planning. They became very familiar with the county situation, our programs, and our possibilities. Each year's program is now being guided by reference to the recommendations of the long range planning study.

The planners had to deal with many changes and problems. Crop yields were below par on many farms. Dairying showed a decline in numbers and labor return. And while beef appeared well adapted to the area, large numbers of farmers lacked cattle feeding experience. Hog producers weren't getting enough little pigs per sow and raising too few meat type hogs. Drainage was not coordinated, and flood and

water problems were all too common. Homemakers were raising questions about remodeling as compared to building new houses. Water and sewage systems were needed on several farms. New equipment, food and fabrics left many homemakers in need of information.

Only about one-third of the farm youth would find a place in agriculture on the home farms. The story of locations and opportunities in positions related to agriculture was not being told. Farm organization and management assistance was listed as an opportunity for extension to help young families in fitting together a successful farm business. In the field of community and public affairs, the committees felt a general lack of interest and knowledge existed concerning preparedness and in matters of public concern such as taxes, trade and so forth.

Implementing the long range recommendations has meant yearly planning and budgeting. Some items obviously needed priority. For example: sewing instruction for new and inexperienced homemakers came before pattern alterations. Organizing project leaders preceded an intensive training program for project leaders. An organization of a sound watershed steering committee was formed one year and agents worked with this committee the second year on general information meetings, tours and so forth. Much of the extension work listed is given repeated attention each year through such means as newspaper, radio, demonstration plots, and meetings.

To be specific, here are some examples of long range planning problems and how they were approached during the first two years.

* Low labor returns in dairying. A dairy herd improvement association was organized by extension agents the first year, involving 25 herds on test.

* Farm and home planning needs. In two years, 42 young farm families have organized in eight groups and have undergone an intensive group training program. All agents have worked with these farm couples on an individual farm and home management basis.

* Soil and water conservation. The area soils agent, in cooperation with county extension personnel, reorganized a watershed steering committee whose activities had lapsed. As a result of cooperation with this group, a conservation and flood prevention program is being planned for an area covering about one-fourth of the county.

* Youth programs. Vocational guidance has been discussed by the assistant agent at meetings held by each of the 20 4-H clubs in the county. Two entire 4-H club leader meetings have been devoted to this topic. A College Dean and a Home Economics School head have been speakers. These meetings, along with advanced 4-H activities such as the 5-calf feeding projects and ton-litter pig projects, have aided in filling requests for help to older 4-H members.

* Nutrition. A program on healthful desserts has been organized as one of the first home program lessons tied to long range recommendations.

* Civil Defense. In cooperation with the local civil defense director, the home agent has conducted leader training and open meetings for more than 800 women on civil defense and preparedness in the home.

* Public affairs understanding. This problem has been attacked by a series of forums, involving two or three counties, on world trade, marketing, and factors affecting prices. A series of meetings, newspaper and radio publicity and a publication titled "Know Your County Government" answered a need for information on taxes, roads, county welfare and other questions.

* Farm operation problems. Intensified farm visits, using specialists on topics like farm buildings, feedlot layout and housing, have been made during the past two years.

These are only a few examples of how activities by Chippewa county extension agents begin with the needs and requests from county people. The program has made yearly planning very simple; we merely select from the list of long range planning recommendations. Adding new ones, dropping those completed and continuing emphasis on several others are processes that never seem to end.

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1,. Minnesota
September 8, 1960 Immediate release

4-H'ERS TO HAVE STATE HEALTH CAMP

More than 100 4-H members will attend the annual State 4-H Health camp Sept. 18-21 in Itasca State park at the University of Minnesota's Forestry and Biological station.

Delegates to the camp include county health champions and other 4-H'ers chosen on the basis of their personal health records, the work they have done in improving health conditions in their homes and communities and their ability to bring back useful health information to fellow club members.

The camp is being sponsored for the eighth year by the University of Minnesota Agricultural Extension Service in cooperation with the Minnesota Tuberculosis and Health association and the Minnesota Department of Health. The Folger Coffee company, Kansas City, Mo., provides funds for the camp.

A cookout at 6 p.m. Sunday, Sept. 18, will be followed by an assembly at which the speakers will be the Rev. Lyle Christianson, pastor, First Methodist church, Bemidji, and Leonard Harkness, state 4-H club leader at the University of Minnesota.

Camp sessions Monday and Tuesday will be given over to workshops on personality development, dental health, home sanitation for healthful living and grooming for good health. Workshop leaders will be Charles Martin, extension family life specialist, University of Minnesota; Mrs. Dorothy Berg, health education director, Minnesota Tuberculosis and Health association; William Jordan, chief, section of dental health, and Myhren C. Peterson, supervisor, district sanitation activities, Minnesota Department of Health.

Special assemblies, group meetings for exchange of ideas, nature hikes and fun fests are also included in the four-day program.

At the banquet Tuesday, Sept. 20, Genevieve Damkroger, mental health consultant, Minnesota Department of Health, will tell of her experiences on a bus trip in Russia.

Announcement of the state health achievement champion for 1960 will be made Tuesday, Sept. 20.

Earl S. Bergerud, district 4-H club leader at the University of Minnesota, has charge of preparations for the camp.

60-291-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 8, 1960 Immediate release

COOKING GUIDE FOR GARDEN VEGETABLES

Quick cooking is your cue to attractive, tasty vegetables.

Vegetables add interest and nutritive value to September meals--especially if they're from your own garden or fresh from local market gardens. But overcooking can make them mushy and tasteless and destroy vitamins and minerals as well.

Cook all vegetables only till they are tender. When boiling vegetables--the most common way of cooking them--add them to boiling salted water and cook them gently to avoid breakage. Start on high heat, then turn to low heat as soon as the water starts steaming.

Using a pressure saucepan will speed up the cooking process. However, it is important to time the cooker correctly to avoid overcooking.

Whether to have the cover on the pan or to leave it off when boiling vegetables depends on the kind of vegetable you are cooking, says Grace Brill, extension nutritionist at the University of Minnesota.

The University nutritionist gives this guide to vegetable cooking:

. Cook strong-flavored vegetables, such as cabbage and onions, uncovered.

. Cook mild-flavored vegetables, such as carrots, in a small amount of water in a covered pan.

. Cook green vegetables in an uncovered pan for the first few minutes, then cover the pan to shorten cooking time. Quick cooking is especially important to preserve color. Cooking in an uncovered pan for the first few minutes allows volatile acids to pass off which would destroy the coloring. Covering the pan after the first few minutes of cooking will shorten cooking time. Cooking in a small amount of water will save nutrients, but a large amount of water gives better color.

. Cook yellow vegetables covered in a small amount of water.

. To preserve the color of such red vegetables as red cabbage, add a little acid in the form of vinegar or lemon juice to the cooking water.

. Cook white vegetables only until they are tender. They darken when they are overcooked.

60-292-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 8, 1960

A FARM AND HOME
RESEARCH FEATURE

Immediate release

GRADUAL CHANGE FOUND IN ETHNIC COMMUNITY MARRIAGE PATTERNS

Marriage patterns in rural Minnesota ethnic communities may be changing, but the change is often a gradual one.

Rural young men from these areas where the old country influence is still strong are going farther from home to find future wives. But few are marrying city girls; the selection still involves mainly girls from other rural places, who have backgrounds similar to the men.

A University of Minnesota rural sociologist, Ronald Klietsch, found these trends in a 1959 study of several communities in central Minnesota. The communities were made up primarily of people with German backgrounds.

His purpose was to learn whether and how mate election has been altered over time. He found that in spite of gradual changes, the old "in-group norms" still persist, in these areas of strong ethnic ties, to a much greater extent than where such ties have weakened.

For example, in community "A," records showed that 75 percent of all marriages over a 70-year period had involved couples from within a 10-mile radius. The rest involved mates who had originally been farther apart, but in the same county.

(more)

This study didn't account for people who had left the area to be married. It dealt only with couples married in the local area itself.

Klietsch did find gradual change over time. About 48 percent of all community A couples married between 1941-50 were from within the 10-mile radius, but the percentage dropped to 31 percent between 1950 and '58.

In community "B," 42 percent of all local marriages from 1941-50 represented couples from within the community itself, compared to only 10.5 percent in the last 8 years. Unlike community A, marriages within the 10-mile radius around community B actually increased--from 35 percent before 1950 to 51 percent since.

Shifts that occurred were due to local conditions--not a trend involving men going to cities for spouses. In community A, decreasing marriages within the area around the community reflects a drop in farm numbers and availability of prospective marriage partners.

In the second community, more partners are from the open country. Reasons are local improvements in highways--making it easier to court girls from a distance--and a fairly large number of young people starting farming.

Klietsch says the fact that trural young men in these areas prefer mates with the same strong German background stems from the strong influence of religious customs, the role of the family and the ethnic factor itself.

Changes that have occurred appear to result primarily from school consolidation, increased availability and broader use of recreational facilities, improved roads and a broader perspective of rural life among the younger generation in these communities.

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60-293-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 8, 1960

Immediate release

POSTGRADUATE CONFERENCE FOR VETERINARIANS SET

The Minnesota Postgraduate Conference for Veterinarians will be held at the College of Veterinary Medicine on the St. Paul campus of the University of Minnesota on September 14 and 15.

The conference was announced today by J. O. Christianson, director of agricultural short courses. Dr. George W. Mather, professor of veterinary medicine and clinics, is program chairman.

Sessions on Wednesday, Sept. 14, will cover specific pathogen-free pigs and their relationship to the control of infectious diseases of swine.

A conference on ophthalmology--the study of the eye and its diseases--will be held on Thursday, Sept. 15.

Speakers for the conference include Dr. Samuel H. McNutt, professor of veterinary medicine, University of Wisconsin; Dr. George A. Young, head of the department of veterinary science, University of Nebraska; Dr. William G. Magrane, practitioner, Mishawaka, Indiana; and Dr. Bertrand O. Combs, practitioner, Conrad, Iowa.

Several speakers from the University of Minnesota are also on the program.

All graduate veterinarians are invited to attend. For more information, contact the Director of Agricultural Short Courses, Institute of Agriculture, University of Minnesota, St. Paul 1.

60-294-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 9, 1960

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* For release at 3:15 p.m.*
* Monday, September 12 *
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CONFERENCE HEARS OF NUTRITION EFFECT ON MILK AND VEAL QUALITY

What a cow eats definitely affects the nutrients in the milk we drink, W. A. Olson, University of Minnesota dairy researcher, told the Animal Nutrition and Health Short Course here today (Monday, Sept. 12).

Olson listed several milk qualities affected by feeding. They are the solids-not-fat content and percentage of fat, the amount of vitamin A and D, and the purity, flavor and pigment of the milk. These qualities in turn affect the products manufactured from milk, he said.

Investigators have reduced the percentage of milk fat greatly and have changed the nature of acids in the fat by feeding cows a small amount of roughage or a ground roughage diet.

Starvation or certain feeds will change the structure of milk in a similar manner, he continued, "but only slight temporary increases in the fat content of milk have been produced by feeding high-fat rations."

Milk from cows changed from underfeeding to marked overfeeding has shown increases of up to 0.8 percent in solids-not-fat. Most of this change occurs in the protein and not the lactose (milk sugar) content of the milk.

The amount of vitamin A and D in milk is directly related to the amount of these vitamins supplied in the feed. Except for iodine, the mineral content of milk is little affected by the amount of minerals in a cow's diet.

The common ingredients in a concentrate mixture normally do not cause off-flavors in milk, Olson went on. "However, starvation or lack of vitamin A may increase spontaneous rancidity of milk."

Cows on a carotene-rich diet produce milk high in pigment. And the purity of milk may be affected by certain feed residues, chemicals or drugs in a cow's ration.

Products manufactured from milk are affected by a cow's diet. The spreadability and color of butter, the character of ice cream and cottage cheese and off-flavors in milk are all influenced by nutrition, he continued.

Olson also said the production of quality veal (the flesh from calves fed entirely on whole milk) has always been considered as having a nutritional basis.

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60-295 - hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960 Immediate release

EFFECT OF FEEDING ON CARCASS QUALITY OF BEEF NOTED

How a farmer feeds his beef definitely affects carcass quality, a University of Minnesota animal scientist told the Animal Nutrition and Health Short Course audience here today (Tuesday).

"Shoppers look for tenderness, juiciness and flavor when they buy steak," said O. E. Kolari. "Yet the effect a feeding program has on these characteristics is only indirectly noted. Instead studies are reported largely in terms of carcass grade."

Carcass grade is related to fatness, Kolari continued, which in turn tends to go with juiciness and tenderness. This means grade is generally a measure of carcass quality.

Kolari said research done around the country has shown these general points:

* Cattle fed for longer periods usually have carcasses grading higher than short-fed cattle on similar rations.

* Carcasses of cattle fed in drylot tend to grade higher than those of animals fed the same length of time on pasture.

* For best carcass quality, protein content of cattle rations should range from 9 1/2 to 11 percent.

* Full feeding grain usually results in higher carcass grades and juicier--and perhaps even more tender--cuts than limited grain; especially with younger cattle.

* The effect of fat content in feed is still a question; studies do not all give the same result.

* A period of slow growth, for example when range cattle are wintered on a minimum of feed, usually won't lower carcass grade.

* Feed additives at proper levels normally have little or no effect on carcass quality.

60-295-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

Immediate release

MIDWEST POULTRY BREEDERS CONFERENCE ANNOUNCED

How to crossbreed poultry for increased performance will be the topic of the Ninth Midwest Poultry Breeders conference Sept. 21 and 22, on the St. Paul campus of the University of Minnesota.

The conference was announced today by J. O. Christianson, director of agricultural short courses. R. N. Shoffner, professor of poultry husbandry, is program chairman.

Speakers include poultry specialists from private industry, from colleges and universities throughout the nation and from the University of Minnesota.

All interested persons are invited to attend. For further information, contact the Director of Agricultural Short Courses, Institute of Agriculture, University of Minnesota, St. Paul 1.

60-296-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

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* For release at 3:40 p.m. *
* Wednesday, Sept. 14 *
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SPECIALISTS CONSIDER EFFECT OF SPF PIGS

How Minnesota hog growers may be affected by the specific pathogen-free swine (SPF) program was outlined today by two University of Minnesota specialists.

Robert Meade, livestock scientist, and Ken Thomas, extension economist, discussed the possible effects of the SPF swine program at the Minnesota Post-graduate Conference for Veterinarians.

Meade noted one potential of the SPF hog program: A complete repopulation of Minnesota sow herds by 1966. He quickly cautioned, however, that such sudden change is unlikely. Many factors limit the program's development.

SPF pigs are the result of a new swine disease control technique. The pigs are surgically taken from their dams a few days before normal farrowing time. The sow is slaughtered for processing and pigs are raised under disease-free conditions for the first month.

The pigs are then taken to farms which have been cleared of all hogs for at least a month--thereby "breaking the chain" in either or both of two serious diseases--atrophic rhinitis and virus pneumonia. It's possible that other diseases may be eliminated, too.

SPF pigs are raised as breeding stock and are kept entirely away from pigs not born by this method. All replacements, gilts or boars, in these primary herds must also come from laboratories or other SPF herds, to avoid reintroducing atrophic rhinitis or virus pneumonia.

If gilts from SPF litters are not recontaminated, they can give natural birth to SPF pigs.

"One immediate place for application of the SPF pig program," said Meade, "is the salvage of valuable lines of breeding stock which might otherwise be lost through disease.

(more)

"But," he continued, "the potential of the program is limited until the breeder can be assured of a fair return on his added investment."

Hog growers are anxious for more information on the SPF program, Meade said.

"The breeder would like reasonable assurance that he can sell breeding stock without the prospective purchaser contaminating the premises while selecting animals. And he doesn't want a claim for a boar that failed to work because he became sick after arrival on a different farm."

Thomas said the breeder may be very interested in producing and marketing SPF pigs because of the apparently favorable relationship between added cost and returns. Preliminary estimates of the added costs to breeders of SPF swine range from $8 to $16 per pig--if the SPF gilt can be kept clean for 4 farrowings.

Thomas suggested the SPF pigs will find their greatest market among better commercial producers. "But," he added, "these better producers will be carefully weighing the costs against the benefits involved."

Persons fostering the program must first prove to the commercial producer that SPF pigs will make him more money than the pigs he now raises, Thomas said. Part of this job is helping the producer find the lowest-cost method of repopulating his herd.

Estimates of the added costs to commercial producers indicate that buying bred gilts from a primary SPF producer and keeping the herd disease-free for 5 years will raise cost from 75 cents to $2 per pig weaned over that period, Thomas says.

This compares with a probable added cost of $1.75 to $3.50 per pig weaned if the commercial producer starts his SPF program with his own breeding stock. This higher cost would result from the cost of the surgical operation, the added cost of a boar, the loss in income from sacrificing sows with potential breeding value and the greater risk of raising the pigs.

Commercial producers, too, must remove hogs from their premises for some time before repopulating with SPF animals. This means a temporary loss of income.

Thomas said the commercial hog grower wants to know how long he can expect to keep his herd free from contamination and how much improvement in performance he can expect from SPF pigs. For example, the added feed conversion needed to cover costs will range from 12 to 150 pounds per 100 pounds of pork produced--depending on the length of time a herd can be kept clean and the method of repopulating the herd with SPF breeding stock.

Thomas and Meade agreed that past experience suggests technologies such as SPF pigs, which require large amounts of additional management, will rise or fall with the farmer's ability to learn the "know how" and put it into practice.

60-297-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

Special to Radio Stations

RADIO SHORTS ON BEEF-GRASSLAND DAY

Here's some help for beef producers faced with a heavy crop of immature corn and bulging silos this fall.

Studies on corn silage for fattening steers and heifers will be reported at the Beef-Grassland Field Day Thursday, September 22, at the University of Minnesota's Rosemount Experiment Station.

The trials involved silage and corn along with several different levels of hay. So come to the Beef-Grassland Day and hear the results. They could mean profits in many a beef lot.

* * *

Can steers and beef heifers get by on little or no hay? Many farmers raising continuous corn would like the answer to that question.

You can hear the question discussed thoroughly at the Beef-Grassland Field Day, Thursday, Sept. 22, at the University of Minnesota's Agricultural Experiment Station. Livestock researcher O. E. Kolari will report on trials in which he compared hay feeding rates of 2, 4 and 6 pounds per head daily on beef animals.

Corn silage, stilbestrol, and vitamin A problems will also be discussed. That's September 22, for the Beef-Grassland Field Day at the Rosemount Experiment Station.

* * *

If the vitamin A problem in beef cattle has you concerned, better come to the Beef-Grassland Field Day, Thursday Sept. 22. The event will be at the University of Minnesota's Rosemount Agricultural Experiment Station.

Main speaker of the event will be A. L. Neumann, animal scientist at the University of Illinois, who has carefully studied vitamin A deficiency and what to do about it. Other topics at the field day will be feeding wintering calves, rations for fattening cattle and feed additives. You'll also see a demonstration on how to select and feed feeder cattle of different classes and grades.

* * *

add 1 Beef-Grassland Field Day radio shorts

Wondering what kind of feeder cattle to put in the feedlot this year?

Here's a chance to get some expert opinion. Simply come to the Beef-Grassland Field Day Thursday, Sept. 22, at the University of Minnesota's Rosemount Agricultural Experiment station.

A feature attraction will be a demonstration of different classes and grades of cattle, along with tips on how to select these cattle, how to feed them, and what the profit prospects are for each kind. The discussion will be led by L. S. Doran from Central Livestock Order Buying Company, and R. E. Jacobs, extension livestock specialist at the University.

That's September 22 for the Beef-Grassland Field Day at Rosemount.

* * *

How a beef man handles his feeder calves this winter may determine whether he chalks up a profit or red ink in his farm account books.

And planning a good feeding program is more apt to be successful if it's based on the latest research. Experiments on grass silages, antibiotics, and stilbestrol implants for wintering calves will be reported at the Beef-Grassland Field Day Thursday, Sept. 22.

The event is at the University of Minnesota's Rosemount Agricultural Experiment Station. Other research topics will include corn silage and hay levels, for fattening cattle, pasture fertilization, and vitamin A problems. The student Block and Bridle Club will make the beef man's day complete with a noon barbecue. And the day will wind up with a demonstration of kinds of cattle to feed during the coming year.

* * *

add 2 Beef-Grassland Field Day shorts

Whether fertilizer can boost beef profits will get some attention at a special event this month. The occasion will be the annual Beef-Grassland Field Day, Thursday, Sept. 22, at the University of Minnesota's Rosemount Experiment station. And everyone interested is invited.

Al Schmid, a University agronomist, will tell what happened to beef profits when he turned steers into different kinds of pasture. He had some animals on bromegrass that got no fertilizer since the pasture was seeded three years ago. Other animals ate brome which had been fertilized annually. Still others are on fields renovated and seeded to a mixture of alfalfa, bromegrass, or orchardgrass and alsike clover.

You can hear results of these trials and more at the Beef-Grassland Field Day, September 22 at Rosemount.

* * *

Would you put nitrogen fertilizer on a pasture twice in one summer? Or do you think it better to put the whole application on at once in early spring?

You can hear soils research men talk on this question at the Beef-Grassland Field Day, Thursday, September 22, at the University of Minnesota's Rosemount Experiment Station.

Paul Burson will tell results of split versus one-shot nitrogen treatments on forage growth. And he will also report the final effect on beef profits.

Other research topics will include pasture mixtures for beef cattle, silage feeding, managing wintering calves, and the vitamin A problem in beef.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

To all counties

For immediate release

NEW SHEEP DISEASE PROBLEM REPORTED

Minnesota sheep growers are being alerted to an infectious disease known as scrapie which attacks the nervous system of sheep. Veterinarians believe it is caused by a virus and affects all breeds, says county agent _____ _____.

Raymond B. Solac, extension veterinarian at the University of Minnesota, says scrapie has not yet been found in Minnesota but has been reported in two adjoining states.

There are, however, six Minnesota flocks with over 600 sheep now under regulatory supervision. These flocks are made up chiefly of sheep that have had no direct contact with the disease. But because they are suspected as a possible source of infection they are inspected regularly by state or federal veterinarians.

Eight months ago only two Minnesota flocks were under supervision.

The name "scrapie" describes the most noticeable symptom of the disease. Infected animals scrape off patches of wool as they rub against objects to relieve the intense itching. Other symptoms are tremors and incoordinated gait.

Infected animals generally die 3 weeks to 6 months after symptoms first appear.

Scrapie is not a new disease. It spread from Europe to Canada in 1939, and to the U.S., in Michigan, in 1947. Now it has been identified in 23 other states.

Solac says little is known about the natural spread of the disease. It may be spread by carrier animals or by other means. The only way known to stop the spread of scrapie is to prevent sheep from exposure to it.

Sheep exposed to scrapie in Minnesota are slaughtered. Both the federal government and the state pay indemnities for such sheep. Scrapie is hard to detect and may be confused with parasitic skin diseases and certain nervous diseases of sheep. But if you suspect an outbreak in your flock, notify your state or federal veterinarian.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

To all counties

A Farm and Home Research Report

WINTER RATIONS WITH STILBESTROL HIKE CALF GAINS

Stilbestrol can hike the gains of steer calves on certain winter rations, says county agent _____ _____. _____ cited University of Minnesota research reported at Beef Cattle-Grassland Field Day, September 22.

Feeding 50 milligrams of antibiotic per head per day had no appreciable effect on the average daily growth of calves. In fact, calves fed an antibiotic showed no consistent effect on feed consumption, feed efficiency, feed cost per pound of gain, or on feeder grades at the end of the experiment.

Livestock scientists J. C. Meiske, A. L. Harvey and O. E. Kolari found calves implanted with 12 milligrams stilbestrol averaged 1.44 pounds of daily gain. Calves that didn't get stilbestrol averaged 1.28 pounds of gain per day.

By contrast, calves fed an antibiotic averaged only .03 pound more daily gain than those not getting the antibiotic--a difference too slight to have meaning.

In the same trial, the researchers compared early cut (3 days after heading) oat silage, late cut (early dough stage) oat silage and alfalfa-brome silage (cut at 1/10 bloom stage) for wintering calves. The animals got all the silage they cared to eat supplemented with 3 pounds of alfalfa-brome hay and about 4 pounds ground ear corn per head daily.

All three types of silage gave good, low-cost (10-12 cents per pound) gains, but calves fed late-cut oat silage gained the most--1.45 pounds per day. Calves fed early-cut oat silage made the lowest daily gains--1.26 pounds per head. Those fed alfalfa-brome silage made gains measuring midway between the two oat silages at 1.35 pounds per day.

Calves on alfalfa-brome and late-cut oat silage ate about the same amounts of silage. Those fed early-cut oat silage ate slightly less.

But calves fed late-cut oat silage took less feed per 100 pounds of gain--8.5 percent less on a dry matter basis than those fed alfalfa-brome silage and 4 percent less than those fed early-cut oat silage.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

To all counties

For immediate release

GOOD CORN SILAGE DEPENDS ON RIGHT MOISTURE CONTENT

No matter what kind of corn silage you put up, the right moisture content is necessary to nutritious silage with high keeping quality.

Whole plant corn silage should be harvested at 65 to 70 percent moisture, says county agent _____ _____. This is when the kernels are in the hard dough stage--fully dented and firm.

Ground shelled corn should go into the silo with 25 to 30 percent moisture, according to extension agronomists and agricultural engineers at the University of Minnesota. But if you put the kernels in whole, the moisture content must be higher--perhaps as much as 5 percent--in order to minimize spoilage.

Ear corn is ready for the silo at 30 to 35 percent kernel moisture. That's because the grain and cob together average about 5 percent more moisture than the grain alone.

If you're putting up ear corn or shelled corn silage, grind the corn. Grinding helps prevent separation of cobs and kernels during filling--gives silage high feeding value and helps prevent spoilage during feeding. Also, grinding is important if you add water to adjust silage moisture.

A hammer mill or burr mill will do a good job of coarse grinding for either ear corn or shelled corn silage.

Since both ear corn and shelled corn silage are feed concentrates, you'll want to take special precautions to prevent spoilage loss. Cover the doors and top of the silage with plastic sheeting. The plastic will seal out air and help prevent spoilage.

No matter what kind of silage you're making, add water to your silage if corn is on the dry side when you fill. Figure about 4 gallons of water per ton of silage for each 1 percent rise in moisture.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

To all counties

ATT: HOME AGENTS

Immediate release

EATING BREAKFAST STARTS DAY RIGHT

How's the breakfast score in your family?

If breakfast is the most neglected meal of the day, extension nutritionists at the University of Minnesota say it's also the most important. Yet teenagers are notorious breakfast skippers.

The effects of skipped or skimpy breakfasts are apparent in students, particularly by mid-morning, when they are likely to be tired, inattentive in class or have difficulty concentrating when they are studying. Adults, too, are likely to experience a mid-morning slump or feeling of listlessness if they have not eaten an adequate breakfast. Studies of industrial workers have traced accidents and slow-up in work to little or no breakfast. Skimpy breakfasts are most serious, however, for growing children whose food must supply the needs for growth and activity.

A good breakfast should supply a fourth to a third of the day's food requirements, the University nutritionists say. For more efficiency in the morning, they recommend a breakfast pattern of a fruit, preferably citrus, cereal, milk and toast, or fruit with toast and eggs, ham or bacon. Tests have proved that eating this type of breakfast enables an adult or the child in school to turn out more work and to tire less easily.

What about the argument that by skipping breakfast you will lose weight? University extension nutritionists point out that there are about 200 calories in a breakfast of 1/2 cup of citrus fruit juice, one egg, lightly buttered toast and black coffee. The mid-morning snack of a doughnut or a sweet roll eaten to replace the missed breakfast supplies at least 135 calories, a candy bar from 150 to approximately 300 calories, without the protein, minerals and vitamins provided by a good breakfast. Compare those 200 calories, too, with at least 350 calories in the gooey luncheon dessert many women think they can eat because they skipped breakfast.

-jbn-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

To all counties

For immediate release

FARM FILLERS

Soils get sick--humans and livestock aren't the only things that get sick on the farm. Soil does, too, especially if you don't give it the fertilizer it needs. And the only way to tell what your soil needs in the way of fertilizer is to have it tested by the University of Minnesota's Soil Testing Laboratory. Do it now during the Fall Soil Sample Roundup. We in the county Extension can give you instructions on how to take samples and what to do with them.

* * * *

Cutting corn high for silage--some Minnesota farmers are trying a different wrinkle in their silage making by cutting corn high and leaving 12 to 18 inches of the lower stalk standing in the field. This gives a higher proportion of grain to stalk and leaves. The results are a more digestible, nutritious silage. University of Minnesota agronomists say chemical analysis indicates the lower part of the stalk is lower in protein and digestibility and higher in fiber than other parts of the plant.

* * * *

For better egg flavor and uniform yolk color, always confine hens and feed them a uniform ration. Poultry specialists at the University of Minnesota say some feeds give unpleasant flavors and undesirable yolk colors, especially those feeds that chickens pick up when they are scavenging around the yard.

* * * *

A cow's diet affects the solids, not fat content, percentage of fat, the amount of vitamin A and D, and the purity, flavor and pigment of milk so says W. A. Olson University of Minnesota dairy researcher. Investigators have greatly reduced the percentage of fat in milk by feeding cows a small amount of roughage or a ground roughage diet. But only slight temporary increases in fat content have been produced by feeding high-fat rations.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 13, 1960

To all counties
4-H NEWS
Enrollment series
Immediate release

NEW EVENTS, PROJECTS IN STORE FOR 4-H

Five projects will be added or revised in the 4-H program and several events have been added to the fall calendar, Robert Pinches, assistant state 4-H club leader at the University of Minnesota, has announced.

Entomology will be adopted as a statewide project in October, and at the same time, health, safety and conservation, which have been 4-H activities, will become individual projects. The field crops project has been changed in line with the latest and best crops practices.

Any 4-H'er will be eligible to participate in the 4-H entomology project. It will give members the opportunity to collect, identify and learn about the insects of Minnesota. Mounted insect displays will be made to show at county fairs and local exhibits. These displays often become an important part of an individual's hobby collection. In counties where entomology has been a pilot project, it has become a fascinating hobby for a good many boys and girls.

Health, safety and conservation, favorite club activities for a long time, will now be individual projects. New requirements will make more challenging the work 4-H'ers will do in the fields of personal and family health, safety and fire prevention and conservation.

In the modernized 4-H field crops project, tested on a pilot basis for the past three years, 4-H'ers grow crops, do soil sampling and study fertilizers and weed control. The project will help boys get better acquainted with crop production practices and the scientific approach to production.

New events on the fall calendar include the new 4-H Forestry camp to be held in Cloquet Oct. 9-12. About 20 older 4-H boys enrolled in the forestry project will attend the camp to study project leadership and forestry skills.

A state 4-H electric conference is scheduled for November. This is the first time such a conference has been held.

Boys and girls throughout the state between the ages of 9 and 21 will have the opportunity to join their local 4-H club this fall and participate in these new projects. Contact your local county extension office for information about how to join a 4-H club.

-rlr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 15, 1960

HELPS FOR HOME AGENTS
(These shorts are intended as fillers for your radio programs or your newspaper columns. Adapt them to fit your needs.)

In this issue:

WHAT'S NEW

Instant Sweet Potatoes in Offing

You may be able to buy instant sweet potatoes soon at your grocer's. They're in the final stage of research necessary before they can be put into commercial production.

The U. S. Department of Agriculture reports that instant sweet potato flakes are prepared by a process similar to that used in manufacturing instant white potato flakes. They have the characteristic bright color and flavor of fresh pureed sweet potatoes. After adding hot water or milk, the sweet potato flakes are ready in a few seconds to serve as mashed sweet potatoes or to use in a pie or casserole.

* * * * *

Piano Insect Spray Nearly Ready

An insecticidal spray solution has been developed by the U. S. Department of Agriculture to prevent and control carpet beetles and clothes moths in pianos where they feed on the wool felt parts.

It's inexpensive to produce, colorless, and leaves no odor. However, a heavy concentration dulls the tone of piano strings. Further tests will determine whether an even, light spraying will prevent this dulling.

Replacing felts that have been attacked by insects requires taking the piano apart. The felt under piano keys generally is the most severely damaged and often is not discovered until a technician is called. Damage may also be found in felts under piano strings or hammers.

-jbn-

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

HOME FURNISHINGS

Gold is Kitchen Accent

Fashionable colors this fall for decorating kitchens are yellow, white or blue. Many kitchens will make use of gold, the new popular kitchen accent.

With renewed emphasis on white appliances, the shift will be to either a sunny color scheme of yellow or a cool one of blue. But according to Mrs. Myra Zabel, extension home furnishings specialist at the University of Minnesota, gold will be the favorite accent, whatever the color scheme. Gold tones will be available in planters, metal kitchen accessories and a variety of kitchen linens.

* * * * *

Watch Pink in Bathrooms

Pink is one of the favorite colors for bathrooms.

According to the latest market reports, pink bathroom accessories are the best sellers -- indicating that more and more homemakers are decorating their bathrooms in pink this fall. However, cautions Mrs. Myra Zabel, extension home furnishings specialist at the University of Minnesota, high-style colors come and go, and in a few years you may want to change your bathroom color scheme. That's why it's wise to keep permanent fixtures in white or a color that will blend with others.

In the meantime, if you're decorating your bathroom in pink, remember that it's difficult to match different shades of that color. Instead, use contrast with some other color. Try your pink with lilac, maroon or the new purple tones.

* * * * *

New Plastic Stool

Worth looking for is a new molded plastic stool available for use in the bath tub or shower stall. Advantage of the plastic is that there's no metal rust or peeling of paint.

* * * * *

HOME MANAGEMENT

Seconds, Irregulars May Be Good Buys

If your clothing budget is limited, you may be able to find some good buys in merchandise advertised as irregulars or seconds. These terms are used for merchandise which falls below standard specifications. Here's the meaning of the terms:

Irregulars may be imperfect in color, weave, size or knit. These imperfections, however, may not affect wearing quality.

Seconds may have a mend or tear or run in the fabric.

If you do decide to buy irregulars or seconds, Mrs. Edna Jordahl, extension home management specialist at the University of Minnesota, emphasizes the importance of examination of the articles before buying, to be sure the imperfections will not affect the wearing quality.

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Know Cash and Credit Terms

Before you decide to buy on credit, know the terms at the store where you buy. Calculate the cost of credit at several stores to decide which is best for you.

When you are using credit, follow these three simple guides, suggests Mrs. Edna Jordahl, extension home management specialist at the University of Minnesota.

- Find the lowest credit rate available.
- Make as large a down payment as possible.
- Pay the balance quickly.

* * * * *

What Should Be on a Label?

The National Consumer-Retailer Council suggests that the following information should be given on a good informative label: What the product is made of, how it is made, how it will perform, how it should be cared for, the name and address of the manufacturer and distributor.

Ask for good labels at your local merchants'--that's the way to improve them.

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HOME IMPROVEMENT

Light Up Bedtime Reading

Reading in bed is a pleasant and relaxing pastime if there's enough light to prevent eye strain.

A table lamp, wall lamp or suspended ceiling fixture may give adequate light for reading in bed, says Mary Muller, extension specialist in home improvement at the University of Minnesota.

Table lamps may be placed to the right or left of the bed with the lamps about in line with the reader's shoulder.

If wall lamps are your choice, the extended arm-type lamps are best. They reach over wide headboards to bring the light over pillows.

Suspended ceiling fixtures should be close to the wall, and to the right or left of the reader. Place reel-type ceiling fixtures the same way and pull them down so that the lower edge of the shade is at eye level.

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Some Do's and Don'ts in Home Lighting

How does your home rate when it comes to lighting? Extension home improvement specialists at the University of Minnesota say that the right kind and the right amount of light in the right place add up to good lighting.

They give these do's and don'ts to help you improve your home lighting:

Do plan for good over-all room lighting. A small bright light in a dark room is hard on your eyes.

Do paint walls and ceilings in light colors when possible. It's easier and more economical to light such rooms.

Do use plenty of light for close work. Ample light is necessary for hand sewing, desk work and reading.

Do use glass or plastic diffusing bowls to cover light bulbs for softer light.

And do clean fixture bowls, reflectors and light bulbs often for better light.

Don't use bare bulbs for lighting. They cause glare with resulting eye strain.

Don't put shiny finishes on walls or ceilings. They cause glare. And don't watch television in a totally dark room. Some room light makes viewing more comfortable.

* * * * *

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 19, 1960

A MINNESOTA
FARM FEATURE

Immediate release

SOIL TEST SPOTS LIME NEEDS ON BLUE EARTH COUNTY FARM

LAKE CRYSTAL, MINN.--Farmer Ralph Norman, Jr., is convinced that soil testing is a cheap prescription for higher profits.

But he adds that you may have to wait a few years to really see results. In his case, 2 ½ tons lime per acre in 1955--just what a test showed was needed--boosted hay yields by a good 50 percent this summer.

Higher rates--which he might have used in 1955 if he hadn't tested--didn't bring further yield increases great enough to pay the extra cost.

It all started in spring, 1955, when Norman asked Blue Earth county agent Wayne Weiser and assistant agent Byron Kunkel about lime needs. They wanted to learn two things: just how much lime his fields needed, and whether a soil test could really predict the need accurately.

Results from the soil test showed 2 ½ tons lime per acre were needed. But Norman, Weiser and Kunkel wanted a close check, so they divided an acre into four sections. One got no lime, the second received the 2 ½ ton recommended rate, the third got 5 tons and the fourth 10 tons per acre.

Norman raised corn on all plots that year and found no yield differences. Soybeans looked better on the limed plots in 1957, but corn the next year again showed no improvement from the lime.

Then last year, Norman seeded oats and alfalfa on the plots, cut the oats for silage and wound up with a good legume stand. He put 200 pounds 0-30-30 fertilizer on the new seeding.

This summer Weiser and Kunkel helped Norman check the hay yields. The unlimed plot had a spotty stand and more weeds and yielded only 2.1 tons per acre in two cuttings. The plot which had received 2 ½ tons lime in 1955 went 3.25 tons hay per acre, and plots with higher rates each produced 3.8 tons--not enough more to matter. The soil test had done its job well.

60-305-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 15, 1960 Immediate release

COUNTY RAM SALE DATES ANNOUNCED

Eighteen county ram sales to be held during the next 4 weeks were announced today by Robert Jacobs, extension livestock specialist at the University of Minnesota.

Ram sale dates are planned jointly by county agricultural extension agents and the Minnesota Sheep Breeders association.

Purebred breeders will bring rams to these events to offer them for sale at private treaty. Rams will be sold from 9 a.m. to 3 p.m. at the county fair grounds in each place except Sebeka and Sandstone where sale facilities will be set up in the business district.

First sale of the series will be held in connection with a special Sheep Day program Sept. 17, at Le Center.

Other sale dates are: Sept. 19, Zumbrota; Sept. 20, Blue Earth; Sept. 21, New Ulm (for Brown, Blue Earth, Sibley and Nicollet counties); Sept. 22, Little Falls; Sept. 24, Sebeka.

Sept. 26, Bagley; Sept. 27, Pine River; Sept. 28, Aitkin; Sept. 29, Sandstone; Sept. 30, Mora (Isanti and Kanabec counties).

Oct. 7, Austin (Mower, Freeborn and Dodge counties); Oct. 10, Windom (Cottonwood, Watonwan and Jackson counties); Oct. 11, Worthington (Nobles and Jackson counties); Oct. 12, Pipestone (Rock, Pipestone and Lincoln counties); Oct. 13, Clinton; Oct. 14, Fergus Falls (W. Ottertail and Becker counties); and Oct. 15, Perham (E. Ottertail and Becker counties).

60-298-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 15, 1960 Immediate release

SALE POLICIES SET FOR NEW VARIETIES OF OATS AND WHEAT

Sale policies for distribution of five newly developed small grain varieties were announced this week by Carl Borgeson, University of Minnesota agronomist.

Varieties affected are Clintland-60, Goodfield and Nehawka oats and Wells and Lakota durum wheat.

Contrary to usual practice, no maximum prices have been set this year. Because all of the varieties originated and are in production in other states, prices aren't expetted to need regulation.

Seed growers will reserve 90 percent of their crop for other growers in the state until Nov. 1 for certified seed and Dec. 1 for registered seed.

Clintland-60 is an early maturing oat variety of medium height. It has good resistance to lodging and bears large seeds. It is resistant to smuts, to all races of stem rust found in this area except 7A, and to all crown rust races prevalent in this region.

Goodfield and Nehawka are both short, early maturing varieties with good straw strength and large seeds. Goodfield is resistant to smuts and to all known races of crown and stem rust common to this region but susceptible to Septoria. Nehawka is susceptible to both crown rust and race 8 of stem rust.

The oat varieties are presently classified "not adequately tested" by the Minnesota Agricultural Experiment station. This means they have not completed the three-year test period required before a variety can be placed on the "recommended" list.

Both Lakota and Wells wheat are short-strawed, high-yielding, early maturing bearded varieties of satisfactory quality. Both are resistant to stem rust, bunt and loose smut. Wells is resistant to leaf rust, Lakota is moderately resistant.

Lists of seed producers are available from the Minnesota Crop Improvement association, University of Minnesota, St. Paul 1.

Growers of Elk and Caribou rye can obtain foundation seed (available only to registered growers) or registered seed now from the Rosemount Agricultural Experiment Station, Rosemount.

Foundation and registered seed of Minter winter wheat is available both from the Rosemount station and the Southern Experiment station, Waseca.

60-299-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 15, 1960 Immediate release

ELM TREES SHOW DISEASE AND ABNORMAL SYMPTOMS

If the once-stately elm tree in your back yard looks bedraggled this fall it's really not surprising. Minnesota elm trees are suffering from several diseases and abnormal symptoms this year.

Leaves on many trees have been turning yellow and dropping. This is caused in most cases by Anthracnose, the black leaf-spot disease of elm. This fungus disease has been abnormally severe this year, apparently because of unusually wet weather this spring and early summer.

Herbert Johnson, extension plant pathologist at the University of Minnesota, says you can spray elms in the spring to control Anthracnose but the disease isn't severe every year and control measures generally aren't needed.

Some elm trees have sparse foliage again this year, a condition that has been around to some extent for the past several seasons. Johnson says several factors contribute to this condition, winter injury among them.

A very dry fall in 1958 was followed by a cold winter with little snow cover. Hot, dry weather the next summer may have weakened the trees still further.

Scale insects are sometimes found in large numbers on elm trees and contribute to the poor condition of many trees. And although the dreaded Dutch Elm disease has not yet been found in Minnesota other fungus diseases with similar symptoms have been known to kill and damage many trees.

Also, says Johnson, salt used on city streets in the winter kills and injures many elm trees along the boulevards. Marginal browning of the leaves and dying ends of branches are signs of salt injury.

According to Johnson, proper care, including fertilizing and watering, is the best protection for your trees.

60-300-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 15, 1960 Immediate release

VITAMIN A PROBLEM TO BE REPORTED AT BEEF GRASSLAND DAY

Vitamin A deficiency, a serious nutritional problem in beef cattle, will get some thorough discussion during the Beef Cattle-Grassland Field Day, Thursday, Sept. 22, at the University of Minnesota's Rosemount Agricultural Experiment station.

Reporting on the problem will be A. L. Neumann, professor and head of the beef cattle division at the University of Illinois. Neumann, widely known for his research on beef feeding and management will report recent studies on vitamin A deficiency and ways to correct it.

Other speakers at the event will include seven University of Minnesota staff members: J. C. Meiske, W. J. Aunan, O. E. Kolari and A. L. Harvey, livestock researchers; Paul Burson, soils researcher; A. R. Schmid, agronomist; and R. E. Jacobs, extension livestock specialist.

Meiske will report studies on grass silages, antibiotics and stilbestrol implants for wintering calves. Aunan will talk on energy levels for steers and Kolari will report trials on limited hay along with shelled corn or corn silage for fattening cattle.

Like Neuman, Kolari will also discuss the vitamin A problem, which has hit a number of beef herds around the state in recent years.

Burson will discuss pasture fertilization and management studies, Schmid will talk on pasture mixtures and renovation and Harvey will discuss beef production.

Jacobs will give some tips on how to feed different grades of cattle during the coming years. A demonstration on the kind of cattle to select will be conducted by L. S. Doran, manager of stocker and feeder operations for Central Livestock Order Buying company, South St. Paul.

The event begins with a 10 a.m. tour of the cattle research facilities at the Rosemount station soils farm. Research reports begin at 11 and the student Block and Bridle club will serve a noon barbecue.

60-301-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 15, 1960 Immediate release

LENGTHEN LIFE OF CHILDREN'S CLOTHES WITH GROWTH FEATURES

You can sometimes add another year or more of life to children's clothes if you buy or make them with special growth features.

Since growth is usually up rather than out, it's most important to look for ways to add length. Shirley Erickson, extension clothing specialist at the University of Minnesota, suggests these growth features to look for in readymade children's clothing or to incorporate in the clothes you make at home:

. Wide hems.

. Sashes on dresses with waistline seams. A sash will cover up a waistline that's too high.

. Princess, tunic or other style with no waistline seam. Since growth occurs in the trunk as well as the legs, adjustment in the waistline may be as necessary as letting down the hem to keep the dress in pleasing proportion. A princess or tunic style with no waistline will provide for this adjustment.

. Adjustable straps or elastic on the waistband or skirts or trousers for the younger set. Buttons on straps can be lowered or the straps can be replaced later by buttonholes on skirt waistband and buttons on the blouse. Elastic in the waistband will allow for expansion in size of waist.

. Long tails on blouses to allow for growth in height.

. Pleats instead of darts at the waistline on blouses. Pleats can be moved to the natural waistline as the child grows.

. Cap or dolman sleeves. This type of sleeve will allow for growth in shoulder width.

. Boxy-styled jackets. A boxy jacket may be attractive short as well as long.

. Long loose sleeves on suit jackets. If the arms outgrow the long sleeves, the sleeves may be worn three-quarter length.

60-302-jbn

Spirit file

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minn.
Sept. 15, 1960

Special to Ramsey Co.

(with mat)

ASS'T HOME AGENT FOR RAMSEY COUNTY

Mrs. Margaret Mills of Duluth has been appointed assistant home agent for Ramsey county.

A graduate of the University of Minnesota with a degree in home economics, Miss Mills has also attended the University of Denver.

For the past two years she has taught home economics in Santa Maria, California. She has also taught home economics in Denver, Colorado, has worked as a home economist for a utility company in Duluth and has worked with decorators in Minneapolis.

As assistant home agent, Mrs. Mills will work with Mrs. Janice Wingren, Ramsey county home agent, and Roger Conklin, agricultural agent, sharing with Mrs. Wingren responsibility for teaching home economics to adult and 4-H groups. Her headquarters will be the county extension office at 2020 White Bear ave., St. Paul.

jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minn.
Sept. 15, 1960

Special to Fillmore Co.

(with mat)

HOME AGENT FOR
FILLMORE COUNTY

Fillmore county will again have the services of a home agent when Mrs. Rita Kramer joins the county extension staff Oct. 1.

Mrs. Kramer received a bachelor of science degree from the University of Minnesota in 1959, with a major in home economics. This past year she has taught home economics in Luverne.

For nine years she was a 4-H club member in Nicollet county, where she grew up on a 460-acre farm. As a club member she carried home economics, dairy and some of the livestock projects, was a junior leader and president of her local club.

Before coming to Fillmore county Mrs. Kramer will spend two weeks in Olmsted county as assistant home agent, receiving training in extension methods and techniques.

As home agent she will assume responsibility for directing the extension home economics program and working with 4-H club members in home economics projects.

jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St.. Paul 1, Minnesota
September 19, 1960

Immediate release

(with mat)

NEW SUPERVISOR IN U EXTENSION HOME ECONOMICS PROGRAM

Jean Lovdokken, Montevideo, has been appointed supervisor of the University of Minnesota's extension home economics program in the northwestern district, Skuli Rutford, director of the Agricultural Extension Service, announced today.

Miss Lovdokken has been home agent in Chippewa county since June, 1958. While there she gave home economics leadership in both the homemakers' and 4-H phases of the Extension program.

A graduate of Concordia college, Moorhead, where she majored in home economics, she has taken graduate work at the University of Wisconsin.

She taught home economics in Karlstad from 1955 to 1957 and in Ortonville in 1957-58.

While in college Miss Lovdokken was active in debate, was a reporter and feature writer on the school paper, served on the student senate and was a member of Omicron Tau Delta, home economics sorority.

She is a native of Wyndmere, North Dakota.

60-302-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 19, 1960

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* For release at 11 a.m. *
* Tuesday, September 20 *
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CHEMICAL WEED CONTROL RESULTS NOTED AT LAMBERTON FIELD DAY

LAMBERTON--Amiben may be the chemical to solve weed control problems for many soybean growers, Field Day visitors at the University of Minnesota's Agricultural Experiment station were told today.

Harley, Otto, extension agronomist, says 3 pounds of Amiben per acre gave effective control of both grasses and annual broadleaf weeds--with the possible exception of cocklebur--in soybean plots at the station.

Otto cautinned, however, that Amiben is still in the experimental stage and cannot be recommended for use on soybeans grown as food until it is approved by the Federal Food and Drug administration. It may be used in fields where soybeans are grown as seed.

Amiben has also shown promise of effective weed control in flax.

In corn plots, atrazine, another chemical weed killer, gave superior weed control compared with Randox, Randox-T, 2-4, D and some new materials not yet released for general use. Atrazine gave good results from both pre-emergence and post-emergence application, and at various application rates. Otto recommends a pre-emergence application of 2 to 4 pounds of atrazine per acre for effective weed control in corn. Post-emergence application still cannot be recommended because of limited information.

Atrazine cannot be used for weed control in soybeans.

60-303-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 19, 1960

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* For release at 3 p.m. *
* Tuesday, Sept. 20 *
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CORN BREEDING PROGRESS NOTED AT LAMBERTON FIELD DAY

LAMBERTON--A quarter-century of corn breeding progress was displayed today at the University of Minnesota's Agricultural Experiment station.

Field Day visitors compared 43 different corn varieties grown in plots at the station. Of these, 14 are experimental hybrid varieties now being tested for possible use in this growing area.

Those which show superior characteristics will be named and released for use by Minnesota corn growers, according to James C. Sentz, University of Minnesota plant geneticist.

The 14 experimental varieties are directly compared with 10 superior hybrids in the plots. These include hybrids widely grown by farmers in southern Minnesota, including Minhybrid 417 and A.E.S. 514.

Popular varieties of years ago, including Minhybrid 403 and 504, are also grown in the plots to help measure progress in breeding double-cross hybrid corn.

Three open pollinated varieties, Golden Jewell, Minnesota 13 and Murdock, favorites of Minnesota farmers before the advent of hybrid corn, are also grown for comparison with experimental varieties.

In station plots, less than 5 percent of the stalks of Minhybrid 417 and A.E.S. 514 are lodged. Stalk breakage in the open pollinated varieties runs much higher. Yields of superior hybrids are expected to run 20 to 25 percent above those in open pollinated corn.

Exact comparisons will be made when the crop is harvested.

Sentz said the progress of a corn breeding program is measured most accurately when old and new varieties are grown side by side rather than when new hybrids are compared only with records of corn grown years ago.

This is because of changes in corn growing practices, including tillage, fertilization and weed control.

60-304-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 19, 1960

SPECIAL TO TWIN CITY OUTLETS

Immediate release

SCHOLARSHIP WINNER ANNOUNCED

Gerhardt Nelson Fick, Vergas, has been awarded the $300 Barzen of Minneapolis, Inc. scholarship in agronomy for the year 1960-61.

Announcement of the award was made jointly today by John Barzen, chairman of the board, Barzen of Minneapolis, Inc., and Keith N. McFarland, director of resident instruction at the College of Agriculture, Forestry and Home Economics.

Fick, a 1960 graduate of the Perham high school, Perham, will begin his college training in agronomy at the University of Minnesota this fall.

The Barzen scholarship was recently established to assist and encourage worthy students, preferably freshmen, who wish to obtain a college career in agronomy.

Selection for the award is based on academic aptitude, vocational promise, personal attributes, leadership and financial need.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 19, 1960

SPECIAL to radio stations and newspapers (dailies and weeklies) in southwest and selected SE districts

TRACY CATTLE FEEDERS' CLINIC SET FOR SEPT. 30

University of Minnesota livestock specialists will appear on the program for the eighth annual Cattle Feeders' Clinic Friday evening, Sept. 30, in the armory at Tracy, Minnesota.

Questions to be discussed include:

What are the chances for profit in feeding cattle under today's conditions of record cattle numbers and rapidly expanding beef production?

What's new in protein supplements, feed additives and feeding systems?

University specialists who will speak include Harlund G. Routhe and Kenneth Egertson, extension farm management specialists; R. E. Jacobs and Raymond Arthaud, extension animal husbandmen.

The program will be opened at 8 p.m. by Raymond J. Newell, Lyon county agricultural agent, who will serve as master of ceremonies.

Egertson will speak on "Over-all Livestock Outlook"; Routhe on "Profit Prospects in Cattle Feeding"; Arthaud on "What's New in Feed Additives and Protein Supplements"; and Jacobs on "Have Cattle Feeding Systems Changed?"

"Kinds of Feeder Cattle, Costs, Ways to Feed, Chances for Profit" is the title of a demonstration and discussion to be conducted by Jacobs, Routhe and L. S. Doran, head of the stocker and feeder division of the Central Livestock Order Buying company.

This annual event is sponsored jointly by the University of Minnesota Agricultural Extension service, Central Livestock association, Central Order Buying company and the Tracy Civic and Commerce association.

It is expected that more than 1500 cattle feeders will attend, with ample space in the Tracy armory to accommodate the crowd.

Refreshments will be served by the Tracy Civic and Commerce association.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

To all counties

For immediate release

FARM FILLERS

For best carcass quality, protein content of beef cattle rations should range from 9 1/2 to 11 percent, says O. E. Kolari, University of Minnesota animal scientist. He adds that full feeding grain usually results in higher carcass grades and juicier--and perhaps even more tender--cuts than limited grain, especially with younger cattle. Kolari's advice is based on research done around the country.

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The size of Minnesota farms increased by about 8 percent between 1954 and 1959, according to the 1959 census of agriculture. About 96 percent of Minnesota farms are still family operated. That's the same percentage as 25 years ago.

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Native trees, both hardwood and softwood, are as valuable now as they were in pioneer days. Over 2 billion board feet of lumber are needed each year for building replacement. Parker Anderson, extension forester at the University of Minnesota, says a well managed farm woodlot will furnish lumber both for sale and for use on your farm.

* * * *

The most valuable pound of soil on your farm is the pound you put in a soil sample box. That single pound sample can tell you what's best for 10 acres of the topsoil on your farm. Pick up some sample boxes at the county extension office this week and have your soil tested during the University of Minnesota's Fall Soil Sample Roundup.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

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* For release at noon, *
* Wednesday, Sept. 21 *
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POULTRY BREEDERS NEED GENETIC TRAINING

To be successful, a poultry breeder must be well trained in population genetics, Ralph E. Comstock told the Midwest Poultry Breeders conference today.

The University of Minnesota animal geneticist said a breeder must have genetic training if he is to judge the implications of new research findings and apply new procedures in his work.

Comstock said poultry breeders today are faced with these major questions:

* In selection, what relative emphasis should be placed on such different traits as egg production, egg shape and size and egg quality?

* Should data used for selection among poultry families be collected under more than one set of environmental conditions?

* Should selection be based on performance of pure strain birds or on the basis of tests for combining ability? Most commercial chickens are crossbred. If pure strain performance is a reliable guide to performance of crossbred offspring, tests for combining ability could be eliminated.

The best solution to the first problem depends on such technical information as the heritability of the different traits, the correlations among them and the relative economic importance of the traits, Comstock said.

Whether data should be collected at more than one location depends on the interaction between inheritance and environment. Information to date doesn't indicate that data from many locations will greatly speed the rate of genetic improvement.

Comstock said selection for combining ability is a critical issue. Recent evidence suggests that it will not contribute to genetic improvement in the near future. However, there is no clear evidence of the long-run effect.

If such selection is necessary for maximum long-run improvement, the better birds 10 to 25 years from now will be produced by breeders who now select for combining ability or who begin such programs in the very near future.

Evidence to solve the issue is now being sought in research at many places and with various organisms, such as fruit flies, chickens, mice and swine. Mathematical studies using electronic computers will also contribute to the study.

Comstock said the successful breeder must be well grounded in genetic theory and able to use new information--whether obtained in research with chickens, fruit flies, mice or corn--in the intelligent modification of his own breeding plans.

60-306-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

Immediate release

MINN. 4-H HEALTH CHAMPIONS NAMED

Minnesota's 4-H health king is Craig Shulstad, 17, Barnesville.

Craig was named health achievement winner at the eighth annual State 4-H Health camp held at Itasca State park Sept. 18-21.

Joan Ruths, 16, Kilkenny, was chosen reserve champion.

As Minnesota's health champion, Craig will receive a trip to the National 4-H Club congress in Chicago in November. Joan will receive a trip to next year's State 4-H Health camp in Itasca park and will serve on the health continuation committee. Both winners received plaques citing them for their health achievements.

The honors came to the two young people as advance birthday gifts. Craig will turn 18 on Sept. 28; Joan will be 17 on Sept. 25.

Last year Craig won a trip to State 4-H Health camp as Clay county's health champion. He assisted with the planning and conducting of this year's camp as a member of the health continuation committee, composed of delegates elected by fellow campers last year.

In his health project he has given a good deal of attention to improvement of his own health and has given frequent talks and demonstrations on health. This year he was named champion health demonstrator at the Minnesota State Fair. His winning demonstration was on proper care of the teeth.

(more)

A member of the Prairie View 4-H club for 10 years, he has served as its president, treasurer and secretary. Last year he was president of the Clay county 4-H junior leaders' club and this year is its reporter and historian. He has carried the 4-H dairy, poultry, beef and gardening projects.

Music is one of his hobbies. He was selected to sing a solo in the 1959 State 4-H Share the Fun program.

Craig is enrolling as a freshman at the University of Minnesota this fall. He is the son of Mr. and Mrs. Arvid Shulstad.

Joan is a senior in Waterville high school. Her parents are Mr. and Mrs. Roland Ruths.

Besides her work in personal health development, Joan's health achievements include writing news articles on health for the local paper, taking Red Cross classes in home nursing and first aid and encouraging families to have first aid kits in their homes.

Joan has carried the clothing and food preparation projects during the eight years she has been a member of the Hi-Lighters 4-H club. She is an active junior leader, has been secretary and reporter of her club and secretary of the LeSueur county 4-H leaders' council.

60-307-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

A FARM AND HOME RESEARCH REPORT

Immediate release

ONE TYPE OF NEMATODE HITS SCORES OF DIFFERENT CROPS

You probably never see them, but nematodes may be crawling all over your soil and crops.

The tiny, worm-like plant parasites are old residents of every corner of the state, according to Donald Taylor, nematologist at the University of Minnesota.

His most recent finding is that one of them--the spiral nematode--can make itself at home in at least 74 different crops including corn, oats, barley, rye, wheat, sugar beets, clover, soybeans and potatoes.

In each of these crops, Taylor found that if he put 100 nematodes in solution on a nematode-free plant, he could recover more than 100 three months later. Therefore, these crops are hosts for the parasite.

Peas, flax and alfalfa, however, were not rated as hosts for the spiral nematode.

These findings give further evidence of the extent to which nematodes may be present. In recent years, Taylor has identified some 40 species in Minnesota, hitting every county of the state. They leave tiny holes in plant roots, which may damage plant growth and serve as pathways for disease organisms.

Nematodes aren't new. They've been around for hundreds of years, but only recently have they been thought of as a farming problem. One recent Minnesota study showed that pea yields could be increased 21 percent by experimentally killing nematodes with soil fumigation.

However, fumigation isn't practical for the average farmer--it's too expensive for wide-spread use except on high-value crops. Instead, the most practical approach to nematode control seems to be in developing crop varieties with resistance to the pests.

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60-308-pjt

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

Special to So. St. Paul Reporter

FIRST BEEF PROJECT PAYS OFF

Gerald Schumann, 15, of Rice Lake is making his first 4-H heifer project four years ago pay off. His beef steer entry in this year's Junior Livestock Show is a calf from that first Angus heifer.

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HARD LUCK HENRY

Henry, a market lamb owned by Carla Jean Parsons, 14, Vernon Center, has had a hard life. According to Carla, Henry's mother broke her neck trying to get into his pen. Poor Henry cried and cried.

But things are looking up for Henry now. He's tame, very well fed and even has a fan in his pen, adds Carla, who will show him at the Junior Livestock Show.

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SALE OF LAMB HELPS BUILD FLOCK

Money received for his lamb, the second highest seller at the 1959 Junior Livestock Show, has helped 19-year-old Tom Schroeder, Bemidji, build up his flock of registered Shropshire sheep. Tom's lamb weighed 118 pounds and sold for $2.85 per pound.

Tom, who will again be exhibiting at the Junior Livestock Show, says he is careful to give the lamb plenty of exercise to prevent him from getting soft.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

To all counties

For immediate release

NARROW CRIBS STORE WET CORN SAFELY

What you do with the corn you harvest this fall will depend a lot on the moisture content, says County Agent _____ _____. If you're storing your corn in cribs over 5 feet wide, better be sure the moisture content is below 20 percent.

But research and experience show that wet corn can be stored in narrow cribs with minimum losses. Extension agronomists and engineers at the University of Minnesota say ear corn with moisture content as high as 35 percent may be stored in cribs no more than 5 feet wide with little or no spoilage.

University specialists stress these points for successful ear corn storage in narrow cribs:

* Keep crib width 4 1/2 to 5 feet.
* Put in a concrete floor or raise the floor to prevent rodent damage.
* Locate your crib away from buildings or other obstructions to make best possible use of natural air movement.
* Build your crib at right angles to prevailing winds.
* Remove husks, loose kernels and other debris from the corn.

If you're storing high-moisture corn in wide cribs you already have, put in some ventilators. This cuts down on the distance the air must move through the mass of corn.

It takes wind pressure to force air through the corn. This means the air path through the ventilator should be horizontal, with the ends of the ventilator exposed to outside air. Vertical, flue-type ventilaotrs are not effective.

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

To all counties

For immediate release

A Farm & Home Research Report

CATTLE CAN BE FATTENED WITH LITTLE OR NO HAY

With a restricted amount of corn and a full feed of corn silage, cattle can be fattened efficiently with little or no hay.

This is one of the results of experiments conducted by University of Minnesota animal husbandmen reported at Beef Cattle-Grassland field day at the University's Rosemount Soils Farm September 22 and cited for the information of _____ farmers by County Agent _____ _____.

In the University trials, either no hay at all, 2 lbs., 4 lbs. or 6 lbs. of hay were fed, according to O. E. Kolari, assistant professor of animal husbandry.

It was found that when no hay was fed, more supplemental protein was required. Either 2.5 lbs., for the heifers, or 2.9 lbs., for the steers, of a 34-36% protein supplement was needed to balance the ration when no hay was offered.

On the other hand, only 1.4 lb. of protein supplement was needed to balance the ration for both steers and heifers when 6 lbs. of hay was fed.

Protein content of the hay was low--12-14%. Had a higher quality hay been fed, less supplemental protein would have been required, said Kolari, who pointed out that corn silage is low in protein.

It was also found that the average daily gains of steers and heifers fed 6 lbs. of hay per head daily were 14.8 and 7.6% less, respectively, than the steers and heifers fed no hay.

Weight gains of steers and heifers fed no hay, 2 lbs. or 4 lbs. of hay were almost the same.

# # # #

-rr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

To all counties

For immediate release

DISEASES SHOW IN SOME CORN FIELDS

If leaves on your corn show large oblong spots this fall, chances are your crop has a light infection of a fungus disease.

Herbert Johnson, extension plant pathologist at the University of Minnesota, says light amounts of Northern corn leaf blight can be found in many fields. Symptoms are the gray to light-brown spots from 1/4 to 1 inch wide and about 1 to 4 inches long.

Although the disease is often severe in southern states, it doesn't seem to have any damaging effect on the Minnesota corn crop this season.

Northern corn leaf blight is rarely found in Minnesota.

Corn fields show some other unusual conditions this fall, probably a result of weather conditions during the growing season.

Some corn is lodging because of root injury. In one case, inspection of a lodged area showed the damage resulted from severe pruning by root worms followed by a fungus infection. Soil application of an insecticide at planting time would have prevented most of the damage.

Corn smut is always present but seldom severe. This holds good again this fall.

# # # #

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

To all counties

ATT: HOME AGENTS

Immediate release

GOOD EATING AHEAD FOR OCTOBER

Some delicious autumn eating is in store for ____ county families who take advantage of the foods that will be in plentiful supply during October.

Cheese deserves special mention, since it heads the U.S. Department of Agriculture's list of plentiful foods. Production of a large variety of cheeses is larger than last year. Many grocery stores will be featuring specials on cheeses this month.

Beef, lamb, broiler-fryer chickens and turkeys are other protein foods that should be good buys during October because of their abundance.

The amount of higher grades of beef will be about the same as during the summer, but supplies of medium and lower grades of beef will be the largest in over two years.

Supplies of lamb are larger and prices lower than for some time. Shoulder, breast, flank or shank cuts, excellent for lamb stew, are priced at especially attractive levels.

Chicken and turkey dinners needn't be restricted to Sundays during October. There will be plenty for week-day dinners, too. The recent hatch of broiler chickens indicates that market supplies in October will be about 5 percent larger than last year. Retail prices of turkeys--in all sizes--should make them one of the best buys of the month.

A bumper crop of cranberries is in sight to furnish the proper accompaniment to chicken and turkey dinners. Cranberries will be available fresh, as frozen whole berries, canned whole berry sauce, canned jellied sauce and bottled juice.

Fall-crop potatoes and rice are other foods on the October plentiful list.

-jbn-

University Farm & Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 20, 1960

To all counties

4-H NEWS

Immediate release

COUNTY 4-H'ERS COMPETE IN JUNIOR LIVESTOCK SHOW

____ _____ county 4-H club livestock champions will compete at the
no. county
42nd annual Junior Livestock show in South St. Paul, October 3-6.

They will be among 700 Minnesota 4-H'ers who will exhibit 310 beef steers, 205 market lambs, 15 trios of lambs and 175 market barrows.

Monday is registration and entry day. Judging of swine and sheep is scheduled for Tuesday with beef judging on Wednesday.

Tours of St. Paul industries will be conducted for 4-H'ers on the days they do not exhibit.

Evening programs include a Hollywood theater party on Monday night in South St. Paul and a 4-H roundup program Tuesday at the South St. Paul high school. Wednesday evening the St. Paul Chamber of Commerce and Junior Chamber of Commerce are hosts for the annual 4-H banquet at the Hotel Lowry in St. Paul.

The auction of 70 top beeves, 50 top lambs, 30 top barrows and 2 top trios of lambs will begin at 1:15 p.m. on Thursday, Oct. 8. Twin Cities and state businessmen support this sale.

*

Livestock not selected for the auction will be sold by commission companies to packers. 4-H owners will have the opportunity to observe this market practice.

The Junior Livestock show is sponsored by the University of Minnesota Agricultural Extension Service and the Minnesota Livestock Breeders' Association. The South St. Paul Civic and Commerce Association, the St. Paul and Minneapolis Chambers of Commerce and the St. Paul and South St. Paul Junior Chambers of Commerce support the event.

-jcm-

* Add a paragraph about any special support from local businessmen in connection with this event.

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 21, 1960

* * * * * * * * * * * * * * * * *
* For release at 11 a.m. *
* Thursday, Sept. 22 *
* * * * * * * * * * * * * * * * *

LOW-ROUGHAGE CATTLE RATIONS PROVE EFFICIENT

ROSEMOUNT--Beef cattle can be fattened efficiently with either no hay or a small amount, when fed with a restricted amount of corn and a full feed of corn silage.

This is one of the results of experiments by University of Minnesota animal husbandmen reported at Beef Cattle-Grassland field day at the University's Rosemount Soils farm Thursday (Sept. 22).

Reporting the effect of feeding four levels of hay with corn silage on feedlot performance was O. E. Kolari, assistant professor of animal husbandry.

In the trials, either no hay, 2 pounds, 4 pounds or 6 pounds were fed. It was found that when no hay was fed more supplemental protein was required. Either 2.5 pounds for the heifers, or 2.9 pounds for the steers, of a 34-36 percent protein supplement was needed to balance the ration when no hay was fed. On the other hand, only 1.4 pound of protein supplement was needed to balance the ration for both the steers and heifers when 6 pounds of hay was fed.

Protein content of the hay fed was low--12-14 percent. Had a higher quality hay been fed, less supplemental protein would have been required, said Kolari, who pointed out that corn silage is low in protein.

It was also found that the average daily gains of steers and heifers fed 6 pounds of hay per head daily were 14.8 and 7.6 percent less, respectively, than the steers and heifers fed no hay.

Weight gains of steers and heifers fed no hay, 2 pounds or 4 pounds of hay were almost the same.

(more)

add 1 low roughage

Kolari also reported that average daily gain of 24 heifers not implanted with stilbestrol was 1.71 pound, while 22 heifers implanted with 12 milligrams of stilbestrol at the start of the trial gained 1.91 pound daily, an increase of 0.2 pound.

Differences in weight gains of fattening heifers fed either 4, 6 or 8 pounds of hay with a full-feed of ground shelled corn were small, stated Kolari in reporting the results of other experiments.

"This is not surprising," he commented, "in view of the fact that for the three hay levels fed, the calculated daily total digestible nutrient intakes were 4 pounds, 14.36 pounds; 6 pounds, 14.26 pounds; and 8 pounds, 14.57 pounds.

"Although these preliminary results are from only one trial, they do suggest that minimum amounts of hay fed to fattening cattle are not markedly superior to moderate amounts when feedlot performance is the criterion. The effect of roughage level on ribbed carcass grades and ribeye marbling scores will be evaluated after the cattle are slaughtered."

One-half the heifers within each of six lots, totalling 46 head, were implanted with 12 milligrams of stilbestrol June 2, 1960. The heifers had been implanted with 12 milligrams of stilbestrol Feb. 16, 1960. The first implant increased average daily gains 0.2 pound.

Re-implanted heifers again outgained those not implanted. Average daily gains were 2.15 pounds for the implant group, compared with 1.91 for their controls--an increase of 0.24 pound.

60-309-rpr

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 21, 1960

* * * * * * * * * * * * * * * *
* For release at 2:30 p.m. *
* Thursday, September 22 *
* * * * * * * * * * * * * * * *

VITAMIN A DEFICIENCY FINDINGS REPORTED

ROSEMOUNT--Feedlot steers may show symptoms of vitamin A deficiency even when they are expected to have good stores of carotene and vitamin A and are fed a ration meeting their approximate carotene requirement, Beef-Grassland Field Day visitors were told today at the University of Minnesota Agricultural Experiment station.

A. L. Neumann, University of Illinois animal scientist, added that stilbestrol use apparently does not increase chances of a vitamin A deficiency outbreak in feedlot cattle.

Vitamin A, the most important vitamin in cattle nutrition, is formed in an animal's body from carotene supplied in the ration. Almost any combination of good green roughage and yellow corn will supply more carotene than an animal requires. Also, an animal stores carotene and vitamin A in its body and draws on these stores if the supply in the ration is low.

Neumann described an outbreak of vitamin A deficiency in the Illinois experimental herd:

Thirty western feeder calves, all steers, had been on feed for over nine months when half the herd suddenly went off-feed. Examination of several animals showed most of the classic symptoms of vitamin A shortage--lameness and edema (fluid collection and swelling) in the briskets, knees, hocks and hoof heads; loose joints and muscles; night blindness; and a generally unthrifty condition with dead-looking haircoats.

Some of the steers became extremely open shouldered and some suffered from convulsive seizures when they were moved about.

Before the outbreak, the animals had been fed various rations. For the first 6 weeks some were on good pasture, others got a full-feed of good legume-grass hay.

For the next 16 weeks they were fed hay, supplement and a full-feed of good corn silage. Then for 8 weeks the steers were fed either dry or high-moisture shelled corn, a supplement and good legume-grass hay.

(more)

add 1 vitamin A deficiency

Next the animals were put on a frequency of feeding trial with a complete ration of 64 percent shelled corn, 10 percent soybean meal, 1 percent alfalfa meal and 25 percent corncobs. Average daily gains were 2.07 pounds.

Steers had been on this ration for 8 weeks when the vitamin A deficiency showed up. Afflicted animals went off-feed. Average daily gains skidded to 1.28 pounds. Some of the steers even lost weight.

The herd was then split into three groups. Each group included steers which had been implanted with stilbestrol at levels of 0, 12, 24, 36 and 48 milligrams.

A control group was fed a basic ration of 65 percent ground shelled corn, 25 percent ground corncobs and 10 percent alfalfa meal. A second group was fed the basic ration plus alfalfa meal and the third group was fed the basic ration and a commercial vitamin A supplement.

In less than a week, both lots of treated steers showed a dramatic increase in appetite with marked improvement in rate of gain and feed efficiency.

Neumann summarized the Illinois trials:

* The outbreak occurred in feedlot steers on a ratinn which furnished about their normal carotene requirement.

* Previous stilbestrol implantation showed no relation either to the onset of the deficiency or to the rate of recovery.

* During the period of treatment, the alfalfa meal lot gained 83 percent more than the controls while the vitamin A supplemented lot gained more than twice as fast as the control lot. Thus, vitamin A supplement appears to give somewhat faster, more effective results than alfalfa meal in restoring animals to normal performance.

* Liver storage increased progressively with graded levels of supplemental vitamin A but was almost nil in untreated controls.

In Minnesota trials, O. E. Kolari found no effect on feedlot performance of cattle fed massive doses of vitamin A--100,000 units per head daily--for either 5 or 10 days. However, the blood plasma content of vitamin A was higher for western feeder steers fed massive doses than for steers not fed vitamin A. None of the steers showdd vitamin A deficiency.

Heifers fed massive doses of the vitamin had about the same blood plasma vitamin A values as heifers which didn't get vitamin A supplement.

60-310-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 21, 1960

Immediate release

NEW FARM AND HOME DEVELOPMENT ORGANIZATION SET UP

A Northwest Farm and Home Development association has been organized in Pennington, Marshall and West Polk counties in Minnesota.

The association was established by the member farm families--which will total 60--in cooperation with the University of Minnesota Agricultural Extension Service.

Special agent for the association will be William Penning, agricultural agent in Grant county since 1957 and agent in Pennington county from 1953-55. Penning's office will be in Thief River Falls, where he will take up his duties this month.

The association will have four main objectives:

* To provide intensive education in farm and home planning and operation for member families, through individual aid in more accurately evaluating costs and returns from alternative enterprises and through providing information on new technology.

* To promote more rapid adoption of recommended organizational and operational changes--among both organization members and other families who receive information from the members.

* To demonstrate methods which other area families might also use in bringing about changes in overall farm planning.

* To identify farm problems which call for further research and educational efforts.

In general, the association will be patterned after a similar organization which has been in operation in Waseca county since 1954.

Expenses of the new Northwest association will initially be shared equally by the members and the Agricultural Extension Service.

The association will work closely with local county agents and specialists from the Agricultural Extension Service state staff.

60-311-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 21, 1960

Special to
So. St. Paul Reporter

FRIENDLY LAMB WAS FUN

George Voxland, 15, Kenyon, had fun with the lamb he will exhibit at the Junior Livestock Show.

"The lamb became so tame and friendly that it would always come running when I brought his feed, and soon I found he was always waiting at the gate for me," says George.

George plans to have a lamb project again next year.

* * * * *

ALBERT LOVES ATTENTION

"Albert," a market barrow owned and raised by Douglas Frykman, 13, Elbow Lake, loves attention. He thinks a bath is wonderful, especially when he gets his ears washed!

Douglas will exhibit "Albert" at the Junior Livestock Show.

* * * * *

BEEF PROJECT GOOD FOR GIRLS

Mildred Onstad, 16, Spring Grove, says she does not agree with some people who think that a beef project is silly for a girl. She thinks it is very worthwhile.

She adds, "I've learned to appreciate animals and not to fear them."

Mildred, who will be exhibiting her beef steer at the Junior Livestock Show thinks that a beef project is fun if you want to make it fun.

-jm-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 21, 1960

Special to So. St. Paul Reporter

4-H EXPERIENCE UNFORGETTABLE

After eight years in 4-H and five in beef steer projects, Michael Harder, 17, of Mountain Lake says the past years of fun, new experiences, new people and travel have been unforgettable.

Adds Mike, "I hope that during my time in 4-H I have been able to do something for 4-H in return for all 4-H has done for me."

Mike will be exhibiting a beef steer at the Junior Livestock Show.

****

COMPETITION AIDS STEER

"Competition did wonders for my steer", claims Jim R. Johnson, 16, of Lindstrom. "He did not start out well this spring so I put another steer in with him. This added competition for the feed made them enthusiastic eaters and they both did well", explains Jim, who will exhibit his steer at the Junior Livestock Show.

****

DREADS TO SELL "COMPANION"

Karen Harder, 18, Mountain Lake, loves animals and describes her seventh year in 4-H and her current beef project as another year of fun.

But Karen dreads selling her "companion" after the Junior Livestock Show, because she has grown very close to the calf.

****

file

Monticello Times
Park Rapids Enterprise

University Farm News
Institute of Agriculture
University of Minnesota
Sept. 21, 1960

SPECIAL to _____

Theron Hatch
John Halliger of Park Rapids
Monticello has been elected a member of the board of directors of the Minnesota Christmas Tree Producers association, according to an announcement from Marvin Smith, Unive sity of Minnesota extension forester and secretary of the organization.

He was elected at a meeting of the association held in Park Rapids recently.

Objectives of the association are to:

Facilitate marketing and wider acceptance of Minnesota trees.

Encourage the production of quality trees.

Sponsor educational meetings for its members.

Promote a uniform grading system.

Provide for the exchange of information and experience among its members.

Co-operate with agencies engaged in Christmas tree research.

—rpr

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960 Immediate release

NEW NURSERY FURNITURE DESIGNED FOR GROWING YEARS

Emphasis in new nursery furniture on the market is on usefulness not only during infancy but during all the growing years of childhood.

Dressers and chests resembling adult furniture are well adapted for service throughout a child's growing years. In some sets drawers and door panels are reversible, with painted colors on one side for use during babyhood and a more sophisticated cane finish on the other for use as a child grows older.

The only piece of furniture intended distinctly for the nursery is the baby crib. A new crib with tubular steel frame has nylon sides which fold down so the mother can sit on the edge of the bed to dress the baby. The sides have safety locks on the outside. Headboard and footboard are covered with washable plastic.

New materials play an important part in making children's furniture both useful and attractive, according to Mrs. Myra Zabel, extension home furnishings specialist, and Charles Martin, extension family life specialist at the University of Minnesota.

Plastic tops and finishes protect the tops of chests, dressers and play tables from stains and scratches. Soil-resistant fabrics and vinyl upholstery make children's chairs easy to keep clean.

The University specialists emphasize the importance of keeping safety in mind when buying children's furniture. They suggest that parents make these checks for safety:

* Check mesh sides on playpens and cribs to be sure the baby cannot get a foothold in them, causing a fall.

* Be sure spindles or bars in crib and playpen sides are close enough together so the baby cannot put his head between them.

* See that legs on high chairs are angled to prevent tipping.

* Look for broad, firm straps on high chairs and bathinette tops.

* Ask about the amount of lead in paint on painted furniture. Paint should contain less than one percent of lead. Lead poisoning can cause death or permanent brain injury.

60-312-jbn

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960 Immediate release

EDITORS' SHORT COURSE SLATED

The St. Paul campus of the University of Minnesota will be the scene Friday, Sept. 30, of the 43rd annual Editors' Short course, it was announced today by J. O. Christianson, director of agricultural short courses.

Hosts will be the University's Institute of Agriculture and School of Journalism, with sessions to be held in the St. Paul campus student center.

Registration will start at 9 a.m., with the opening session slated for 9:30. Robert L. Jones, director of the School of Journalism, will preside, with Christianson welcoming the editors.

Other morning sessions will include:

"What the Judges Found in the 1960 MNA Newspaper Contests," to be discussed by J. Edward Gerald and John Cameron Sim, School of Journalism, and Harold B. Swanson, Information Service, St. Paul campus.

"Classified Gets Stronger All the Time"--Les Curtis, Jr., St. James Courier and Plaindealer; Irv and Duane Lidstrom, Detroit Lakes Tribune; John R. Pfund, Norman County Index, Ada; and Harold N. Fuglie, Long Prairie Leader.

"The Community Press in Other Lands"--Raymond B. Nixon, School of Journalism, and Jacques Kayser, deputy director of the French Press institute.

Following luncheon, "Re-drawing Boundaries for Minnesota Congressional Districts" will be discussed by Richard Wanek, St. Paul Pioneer Press and Dispatch, and State Reps. D. D. Wozniak, St. Paul, and Glenn D. McCarty, Minneapolis.

Afternoon sessions will also include:

"Utilizing Farm Products to Encourage Industry in Smaller Communities"--Fred Smith, professor of agricultural biochemistry at the University.

"Legals Make News as Well as Revenue"--Clarence Burgeson, Austin Daily Herald; James M. Kinney, Pope County Tribune, Glenwood; Carl O. Weicht, News and Independent, Northfield; and Ralph W. Keller, Minneapolis, manager, Minnesota Newspaper association.

"What's Ahead for More Efficient Operation"--Robert N. Flesch, Minnesota Mining and Manufacturing company, St. Paul; and John Ward, U.S. Leasing corporation, Minneapolis.

On Saturday, Oct. 1, the University will entertain editors and legislators at a traditional football party. Tours in the morning, followed by a barbecue luncheon in the University field house, will precede the Minnesota-Indiana football game.

60-313-rpr

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960 Immediate release

APPLE TREES SHOW DISEASE DAMAGE

If the leaves on your apple trees are falling earlier than usual this fall, it's probably because of apple scab fungus. Many apple trees, especially the Hopa ornamental crab, have shown severe symptoms of the disease this season.

Leaves and ends of young twigs turned black on many trees early in the summer. Foliage was sparse all season and with the early leaf fall many trees are now almost completely bare.

The disease also attacks apple fruit and results in the large, brown, dry spots which appear on many apples.

High moisture conditions in late spring and early summer permitted the unusually heavy infection this year, according to Herbert Johnson, extension plant pathologist at the University of Minnesota.

Infection spots were close together on the leaves and these have grown together in many cases. Also, additional infection has taken place from time to time during the summer.

Varieties of apple and crabapple differ somewhat in their resistance to the disease. Generally, however, all varieties are susceptible.

Fungus spores that live over winter on diseased leaves could cause infection in your trees again next spring. Fall chemical treatments are not recommended but carefully cleaning up fallen leaves may help prevent spread of the disease next year.

The disease is controlled in the spring and summer by spraying. The "Home Fruit Spray Guide," available at all county extension offices and from the Bulletin Room, University of Minnesota, St. Paul 1, gives the materials and schedule for spray application.

A fertilizer application next spring will improve the general health and vigor of your apple trees.

60-314-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960 Immediate release

FARM PROBLEMS FEATURED IN BROCHURE SERIES

What can we expect from proposals for solutions to farm problems? What will be the results of acreage controls, land retirement, marketing quotas or free market prices?

To support public discussions on these topics with facts and "expert" opinion, a group of the country's leading economists has put together a series of 13 publications called, "The Farm Problem: What Are the Choices?" The series analyzes the agricultural income problem and discusses 12 alternative approaches to its solution.

The publications are the result of several years' work by the National Committee on Agricultural Policy. The committee is made up of representatives of the Land-Grant Universities and the U. S. Department of Agriculture. Luther Pickrel, extension economist in public affairs, represented the University of Minnesota and is author of one of the publications, "Expansion of Foreign Demand."

The Iowa State University Center for Agricultural and Economic Adjustment published the reports, and the work of the committee was sponsored by the Farm Foundation of Chicago.

In Minnesota, county extension agents will handle the distribution of the series.

60-315-hbs

NOTE TO PRESS AND RADIO--If you'd like a complete set of the 13 publications, we'll be glad to provide you a free set. We purchased a limited supply to take care of Minnesota requests. We don't have enough copies to make large distribution to the general public, but we'll be happy to provide you the set for the broad background information it will give you. Address your request to:

Information Service
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960

A FARM AND HOME RESEARCH REPORT

Immediate release

CHEMICAL CONTROL OF GRAIN RUSTS MOVES CLOSER

The day when rust diseases in small grain crops may be controlled by chemicals is closer because of a recent finding by University of Minnesota plant physiologists.

Arne S. Andersen and J. B. Rowell have devised a successful means of measuring the effective life of chemicals used for systemic rust control. Systemic control means the chemical is taken up by the plant system and fights rust from inside the plant. Main advantage of this method is that rain can't wash protection away.

Systemic control isn't a new idea. German scientists were studying this method over 20 years ago. Finding the right chemical to do the job has been--and still is--a problem. The ideal control must do several things: enter the plant easily, act as an eradicant (by removing rust symptoms already present), remain active in the plant over a long period of time, be inexpensive and leave no toxic residue.

Scientists have known that nickel chloride readily enters the plant system--but when used alone remains effective only for a day or two. Andersen and Rowell find the cycloheximide derivatives--chemicals already in limited use to control white pine blister rust--will fight rust from inside a grain plant for as long as three weeks. Two treatments could see a plant safely through a rust epidemic.

The problem is, the cycloheximides are slow to enter the plant and are too expensive for practical use.

However, Andersen and Rowell's measurement technique now gives scientists a tool which may help them learn more about the mechanisms in a plant which affect chemically induced rust resistance. This in turn may lead to discovery of a low-cost rust control chemical which combines the easy entry of nickel chloride with the lasting ability of the cycloheximides.

The main approach in rust control has been in developing new varieties which resist prevailing diseases. This approach will continue to be important. But chemical measures could play an important role in controlling diseases between the time new races or strains first appear and the time new, resistant varieties are developed.

60-316-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960

SPECIAL to So. St. Paul Reporter

EXPERIENCE VALUABLE

Valuable lessons learned by Kenneth Thesing, Lewiston, in six years of 4-H club work include the importance of multiple farrowing so as to have hogs ready for market at peak price seasons. "I find farm management to be an excellent source of new ideas in hog raising," says 18-year-old Kenneth. He will show a Landrace-Duroc at the Junior Livestock show.

* * * *

"TIM AND TINA"

Dennis Haugen, Madelia, named his pigs Tim and Tina, after two old-time radio characters. He got the idea from his mother. Dennis will exhibit a Hampshire barrow at the Junior Livestock show.

* * * *

CONFUSED...?

Judy Brown, Washington county 4-H club member, suspects that the mother of the crossbred Southdown-Shropshire wether she will show at the Junior livestock show really expected to give birth to a calf. The mother had the run of the farm and was usually with the cows. The lamb to be exhibited by Kenny Haines of White Rock, South Dakota (Traverse county, Minn.), on the other hand, liked to play with the kittens on the farm.

JEALOUS

"It seems my calves are jealous of each other, because when I brush one calf the other one will butt me, so I have to scratch its head," says John Schumacher, Wheaton. He will bring an Angus steer to the Junior Livestock show.

* * * *

ROSEBUSH DIET

Bill Wilder's lamb thrived, even though it ate rose bushes which had been sprayed for insects. Billy will bring the Shropshire wether to the Junior Livestock show.

# # # #

-rpr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960

SPECIAL to So. St. Paul Reporter

PLAYS RADIO FOR CALF

Keith Kraft, Canby, accustomed his calf to the noise of crowds by playing the radio when it was tied up at home. The animal will be exhibited at this year's Junior Livestock Show.

* * * *

CALF WITH PERSONALITY

A lamb with a personality is "Admiral Chester Nimitz," to be shown at the Junior Livestock Show by Douglas Horr, Monticello. Douglas says the purebred Southdown wether "loves to bury his nose in his feed and then spread it all over his pen. I have often found him with straw and pigeon feathers sticking out of his mouth like toothpicks."

* * * *

FEED RECORD BETTER

Roger Kritzeck, Howard Lake, is pleased with the feed record performance of the purebred Poland China barrow he will exhibit at the Junior Livestock show this year. He reports that he used less feed and that the animal gained .07 pounds more per day than the pig he fed last year.

* * * *

CALVES LIKE ATTENTION

Judy Ploetz, Utica, who will show an Aberdeen Angus steer at the Junior Livestock show, reports that her calves really appreciate being bedded and curried. "We try to keep their pen as clean as possible," says Judy. "When we bed them they jump and really kick up their heels. We always curry them before we bed them. Seems like they appreciate their bedding. They really like attention and like to be curried. If you are currying one, the others will come up and want to be curried also."

Judy's sister, Linda, who will also have an Angus steer at the Junior show, reports that "whenever I curry any of the other steers, my Black will nuzzle and shove me around until I curry him again."

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-rpr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960

SPECIAL to So. St. Paul Reporter

With Mat

JACOBS BUSY MAN AT JUNIOR SHOW

One of the busiest of the many busy people at the Junior Livestock show this year will be Robert E. Jacobs, extension livestock specialist at the University of Minnesota and general manager of the show.

Jacobs succeeds W. E. Morris, who was manager of the show for 12 years before retiring from the University staff in 1954.

Jacobs is well qualified for his Junior Show duties, with a solid background in livestock work, including a master's degree in animal husbandry from Iowa State College, in addition to his bachelor of science degree from the University of Minnesota, years of experience as a county agent and 4-H club member.

Jacobs' permanent full-time job is to work closely with the state's county agents and with Ray Arthaud, the other University of Minnesota livestock specialist, in bringing Minnesota farmers the latest results of livestock and management research for more efficient and profitable farming.

Jacobs was born at Milford, Iowa, graduated from Elk River (Minn.) high school in 1928 and attended the University of Minnesota College of Agriculture from 1930 to 1935.

He was on leave from September, 1954, to June, 1955, to attend Iowa State.

Raised on a farm near Elk River, Jacobs was active in 4-H work as a youth and began his extension career as a county 4-H club agent in Pope and Swift counties in 1933.

In 1939 he was appointed assistant county agent for West Otter Tail county at Fergus Falls, serving there until August, 1939. He then became McLeod county agent at Glencoe and moved from there in August, 1947, to become Freeborn county agent at Albert Lea.

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-rpr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 22, 1960

Special to So. St. Paul Reporter

LAMB IS T.V. STAR

"Buster," a market lamb owned by Lorraine Eliason, 15, Willmar, is a star. He and Lorraine were on a television program.

"It was a very exciting experience," says Lorraine, who will be exhibiting "Buster" at the Junior Livestock Show.

* * * *

CHAMPIONSHIP RECORD

Curtis Hallstrom, 18, Mora, has a fine record in 4-H. He has shown the grand champion beef at the Kanabec county fair twice and the reserve champion beef at the Duluth Junior Livestock Show once. Last year at Duluth he was grand champion showman.

Curtis will exhibit a beef steer at the Junior Livestock Show.

* * * *

JUDGE TO BE JUDGED

Russell Bargendale, 13, Dawson, has learned to judge market steers. Points he considers very important are the weight of the animal, hair, which should be fine and soft, and a smooth skin. Reasons for placement of the steer should be descriptive, critical and comparative.

Instead of judging, Russ will be judged at the Junior Livestock Show where he will exhibit his beef steer.

-jm-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 23, 1960

Special to So. St. Paul Reporter

NO OBEDIENCE, JUST EXERCISE

Anne Shortall, 14, Kilkenny, knows that exercise is important for a good, firm hog.

The first time Anne tried to exercise the market barrow she will exhibit at the Junior Livestock Show he broke away from her. She had to chase him through the hay field and the corn field.

"I guess he didn't learn to obey, but he certainly got plenty of exercise!" says Anne.

* * * *

FAMILY INTEREST IN BEEF

Kathleen Fuhrmann, 14, Marshall, has a special reason for being interested in a beef project. Her grandfather had a beef herd and her father showed beef when he was in 4-H.

Now Kathy has her own Angus steer that she will exhibit at the Junior Livestock Show.

* * * *

CHAMP LIKES PROJECT

Lloyd Steinmetz, 13, Gary, has a good reason for sheep being his favorite 4-H project. Two years ago he won a reserve grand champion ribbon and last year a grand champion ribbon with his lambs.

Lloyd will exhibit a Hampshire lamb at the Junior Livestock Show.

# # # #

DREAM COMES TRUE

"Ever since I can remember I have wanted a lamb and now my dream has come true." says Mary Wood, 13, Martin County.

"Buster," the "dream come true," has become Mary's pet, pal and most of all her friend.

Mary will exhibit her lamb at the Junior Livestock Show.

* * * *

"BILLY," THE FRIENDLY STEER

"Billy," a beef steer owned by Bruce Willer, 14, Martin County, loves attention and his daily walk.

"Once," says Bruce, "I was walking through the yard and he came up behind me and bumped me because he wanted to be petted."

The calf enjoys his exercise so much that he never wants to go back into his pen.

Bruce will exhibit "Billy," whom he says is just like a pet, at the Junior Livestock Show.

* * * *

APRIL-FOOLY

"April" and "Fooly" are not just a prank, they are the twin lambs of Sue Winter, 16, Currie. The lambs, born on April Fool's Day, will be exhibited by Sue at the Junior Livestock Show.

* * * *

A LITTLE LUCK.....

"A little luck and a lot of good pig" is the formula of Phyllis Keltgen, 16, of St. Peter for a winning show hog.

Phyllis will be using her formula for the eighth time when she exhibits her hog at the Junior Livestock Show.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 26, 1960

file

Special to
Morrison county

ANDERSON NEW ASSISTANT AGENT

Ronald Irvin Anderson will begin his duties as assistant county agricultural agent in Morrison county Oct. 1, with headquarters in Little Falls.

Anderson, a graduate of the University of Minnesota College of Agriculture in 1959, replaces James Hoffbeck, who became agricultural agent for Aitkin county on September 1.

He grew up on a 160-acre dairy farm in Wright county, graduating from Cokato high school.

As a youth, he was a 4-H club member for six years, serving as a club officer for four years. In high school he was a member of the football, wrestling and track teams.

Anderson followed a busy schedule as a college student. He was a member and vice president of both the Delta Theta Sigma fraternity and the Plant Industry club. He was also a member of the Toastmasters' club, the University crops judging team and the Lutheran Students' association.

Honors won during his college years include placing first in both the soil judging and the land judging contests.

In addition, he worked 15-20 hours per week testing soil in the University Soil Testing laboratory. Summer work included employment by the Soil Conservation service in Stearns county.

He has served actively for six months in the U. S. Army.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960

Immediate release

(with mat)

MUDGE NAMED EXTENSION DAIRYMAN

J. William Mudge, Gridley, Kansas, will be the new extension dairyman at the University of Minnesota beginning October 1.

Skuli Rutford, director of the Agricultural Extension Service, has announced that Mudge will fill one of the vacancies left by the retirement of Ramer Leighton and Harold R. Searles, former extension dairymen on the St. Paul campus. He will cooperate with farmers, county agents, other extension specialists and local Dairy Herd Improvement associations in educational programs on improved dairy practices.

A native of Kansas, Mudge earned his B. S. in dairy husbandry and his M. S. in animal breeding at Kansas State college, Manhattan, Kansas.

Since 1956 he has been studying for his Ph. D. degree and working as a graduate research assistant at Kansas State university.

Mudge served in the U. S. Navy from 1942 to 1946 and was discharged with the rank of lieutenant. From 1946 to 1947 he was dairy herdsman at Kansas State college. . . He farmed in partnership with his father from 1947 to 1950 and operated his own dairy farm from 1950 to 1955. During this time he was active in breeding and showing registered dairy cattle.

He is married and has two children.

60-317-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960 Immediate release

MINNESOTA, U. S. FARMERS FIND MARKETS IN FOREIGN LANDS

Farmers in Minnesota and the rest of the U. S. are fairly good competitors for Asian markets--in spite of transportation costs and low wage rates in the Far East.

At present, though, the U.S. may be exporting about as much agricultural produce as is feasible, according to Luther Pickrel, extension agricultural economist at the University of Minnesota.

The major problem, he points out in the current issue of Minnesota Farm Business Notes, is that countries needing our farm goods the most are least able to buy them. Farm Business Notes is an Agricultural Extension Service publication.

Public Law 480 provides vast amounts of surplus U. S. food (mostly grain) in return for local currency or as emergency grants. However, the P. L. 480 program is far from trouble-free, Pickrel says. Its major objective is to get rid of surpluses rather than aid economic development abroad. So in many countries, it often fails to meet the needs.

Of all Far East markets for U. S. farm goods, Japan received the most in the 1958-59 fiscal year--more than $317 million. India was next, receiving $250 million. Others receiving less than $70 million were the Philippines, Pakistan, Hong Kong, Thailand, Malaya and Singapore.

There was a big difference in how the exports were financed. More than 99 percent of all U. S. farm exports to India and Pakistan went under special government programs--like P. L. 480. In contrast, only 4.8 percent of the exports to Japan were handled under special programs, and less than half of the goods going to other countries were under programs.

(more)

add 1 Far East markets

Japan is one of the most important customers for U. S. farm goods anywhere in the world. She has bought more than a third of a billion dollars worth annually for most of the last decade. She is the biggest single soybean market--buying $100 million worth last year.

Pickrel sees some problems in the Japanese market, though. The decline in U. S. military operations in the Far East will mean fewer U. S. dollars there and fewer U. S. purchases. Also, Japanese farm groups and some political leaders are pressing for protectionism, such as import duties on U. S. goods.

Japan recently announced it would reduce trade restrictions which have limited U. S. imports there in the past. If that reduction materializes, it could mean expanded Japanese demand for U. S. farm commodities.

India, Pickrel says, is a prime example of the difference between need and economic demand. The 400 million people there average about 1,800 calories intake per day. That is 600 less than the estimated minimum for good health.

Per capita income in India is about $65 per year, compared to about $2,200 in the U. S.

So despite the relatively large U. S. agricultural sales to India, the country needs more. Of that sent there last year, most was food, grains and cotton. Another P. L. 480 agreement was signed between India and the U. S. last May, for about $1.3 billion worth of agricultural goods. This will include 587 million bushels of wheat and 22 million bags of rice.

Most Indian currency received for the goods will be given back or loaned to her for economic development.

The Philippines buy mostly tobacco, wheat flour, rice, cotton, fats and oils. Sales of cotton, dry milk solids and wheat to that country could probably be expanded somewhat, Pickrel feels. For example, evaporated fluid milk plants there use dry milk solids and coconut oil for fat. Dry milk solids undersell evaporated milk. Result has been a shift away from canned milk to imports of dry milk solids.

Exports for dollars to Malaya and Singapore could be increased now, according to Pickrel. Both population and income are rising there. But in Thailand, immediate prospects for increased farm sales are not encouraging.

60-318-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960

To all counties

Immediate release

FARM FILLERS

Moisture content of soybeans may change as much as 4 or 5 percent between morning and afternoon, say University of Minnesota agronomists. That means you may have to adjust the speed and clearance of your combine cylinder several times during the day to prevent loss from cracking and splitting.

* * * *

A tattle-tale plant is giving Minnesota scientists a speedy way to check virus disease resistance in red clover varieties. Gomphrena globosa, an ornamental plant originally from the tropics, breaks out in 3 days when smeared with sap from virus infected red clover plants. Clover doesn't usually show disease symptoms for a month or so. The fast detection method will help plant breeders develop new virus-resistant clover varieties for Minnesota farms.

* * * *

Your apple trees may be infected with apple scab fungus next spring because of contact with fungus spores that live over winter on diseased leaves. Fall chemical treatments are not recommended according to Herbert Johnson, extension plant pathologist at the University of Minnesota, but carefully cleaning up fallen leaves may help prevent spread of the disease next year.

* * * *

Milk cows appreciate a dry sheltered place when nights turn damp and cold. Extension dairymen at the University of Minnesota say your cows probably will give more milk and stay in better health if you keep them in the barn overnight when fall weather turns bad.

* * * *

Best test of a good feed or a good storage method for the feed is the amount of milk or meat that can be produced per ton of feed harvested--not per ton of feed that is fed. That's according to R. M. Jordan, livestock scientist at the University of Minnesota.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960

, To all counties

Immediate Release

SUBSTITUTION OF TREE VARIETIES SUGGESTED

Farmers wishing to obtain trees from the State Department of Conservation can prevent cancellation of their orders by granting the nursery the privilege of substituting for varieties which are out of stock, County Agent _____ has been informed.

The information was passed along from R. Clement, in charge of nurseries and planting for the conservation department, by Parker Anderson, University of Minnesota extension forester.

Clement reported that the department's supplies of black spruce, Colorado spruce, Ponderosa pine and Scotch pine were exhausted. He stated that orders were still being taken, however, for Norway pine, white spruce, Jack pine and white pine and that quantities of white cedar, balsam fir and the deciduous trees included on the price list are on hand only in extremely limited quantities.

When an individual requests 2,000 trees made up of four varieties, his order will be cancelled if the supply of one or more varieties is depleted, unless the privilege of substitution is granted.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960

A Farm and Home Research Report

To all counties

STILBESTROL UPS GAINS OF BEEF CATTLE ON PASTURE

Six cent's worth of stilbestrol per steer made a big difference in beef gains this season in pasture trials at the University of Minnesota's Rosemount Experiment Station.

According to A. L. Harvey, animal scientist at the University, implanting steers with 24 milligrams (mg.) of stilbestrol when they were turned on pasture did these things:

* Increased average daily gain per head 0.43 pounds (1.35 to 1.78 pounds).

* Increased beef production per acre 53 pounds (181 to 234 pounds).

* Increased the value of beef produced per acre $11.13 ($38.01 to $49.14).

* Increased the amount of beef produced per acre from unfertilized grass pastures 57 pounds (105 to 162 pounds); from fertilized grass pastures 27 pounds (196 to 223 pounds); and from fertilized legume-grass pastures 76 pounds (242 to 318 pounds).

Steers that never were implanted with stilbestrol averaged 1.39 pounds of gain per day on all pastures but steers implanted at the start of the pasture season only, gained .33 pounds per steer (1.39 to 1.72 pounds) more each day than their untreated herd mates. And steers implanted at the beginning of winter feeding and again at the start of the pasture season gained .42 pounds per day (1.39 to 1.81 pounds) more than the untreated steers.

On the other hand, steers implanted with 12 mg. stilbestrol when they went on feed last fall but not implanted again when they went on pasture averaged only 1.28 pounds of daily gain--6 percent less than steers that never were implanted. However, the treated steers had made better gains last winter, 1.45 pounds daily compared to 1.38 pounds for steers not implanted.

Results of several years' experiments show that when moisture conditions favor good pasture growth, implanting steers with stilbestrol at the start of the pasture season--regardless of previous winter implanting--means faster gains and higher profits.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960

To all counties

Immediate release

FOOD SPENDING SHOULD HOLD UP

Even though business activity appears to contain both strong and weak aspects, expenditures for food should hold up well for next year.

That's the way County Agent _____ sums up the outlook in the general economy for Minnesota farmers this week.

Quoting Martin K. Christianson, University of Minnesota extension economist in marketing, the county agent pointed out that expenditures on nondurables and services have tended to continue strong in the past, even in the face of moderate declines in business activity.

"This seems to indicate that even though marked improvement in the weaker elements of business might not occur, the demand for food will continue strong," according to Christianson.

He continued:

As in the past, prices received by farmers will be greatly influenced by commodity supply conditions.

In the past, private investment has been the most variable source of demand.

This category of demand presents a picture both of strengths and weaknesses. Much of what happens to business activity this fall and winter will depend upon changes in this sector.

Easier credit could help to stimulate business activity.

Christianson's analysis of the general economy is one in a series of single sheet publications on "What's Ahead for Minnesota Farmers" issued by the University of Minnesota Agricultural Extension service and available in the county agent's office.

-rpr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960

To all counties

Immediate release

BUY CAUTIOUSLY, FEEDERS URGED

Cautious buying will again be necessary on lower grades and long-fed calves, it was pointed out this week to _____county cattle feeders.

The pointer came from County Agent _____, who was quoting Paul Hasbargen and Hal Routhe, extension economists in farm management and R. E. Jacobs, extension animal husbandman at the University of Minnesota.

Farmers were also reminded that the cattle cycle is in the third year of the expansion phase. The number of cattle and calves on farms January 1, 1961, is expected to reach 105 million head.

"A 5-10 percent increase in slaughter in 1961 will again result in prices ranging $1.50-2.50 lower. With present feeder price levels, most cattle feeders can expect fair to average labor returns," according to the University economists.

Other comments on the cattle outlook from Hasbargen and Routhe:

Barring unforseen developments, the next two years will bring a continuation of present trends--increased cattle numbers, heavier supplies of slaughter cattle and weaker prices.

Expansion of cattle numbers should taper off at about 110 million head. The lower prices at that time (1963-64) will bring the cattle cycle into the declining number phase.

Fed cattle marketings will be about equal to last year for the remainder of 1960. However, marketings of cows, calves and grass-fat animals will remain above last year's levels. Thus, total slaughter will be up and prices down somewhat.

Prices for finished cattle, however, should increase from August, 1960, lows. This appears probable in light of the cattle on feed reports, improved demand and decreased hog marketings.

MORE

Add 1 - Buy Cautiously

The level of cattle feeding is expected to remain high in the coming year. Slaughter during 1961 will run 5-10 percent above 1960 levels. This will result in a further price reduction of $1.50-2.50 on slaughter cattle.

More cattle will be available for feedlot replacement this fall.

Unless early frost hits the corn belt, feeders in this area will not be over-eager to buy cattle this fall. Returns from cattle feeding the past two years have not been especially encouraging, and all conditions point to lower slaughter prices again in 1961.

Since feed and other costs of cattle feeding will be about as high as last year, most corn belt farmers will be cautious about filling their feedlots this fall-especially with calves.

Heavier supplies, average to poorer range conditions and the cautious attitude of feeders all point to considerably lower feeder cattle prices this fall compared with a year ago.

With increasing cow numbers, the 1961 calf crop should be 3-4 percent higher than 1960. This would increase calf slaughter and feeder and stocker supplies in 1961.

If the present expansion in cattle numbers continues in an orderly manner and feeder prices are not bid to higher levels, there are opportunities for fair to average returns for the cattle feeder in the year ahead.

However, if a combination of poor feed conditions on the ranges and pessimism on the part of ranchers results in a heavy movement of cattle into feedlots, sharper slaughter price reductions than expected could wipe out any anticipated returns.

The University specialists' analysis of the beef cattle outlook is one in a series of single sheet publications on "What's Ahead for Minnesota Farmers" issued by the University of Minnesota Agricultural Extension Service and available in the county agent's office.

-rpr-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960

To all counties

ATT: HOME AGENTS

Immediate release

BUY NYLONS ACCORDING TO INTENDED USE

Wise buymanship is one of the secrets to longer wearing nylons.

To get most satisfactory wear out of nylons, build a wardrobe of hose for specific uses, suggests Athelene Scheid, extension clothing specialist at the University of Minnesota. A sheer party hose can't be expected to stand up when worn in walking shoes, nor will a service weight stocking be as flattering for dress-up occasions as a sheer hose.

In order to select the proper weight hose for different purposes, know which denier to buy for particular uses. Denier refers to yarn size. The lower the number, the finer the yarn and the more sheer the finished hose will be. Thus 12 denier is luxury hose; 15 denier is suitable for dress wear; 20 for daytime wear; 30-40 for street wear. Service weight is 70 denier.

But yarn weight alone does not determine sheerness. Closeness of knitting -- called gauge -- must also be considered. Gauge designates the number of loops in each 1 1/2-inch section. The higher the gauge number, the closer the stitch and the more snag-resistant and fine the fabric will be. Thus a 60-gauge hose will be more durable than a 51-gauge.

Most popular nylon hose sold today is 15 denier, 60 gauge or dress sheer weight. However, a 20-denier daytime sheer hose will wear considerably longer than a 15-denier dress sheer.

For economy's sake, buy three pairs of hosiery at one time so the mates can be matched when one or two stockings have to be discarded.

For proper fit, the stocking foot should be 1/2 inch longer than your foot to allow for the foot sliding forward.

Check on construction, too, if you want nylon stockings to wear well. The seam in full-fashioned hosiery should be straight, narrow and with no raw fabric edges showing. The welt or hem should be 3 to 4 inches long, with a well constructed afterwelt directly below to give added strength and with a row of run-stop stitching around the stocking. Reinforcement in toe, heeland sole should be in proportion to weight and style of the hosiery.

-jbn-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 27, 1960

To all counties

4-H NEWS
Immediate release
Enrollment series
(With mat of 4-H officers)

4-H OFFICERS INVITE YOUTH TO JOIN 4-H

"In 4-H the more you do, the more you want to do."

These are the words of the new president of the Minnesota State 4-H federation in issuing a special invitation to boys and girls in the state to join a 4-H club this fall.

The four new officers of the state's 50,000 4-H'ers assume their duties this month by taking an active part in the annual 4-H membership drive now under way in this county and throughout the state.

The officers are: Ina Street, 17, Mahtomedi, president; Richard Tangen, 18, Hawley, vice president; Sonja Lake, 17, Aitkin, secretary; and Gary Johnson, 18, Delavan, treasurer.

In urging boys and girls in county to join a 4-H club this fall, Ina made this comment, "4-H is like other organizations; you get out of it exactly what you put into it, except that in 4-H the more you do the more you want to do." According to Gary and Richard, 4-H is a place to learn the "give and take of being a leader and a follower."

All four officers point out that 4-H'ers make many new friends and get acquainted with people all over their county.

4-H work is training thousands of young people to be better citizens, in teaching them skills in leadership and personal development, homemaking and farming, and is showing them the way to greater enjoyment of rural and urban living, the officers add.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 28, 1960

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* For release at noon, *
* Friday, September 30 *
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HOW FARMERS ADJUST TO INTERSTATE HIGHWAY TOLD

How does the Interstate Highway affect the size and shape of a farmer's fields? Are payments for land used in highway construction high enough to cover the damages to farm operation?

These questions are answered in "How Farmers Adjusted to an Interstate Highway," a report issued jointly this week by the University of Minnesota departments of agricultural economics and geography in cooperation with the Minnesota Department of Highways and the U. S. Bureau of Public Roads. Walter Gensurowsky, agricultural economist, and Everett G. Smith, Jr., geographer, made the study.

The report concerns an 8-mile segment of the Interstate Highway system built through a rural area between Faribault and Owatonna during 1956-58. This freeway took land from 28 farms along the route. In 13 cases a farmer's land was trimmed; in 15 instances farms were split up by the new construction. Farms that were trimmed lost an average of 5.1 acres. Farms that were split up lost from 9 to 68 acres each; the average taking was 20.1 acres. Average land loss to all farms fronting the freeway was 13 acres.

Farmers have adjusted to the change in various ways, according to the study. There is more buying, selling and renting of land as farmers try to re-establish the most favorable conditions of land use. However, this follows a general trend of changes in agriculture which have been underway for some time.

Payments per acre for right-of-way land along the interstate route were higher than the market value of the land. This is because damage payments to farmers must compensate for such things as denial of access to the limited-access highway and damage resulting from inefficient farm operation. Inefficient operation results from roundabout travel to severed portions of the farm and from reduced farm size.

This report is the third in a series on the economic effects of Interstate Highways in Minnesota being prepared under the direction of James Schwinden, research project director. Reports to be issued in the near future include "The Economic Effects of a Highway Change on Faribault, Minnesota," and "Belt-Line Commercial-Industrial Development," a case study in the Twin City metropolitan area.

60-319-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 28, 1960 Immediate release

FARM INCOME TAX SHORT COURSE ANNOUNCED

The eighteenth annual Farm Income Tax short course will be held at the Hotel Lowry, St. Paul, on Oct. 10 and 11.

This was announced today by J. O. Christianson, director of agricultural short courses at the Institute of Agriculture, University of Minnesota. Hal G. Routhe, extension economist, is program chairman.

Sessions on Oct. 10 will cover the federal income tax. The program includes a review of tax fundamentals, new developments and specific problem areas, and guidance in preparing various federal income tax forms.

State income tax will be covered on Oct. 11. Topics include tax fundamentals, inclusions, exclusions and deductions from gross income, taxable and non-taxable entities, and capital and ordinary gains and losses.

Speakers include George O. Lethert, district director of internal revenue, the U. S. Treasury Department, and Joseph M. Robertson, commissioner of taxation, State Department of Taxation.

The short course is sponsored by the University of Minnesota in cooperation with the Office of the District Director of Internal Revenue, the Minnesota State Department of Taxation and the Minnesota Bankers association.

For further information, contact the Director of Agricultural Short Courses, Institute of Agriculture, University of Minnesota, St. Paul 1.

60-320-hrs

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 28, 1960

Immediate release

4-H'ERS EXHIBIT AT JUNIOR LIVESTOCK SHOW

Seven hundred 4-H club members will exhibit a total of 695 animals at the 42nd annual Minnesota Junior Livestock show Oct. 3-6 in South St. Paul.

Livestock exhibits will include 310 beef steers, 205 market lambs, 15 trios of lambs and 175 market barrows, according to Howard Newell, University of Minnesota district 4-H club leader.

Monday's schedule of events includes registering and entering exhibits, with a Hollywood theater party that night in South St. Paul. Hosts at the party will be members of the South St. Paul Chamber of Commerce.

Judging begins on Tuesday with swine and sheep. Beef judging is on Wednesday.

Tours of various St. Paul industries will be conducted for 4-H'ers on the days they do not exhibit.

The annual 4-H banquet will be held Wednesday at 6 p.m. at Hotel Lowry, St. Paul. Banquet hosts will be the St. Paul Chamber of Commerce and the St. Paul Junior Chamber of Commerce.

A public auction of 70 top beeves, 50 top lambs, 30 top barrows and 2 top trios of lambs is scheduled for Thursday, Oct. 6, at 1:15 p.m. Animals not selected for the auction will be sold by commission companies.

The Junior Livestock show is sponsored by the University of Minnesota Agricultural Extension Service and the Minnesota Livestock Breeders' association. The St. Paul and South St. Paul Chambers of Commerce, the St. Paul and South St. Paul Junior Chambers of Commerce and the Minneapolis Chamber of Commerce support the event.

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60-321-jcm

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 28, 1960 Immediate release

CHEESE, BEEF, CRANBERRIES PLENTIFUL

Cheese will be one of the most plentiful foods on October markets.

Food shoppers can look for specials in a wide variety of cheeses, according to Mrs. Eleanor Loomis, extension consumer marketing agent at the University of Minnesota. Traditionally October is designated as Cheese Festival Month by the dairy industry.

Production of cheese is larger this year than in 1959.

Evidence of the increasing popularity of this food is that consumption in recent years has averaged more than 8 pounds per person compared to less than 6 pounds in prewar years.

Another abundant October food will be beef. Supplies of Good, Choice and Prime grades will be about the same as in recent months, but there will be considerably more of the leaner-type beef for hamburger, stews and minute steaks.

Other protein foods on the U. S. Department of Agriculture's list of plentifuls are tender young chicken, turkeys in all sizes and lamb. Retail prices for turkey and for chicken should make them among the best buys of the month. Supplies of lamb are larger and prices lower than they have been for some time.

The cranberry crop is expected to set another record this year. In addition to big supplies of the fresh berries, canned cranberry sauce and jelly and bottled cranberry juice will be plentiful. Present estimates indicate that this year's cranberry crop will be 4 percent larger than last year's record crop and 29 percent above average.

Rice for hot dishes and puddings and fall-crop potatoes--excellent for baking--complete the list of abundant foods for October.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 28, 1960

Immediate release

DATE SET FOR CORN-SOYBEAN DAY AT ROSEMOUNT

Corn and soybean growers will hear the latest research on ways to get more profits from their crops Thursday, Oct. 13, at the University of Minnesota's Rosemount Experiment station.

The event will be Corn and Soybean day, at which farmers can compare different varieties of those crops and the effect of different planting dates.

About 50 commercial corn hybrids will be on display and husked out, in side-by-side comparisons. Yield data will be published in a University publication this winter.

Five different soybean varieties will be on display.

How the planting date affects maturity of both corn and soybeans will be shown by other research. Farmers will see soybeans planted May 31, and others planted two and four weeks later.

How to make ear corn and shelled corn silage and facts on wet corn storage, are other program topics.

Research reports will be made by three University agronomists, J. W. Lambert, R. H. Peterson and Harley Otto. Otto is extension agronomist.

Charles V. Simpson, Waterville, president of the American Soybean association, will discuss "Developing Markets for Minnesota Soybeans."

E. H. Rinke, professor of agronomy and plant genetics, will preside.

The program starts at 1 p.m. at the office-auditorium area.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 30, 1960

SPECIAL to Kandiyohi County
With mats

OLSON NEW ASSISTANT AGENT

Marvin D. Olson will become assistant county agricultural agent for Kandiyohi county November 1, succeeding Robert Anderson, who resigned Sept. 19.

Olson has served as assistant county agent in Mille Lacs county since December, 1957.

In Kandiyohi county Olson will assist County Agent Ronald R. McCamus in the over-all extension program. Much of his time will be devoted to youth.

Raised on a 160-acre dairy farm in Otter Tail county, Olson attended the University of Minnesota College of Agriculture, Forestry and Home Economics, where he received his B.S. degree in 1957.

He was a 4-H club member for seven years and took part in dairy, gardening and home beautification projects. He was also a member of an FFA judging team while in high school at Pelican Rapids.

Olson served in the U. S. Army during 1953-55.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
~~November 5,~~ 1960
Sept. 30

Fillers for use during football games

MUMS FOR MINNESOTA

Minnesotans can give their University credit for many of the chrysanthemums that brought a riot of color to home gardens this fall.

The University of Minnesota has played a major role in developing early varieties of 'mums that bloom before frost. Thirty-nine varieties of chrysanthemums have been developed by the University department of horticulture, especially for growing conditions in northern climates. Maroon 'n' Gold, the purple Chippewa, Minnpink and Minnbronze, the white Glacier, the creamy white Prairie Moon and the deep yellow Tonka are a few of the popular varieties developed by the University for you.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
~~October 15~~, 1960
Sept. 30

Fillers for use during football games

Boys and girls who enroll in local 4-H clubs this fall have many advantages. One of them is being able to enjoy the many activities and opportunities of winter club work. The winter program includes many 4-H activities that have appeal--musical events, plays, speaking contests. And of course there's the fun of skating and skiing parties, hayrides and a variety of sports events.

Girls who take home economics projects can do much of their project work in winter, and both boys and girls can plan their demonstrations before the spring rush. Many of the livestock projects must be started this fall for best results.

County extension offices are taking enrollments now. Or see a local leader or a member in a 4-H club near you about joining. Or if you'd like send your request for information to this station.

(Note - to station, send any requests to 4-H office, Institute of Agriculture, University of Minnesota, St. Paul 1, or your local county extension office)

* * * *

SOIL TEST TELLS HOW TO FERTILIZE

You wouldn't expect a starving football player to go out on the field and make a touchdown. But many folks expect starving soil in their fields or garden to produce a bumper harvest.

Your soil can't tell you if it's hungry--but a soil test can. And the soil test tells you how to fertilize for a bumper harvest next year.

Join the University of Minnesota's Fall Soil Sample Roundup. See or call your county agent for more information first thing next week.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
~~October 29,~~ 1960
Sept 30

Fillers for use during football games

PARENTS AND 4-H

Here's a message to parents of boys and girls between 9 and 21. You can help your sons and daughters to an educational, enriching and exciting experience by encouraging them to join a 4-H club.

4-H is an international organization with over 2 million members. In Minnesota, it's carried on by the Cooperative Extension Service of the United States Department of Agriculture, the University and the counties.

Leaders in industry say one of the finest recommendations a young man or woman can offer is a successful 4-H background.

You parents can give your sons and daughters the opportunity for such a background by encouraging them to join a 4-H club now. See your county extension agent for more information. Or write to this station.

(Note - to station, send any requests to 4-H office, Institute of Agriculture, University of Minnesota, St. Paul 1, or your local county extension office)

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
~~October 1,~~ 1960
Sept. 30

Fillers for use during football games

THERE'S ROOM FOR YOU IN 4-H

Minnesota has 51,000 4-H club members--but there's always room for more. Enrollment is now open to boys and girls, 9 to 21 years of age, whether they live on the farm, in town or in the city.

4-H is an educational program carried on by the Cooperative Extension Service of the U. S. Department of Agriculture, the University of Minnesota and the counties. Originally for farm boys and girls, the 4-H "learn by doing" program is being modified to interest more and more young people in towns and cities with activities ranging from home economics and agriculture to home shop and radio speaking.

Your county extension office can give you information about joining a 4-H club near you. Or, if you'd like, send your name and address to this station and we'll forward your request to the proper office.

(Note * to station, send any requests to 4-H office, Institute of Agriculture, University of Minnesota, St. Paul 1, or your local county extension office)

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SOIL TESTS ARE ACCURATE

Imagine what a football fan would say if you told him of a sure-fire system for picking the winner 90 percent of the time.

There is such a system--but it doesn't work for football. It's good only for predicting what it takes for profitable yields from your fields or garden, and it's proven 90 percent accurate in University of Minnesota tests.

That system is soil testing. All you have to do is sample your soil and send it to the University of Minnesota Soil Testing Laboratory. Your county agent will furnish sample boxes and how-to-do-it information. And when the results come back, he'll tell you how to fertilize for top yields.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
~~November 12,~~ 1960
September 30

Fillers for use during football games

THE APPLES YOU EAT

The apple you're eating right now--or the strawberries you enjoyed from your garden this summer--may be among the dozens of varieties of fruit developed by University of Minnesota horticulturists.

Early settlers were sure fruit couldn't be raised in Minnesota. But since the University Fruit Breeding Farm was established some 50 years ago, University horticulturists have developed more than 60 varieties of fruit.

One of the most popular of these is the Haralson apple, now the most widely planted variety in Minnesota. Newest of the fruits introduced by the University is a June-bearing strawberry called Trumpeter, especially good for freezing.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
~~October 8,~~ 1960
Sept. 30

Fillers for use during football games

4-H TRAINS FOR LEADERSHIP

4-H club work work is the finest possible training for home responsibilities and community leadership. 4-H members really do things--in the home, on the farm and in their communities.

Any boy or girl may enroll who is between the ages of 9 and 21. The only other requirement is that a member carry one or more projects. But 4-H'ers may choose from a wide variety of projects offered in junior leadership, shop, gardening and conservation, as well as in homemaking and agriculture. In each project they "learn by doing" skills they can put to use immediately as well as in later life.

Your county extension agent can give you the names of clubs and leaders near you, or if you'd like, send your name and address to this station for information.

(Note - to station, send any requests to 4-H office, Institute of Agriculture, University of Minnesota, St. Paul 1, or your local county extension office)

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SOIL TESTS ARE VALUABLE

Your most valuable pound of soil is the pound you put in a sample box. That one-pound sample can tell you how to boost the yield of a garden plot or a 10 acre field.

It's easy to have your soil tested at the University of Minnesota Soil Testing Laboratory. Your county agent will furnish sample boxes and information sheets. And when the results of the test come back, he'll recommend fertilizer application rates.

Have your soil tested now--during the University of Minnesota's Fall Soil Sample Roundup.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 30, 1960

SPECIAL TO WEEKLIES

Immediate release

U RESEARCH MAY AID MINNESOTA INDUSTRY

How University of Minnesota fundamental research may result in expanded chemical uses for starch and in setting up new industrial plants close to the source of some of Minnesota's most important farm crops was explained Friday (Sept. 30) on the St. Paul campus of the University of Minnesota.

Progress in the research was reported by Fred Smith, University biochemist, at the 43rd annual Editors' Short course.

Smith explained that heating corn starch either alone or with a small amount of an acidic substance brings about what is called dextrinization, to produce compounds with gum-like properties. Compounds of this type are now employed on a vast scale in the adhesive, mining, paper and textile industries.

The University researcher traced the discovery of this gum to a fire in an Irish starch plant in 1821. The fire roasted the starch, and when water was poured on the flames the result was a gum which was found useful for such things as sealing envelopes.

Until University of Minnesota scientists began recent investigations, however, no one knew exactly what chemical changes occurred during the roasting process.

When suitable chemical compounds are mixed with the corn starch before dextrinization, the added compound forms an integral part of the remodelled corn starch molecule.

The nature of the remodelled starch depends on the heat treatment and also on the substance mixed with the corn starch. Variation of the added substances brings a wide variety of remodelled starches.

(more)

If a simple substance such as mannitol, an inexpensive common sugar compound, is mixed with the starch, the resulting product is called a graft polymer because the added substance has been grafted onto the corn starch molecule.

When the substance mixed with the starch is a large molecular weight substance such as guar gum, another carbohydrate polymer, the product is called a co-polymer.

Both the mannitol-corn starch polymer and the guar-corn starch co-polymer are new substances. They are the forerunners of new types of adhesives and, University researchers hope, the beginnings of a new industry based on starch.

What can be done with starch from corn can also be done with starches from potatoes, wheat and other crops which are in surplus as foods. This fact offers hope, Smith pointed out, for helping solve the farm surplus problem through using crops as chemicals rather than as foods.

He predicted that within the next decade the organic products of the farm will become an important part of the chemical industry.

He cited petroleum as an example of how fundamental research can result in new uses and the expansion of an industry. Petroleum, originally used only for fuel and lubrication, is now used in many new industrial fields--in the making of rubber, alcohol, plastics and other products.

University researchers hope their efforts will bring discoveries which will directly result in, or will stimulate industry to find, new chemical uses for starch.

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University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 30, 1960

SPECIAL TO WEEKLIES

Immediate release

EDITORS REVIEW COMMUNITY PRESS IN OTHER LANDS

The strongest democracies in the world are those countries with the most numerous and highly developed community newspapers, those attending the 43rd Editors' Short course on the St. Paul campus of the University of Minnesota, were told today (Sept. 30).

Raymond B. Nixon, professor of journalism at the University, stressed the importance of the community press in advancing a richer, better life for people everywhere. He defined community press as "weekly or small daily papers published in communities where the editor and his staff have a personal knowledge of their readers and handle the readers' problems in a personal manner."

"It is the paper's nearness to its people that distinguishes the community press, whether it be in a village, a small city or part of a large metropolitan area," he said.

Nixon, who is editor of Journalism Quarterly and president of the International Association for Mass Communications Research, compared the community press in four areas of the world.

In countries where freedom of the press and democracy had their birth, the community press came into being because it served an essential function--to provide vital information and make possible public opinion on community problems.

(more)

"But there is a great danger today in these countries that the press may grow prosperous and complacent and lose sight of its functions," Nixon said. He cited a [redacted] paper whose editor stopped writing editorials because there was "nothing new" to write about. The editor said the city council was just a "rubber stamp" anyway and people weren't interested in it. Also, he felt it was not the business of a local paper to carry national and international affairs.

"That editor should be explaining to his readers why their city council has become only a 'rubber stamp,' and what might be done about it," Nixon said.

"As for national and international news, that editor apparently overlooks that a Russian Sputnik or ICBM in the sky can be just as close to a Minnesota community today as was an Indian behind a tree a hundred years ago."

Some South American countries have adopted the form of our free press, but in many cases the publishers have not permitted their papers to perform the function, according to Nixon. Many papers there are controlled by publishers who have other sources of income and who use their papers for the benefit of a relatively small class in society.

But the masses in these underdeveloped areas are beginning to awaken, Nixon said. "And if community newspapers there don't begin to perform their function they will be largely responsible for the failure of democracy in those countries."

India, Burma, Pakistan and other Asian countries that were once under British rule have developed some of the functions of democracies. But because of wide-spread illiteracy and low per capita income they have not been able to fully develop a free community press.

"I attended a village council meeting in India and saw how eager the people are to develop democratic functions. They are anxious for the services of a community press but lack the means to give it form. These countries need our financial help and technical assistance. Most of all, they need our help through personal contact," Nixon said.

(more)

Russia and Bulgaria were cited as examples of communist countries that never have known democracy and have never had a true community press. These countries are developing papers which have the form of the community press but not the function. But as literacy and living standards go up, even communist papers move a little closer to our concept of journalism, said Nixon.

"We need more contacts between east and west to bring about increased pressure by the people in communist countries for more freedom, including the right to have a community press. The longer we can maintain even an uneasy peace, the better will be the chance of these people to develop a system of genuine communication. As they see how our papers function and how theirs fail to bring them a true picture of the world, their demands for more freedom will grow stronger.

"If countries which have most fully developed the community press will keep it stronger and help other countries that wish to enjoy its benefits, there is a good chance that all the people of the world will someday enjoy the democratic functions of a free community press."

-hrs-

University Farm and Home News
Institute of Agriculture
University of Minnesota
St. Paul 1, Minnesota
September 30, 1960

ATT: Agricultural Agent
Home Agent
4-H Club Agent

GARDEN FACT SHEET FOR OCTOBER

By O. C. Turnquist
C. Gustav Hard
Extension Horticulturists

Vegetables - by O. C. Turnquist

1. Root crops should be removed from the garden before the soil freezes, but light frosts will not hurt the tap roots. Parsnips may be left over winter and used next spring. Contrary to many beliefs, the parsnip is not poisonous but is improved in quality if left in the ground during winter.
2. Don't wax carrots for better keeping quality. Only rutabagas, parsnips and turnips lend themselves to waxing with paraffin for better storage. Consult Extension Folder 172 for information on waxing.
3. Put only sound and disease-free vegetables into storage. Don't treat potatoes with sprout inhibitors until mid-December or early January. Several products such as Dormatone are available for sprout inhibition.
4. The key to successful storage of vegetables is temperature. Root crops should be kept at temperatures of 34°-40°F. in a moist atmosphere. Onions keep best at the same temperature but in a dry atmosphere. Squash and pumpkin should be kept at 40°-50°F. in a dry atmosphere.
5. Clean up the garden plot and remove all debris and plant remains. Rake up all old fruits of tomatoes, peppers, melons and cucumbers before plowing. This practice will eliminate volunteer plants in your garden next spring.

Fruits - by O. C. Turnquist

1. Raspberries should be protected during winter. Bend the canes over and cover them with soil. Where snow coverage is usually ample, only the tips of the canes need to be covered with soil. Cover them before the ground freezes.

Cooperative Extension Work in Agriculture and Home Economics, University of Minnesota, Agricultural Extension Service and U. S. Department of Agriculture Cooperating, Skuli Rutford, Director. Published in furtherance of Agricultural Extension Acts of May 8 and June 30, 1914.

2. Strawberries should be covered for winter but not until they have been exposed to a few good frosts to aid in hardening them. Cover the fruits with a 2-inch layer of clean straw or marsh hay late this month or early in November.
3. Tender grape vines should be pruned, removed from their support and completely covered with soil. Prune to one main stem with short spurs, with one or two buds on each spur for next year's crop.
4. Protect young fruit trees from mice and sunscald. A cylinder of 1/4-in mesh hardware cloth will give good protection if it is imbedded in the soil so mice cannot get underneath it. Sunscald can be prevented by wrapping the trees with strips of burlap or fastening boards to the southwest side of the trunk and larger branches.
5. Tree-ripened fruits have better color and quality and will keep better than those picked too early. Light frosts do not hurt late apple varieties.

Ornamentals - by C. Gustav Hard

1. This month hybrid tea roses and floribunda roses should be protected for winter. A heavy leaf covering (2 to 3 feet deep) is suggested when an adequate supply of leaves is available. The soil mound method can also be used. Mound the soil at least 1 foot high with a spread of 18 inches around the base of the plants. Spray the roses with a fungicide such as ferbam before mounding. Later, after the soil mound is frozen, apply from 18 to 24 inches of marsh hay over the roses.
2. Water evergreens and other shrubbery in fall to supply a good source of moisture for winter. If there is evidence of new growth, discontinue the watering.
3. Visit 'mum gardens and select your varieties for next year.
4. It's not too late to plant tulips, hyacinths, and daffodils.
5. A compost pile can provide the garden with a rich supply of nutrients as well as organic matter. All leaves, grasses and other plant residue should be saved for the compost pile. It can be placed in the back of the border where it will not be unsightly or in the way. Be sure to include some rich garden soil so that bacteria is introduced for decay. Add a liberal quantity of a complete fertilizer (10-10-10 at 3 pounds to a 6-foot square) to hasten the decomposition process. Be sure to leave the center of the pile lower to collect the natural rainfall.