

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 2, 1964

Immediate release

OFFICERS OF RURAL ARTISTS ELECTED

Harvey Turner, 1966 Roselawn Ave., Falcon Heights, has been named president of the Minnesota Rural Artists' Association.

He was elected to a two-year term at the annual business meeting of the association held during the annual University of Minnesota Town/Country Art Show on the St. Paul Campus.

New directors, named to three-year terms, are Mrs. Helen Skeie, Willmar; Mrs. Beatrice Windhorn, St. Peter; and Mrs. Millie Miller, Appleton.

Carried over are these officers: Mrs. Jennie Arkins, White Bear Lake, vice president; Mrs. Philomine Miller, 1095 Juno Ave., St. Paul, secretary-treasurer; Herbert Millington, Anoka, Mrs. Theodora Brown, Anoka and Mrs. Josephine Caron, Fridley, directors; Mrs. Dorothy Cina, Stansfield, newsletter editor; and Marion Killmer, 1700 W. Larpenteur Ave., Falcon Heights, newsletter publisher.

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64-94-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 2, 1964

*For release at 6 p.m., *
*Saturday, April 4 *

WINONA COUNTY YOUTH GROUP WINS COMMUNITY SERVICE AWARD

ST. CLOUD--Activities of service to their communities have won awards for three Young Adult Citizens groups in Minnesota.

First prize of \$50 went to the Winona County Young Adult Citizens Club. Kandiyohi County Young Adult Citizens received second place and an award of \$25; Watonwan County YAC Club, \$10 and third prize.

The community service awards were presented at this evening's banquet (Sat., April 4) held during the annual Young Adult Citizens conference at the Germain Hotel. The awards, sponsored by Midland Cooperatives, Inc., in cooperation with the University of Minnesota Agricultural Extension Service, are given to stimulate community service activity on the part of every YAC group in the state.

Major activity of the Winona County group was to compile and publish a farm plat book of Winona County, with an index of owners. Another activity was building 140 feet of board fence at the fair grounds, as well as painting tables and show cases for fair displays. The group also made favors for rest home patients, retarded children and crippled children, sponsored leadership training in recreation and music for adult leaders and recreation chairman of 4-H clubs and took an active part in various community events and in health drives.

Members of Kandiyohi County's YAC spend a night a month in patient therapy at Willmar State Hospital. A new project of the group is sponsoring a tractor-pulling contest at the county fair. As part of its community service last year, the group also painted the new dairy products building on the fair grounds and erected display racks for exhibits in the 4-H building. Making Christmas goodies for nursing homes and giving Christmas gifts to needy families were other activities.

To promote better understanding between rural and urban people in the community, the Watonwan County YAC group sponsored with the Farm Bureau a farmers'-businessmen's banquet this past year. In other community service members cooperated in conducting a tractor-pulling contest at the fair, assisting in the March of Dimes drive and providing gifts for retarded children and residents in a nursing home.

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THE RURAL FAMILY IS CHANGING ACCORDING TO UNIVERSITY SURVEY

"Who wears the britches in your family?" This question is becoming less and less of a joking phrase and more of a reality in our technologically oriented mass society.

A survey by John D. Photiadis, assistant professor of rural sociology at the University of Minnesota, indicates that rural America is changing rapidly and one major reason for the shift is the changing farm family.

Photiadis says that in the past, primarily because of isolation, the farm family developed distinct characteristics much different than those found in the cities. There was a strong interdependence among family members and major decisions were made by the father or oldest male in the family.

This is not the case today. Now the church and schools play a large role in the educational and recreational life of a rural family. Photiadis says this trend makes the children more a product of many influences than of the family alone.

Rural family life has also shifted from its original economic base. Children are now less dependent upon the family and the farm for securing a living in this era. Urban centers and changing concepts toward independence allow the farm youngsters greater opportunities for earning a living.

(more)

add 1 -- rural family

Another aspect basic to the change, according to the rural sociologist, is the great importance placed on individual achievement rather than on family name and heritage.

Larger farms, smaller families, and changes within family hierarchies are the most visible aspects of this changing scene. Modern economics dictates the need for efficient and competitive farm production. A weakening of family ties and smaller concentrations of families (gone are the two and three generations on one homestead) has led to smaller families. And the change in family leadership and decision-making springs from changing concepts of dependence.

Despite these trends, Photiadis says, the family is still the most important agent in the development of children equipped to cope with these changing times. In fact, he says, the family could probably take on more significance as society becomes more complex.

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64-91-jfk

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April 2, 1964

Immediate release

MINNESOTA STATE FIRE SCHOOL SET FOR APRIL 27-30

Over 400 firefighters from all over Minnesota are set to attend the 13th annual Minnesota State Fire School at the University of Minnesota Institute of Agriculture April 27-30.

The four day program will cover instruction in fire fighting and fire rescue techniques as well as the latest developments in the prevention of fires.

Sam Mele, manager of the Minnesota Twins baseball club will be the guest speaker at the annual banquet to be held at 5:30 p.m. Monday, April 27, in the Arizona Room of the Prom Center, 1190 University Avenue., St. Paul.

Tuesday has been designated "City Officials Day" with invitations extended to all state municipal officials.

The Wednesday "Outdoor Day" sessions will be held at the state fair grounds. There will be demonstrations of fire fighting and new equipment as well as a display of fire fighting apparatus in the Hippodrome Building.

A team from the emergency room of St. Mary's Hospital, Rochester, Minn., will demonstrate accident recovery techniques as a highlight of Thursday's program.

Registration will be in Coffey Hall on the St. Paul Campus at 7:30 a.m., Monday, April 27. The school is offered through the Department of Agricultural Short Courses of the Institute of Agriculture and in cooperation with state fire fighting and fire insurance underwriting groups.

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64-92-jfk

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St. Paul, Minnesota 55101
April 6, 1964

To all counties
Immediate release

IN BRIEF.....

A root rot disease of soybeans, present in states south and east of Minnesota for the past few years, has not been identified in this state, according to Herbert Johnson, extension plant pathologist. The disease is phytophthora root rot. Several suspected cases have been investigated, but this fungus has not been found. In most cases, the dead spots in soybean fields turned out to be the result of lightning strikes. Some soybean seed is available of varieties developed for areas where the disease is present. Generally, these varieties are likely to be too late in maturity for Minnesota. In the absence of the disease, these varieties offer no advantage over recommended varieties. Resistance to this root rot is rather easy to incorporate into present varieties, and some work has already been started on varieties recommended for Minnesota. Johnson says that if and when the disease hits the state, well adapted varieties will be available.

* * * *

Each gardener will have to decide just how good he wants his lawn to be, says R. E. Pellett, horticulturist at the University of Minnesota. Common sense procedure, he declares, is to make a list of items on which a home owner might spend money for lawn care. Included in the list would be lawn seed, fertilizer, lime, weed sprays, fungicides, insecticides, soil test, lawn tools such as sprinklers and hose, lawn mower depreciation and lawn mower repair and sharpening. The next step is to decide how to distribute the dollar to give the best lawn. A good fertilizer program will probably pay the best dividends. All fertilizer must be sold with an analysis of nitrogen-phosphorus and potassium, with the analysis given by three numbers, each representing the percentage of the nutrient in that order. Since nitrogen is the most limiting nutrient in the lawn, consider the cost of nitrogen in each lawn fertilizer and then buy the cheapest, Pellett advises.

* * * *

Park bluegrass, a variety developed by the University of Minnesota a few years ago, is now being produced in The Netherlands and Denmark and some may find its way back to the U. S. this summer. The effect on local prices, however, remains to be seen, say University agronomists.

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April 6, 1964

To all counties

ATT: HOME AGENTS

Immediate release

DON'T LET
CLEANING GET
YOU DOWN

Wrenched backs, bruises, even broken bones are sometimes the aftermath of spring housecleaning.

Actually, applying common sense while you are doing your housecleaning should get you through the job without mishaps, says Glenn Prickett, extension safety specialist at the University of Minnesota. Furthermore, while removing dirt, dust and clutter, you have the opportunity to check each room for possible hazards and eliminate them. Hence you should have the double satisfaction of having both a cleaner and a safer home, Prickett adds.

Fatigue and hurry are among the fundamental causes of accidents at housecleaning time. Plan ahead the amount of work you will do in a day, and then limit it to that amount. Don't try to accomplish too much. To avoid becoming overtired, take frequent breaks of a few minutes -- drink a glass of milk or a cup of coffee or just rest for five minutes.

Avoid wrenched backs by lifting properly. If the load is very heavy, divide it and make two trips rather than one. When lifting some object from the floor, squat and let your legs carry the weight. When you bend at the waist and reach down to grasp an object, you place a severe strain on the sensitive back and abdominal muscles and thus are likely to feel the effects for days afterward. But when you squat or bend at the knees and keep the back as upright as possible, the powerful leg and thigh muscles do the lifting without excessive strain.

Makeshift step stools -- such as a box upon a chair -- cause many a fall. Since a certain amount of climbing is necessary during housecleaning, purchase of a sturdy step stool is an investment in safety. But when you use any step stool or ladder, be sure to set it on a solid base and avoid standing and working on the very top step.

Dressing properly for the cleaning job makes good sense and helps avoid accidents. Wear low-heeled, comfortable shoes and slacks. Or, if you work in a dress, the skirt should be moderately full so as not to restrict movement, yet not so full it will catch on objects. Flimsy, fluttering aprons or plastic aprons may be a fire hazard.

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April 6, 1964

To all counties
ATT: HOME AGENTS
Immediate release

JUNIOR AND SENIOR
HIGH GIRLS INVITED
TO U HOME EC DAY

Saturday, May 2, has been set as the day when junior and senior high school girls in all _____ County schools are invited to attend Home Economics Day on the University of Minnesota's St. Paul Campus.

"Home Economics -- Your Key to Opportunity" is the theme for the day.

Girls considering home economics as a career will get a preview of the variety of professional opportunities open to graduates. Morning and afternoon programs will acquaint girls with courses in home economics at the University and with career openings in textiles and clothing, food, nutrition and food service management, related art, household equipment, education, home management and family living. University home economics staff members and students will take part in the programs.

A style show will be featured entertainment during a buffet luncheon which will be served at noon in the North Star Ballroom of the Student Center.

Tours of St. Paul Campus buildings are scheduled for the morning. Special exhibits will be on display in all divisions of home economics in McNeal Hall.

Girls who wish to attend Home Economics Day should register immediately with high school home economics teachers or counselors or with county home agents. Advance registration is compulsory. Reservations must be accompanied by the registration fee of \$2. The registration fee also covers cost of the luncheon.

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To all counties
4-H NEWS
Immediate release

SMART TEEN SHOPPERS
CONSIDER QUALITY

Do you know that you may actually be throwing money away when you spend too much, or even too little, on the things you buy?

"Just what do I expect from this purchase?" is a question you should ask each time you shop, Mary Frances Lamison, state home economics agent at the University of Minnesota, advises teen-agers.

Nearly everything today is sold in a wide range of quality or excellence of design and construction. To get the most for your money, you'll have to choose which level of quality is best for each purchase you make. Use these questions as a guide, says Miss Lamison:

- 1) How often will you use or wear the item?
- 2) Where will you use or wear the item?
- 3) How long should it last?

If the quality of an item isn't good enough for your purposes, it may be worn out too soon. But if it's higher quality than you need, you may simply be wasting money.

There are some items you'll want for just the present season or school year but wouldn't dream of using or wearing a year later. This is especially true with fads like chemises and Beatle wigs which are "out" nearly as soon as they're "in." Usually it's a good rule not to spend money on expensive models of this kind when less costly versions will serve the same purpose.

From other items, however, you'll expect several years of good use. High quality is important here. In a winter coat, for instance, which will be worn many times for several seasons, durability and long-lasting good looks should be prime considerations. In this case, the best quality you can afford will usually prove to be the best buy.

Keep in mind that this all-important quality question applies to more than clothing. In buying records, for example, it's smarter to choose higher quality in an album you'll still enjoy a year or two later than in a hit-tune of the week.

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NEW GROWING SEASON
BRINGS CONCERN
OVER DUTCH ELM

People are keeping a close eye on elm trees these days. But of the many things that can happen to elms, most are not related to Dutch Elm Disease.

Extension plant pathologist Herbert Johnson at the University of Minnesota says Dutch Elm and other wilt diseases have fairly distinct symptoms.

As trees leaf out this spring, watch for branches that may be weak or dead now, but which were growing last season. Then during the growing season, watch for wilting and dying of individual branches.

If you see wilting, take a section about a half inch in diameter from the wilted branch and make a clean cut across it. If there is wilt fungus present, you will see a brown line or series of dots in the white wood just under the bark.

A laboratory test is needed to determine whether it is Dutch Elm Disease fungus or some other wilt fungus. This test can be run at the Plant Disease Clinic, University of Minnesota, St. Paul 1, or at the Division of Plant Industry, 670 State Office Building, St. Paul, 1.

Three to four branches should be sent in for the test; each should be about half inch in diameter and 6 to 10 inches long. Wrap them in paper--not in plastic.

Branches that show the brown lines or dots in white wood will be tested, and others will be reported as not showing symptoms. Dead and dry wood will not be tested.

Bark does not show Dutch Elm symptoms. Miscellaneous insect tunnels under the bark may be caused by several insects. The distinctive tunnels of the elm bark beetles are easily identified. Elm wood containing such tunnels should be destroyed immediately, or should have been destroyed earlier in keeping with the recommended sanitation program.

add 1 - new growing season

Recommendations for control of Dutch Elm disease are: sanitation (destruction of all dead and dying elm wood) and beetle control with a dormant spray in spring or fall. Spraying should be done only on elms in a radius of 300 to 500 feet from locations of known infected trees.

Infected trees should be removed immediately.

Owners of especially valuable elm trees may wish to spray them as an additional safeguard, even though there is no known infected tree nearby.

Johnson says two new methods of control are being tested and one is ready for use. The Dutch Elm disease fungus can move from infected trees to adjacent healthy trees through root grafts. Roots can be cut by trenching between trees, but this is expensive and laborious.

Now, a chemical can be used to kill roots half way between trees and effectively stop movement of the fungus. The other method involves injection of a chemical called "Bidrin" into the tree trunks in spring.

Bidrin is a systemic insecticide. It moves throughout the tree and kills beetles that feed on the tree. Prospects for this method look good and large scale tests are being run in Wisconsin in 1964; however the material is not available now, but may be after the tests.

For areas not immediately threatened by the disease, Johnson recommends cleanup of all dead and dying elm wood. Spraying for control of beetles is an added step after the disease is present.

Illustrations and descriptions of Dutch Elm symptoms are in Extension Folder 211, "The Dutch Elm Disease," available from the county extension office or from the Bulletin Room, Institute of Agriculture, St. Paul, 55101.

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CHEMICALS CONTROL
SOIL INSECTS

Soil insects cause quite a few problems to the farmer. They feed on the roots, the plant above the ground, and make it easy for other disease organisms to enter the plant.

John Lofgren, extension entomologist at the University of Minnesota, lists the following insects as damaging to corn: wireworms, corn rootworms, white grubs, seed-corn maggots, corn seed beetles, and cutworms.

Lofgren says there aren't any practical ways to control soil insects after the crop has been damaged. Cutworms, however, can be controlled after injury is noticed.

The following practices outlined by Lofgren are preventive measures against soil insects, except for western corn rootworm infestations which are resistant to aldrin and heptachlor..

1. Soil Treatments. There are two ways to carry out soil treatments -- broadcast and band placement. Broadcast applications include the spreading of one and a half to two pounds of actual aldrin or heptachlor per acre.

The chemical must be incorporated into the soil immediately after application. Therefore, a tractor mounted sprayer pulling a disk is often used in broadcast applications.

Band treatment requires about one pound of actual chemical per acre. Sprayers should be adjusted so the spray does not hit the seed directly. If granules are used, they should be applied above the seed.

Band treatments don't control cutworms or wireworms as effectively as broadcast treatments.

add 1 - soil insects

2. Fertilizer--Insecticide Mixtures. Fertilizers are available with additions of insecticides. These fertilizer-insecticide mixtures are applied at planting time and are quite effective if placed above the seed. Therefore, mixtures don't work too well when placed two inches to the side and two inches below the seed.

Broadcast applications of fertilizer-insecticide mixtures may be quite effective according to Lofgren.

3. Seed Treatments. Treating seed with aldrin, dieldrin, heptachlor, or lindane prevents damage from seed-corn maggot, corn seed beetles, and light wireworm infestations. Seed treatments are not effective in controlling white grubs, cutworms, rootworms or heavy wireworm infestations.

Lofgren recommends treating seed with one ounce of actual aldrin, dieldrin, heptachlor, or lindane per bushel if you have not used a soil treatment. The regular fungicidal seed treatment should still be used with the insecticide treatment.

Cutworm infestations can be controlled by spraying two pounds of actual toxaphene or DDT, one-half pound actual dieldrin, or one-fourth pound of actual endrin per acre. Lofgren states that the spray should be applied on the row as soon as the damage is noticed.

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MINN. TO SEND IFYE TO THAILAND

Georgia Bergstrom, 20, Oak Park, has been selected as an International Farm Youth Exchange delegate from Minnesota to Thailand, Evelyn Harne, associate state 4-H club leader at the University of Minnesota, has announced.

Miss Bergstrom will leave for Thailand in September. She is the first Minnesota IFYE to go to Thailand.

She is the third IFYE to be chosen a representative from Minnesota in the 1964 program in which rural young people live and work with farm families overseas. Ronald Kelsey, Lewisville, will sail from New York April 15 on the S. S. Rotterdam for six months in Sweden. June Cunningham, Sleepy Eye, will leave Montreal April 30 on the S. S. Batory for Poland. Kelsey and Miss Cunningham will spend April 9-14 in orientation in Washington, D. C.

Darryl Bussler, Brownton, 1963-64 IFYE, returned this week from his assignment in Jamaica.

Miss Bergstrom is a senior in elementary education in Trinity College, Chicago. She will receive her bachelor of arts degree in June.

A daughter of Mr. and Mrs. Norbert Bergstrom, she was an active 4-H club member in Benton County for eight years.

The International Farm Youth Exchange, a 4-H club people-to-people program, is sponsored by the Cooperative Extension Service and the National 4-H Foundation to increase world understanding at the grass roots level. In the 16 years of the program, 1,546 U. S. delegates have gone abroad and 1,750 young men and women have come from 67 countries.

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TIME TO START TOMATO PLANTS FROM SEED

Want some particular varieties of tomatoes for your garden this year? A way to be sure of getting the varieties you want is to start some seeds indoors.

Tomato plants can be seeded in the house now, since it takes about six weeks to grow a good plant for setting outdoors, according to O. C. Turnquist, extension horticulturist at the University of Minnesota.

For dependable, continuous production of high quality tomatoes, he recommends four varieties: Fireball, Hybrid EE, Moreton Hybrid and Big Boy. Fireball and Hybrid EE produce early, medium-size fruits but become less productive in late summer. They are bush-type plants, not suitable for staking. In addition to one of these early varieties, Turnquist suggests Moreton Hybrid, which will start producing as Fireball and Hybrid EE taper off. For large, smooth fruits, Big Boy, a mid-season to late variety, is still the most popular of all tomatoes.

Plant Early Salad Hybrid if you want some of the small-fruited cocktail or eat-whole tomatoes. One plant may yield up to 400 fruits.

If you like yellow-fruited tomatoes, try Sunray, a midseason variety milder and less acid than most red tomatoes and suitable for staking.

A good soil mixture for starting seeds is three parts garden soil, two parts organic matter and one part sand. If you broadcast the seed in the container, avoid getting plants too thick. Planting two or three seeds directly into a 4-inch peat pot has been found successful. After the first true leaves appear, thin the seedlings to one plant. At the appropriate time the pot can be set directly into the garden.

Plants will grow best if kept in direct light where there is good air circulation.

Don't set tomato plants into the garden too early, Turnquist warns. Usually the latter part of May is recommended, when soil and air temperatures are warm enough to establish the transplants.

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MINNESOTA NUTRITION CONFERENCE SET FOR SEPT. 14-15

The annual nutrition conference for feed manufacturers and dealers, sponsored by the University of Minnesota Institute of Agriculture, will feature four nutrition specialists from Iowa, Michigan, Ohio and Washington State universities when it meets Sept. 14 and 15.

The conference chairman, Paul E. Waibel, associate professor of poultry science at the University of Minnesota, says the two-day meeting will cover major topics in animal nutrition. It is designed to meet the needs of feed manufacturers and dealers, nutritionists, veterinairians, county agents, university researchers, and pharmaceutical representatives.

Also featured on the program will be addresses by industry representatives in the area of swine feeding and egg production. Additional topics will be handled by University faculty members.

The conference, according to Waibel, has been planned on a regional basis and any persons in the area interested in animal nutrition are cordially invited to participate.

The program is sponsored by the University's department of short courses and will be held at the Student Center on the St. Paul Campus of the University. Registration is set for Monday, Sept. 14, at 8:15 a.m.

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Immediate release

U HOME ECONOMICS DAY IS MAY 2

Home Economics Day on the University of Minnesota's St. Paul Campus will be May 2 this year.

All junior and senior high school girls in Minnesota are invited to attend the event which has as its theme "Home Economics--Your Key to Opportunity."

Acquainting interested high school girls with opportunities for various careers in home economics through courses at the University is the purpose of H.E. Day.

University faculty members and students will discuss courses and career opportunities in textiles and clothing, food, dietetics and food service management, related art, household equipment, education, home management and family living.

Tours of campus buildings are scheduled during the morning. Exhibits will be on display in all divisions of home economics in McNeal Hall.

A buffet luncheon and a style show in the North Star Ballroom of the Student Center will be other features of the day's program.

Girls interested in attending Home Economics Day should register with their high school home economics teacher, counselor or county home agency by April 13. Or send registrations directly to Kathleen Jeary, School of Home Economics, University of Minnesota, St. Paul, Minn. 55101 by April 20. Advance registration is necessary. All reservations must be accompanied by the registration fee of \$2. The registration fee also covers cost of the luncheon.

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FARM MANAGEMENT RESEARCH EVOLVES IN MINNESOTA

"How can I increase my earnings? What crops shall I grow? What are my costs?" These questions asked by the farmer of yesteryear are still being asked today.

What has developed from these questions is farm management research, a long-time activity at the University of Minnesota.

The first attempt to answer these questions began in 1894 when a series of rotation experiments were tried by two pioneer agronomists: Willet M. Hays and Andrew Boss. The crop yield information gleaned was valuable but further work was necessary when costs and returns entered the picture.

The next step in this management evolution involved a buggy ride to Northfield, where the two men interviewed 45 farmers. Fifteen agreed to participate and provide daily reports on operations and costs. This move and subsequent ones in the Marshall and Halstad areas launched a program which operated until 1953.

The basic assumption these men, and others throughout the country, were working on was to average costs of production and provide guidelines for profitable farm operations.

Other developments, just appearing at that time, also added two more dimensions to the fledgling program: utilization of survey methods to obtain information from many farmers by a single interview with each and establishment of a system of records by the U. S. Department of Agriculture.

These two additions to farm management techniques helped focus attention on the real problem facing farmers--what changes are necessary to make improvements in farming operations and how will they affect earnings?

World War I intervened at this point and many of the projects were closed until 1920. When they were inaugurated again new developments had caused important changes in techniques and emphasis.

(more)

add 1 -- farm management

On Jan. 1, 1928, a new project, based on research in Illinois, was begun. The first objective called for establishment of a system of records and analysis which would make records useful to the individual farmer. The second was to provide information for farm planning and a profitable operation.

This project has generated a great deal of information along with many articles and bulletins being used in resident and extension teaching. A similar service based on the 1928 program was established in southwestern Minnesota in 1940 and is still in operation today.

Bringing these older basic techniques together with the rapid advancements of modern science has been the main job of the farm management specialists lately.

Currently an evaluation is underway to determine the compatibility of present information gathering services and analysis with high speed computers. With such a service it might be possible to provide summaries more rapidly and more economically.

The original questions still need to be answered, however, as modern agriculture becomes more competitive. Many of the problems are made difficult by lack of tools and knowledge but the basis laid back in 1894 and the development of modern methods will help in the continuing search for answers.

And there's no lack of questions. Economic change is constantly raising new and difficult problems for the researcher in farm management.

This historical look at farm management research is covered in detail in the current issue of Minnesota Farm Business Notes, an Agricultural Extension Service publication. Authors are agricultural economists George Pond, retired, S. A. Engene and Truman Nodland.

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4-H LEADERSHIP CONFERENCE AND CLUB WEEKS SCHEDULED

The State 4-H Junior Leadership Conference will be held June 23-26 on the State Fair Grounds in St. Paul, Earl Bergerud, assistant state 4-H Club leader at the University of Minnesota, has announced.

Outstanding young people representing Minnesota's 81 counties will attend the 44th annual conference. Its purpose is to help the 4-H'ers develop leadership skills through discussions with guest speakers and other club members. New State 4-H Federation officers will be elected and installed at the conference.

Also scheduled are three district 4-H Club weeks. They will be held June 8-12 at the North Central School of Agriculture, Grand Rapids; June 17-21 at the Northwest School of Agriculture and Experiment Station, Crookston; and again June 17-21 at the University of Minnesota, Morris.

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NEW SOLUTIONS NECESSARY FOR COUNTY GOVERNMENT PROBLEMS

A declining or stationary population and expanding services are two of the main problems county governments in Minnesota must face up to in an effort to halt the economic squeeze of spiralling costs and drooping tax revenues.

According to Robert I. Wessel, social science analyst with the U. S. Department of Agriculture, during 1950 and 1960 the main characteristic of county economics was higher per capita property taxes and much higher per capita expenditures. This was especially true in counties with low populations and low median family incomes.

Wessel discusses county government in Minnesota Farm and Home Science, a University of Minnesota Agricultural Experiment Station publication.

He says that some counties have taken action within their statutory limits to reduce expenditures. This took the form of reduction in administrative positions in school districts and a cutback in some county clerical positions. However, he says, this did not help a great deal. The heavy costs of roads and welfare were not reduced and major county government structure and costs are set by law.

The USDA researcher points out that some other alternatives have been proposed. One such proposition calls for a reduction in administrative functions where there is an overlapping. The county auditor, treasurer and assessor positions might be combined as might the offices of the judge of probate and the clerk of the court or the judge of probate and the county attorney.

A second alternative suggested is intercounty cooperation in the use of office and road equipment. Joint ownership might provide adequate services where there might otherwise be no service or poor service.

A final alternative offered is consolidation of some counties. This would reduce staff and equipment where it is now being duplicated because of outdated geographical boundaries.

Wessel points out that these moves would provide some economy in county government administration but they do not tackle the problem of roads and welfare, the major service functions of county government and the most expensive.

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Immediate release

ST. PAUL CAMPUS WILL HOST FFA CONVENTION MAY 3-5

More than 2,200 Minnesota rural boys will take part in the Future Farmers of America (FFA) Convention and Leadership Training Conference, May 3-5 at the University of Minnesota's St. Paul Campus.

The theme of this year's convention, "Agriculture--Dynamic-Challenging," will give the participants an opportunity to explore modern agriculture as well as take part in contests, business sessions and tours.

The three day meeting will kick off Sunday evening with a talent show and wind up Wednesday with a training session for newly-elected state FFA officers.

An annual highlight is the hand milking contest between the State Star Dairy Farmer and Minnesota's Princess Kay of the Milky Way. This unique event will take place in front of Coffey Hall on Tuesday at 8:45 a.m.

Monday's events will include judging contests, the second annual Creed Contest, an awards luncheon honoring State Farmers, District Star Farmers and National FFA Foundation Award winners, and special educational classes. These latter meetings will allow faculty members to explain teaching, research and professional opportunities at the University.

The delegates will leave the campus Monday evening for the 28th annual convention banquet in the St. Paul Municipal Auditorium. Governor Karl Rolvaag, Mayor Vavoulis of St. Paul and National FFA vice president, Joseph Coyne, Minooka, Illinois, will be the principal speakers.

Another banquet highlight will be the presentation of the FFA Chapter sweetheart's University Hospital,
Other special features will include an address by Dr. Donn G. Mosser, / on
"Smoking--A Health Hazard" on Tuesday morning, a parliamentary procedure contest, a public speaking contest and the State FFA band and chorus concert.

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64-101-jfk

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 13, 1964

To all counties
Immediate release

SQUELCHES RUMORS
OF ROOT ROT
IN SOYBEANS

A soybean root rot disease, found in many of the states east and south of Minnesota, has not yet shown up in any counties of the state..

According to H. G. Johnson, extension plant pathologist at the University of Minnesota, several suspect cases of dead soybean patches were linked to causes other than the Phytophthora fungus. In general, he said, the most common cause resulted from lightning strikes.

Johnson says some resistant soybean seed is available but these varieties are likely to be too late maturing for our normal season. However, in the absence of the disease, these varieties offer no advantage over the present recommended varieties.

Research work is progressing in this area and it has been found relatively easy to incorporate resistance to this root rot in varieties being used now. Johnson says that when they are needed, resistant varieties that are adapted to this state will be available.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 13, 1964

To all counties
Immediate release

IN BRIEF.....

A declining or stationary population and expanding services are two of the main problems county governments in Minnesota must face up to in an effort to halt the economic squeeze of spiraling costs and drooping tax revenues. According to Robert I. Wessel, social science analyst with the U. S. Department of Agriculture, some counties have taken action within their statutory limits to reduce expenditures. This took the form of reduction in administrative positions in school districts and a cutback in some county clerical positions. However, he says, this did not help a great deal. The heavy costs of roads and welfare were not reduced and major county government structure and costs are set by law.

* * * *

Dutch Elm Disease: People are keeping a close eye on elm trees these days. But of the many things that can happen to elms, most are not related to Dutch Elm Disease. Extension plant pathologist Herbert Johnson at the University of Minnesota says Dutch Elm and other wilt diseases have fairly distinct symptoms. As trees leaf out this spring, watch for branches that may be weak or dead now, but which were growing last season. Then during the growing season, watch for wilting and dying of individual branches.

* * * *

Poor cultural practices, rather than insects and diseases, are the primary cause of a large proportion of gardening troubles, says E. M. Hunt, executive secretary of the Minnesota State Horticultural Society. According to Hunt, "Many insect and disease problems could be avoided if we were better gardeners-- if we really understood the problems and made reasonable effort to eliminate some of the pitfalls." He lists as pitfalls for the amateur gardener: poor soil management, over crowding of plants, improper cultivation and weed control, poor site and poor selection of plants.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 13, 1964

To all counties
4-H NEWS
Immediate release

4-H FILLERS

4-H Clubs are part of the national educational system of cooperative extension work which is shared by the United States Department of Agriculture, the state land-grant colleges and the individual counties.

* * * *

4-H'ers focus on car care and safety in the automotive project, one of the newest club activities. Popular with urban and rural teen-agers alike, enrollment in the project has already doubled in the four years since it began.

* * * *

People in other countries learn about American youth and 4-H firsthand through the International Farm Youth Exchange, begun in 1948. The program gives our young people a chance to learn another way of life by living in another country. In exchange, foreign youths come here to live. After returning home, "IFYE's" share their experiences with youth and civic groups in their own countries.

* * * *

"For my club, my community and my country"--this final line of the 4-H pledge reflects the benefits of 4-H to those beyond the club. 4-H members aid in community development through service projects, participation on community planning committees and leadership development. Club work helps members understand the why of democracy as well as the how by providing real-life experience in democratic action.

* * * *

The 4-H Club idea now encircles the globe. About 70 countries have adopted youth programs similar to 4-H which are especially suited to their own needs.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 13, 1964

To all counties
ATT: HOME AGENTS
Immediate release

CHOOSE COOKING
METHOD ACCORDING
TO BEEF CUTS

Beef rates high on food preference lists of most families -- and this month ranks at the top of the list of good buys, too.

As long as there is more than enough beef to satisfy the demand, consumers are assured that prices will remain attractive.

In a typical week, a third of U. S. families serve a beef roast of some kind, and even more families eat steak, according to a U. S. Department of Agriculture report.

The abundance of high quality, tender, flavorful beef now on meat counters offers a wealth of menu variety along with mealtime satisfaction and good nutrition. But to make the most of the meat you buy, make sure you cook the cuts you choose according to the recommended method, suggest extension nutritionists at the University of Minnesota.

For example, broiling, pan-frying and roasting are recommended for tender cuts. These include USDA Choice sirloin, porterhouse, T-bone or club steaks, which broil well under direct heat but may also be pan-broiled or pan-fried. For oven roasting in an open pan, select a rib, loin or Choice grade rump roast.

Cuts of chuck, rump, round -- including heel of round -- and short ribs are all suited to braising or pot roasting, -- that is, cooking the meat covered, with some liquid added. Pot roasting brings out hearty flavor and gives a rich brown color to the meat. The key to success is a heavy frying pan or kettle with a tight-fitting cover. The braising can be done on top of the stove or in the oven with any liquid you choose to add such as water, tomato juice, onion or mushroom soup.

If cost is a major consideration in your purchase of beef, remember the higher grades and more tender cuts generally are most expensive. Of the top three federal grades of beef -- Prime, Choice and Good in that order -- USDA Choice will be found most often in retail stores. However, you can often save by buying U. S. Good grade, which, though not as juicy as Choice or Prime, can be tender and tasty when cooked properly -- generally by the braising method.

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

TESTS SHOW EFFECTS OF WEED FILLERS

Ever wonder why weeds never seem to grow in your neighbor's corn or soybean field? More than likely, he's making good use of herbicides.

For the past five years, extension agronomists at the University of Minnesota and county extension agents have been testing the effectiveness of herbicides under a variety of conditions.

Results from these demonstrations and experimental plots at University Experiment Stations have shown that soil type and rainfall greatly influence the effectiveness of the herbicides. On pre-emergence herbicides, one-half to three-fourths of an inch of rain must be received 10 to 14 days after application if the chemicals are to be effective. Soil type affects the rate of application, and the effectiveness of the herbicide.

Harley J. Otto, extension agronomist at the University of Minnesota, has listed the major chemicals and some characteristics of each:

* CDAA (Randox) -- can be used on corn and soybeans. It is more effective on annual grasses than annual broad-leaved weeds and is best suited for soils with relatively high organic matter. Randox can be applied at four to five pounds of active chemical per acre on a broadcast basis. Band applications require proportionately less chemical. It will control the annual grasses for about four to five weeks. The granular form has been slightly more effective than the liquid form.

-more-

add 1 - tests show effects

* CDAA-T (Randox-T) -- can be used only on corn. It is more effective than Randox in controlling broad-leaved weeds and about equal in controlling annual grasses. Randox-T is best suited for soils high in organic matter. It is effective in controlling the annual grasses for only a short period of time. Granules appear to be more effective than liquid formulations.

* Atrazine -- only for corn. Atrazine controls annual grasses and broad-leaved weeds. The rate of application varies from two to four pounds of active ingredient per acre depending upon soil type and the organic matter content. The lower rates are used on the lighter textured soils and soils low in organic matter.

Atrazine is effective over a long period of time and may have some soil carryover. You can reduce the carryover by using band instead of broadcast applications, by using the minimum rate for effective weed control, and by thorough tillage of the soil before planting a susceptible crop, such as soybeans, small grains and small seeded legumes.

Atrazine can be applied pre-emergence or post-emergence. Post-emergence applications must be applied before the grasses are one and one-half inches tall or before three weeks after planting.

* Linuron (Lorox) -- can be used on corn or soybeans and controls both annual grasses and broad-leaved weeds. The rate of application must be tailored to the soil type. A maximum of two pounds of active ingredient can be used on soybeans and a maximum of two and one-fourth pounds of active chemical can be used on corn.

There has been no observed carryover with Lorox. However, it may injure corn so directions should be followed closely.

* Amiben -- used on soybeans to control grasses and broad-leaved weeds. Two to three pounds of active chemical per acre plus a good cultivation program have given good weed control for the entire season.

add 2 - tests show effects

* Trifluralin (Treflan) -- a new chemical that can be used only on soybeans grown for seed. It will control the annual grasses and most of the broad-leaved weeds.

Application rates vary from one-half to one pound of active chemical per acre. The chemical must be worked into the soil immediately after application. For this reason, it is probably more practical to apply trifluralin before planting.

Trifluralin has caused some crop injury in tests. Therefore, directions should be followed as stated on the label of the container.

Linuron (Lorox) and dalapon (Dowpon) have been used as post-emergence herbicides on corn. The spray must be directed downward toward the base of the corn stalks and weeds. If the chemicals are sprayed over the top of the corn plant, severe crop injury will occur.

Linuron will control both the annual grasses and broad-leaved weeds while dalapon will control only the annual grasses. When 2,4-D is applied with dalapon broad-leaved weeds and grasses can be controlled.

Otto points out that weed competition is the greatest during the first six weeks of growth. Therefore, some other method for early weed control must be employed if only post-emergence herbicides are used.

When using herbicides, read and follow label instructions carefully. Make sure application equipment is in good working order and properly calibrated.

Further information on weed control can be obtained from Extension Folder 212 available through the Bulletin Room at the University of Minnesota or your county agent.

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Department of Information
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Immediate release

SOYBEAN PRICE PEAK SEEN FOR THIS CROP YEAR

Soybean growers holding their crop in anticipation of a rise in prices might do well to analyze the present market situation for their product.

According to Reynold Dahl, agricultural economist at the University of Minnesota, it appears that the seasonal peak in soybean prices has been reached for this crop year. He bases his forecast on the declining margin of profit for soybean processors.

Dahl, in an article in Minnesota Farm Business Notes, a University of Minnesota extension publication, says that the raw bean yields two joint products: soybean oil and soybean meal. These products, 11 pounds of oil and 48 pounds of meal per bushel of beans, have been equally in demand in the past but the emphasis has shifted lately.

The focus is now on the meal while oil usage has slumped. Dahl attributes this shift to increased feeding of protein and increased livestock production. However, the sales of meal have driven the prices up to a point where they are now beginning to weaken as other sources of protein feed become available.

(more)

add 1 -- soybean price

The economist points out that in 1948 the value per bushel of finished products was \$2.80 and the price paid the soybean producer was \$2.36. This "crushing margin" of 44¢ has plunged drastically from that high to a margin, in January of 1964, of one cent.

This does not cover the costs of crushing and thus reduces the processor's demand for soybeans. Dahl says that recent low crushing margins contributed to a reduction of 13 million bushels in the first four months of this crop year compared to one year ago.

There is also a foreign demand for soybeans but this tends to fluctuate with the domestic market and subsequent domestic prices. Dahl does not expect any relief for the soybean industry in this area in the foreseeable future.

Without an increase in the rate of crush between now and next fall the carry-over of beans for this crop year will exceed the 15 million bushels currently forecast.

And unless crusher demand increases in the near future, the farmer holding his crop for higher prices will have an indication that there will be no appreciable increase in the base price of soybeans in the near future.

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Department of Information
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Immediate release

BELTRAMI COUNTY SOLVES PROBLEMS IN HEALTH, EMPLOYMENT

BEMIDJI--Local people in Beltrami County are moving ahead to improve health in the area, stem the growing tide of unemployment among their young people and improve the condition of older people.

It's all part of the work of the Health-Education-Welfare Committee, one of seven committees of the Beltrami County Area Development Association. As with any effective program in Area Development (RAD), the secret to success with the Health-Education-Welfare Committee has been to put it in the hands of local leaders. Some 200 different persons have assisted in some way thus far with the committee's programs.

"Once the process is started, it can become a chain reaction," says Mrs. Jean Castle, Beltrami County home agent. "You start with local community leaders who call upon other reliable, energetic and sincere persons. These persons in turn inform others and you have, in a very real sense, a people's program."

Beltrami County's RAD program is carried out by nearly 500 local volunteers. Organizational meetings of the RAD groups were initiated by the County Extension Service; then interested local leaders took over.

First step in the activity of the Health-Education-Welfare Committee was to make a health survey. Women from all parts of the county cooperated in the study. Since there was no county nurse, the women investigated this situation, found funds were available for the position and soon a qualified public health nurse was hired.

Interested in raising the level of family living in the area, the HEW Committee called a county-wide meeting dealing with the problems of aging. As a result, the Beltrami County Senior Citizens' Council was formed, which immediately swung into action.

(more)

add 1 -- solving problems

A study of education and the drop-out problem was another venture of the HEW Committee. After digging up facts about the number of youth who leave the area upon graduation, those who find local employment and about others who end up in unemployment lines, the committee saw a definite need for vocational training in the skilled and semi-skilled trades, a need not being met in the county. A vocational training study group was set up, headed by Paul Olstad, Beltrami County treasurer, and composed of local business and professional people, civic leaders and rural farmers and homemakers.

To get some concrete facts from which to work, the group sponsored a survey carried out by E. M. Outwin, area vocational training coordinator. In the study all high school juniors and seniors within a 50-mile radius of Bemidji were asked to indicate plans and preferences for further education.

Although still in the developmental stage, the project of the vocational training study group could mean an improvement in the level of education for many young people in the county. It could also result in greater economic growth if a ready supply of skilled workers should attract an industry to the area.

Many special interest groups have an opportunity to function under the HEW Committee. One such group is the sub-committee on alcoholism and narcotic education. The group has sponsored radio programs, open meetings, a special seminar and provides a speakers' service for local club meetings.

The strength gained by working on various projects through a group is recognized by committee members, one of whom remarked, "I have been aware of these problems for years and could not do anything alone; now I feel anything we do as a group will be of real help."

In any successful project there are countless unrecognized workers, Mrs. Castle points out. But "in Beltrami County," she adds, "these persons are rewarded with the knowledge that they have contributed in their own capacity to make the various projects successful and their communities better for their neighbors and themselves."

Department of Information
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Immediate release

FINAL PLANS COMPLETE FOR MIDWEST MILK MARKETING CONFERENCE

"The Changing Market Picture" in dairying will be highlighted during the 19th annual Midwest Milk Marketing Conference next Wednesday and Thursday, April 22 and 23, on the St. Paul Campus of the University of Minnesota.

The conference will be attended by some 350 managers and directors of cooperative dairy plants, milk marketing research men, and members of milk regulatory agencies from about 20 states.

Sessions will be on the St. Paul Campus of the University of Minnesota on Wednesday and at the Pick-Nicollet Hotel in Minneapolis on Thursday.

The conference theme will be "The Changing Market Picture," according to E. Fred Koller, University agricultural economist and secretary for the conference.

One of the key addresses to be delivered during the morning session on Wednesday will be, "The Changing Market Structure in the Dairy Industry--What Does it Mean?", delivered by Hugh L. Cook, agricultural economist at the University of Wisconsin. He will cite the trend toward concentration in the dairy industry.

(more)

A co-worker at Wisconsin, F. W. Groves, will reinforce Cook's stand on concentration in his presentation of "Cooperative Mergers--Key to the Future." According to Koller, this should be of particular interest to managers and directors of dairy cooperatives in Minnesota, Wisconsin and Iowa where such mergers have been among the leading topics of discussion.

During the Wednesday evening session, Gordon W. Sprague, dairy economist for Land O'Lakes Creameries, Inc., in Minneapolis and A. L. McWilliams, general manager of Pure Milk Association in Chicago, will attempt to answer the question "What Kind of a Dairy Program Should We Have?"

Sprague will deal specifically with the butter fat production payments plan--letting the price of butter fall to market level and subsidizing producers. McWilliams will cover the class one base plan in which dairy farmers would be paid a certain guaranteed price for their milk quotas. Any surplus milk production would be marketed at a much lower price.

The final session on Wednesday morning will hear C. W. Pierce, a specialist in dairy marketing at Pennsylvania State University, talk on the "Present Status and Future of State Milk Control Laws." Also addressing the final session will be Lynn C. Paulson, executive secretary of the National Independent Dairies Assn. of Washington, D.C., and former Federal Trade Commission Attorney. Paulson will speak on "The Federal Trade Commission and the Regulation of Competition in the Milk Industry."

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64-106-wlb

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Immediate release

100 AWARDS GIVEN TO FUTURE FARMERS

More than 100 young Minnesotans, representing 60 FFA chapters, have been named winners of nearly \$3,000 in Future Farmer of America awards.

They will be honored at a luncheon on the St. Paul Campus of the University of Minnesota May 4 during the state FFA convention. The convention runs May 3-5.

Included are the following National FFA Foundation Proficiency in Farming state awards of \$100 each:

Star Dairy Farmer, Clellan Weldy, 19, Fairfax; Star Beef Farmer, Roland Burt, 18, Lewiston; Star Crop Farmer, Joe Hough, Jr., 19, Barnesville; Star Swine Farmer, Larry Aarestad, 18, Halstad; Star Sheep Farmer, Leonard Wohlman, 19, Renville; Star Forestry Farmer, Warren Peterson, 18, Willow River; Star Poultry Farmer, William Anderson, 18, St. Charles; Star Livestock Farmer, Ronald Schmidt, 18, Appleton.

Soil and water management, Carl Rolloff, 18, New Ulm; farm mechanics, Alan J. Smith, 18, Stillwater; farm and home electrification, Eugene Engstrom, 19, Renville.

(more)

add 1 -- FFA awards

Minnesota FFA Foundation trophy awards:

Regional soil and water management--Leon Vetter, 18, Climax; Jon D. Evert, 18, Barnesville; James Swanson, 18, Willmar; Carleton Anderson, 18, Ortonville; Howard Musehl, 18, Faribault; and Lowell Mueller, 17, Lewiston.

Regional Star Dairy Farmers--John Knudtson, 19, Halstad; Ronald Cline, 19, Staples; Ronald Johnson, 19, Evansville; Bruce Houle, 18, Forest Lake; Richard Wiens, 17, Mountain Lake; Steven Stadheim, 18, Ellendale; and Gerald Bartel, 13, Kasson.

Minnesota FFA Foundation merchandise awards:

District Star Farmers--Mark Bruggeman, 17, Thief River Falls; Russell Thompson, 17, Motley; Robert Week, 17, Evansville; Dennis Vieau, 17, Howard Lake; Daryl Luthens, 18, Hutchinson; Gary Hansen, 17, Jackson; Duane Gran, 18, Nicollet and Paul Trapp, 17, Hastings.

Regional Concrete Improvement award of \$20 each from Portland Cement Association:

Brent Aarestad, Halstad; Mike Sweeney, Staples; Thomas Dallmann, Barnesville; Don Schendel, Howard Lake; Dennis Edwards, Hector; Mark Eggimann, Jackson; Gene Bertram, Faribault; Dennis Verthein, Lewiston.

The Faribault FFA chapter will be honored as state winner of the National FFA Foundation Award of \$100 for farm safety.

Chapters from Lanesboro, Stewart and Winona each receive plaques and cash awards, for showing the most progress in efficient milk production. The awards are sponsored by the National Dairy Products Corporation, National Butter Company and Kraft Foods Company.

Other regional FFA Foundation trophy award winners:

Farm mechanics--John A. Peterson, 17, Hallock; Robert Week, 18, Evansville; Bill Sietsema, 18, Renville; Larry Spitzner, 18, St. James; Kenneth Miller, 18, Owatonna and Jerald Rehnke, 18, Kenyon.

(more)

add 2 -- FFA awards

Farm Electrification--Richard DeSplinter, 19, Jasper.

Farm Safety--Ortonville, Delavan and Stillwater chapters.

Beef Farming--Brent Aarestad, 17, Halstad; Jim Morrow, 18, Motley; DuWayne Sonnenberg, 18, Perham; Lawrence Welk, Paynesville; Richard Wolff, 18, Canby; R. Bruce Johnson, 18, St. James and J. Michael Taylor, Blooming Prairie.

Crops Farming--Jonathon Hastad, 18, Halstad; Michael Ward, 18, Staples; David Luhman, 18, Howard Lake; Earl Nellerroe, 18, Granite Falls; Richard Gaalswyk, 18, St. James; Bill Herrmann, 20, Delavan and Jerry Simon, 17, Lewiston.

Hog Farming--Russell Thompson, 17, Motley; Ronald Nelson, 18, Rush City; Michael Frank, 18, Hector; Raymond Christensen, 18, Sleepy Eye; Roger Pfeifer, 18, Blooming Prairie and David Stegemann, 18, Wabasha.

Poultry Farming--John Erickson, 17, Willmar; Gayle Sitter, 16, Ortonville; Wayne Finnern, 18, Okebena; and James Madson, 18, Blooming Prairie.

Sheep Farming--Francis Spokely, Jr., 18, Climax; Daniel Peterson, 18, Parkers Prairie; Ernest Peterson, 18, Rush City; David Drealan, 18, Fulda; William Brixius, 18, Wells; and David Nystuen, 18, Kenyon.

Forestry--Dennis Anderson, 17, Motley; Jerry Draheim, 18, Olivia; and Stanley Babcock, 19, Faribault.

Livestock Farming--Richard Hedde, 19, Climax; Eugene Dennemeyer, 18, Staples; Norlin Boyum, 17, Battle Lake; Gaylon Swenson, 18, Forest Lake; Gary Hansen, 18, Jackson; Donald Haase, 19, Blue Earth and James Brogan, 19, St. Charles.

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64-105-pjt

21P
Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 20, 1964

To all counties
Immediate release

PLANT SOME NEW
VARIETIES IN YOUR
GARDEN THIS YEAR

Consider selecting some of the newer varieties of vegetables when you plant your garden this year. Many of them are better producers, more disease resistant and of higher quality than some of the older varieties.

However, whether you choose old or new varieties of vegetables, they should be adapted to Minnesota, O. C. Turnquist, extension horticulturist at the University of Minnesota, emphasizes. Selection of adapted varieties is an important step to a successful garden, he says.

A list of recommended varieties for Minnesota gardens is given in a University Agricultural Extension Service revised publication, 1964 Vegetable Varieties, Extension Folder 154, just off the press. Copies are available free of charge from the county extension office.

Vegetable variety trials conducted throughout the state by the University Agricultural Extension Service in cooperation with both home and commercial gardeners are the basis for the recommendations. Reliable older varieties are listed in addition to some of the new varieties.

Among the newer varieties adapted to Minnesota, Turnquist recommends these as worth trying along with some of your old favorites:

Broccoli - Spartan Early, a new early variety improved from the popular Green Mountain; snap bean - Tendercrop, highest rating of the snap beans in the last 5 years of trials, combining mosaic resistance, high yield and high quality; cabbage - Emerald Cross, early F₁ hybrid, high in yield and quality; squash - Hercules, a new strain of the Butternut but with later maturity; peas - Perfected Freezer, vigorous and disease resistant, excellent for fresh use and for freezing; lettuce - Buttercrunch, heat resistant and high quality; cucumber - Spartan Dawn, a hybrid, heavy yielder early in the season; tomato - Gardener, a new early tomato with medium size fruits; sweet corn - Butter and Sugar, a hybrid maturing in about 82 days, high yielding and good quality; watermelon - Hybrid 103, a heavy yielder of fruits averaging 12 to 15 pounds.

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To all counties
Immediate release

SOIL TILLAGE
IMPORTANT FACTOR
IN CROP SUCCESS

Those who till the soil seem to be taking an ever more critical look at how much and what kind of tillage is most needed.

Is soil in general being tilled too much? Too little? Is the right equipment being used?

Soil physicist George Blake at the University of Minnesota approaches these questions with this general point: Within limits, crops are not especially sensitive to the way soil is tilled. But he adds one important exception - the danger of working soil when it is too wet, as farmers are often forced to do in Minnesota.

Blake sees three basic requirements of soil tillage.

First, it must allow getting the seed in the ground and must make for good germination.

Second, it should be of some aid to weed control and, third, it should make for easier harvesting.

Beyond helping meet these conditions, amount or type of soil tillage has relatively little effect on crop success. Research shows that crops can be raised with far less tillage than used to be thought necessary. Weed chemicals have helped eliminate many cultivation operations, for example.

On the other hand, Blake says, minimum tillage is not a yield-increasing operation. Some of the forms that minimum tillage can take, such as planting corn in tractor wheel tracks, don't necessarily lead to bigger yields. But they often produce results as good as would be the case with more tillage.

add 1 - soil tillage

A major tillage problem is working the soil when too wet. Wet tillage tends to strain the little soil crumbs, the aggregates which have been stabilized over time. The result is a weakening of the whole structure. The soil becomes more subject to puddling, to formation of crusts that crack when dry. Clods develop, which are harmful to germination if not to plant growth.

Blake points out that a number of forces are continually building up soil structure, while other forces are constantly breaking it down. The ideal is to maintain a sort of equilibrium. Over tilling, or wet tilling, can upset this state of balance and produce an overload of structure-breaking forces.

Researchmen have frequently watched what happens when you deliberately upset this balance. One way is to compact the soil, as Blake and his colleagues have done with a specially weighted wheel and other devices.

Does excess compaction reduce yields? Not in every case. In years without excess moisture, compaction may not harm production at all. But if you have weather conditions that help bring about poor soil structure, the compaction can make the problem even worse.

Much more research is being done on the whole question of soil tillage. In cooperation with the U. S. Department of Agriculture, University soil scientists are studying the way soil aggregates form and how they are stabilized.

It is known, for example, that adding organic matter such as manure improves soil structure. But less well understood is just what causes soil particles to hang together in the first place. There are undoubtedly both physical and chemical aspects. Micro-organisms probably play a role.

Blake notes several specific questions needing study:

What are some of the easiest and best ways to get rid of crop residue, such as corn stalks? What effects do such methods have on soil structure?

-more-

add 2 - soil tillage

What kind of soil structure gives the least loss of water? Theoretically, a rough soil might lead to less moisture loss in some cases and to more in others. Just what the situation is in Minnesota conditions needs more study.

What tillage methods are most effective and efficient? Blake points out that work by farmers, researchmen and implement manufacturers have shown that many operations can be combined--tillage, fertilizing, planting, chemical spraying can be done in one trip with the right kind of equipment.

Finally, there is the question of farmer habits. To what extent does the farmer depend upon tradition or past experience in deciding how and how much to till a soil? Is "how the field looks" an important factor?

Some of the most recent evidence of the need for as little tillage as possible comes from a cooperative project between the University and G. W. French of the USDA in the Red River Valley. Five different methods of seedbed preparation for potatoes were compared over a three-year period.

Some plots were chisel plowed and some were plowed conventionally, either in fall or spring. One set of plots had no tillage. Potatoes went directly in standing wheat stubble.

The "no tillage" plots averaged 163 cwt. per acre, which was as high as any of the other plots.

Such evidences continues to make it clear that tillage operations need a hard, critical look from farmers and **researchmen**.

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To all counties
Immediate release

2,4-D POPULAR
BUT REQUIRES
SOME CAUTIONS

Although it's an extremely popular weed killer, 2,4-D must be used with a good deal of caution, according to extension specialists at the University of Minnesota.

Minnesota crop producers in 1963 sprayed some 2.9 million acres of small grain and 2.7 million acres of corn for weed control. Practically all the small grain spraying was with 2,4-D or closely related chemicals, and well over three-fourths of the corn acreage received the same chemical.

Yet, "old standby" 2,4-D shouldn't be used indiscriminately. Its efficiency depends upon:

- 1) The stage of growth of the crop plant and weeds, and
- 2) The amount of chemical used per acre.
- 3) Weather conditions before, during and after spraying.

Furthermore, some 2,4-D formulations have label approval for use only on certain crops.

Extension agronomist Harley Otto says the recommended rates for different crops are as follows:

Corn: The first application should be made after corn has passed the two-leaf stage. Corn can be sprayed over the top until it is 8 inches tall. After that, drop nozzles should be used.

Wheat and Barley: Spray should be applied between the appearance of the fifth leaf and the early "boot" stage, when heads start forming.

add 1 - weed killers

Oats: Application time is between 6th leaf and early boot stage. While 2,4-D may be used on oats, MCPA, a related chemical, is less likely to injure the oats.

Otto says that if a small grain is underseeded, 2,4-D or MCPA should be applied after the legume is at least two inches tall. A canopy of crop and/or weeds should cover the seedling to protect them from the chemical.

In general, weeds are more easily controlled with 2,4-D when young and actively growing than when mature.

Use rates suggested on the label and follow all label instructions carefully.

The chemical 2,4-D is available in different formulations. It comes in ester and amine form, and in general, Otto says that with the ester, lower rates should be used. This form is more volatile and likely to injure susceptible plants, compared with 2,4-D amine.

Also, 2,4-D dusts tend to be more hazardous, because of drift, than sprays.

As with any chemical, mixtures containing 2,4-D must be used only on crops for which there is label approval. Mixtures of 2,4-D and trace elements, for example, now are registered for use only on corn--and not on other crops.

Formerly, 2,4-D dust had approval for a wider range of uses than is now the case. And the important thing to remember is that use on crops for which there is no approval could result in confiscation if residues are found in crop samples.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 20, 1964

To all counties
ATT: HOME AGENTS

HANG PICTURES
FOR GREATER
ENJOYMENT

Whether you intensify or lessen the beauty and dramatic effect of the pictures on your walls depends a good deal on the way you hang them.

Pictures should provide enjoyment for family members and guests and should enhance the attractiveness of the room. But when little attention is given to the way these pictures are hung, much of their effectiveness in adding beauty and warmth to the home is lost, says Mrs. Myra Zabel, extension specialist in home furnishings at the University of Minnesota.

Mrs. Zabel gives some guides to help you hang pictures to best advantage.

. Place pictures no higher than needed for full enjoyment. The viewer should be able to see them comfortably from a sitting position. Pictures in children's rooms should be low enough for them to enjoy.

. Place a picture at the side of a furniture grouping, with a plant, lamp or other accessory to balance the unit. This informal arrangement is often more pleasing than the formal one of centering a picture above a piece of furniture.

. Look at the over-all size and shape of the space where pictures are to be hung. A space taller than it is wide is best filled with a vertical picture or a group having a vertical shape. A space wider than it is tall is best filled with a single horizontal picture or a group arranged in horizontal shape. A square space may be filled with a vertical, a horizontal or a square picture.

-more-

add 1 - hanging pictures

. Hang a picture or a group of pictures near other furnishings. The picture will seem to be a part of the group of furnishings if the space between the picture and any article in the group is narrower than the length of the side of the picture.

. Set a picture off from patterned wallpaper by using a wide mat.

. In a grouping, hang pictures together that are similar in subject matter, color or technique. To tie them together, you may want to frame and mat all alike.

. Combine pictures of various sizes in such a way that the outside of the grouping is a rectangle or a square. Square, vertical and horizontal pictures combine well, but the result may be confusing if oval, round and diamond shapes are added.

. Have the space between individual pictures in a grouping no greater than the width or depth of the pictures themselves. Take into consideration also the size of the whole unit in relation to the wall space.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 20, 1964

To all counties

4-H News

(1st in a series
on career exploration
and selection)

WATCH TRENDS
WHEN CHOOSING
YOUR CAREER

Trends and opportunities--these are two key considerations for young people facing a career choice.

The employment picture in America has been changing rapidly and will continue to shift even more in the next 10 years. Major economic trends are causing some job areas to expand greatly while others decline. For those on the threshold of a lifetime occupation, it is of vital importance to know just what these trends are and to understand how they will affect the choice of a job.

The biggest growth in career opportunities during the coming decade will be in occupations requiring the most education and special training--the "white-collar" or professional and technical careers, according to the U. S. Department of Labor. This may mean a job increase as high as 40 percent in fields such as teaching, medicine, science, mathematics, the ministry, business administration, home economics, journalism and social work.

Opportunities for clerical and sales workers will be about 30 percent greater. And there will be roughly 25 percent more jobs for service workers such as policemen, filling station attendants, barbers and beauticians.

But a startling fact is that by 1980, as many as 15 to 20 fewer farmers (both operators and hired laborers) will be needed than in 1960. However, since agriculture is involved in many of the professional and technical occupations, young people interested in this field will find many new opportunities in agriculture-related occupations.

-more-

add 1 - your career

The population explosion presents another startling situation. By 1970, two million more teen-agers will be seeking employment than in 1960. Many will be trained for one of the expanding fields. But another half million, including the high school drop-outs, will find only mediocre "blue-collar" jobs with spells of unemployment.

At the same time as these untrained young people are coming into oversupply, the jobs they can do are being eliminated by automation. By 1980, no more unskilled workers will be needed than in 1960, reports the United States Department of Labor.

-bik-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 20, 1964

To all counties

Immediate release

TIMING, RIGHT SPRAY
ARE NEEDED FOR
FRUIT DISEASE CONTROL

Proper timing and the correct materials are all you need to control diseases that may attack your fruit crops.

According to Herb Johnson, University of Minnesota plant pathologist, a copy of the "Home Fruit Spray Guide" will give you the information you need for a disease prevention program.

Johnson says that some years an entire crop can be lost or severely damaged because of disease attacks, however, most can be adequately controlled with a timely spraying of fungicides.

If you raise strawberries, watch for leaf spots, blossom blights and fruit rots. Raspberries are susceptible to these three attacks as well as cane blights. Apple growers on the other hand should be on the lookout for scab and cedar-apple rust during the growing season.

You can obtain a copy of the "Home Fruit Spray Guide" from your county extension agent or from the Bulletin Room at the University of Minnesota, St. Paul, Minnesota 55101. And while you're at it, ask for their pamphlet on insect control recommendations.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 20, 1964

To all counties
Immediate release

IN BRIEF.....

The seasonal peak in soybean prices has been reached for this crop year, says Reynold Dahl, agricultural economist at the University of Minnesota. He bases his forecast on the declining margin of profit for soybean processors. Dahl, is an article in Minnesota Farm Business Notes, a University of Minnesota extension publication, says that the raw bean yields two joint products: soybean oil and soybean meal. These products have been equally in demand in the past but the emphasis has shifted lately. The focus is now on the meal while oil usage has slumped. Dahl attributes this shift to increased feeding of protein and increased livestock production. However, the sales of meal have driven the prices up to a point where they are now beginning to weaken as other sources of protein feed become available.

* * * *

Apply Lime Now for Future Alfalfa Stand

Apply lime this spring to fields scheduled for alfalfa a year from now, says Merle Halverson, extension soils specialist at the University of Minnesota. You'll be better assured of a good stand if you do.

According to Halverson, time and mixing are both important to correcting the acid soil activity that prevents good alfalfa stand establishment and growth.

* * * *

Tomato plants can be seeded in the house now, since it takes about six weeks to grow a good plant for setting outdoors, according to O. C. Turnquist, extension horticulturist at the University of Minnesota. For dependable, continuous production of high quality tomatoes, he recommends four varieties: Fireball, Hybrid EE, Moreton Hybrid and Big Boy.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 20, 1964

To all counties
4-H NEWS
Use if appropriate

COUNTY 4-H'ER
DELEGATE TO
MARYLAND

_____, has been selected as
the _____ County delegate in the Minnesota-Maryland Exchange, June 17
through July 7.

_____ will leave for Maryland on June 19 after a two-day orientation
session on the St. Paul Campus of the University of Minnesota. Delegates will
live one week with 4-H families in Maryland, sharing in their daily activities
and exchanging ideas about 4-H and facts about the two states.

From June 28 to July 4, the member-delegates will attend a Citizenship Short
Course at the National 4-H Center in Washington, D. C. Discussions at the Center
and educational tours of the city are among the week's events.

The group will hold an evaluation meeting on July 7 after their return to
St. Paul.

Exchangees are selected on the basis of their long-time records in 4-H and
their interest in citizenship and leadership. Club members are chosen who are
best able to benefit from their experiences and share them with other 4-H'ers.

Minnesota's exchange program began with Mississippi in 1951 and continued
through 1956. For the next three years, Minnesota participated in an exchange
with Manitoba. This is the fifth and final year of the exchange with Maryland.

The program is sponsored by the Minnesota and Maryland Agricultural Extension
Services with the support of the Minneapolis Tribune.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 21, 1964

Immediate release

MANY MORE WOODY SHRUBS NOW ADAPTED TO MINNESOTA

The list of woody shrubs adapted to Minnesota conditions is growing longer each year as a result of breeding and testing of ornamentals by University of Minnesota horticulturists at the Landscape Arboretum and the Fruit Breeding Farm.

Nevertheless, it's important to check carefully before buying nursery stock to be sure you are getting varieties adapted to Minnesota and to conditions in your own home yard, Leon C. Snyder, head of the University of Minnesota's Department of Horticultural Science, warned today.

Among varieties of woody shrubs tested and found to be hardy in Minnesota, Snyder recommends these: Shubert chokecherry, a small tree or large shrub with purple leaves; Toba hawthorn, a small tree with double flowers similar to Paul's Scarlet, an English hawthorn; Enchantment mockorange, which does not grow too large and does not become leggy like many mockoranges; hybrid lilacs such as the late variety Prestonian, and the early bloomer Dilatata; Claveys Dwarf honeysuckle, a compact shrub growing to a height of 5 feet, useful in hedges or for foundation plantings; and flowering crabapples.

Few ornamentals combine as many desirable qualities in a single variety as flowering crabapples, Snyder said. Among these are three varieties developed and introduced by the University: Flame, Radiant and Vanguard crabapples, all fully hardy, with white and red blossoms, bright red fruits and foliage with a reddish cast.

Many shrubs grown in more temperate climates are showing some promise for Minnesota because of the efforts of University horticulturists to develop hardy strains. Although they are not as yet reliably hardy, Minnesotans may want to plant some of these on a trial basis: Korean boxwood, a broadleaved evergreen shrub 18 to 22 inches high, which has done well in the Twin Cities area; the Mollis azalea and several other hybrids; the Beatrix Farrand forsythia; and the Umbrella and Star magnolias.

Among the shrubs that have thus far proved to be unsuitable for Minnesota planting because of serious dieback or flower bud damage in cold winters are Golden Raintree, most flowering quinces and many broadleaved rhododendrons.

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 21, 1964

Immediate release

FOR BEST RESULTS PLANT RECOMMENDED VEGETABLE VARIETIES

A new early tomato suitable for direct seeding in the garden in May is one of the newer varieties of vegetables recommended for Minnesota gardens.

Called Gardener, this tomato has medium-sized fruits which mature about the same time as Fireball. Plants are adapted to staking.

The Gardener tomato is one of the vegetable varieties urban, suburban and rural gardeners may be interested in planting this year because tests show it is adapted to Minnesota, according to O. C. Turnquist, extension horticulturist at the University of Minnesota. Selection of varieties adapted to local conditions is one of the most important steps to a successful garden, he emphasizes.

As an aid to gardeners, recommended varieties for Minnesota are listed in a revised University Agricultural Extension Service publication, just off the press, 1964 Vegetable Varieties, Extension Folder 154. The publication may be obtained free of charge from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul 55101 or from county extension offices.

Included in the publication are many new introductions which are more productive, more disease resistant and of better quality than some of the older varieties. Reliable older varieties are also listed.

Planting some of these new varieties, in addition to older varieties, will make gardening more interesting, Turnquist said. Here are some of the vegetable varieties he recommends for small home gardens: snap beans - Tendercrop, high-yielding all-purpose bean for fresh use, canning and freezing; broccoli - Spartan Early, early, high quality and excellent for freezing; carrot - Scarlet Nantes, one of the most popular, dependable and sweetest carrots for the home garden; lettuce - Summer Bibb, loose-heading type that can be grown all summer; peas - Frosty, early, large peas, excellent for freezing; radish - Stoplight, earlier and longer standing than some older varieties, and Red Boy, especially suited to summer planting; tomato - Gardener.

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64-108-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
April 21, 1964

Immediate release

NEW ASSISTANT STATE, 4-H LEADER NAMED

Wayne E. Carlson, Roseau, has been named assistant state 4-H club leader at the University of Minnesota, effective May 1, Roland H. Abraham, acting director of the Minnesota Agricultural Extension Service, has announced.

His assignment will involve giving leadership to extension agents in northwestern Minnesota in the development of 4-H club and other extension youth programs. He will also have statewide responsibilities in 4-H and youth program development.

Since 1957 Carlson has been associate 4-H club agent in Roseau County.

He holds a bachelor of science degree from the University of Minnesota and has completed course work toward a master's degree.

He has served on the professional improvement committee of the Minnesota County Agricultural Agents' Association.

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Department of Information
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University of Minnesota
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April 21, 1964

Immediate release

MINNESOTA EXCHANGEES TO MARYLAND

4-H delegates from Minnesota will visit Maryland this summer in the last of five annual Minnesota-Maryland exchanges.

Purpose of the program is to learn first hand about the partner state and to share ideas about 4-H, according to Stanley Meinen, assistant state 4-H Club leader at the University of Minnesota. The trip is an educational opportunity for 4-H'ers in both leadership and citizenship training.

The member-delegates leave June 19 for Maryland where they will live one week with 4-H families. From June 28 to July 4 they will attend a Citizenship Short Course at the National 4-H Center in Washington, D. C.

The exchange program began with Mississippi in 1951 and continued through 1956. For the next three years, Minnesota participated in an exchange with Manitoba. The present exchange began in 1960. Minnesota 4-H'ers visited Maryland in '60 and '62, with Maryland 4-H'ers traveling to Minnesota in the alternate years.

Delegates are selected on the basis of their long-time 4-H records and their interest in citizenship and leadership.

The program is sponsored by the Minnesota and Maryland Agricultural Extension Services with the assistance of the Minneapolis Tribune.

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64-110-blk

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 23, 1964

Immediate release

BELTRAMI COUNTY SENIOR CITIZENS KEEP BUSY, HAPPY

BEMIDJI--A 70-year old man is kept busy all winter making articles of pine cones to meet the demand of summer sales.

A 75-year old woman supplements her small pension by selling her driftwood arrangements through a craft shop set up specifically to market the handiwork of the elderly.

These are only two among dozens of older people in Beltrami County who have suddenly been given an opportunity to earn money through the sale of crafts in which they are skilled. It's the kind of opportunity that would be cherished by senior citizens anywhere, yet denied to most of them.

A special program under the guidance of the Beltrami County Health-Education-Welfare Committee and the Senior Citizens' Council is responsible for the hobby outlets that provide additional needed income for many older folks--and, just as important, the satisfaction of keeping busy with crafts they enjoy.

But the program doesn't stop there. It also takes into account the need of older people for mental stimulation, for recreation, for social get-togethers to fill in lonely hours and, not least, for improvements in their housing.

It all started with Area Development (RAD), a process of social action that offers local people a way to help them adjust to changing times. Beltrami County's RAD program is carried out by nearly 500 local volunteers.

The Health-Education-Welfare Committee is one of seven committees of the Beltrami County Area Development Association, formed to carry on RAD activities. Organizational meetings of the RAD groups were initiated by the County Extension Service, whose agents--Mrs. Jean Castle and William J. Sliney--also play an educational role as representatives of the University of Minnesota's Institute of Agriculture.

Initial action of the Health-Education-Welfare Committee, under the enthusiastic direction of Mrs. Jim Grier, its first chairman, was to take a long look at the county situation. Ten percent of the county's population, they found, was 65 years of age and over; yet the only organized programs for older people centered in three golden age church groups.

(more)

add 1 -- senior citizens

A county-wide meeting was called to discuss some of the problems of the aging. Of the 100 persons attending, more than 30 volunteered to assist in a county program. At the meeting of these volunteers a week later, the Beltrami County Senior Citizens' Council was organized, with Mrs. Harry Holand of rural Bemidji as chairman.

First project of the council was a picnic for senior citizens. The Governor of Minnesota was invited to be guest speaker, county merchants cooperated by supplying refreshments and prizes were awarded. More than 500 people from northern Minnesota came to the picnic to visit with old friends, talk over old times and make new friends.

Because the diets of so many older people need improvement, Mrs. Ada Stinson of Bemidji initiated a special cooking school which was presented by home economists of a local utility company. The session emphasized cooking nutritious food for two, the basic four in the diet and efficient use of appliances.

Inadequate housing for senior citizens is another problem in the area. Many of their dwellings are not in sound condition and have no plumbing. In wrestling with this problem, the council has appointed a housing sub-committee which is promoting cooperative or civic-owned apartment building facilities for older people.

The Christmas season was an especially busy and satisfying time for older people in the county this year. The Senior Citizens' Council, under the direction of Mrs. Olive Glenn of Bemidji, sponsored a toy repair workshop. The local Lions Club supplied materials, and older people donated their work in repairing hundreds of toys which were given to needy children.

A project the Senior Citizens' Council is working on presently is the Paul Bunyan Hobby Show which it is sponsoring May 8 in the Masonic Temple in Bemidji from 11 a.m. to 4:30 p.m. Senior citizens are urging young and old in the entire area to exhibit their hobbies. Mrs. Holand, chairman of the Senior Citizens' Council, is also chairman of the hobby show.

(more)

add 2--senior citizens

One of the most successful ventures of the Senior Citizens' Council has been its craft shop. Working on the theory that if articles made by older men and women could be sold, they would be able to afford materials for their hobby and also realize some extra income, Mrs. Charles Sattgast of Bemidji organized a hobby group. She developed training workshops to teach art principles and methods of making attractive articles for sale, with special emphasis on use of native materials.

The Bemidji Chamber of Commerce provided space for the shop in the information building on Lake Bemidji--an ideal place to attract tourists, since the statues of Paul Bunyan and Babe the Blue Ox are also near by.

At the end of the first two-months' season, Mrs. Merle Kalbrenner, Bemidji, who served without pay as manager of the Senior Citizens' Craft Shop, reported \$3,000 worth of locally made articles had been sold. At times the shop was completely sold out.

To assure a big enough supply to meet tourist demands in the summer of '64, the council has encouraged local residents to work all winter stockpiling their crafts for the coming season. Plans are to operate the shop for three months instead of two, with coordinated work schedules of volunteer help.

The shop retains a percentage of the sale price to cover operating expenses, with the remainder going to the senior citizens. The small margin left over and above expenses is now being earmarked for a community center where groups of all ages can meet.

Until the community center becomes a reality, recreation and social get-togethers are held in various places where group activity is possible. For many older people these get-togethers are the only outside stimulation in otherwise lonely lives.

But if future plans of the Senior Citizens' Council materialize, there should be no boredom for older people in Beltrami County. These plans include development of recreation groups in all sections of the county, a visitation service for persons confined to their homes and regular educational programs for senior citizens.

Department of Information
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Immediate release

WATER POLLUTION BODES ILL FOR OUR AQUATIC POPULATIONS

Pollution is usually thought of in negative terms--and only occasionally in a positive way.

One positive approach to pollution experimentation is an attempt to control sea lamprey in the Great Lakes with toxic material.

In a recent paper presented to the Wildlife Disease Association, L. L. Smith, Jr., of the entomology, fisheries and wildlife department of the University of Minnesota used the lamprey example as a look into the future. For the present, however, pollution is a major problem and turning this coin over to a more positive side is a long way off.

According to Smith, most early work in sanitary engineering related only to provision of clean, sanitary water, control of disease and elimination of public nuisances. Newer, more troublesome problems are now being considered with our industrial society pouring toxic ingredients into natural water supplies.

Smith says much earlier investigation related to pollution in terms of acute toxicity and in shifts of species occurrence or numbers. As a consequence our understanding is fragmentary.

The University researcher feels that sublethal toxic effects, the physiological effects on the fish and the changes in environment should be the focal point of investigatory work.

The obvious nature of acute toxic effects makes it more visible to the layman and is dealt with by Smith first. The primary cause of this toxicity is industrial wastes which kill or reduce different species in a polluted area. The waste usually takes the form of metal salts, acids, alkalies, some kinds of non-metallic inorganic compounds, insecticides and other organic compounds. Domestic sewage, however, is not usually considered a toxic problem because it is made up of natural plant and animal materials.

(more)

add 1 -- water pollution

Smith says that continued introduction of toxic materials at levels which cause observable fish kills will eventually reduce fish populations and fish-food organisms to very low levels and may kill off some of the species altogether.

A second area of investigation is the physiological effect of pollutants on species at levels not considered high enough to kill. Here the growth rate of different species under different levels of pollution, the mortality of different species during the egg stage and the effects of accumulation of toxicants is being studied.

Finally, Smith calls for more work in studying the effect pollution has on the environment of aquatic species. He says this type of pollutant effect is more important than the direct effects already mentioned.

There may be three basic types of change. First, the species may be drastically changed or altered even though total productivity remains the same. Secondly, changes may make the environment less productive. And third, changes may result in greater productivity with introduction of organic materials.

The most obvious change in this area is the amount of oxygen dissolved in the water. A lack of oxygen causes a shift to a species which can tolerate lower levels of oxygen. This usually means favoring what is considered to be a "rough fish" by anglers.

The addition of polluting materials to natural waters may also eliminate certain types of food items or replace them with types of small value or more inaccessible to the fish. This may cause lower population numbers or quantities of less desirable species. Additional pollutant may also alter the stream bottom to such an extent that the repercussions are harmful to the fish population.

Smith says these problems are not all the researchers have to contend with in the future. The numbers of new compounds being added to the natural waters each day defies categorization. And, he says, the types and numbers of combinations of different pollutants has barely been looked at. Here the researcher must resort to studying natural habitats rather than controlled lab experiments.

In the future, the researcher says, we will concentrate more on the physiological and environmental problems as well as the indirect effects that non-toxic additives may cause. When some of these secrets are unlocked we may start to look into more positive work such as that being carried on against the sea lamprey--and this in turn opens new vistas.

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

CONTROL PROGRAM
FOR DUTCH ELM
TAKES SEVERAL YEARS

The length of time that an intensive control program must be applied to the Dutch Elm disease problem is something that local government units must face up to when appropriating funds to do an adequate job.

According to Herb Johnson, extension plant pathologist at the University of Minnesota, guidelines are now available to help answer this complex question.

Removal of dead and dying elm trees is one of the major sanitation goals of the control program. This phase, however, is often complicated by the presence of elm trees in nearby areas where a control program is not in effect. This, Johnson says, may be in wooded lots, river bottom land, and political divisions or subdivisions not under the jurisdiction of the program coordinators.

The elms in such areas will be a source of the Dutch Elm disease fungus and bark beetles until the elms in those areas have been dead for a few years. The latest information indicates that as long as ten years of an intensive program may be necessary to ensure protection against an uncontrolled area. Johnson says that sufficient decomposition of elm wood should have occurred in this length of time to prevent further spread of the fungus.

This, then, is a good indication of the length of time an intensive control program must continue. Assuming a one percent loss of elms during a sound control program, 90 percent of the elms should remain in good condition at the end of ten years as long as pruning is kept up to date.

Johnson says that the preventative program cannot be dropped completely then, but some reduction in expense should be indicated.

The exact nature of the maintenance program has not been fully worked out but would likely involve: tree inventory, survey, sanitation, spraying in the immediate vicinity of occasional infection, spraying of especially valuable trees, and a planting program which will include many varieties of trees. This latter action would lessen damage in the future when one disease threatens only one variety.

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 27, 1964

To all counties
Immediate release

LITTLE WORDS
IN FUNGICIDES
NEED DEFINING

Dinocap, dodine, folcid and folpet--what language is this?

You're not likely to find these and many similar words in a dictionary although they are being used more and more in the English language and probably in many other languages.

According to Herb Johnson, plant pathologist at the University of Minnesota, these words belong to the jargon of his field. They are "common names" that designate specific chemicals that are used as fungicides for the control of plant diseases.

Johnson says it is well worthwhile for everyone who has occasion to come in contact with fungicides to learn the common names. If you think this is a difficult chore, then imagine the problem of memorizing a long, complicated chemical name like: N-trichloromethyl-mercapto-4-cyclohexene-1,2-dicarboximide or on the other hand giving a list of several tradenames each time you mention a fungicide.

The common names are helpful in making recommendations for fungicides that control plant diseases. If the person needing the fungicide and the person selling it are both familiar with common names, then it is a simple matter to determine the proper material by one of its trade names.

Johnson points out that many private companies often sell the same fungicide under different tradenames. By identifying the fungicide by its common name this confusion can be eliminated.

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

IN BRIEF.....

Dutch Elm Disease control programs, which seem spectacular to some, often go unnoticed. George E. Hafstad, Wisconsin Department of Agriculture, discusses this point in the 1963 Dutch Elm Disease Report. His point is that a good control program that holds losses to around 1 percent annually may go without recognition-- the elm trees that were there 25 years ago are still around. The favorable results of a good Dutch Elm Disease control program are "spectacular" only when compared with the results of a poor program or no program at all.

* * * *

Selecting the right varieties: It's important to check carefully before buying nursery stock to be sure you are getting varieties adapted to Minnesota and to conditions in your own home yard, Leon C. Snyder, head of the University of Minnesota's Department of Horticultural Science, warned recently. Among varieties of woody shrubs tested and found to be hardy in Minnesota, Snyder recommends these: Shubert chokecherry, Toba hawthorn, Enchantment mockorange, hybrid lilacs such as the late variety Prestonian, and the early bloomer Dilatata, Claveys Dwarf honeysuckle and flowering crabapples.

* * * *

A new early tomato suitable for direct seeding in the garden in May is one of the newer varieties of vegetables recommended for Minnesota gardens. Called Gardener, this tomato has medium-sized fruits which mature about the same time as Fireball. Plants are adapted to staking. The Gardener tomato is one of the vegetable varieties urban, suburban and rural gardeners may be interested in planting this year because tests show it is adapted to Minnesota, according to O. C. Turnquist, extension horticulturist at the University of Minnesota.

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To all counties
Immediate release

FEEDSTUFFS INFLUENCE
COMPOSITION OF MILK

Ever wonder how milk is made? Scientists are still trying to learn the cow's secret, but they have found some key factors influencing the milkmaking process.

The amount and composition of milk produced depends largely upon the type of materials fed according to Donald Otterby, dairy scientist at the University of Minnesota.

Feedstuffs are converted by rumen bacteria into volatile fatty acids. There are three main kinds of volatile fatty acids produced -- acetic, propionic, and butyric. Acetic acid is of major importance in milk production. The cow also uses these fatty acids as her major source of energy.

Fatty acids are produced in abundance when early cut, well-cured hay is fed to the cow. If the cow gets low quality hay, the fatty acid production will be lower, and less energy will be available.

Heavy grain feeding affects the ratio of the three fatty acids according to Otterby. The amount of acetic acid is decreased while propionic and butyric acid concentrations are increased when large amounts of grain are fed with little or no roughage.

If the decrease in acetic acid is too great, the composition of the milk will be changed. Acetic acid is the major building block of milk fat, and the percent of milk fat will be decreased when low levels of acetic acid are present. The other fatty acids tend to stimulate fattening when present in high proportions.

Feeding ground and pelleted roughages will also decrease the amount of acetic acid produced. This will then cause a decrease in the percent of fat in the milk. Intake is sometimes reduced when ground and pelleted roughages are fed so milk production may also suffer.

Otterby states that research is being continued to determine the composition of fatty acids produced from early cut and late cut hay.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 27, 1964

To all counties

4-H NEWS
(Second in a series on
teen-age career oppor-
tunities and explora-
tion.)

Immediate release

TEEN'S FUTURE RESTS ON
CAREFULLY CHOSEN CAREER

Ask yourself "What is the right career for me?" and you'll have some 650 possible answers -- the number of jobs listed by the U. S. Occupational Dictionary.

As an average American boy or girl, you can expect to put over 100,000 hours of work or 40 years of your life into your chosen occupation. This is a long time, especially if it's on the wrong job. You can't afford to make a mistake, for your future happiness and prosperity will largely depend on the step-by-step decisions you'll make in the next weeks, months or years.

Perhaps you have thought carefully about two or three careers and feel you have explored the job area rather well. This is not enough! Many young people take the first job offered without thinking about much more than their first paycheck. In fact, some teens give more time and thought to selecting clothes that will last only six months than in choosing a job that may last a lifetime.

Surveys indicate that more than 36 million Americans are not happy with the jobs they hold. They regret now that they didn't look further before taking their first job. Chart your future rather than leaving it to chance. The more career possibilities you investigate, the better prepared you'll be to make a wise choice, says Earl Bergerud, assistant State 4-H Club Leader at the University of Minnesota.

Look for a career that fits in with your other goals in life. To a great degree, it will determine where you'll be living, who your friends will be and how much money you'll be making. Vocational counselors and informed people in various fields can tell you about each of these aspects.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
April 27, 1964

To all counties
ATT: HOME AGENTS
Immediate release

PLAN MAY MEALS
WITH PLENTIFUL
BEEF, TURKEY

Beef roast, steak, ground beef -- take your pick for May meals with appetite appeal.

And to vary the main course, serve turkey often for both the family and guests.

Because both of these meats are on the U. S. Department of Agriculture's list of plentiful foods for May, they will be good buys all month.

Other foods on USDA's plentiful list are milk and dairy products, salad dressings and oils, lettuce and canned ripe olives.

Beef is a bargain buy -- price-wise, nutrition-wise, variety-wise and flavor-wise. Supplies are at record levels.

Meat counters will have an abundance not only of beef, but of Choice quality beef. Although retail prices will fluctuate, week-end specials should offer consumers excellent beef buys.

Farm marketings of turkeys in May will be about a fourth greater than a year ago. Cold storage holdings are up 12 million pounds. This big supply means shoppers should keep an eye on poultry counters during May. Turkey may be just the thing for a Memorial Day cook-out, whether you choose a small bird for your rotisserie or a large bird cut in half for on-the-grill roasting.

Supplies of milk and dairy products will be increasing as they approach their annual peak in June. Warm weather is an ideal time to serve cottage cheese salads, and ice cream desserts. Ice cold milk, of course, makes good drinking any time of year.

-more-

add 1 - planning May meals

Appropriately for May, which is Salad Month, grocers' shelves will have large supplies of salad dressings and salad oils and vegetable bins will be filled with crisp lettuce. Shipments of lettuce from California and Arizona are expected to reach a peak during the first half of May.

Since this season's record pack of ripe olives is almost 18 percent above that of a year ago, consumers can look for specials on canned ripe olives. Ripe olives add interest to salads and to the relish plate.

To bring spring to your table, don't forget strawberries in your menu planning. The spring crop of strawberries from the South and Southwest will reach its peak in May. This year's crop is above that of last year and prices are lower, on the average.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 28, 1964

Immediate release

FRUIT AND VEGETABLE WHOLESALE MARKETS UNDERGO CHANGE

The Twin Cities wholesale fruit and vegetable market has undergone a fundamental change in the past 30 years--shifting from a major diversion and shipping point to a receiving market.

This change and the structure of the market today are described in detail in a recent U. S. Department of Agriculture report, written by USDA economist John K. Hanes at the University of Minnesota. The study is part of a nation-wide project involving 52 wholesale fruit and vegetable markets.

Hanes points out that in 1923 only 25 percent of the carlot receipts of 11 principal commodities were unloaded in the Minneapolis-St. Paul produce market. By 1958, when the study was conducted, only a very small volume of fruits and vegetables were diverted.

The history of produce marketing in the Twin Cities dates back to decades immediately following the Civil War, and starts largely with the establishment of the St. Paul public market place in 1869. Eventually there were developed three jobbing markets and two municipal markets in the Twin Cities.

Up to the 1920's, the market was a diversion point for apples from California and the Pacific Northwest, and a shipping point for potatoes produced in Minnesota, North Dakota and Montana.

The character of the market has changed completely in the past 30 years. By 1958, diversion had become negligible. About 45 percent of total receipts did leave the market, but this was primarily truck shipments to wholesalers and retailers serviced by firms in the Twin Cities market.

Also, local production of potatoes, fruits and other vegetables for fresh market decreased sharply. Volume at farmers' markets declined from over 13,000 carlots in 1936 to less than 1,000 in 1958. The number of metropolitan area shippers of potatoes and other local produce decreased from 24 in 1926 to none in 1958.

(more)

add 1 -- fruit, vegetable markets

In 1958, 78 firms in the Minneapolis-St. Paul market were operating. This included 45 wholesale handlers, 20 brokers and agencies and 13 retail organizations.

In total volume, the wholesale market received 18,900 carlots of fresh fruits and vegetables in 1958. In addition, 3,900 carlots sold by firms in the market bypassed the Twin Cities.

More than 2,000 retail grocery stores, ^{specialty stores,} restaurants, institutions and processors were supplied in the metropolitan area alone by the Minneapolis-St. Paul market. About half of the total sales went to buyers in the Twin Cities, with the rest distributed out of town.

Of the total produce supply to the market, 86 percent was purchased directly from the shipping point, or port of entry. Most of the remainder (12 percent of the total) was bought from local growers.

In obtaining supplies of fruits and vegetables from shipping point, brokers or agents employed by firms bought 47 percent. Purchases by telephone or wire accounted for 29 percent, salaried employees bought about 13 percent and 8 percent was consigned by growers and shippers.

When asked how they set prices, 25 of the 45 wholesale handlers said they sought a specific markup. The remaining 20 stated they "followed the market" or set prices according to supply and demand.

Although few firms had changed their sources of supply during the past 10 years, many wholesalers reported shifts in the importance of outlets. The most significant change was the decline in sales to independent grocery stores. Some reductions in purchases from wholesale organizations by retail organizations such as chains also occurred.

Marketing margins varied widely. Wholesale handlers who actually received the produce and made deliveries had higher margins and costs than did brokers who performed none of these functions. Gross margins for the wholesale handlers were 14 percent of sales, compared with only 3.8 percent for brokers and distributors.

Department of Information
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April 28, 1964

Immediate release

H. S. GIRLS TO LEARN ABOUT HOME EC CAREERS SAT.

Some 700 high school girls from all parts of Minnesota will get a preview of professional opportunities in home economics when they attend the University of Minnesota's annual Home Economics Day on the St. Paul Campus Saturday (May 2).

Purpose of the event is to acquaint high school students with the home economics curriculum at the University, as well as the varied opportunities in home economics careers. "Home Economics--Your Key to Opportunity" is the theme for the day.

Keith McFarland, director of resident instruction in the College of Agriculture, Forestry and Home Economics, and Louise Stedman, director of the School of Home Economics, will welcome the guests at the opening program in Coffey Hall Auditorium at 9:15 a.m. following registration. Included in the morning program will be student skits portraying campus life and short talks by students and staff members representing seven different divisions of home economics. They will discuss course work and career opportunities.

Tours of the Student Center, the dormitories and McNeal Hall are also scheduled for the morning. The girls will also view a special exhibit by related art students in the Student Center and other displays in McNeal Hall.

Following a buffet luncheon in the North Star Ballroom of the Student Center, a fashion show in Coffey Hall Auditorium will feature home economics students modeling garments they have made.

During the afternoon each girl will have an opportunity to attend two sessions of her choice in such specializations as textiles and clothing, food, nutrition and food service management, related art, household equipment, education, home management and family living.

Student chairmen for the event are Kaye Farrow, Robbinsdale; Joan Lundgaard, Edina; Sandra Smith, De Kalb, Ill.; Twylla Reese, 8108 Colfax Ave., Minneapolis; Karen Larson, Alberta; Sandra Kitchell, Ada; Julie Salmela, Sebeka; Laurel Severson, Coon Rapids; Barbara Robinson, 3055 Benjamin, Minneapolis; Mary Myles, Duluth; Jan Larson, 1546 Breda Ave., St. Paul; Beverly Palmer, Stillwater; Judith McComb, 327 Minnehaha Park W., Minneapolis; and Colleen Murphy, Osseo.

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64-115-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 28, 1964

Immediate release

FORESTRY AND FOREST PRODUCTS CAREERS DAY AT U OF MINNESOTA

High school students from throughout Minnesota have been invited to a Forestry and Forest Products Career Day on the University of Minnesota St. Paul Campus, Saturday, May 9.

The visiting students will have an opportunity to view exhibits and demonstrations at Green Hall and the new Forest Products Building. They will also meet with faculty members to hear about the several courses of study offered and the opportunities available to them in this rapidly expanding field.

The program will include explanations by staff members on the field of forestry, the undergraduate training program and summer work opportunities throughout the country.

An added attraction this year will be provided. The high school students will be allowed to sit in on regular classroom sessions dealing with photogrammetry, dendrology and forest products engineering.

Added attractions include films and a luncheon sponsored by the Forestry Club and the Lignum Club.

Registration takes place at 9:30 a.m. in Green Hall.

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64-114-jfk

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 30, 1964

Immediate release

HORTICULTURIST LISTS STEPS TO SUCCESS IN GROWING FRUIT

No success in growing fruit in the backyard? Perhaps you haven't chosen a variety suitable to your part of the state or your particular conditions.

O. C. Turnquist, extension horticulturist at the University of Minnesota, says choice of an adapted variety is the first step toward success in growing fruit--whether you're a backyard gardener or a commercial grower.

University of Minnesota tests have established recommended varieties for home fruit growers in various areas in the state. Here are some varieties Turnquist suggests for all areas in Minnesota: June-bearing strawberries--Earlimore, Trumpeter; everbearing strawberries--Ogallala and Red Rich; raspberries--September (red ever-bearing) and Latham; grapes--Beta (black), Bluejay (dark blue) and Red Amber (red); apples--summer - Mantet and Oriole; fall - Lakeland; winter - Haralson and Connell Red; apricots--Moongold and Sungold. Moongold and Sungold apricots should be planted together or with other hardy apricot varieties to assure cross-pollination.

These and other recommended varieties are listed in Horticulture Fact Sheet No. 3, Fruits for Minnesota, 1964, available free of charge from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul, Minn. 55101 or from county extension offices.

As further steps to successful fruit growing, Turnquist lists:

. Proper soil preparation. This includes treatment for insects, improvement of the soil structure by working in 3 to 4 bushels compost or manure per 100 square feet of area and addition of plant food through applications of fertilizer. Use 3-5 pounds of a complete fertilizer such as a 10-10-10 per 100 square feet of area.

. Proper planting and pruning. Follow instructions so you plant fruits at the recommended depth. At planting time, raspberry canes should be cut back to 4 to 6 inches above the ground. Apple trees should be pruned to develop a good framework of branches.

. Summer care. Without attention to watering, mulching and pest control in summer, all other steps you have taken to establish a fruit planting will be wasted.

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Department of Information
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University of Minnesota
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Immediate release

U ARBORETUM NOTES PROGRESS DURING YEAR

Acquisition of more land for testing new ornamentals and creation of a unique bog garden are among developments during the past year at the University of Minnesota's Landscape Arboretum, which last year was visited by 25,000 individuals.

The size of the arboretum, located on State Highway 5 about 4 miles west of Chanhassen, has now grown from the original 160 acres to 302 acres, according to Leon C. Snyder, director of the arboretum and head of the University's Department of Horticultural Science. The additional land assures the arboretum of an adequate area for expanding plant collections and propagating new and promising materials, he said.

Last year 376 new species of ornamentals and cultivars were added to the arboretum plantings, all of them under test to determine how well adapted they would be to Minnesota conditions. An important objective of the arboretum is to carry on research in testing and developing hardy ornamentals for home landscaping. More than 100 varieties were discarded this past year for lack of hardiness, insufficient ornamental quality or failure to become established. At the end of the 1963 growing season, there were 7,631 plants representing more than 2,000 species and cultivars in the various collections. These were in addition to nearly 500 native species and varieties growing in the arboretum.

One of the many natural beauty spots in the arboretum is the bog garden--a small lake surrounded by wetlands with rich native bog vegetation. A 1,000-foot trail leading to the bog area has now been filled and graded to provide a dry approach during all seasons. The bog itself is traversed by an 800-foot-long railroad tie trail. In the bog garden are such native plants as cattails, marsh-marigolds, great blue lobelia, pitcher plants, wild calla lilies, orchids, bog laurel, highbush cranberry, tamarck, balsam fir and many species of willows and dogwoods. The Federated Garden Clubs of Minnesota is sponsoring the bog garden.

(more)

add 1 -- U arboretum

During the past year construction was completed on a rock-retaining wall around three sides of the woodland pond. A gravel and woodchip path now encircles the pond. Ferns have been planted along the open side and various aquatic and moisture-loving plants will be added from time to time.

Among the most popular areas in the arboretum during the past year has been the woodland garden, Snyder says. A printed woodland trail guide enables visitors to tour the area on foot and to identify the hepatica, trillium, lady's slipper, columbines and other plants that provide color through most of the season.

Of special interest to visitors also have been the 90 varieties of flowering crabapple, the hosta collection of 113 plants in the woodland garden, the daylily collection of 80 varieties and the azalea and rhododendron collection which now has 1,340 plants representing 134 species, cultivars and hybrid groups. More than 100 varieties of hybrid musk, hybrid perpetual, rugosa, damask and other old-fashioned roses in the arboretum rose collection have been re-grouped in a horseshoe-shaped bed, backed by over 50 shrub and species roses.

Planted in a natural setting, the arboretum gives Minnesotans an opportunity to see and study plant materials in natural landscape groupings, as well as the variety of plants available for landscaping. Woodland trails make it possible to walk through the arboretum to study the plantings. College and high school classes use the arboretum as an outdoor laboratory for plant identification and for the study of birds in their natural habitat.

An account of the progress of the University Landscape Arboretum during the past year is contained in the University's Agricultural Experiment Station Miscellaneous Report 55, University of Minnesota Landscape Arboretum. Single copies of the report are available from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul, Minnesota 55101.

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Department of Information
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University of Minnesota
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Immediate release

CANKERWORMS ABUNDANT AGAIN IN MINNESOTA

Those bothersome cankerworms are likely to abound in many parts of Minnesota this spring, but they don't give a particular community much advance notice.

Extension entomologist John Lofgren at the University of Minnesota suggests a close watch on trees starting the next few days, or when leaves are almost fully expanded,

One way, Lofgren says, is to stand under a tree on a bright day and look up through the tree canopy. If cankerworms are numerous, you will see hundreds of small "shot holes" in the leaves.

Lofgren continues that the only recommended practice for cankerworm control and prevention of further defoliation is to spray the foliage of infested trees with DDT, methoxychlor or carbaryl (Sevin).

High pressure sprayers or mist blowers are needed to cover large trees adequately. Heavily wooded areas can be effectively treated by airplane or helicopter.

Cankerworms are slender, greenish or brown, and are often known as "inch worms." They feed on foliage of many species of deciduous trees and shrubs in early spring. There is just one brood of worms each year and they usually reach full growth, quit feeding and leave the trees the first part of June.

But if worms are abundant, Lofgren adds, they can have most of the young leaves chewed bare by then.

A healthy, vigorous tree will leaf out again after a cankerworm attack, and won't suffer too much damage. After several defoliations in successive years, however, there may be some die-back--especially if trees are suffering from lack of moisture or other adverse growing conditions.

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
April 30, 1964

Immediate release

FORTY FOREIGN STUDENTS ARRIVE ON MINNESOTA FARMS nine

Forty foreign students representing / nations recently arrived in Minnesota, and have been placed with host families in 25 different counties in the state.

These students are participating in a special work-study program here in Minnesota, according to LaVern A. Freeh, head, Department of Agricultural Short Courses-- the department in the University of Minnesota Institute of Agriculture administratively responsible for the program.

These students spend nine months living and working on a Minnesota farm and three months (one University quarter) attending the University. Then they have the opportunity to travel for six to nine months in other sections of the United States.

This two-way program began in 1949 with Sweden and since that date 315 students have come to Minnesota, while 23 Institute of Agriculture students have gone to Europe.

The program is coordinated in each county by the county agent and the nearest vocational agriculture instructor working with the host family to help plan a work-study program for the student while he is on the host farm. The vocational agriculture instructor visits the student periodically.

Al W. Keating, coordinator of foreign training programs, Department of Agricultural Short Courses, serves as coordinator of the program. He works closely with an advisory committee made up of representatives of the organizations involved with the program in addition to a series of nationality committees. Professor Ralph E. Miller, College of Agriculture, Forestry, and Home Economics, serves as the advisor for the students while they attend the University.

The 1964-65 group includes 24 participants from West Germany, four from Denmark; four from Finland; three from England; one from Kenya; one from Lebanon; one from Tanganyika; one from Jordan-Jerusalem; and one from the Netherlands.

Counties involved in this year's program are: Blue Earth, Carver, Dakota, Fillmore, Freeborn, Goodhue, Hennepin, Jackson, Lake of the Woods, LeSueur, Lyon, McLeod, Meeker, Nicollet, Olmsted, West Otter Tail, West Polk, Rope, Ramsey, Renville, Rice, Stearns, Wabasha, Watonwan and Winona.

This program offers a great potential for creating a clearer understanding between peoples of different nations. Plans are now being made to expand the program to make it possible for a larger number of Institute of Agriculture students to go to Europe each year, Freeh says.

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64-117-pjt

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May 1, 1964

SPECIAL

*For release at 8:30 p.m., *
*Monday, May 4 *

OKEBENA BOY NAMED 1964 FFA STATE STAR FARMER

Larry Henning, 19-year-old member of the Okebena Future Farmers of America chapter, was named this evening (Monday) as Minnesota's 1964 FFA State Star Farmer.

He received a \$200 cash award and a plaque from the National and State FFA Foundations which were presented at the annual State Future Farmers of America banquet in the St. Paul Municipal Auditorium arena. The banquet was held in connection with the annual State Future Farmers of America convention on the St. Paul Campus of the University of Minnesota.

Selected from a group of 280 State Farmer Degree holders, the top Future Farmer is the son of Mr. and Mrs. Henry Henning of Okabena, Minnesota. He has one sister and one brother. His agriculture instructor and FFA adviser is John Murray and his high school superintendent is E. W. Nelson.

Now completing his fourth year of vocational agriculture in Okebena High School, the farm youth had an increase in net worth of \$12,599.13. He rents 34 acres of cropland from his father and owns 100 head of purebred sheep, 13 dairy cows and 3 other dairy animals in partnership with his sister. He also owns 1780 bushels of corn and 570 bushels of soybeans and \$1906 worth of crop and livestock equipment.

Larry has served as a district FFA reporter, chapter vice-president and sentinel. He has been a member of the FFA chapter dairy and crops teams, was named the State Star Sheep Farmer at the 1963 State FFA Convention and won the regional sheep award in 1962. He received the Chapter Star Greenhand award when he was a freshman and the Chapter Dairy and Star Chapter awards as a senior.

He has been a member of the Okebena High School football and basketball varsity teams for four years, served as senior class treasurer and a member of the junior and senior class plays. Larry has served as president of the Jackson County 4-H Junior Leaders Association and president of the Ewington 4-H Club. He is a member of the Walther League and usher of a local church.

(more)

add 1 -- FFA State Star Farmer

Larry is a member of the State Sheep Breeders Association, and a junior member of the Holstein Dairy Club, Corriedale and Hampshire Sheep Breeders Associations. He has received many championship awards in the Minnesota State Fair FFA and open classes for sheep since 1961. He had a reserve champion pen at the 1963 Western Lamb project.

He was in charge of the Jackson County Fair Children's Barnyard exhibit and chairman of the local chapter's Corn Drive for Camp Courage.

Named Regional Star Farmers at the banquet were: Robert Brandt, 17, Ada; Wayne Fairchild, 17, Hibbing; Daniel Peterson, 17, Parkers Prairie; Russ Danson, 17, Rush City; James Thorpe, 18, Canby; Roger Pfeifer, 18, Blooming Prairie and Dennis Jackson, 17, Pine Island.

Fourteen adults were named State Honorary Farmers for their years of service to FFA members. They were:

Alvin Aho, State FFA Band Director, Randolph

Wayne Broecker, President, Minnesota Vocational Agriculture Instructors' Association, New Richland

Frank DeGroat, past FFA Foundation donor representative, Lake Park

Richard Donat, FFA Adviser and past member of the State FFA Board of Directors, Staples

E. N. Duncan, Minnesota FFA Foundation Finance Committee Chairman, St. Paul

Donald Lehtinen, past FFA Foundation donor representative, Duluth

Jens Hardy, father of State FFA president, Sacred Heart

John E. Libby, Secretary-General Manager, Minnesota State Fair, St. Paul

Ralph Miller, Associate Professor, College of Agriculture, University of Minnesota, St. Paul

Stanley Nelson, Ag. Ed. Office, University of Minnesota, St. Paul

L. G. Peters, State FFA Chorus Director, Sanborn

Dr. William Petersen, K S T F, radio and professor emeritus, University of Minnesota, St. Paul

Howard G. Peterson, Superintendent of Schools, Ortonville

D. T. Grussendorf, member of the Board of Managers and Supervisor of the Future Farmers of America Department at the Minnesota State Fair, Duluth

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 4, 1964

To all counties
ATT: HOME AGENTS
Immediate release

SPANDEX FIBERS
GIVE COMFORT

Blouses and shirts that don't pull out of skirts and slacks, bathing suits and foundation garments that give figure control but are not harmed by body oils, men's suits that hold their shape and are comfortable -- these are some of the garments you can look for in increasing numbers.

The garments with these special properties are made of snap-back yarns called spandex. Spandex yarns are being used in more and more apparel in which stretch and elasticity are employed to achieve comfort, fit and support, according to Mrs. Roberta Richards, instructor in textiles and clothing at the University of Minnesota.

Stretch and spandex yarns are not the same. Stretch yarns are not elastic in the sense that rubber is. The stretch and elasticity of the stretch yarns result from the coil, curl or crimp which was set in the fibers. Most of the stretch yarns processed today are made of nylon, though several other fibers including the polyesters are in use.

A spandex yarn owes its stretch to its chemical structure rather than to a curl and crimp; hence it is similar to a rubber thread in this respect. Like rubber, the spandex fiber is elastic and returns to its original shape. Most spandex yarns, however, are stronger and more durable than rubber thread and more resistant to most chemicals and to laundering conditions.

-more-

add 1 -- spandex fibers

Appearing in stores now are slips with straps and bodice of spandex yarns to assure better fit. Other garments you can look for are women's blouses and sport shirts with lengthwise stretch to prevent them from pulling out of skirts or slacks, men's suits and men's and women's shorts with crosswise stretch. Foundation garments, swimwear, football pants and surgical and support stockings of spandex have been available for some time. Trademark names you will find on these garments if they are made of spandex fibers are Lycra, Vyrene or Curel.

Among the desirable properties of spandex fibers are these:

- . They are stronger and lighter weight than rubber, although rubber has better elastic recovery.
- . They are not affected by perspiration or damaged by body or cosmetic oils.
- . They may be washed in automatic washers and tumble dried.
- . Since they are white, they can be dyed.

-jbn-

Department of Information
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University of Minnesota
St. Paul, Minnesota 55101
May 4, 1964

To all counties

4-H NEWS

(Third in a series
on teen-age career
opportunities and
exploration.)

EDUCATION
PAYS OFF IN
JOB SEARCH

The future is wide open for those who are ready!

Multitudes of opportunities lie ahead for jobseekers, but most jobs of the future will demand people with "marketable skills," according to the U. S. Occupational Outlook Handbook.

The day of the "I-can-do-anything" applicant is gone. The fastest growing occupations are those which call for the most education and special training.

A young man beginning a job or career today has 40 to 50 years of working life ahead of him. The boy who graduates from high school and goes on to college or receives training in some special skills (mechanical or barbering, for instance) is much better prepared for the competition he'll face from the 26 million young men and women also beginning work during the 60's.

Today's young woman is likely to work for a large part of her life, too. At present, the number of women working is increasing nearly twice as fast as for men.

By 1970, one third of all workers will be women, according to predictions. Most single women will spend 40 years at work; married women without children, 31 years; and married women who go back to work after their children are grown, 27 years. Thus, women, too, will need as much education or special training (as nurses, business workers, or beauticians, for example) as they can get.

Perhaps the most easily understood pay-off in education is the ease of getting a good job or the increase in income that it brings.

add 1 -- education pays off

A high school diploma is already a requirement in a great many jobs; yet 30 percent of all young people in the U. S. never finish high school. These "dropouts" will spend a large part of their life seeking jobs that do not exist, writes Arthur Mauch, agricultural economist at Michigan State University in his pamphlet Education and Training. And they'll draw much of their below-average incomes from unemployment compensation and welfare payments. Not only will this bring unhappiness to these 7.5 million young people, but they will also be a drag on society, for automation is rapidly eliminating the jobs they can do.

Another 40 percent of the young people in the working world graduate from high school but do not go on to college or take specialized training. They fare a little better than the dropouts and can usually hold their own on the job market, though advancement is slow and limited. The life income of a high school graduate averages \$1,300 more per year than that of a dropout.

Top opportunities, however, go to the college graduates--20 percent of the young working force. Most of these young men and women find plenty of jobs waiting when they finish college. Many, in fact, are actually courted by company recruiters who invade their campuses. A college diploma will add an extra \$3,500 per year to a graduate's life income. This additional amount alone exceeds the total income of many high school dropouts.

Most college graduates have higher incomes than high school graduates with 20 years of working experience, or than dropouts with 40 years working experience.

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Institute of Agriculture
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St. Paul, Minnesota 55101
May 4, 1964

To all counties

For immediate release

DRY FIELD BEAN
INDUSTRY GROWS
IN MINNESOTA

While the most spectacular growth in bean production in Minnesota has been in soybeans, dry field beans are of some importance in the state, too.

Dry field beans can be grown in almost any part of Minnesota, according to R. G. Robinson, agronomist at the University of Minnesota.

However, since present prices and marketing problems make soybean production more profitable, field bean production is largely limited to northern areas less suited to soybeans.

Pinto is probably the best field bean variety for Minnesota; its acreage approached the 10,000 mark in 1963. The major bean processing plant is located in Marshall county at Oslo and another last year was started at Borup.

Robinson outlines several principles for dry field bean production:

* Soils and Fertilizers -- Beans will grow on most soils, but it must be well drained. Beans can be injured in a few hours from standing water. Sandy loam and clay loam soils high in organic matter are best. Fertilizers are not normally used on beans in Minnesota.

* Crop Sequence -- Beans fit well into crop rotations, and do best when following small grains, corn, and forage crops. You shouldn't plant beans on the same field more than once every three or four years.

* Plant Certified Seed -- Plant a certified variety from blight-free western areas to avoid infestations of blight and anthracnose diseases. Idaho Certified Pinto No. 111 is an excellent variety.

-more-

add 1 -- dry field beans

* Seed Treatment and Inoculation -- Seed should be treated with a fungicide to control disease organisms that are carried on the outside of the seed and in the soil. Insecticides are usually applied to protect the seed from these insects.

Inoculation will insure the presence of bacteria for nitrogen fixation. Inoculate at the time the seed is to be planted.

* Planting Dates -- Beans should be planted about two to three weeks after corn. They are susceptible to frost and should not be planted too early. Some northern Minnesota farmers plant pinto beans during the last ten days of May so they can harvest in late August or early September. During cold springs, this may be too early.

* Planting -- Beans can be planted with a corn planter, sugar beet planter, or a grain drill. A great variety of row spacings can be used. The planting rate depends on the condition of the seedbed, germination of the seed, treatment of the seed, and the row spacing. When Pinto 111 is planted in 22 inch rows, 60 to 75 pounds per acre is a common rate, assuming 95 percent germination.

Shallow planting, between one to one and a half inches, is preferable when moisture is adequate. Otherwise, deeper planting depths may be necessary to reach the moisture.

* Cultivation -- Beans are usually cultivated twice to kill the weeds and to hill up the rows. Hilling up the rows promotes growth of adventitious roots and facilitates the puller at harvest.

* Harvesting -- Pull the beans before frost when most pods are yellow and the seed is mature. The seeds that are almost mature will continue to ripen after pulling. The immature seeds can be removed by threshing. To windrow the beans you can use a side delivery rake or a windrower. Besides placing the beans in a row, the windrower also removes stones and soil.

add 2 -- dry field beans

* Combining -- the beans are ready to combine after drying from four to ten days. Bean seeds split easy so take care in adjusting the cylinder speed and concave clearance. The cylinder speed is usually 250 to 400 r.p.m., and the cylinder-concave box clearance should be wide enough to prevent bean damage.

Safe moisture levels for storage range from $12\frac{1}{2}$ to $14\frac{1}{2}$ percent. The higher percentage is for short-time storage situations. However, some growers start harvesting at 16 percent moisture.

More detailed information on growing field beans can be obtained from Extension Bulletin 310 available through the Bulletin Room at the University of Minnesota, St. Paul Campus 55101.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 4, 1964

To all counties
Immediate release

IN BRIEF.....

Cankerworms abundant again in Minnesota: Those bothersome cankerworms are likely to abound in many parts of Minnesota this spring, but they won't give a particular community much advance notice. Extension entomologist, John Lofgren at the University of Minnesota suggests a close watch on trees starting the next few days, or when leaves are almost fully expanded. One way, Lofgren says, is to stand under a tree on a bright day and look up through the tree canopy. If cankerworms are numerous, you will see hundreds of small "shot holes" in the leaves.

* * * *

Fruit and vegetable wholesale markets undergo change: The Twin Cities wholesale fruit and vegetable market has undergone a fundamental change in the past 30 years--shifting from a major diversion and shipping point to a receiving market. This change and the structure of the market today are described in detail in a recent U. S. Department of Agriculture report, written by USDA economist, John K. Hanes at the University of Minnesota. The study is part of a nation-wide project involving 52 wholesale fruit and vegetable markets.

* * * *

Horticulturist lists steps to success in growing fruit: No success in growing fruit in the backyard? Perhaps you haven't chosen a variety suitable to your part of the state or your particular conditions. O. C. Turnquist, extension horticulturist at the University of Minnesota, says choice of an adapted variety is the first step toward success in growing fruit--whether you're a backyard gardener or a commercial grower. University of Minnesota tests have established recommended varieties for home fruit growers in various areas in the state. Their results are listed in Horticulture Fact Sheet No. 3, Fruits for Minnesota, 1964, available free of charge from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul, Minnesota 55101.

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Department of Information
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St. Paul, Minnesota 55101
May 4, 1964

To all counties

Immediate release

NEW ACT PROVIDES
FOR TWO-STEP CUT
IN TAX RATES

Now that your 1963 income tax work is done, you can start thinking about '64 taxes--with prospects of paying less Federal income tax in the year ahead.

Tax payers can look forward to a two-step reduction in tax rates, according to Paul Hasbargen, extension economist at the University of Minnesota. The Revenue Act of 1964 reduces the present range of 20 to 91 percent taxable income to a range of 16 to 77 percent this year. A projected 14 to 70 percent is scheduled for 1965, and succeeding years, says Hasbargen.

When fully effective in 1965, the reduction will mean an average rate decrease of more than 14 percent for all taxpayers. However, the reduction will be proportionately much greater for families with low incomes.

For example, a typical married couple with no dependents and a net income from farming of \$3,000 a year, and using the standard deduction, paid \$300 in taxes in 1963, but in 1965 they will pay only \$200, according to Hasbargen. Most of this 33 percent decrease will come from the reduction in rates.

A typical married couple with two dependents and a 1963 net income of \$6,000 from farming has just paid \$600 in taxes. In 1965, they will pay only \$450, a reduction of 25 percent. If the same couple has a net income of \$10,000 their 1965 liability will be 19 percent lower than in 1963.

The overall effect of the reduced rates will mean a tax reduction of \$250 million to \$300 million from the more than \$1.3 billion paid by farmers under the old rates says Hasbargen.

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To all counties
Immediate release

NEW TAX DEDUCTION
PLAN IMPORTANT
TO FARMERS

In some ways the provision of a minimum standard deduction, under the Revenue Act of 1964, is as important to farm taxpayers as the reduction rates, according to Paul Hasbargen, extension economist at the University of Minnesota.

This feature of the new tax law is especially important for large families--and rural families still tend to be larger than urban ones, says Hasbargen.

Before enactment of the tax bill, taxpayers had the option of either itemizing personal deductions or using a standard deduction provided by the law. Taxpayers choosing the standard deduction could deduct 10 percent of their adjusted gross income--up to a maximum of \$1,000.

The smaller the taxpayer's income, the smaller the standard deduction. The new law, however, would allow a deduction of \$1,000 for a couple with six children no matter how small their income was, states Hasbargen.

The new option is figured as follows: A total of \$300 for a single taxpayer, plus an additional \$100 deduction for wife and each dependent up to a maximum of \$1,000.

Therefore a family of eight would get the maximum of \$1,000 under this option whereas they would get only \$600 on an adjusted gross income of \$6,000 under the 10 percent standard deduction.

These deductions are in addition to the \$600 personal exemption. Thus, a family of four would have no taxable income with a \$3,000 earnings under the new option whereas the 10 percent option would leave \$300 taxable deductions if their total exceeds the standard deductions described above, points out Hasbargen.

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May 4, 1964

To all counties
ATT: HOME AGENTS
Immediate release

HOME AGENT TO
ATTEND ANNUAL
STATE CONFERENCE

_____, _____ County home agent, will spend May 12-15 on the University of Minnesota's St. Paul Campus attending the annual conference for all home agents in the state.

Theme of the sessions to be carried out in talks and panel discussions during the week is "Planning educational programs for an expanding clientele."

Featured speakers will include Marlys Richert, assistant director of home economics extension at the University of Wisconsin; Margaret C. Brown, director of the Division of Home Economics, Federal Extension Service, Washington, D. C.; S. O. Berg, dean of the University's Institute of Agriculture; Roland Abraham, acting director of the Minnesota Agricultural Extension Service; and Dorothy Simmons, state leader, extension home program at the University of Minnesota.

A dinner in Coffman Memorial Union May 12 will honor Mrs. Olive Opp, Pope County home agent, who is retiring. At the event, Louise Stedman, director of the University's School of Home Economics, will speak on "Home Economics Extension Around the World."

Objective of the conference is to prepare agents to carry on their programs in the counties more effectively.

Minnesota's 72 home agents, who are the University's representatives in the counties, direct the county extension home program. Objectives of this program are to assist families in acquiring knowledge and abilities to achieve a satisfying life under new and changing conditions. In Minnesota more than 46,000 women participate in groups enrolled in the extension home economics program and others receive help in solving home and family living problems through other contacts with agents or extension specialists, according to Miss Simmons. A broad scope of information is made available through this educational program.

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Immediate release

FILLERS FOR YOUR WOMEN'S PAGES

Remove gum on clothing or rugs by hardening it first with a cube of ice, then scraping the gum off with the back of a knife. If a stain remains, sponge it with a grease solvent, suggests Mrs. Myra Zabel, extension specialist in home furnishings at the University of Minnesota.

It's perfectly safe to leave unused portions of canned food in the opened can, say extension nutritionists at the University of Minnesota. However, the important thing to remember is that the can should be covered and kept refrigerated.

Beef steaks and roasts will keep well in the freezer at 0°F. up to 9 months, according to tests in the University of Minnesota food processing laboratory.

To keep a coating on chicken pieces while they're frying, U. S. Department of Agriculture home economists advise rolling the pieces first in seasoned flour, then dipping in an egg beaten with 2 tablespoons of water until frothy.

Fresh beef roasts and steaks may be kept from three to five days in the refrigerator and still retain their quality. Store them in the coldest part of the refrigerator with the wrappings loosened.

Girls are more poorly fed than boys. Nutrients most lacking in teen-age diets are calcium and vitamin C, reports the U. S. Department of Agriculture. Drinking more milk and eating more vegetables and fruits would overcome these deficiencies, say nutritionists.

Low temperature is the key to success in both egg and cheese cookery.

For tender fried eggs, heat a minimum of fat in the pan, slip the egg in and put the lid on the pan so the egg steams until the white covering over the yolk is done. Use low heat.

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Department of Information
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May 4, 1964

FFA CONTEST WINNERS NAMED

More than 2300 boys from rural Minnesota are taking part in their annual Future Farmers of America (FFA) convention and leadership training conference at the University of Minnesota's St. Paul Campus this week.

Numerous awards are being handed out to various participants with the grand prize, the 1964 FFA State Star Farmer citation, going to Larry Henning, 19-year-old member of the Okebena FFA chapter.

Eight chapters, Albert Lea, Alden, Butterfield, Buffalo, Fairmont, Freeborn, Le Sueur and Spring Valley, were awarded a special citation as winners of the 1963 "Corn Drive for Camp Courage." More than 104 chapters contributed \$20,890, from sales of gleaned corn, to the financing of Camp Courage for Crippled Children near Annandale.

An expense paid trip to the Minnesota Association of Cooperatives in St. Paul and to the American Institute of Cooperatives meeting in East Lansing, Michigan, went to the Alexandria chapter advisor and four of its officers. The chapter won the FFA award for classroom study of cooperative organizations. Wells and the Blue Earth chapters, second and third place winners, will also receive expense paid trips to the Minnesota meet.

Eight FFA chapters received gold emblem certificates from the Farm Section of the Minnesota and National Safety Councils for participation in the Safe Corn Harvest program last fall. The chapters were Blooming Prairie, Faribault, Glencoe, New Ulm, Olivia, Ortonville, Sanborn and Wabasha. Each chapter promoted safe corn harvest practices among local farmers. The Faribault and Ortonville chapters participated in an extensive Safe Farm Power Use Program and were recipients of gold certificates.

(more)

add 1 -- FFA contest winners

The Minnesota FFA Association presented a special award to E. O. Johnson, State Commissioner of Education. The presentation, made at the 28th annual banquet, commended his encouragement and support of the FFA program in the state.

A desk pen set was also presented at the banquet to Richard Donat, Staples, agriculture instructor, for his service as a member of the State FFA Board of Directors.

Mike Miller of the Paynesville chapter performed a piano solo to take the first place award in the FFA talent contest on Sunday. He will receive an expense-paid trip sponsored by the Peavey Company, Minneapolis, to the North Dakota FFA Convention in June. Second place in the talent contest went to Willis Runck of New Ulm for a pantomime performance and third place was awarded to Wayne Wagar of Worthington for his vocal solo.

Faribault won first place in the 1964 State Chapter Award Contest and will receive a plaque from the St. Paul chapter of Alpha Gamma Rho Fraternity. Chapter Contest award entries from Canby, Faribault, Ortonville and Stillwater received state gold emblems and will now be entered in national competition.

Minnesota FFA chapters which received superior awards include: Adams, Alberta, Albert Lea, Alexandria, Audubon, Barnesville, Blooming Prairie, Blue Earth, Brainerd, Canby, Clarkfield, Climax, Delavan, Evansville, Faribault, Farmington, Foley, Forest Lake, Franklin, Gaylord, Glenville, Halstad, Hastings, Hibbing, Hitterdal, Hoffman, Howard Lake, Jasper, Kenyon, Kimball, Lakeville, Le Center, Lewiston, Little Falls, Minnesota Lake, Montgomery, Morgan, Motley, Mountain Lake, Nicollet, Olivia, Ortonville, Owatonna, Parkers Prairie, Redwood Falls, Renville, St. Charles, St. Peter, Sanborn, Slayton, Springfield, Stillwater, Tyler, Wells, Westbrook, Winnebago, Winthrop, and Worthington.

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May 6, 1964

Immediate release

COOPERATIVE AGRICULTURAL EXTENSION MARKS 50TH YEAR OF FEDERAL SUPPORT

Federal support of the Cooperative Agricultural Extension Service of the University of Minnesota is marking its 50th year, according to Roland H. Abraham, acting agricultural extension director at the University.

The Agricultural Extension Service is the major unit for continuing education in the University's Institute of Agriculture, and is staffed by a total of about 300 county extension agents and state specialists.

Each county extension agent--including agricultural, associate, home and 4-H agents--is a faculty member of the University.

The 50th year anniversary recognizes the passage of the original Smith-Lever Act of May 8, 1914, which provided for arrangements concerning extension education between the U. S. Department of Agriculture and the Land-Grant colleges and universities of all states.

The "Cooperative" term refers to the fact that Agricultural Extension programs of the Institute are a joint venture of counties, the state, and the U. S. Department of Agriculture. Slightly less than half of the total support of Agricultural Extension in Minnesota comes from federal sources.

Actually, Agricultural Extension education has been conducted in Minnesota for more than 50 years. The first state law providing for this activity was passed in 1909, and Minnesota's first county agent began his duties in 1912 in Traverse County.

Abraham points out that the Smith-Lever Act is the third of three major historical events relating to education in state colleges of agriculture. The first is the Morrill Act of 1862, establishing the Land-Grant colleges, and the second is the Hatch Act of 1887, which provided for federal support to research at agricultural colleges.

(more)

add 1 --extension

"The Smith-Lever Act," says Abraham, "reflects the historical concern of Congress and rural America over the need for greater use of developing technology on American farms. The years following the Hatch Act showed a need for a special educational unit to disseminate research results.

The fundamental purpose of Extension is to help people identify goals, needs and alternative courses of action, based on the assumption that education is a process which continues throughout life.

"In the early days, Extension was concerned largely with improvement of family income and living through increased efficiency and higher agricultural production and, along with many other agencies, met with substantial success in these efforts.

"Today, one farm worker produces food and fiber for himself and 28 others, compared with a half dozen others at the turn of the century.

"Extension has helped usher in the age of the modern and mechanized farm. It helped bring in hybrid corn, a variety of new tillage practices, ^{and} refined approaches to livestock management. Furthermore, it brought to rural people a wide range of information relating to family living and youth development. "

Many aspects of the U. S. Agricultural Extension approach have been adopted by underdeveloped countries in efforts to improve agriculture and rural standards of living.

The rapidly shifting society, Abraham says, has led to a number of shifts in Extension programs. Today, Extension education involves broader contact with individuals, families, interested groups and entire communities in appraising the social and economic environment. New areas of emphasis in recent years have included:

- 1) Land utilization, zoning and transportation;
- 2) Problems of community organization finances and family and community living;
- 3) Ways and means for the coordination and expansion of educational opportunities; and
- 4) Assistance in the development of community action programs.

(more)

add 2 -- extension

Increased emphasis, Abraham continues, is being placed on the development of rural areas. "The Rural Areas Development program (RAD) brings the Institute in contact with new audiences and new opportunities--and represents a shift from emphasis upon the individual farm unit and production to a broader emphasis on an entire rural community and its social and economic problems."

Rural Areas Development is a broadly-based method for studying rural problems and developing understanding among local people who then prescribe measures. Extension's role in this activity is in initiating organizational activity and providing educational resources.

As part of their RAD efforts, about 15 Minnesota counties have within the past two years completed Overall Social and Economic Development Plans (OSEDFs). These reports are searching looks at local needs, problems and opportunities, natural and human resources, alternative solutions to problems and ways to arrive at courses of action.

In addition to the increased emphasis on Rural Areas Development, Abraham points to these trends in Cooperative Extension Education:

- 1) Intensive, sequential courses such as those held for swine producers in 21 counties during recent months. These were meetings based on the fundamentals of agricultural science in contrast to the "how to do it." Topics included economics of production, basic nutrition, reproductive physiology, building principles, diseases and marketing.

- 2) Farm and home development workshops conducted for hundreds of farm families by county extension agents and state extension specialists last winter. Participants, primarily young couples, studied their resources, management methods, and ways of evaluating alternatives open to them.

- 3) Family education, including information to the consumer. Educational programs are provided to over 50,000 homemakers in family life, family economics, home management, child development, human relations, home furnishings, clothing, nutrition, health, housing and equipment.

- 4) Youth programs, involving some 54,000 boys and girls in 4-H and other programs designed to supplement formal school studies and help prepare the youngster for his adult life.

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May 6, 1964

Immediate release

WORKSHOP FOR SCHOOL LUNCH PERSONNEL THIS SUMMER

Four short courses for school lunch personnel will be given this summer in Morris, Crookston, Waseca and on the University of Minnesota's St. Paul Campus, La Vern A. Freeh, director of agricultural short courses, has announced.

Sponsoring the sessions are the University's Institute of Agriculture and the School Lunch section of the State Department of Education. Mrs. Margaret Dayton, director of the school lunch program at Wayzata, is program coordinator.

Two courses are open to school lunch personnel who have never attended a school lunch workshop--at the West Central School and Experiment Station, Morris, June 22-25, and at the Northwest School and Experiment Station, Crookston, June 29-July 2.

An advanced course will be given June 15-18 at the Southern School and Experiment Station, Waseca, for school lunch personnel who have attended one three-day school lunch workshop in the last three years.

The workshop on the St. Paul Campus will be open only to those who have certificates from at least two three-day school lunch short courses held within the last three years.

School lunch as a part of education and safety in working will be discussed at all workshops. The St. Paul Campus sessions will feature equipment demonstrations and discussions on management, public relations, nutrition problems of small children and teen-agers and personnel problems.

Information on the school lunch workshops may be obtained by writing the Department of Agricultural Short Courses, Institute of Agriculture, University of Minnesota, St. Paul, Minn. 55101, or by calling 647-3715.

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Immediate release

FFA ELECTS NEW OFFICERS AT CLOSING SESSIONS

The Minnesota Future Farmers of America (FFA) elected a new slate of officers at the closing session of their 35th annual convention, Tuesday afternoon on the St. Paul Campus of the University of Minnesota.

Named 1964-65 state president was David Hartle, 18, of Owatonna, son of Mr. and Mrs. Norbert Hartle of Route 4, Owatonna.

Other elected officers include: Gene Sim, 18, Lewiston, first vice president; Arthur Springer, 18, Delavan, secretary; Rodger Schneck, 17, Ortonville, treasurer; Ronald Erpelding, 17, Kimball, sentinel; and Larry Henning, 19, Okabena, reporter.

G. R. Cochran, W. J. Kortesmaki, both of St. Paul, and Joe Malinski, New Prague, were re-elected as state adviser, state executive secretary and state executive treasurer, respectively.

The other newly-elected state vice presidents are: Mark Bruggeman, 18, Thief River Falls; Robert Cluever, 19, Eagle Bend; David Skrove, 17, Alexandria; Dave Skoger, 18, Cambridge; Vernon Schwartz, 19, Danube; Carl Rolloff, 17, New Ulm; and Dennis Whitney, 19, Delavan.

Winners of several convention contests were also announced Tuesday.

In Parliamentary Procedure, first place went to the Faribault FFA chapter, coached by Paul Day, chapter adviser. The Mountain Lake chapter placed second and the St. Charles chapter third.

Mike Paterson, 17, of Detroit Lakes, was named first place winner in the Minnesota FFA Public Speaking Contest. Paterson received a \$100 National FFA Foundation award and a gold watch from the Minnesota Farm Bureau for his talk on "Old McDonald had a Farm." He will represent Minnesota at the regional FFA public speaking contest in Kansas City, Oct. 13.

Other public speaking contest winners were Richard Huber of Le Center, second and Donald Devens of St. James, third.

(more)

add 1 -- FFA officers

Creed contest placements include Phillip Hansen of Lewiston, first place; Danny Olson of Halstad, second place, and Murl Nord of Bemidji, third place. The winners received a plaque from the State FFA Foundation.

Dean Franz of Mountain Lake was cited for the individual leadership award. Franz received a trophy from the Farm House Fraternity on the St. Paul Campus.

Three gold emblem awards were given in the Farm Management Contest. Recipients included Russell Thompson, Motley, and Gerald Bosshardt, Faribault, in a two-way tie for first place. David Hartle, Owatonna, placed third.

Five teams in farm mechanics rated gold emblem awards. They are: Royce Hoekstr and Keith Harbert, Owatonna; Dan Olson and Lyle Anderson, St. James; Lee Anderson and Dave Benson, Rush City; William Boese and Kenneth Frank, Gaylord; and Doug Busch and Wayne McCuen, Brewster.

Other events and their gold emblem winners are as follows: Beef Showmanship-- (1) Garry Hanson, Jackson; (2) Bruce Johnson, St. James; (3) Bob Neal, Lake Crystal. Swine Showmanship-- (1) Wayne Grundstrum, Kennedy; (2) Darwin Gunderson, St. Peter; (3) Larry Kruger, Blooming Prairie.

Crops Contests teams-- Gene Christensen, John Hastad and James Knudtson of Halstad; S. Shearer, J. Ploehn and D. Hansen, of Jackson; R. Johnson, M. Rickert and M. Milbrath of Okebena; G. Miest, Larry Wollé, D. Meier of St. James, and J. Robinson, R. Soleta and M. Ludvigson of Windom.

Dairy Cattle gold emblem teams-- Atwater, Donald Amdahl, Gary Behn, Larry Slinden; Morgan, Arlyn Stokesbary, John Dollerback, Bobby Hoffbeck; Climax, Arlen Larson, David Abbentroth, Greg Abbentroth; New Ulm, Tom Haala, John Albrecht, Roger Besemer, and Hutchinson Robert Albrecht, Richard Reimer and Leroy Beilke.

Dairy Products Teams-- Pine City, Dave Holman, Gary Kobberdahl, Charles Cummings; Evansville, Robert Week, Verle Grove, James Borgrud; Elbow Lake, Gordon Keller, Steven Frikken, Douglas Larson; Marshall, Richard Alex, Dick Lauve, Tom Doom, and Wells, Randy Mueller, Tom Schuster, Dale Wach.

The top five dairy showmanship entrants are: David Dumonceaux, Foley; James Winter, Hoffman; Denis Sonnenberg, Perham, Danny Staty, Foley and Greg Bakeberg, Howard Lake.

(more)

add 2 -- FFA officers

The top five forestry teams include: Fine City, O. Kick, A. Hanson, J. Ausmus; Brainerd, Carol Boeder, Leo Matties, Larry Thompson; Cotton, Mike Long, Robert Rohlf, Kent Flaada; Park Rapids, LeRoy Luukkonen, Bob Fix, Wilbur Borg, and Staples, Duane Larson, Steve Owen, Anthony Young.

General Livestock team winners were: Faribault, W. Babcock, J. Wille, G. Nichols; Garden City, E. Gilman, J. Rollings, H. Belgard; Okebena, E. Freking, B. Hill, H. Bademacker; Halstad, J. Bitker, B. Aarstad, T. Harrington, and Jackson, M. Eggimann, B. Johnson, F. Beadieek.

Gold team listings in horticulture are: Climax, T. Kobberrig, T. Christopher-son, B. Mohn; Pine City, D. Rys, J. Bombard, T. Rollf; Detroit Lakes, M. Paterson, F. Hale, R. Hanson; Motley, F. Theide, H. Tholl, L. Macheel, and Brainerd, R. Pierzinski, L. Streniff, B. Sewell.

Meat contest team winners included: Glenville, Doug Mittag, Joe Pacovsky and Bob Schumacher; Adams, Lynn Sathre, Bob Jax, Jim Ffiefer; Blooming Prairie, Chris Olson, Wayne Williamson, Dean Wood; Ellendale, Burton Scripture, Dave Vogelsang, Ron Geerdes, and Jackson, Larry Saathoff, Larry Michelson, Ken Bezdicek

The five gold emblem teams in the poultry division are: Pine City, V. Valvoda, J. Vacinels, T. Minar; St. James, D. Westman, R. Sein, S. Sturm; Jackson, J. Quiring, C. Wolff, M. Thompson; Rush City, N. Nelson, J. Hselm, R. Nelson and Ortonville, M. Conrad, G. Sitter, K. George.

The first three places in sheep showmanship were held by Dean Strain of Byron; Paul Weins of Rochester, and Curtis Radeke of Mora.

Five team winners in the soils contest included: Worthington, Stan Lambert, Dave Frey, Paul Hansberger; Tracy, Larry Sabinske, Dennis Fultz, Barry Erickson; Elbow Lake, Paul Brutlag, Larry Brutlag and Roger Ostenson; Northfield, David Lien Jim Werner, Art Schmitz, and Luverne, Waldo Oeding, David Stearns, Alan Hemme.

Rating gold emblems for their team score in the wildlife contests were: Pine City, Douglas Davis, Bruce Davis, Kenneth Gray; Holstad, Douglas Paulsrud, Mike Warner, Steven Temptrud; Cyrus, Richard Walker, Roger Larson, Daryl Bright; Crosby-Ironton, Melvin Bartel, Tom Klitzman, Martin Severson, and Detroit Lakes, Gary Olson, Dick Teal, Ben Houge.

Department of Information
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May 7, 1964

Immediate release

E. C. STAKMAN TO BE HONORED BY COSMOS CLUB

WASHINGTON, D.C.--Elvin C. Stakman, retired University of Minnesota faculty member, has been designated as the recipient of the first annual Cosmos Club Award for "new knowledge brought to the biological sciences and for his inspired manner of guiding its application for the benefit of mankind."

Stakman--"Stake" to his colleagues and former students now scattered throughout the world--is the man recognized as one of the world's foremost authorities on rusts and other diseases of cereal grains.

It is for this outstanding work in the field of plant pathology in part that he will be honored by the Cosmos Club.

The Club, located in Washington, D.C. and founded in 1878, is presenting the award on an annual basis to a person of national or international standing in the field of science, literature, the fine arts, the learned professions, or the public service. The purpose of the award is to further the cultural objectives of the club.

A formal presentation of the award will be made to Stakman on May 13 in Washington. At that time he will present an address on "Science, Sense, and Society."

Stakman, who holds a bachelor's, master's and doctor's degrees from the University, joined the University of Minnesota staff as an instructor in 1909. In 1913 he became head of the section of plant pathology of his department and in 1940 he became head of the Department of Plant Pathology and Botany. He retired in 1953.

(more)

add 1 -- Stakman honored

In addition to his fame as a researcher, Stakman is renowned as a teacher. Students from all corners of the globe have come to Minnesota to study under his direction. These former students are now carrying on the research he began in the fight against rust and other plant diseases.

Born in Algoma, Wisconsin, Stakman grew up in the farming community of Brownton, Minnesota. He taught in public schools at Red Wing and Mankato and was superintendent of schools at Argyle, Minn., before he joined the University.

Perhaps his major contribution to the understanding of control of grain rusts has been the discovery that within a variety of species of the stem rust fungus there are races or strains. It was on the basis of this discovery that he was awarded the Emil Christian Hansen gold medal and prize.

An excerpt of his citation from the Cosmos Club states that "As a statesman of science he has always been a lucid exponent of a humanistic scientific philosophy. His great intellectual and scientific merit has been recognized on many occasions by national and international societies, academies, and boards which have elected him to membership and high positions."

One of the criteria laid down by the Cosmos Club for the award is the recipient's ability to communicate through the spoken or written word to a broad audience.

Stakman did this during his long and distinguished career. The citation continues, "For his clear voice in the cause of science and in the service of humanity, the Cosmos Club is proud to designate Elvin Charles Stakman as the first recipient of the Cosmos Club Award."

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May 7, 1964

Immediate release

MINN. HOME AGENTS ATTEND SPRING CONFERENCE AT U

Minnesota's 72 home agents will attend their annual spring conference on the University of Minnesota's St. Paul Campus May 12-15.

The meeting opens Tuesday at 9 a.m. in the St. Paul Campus Student Center.

"Planning educational programs for an expanding clientele," theme of the conference, will be carried out in talks and panel discussions during the week.

Mrs. Margaret C. Brown, director of the Division of Home Economics, Federal Extension Service, Washington, D.C., and Marlys Richert, assistant director of home economics extension at the University of Wisconsin, will be out-of-state guest speakers. Mrs. Brown will discuss "Planning for Personal and Professional Development" at the closing session Friday morning. Miss Richert will speak Tuesday afternoon on "Blocks to Progress" and Wednesday morning on "Determining Objectives for Home Economics Programs."

Among other speakers during the week will be S. O. Berg, dean of the University's Institute of Agriculture; Roland Abraham, acting director of the Minnesota Agricultural Extension Service; Dorothy Simmons, state leader of the University's extension home program; Irene Ott, Mrs. Ilene Naly and Mrs. Ruth Spidahl, county home agents; and G. J. Kunau, Goodhue County agricultural agent.

A dinner in Coffman Memorial Union Tuesday evening will honor Mrs. Olive Opp, Pope County home agent, who is retiring. Louise Stedman, director of the University's School of Home Economics, will talk on "Home Economics Extension Around the World" at the event.

Purpose of the conference is to help home agents carry on their county programs more effectively. Along with agricultural agents and 4-H club agents, home agents are the University's educational representatives in the counties--all of them University faculty members. Home agents direct the county extension home economics program, which makes available a broad range of information with the objective of helping families achieve a satisfying life under new and changing conditions.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 7, 1964

Immediate release

POPE COUNTY HOME AGENT TO RETIRE

A home agent who has had a special talent for developing leadership abilities of rural women will retire this summer after 15 years of service to the families in her county.

She is Mrs. Olive Opp, Fope County home agent and assistant professor on the University of Minnesota staff, who will be honored Tuesday evening (May 12) by fellow home agents and members of the University extension home economics staff at a dinner in the Campus Club in Coffman Memorial Union.

Mrs. Opp holds the distinction of several firsts. She was the first home agent in Pope County, a post she assumed in February, 1949. She is also the first Minnesota home agent to retire.

During the 15 years she has been in Pope County she has developed a strong leadership program among women in extension home economics groups, as well as among 4-H members. She has directed a well rounded home economics extension program, touching many phases of home and family living, according to Dorothy Simmons, state leader, and Mrs. Rosella Cualey, district supervisor, extension home economics. She has helped conduct farm and home development workshops, assisting young couples in studying their resources and management methods and in evaluating alternatives.

In 1959 Mrs. Opp was cited by the National Home Demonstration Agents' Association for distinguished home and community service as an educational leader.

Before going to Fope County, Mrs. Opp had been home agent in Traill County, N.D., and also on the North Dakota state home economics extension staff. She had taught home economics in various schools in North Dakota and had been a dietitian in veterans' hospitals in Helena, Mont., and Milwaukee, Wis.

Leaving her desk in the Agricultural Extension Service in Glenwood will mean freedom from numerous office and telephone calls answering questions ranging all the way from "My home freezer has stopped; will the food spoil?" to "What shall I look for to get a good buy in a refrigerator?" But leaving her job will also mean eliminating many miles of travel each week, whether to speak at a meeting, help a woman plan remodeling of her kitchen or give special assistance to 4-H members.

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64-127-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 11, 1964

To all counties

4-H NEWS

(4th in a series on
teen-age career
exploration)

**ANALYZE SELF,
JOBS BEFORE
CHOOSING CAREER**

Immediate release

Choosing a career doesn't simply mean deciding where you can get the best job.

It means finding a lifetime occupation that's best for you. With a possible 40 or more years of your life depending largely upon this choice, it must not be a snap decision!

In the 4-H Career Exploration Project for Older Youth three basic steps are given in selecting a career.

First, analyze yourself. What are your abilities, interests and goals?

Your abilities give a clue to your chances for success in a particular kind of work. High school or college guidance counselors have aptitude tests which you can take to measure these abilities. And interest tests will group your various interests into significant patterns.

Consider what you like to do in relationship to what you can do. Success in a career depends a great deal on how well your interests and abilities coincide.

Personal goals represent what you expect to "get out of life." It's extremely important to set your goals high enough so that they will continue to challenge you throughout life. A career must be able to satisfy these goals.

Second, analyze careers which relate to your interests, abilities and goals. Find out as much about them as possible by reading books and magazine articles, by visiting the office, plant, factory, farm or other place where the work is actually done, and by talking to people in those careers and to employers who hire them.

-more-

add 1 - analyze self

Third, match the two as well as possible. Consider the answer to these questions as you are making your career decision:

- * Will I like the work?
- * Does the work fit my qualifications?
- * Does the job afford the security I desire?
- * Will I have good chances for advancement?
- * Will I earn better-than-average money?

Be realistic! Your choice must be in keeping with your capabilities and interests, with the opportunities for placement after college or other training, and with the job availability in the community or places you might like to live.

-blk-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 11, 1964

To all counties
Immediate release

EGG PRODUCTION
LESS SEASONAL
IN U. S., STATE

Egg production is becoming more evenly spread around the calendar, both in Minnesota and in the U. S. as a whole.

As a result, some of the seasonal ups and downs in egg prices to producers are being smoothed out, according to agricultural economists at the University of Minnesota.

Egg price and production trends have been studied by extension economist W. H. Dankers, research economist C. V. Hess, and extension economist J. C. Chai at the University of Minnesota.

They point out that between 1935 and 1939, Minnesota egg production in April was 58.6 percent above the annual monthly average production. Prices for April during those years averaged 16.2 percent below the annual monthly average.

For the month of November in the 1935-39 period, state egg production was 54.1 percent below the annual monthly average and price to producers was 30.9 percent above the annual monthly average.

Since then, these peaks and dips have leveled off to a marked extent. During 1963, seasonal fluctuation in price to Minnesota producers was from a high of 16.8 percent above the annual monthly average to 13.5 percent below.

Underlying this tendency for production and prices to smooth out has been a shift in production patterns to take advantage of higher seasonal price periods, the economists say.

For many years, baby chicks were bought in the spring of the year--mostly during March, April and May in Minnesota. About a year later, these birds would hit their maximum production of regular large eggs.

add 1 - egg production

One reason for this pattern was the favorable weather for raising pullets during the summer. Buying baby chicks in late fall or winter would have required expensive insulated buildings and heating equipment.

Today, many people buy mature young pullets instead of baby chicks. These birds can be purchased during a time when most spring-hatched chicks are declining or are low in production. That way, the producer has birds coming into production of regular large eggs during slack production periods.

Through buying these mature young pullets in "off season" periods, the producer may get higher prices for eggs, which will justify the somewhat higher price which may have to be paid for these birds.

The economists say that the shift away from seasonal production can reduce many marketing costs, because of greater efficiency resulting from more effective use of egg handling, processing and storage facilities.

While they expect the trend away from seasonality to continue, the economists recognize that higher egg prices during "off season" periods must be sufficient to offset any higher production costs.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 11, 1964

To all counties

ATT: HOME AGENTS

(1st in a series on
laundering various
fibers)

**STRETCH, SPANDEX
MAY BE MACHINE
WASHED AND DRIED**

Immediate release

Those garments you bought of stretch or spandex fibers mean both easy care and long wear if you give them proper attention.

Proper care begins with reading instructions for care on the hang tag when you buy any garment, says Mrs. Roberta Richards, instructor in textiles and clothing in the University of Minnesota's School of Home Economics. She points out that with some 240 different man-made fibers and blends on the market, it is impossible to know how to launder particular fabrics without reading the manufacturer's directions.

Since garments containing stretch or spandex yarns usually are blends, a good rule to follow is to treat the garments in the way that's suitable for the most sensitive fiber in the blend. The label will give information about the blend. In some cases, the garment may not be washable. For example, if the fabric contains wool in the warp and a stretch yarn in the filling, the instructions will usually suggest dry cleaning in the same manner as for an all-wool garment.

If, however, instructions with garments made of stretch or spandex fibers say they are washable, here are some suggestions on laundering them for best results:

- . Sort articles, so that only white articles are washed together. It is especially important to separate white from dyed articles since both nylon and spandex will absorb dyes from the wash water. Most of the stretch yarns are made of nylon.

- . Pretreat badly soiled areas with a paste or a liquid detergent.

-more-

add 1 - stretch, spandex

. Wash garments either by hand or in the machine, using warm - not hot - soft or softened water (about 100° F. or about body temperature), and a heavy-duty detergent.

. Wash by hand garments of delicate construction or with delicate trim.

. Use gentle agitation when washing in the machine.

. Avoid chlorine-type bleaches on garments containing spandex.

. Drip or line-dry or tumble dry at the wash-and-wear setting.

. If pressing is necessary, use the low temperature recommended for synthetics (275° to 300°F.). Avoid stretching these fabrics during ironing or pressing.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 11, 1964

To all counties
Immediate release

IN BRIEF.....

Soil surveys get widened use: Those soil surveys which have been so useful to farmers in planning drainage, fertility, rotations and other projects are now getting wider use. Engineers designing state and federal highway construction are finding the soil surveys useful in developing engineering properties of soils. Metropolitan planning personnel are using the soil survey information in locating and designing housing developments. County tax assessors are using the surveys in developing the real estate tax base for agricultural land.

* * * *

Mixed or blended fertilizers need nitrogen: When mixed or blended fertilizers containing phosphorus are used in starter or "banded" placement, they should also contain some nitrogen. The reason is that the ammonium form of nitrogen stimulates early plant phosphorus uptake at the critical time when soils are at their coldest and the plants are at their weakest. A. C. Caldwell, professor of soil science at the University of Minnesota, has found that the relative amounts of nitrogen and phosphorus aren't critical so long as there is at least one part nitrogen to every four parts phosphate (P205). Also, it hasn't mattered whether the nitrogen has been physically mixed or chemically combined with the phosphate.

* * * *

Family fallout protection: Every family has some fallout protection in their home. According to Cliff Halsey, rural civil defense specialist, the first floor of a two-story house will keep out half of the outside radiation. The average basement will let in 10 to 20 percent of the outside radiation. This protection may not be enough says Halsey. Family shelters recommended by the Office of Civil Defense have a protection factor of at least 100; that is, they let in 1/100 of the outside radiation. For further information on family fallout shelters write for Rural Civil Defense Tip Sheets No. 10-11, c/o Institute of Agriculture, University of Minnesota, St. Paul, Minnesota 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 11, 1964

To all counties
Immediate release

HIGH PROTEIN
FEED USAGE
INCREASES SHARPLY

Use of high protein feeds in livestock and poultry operations has been in an upward spiral for the last few years. With this expanded usage, there has been a parallel rise in the feed cost.

According to J. C. Chai and Harold C. Pederson, extension marketing economists at the University of Minnesota, this statement needs to be examined in the light of the volumes produced, variations in yearly prices, and future trends.

In the May edition of the Minnesota Farm Business Notes, the specialists indicate that the quantity of these high protein feeds has increased rather steadily since 1950. This increased feeding has brought about a two to three percent increase in production per year.

"It is interesting to note from the Minnesota farmer's point of view," they said, "that a large proportion of high protein feeds are made from soybeans, grains milled, and meat by-products."

Of course, these feeds vary in composition--in percentage of protein and in nutritional characteristics--but one can determine the yearly average price relationships among the top eight selected.

These eight are soybean meal, cottonseed cake, linseed meal, tankage, fish meal, wheat mill feeds, alfalfa meal and gluten feeds.

Here are some findings from the study:

* The yearly average of soybean meal shows an almost uninterrupted upward trend. This has been due chiefly to increased soybean production assisted by processing improvements which made soybean meal a competitive high protein feed. In 1963 the average price per ton was \$71.30.

add 1 - feed usage increases

* Cottonseed meal has also shown an upward trend but has remained more expensive than soybean meal by \$4.20 a ton in 1963.

* Linseed meal prices have shown more fluctuation from year to year with a slight upward trend noticed. Price in 1963 was \$67.30 per ton on the average.

* Fish and meat meal are the highest priced of the eight but have remained stable in price over the years. Fish meal at \$126.50 and meat meal at \$93.70 were the average 1963 prices per ton.

* Prices for the mill feed, gluten feeds and alfalfa meal have generally remained stable. They ranged from \$38.40 to \$48.40 per ton in 1963.

Chai and Pederson say that the continued upward climb in usage of high protein feed, the export demand for oilseeds, and prices received from other products such as grains, oilseeds, livestock, poultry, and fish, will affect future price trends.

The export demand will hinge mainly on the demand for soybeans overseas; the usage will have to rely upon the continued prices received from livestock sales; and the price received for the other products will also be affected by market demand.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 11, 1964

To all counties
(except Cook, Lake,
and St. Louis)

Immediate release

**CROSSBRED PIGS
ARE COMPARED
WITH PUREBREDS**

Crossbreeding, an effective way of capitalizing on hybrid vigor, is used extensively today in the swine industry.

How has this practice been faring? Some experiments involving crossbred boars in rotations have led University of Minnesota animal husbandry researchers to this conclusion: Crossbred boars will perform at a level equal to the average performance of progeny sired by the parent breeds of the boars.

In a typical crossbreeding program, three to four pure breeds or lines of boars are used in rotation. Replacement females are usually saved from each generation.

One question, then, is whether cross bred boars might replace some of the pure breeds in the rotation. In the University of Minnesota trials, purebred and crossbred sires were compared according to performance.

In the experiment, Minn. No. 1, Minn. No. 2, and Minn. No. 3 boars were used as the "purebred lines." The crossbred boars were 50 percent Minn. No. 3, 25 percent Minn. No. 2, and 25 percent Minn. No. 1. All the dams were Minn. No. 1.

After weaning, the crossbred and purebred sired pigs were assigned to separate pens. One pen of each were put on restricted feeding to determine possible effects on carcass traits. All the pigs were fed to a market weight of 190 to 210 pounds.

Performance comparison of these pigs showed less backfat thickness and greater daily gain for the purebred sired stock. According to the animal specialists, these differences may be accounted for by the greater selectivity of the purebred sires. The purebred boars were selected on the basis of growth rate and backfat thickness; whereas the crossbred boars were selected randomly at weaning.

add 1 - crossbred pigs

The selection differentials of daily gain were sufficient to account for the observed differences. However, only part of the differences in backfat thickness can be explained through differences in selection.

The variances in progeny performance were similar, indicating that crossbred sires may not increase variation in a systematic crossing program.

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Department of Information
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Institute of Agriculture
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St. Paul 55101 -- Tel. 647-3205
May 12, 1964

Immediate release

LAKE STATES DAIRY INDUSTRY NEEDS OUTLINED BY RESEARCH PROJECT

An extensive study of the future of dairying in the Lake States region has been completed by the U. S. Department of Agriculture and agricultural experiment stations in Illinois, Iowa, Minnesota, Wisconsin and Michigan.

These agencies cooperated in a survey of dairy product producers to decide what income-improving adjustments may be necessary to provide a sound competitive base for the future.

In the May edition of Minnesota Farm Business Notes, a University of Minnesota extension publication, W. B. Sundquist, USDA economist at the University, summarized some of the main findings of the study.

A brief background sketch shows that the Lake States area, Minnesota, Wisconsin and Michigan, produces more milk than does any other region in the country. However, distance from market for grade A products, the preponderance of grade B products, and the declining demand for products manufactured from grade B milk, all combined to undermine this rosy picture of overall dairy productivity.

Almost the entire area is dominated by the Chicago market which includes northeast Illinois, southwest Michigan, Wisconsin and northwest Indiana. This market handles the fluid or grade A milk.

To obtain a representative sample of milk producers in the area the researchers drew on the Lake States area as well as northeast Illinois and northeastern Iowa. They then attempted to piece together all the important variables such as soil type, farm size, dairy facilities, and milk market to find the most profitable way to organize each type of farm in the area.

Market projections indicate that there will be a slight increase in total demand for milk. This is based on 1959 figures. Included here is a decreased per capita demand for fluid milk but an increase in the population by 1965.

The analysis applied to the many variables which affect market projections in general and to the Lake States region specifically.

(more)

add 1 -- dairy industry needs

Here are some considerations recommended by the researchers:

* Grade A producers could produce an increased supply of milk as their competitive position in dairying is strong relative to grade B producers.

* Many grade B dairy farmers will find it profitable to decrease milk production. They can move from grade B to grade A production or they can move into beef and/or hog production and eliminate their dairy operation. It must be remembered that this last consideration was based on livestock prices before they dropped. It may be also a good move for grade A dairymen to move into beef or hog production if they are located in the region's corn-belt.

* An increase in the quality of cows and size of herds would be profitable on farms staying in dairy production. Concomitant with herd expansion is a need for emphasis on labor saving devices.

The study shows that the largest increase in milk production would be profitable in Michigan where livestock alternatives are limited. Better capital position and the "higher priced fluid milk market" of the Michigan area are further reasons for this suggestion.

There could also be a profitable reduction in milk production on farms in the corn-belt areas of the region, particularly in Illinois, Iowa and south-central Minnesota. This is indicative of the strong competitive position of cash crops and non-dairy livestock enterprises.

Some of the smaller farms in east-central Minnesota and west-central Wisconsin will probably have to be consolidated. They cannot be organized to provide adequate incomes and their resources do not provide a sufficient base from which to make profitable adjustments.

The research findings, Sundquist says, take into consideration such nonprofit factors as unwillingness to incur large debt for farm adjustments, risks associated with some feeding enterprises, and uncertainty about the profitability of some farm practices which will likely prevent any income-improving adjustments, as outlined above, from occurring 100 percent of the time.

However, he stated finally, the extent of adjustment which actually does occur in the future will greatly determine the future competitive position of the Lake States farmers.

Department of Information
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St. Paul 55101 -- Tel. 647-3205
May 12, 1964

Immediate release

EXTENSIVE INJURY TO SHRUBS THIS SPRING

If your shrubs and evergreens show greater dieback this year than usual, don't blame your nurseryman.

L. C. Snyder, head of the Department of Horticultural Science at the University of Minnesota, says the injury in shrubs is due to a number of factors: the dry fall, the lack of snow cover and the windy spring.

The heavy winds early in April caused further desiccation to plants already drying out because of the lack of rain last fall. Many arborvitae turned brown after the strong April winds, Snyder said. He reported that arborvitae on the crest of a hill at the University of Minnesota Landscape Arboretum, where they received the full force of the wind, had turned brown, while arborvitae on a protected hillside were still green.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 12, 1964

Immediate release

VETERINARY CLINIC TO CONDUCT TOURS

The Veterinary Clinic on the St. Paul Campus of the University of Minnesota will open its doors to the general public from 12:00 p.m. to 5:00 p.m. on Sunday, May 17, 1964.

The annual open house is sponsored by the Minnesota Student Chapter of the American Veterinary Medical Association. It enables the visitors to view the modern clinical facilities, various research projects, and new developments in the field of veterinary medicine.

Featured at this year's open house are a cow and a sheep with rumen fistulas or "windows in their stomachs." These animals are used in studying digestive processes and disturbances.

Tours will be conducted through the clinical wards where animals can be observed. Displays of other aspects of veterinary medicine and research will also be set up at the clinic.

The Veterinary Clinic is located west of the State Fair Grounds on Boyd and Commonwealth Avenues.

Refreshments will be served following the tours.

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64-130-pjt

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 18, 1964

To all counties

4-H NEWS

(5th in a series on
teen-age career
exploration.)

COLLEGE APPLICANTS
SHOULD SEEK
SCHOLARSHIPS

Are you planning a college education but frightened by costs?

Though financing higher education is a growing concern to young people and their parents, more and more scholarships and loans are being made available to help pay college costs.

If your college days will be here within a year or two, start now to investigate these financial aids. High school counselors or the bureau of student loans and scholarships at your chosen college will supply you with information.

Last year the University of Minnesota awarded about 450 scholarships averaging over \$300 apiece to entering college freshmen, according to Ralph Milier, associate professor and scholarship advisor in the College of Agriculture, Forestry and Home Economics at the University of Minnesota. Several Minnesota colleges also offer scholarships to entering freshmen who are graduates of Minnesota high schools. Opportunities are especially good for students in the upper quarter of their high school classes.

Each year National Merit Scholarships are awarded to outstanding students all over the country. You may become eligible by taking a test administered annually in all high schools.

Numerous scholarships are given by private companies and industries to encourage young people to enter their particular field. For example, five scholarships of this type are offered to Minnesota 4-H'ers each year: the McKerrow Scholarship for participants in 4-H livestock projects; the Keep Minnesota Green award for forestry students; F.H. Peavey and Co. scholarships to 4-H'ers in the bread project; and two scholarships by Watkins to an outstanding boy and girl in 4-H.

-more-

add 1 - college applicants

Nearly 200 national scholarships are available to active 4-H members. Most are awarded on a competitive basis of achievement in various project fields. These 4-H scholarships are to be used for courses at state land grant colleges.

Under the National Defense Student Loan program, you may borrow \$1,000 per year up to as much as \$5,000 during your years in college. It's essential to investigate early, advises Miller, since not all schools have sufficient funds to meet demands of all applicants.

Most colleges and universities make other scholarships available to many students after successfully completing at least one quarter of college work

Nearly all scholarships are based on a combination of need, academic achievement and frequent participation in various high school or college activities.

-blk-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 18, 1964

To all counties
Immediate release

FARM PRODUCTIVITY
IS MEASURED
BY ECONOMISTS

"Is my farm productive? Of course! If it weren't, how could I stay in business?" This type of answer to a question of productivity in farming really doesn't answer the whole question.

According to H. R. Jenson and P. Ram, agricultural economists at the University of Minnesota, the situation must be looked at from a time-span point of view. A farm may be very productive at one point in time but not so productive at another.

This, the two University researchers say, hinges on changing farming methods and fluctuating market conditions.

In the May edition of Minnesota Farm Business Notes Jenson and Ram dealt with a measure of farm productivity in south-central Minnesota and the Red River Valley for 1960.

They calculated total annual output by summing income from sales of farm products, value of farm products held for sale, income from government payments, income from custom work done for others, and dollar value of farm products consumed by the household.

The input included total man hours and the wage per hour paid; farm operating expenses; depreciation on machinery, buildings, and equipment; and interest on investment in land, service buildings, machinery, equipment, and breeding stock.

Wages per hour were estimated at \$1.13 in south-central Minnesota and at \$1.09 in the Red River Valley. Depreciation on machinery and equipment was set at 12 percent and on buildings at four percent. Interest on buildings and land was estimated at five percent and on machinery, equipment and breeding stock at seven percent.

add 1 - farm productivity

The two men then divided the annual output by the annual input and determined by the ratio of the two just how productive a farm was. A ratio of one (1.0 indicated that the farmer just broke even for the year. Anything above indicated a profit. Anything below a value of one did not mean losing money, but the farmer failed to meet operating expenses together with the conservative labor wage and investment costs charged against capital.

In the south-central area it was found that small farms had a ratio of .91 while large and medium sized farm operations had a ratio of 1.03. At the same time livestock farms (hog and/or beef) had a ratio of 1.09. A fourth category which included dairy and other types of farming operations had a productivity ratio of .92.

In the Red River Valley size of farm was the main factor. The agricultural economists looked at pure cash grain farms, cash crop farms producing grain and sugar beets, and cash crop farms with livestock, grains and sugar beets operation.

The type of operation did not affect the ratio. A small farm had a ratio of .77, a medium type was listed at 1.06 and a large farm had a ratio of 1.21.

In summing up, Jensen and Ramsey say that size of farm influences its productivity and such an operation requires a relatively large investment and operating capital. In the south-central area size and type of farm are both important but in the Red River Valley the type of operation makes little difference.

Both men add, however, that a third variable is necessary--operating ability on the part of the farmer to make his farm productive.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 18, 1964

To all counties

ATT: HOME AGENTS

(2nd in a series on
laundering various
fibers.)

**BUY POLYESTER IF
YOU'RE LOOKING
FOR EASE OF CARE**

For the consumer looking for the ultimate in easy-care fabrics, the polyester will usually fill the bill. They can be washed in the automatic washer, they dry quickly and require little additional attention. Consumers who are not acquainted with the term polyester are familiar with Dacron. Polyester is a family or generic name for fibers of a certain chemical composition. Dacron, Fortrel, Kodel and Vycron are all members of the polyester family with similar characteristics. Just as members of a family have given names, these are the trade names given by the manufacturers.

Most popular of the polyester blends now being produced, according to manufacturers, is the polyester/cotton blend. The usual proportion, 65 percent Dacron and 35 percent cotton, is used extensively for men's shirts, women's blouses and dresses. Accounting for the consumer acceptance of these fabric blends, say extension clothing specialists at the University of Minnesota, are wrinkle resistance and recovery providing day-long neatness; easy-care convenience; good pleatability and crease retention; added strength and durability. Polyester fibers are also moth- and mildew-resistant.

For most satisfactory results in washing polyester and polyester blends, extension home improvement specialists and extension clothing specialists at the University of Minnesota recommend these steps:

- . Before laundering, pretreat badly soiled areas by rubbing with heavy-duty liquid detergent concentrate or a paste of detergent and water.
- . Wash white garments only with other white articles.

-more-

add 1 - buy polyester

. Wash in warm (105°F.) water, using a heavy-duty detergent, for 5 to 8 minutes. For lightly soiled garments of delicate construction, 2 or 3 minutes should be sufficient.

. If you don't have a tumbler-type dryer, remove the clothes after completion of the rinsing cycle but before beginning the final spin-dry cycle. Allow them to drip-dry on non-staining hangers. Shape the collar, cuffs and seams with fingers while the garment is wet.

. If you have a tumbler-type dryer, use the complete wash and spin-dry cycles. Then dry the garments at the low or medium temperature setting.

. If possible, follow with 5 to 10 minutes of tumbling without heat. Remove the garments immediately at the end of the drying cycle and hang on non-staining hangers.

. When white articles become dull after repeated launderings, give them a thorough hot water (140° F.) wash with a bleach to restore their brightness, unless the garments are specifically tagged "do not bleach."

. Reduce the clinging tendency in garments by adding a small amount of fabric softener to the final rinse water.

. If pressing is required, use a steam or dry iron at the rayon or synthetic setting.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 18, 1964

To all counties

Immediate release

FLAX RUST
RETURNS TO AREA

Look out for race 300!

That's advice from V. E. Comstock, agronomist at the University of Minnesota. Race 300 is a new race of flax rust that first made its appearance in 1962. Last year, it caused considerable damage in areas where first noticed.

Flax rust has caused considerable damage to the flax industry. In 1951, estimated losses due to rust amounted to \$10 million. By 1952, these losses were virtually eliminated through development of rust resistant varieties.

Studies indicate that race 300 got its start by a single gene mutation in the rust populations of Canada. Similar races of rust exist in South America, so care must be taken when South America flax seed so care must be taken when importing South American flax seed.

Race 300 will attack all varieties that depend on the "L" gene for their resistance. Consequently, Marine, Marine 62, Army, Sheyenne, and Cree are susceptible because they all depend on the "L" gene for resistance.

The flax rust fungus overwinters in a black spore stage. These spores are frequently found in straw, debris and stubble. Each spring, the fungus begins a new life cycle of the flax rust. Therefore, it is important that rust resistant varieties are planted to avoid infestations.

Fortunately, there are several adapted varieties that depend on other genes for their resistance. Comstock lists the present recommended varieties as resistant to race 300: Windom, Bolley, B-5128, Redwood, and Summit.

Comstock emphasizes that these varieties be used widely during next few years until new sources of resistance can be incorporated into adapted varieties.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 18, 1964

To all counties
Immediate release

AGRONOMIST ADVISES
VALUE OF EARLY
HAY CUTTING

You may have heard scores of times that early hay cutting can mean more pounds of meat or milk from each ton of hay.

Here is an idea of just how important early cutting is.

Research indicates that each day you wait after the bud stage in alfalfa reduces intake and digestibility of total feed nutrients by 1 percent. That adds up to a 20-pound feeding loss for each ton of hay for each additional day of growth.

Jim Justin, extension agronomist at the University of Minnesota, says those figures have been verified by years of extensive research.

He explains that as a forage crop reaches maturity, the protein level goes down, fiber content goes up, and the amount an animal can eat in a day becomes smaller. Just as people eat less of foods they don't like, so will livestock eat less of an unpalatable feed.

Livestock simply don't like high-fiber hay as well as hay low in fiber. Nor does high-fiber hay pass through the digestive tract rapidly. Both factors reduce the amount of daily hay consumption. And feed intake, for top production, must be high.

The idea is to cut legumes such as alfalfa in the bud or very early bloom stage, and grass just as the heads appear. This means cutting alfalfa in the first week of June in most of Minnesota.

Farmers who wait until late June to harvest can lose more quality than do those who harvest early and get some hay damaged by rain. Furthermore, weather records show that rain is as likely in late June as in early weeks of that month.

Cutting at the recommended stages, Justin says, allows for good recovery if soil fertility and moisture are adequate. Early cutting can also mean the possibility of harvesting three crops by September 1 and increasing total hay yields while improving quality.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 18, 1964

To all counties
Immediate release

IN BRIEF.....

An extensive study of the future of dairying in the Lake States region appears in the May edition of Minnesota Farm Business Notes, an extension publication. W. B. Sundquist, USDA economist at the University of Minnesota, summarized some of the considerations recommended by the researchers in the study. (1) Grade A producers could produce an increased supply of milk as their competitive position in dairying is strong relative to grade B producers. (2) Many grade B dairy farmers will find it profitable to decrease milk production. They can move from grade B to grade A production or they can move into beef and/or hog production and eliminate their dairy operation. (3) An increase in the quality of cows and size of herds would be profitable on farms staying in dairy production. Herd expansion usually requires emphasis on labor saving devices.

* * * *

If shrubs and evergreens show greater dieback this year than usual, don't blame the nurseryman. L. C. Snyder, head of the Department of Horticultural Science at the University of Minnesota, says the injury in shrubs is due to a number of factors: the dry fall, the lack of snow cover and the windy spring. The heavy winds early in April caused further desiccation to plants already drying out because of the lack of rain last fall.

* * * *

Tax Law Affects Crop Insurance Report: The 1964 revenue act makes it possible to report crop insurance income in the year following a loss, according to Harvey Bjerke, fieldman for the Southeast Farm Management Service. Such a report would assume that the income is in the same year as the loss by the terms of the 1964 revenue act. The farm taxpayer must be able to show that the income from these crops would ordinarily not have been reported in the year in which the loss occurred.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 19, 1964

Immediate release

PEAT UNDER STUDY IN UM AGRICULTURAL RESEARCH PROJECT

A Minnesota land resource that could capitalize on the expanding interest in home lawns and back yards is under long-term study at the University of Minnesota's Institute of Agriculture.

The resource is peat, and it covers some 7 1/2 million acres of Minnesota, concentrated largely in north central and northeastern areas.

Relatively undecomposed peat makes a good soil conditioner, but it is not a fertilizer. It can be added to soil to improve water intake and holding capacity and nutrient holding capacity. It can even aid in weed control when used as a mulch.

The University agricultural research project in peat is headed by soils scientist Rouse Farnham, and recently received additional support through a \$2,500 grant from the Iron Ranges Resources and Rehabilitation Commission.

The promising aspect of Minnesota's peat resources is that at least 20,000 acres are covered with the less decomposed peat which is suitable for commercial development for the horticultural market.

Commercial sales of peat have more than tripled in the U. S. since 1950, now running near a million tons yearly.

A large chunk of peat sales in the U. S. now come from other countries-- Canada, West Germany, and Poland in that order. Other countries have marketed peat here, too. In Minnesota, about half of the peat sales are from local bogs, the rest coming from other states and other nations.

Farnham continues that the Minnesota peat industry, for horticultural markets, is not developed to anywhere near its potential. One problem is lack of fundamental information about the nature and use of peat, which Farnham and his co-workers have been gathering.

Peat is usually defined as any soil with more than 30 percent organic matter to a depth of at least 12 inches. Farnham classifies peat according to the stage of decomposition as determined in the field. No laboratory analysis is needed.

(more)

add 1 -- peat research

The main classifications of peat are these:

- 1) Undecomposed peats. These include the sphagnum mosses, the peat moss (or moss peat) and reed-sedge peats.
- 2) Partly decomposed peats, and
- 3) Completely decomposed peats, which have sometimes been used as fuel.

All three types of peat are found throughout Minnesota and all have some horticultural value. However, the less decomposed types are more suitable to commercial development. A given bog may have surface deposits of sphagnum moss and lower layers of the other types.

On the market sphagnum moss peat is the most popular of the undecomposed peats, and brings a higher price. It is extremely acid, is high in water-absorbing capacity and light in weight. A sack of it, about the size of a fertilizer bag, is feather light by comparison.

Sphagnum moss peat has few or no weed seeds, partly because of its acidity. It is an excellent insulator, making a good mulching material.

Farnham says a fundamental point about peat must be kept in mind: It is a valuable organic amendment--a soil conditioner--but not a fertilizer. And there is, or may be, a sharp difference between natural peat and peat mixed with soil in a garden.

For example, sphagnum moss in its natural state will absorb 20 to 30 times its dry weight in water. Artificially dried, the same peat may absorb only 6 to 8 times its weight.

On the other hand, different kinds of peat vary little in ability to absorb water when mixed in the soil. This is because any peat is highly "diluted" by the soil in which it is mixed. Thus, reports of water-absorbing values of different kinds of peat may be deceiving.

Whether a peat deposit is worth harvesting may depend on a number of factors, according to Farnham. He says moss peat deposits should be at least five feet deep, of uniform density and quality to make harvesting profitable. The thicker the layers, the more homogenous the deposit, and the less decomposed the peat, the easier it is to drain the bog.

Farnham says more fundamental research on peat is needed. Also quality control in production and specifications for marketing peat are needed both to protect the consumers and the producers. Steps to establish such standards have been taken recently by research workers, producers and professional horticulturists.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
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Immediate release

CAREER EXPECTATIONS OF H.S. GIRLS NOT ALWAYS REALIZED

About half of the high school girls who dream of professional careers realize their ambitions.

Although many girls actually achieve the career aspirations of their high school days, others change their goals by choice or necessity and select other occupations, according to Clarice Olien, assistant extension sociologist at the University of Minnesota.

Miss Olien reports some of the findings from studies conducted by University sociologists comparing job expectations of high school girls with their occupational attainments after graduation.

In the studies more than 800 senior girls in 21 high schools in northeastern and southwestern Minnesota were questioned about their occupational and educational plans. Six years later the girls were asked about the amount and kind of formal education they had received, the kind of jobs they had held since graduation from high school and whether they planned to be employed in the future.

Although at the time they were seniors about half of them expected to go into professional careers such as teaching, nursing, library or social work or home economics only a fourth of the girls actually attained their goals. About three-fifths of the girls had obtained clerical positions after graduation -- as secretaries, typists or sales clerks -- although slightly less than half had expected to go into that type of work. Less than a tenth of the girls had gone into such semi-skilled occupations as practical nursing or assembly work in factories, and about six percent were in unskilled occupations. Most of the latter were waitresses.

By the time the young women received the second questionnaire in the study -- six years after high school graduation -- almost nine-tenths of them had married. Slightly over a fourth of the married group were still working -- about half of them in clerical jobs and about two-fifths in teaching and other professions. About three-fourths of the married group had worked at some time after marriage -- either continuing a before-marriage job or obtaining work later.

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64-133-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 19, 1964

Immediate release

MINNESOTA 4-H DELEGATES TO MARYLAND AND WASHINGTON, D. C.

Thirty-five young people and two adult leaders will travel to Maryland in June to represent Minnesota's 4-H Clubs in a two-state exchange.

The 4-H'ers will leave June 19 for Maryland following an orientation program on the Minneapolis Campus of the University of Minnesota, according to Stanley Meinen, assistant state 4-H Club leader at the University.

Delegates will live for one week with farm families in Maryland, exchanging ideas and facts about 4-H and about the two states.

From June 28 to July 4, they will attend a Citizenship Short Course at the National 4-H Center in Washington, D. C., where they will meet congressmen, tour points of interest and discuss their role in American democracy.

The Citizenship Short Course continues through the summer in week-long sessions which other groups of 4-H'ers from Minnesota will attend.

An evaluation of the trip and a luncheon will be held in St. Paul after the members return.

This is the fifth and final year of the Minnesota-Maryland exchange. Minnesota's 4-H exchange program began with Mississippi in 1951 and continued with Manitoba in 1956. The program is sponsored by the University of Minnesota Agricultural Extension Service and the Minneapolis Tribune.

1964 delegates are: Tim Arneson, Shevlin; Roger Ernst, Glencoe; Michael Hamilton, Cedar; Kenneth Horecka, Blooming Prairie; John Miest, St. James; David Morse, Austin; John Peter, Randolph; Patrick Shields, 2700 E. Maryland Ave., St. Paul; Thomas Tweeten, Spring Grove; Tom Ward, Chatfield.

Mary Cain, Osseo; Anne Chute, Aitkin; Ruth Clasen, Long Prairie; Susan Clow, Orleans; Barbar Gens, Madelia, Rita Gresback, 1986 Payne Ave., St. Paul; Mirian Hagen, Belview; Ramona Hamre, Mahnomen; Gail Haney, Rochester; Jean Hartwig, Darwin; Pat Hibbard, St. Cloud; Myrene Jones, New Ulm; Sharon Laakso, Cotton.

John Lehtinen, Aurora; Kathy Lohmann, Goodhue; Donna Meyer, Ellsworth; Diane Morrein, Albert Lea; Janice Nelson, Blue Earth; Donna Nesbitt, Hopkins; Lynda Schleif, Hanover; Linda Skogrand, Montevideo; Ruth Vollmers and Connie Weeding, Chokio; Ethel Wicks, Austin; and Jean Will, Jordon.

Adult leaders selected to accompany the delegates are Marvin Olson, Willmar, and Irene Ott, Glencoe, extension agents. ###

64-132-blk

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

INCREASING LEISURE TIME HAS IMPLICATIONS FOR PARK MANAGEMENT

With four million people planning to use Minnesota parks this summer, you can truthfully say we have a mass movement to outdoor recreation.

Yet, we may be witnessing only the beginning. Forty years from now, about three times as many people will take part in outdoor recreation as in 1964. Recreational uses of forested lands are doubling at about 10 year intervals.

And with boating expected to move up from 10th to 7th place in participation by people, the move to the out-of-doors will have special meaning for Minnesota.

Understandably, park managers and planners are keeping a watchful eye on these trends. Increasing amount of leisure time and recreational activity can spell problems for public facilities that don't keep up to date.

A variety of problems to be kept in mind are spelled out by Donald F. Duncan, assistant director of the University of Minnesota School of Forestry.

While meeting the recreational demand may call for some new ideas, Duncan points out there's a long way to go with existing knowledge.

Take, for example, the crowded weekends in parks. A long-recognized solution might be staggered weekends--such as some persons having Saturday and Sunday off, and some Sunday and Monday. Or it might mean time off at other times of the week.

Duncan's interest in such problems reflects a growing research activity in recreation resource management by the School of Forestry in the University's Institute of Agriculture.

One central question is the changing desires of people--with the rapid growth of skiing being an example. But Duncan says it isn't merely a case of supply fulfilling demand. To a great extent, supply may create demand.

If there are good swimming facilities, people will use them. If not, they seek other recreation. And while that's somewhat of a simplification, it points out that availability is a strong determinant of what people do.

(more)

add 1 -- park management

In general, however, desires of people must be taken into account. The Outdoor Recreation Resources Review Commission has found that about 45 percent of Americans prefer some water-based form of outdoor recreation. So the implications for Minnesota are clear; with all its water, the state has a bright future as a major recreational area.

What are some of the major problems facing managers of parks and public recreational facilities? Duncan discusses site selection, financing, vandalism and preservation.

Site selection--While the most scenic sites are selected for development, this practice may be questionable, Duncan says. It might often be more reasonable to put the site within easy walking distance of the scenic attraction, but not on it. Where demands are heavy, it may be wise to set up alternative areas for camping or pick-nicking. This may be expensive initially, but may be more economical in the long run than rehabilitation of existing areas.

Then there are problems of soil type and plant cover which can stand heavy use. Elms, cottonwoods and green ash stand up better under use than oaks or sugar maple; compaction hurts the latter two more.

Financing--Duncan notes that the generally accepted idea is that investments in land and capital improvements be paid for out of tax revenues while costs of maintenance be paid by participants. This is especially true of developed campsites--w which until recently, were usually provided free by public agencies.

Duncan says one question here is the cost of collection compared with the amount collected. Meters, ticket vending machines and coin operated gates have been used with more or less success. Another point is that fees in public parks have implications for private facilities; where public agencies charge nothing, the private operator can hardly compete. But where it costs \$2 at a public park, a private entrepreneur can perhaps charge \$3 by providing some services not available at the public site.

(more)

add 2 -- park management

Vandalism--Usually, this is most serious near centers of population. A good rule here, Duncan believes, is "if you can't maintain it, don't build it." And initial design is important; vandalism is generally more serious on less costly installations; tiled floors in toilets may actually be less costly because of reduced maintenance.

Also, Duncan says, education and interpretation for visitors can reduce vandalism. People who are out of doors more, feel at home in the parks, and appreciate living things may be less inclined to vandalism.

Preservation--Here is something of a contradiction, Duncan says. We establish parks, often, to preserve some natural feature, to have an esthetic appeal. At the same time, we make it available for use by large numbers and guarantee its deterioration. Studies of canoeists' campsites in the Quetico-Superior show signs of extensive environmental change. Ground cover deteriorates rapidly. Tree roots are exposed, young trees are cut for camp wood and tent poles.

Park managers and researchers are concerned with "carrying capacity," or the amount of use a recreational area can stand without loss in quality. But this may be set at a high or low level of quality, and much judgment is needed for an individual case.

Some symptoms of overuse are obvious, some more subtle. The first thing to show up may be mechanical destruction--as from people armed with knives or axes. Less obvious is soil compaction, which increases water runoff and erosion, and leaves less water for plants. Also, it reduces the amount of air in the soil. This, of course, is a major consideration in site selection.

Duncan concludes that current solutions to problems of recreational areas are far from adequate. But he adds that recognizing the problems is a long step ahead.

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Department of Information
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University of Minnesota
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Immediate release

4-H HEALTH, CONSERVATION CAMPS SCHEDULED FOR JUNE

Two 4-H Club camps will be conducted in June for some 200 outstanding members in the health and conservation projects, according to Wayne Bath, associate state 4-H Club leader at the University of Minnesota.

They are the State 4-H Conservation Camp, June 3-7, and the State 4-H Health Camp, June 7-11. Both are annual events held at the University of Minnesota Forestry and Biological Station at Itasca State Park.

Camp delegates were selected on the basis of accomplishment in the area of conservation or health and on all-round ability and achievement in the 4-H program.

Sponsor of the Conservation Camp is the Federal Cartridge Corporation. The Health Camp is sponsored by the Folger Coffee Company.

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64-134-blk

Department of Information
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Immediate release

SALAD GREENS GOOD BUY THIS MONTH

Greens for the salad bowl are among the best buys in the vegetable section of Minnesota food markets this month, reports Mary Ryan extension consumer marketing specialist at the University of Minnesota.

Crisp, fresh, high quality lettuce and celery from California and Arizona are coming to Minnesota in large volume. Added to these are increasing supplies of locally grown green onions and radishes.

To vary your tossed salads, take advantage of the different types of lettuce at produce counters, Miss Ryan suggests. Round compact heads of Iceberg lettuce are excellent for serving in wedges or torn for salads. Individual leaves can be used as cups filled with fruit or other salad. Romaine, with an elongated head and crisp leaves, has a nutty flavor which teams well with tomatoes and cucumbers and adds interest to tossed salads. Bibb lettuce has tender, deep green leaves which should be used whole whenever possible or torn into bite-size portions. Boston or butterhead lettuce is noted for its tender, delicate leaves with a texture often described as that of freshly churned butter. Crisp curly leaf lettuce gives a delicate flavor to tossed salads and is popular served wilted.

When selecting lettuce, look for crisp, green, fresh-looking leaves. Flabby or wilted leaves are signs of age or damage. Although they may often be re-crisped in cold water, vitamins are lost.

The University marketing specialist recommends washing and trimming salad vegetables as soon as you bring them home. Drain well and store them in a plastic bag until ready for use.

A problem to many homemakers is the internal brown discoloration or russetting which produces "freckled" lettuce. Since such browning is most likely to develop at temperatures from 38° to 40°F., Miss Ryan says it may help to move lettuce into another section of the refrigerator which will be either colder or warmer. Another major cause of russet spotting is storing lettuce with apples, pears, melons and other fruits which give off ethylene gas during ripening. The ethylene gas increases the russetting.

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Department of Information
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University of Minnesota
St. Paul, Minnesota 55101
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To all counties

Immediate release

BEEF SUPPLY
IS VITAL FACTOR
IN PRICE SITUATION

The sagging price situation in the cattle market has caused a great deal of concern among beef men.

According to S. A. Engene, agricultural economist at the University of Minnesota, the first important factor affecting meat prices is the supply.

He says that because our population has been growing continuously, this can be most effectively studied in terms of per capita supplies.

"In our marketing system," he points out, "practically all meats that go to market are consumed. And they are consumed shortly after marketing; carryover stocks are a small part of the total supply."

The researcher says that in a given year, marketings almost equal consumption. Therefore, an important factor affecting price is the amount of meat consumers are asked to buy.

How much beef are farmers now asking them to buy?

Here past trends provide information. U. S. consumption per capita of beef dropped from 70 pounds per person during 1900-11 to 52 pounds in 1927-40.

Following World War II, farmers stepped up beef production quite rapidly, doubling supplies from an estimated eight-and-a-half billion pounds in 1941-52 to 18.2 billion pounds in 1964.

Of this increase, almost 90 percent came from increased U. S. production while a little over 10 percent came from increased imports.

This increase in the beef supply, unlike the previous period mentioned, was more rapid than the growth of our population. The average quantity of beef each person was asked to buy rose from 61 pounds per year in 1941-52 to 97 pounds in 1964.

-more-

add 1 - beef supply

This rapid increase in supply has brought prices down.

Engene says the second factor of the principle now enters the picture--demand. Present prices would probably be considerably lower, he says, if there had not been higher incomes and a shift in preference from pork to beef during the last two decades. This shift made consumers willing to buy the extra beef without a drastic drop in prices.

Looking to the future, the economist foresees a high beef supply for the next few years, possibly going higher than the 1964 per capita level of just under 100 pounds per year.

Surveys have indicated that farmers and ranchers had more beef cows at the start of 1964 than in any past years, meaning that more calves will be coming to market in the future. Engene says this large supply will probably forestall any increase in the price of beef.

Any study of the beef market also requires a look at other meats which are available for the consumer's dollar.

Beef's biggest competitor is pork, which has increased almost as fast as the population. The average level of pork consumption per person has remained constant since the turn of the century. Despite this, hog prices did not keep up with beef prices, because of the shifting preference for beef.

Other types of red meats, (veal, lamb, mutton,) stayed slightly ahead of population increases up to 1950 but have declined to about 10 pounds per person this year.

Another factor which has tended to depress beef prices is the consumption of chicken in the last 20 to 25 years.

"So," Engene adds, "there seems little probability that beef prices will rise in the near future. And when we consider the factors which have caused the drop in the beef market we have to consider the consumer's demands as well as our productivity."

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

UNIVERSITY RESEARCH
ASSESSES HAIL
DAMAGE TO CORN

Hail damage in a corn field can go far beyond the outright shredding of leaves and other physical damage that you see after the storm lets up.

Apparently, hail damage can lead to stalkrot infections, according to some research by Larry J. Littlefield, plant pathologist at the University of Minnesota.

Littlefield made a survey in the summer of 1963 in 17 counties, and determined yield reduction in corn according to estimates from county extension agents.

The survey concerned some 150,000 acres of corn receiving hail. Yield reductions from hail ranged from almost none in some fields to 100 percent in others. By conservative estimate, Littlefield says, yield reduction from hail storms averaged 10-15 percent.

Not all the reduction resulted directly from physical damage. Littlefield found that stalkrot infection in fields with moderate to heavy hail damage was noticeably higher than in nearby fields that escaped hail.

In several fields, nearly all stalks had some rot in and around hail wounds. And amount of rot in a stalk internode didn't vary much according to size of the wound.

Littlefield made laboratory analyses of rotted areas of stalks six to eight weeks after hail storms. He found definite evidence of stalkrot organisms in nearly a third of the isolations he made.

He concluded that hail wounds provided a path of entry for fungi into stalks. Subsequent fungus invasions probably contributed to corn yield reduction.

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Department of Information
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To all counties
Immediate release

EARLY CUTTING
IS ONE PART
OF HAY QUALITY

Important as it is, early cutting is only part of hay quality improvement.

Extension agronomist Jim Justin at the University of Minnesota says that every day a legume grows beyond the bud stage--or grasses beyond heading--means additional loss in feed value.

But once hay is cut, the rest of the harvesting procedure becomes critical. By the time hay is stored, it is never as nutritious as at cutting time, Justin says. And the more time between cutting and storage, the greater the loss.

Hay cured in the field with good drying conditions normally has lost 20 to 25 percent of its value as feed. To keep this loss as low as possible, it's necessary to finish curing in a hurry.

Hay conditioners can reduce curing time by as much as 50 percent, and thereby save many leaves. While leaves make up half the weight of alfalfa, they contain 70 percent of the protein and 90 percent of the vitamins.

Leaves dry faster than stems and can fall off in the field. Conditioning, however, allows the stems to dry faster. The result is shorter curing time and more leafy hay.

Then there is raking. Best time to rake hay is when it is damp, again to save leaves. They aren't as likely to get knocked off when damp and tough.

Once hay is baled, the idea is to get it into storage immediately. Justin says leaving bales in the field for days is a waste of time and money used to harvest high quality feed.

Justin concludes that early cutting, raking hay while damp, rapid curing and storing, can put better quality feed in the barn without additional production costs.

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To all counties
Immediate release

IN BRIEF.....

A Minnesota land resource that could capitalize on the expanding interest in home lawns and back yards is under long-term study at the University of Minnesota's Institute of Agriculture. The resource is peat, and it covers some $7\frac{1}{2}$ million acres of Minnesota, concentrated largely in north central and northeastern areas. The promising aspect of Minnesota's peat resources is that at least 20,000 acres are covered with the less decomposed peat which is suitable for commercial development for the horticultural market. Commercial sales of peat have more than tripled in the U. S. since 1950 and are now running near a million tons yearly.

* * * *

Recreation resource management is being subjected to more and more research at the University of Minnesota's Institute of Agriculture. The research is based on such facts as these: Forty years from now, about three times as many people will take part in outdoor recreation. Uses of forested lands for recreation are doubling at about 10-year intervals. Increased participation in outdoor recreation means public facilities must keep up to date.

* * * *

Turkey Menu. A feeding program for a fryer-roaster turkey operation should utilize the ration as a complete feed for best control over nutrient intake. The ration may be in meal form, reports Elton L. Johnson, poultryman at the University of Minnesota. A slightly higher growth rate and improved feed conversion ordinarily occurs if a combination of pellets and crumbles or granules is used. This intermediate form of feed should be used for approximately the first 10 to 12 weeks of the turkey's life. A complete pellet may be fed thereafter until the birds are marketed.

* * * *

Planting warm-season vegetables: Most vegetable crops can be planted in the garden as soon as the soil is prepared in spring. However, some vegetables have difficulty germinating when the soil is still cold, points out Orrin Turnquist, horticulturist at the University of Minnesota. These crops include sweet corn, beans, cucumber, melons and pumpkins. They should not be planted until after mid-May.

* * * *

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 25, 1964

To all counties

ATT: HOME AGENTS

(3rd in a series on
laundering various
fibers.)

Immediate release

IT'S SAFER TO
DRYCLEAN YOUR
ACETATE FABRICS

Don't take it for granted that all of today's synthetic fabrics are machine-washable. That's why it's important to read the hang-tag with information on care of the garment you buy.

Fabrics made from acetate, for example, such as acetate ninon, taffeta and satin, are seldom promoted as machine-washable. When a large percentage of the fabric is acetate, the recommendation is to dryclean. Acetate is a soft fiber and when wet wrinkles badly. Wrinkles that might be set as the water is extracted in the machine cannot be removed satisfactorily even when the fabric is ironed while damp. The fiber is also weakened when wet.

For ironing acetate fabrics, extension clothing specialists at the University of Minnesota recommend a low-temperature setting--about 325°F. -- because acetate fiber has a low melting point and is susceptible to glazing. The specialists also suggest ironing such fabrics on the reverse side or with a press cloth to prevent glazing.

Included in the acetate family are fabrics with such trade names as Acele, Celeperm, Celanese, Estron and Chromspun.

-jbn-

Department of Information
and Agricultural Journalism
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University of Minnesota
St. Paul, Minnesota 55101
May 25, 1964

To all counties

ATT: HOME AGENTS

(3rd in a series
on laundering
various fibers)

ARVEL CAN BE
WASHED AND
TUMBLE-DRIED

Immediate release

Don't confuse a garment made of triacetate with one of acetate, when it comes to cleaning and other care.

Arnel triacetate, although it's in the acetate family of fibers, differs in performance characteristics and in care requirements, say extension clothing specialists at the University of Minnesota.

Knitted fabrics made of Arnel are as near to wash-and-wear as can be produced, according to manufacturers. Jersey fabrics of 100 percent Arnel may be washed by hand or machine and tumble dried in the dryer. However, printed Arnel jersey garments should be washed separately by hand. Knit fabrics and blends need little or no touch-up ironing after laundering and tumble-drying. When ironing is necessary, the triacetate fabrics can be ironed at slightly higher temperatures than the acetate fabrics.

-jbn-

Department of Information and
Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 25, 1964

To all counties

4-H NEWS

Immediate release

LOCAL 4-H'ER TO
CONSERVATION CAMP

_____, 4-H Club member from _____, has been selected
(name) (address)

to represent _____ County at the 30th annual Minnesota 4-H Conservation
Camp June 3-7 at Itasca State Park at the University of Minnesota's Forestry and
Biological Station.

Delegates to the camp are chosen because of their achievements and participation
in conservation or forestry projects.

Purposes of the camp, which is sponsored by the Minnesota Agricultural
Extension Service and Federal Cartridge Corporation, are to develop in the delegates
an understanding and appreciation of the world of nature; to acquaint them with
wise use and intelligent conservation of natural resources; to develop their interest
in specific conservation activities; to develop their skill in observing and
identifying birds, insects, plants and trees; and to provide leadership experience.

Campers will be assigned to Indian tribes and will attend classes in forestry,
wildlife, entomology and plants taught by University of Minnesota extension
specialists. Special assemblies will feature talks on Indian folklore, career
opportunities in conservation, Minnesota wildlife and conservation of human
resources.

A Sunday morning service in Preacher's Grove, a tour of Itasca State Park,
a boat trip on Lake Itasca, treasure hunts and kittenball and volleyball tourna-
ments will be other features of the camp.

Presentation of the Keep Minnesota Green Award, a \$100 scholarship and plaque,
to Allan Kostner, McGrath, state 4-H forestry winner, will be a highlight of the
annual banquet Sat., June 6. Banquet speaker will be Darroll Bussler, 1963
International Farm Youth Exchange delegate to Jamaica, who will talk about his IFYE
experience and show pictures of Jamaica.

add 1 - Conservation Camp

Program for the camp has been planned with the aid of the 4-H continuation committee chosen last year: Paul Johnson, Hennepin County; Suzanne Sourbeck, Jackson County; Roger Sonnenberg, East Otter Tail County; Alyce Kalina, Pope County.

-jbn-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
May 25, 1964

To all counties

4-H NEWS

(6th in a series
on teen-age career
exploration)

HIGH SCHOOL
PREPARES TEENS
FOR HAPPY FUTURE

Immediate release

There's no time like the present to plan for the future.

Career planning must be a continuous process. Begin early. There are things you should do while still in high school to guarantee a satisfying future.

Will you attend college, get specialized training at a professional or vocational school, seek full-time employment?

Look beyond high school and plan your courses accordingly.

About four of every 10 teen-agers will begin college. If you're among them, you'll have to meet entrance requirements of some sort at any college or university you select. These requirements vary significantly between schools and usually include completion of specific courses and a specified level of achievement in all high school work, according to Ralph Miller, associate professor and scholarship adviser in the College of Agriculture, Forestry and Home Economics at the University of Minnesota.

Write to the admissions offices at all colleges or training schools in which you are interested. Ask for their bulletins--most are free. Read them carefully and compare school curricula and entrance requirements with each other. Discuss them with your parents and high school counselor or principal. Then let this information guide you in choosing high school courses to avoid delay and disappointment later.

Many high school vocational programs lead to early employment. Some are self-evident and tie in easily with local opportunities. The future secretary, for instance, should take courses in typing, shorthand and office practices. Other vocational programs may not be so directly related to immediate employment but will be of great value in specialized training programs after high school.

-more-

add 1 - high school prepares teens

Investigate colleges, visit with employers and explore the job market to gain a better understanding of the importance of your high school program to your future.

Successful high school programs don't happen by accident; they are planned. A good high school experience is invaluable. Don't waste it through poor planning or lack of information.

-blk-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota, Tel. 647-3205
May 26, 1964

Immediate release

SCHOLARSHIP MONEY AWARDED TO ST. PAUL CAMPUS STUDENTS

A total of \$36,500 in scholarship awards to students has been announced by the scholarship committee of the College of Agriculture, Forestry and Home Economics at the University of Minnesota.

A total of 93 upper classmen on the St. Paul Campus have been recognized for high scholarship achievement. Money grants totaling \$17,500 were awarded.

Also, 61 freshmen who are applying for admission to the College of Agriculture, Forestry and Home Economics have been awarded scholarships which average over \$300 apiece, for a total of approximately \$19,000. These scholarships are currently being announced at awards and graduation exercises in local high schools.

The awards made during the annual recognition assembly on the St. Paul Campus are as follows:

The Caleb Dorr Senior Gold medal went to the highest ranking man and woman in the College of Agriculture, Forestry and Home Economics and the highest ranking senior in the College of Veterinary Medicine.

These medals were awarded to seniors Marcella J. Swenson, home economics, Mahtowa; John C. Anderson, agriculture, Cambridge and Robert L. Hickman, veterinary medicine, Pine River.

Dennis P. Bradley, forestry major from Grand Rapids received the Samuel B. Green Scholarship medal. The award is given to the highest ranking forestry student at the end of the fall quarter of the senior year.

High junior Caleb Dorr awards were given to Jane E. Plihal, home economics education, \$200, Hutchinson; George H. Copa, agricultural education, \$200, Little Falls, and Stanley H. Kleven, veterinary medicine, \$110, Dawson.

(more)

add 1 -- scholarships

High sophomore Caleb Dorr awards were given to Sarah C. Souther, home economics education, \$200, St. Paul; Steven G. Thorne, forestry, \$200, Minneapolis, and John F. Quast, veterinary medicine, \$90, Winsted.

High freshmen Caleb Dorr awards were given to Patricia L. Kooser, home economics, \$200, Mankato; Gordon E. Moskal, agriculture, \$200, Westchester, Ill.; Carl L. Pherson, agricultural education, \$200, Kasota and Donald N. McMartin, veterinary medicine, \$70, Madelia.

A \$750 scholarship award by the Minneapolis Gas Co. went to Marilyn J. Van Gelder, home economics, Minneapolis. Four \$500 scholarships were awarded by: NOFC Chemical Co. Scholarship in Animal Husbandry to Gordon E. Moskal, agriculture, Westchester, Ill; Ralston Purina Scholarship to Kerwin L. Siewert, agriculture, Zumbro Falls; two Continental Grain Co. scholarships to John E. Allerson, agriculture, Nicollet and Larry J. Wipf, agriculture, Jeffers.

The Minnesota Dairy Industry committee awarded five \$450 scholarships to: Mary A. Goehle, agriculture, Stanchfield; Ronald H. Schmidt, agriculture, Darwin and Curtis V. Sellman, agriculture, Center City.

Additional scholarship awards for 1964-65 are as follows:

ALPHA GAMMA RHO SCHOLARSHIP--\$150 Brian E. Toivola, veterinary medicine, Chisholm.

ALPHA ZETA TRAVELING SCHOLARSHIPS: \$75--Dennis H. Berry, forestry, Minneapolis; George H. Copa, agricultural education, Little Falls; Duane R. Dykhuizen, agriculture, Maple Lake; Ronald H. Schmidt, agriculture, Darwin and Larry J. Wipf, agriculture, Jeffers.

MARY L. BULL SCHOLARSHIP--\$50 Dona M. Kranz, home economics, Braham.

CHICAGO FARMERS SCHOLARSHIP--\$200 Daniel A. Von Bank, agricultural education, Jordan.

JAMES B. FITCH SCHOLARSHIPS: \$100--Dairy Husbandry: Kerwin L. Siewert, agriculture, Zumbro Falls. Dairy Industries: Mary A. Goehle, agriculture, Tyler.

(more)

add 2 -- scholarships

DEAN E. M. FREEMAN SCHOLARSHIP--\$50 Julie A. Carlson, home economics
Minneapolis.

FLORA LORE GARDEN CLUB SCHOLARSHIP--\$100 Marcus H. Olsen, agricul-
ture, Garfield.

WILLIAM F. HAGERMAN AWARD--\$50 Paul D. Johnson, agriculture, Maple
Plain.

HOME ECONOMICS ASSN. SCHOLARSHIP--\$50 Loretta K. Hanson, home econ-
omics education, Anoka.

INTERNATIONAL MILLING COMPANY SCHOLARSHIP IN BIOCHEMISTRY:
\$300--Gail M. McCall, home economics education, Anoka; Patricia A. Murphy, home
economics education, Excelsior, and Karen L. Oelke, home economics education,
Waverly.

MINNEAPOLIS HIDE AND TALLOW COMPANY SCHOLARSHIP--\$300 Joel A.
Huser, agriculture, Plato.

MOORMAN MANUFACTURING CO. SCHOLARSHIPS IN AGRICULTURE: \$300--
Allan J. Palmquist, agriculture, St. Peter; David C. Pierson, agriculture, Lake
Elmo and Gene H. Rouse, agriculture, Olivia.

NORTHERN STATES POWER COMPANY SCHOLARSHIP IN HOME ECONOMICS--
\$300 Ruth G. Erickson, home economics education, McIntosh.

NORTHWEST FEED MANUFACTURERS ASSOCIATION SCHOLARSHIPS: \$300--
Dennis B. Gilbertson, agriculture, Minneapolis; Robert W. Jolly, agriculture,
Minneapolis; William G. Moebius, agriculture, Faribault; Glenn L. Nelson, agricul-
ture, Elbow Lake; Alan L. Pikop, agriculture, Elbow Lake and Donald P. Untiedt,
agriculture, Edgerton.

HARVEY E. YANTIS MEMORIAL SCHOLARSHIP--\$300 Gordon B. Meyer,
agriculture, Farmington.

PHI UPSILON OMICRON SCHOLARSHIP--\$150 Twylla J. Rothi, home econom-
ics education, Wadena.

(more)

add 3 -- scholarships

ST. PAUL CAMPUS FACULTY WOMEN'S CLUB SCHOLARSHIP--\$200 Carol Ann Fehr, home economics, East Grand Forks.

TWIN CITY HOME ECONOMISTS IN HOME MAKING SCHOLARSHIP-- \$200 Cathy A. Waslien, home economics, Minneapolis.

FLORENCE MUNSON WILSON MEMORIAL SCHOLARSHIP--\$50 Jean A. Draft, home economics, Brewster.

HAROLD K. WILSON SCHOLARSHIP--\$200 Donald M. Vietor, agriculture, Stillwater.

PFIZER VETERINARY STUDENT SCHOLARSHIP AWARD--\$400 Eldon R. Grazin, veterinary medicine, Williams.

SMITH-DOUGLASS CO. INC. SCHOLARSHIP--\$300 Richard C. Leslie, agriculture, Chester, Iowa.

FEDERATED GARDEN CLUBS OF MINNESOTA--\$100 Bonnie J. Olesiak, agriculture, Brookston.

FISHERY AND WILDLIFE MANAGEMENT SUMMER SCHOLARSHIPS: \$250-- Gary W. Crawford, agriculture, Minneapolis and James R. March, agriculture, Markesan, Wis.

CHARLES LATHROP PACK PRIZES IN FORESTRY--first prize \$60--Terrance M. Costello, forestry, Blackduck. Second prize \$30--Edgar J. Sorgatz, forestry, St. Paul.

AMERICAN BREEDERS SERVICE SCHOLARSHIP--\$200 Ronald G. Goose, veterinary medicine, Roseau.

DULUTH KENNEL CLUB SCHOLARSHIPS: \$100--Patrick J. Manning, veterinary medicine, St. Paul and David A. Spong, veterinary medicine, Fargo, N. D.

MINNESOTA VETERINARY MEDICAL ASSN.--\$25 Robert L. Hickman, veterinary medicine, Pine River.

CARL F. SCHLOTTHAUER MEMORIAL AWARD--\$25 Melvyn L. Fahning, veterinary medicine, St. Paul.

(more)

add 4 -- scholarships

WOMEN'S AUXILIARY TO THE MINNESOTA VETERINARY MEDICAL ASSN.

AWARD--\$25 Norman L. Osgood, veterinary medicine, Milwaukee, Wis.

WOMEN'S AUXILIARY TO THE AMERICAN VETERINARY MEDICAL ASSN.

AWARD--\$50 James D. Mortimer, veterinary medicine, Belle Fourche, S. D.

RHETORIC SERVICE AWARDS went to John E. Allerson, agriculture, Nicollet;
Ryon C. Johnston, agriculture, Buffalo; Faith K. Zupfer, home economics, St. Paul;
Wayne J. Dunn, forestry, St. Paul; Dennis H. Berry, forestry, Minneapolis;
Elizabeth H. O'Brien, home economics, Minneapolis; Howard M. Kittleson, agricul-
tural education, Blooming Prairie; Janet L. Cole, home economics, Austin; Carl L.
Pherson, agricultural education, Kasota; Sondra I. Burfield, home economics,
Houston; Allan C. Wigand, forestry, Minneapolis; Laurel J. Severson, home econo-
mics, Coon Rapids; Joseph A. Hobson, agricultural education, Le Center; Sharon A.
Johnson, home economics education, North Branch, and Allan C. Wigand, forestry,
Minneapolis.

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64-137-wlb

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 26, 1964

Immediate release

AG LEADERS AND ORGANIZATIONS RECEIVE SAFETY AWARDS

Four agricultural leaders and representatives of seven 4-H clubs in the state will be among those receiving awards at the Governor's safety award dinner Wed., May 27, at the St. Paul Hotel, St. Paul, for promoting farm and home safety.

Announcement of the agricultural safety awards was announced by Leonard Harkness, state 4-H Club leader and chairman of the agricultural awards committee of the Minnesota Safety Council.

Receiving the meritorious service award of the Minnesota Safety Council will be Harold Macy, dean emeritus, Institute of Agriculture and Mrs. Rosella Qualey, district supervisor, extension home economics program, University of Minnesota; Mrs. Laura Remnitz, Willmar, educational director, Minnesota Farmers' Union; and Paul Stelmaschuk, Pennington County agricultural agent, Thief River Falls.

The county 4-H safety award, a plaque from General Motors, will be presented to Carver County for 4-H club participation in safety hazard hunts and bicycle inspection and reflectorizing programs.

Robert Blaeser, Mahnomon, and Yvonne and Andrea Passe, Wabasha, received gold watches for their championship 4-H safety demonstrations.

Three 4-H clubs won National Safety Council certificates of commendation for their safety activities: Cascade Cruisers 4-H Club, Olmsted County; Eitzen Be Square 4-H Club, Houston County; and Lucky Aces 4-H Club, Washington County.

The Faribault Chapter of the Future Farmers of America received the state FFA farm safety award. Adviser of the Faribault Chapter is Paul Day, agriculture instructor in Faribault schools.

The following counties were given certificates of merit from the Minnesota Safety Council for farm and home safety activities during the past year: Houston, Jackson, Olmsted, Pennington, Rice, Sherburne and Stevens.

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 28, 1964

Immediate release

UM SCHEDULES BRANCH EXPERIMENT STATION FIELD DAYS

Field days at seven branch experiment stations of the University of Minnesota's Institute of Agriculture will be held during July, according to Sherwood O. Berg, dean of the Institute.

The events will be at the Southwest Experiment Station, Lamberton, July 2; Southern School and Experiment Station, Waseca, July 7; Agricultural Experiment Station, Rosemount, July 8; West Central School and Experiment Station, Morris, July 9; Northwest School and Experiment Station, Crookston; July 14; North Central School and Experiment Station, Grand Rapids, July 23; and Northeast Experiment Station, Duluth, July 24.

Each day will feature tours of research activities in soils and crops--including studies in soil fertility, crop management, tillage, varietal testing, disease resistance and other agronomic aspects. Livestock research projects also may be seen.

A plant pest clinic, where visitors may take weed, insect, and plant disease specimens for identification, will be held at each field day.

University specialists in safety and rural civil defense will present demonstrations at some of the events.

Each field day is open to the public.

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64-141-pjt

add 1 -- Quetico-Superior study

Soils in the Quetico-Superior are quite shallow. Often, they are under a foot deep, and trees may be rooted in only a half foot of soil. In such a case, even slight erosion will expose tree roots. Roots were exposed in about three-fifths of the campsites, but in only a single case on unused areas. Exposed roots make trees more susceptible to drouth, to wind and other damage.

Then, there's the matter of wood cut by campers. Many pine saplings had been cut for use as tent poles--one major reason why campsites rarely have many seedlings left.

What management steps might be taken to help protect the campsites? A first point to keep in mind is that canoeists interviewed for this study varied in the kind of location they prefer. Most preferred an island with pine trees, but beyond that, preferences seemed to be a matter of what was available when it was time to stop for the day.

Clearly, say Frissell and Duncan, it will be virtually impossible to maintain island campsites in undisturbed condition. As the study shows, even light use means loss of ground vegetation.

Campsites which have deteriorated severely could be removed from use temporarily to permit recovery through natural processes or with management help. Compacted soils might be loosened physically. New soil might be brought in to some sites. And litter could be redistributed over new soil layers and planted to native plants and grasses.

Much could probably be done simply by getting more information to canoeists before they enter the area, the foresters say. The new visitor information center established at Ely by the U. S. Forest Service should help in this. Some sites could be closed temporarily, and closure reasons could be explained to vacationers.

However, with expected increases in canoe country vacationing, simple closure may be inadequate. It may be necessary, Frissell and Duncan continue, to take steps to disperse wilderness visitors to less used areas. Such dispersal is already practiced in some national forests.

It may be difficult to use traveling recreational guides for dispersion of visitors in the Quetico-Superior, but Duncan and Frissell suggest that outfitters and administrative agencies might develop routing plans which would accomplish the same task.

The foresters admit that management may inhibit, somewhat, the freedom of choice and movement now available to canoe country visitors. "But this," they conclude, "may be the price the wilderness recreationist must pay to insure preservation of the basic wilderness resource and of the kinds of canoe campsites he prefers."

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 28, 1964

Immediate release

4-H DELEGATES TO STATE CONSERVATION CAMP

About a hundred delegates from Minnesota's 87 counties will attend the 30th Annual State 4-H Conservation Camp, June 3-7, at the University of Minnesota's Forestry and Biological Station at Itasca State Park,

Purposes of the camp are to develop in the delegates an understanding and appreciation of nature; to acquaint them with wise use and intelligent conservation of natural resources; to develop interest in specific conservation activities; to develop skills in observing and identifying birds, insects, plants and trees; and to provide leadership experiences.

All delegates were selected on the basis of their 4-H achievements and their participation in conservation and forestry projects.

The 4-H'ers will be grouped in Indian tribes for camp activities which include classes in forestry, wildlife, entomology and plants taught by University of Minnesota extension specialists. Special assemblies will feature talks on Indian folklore, conservation of human resources, Minnesota wildlife and career opportunities in conservation. The Happy Hollow 4-H Club of Kandiyohi County, Conservation Club of the Year, will give a report on their conservation activities.

A Sunday morning service in Preacher's Grove, a boat trip on Lake Itasca and tour of the park, treasure hunts and kittenball and volleyball tournaments are among other events.

Presentation of the Keep Minnesota Green Award, a \$100 scholarship and plaque, to state forestry winner Allan Kostner, McGrath, will highlight the Saturday evening banquet. Guest speaker will be Darroll Bussler who will give a slide-illustrated talk on his experiences as a 1963 International Farm Youth Exchangee to Jamaica.

The camp is co-sponsored by the Minnesota Agricultural Extension Service and the Federal Cartridge Corporation.

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64-139-blk

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 28, 1964

Immediate release

WILDERNESS MANAGEMENT MAY MEAN MORE CONTROL ON CANOE TRIPS

Canoe country visitors may have to sacrifice some freedom in mapping their routes, in return for a wilderness area that provides the kinds of campsites and preserved natural wonders that people prefer.

This conclusion is based upon a recent study in the Quetico-Superior wilderness area of northern Minnesota and Ontario. The study was conducted by the School of Forestry in the University of Minnesota's Institute of Agriculture, in cooperation with the Lake States Forest Experiment Station.

Foresters S. S. Frissell, Jr. and D. P. Duncan studied campsite deterioration in an area northeast of Ely, in both the Quetico Park of Ontario and the Boundary Waters Canoe Area of the Superior National Forest. They also interviewed more than 30 canoe parties to learn what canoeists look for in a camp site.

One finding was that with any recreational use in the wilderness, some vegetation loss can be expected. Compared with areas that had never been used, campsites had lost from nearly two-thirds to 99 percent of their original ground cover.

More than eight-tenths of the ground cover was lost with light use, and there was little change with heavier use.

Far more serious were effects on pine stands at campsites. On the unused areas which the foresters studied, they found seedlings of ten species of trees. Most of the seedlings were white pine and black spruce. However, they found no seedlings growing on used plots.

Similarly, the study found less litter and humus (tree twigs, needles, leaves and similar material) on campsites. On the average, the depth of litter and humus was only one third that of unused areas. At least part of the cause includes loss of ground vegetation, trampling and more removal of litter and humus by surface runoff when the soil becomes compacted. Compaction, of course, is much more common in campsite areas.

(more)

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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 28, 1964

Immediate release

HAPPY HOLLOW 4-H CLUB NAMED CONSERVATION CLUB OF YEAR

A Kandiyohi County 4-H Club has been named Conservation Club of the Year for its work in developing a lakeside picnic area for the public.

The Happy Hollow 4-H Club has made a project of cleaning up and beautifying the public access area to Lake Carrie. Members have worked in cooperation with the Sportsmen's Club and the county engineer on this project.

The 21 4-H members spent three different days clearing off rocks and dead branches and piling wood for campfires. They have made bird houses and placed them in the trees, have planted flowers and painted barrels for trash. A roller skating party and a bake sale sponsored by the 4-H'ers provided funds for purchase of picnic tables.

The club will be recognized for its achievements at the Minnesota 4-H Conservation Camp June 3-7.

All members of the Happy Hollow 4-H Club have taken conservation as a group project for two years. Some members have been enrolled for five years.

Talks and demonstrations at club meetings have included making bird feeders, what to feed the birds, game laws, insect control, safety in use of pesticides. Feeding the birds was a winter project of the club last year. On Arbor Day each member planted a tree or shrub in his home yard.

Mr. and Mrs. Roger Christenson, Atwater, are adult leaders of the club.

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64-142-jbn

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 1, 1964

To all counties
Immediate release

IN BRIEF.....

Seasonal Fluctuation of Milking Interval: Milking interval tends to vary more during late spring and early summer months. One of the major reasons is that field chores cause delays or rushed milking. V. S. Packard, extension dairy products specialist at the University of Minnesota, says recent research indicates high producing cows will show significant reductions in milk production when the herd's milking schedule is irregular. To keep high producing dairy cows at their peak, uniform time intervals between milkings must be maintained.

* * * *

Suggestions for Emergency Cropping Plans: If your cropping plans have to be changed because of climate changes or failure to meet seeding deadlines, you might consider these four alternatives: 1) Utilize the crops you may have left by employing alternate harvesting methods. This could mean using oats or soybeans as silage. 2) Replant the same crop that was sown originally. 3) Seed a short-season emergency crop to replace the one lost. This would utilize the land to some extent. 4) Finally, if no other possibilities are open, you can leave the land as is. This may save time and money in the long run, according to Harley Otto, extension agronomist at the University of Minnesota.

* * * *

Control on Canoe Trips: Canoe country visitors may have to sacrifice some freedom in mapping their routes, in return for a wilderness area that provides the kinds of campsites and preserved natural wonders that people prefer. This conclusion is based upon a recent study in the Quetico-Superior wilderness area of northern Minnesota and Ontario. The study was conducted by the School of Forestry in the University of Minnesota's Institute of Agriculture, in cooperation with the Lake States Forest Experiment Station.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 1, 1964

To all counties
4-H NEWS
Immediate release

LOCAL 4-H'ER
IS DELEGATE TO
HEALTH CAMP

_____, _____, _____ will attend
(is attending) the 12th Annual State 4-H Health Camp, June 7-11, at the University
of Minnesota's Forestry and Biological Station in Itasca State Park as the delegate
from _____ County.

About 100 young people will combine education and recreation as they learn
more about the importance of health in their lives. All delegates were chosen for
their 4-H achievements and participation in health activities.

Leonard Harkness, state 4-H Club leader at the University, will highlight the
opening night assembly with a history of Itasca State Park.

Key feature of the camp is a series of discussions led by state and national
authorities: Dr. Sidney Finkelstein, a district director of the Minnesota Depart-
ment of Health; Karen Henry, dietary consultant, Minnesota Department of Health;
Kathleen Dempsey, educational stylist for the Simplicity Pattern Company; and
Dorothy Berg, health education director of the Minnesota Tuberculosis and Health
Association.

Other discussions and talks focus on safe living, civil defense, and careers
in fields of health. A panel of 4-H'ers will also relate successful experiences
in health work in their clubs and counties.

Delegates will participate in an all-camp election, skits and a talent show.
They will tour the park and have a dance and campfire songfests.

A final banquet will be followed by a candlelighting ceremony and introduction
of the 1965 Health Camp Continuation Committee.

Co-sponsors of the camp are the Folger Coffee Company and the University of
Minnesota's Agricultural Extension Service.

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 1, 1964

To all counties
ATT: HOME AGENTS
Immediate release

DAIRY PRODUCTS
LEAD LIST OF
JUNE PLENTIFULS

Milk and dairy products lead the list of plentiful foods and good buys for June.

Early summer vegetables, canned pink salmon and beef are other items on the U. S. Department of Agriculture's June list of abundant foods. These foods should be among the best buys at local markets.

Supplies of vegetables from distant commercial producing areas will be supplemented during June with a variety of early summer vegetables from local market gardens. Among these will be radishes, leafy greens, green beans and beets.

Stocks of pink salmon are particularly plentiful. Unusually favorable catches in Alaska, Washington and Oregon during the past three years have enabled canners to accumulate large supplies.

Beef continues to be plentiful, particularly the Choice grade. Watch for week-end specials on particular cuts of beef.

June is Dairy Month -- 30 days in which to serve your family the delicious and nutritious goodness of dairy products, including milk, cheese and ice cream. Extension nutritionists at the University of Minnesota say milk should be a mainstay in all menus, whether it is served as a beverage to young and old alike or used in foods. It is our best source of calcium and also provides high-quality protein.

Cheese and ice cream also contribute calcium and protein to the diet. Figured on the basis of calcium content, it will take these amounts to replace a given amount of milk: 1-inch cube cheddar-type cheese would equal 2/3 cup milk; ½ cup cottage cheese, 1/3 cup milk; ½ cup ice cream, and ½ cup milk.

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 1, 1964

To all counties
Immediate release

TEMPERATURE AFFECTS
LIVESTOCK PRODUCTION

How hot weather affects animal production has been made clear in agricultural research.

C. K. Otis, agricultural engineer at the University of Minnesota points to trials with a limited number of animals in calorimeters to illustrate this relationship.

Otis points out that normal milk production can be expected between a range of 40 to 75 degrees Fahrenheit. However, differences do exist among the various breeds. Holstein can withstand cold better than Jerseys; Jerseys can stand heat better than Holsteins. In experimental work, Holstein milk production began to decline at 10 and 75 degrees Fahrenheit while Jersey production declined at 30 and 80 degrees Fahrenheit.

Experimental work also showed that cows respond to temperature changes. Temperatures ranging from 70-110 degrees caused a greater drop in milk production than temperatures ranging between 50-110 degrees. This difference is explained by the five degree lower average of the latter range.

Swine weighing between 50 to 200 pounds seemed to do best between 60 and 70 degrees Fahrenheit. Temperatures outside this range tended to reduce the rate of gain and the efficiency of gain. Carcass quality seemed to be best in this range too.

Lactating sows also showed a response to temperature. According to Otis, sow condition, litter growth, and mortality improved when sows were cool.

-more-

add 1 - temperature affects

Findings from poultry research showed that temperature has considerable affect on the feed required to produce a dozen of eggs. Road Island Red hens, the ones used in the experiment, required 41 percent more feed per dozen of eggs when housed at 37 degrees Fahrenheit than did those birds housed at 65 degrees Fahrenheit. At a temperature of 85 degrees, the birds required 18 percent more feed per dozen eggs than they would have required at 65 degrees.

Otis points out that disease control is also linked with temperature, although this is hard to measure.

The agricultural engineer states that these experiments still need verification in the field with large number of animals. However, they give some implications of what can be expected.

Otis summarizes that a consistent, proper environment is necessary if the full benefits of breeding, feeding, and disease control are to be realized. And temperature plays an important part in this environment according to Otis.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 1, 1964

To all counties
Immediate release

FARM PEOPLE OVER 65
TO GET NEW
TAX BENEFITS

Farm people over 65 will receive additional tax benefits under the Revenue Act of 1964, according to Paul Hasbargen, extension economist at the University of Minnesota.

The benefits include: (1) A partial exclusion from taxation of the gain received from the sale of the taxpayer's personal residence; (2) an increased medical expense deduction; (3) an additional minimum standard deduction; and (4) special retirement income credit.

Taxpayers 65 years of age and older can exclude part of the gain on the sale of their personal residence, says Hasbargen, if the sales price exceeds \$20,000. They can exclude all of the gain if the sales price is less than \$20,000.

For example, suppose a person 65 years old sells his residence for \$24,000 at a \$6,000 profit. Of this total gain, \$5,000 would be excluded from his adjusted gross income and only \$1,000 would be subject to taxation, according to Hasbargen.

If the sales price was \$17,000 with a \$6,000 profit, the entire \$6,000 would be excluded. The exclusion can be applied only once to the sale of residence after the taxpayer is 65 years old.

Medicine and drug expenses were deductible only to the extent that they exceeded 1 percent of the taxpayer's adjusted gross income. This limitation has now been removed for all taxpayers over 65 years of age and for expenses paid on behalf of dependent parents 65 years old or older.

-more-

add 1 - farm people over 65

Hasbargen says taxpayers who are 65 or over--or who are blind--are allowed an additional \$100 on their minimum standard deduction. This is in addition to the \$600 personal exemption which such taxpayers have been receiving.

The new law liberalizes the special tax credit granted to retired couples against dividends and other kinds of retirement income on joint returns.

The law now provides that where the husband and wife have both reached age 65 before the close of the year, the maximum income on which the credit may be based is \$2,286 as contrasted with \$1,524 under the old law. The credit will be reduced from 20 percent to 17 percent of eligible income for 1964 and 15 percent for 1965.

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Department of Information
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St. Paul 55101 -- Tel. 647-3205
June 2, 1964

Immediate release

4-H'ERS TO ATTEND STATE HEALTH CAMP

About 100 4-H young people will combine education and recreation as they learn more about the importance of health in their lives at the 12th Annual State 4-H Health Camp, June 7-11, at the University of Minnesota's Forestry and Biological Station in Itasca State Park.

Key feature of the camp is a series of discussions led by state and national authorities: Dr. Sidney Finkelstein, a district director of the Minnesota Department of Health; Karen Henry, dietary consultant, Minnesota Department of Health; Kathleen Dempsey, educational stylist for the Simplicity Pattern Company; and Mrs. Dorothy Berg, health education director of the Minnesota Tuberculosis and Health Association.

A talk by Leonard Harkness, state 4-H Club leader at the University, will highlight the opening night's events.

Other discussions and talks will focus on safe living, civil defense and careers in fields of health. A panel of 4-H'ers will relate successful experiences in health work in their clubs or counties.

The young people will participate in an all-camp election, skits and a talent show. They will have tours of the park, a dance and campfire songfests.

The introduction of the newly selected 1965 Health Camp Continuation Committee will follow a candle lighting ceremony at the final banquet.

Delegates, who were chosen for their 4-H achievements and participation in health activities, represent all Minnesota counties.

The camp is sponsored by the Folger Coffee Company and the University of Minnesota's Agricultural Extension Service.

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64-143-blk

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 2, 1964

Immediate release

PLAN FOR ONE-BEDROOM HOUSE DESIGNED BY USDA

A one-bedroom farmhouse has been designed by the U.S. Department of Agriculture especially to meet the needs of retired people or young couples.

Plan No. 7154, for frame construction with concrete slab-on-grade and trussed roof, was developed especially as a farmhouse but would be appropriate for rural non-farm areas, town or city.

The center hall with roomy coat closet sets up a smooth traffic pattern providing good circulation to all areas. The efficient arrangement and comfortable living space are ideal for a retired or newly married couple, according to Mary Muller, extension home improvement specialist at the University of Minnesota.

The bedroom is separated from the living and kitchen areas and is sound-cushioned from the entrance hall by closet walls. A second bedroom could be added with the entrance through the space now occupied by the linen closet.

The L-shaped kitchen, with ample space for food preparation, is close to the terrace for convenience in serving meals outdoors.

A spacious workroom with modern equipment and storage areas serves as a center for many household tasks and activities, including laundry. To save steps, it is located near the kitchen, bathroom and rear entrance. The room provides a place for hanging work clothes and for washing up before entering other areas of the house. There is sufficient floor space for sewing, ironing and children's play. Storage is provided for canned goods and canning equipment. For the older family, the space might serve for hobbies in addition to the normal household activities.

A descriptive leaflet of plan No. 7154 is available free of charge from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul, Minn. 55101. Copies of building drawings may be obtained for 50 cents from Blueprint Room, Agricultural Engineering Department, University of Minnesota, St. Paul, Minn. 55101. Money must accompany the order for the building drawings.

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64-144-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 2, 1964

Immediate release

GRIM STATISTICS POINT UP NEED FOR FARM SAFETY PROGRAM

A careless slip or an item left unchecked in the morning inspection of machinery can mean the difference between losing a leg or an arm and not having an accident. Or, it may mean a life.

Among farm operation accidents, about one in 50 is fatal, farm home accidents because of lower hazards, run to about one death in 100 accidents.

These statistics are presented by Glenn Frickett, extension specialist in safety at the University of Minnesota. He advises the need for caution in and around the farm and farm home. Next to traffic, Frickett says, the home area is where accidents occur most frequently.

In 1963, 1,779 persons of all ages died from accidental causes in Minnesota. Of this total 48 occurred in farming operations and 84 took place in the farm home and vicinity. One of the most tragic aspects of this latter group is the approximately 15 children who died in machinery accidents around the farmyard.

Frickett says that statistics such as these point up the need for care in all phases of activity. He says that during Farm Safety Week, July 19-25, the nation's farmers will acknowledge the need for care and caution. However, he adds, this should not be a one-week campaign but rather a year-round effort.

Data on general farm accidents show that the major cause of death was machinery operation. The next most common cause was falling objects.

On the farm home front, 18 persons died from falls; 17 in machinery operation; and 13 in fires, explosions, burns or scalds. A fourth common cause which also involved children, was suffocation, accounting for eight deaths.

It's not until these types of statistics are made available, Frickett says, that the average person becomes aware of the need for farm safety practices. He adds that a family with a definite program for safety will have fewer accidents both at home and in the field.

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64-145-jfk

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 5, 1964

Immediate release

"BEEF IMPORT DILEMMA" DISCUSSED BY UM ECONOMISTS

Low cattle prices and increased beef imports should be viewed within the perspectives of overall U. S. trade policy and postwar developments in world beef trade, according to agricultural economists at the University of Minnesota.

Economists A. F. McCalla and E. W. Learn state that , "Trade is a two-way street for all nations. Those who want to sell abroad must purchase foreign goods in return.

"As leader of the Western world and as the largest exporter of agricultural products, the U. S. must carefully consider any action that might lead to more rather than fewer trade restrictions."

In the current issue of Minnesota Farm Business Notes, McCalla and Learn state that "requests for import restrictions as a means of improving domestic cattle prices illustrate a basic conflict between domestic agricultural policy and freer trade.

"In 1962, U. S. agricultural interests reacted strongly against high tariffs to protect German poultry producers in the 'chicken war.' Currently, U. S. beef interests are seeking comparable treatment regarding 'low priced' beef imports.

"The economics issues in both cases are essentially the same," the economists say. "But the position of U. S. agricultural interests has been reversed."

World trade volume in beef is now at the highest level in history. The heaviest increases have been in live cattle and fresh, chilled, and frozen meats. Only for prepared meats has beef volume shown a recent decline.

(more)

add 1 -- beef imports

Live cattle trade has been dominated largely by exports between nearby countries--such as Canada and Mexico to the U. S., Ireland and Denmark to Great Britain, and Denmark to the Common Market.

Trade in fresh, chilled, frozen and canned meat, however, covers greater distances. Contributing to rising volume in this form of meat are improved processing and shipping technology and relaxed restrictions on trade in fresh meat.

Volume of imports to the U. S. tends to follow the U. S. cattle cycle. In the "building phase" of the cycle, the economists explain, prices of fed cattle rise and cows are held to expand herds. At the same time, imports of feeder cattle increase.

As herds expand, the supply of cow beef is reduced. Then imports increase to supplement domestic supplies.

At the same time, demand for cow beef products has been rising. Per capita consumption of hamburger and processed beef in the last 10 years has risen 33 percent compared with 10 percent for all red meats.

Another factor is the trade activity of Australia and New Zealand. In 1958, and again in 1960, Australia and the United Kingdom altered their trade agreements, allowing Australia to sell more beef to other countries.

Furthermore, United Kingdom application for membership in the Common Market threatened Australia's and New Zealand's prospects in the British market. Therefore, McCalla and Learn explain, the countries down under looked to the U.S. as an outlet for exportable meat products.

In recent years, McCalla and Learn continue, the U. S. market has been able to absorb 3 to 4 percent annual marketing increases without serious lowering of prices.

Imports in 1963 were up 7 percent, or 240 million pounds from 1962, but domestic production climbed 1 billion pounds in the same period.

(more)

add 2 -- beef imports

Recent U. S. Department of Agriculture studies suggest that cattle prices would have fallen substantially even in the absence of imports. In general, estimates are that imports probably have contributed not more than 15 to 20 percent of the price drop. The decline in average prices between 1962 and 1963 was \$3.70 per hundred pounds.

The economists continue that if imports have had only a small price-depressing effect, then the price-raising effects of restricting imports would also be small. In any case, the longrun price structure of the U. S. market is determined largely by domestic supplies, they say.

They add, however, that imports may be especially important in the building phase of the cattle cycle; they may prevent cow prices from rising in response to lower domestic supplies of cow beef. The merit of this argument, say McCalla and Learn, depends upon the extent to which higher cow beef prices provide incentive to cull breeding cows. And this question is currently unanswered.

Recently concluded voluntary trade agreements limit imports in 1964 to a level 6 percent below 1963. The U. S. may not independently impose further restrictions without violating previous commitments under the General Agreement on Tariffs and Trade (GATT).

The Trade Expansion Act of 1962 emphasized U. S. interest in expanded trade, the economists continue. Imposing restrictions on meat imports would place U. S. negotiators in a difficult position when bargaining for increased access to foreign markets, they say.

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64-147-pjt

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 5, 1964

Immediate release

HERE ARE TIPS FOR THE LADIES ON GLOVE ETIQUETTE

Glove wearing has its own etiquette.

Probably more questions come from women on how and when to wear gloves than on any other clothing accessory, according to Thelma Baierl, extension clothing specialist at the University of Minnesota.

Tradition and common sense combine to give us basic "do's" and "don'ts" for when to wear gloves, she says. When gloves are a fashion accessory to help complete the total effect of the costume--not merely worn for warmth--here are some suggestions to follow:

- . Do wear gloves on city streets, when on business in public places, when driving and for outdoor ceremonies and receptions.
- . Do wear gloves as a mark of respect in church.
- . Do wear gloves for formal indoor receptions and balls and when arriving at a luncheon or dinner party. Keep them on for formal occasions--while dancing or going through a reception line. For a luncheon or dinner party, leave them with your coat.
- . Don't eat with gloves on.
- . Don't wear bracelets or other jewelry on the outside of long gloves.

(more)

add 1 -- glove etiquette

. Don't make a habit of carrying your gloves like a wilted bouquet. Wear them, put them away in your purse or, if you're sitting down, let them lie flat in your lap.

Although at one time a lady never appeared in public without gloves and a hat, it is now completely acceptable to wear gloves without a hat.

No one answer can be given to the question of what is correct glove length, except for formal occasions, Miss Baierl says. When the occasion is very formal and the dress is a bare-shouldered fashion, the glove should be very long, reaching to the middle of the upper arm or higher. For other occasions, one safe guide to follow with coats, suits and tailored dresses which have sleeves that end below the elbow is to have the gloves long enough to meet the sleeves. Avoid any short gap between gloves and sleeves that make the latter look as though they might have shrunk. With sleeveless or cap-sleeved daytime dresses, the gloves might be the shorty or the crushed 10-button length.

Color in gloves is a matter of taste and current fashion, according to the University clothing specialist. Black, beige and white are always in fashion and may be worn with any color. The beige family--including hone, chamois, tan and brown shades--is basic and versatile. Pastel-colored gloves are best limited to summer clothing, for dressy occasions.

Whether you choose to match or contrast gloves with your costume is largely a matter of your own fashion sense. White gloves, for example, may have a fresh young look with dark colors, but remember that the contrast will call attention to the hipline. Hence, if your figure is heavy, it is best to have the gloves somewhat near the color of the costume.

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64-146-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 8, 1964

To all counties
Immediate release

CORRECTION

In the release dated June 1, 1964.

TEMPERATURE AFFECTS
LIVESTOCK PRODUCTION

Please change the fourth paragraph to read as follows:

"Experimental work also showed that cows respond to average temperature changes. Temperatures ranging from 70-100 degrees caused a greater drop in milk production than temperatures ranging between 50 and 110 degrees. This difference is explained by the five degree lower average of the latter range."

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 8, 1964

To selected counties
Immediate release

CUTWORMS ATTACK
MINNESOTA CORN

A cutworm invasion in southern Minnesota corn fields is demanding some emergency action by many farmers.

But whether the field should be sprayed, replanted, or both depends on the extent of damage and the stage of growth of the cutworms.

Extension entomologist John Lofgren at the University of Minnesota says the dry weather has a good deal to do with the cutworm attack. Because of dry soil, the worms are cutting off plants below the soil surface and, frequently, below the growing point.

Reports indicate a lot of variation in worms--some fields have mostly full grown worms while the worms are still small in many others.

Where worms are full grown (over an inch long) and the stand is badly thinned, there is little to do except replant. Insecticide treatment won't be much help for these larger worms, since they will soon pupate to produce moths.

Another hatch of cutworms this year is quite unlikely, Lofgren says, except possibly in extremely late corn this fall.

If the worms are still small and the field is damaged so badly that replanting is necessary, Lofgren advises first discing in a broadcast application of 1½ pounds actual aldrin or heptachlor per acre.

If the worms are small and replanting doesn't seem necessary, the recommendation is for two pounds of toxaphene or ½ pound dieldrin in at least 10 gallons of water per acre. Spray should be directed over the rows, and cultivated into the soil.

If the worms are large and feeding well below the soil surface, a postemergence spray will probably not give much control, Lofgren says.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 8, 1964

To all counties
Immediate release

ECONOMIST REVIEWS
FARM POLICY
FOREIGN AFFAIRS

Some major aspects of "American Farm Policy and Foreign Affairs" were reviewed recently by Elmer W. Learn, head of the department of agricultural economics at the University of Minnesota.

Learn points up the relationship between domestic farm programs and foreign policy.

He says foreign issues have entered the farm policy debate to a greater degree than ever before in our history. "They may be the issues that finally decide the course of farm policy in the United States."

Learn says governmental leaders and spokesman for agriculture here and in other countries need to recognize some basic facts.

First, all of the developed countries of the world have farm problems somewhat similar to those which we have.

Second, all the developed countries of the world have adopted programs to deal with these price and income problems in agriculture.

Third, virtually all of these programs are inherently in conflict with the generally expressed desires for freer trade.

Learn says the U. S. couldn't reduce these conflicts by itself. "But," he says, "As the recognized leader of the Free World, we can hardly afford to lead that world to even greater trade restriction without exhausting all possibilities for progress in the other direction."

Finally, Learn refers to the situation of today where the governments for one third of the world's people worry about food surplus while those for the other two thirds worry about hunger. He says a workable solution can be reached only when the developed nations are able to temper their own selfish interest with a greater desire to solve the problems of hunger and economic development wherever they exist.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 8, 1964

To all counties
Immediate release

IN BRIEF.....

Heat Will Affect Butterfat Test: Don't be alarmed if butterfat test of your milk drops this summer. V. S. Packard, dairy product specialist at the University of Minnesota, says that a decrease of one-tenth to three-tenths of a percent in your test may occur for each ten degree rise in outside temperature. The specialist points out that the highest testing cows are affected most. However, other factors can influence test too. Milk production, according to Packard, tends to be affected in a similar manner.

* * * *

Grim Statistics on Farm Accidents: In 1963, 1,779 persons of all ages died from accidental causes in Minnesota. Of this total 48 occurred in farming operations and 84 took place in the farm home and vicinity. One of the most tragic aspects of this latter group is the approximately 15 children who died in machinery accidents around the farmyard. Data on general farm accidents show that the major cause of death was machinery operation. The next most common cause was falling objects. On the farm home front, 18 persons died from falls; 17 in machinery operation; and 13 in fires, explosions, burns or scalds. A fourth common cause which also involved children, was suffocation, accounting for eight deaths.

* * * *

A One-Bedroom Farmhouse has been designed by the U. S. Department of Agriculture especially to meet the needs of retired people or young couples. Plan No. 7154, for frame construction with concrete slab-on-grade and trussed roof, was developed especially as a farmhouse but would be appropriate for rural non-farm areas, town or city. A descriptive leaflet of Plan No. 7154 is available free of charge from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul, Minnesota 55101.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 8, 1964

To all counties

ATT: HOME AGENTS

(4th in a series on
laundering various
fibers)

LAUNDER ACRYLICS
IN COOL WATER

Immediate release

Low temperature for washing, drying and ironing is the key to proper care of acrylic fibers.

Acrilan, Creslan, Orlon and Zefran are all members of the acrylic family.

General rules for laundering the acrylic fibers, say extension clothing specialists at the University of Minnesota, are to wash them in lukewarm water with a mild detergent by hand or at the delicate fabric setting on the washing machine. Tumble dry at the low temperature setting, or dry on the line. Normally little or no ironing will be required. If you feel the garment needs ironing, use the lowest temperature setting on the iron.

Since special care techniques are required for certain types of construction or for certain blends, be sure to read and follow the directions on the hang tag on the garment. For example, sweaters or knit sport shirts of Orlon Sayelle may be hand- or machine-washed and tumble dried. No blocking is necessary, but because of the stretching and shrinking action of the fiber characteristic of Orlon Sayelle, sweaters or shirts of this fiber should not be hung up to dry.

Among the characteristics of all the acrylic fibers are their warmth and softness, bulkiness, resilience, resistance to wrinkling and damage from bleaches and dilute acids. Mildew can be wiped off and apparently will not weaken the fiber. Properly constructed fabrics will retain permanently pressed-in pleats and hold creases.

Popular garments of 100 percent acrylic are sweaters -- for example, of Orlon. Also available in ready-to-wear are blends of acrylics with natural or synthetic fibers -- acrylics with rayon or with cotton in woven materials and acrylics with wool in knitted fabrics.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 8, 1964

To all counties
4-H NEWS
Immediate release

LOCAL YOUTHS
TO STATE 4-H
CONFERENCE

_____ young people will represent _____ County at the
44th State 4-H Junior Leadership Conference, June 23-26, on the State Fair Grounds
and the University of Minnesota's St. Paul Campus.

They are: (list names and addresses)

Approximately 750 junior leaders from all parts of Minnesota will attend the
conference, according to Leonard Harkness, state 4-H Club leader at the University
of Minnesota, who will welcome the delegates.

Through a series of workshops, the 4-H'ers will be able to learn more about
specific programs and gain an understanding of the importance of their role in 4-H.

LaVern Freeh, director of Agricultural Short Courses at the University, will
keynote the opening assembly, speaking on "Leadership--Opportunity and Obligation."

The "world's most traveled man," John H. Furbay, the eminent author-lecturer,
sponsored by the General Motors Corporation, will address the young people with
"A Countdown for Tomorrow."

University students representing various political groups on campus are
scheduled to discuss issues of the 1964 election. Following the panel, a "Careers
Unlimited" tour of the University and several trade and vocational schools in the
Twin Cities will familiarize the 4-H'ers with vocational possibilities.

Other events fill out the week's schedule: a discussion of the 4-H Peace
Corps, chicken barbecue at Como Park, Twin Cities Tour at Twilight, Minnesota
Twins' game, hootenannies and a banquet.

Slated for the final assembly are the installation of new state federation
officers, the election of the 1965 continuation committee, and the presentation
of a certificate to the winner of the 4-H Tractor Operators' contest.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 8, 1964

To all counties
Immediate release

HOG CHOLERA
PROGRAM CONTINUES

Minnesota launched into the second phase of the National Hog Cholera Eradication Program this year.

Phase one dealt with educational aspects of the program.

Minnesota is one of 38 states participating in the national program which was instituted in 1962. The USDA takes charge of conducting the program, in close association with the various states.

Phase two deals with reducing the incidence of hog cholera through the quarantine of infected and exposed swine restricting movements of exposed swine to slaughter, inspecting swine in the trade channels, maintaining inspection of swine assembling and handling facilities, and providing dealer information for traceback purposes.

The College of Veterinary Medicine at the University of Minnesota has played an important part in implementing the program both on the national and local levels. At the start of the program, the college conducted a symposium where state and national officials were brought up to date on the latest findings in hog cholera.

Recently, a one-day school was held where state and federal veterinarians were given the latest information on hog cholera and trained for the second phase of the program.

In addition, several veterinarians from the College of Veterinary Medicine have traveled the country lecturing on the various phases of hog cholera eradication. Dr. D. K. Sorenson, D.V.M. at the University of Minnesota recently returned from a lecture series in Illinois.

The College of Veterinary Medicine is presently re-editing a film it has been using in the education part of the program. This film deals with the clinical and pathological manifestations of hog cholera.

Minnesota will need to institute a few minor changes in the hog cholera program carried out by the State Livestock Sanitary Board to enter into the second phase of the national program.

Over a period of years, the eradication program will be cheaper than vaccination, and it will allow U. S. pork products to enter more foreign countries.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 9, 1964

Immediate release

EXPORT MARKET CRUCIAL TO SOYBEAN SUCCESS STORY

An expanding export market has written the vital chapter in the postwar success story of U. S. soybeans.

While U. S. soybean production has doubled in the past decade, reaching 701 million bushels in 1963, exports more than tripled in the same period, according to agricultural economist Reynold P. Dahl at the University of Minnesota.

He points out in the current issue of Minnesota Farm Business Notes that the soybean equivalent of U. S. exports of soybeans, soybean oil, and soybean meal in 1962-63 totaled nearly two-fifths of production.

The six countries of the Common Market took more than a third of all U. S. exports of soybeans and 65 percent of total U. S. shipments of soybean meal in the 1962-63 year.

These are commercial sales for dollars, and a question often raised is how the Common Market will affect U. S. aims in maintaining and expanding this export market.

The Treaty of Rome which established the Common Market (technically termed the European Economic Community) provided that all tariffs between member countries would be eliminated by 1970. Also, a common trade policy with third countries would be in force by then.

In the past, common market countries have supported their own farm products at levels above world prices. Imports have been restricted through quotas, fixed tariffs, levies, state trading monopolies and other means.

Under a common agricultural policy now being formulated, the Common Market has decided to limit imports of wheat, feed grains and poultry through variable levies which raise import prices to the higher prices within the Market. The effect is to insulate their market from import competition, Dahl explains.

In spite of concern over the future of U. S. agricultural exports to the Common Market, Dahl advises against generalizing this concern to all commodities.

(more)

add 1 -- soybean exports

Soybean exports from the U. S. to the Market have a bright future, says Dahl. Both soybeans and soybean meal are currently imported duty-free into the Common Market, and will continue to be free under the common external tariff in 1970.

Another factor is the European climate. These countries do not produce enough oilseeds for their needs. And they find it desirable to import soybeans which contain a higher ratio of high protein meal to oil than do most oilseeds--80 percent meal to 17 percent oil on a weight basis.

Prospects are good, Dahl continues, that demand for soybean meal in the Common Market will increase rapidly as meat production and consumer incomes there go up. Assuming the present rate of consumer incomes will continue, the EEC Commission forecasts that between 1958 and 1970, poultry consumption there will increase 115 percent, beef consumption by 53 percent and pork, 29 percent.

Still another factor is feed grain prices, which the Common Market countries support considerably above world prices. Feed grain in the Market is expensive relative to soybean meal; in Germany, for example, soybean meal in 1962 sold for about \$13 less per metric ton than feed barley.

As a result, soybean meal use for livestock feed has increased sharply in Europe. And with livestock production increasing there, the increase in U. S. exports of soybeans and soybean meal becomes more understandable.

Dahl says future growth of soybean and soybean products exports from the U. S. will be affected by prices. Soybean meal has tough competitors in the Common Market sales can drop rapidly when price gets out of line with competing products. The same is true for oil.

Therefore, Dahl sees a need for restraint in setting support prices for soybeans. And it is in the interest of the U. S. soybean industry to expand production each year enough to cover the demand increase.

As a case in point, the supply of soybeans at the beginning of the 1963 crop year is about the same as a year earlier. The result was higher soybean and soybean meal prices, which helped reduce the rate of increase in foreign sales this year.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
May 9, 1964

Immediate release

HERE'S WHAT TO DO IF YOUR HOME FREEZER STOPS

Will the food in the home freezer spoil if the power goes off in an electrical storm?

This is the season that question is frequently asked by worried homemakers, reports Mrs. Shirley T. Munson, in charge of the University of Minnesota's food processing laboratory.

Often, too, Mrs. Munson says, individuals call to say they have come back from vacation and found they had accidentally pulled out the freezer plug or turned all the electricity off. In that case, there's not much to do except discard the contents of the freezer--unless ice crystals are still present in the food, according to Mrs. Munson.

But if the freezer stops running because the electricity has gone off, you can take one of a number of different steps to keep food from spoiling: keep the freezer door closed; move the food to a locker plant; or add dry ice.

Food in a large chest-type freezer that is full won't thaw for two to three days when the power is off, Mrs. Munson says. In a freezer that's half full, food should keep well for one day. But food in an upright freezer will thaw more quickly. If the electricity comes on in a matter of hours, you needn't worry. However, don't open the freezer unnecessarily, because by doing so you let warm air in and raise the inside temperature.

If the power should be off for more than a day or two, dry ice can come to the rescue. The dry ice is most effective if you saw one 50-pound chunk into smaller pieces and set these on cardboard on top of the frozen food packages. Wear gloves to keep the ice from touching your skin while you are handling it. A 50-pound cake of dry ice placed in a freezer fairly soon after power failure will prevent thawing of the food for two to three days.

(more)

add 1 -- if freezer stops

In case you arrange with a local freezer plant to transfer frozen food there in an emergency, put crumpled newspapers around the frozen food packages and pack them in cardboard boxes.

When the power is restored, if you find your freezer is full of partially thawed foods, it may be best to take the food to a commercial locker plant to get a quick re-freeze. To refreeze food in your own freezer, rearrange the packages so the warmer ones are against the refrigerated surface. Pile packages so air can circulate around them.

Examine each package of thawed meat especially carefully, Mrs. Munson cautions. Meats and poultry are unsafe to eat when they start to spoil. If the food still contains some ice crystals, it is safe to refreeze, though the quality may suffer. However, it is often wiser to cook food that is almost completely thawed than to re-freeze it. If the odor of thawed food is questionable, destroy the food; it will probably be unsafe to eat.

Mrs. Munson warns against refreezing vegetables, shellfish and cooked foods that have thawed completely, since it is difficult to tell by the odor whether they have spoiled.

If thawed fruits taste and smell good, you can either refreeze them or use them for making jams or preserves. When fruits start to spoil, they usually ferment. A little fermentation will not make fruits dangerous to eat, but it may spoil their flavor.

Removing the bad odors from the freezer is one of the big problems homemakers face if electricity went off when the family was on vacation and food spoiled. Mrs. Munson has this suggestion: First wash the inside of the freezer thoroughly with a detergent solution or baking soda. If the odor still remains, put several shallow dishes of vinegar in the freezer and let them stand at least overnight, with the motor running. Then defrost, wash and rinse the freezer. This process may have to be repeated several times before the odor disappears.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 13, 1964

Immediate release

HEAD OF AGRONOMY APPOINTED AT U

Herbert W. Johnson, Beltsville, Md., has been named head of the Department of Agronomy and Plant Genetics at the University of Minnesota, effective July 16.

Johnson has been in charge of soybean investigation for the Crops Research Division, Agricultural Research Service, U. S. Department of Agriculture in Beltsville, Md., since 1953. In this position he has directed all agronomic, plant breeding and genetic work conducted by the Agricultural Research Service on soybeans and has cooperated in research activities with agricultural experiment stations at land-grant universities.

From 1948 to 1953 he did research for the U. S. Department of Agriculture at North Carolina State College, Raleigh, N. C.

A native of Tennessee, Johnson holds a B. S. degree from the University of Tennessee. He received his M.S. and Ph. D. degrees in plant breeding from the University of Nebraska and assisted in agronomy research and teaching there.

Johnson is the author and co-author of numerous scientific publications in plant breeding and in the application of statistical genetics to plant breeding. He is listed in American Men of Science.

In 1963 he was named a fellow of the American Society of Agronomy. Active in various professional organizations, he has served on the American Society of Agronomy's Varietal Standardization and Registration Committee, on the advisory board for the National Soybean Crop Improvement Council and on the research committee for the Soybean Council of America.

As head of the Institute of Agriculture's Department of Agronomy and Plant Genetics Johnson succeeds Will M. Myers, who was appointed dean of International Programs at the University of Minnesota.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 15, 1964

To all counties
Immediate release

IN BRIEF.....

An expanding market has written the vital chapter in the postwar success story of U. S. soybeans. While U. S. soybean production has doubled in the past decade, reaching 701 million bushels in 1963, exports more than tripled in the same period, according to agricultural economist Reynold P. Dahl at the University of Minnesota. He points out in the current issue of Minnesota Farm Business Notes that the soybean equivalent of U. S. exports of soybeans, soybean oil, and soybean meal in 1962-63 totaled nearly two fifths of production.

* * * *

Guides for buying nitrogen: It's time to consider what kind of nitrogen fertilizer to use in sidedressing your corn. John MacGregor, soil scientist at the University of Minnesota, points out several factors to consider when buying nitrogen. First, figure what nitrogen is costing on a per pound basis. Nitrogen is sold as a solid, liquid, or a gas and the actual amount may vary from 16 to 82 percent. MacGregor also advises figuring your cost of application. Each form of nitrogen requires different equipment for application. Finally, estimate whether the equipment will be available at the time that you want it. According to MacGregor, nitrogen should be applied before July 1.

* * * *

If you have applied a preemergence herbicide and have had no rainfall, it may be a good idea to use some method of cultivation against weeds. An extension agronomist at the University of Minnesota, Harley Otto, says that you should not expect good results from preemergence herbicides if no rainfall has been received. Therefore, Otto suggests that you harrow, rotary hoe, or cultivate shallow to remove the weeds that are emerging. The University agronomist says the preemergence herbicides may still be effective if moisture is received later.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 15, 1964

To all counties
4-H NEWS
Immediate release

4-H'ERS SHARE
TALENTS IN
DISTRICT FEST

_____ County 4-H clubs will be represented at a district 4-H Share-
the-Fun festival July ___ at 8:00 p.m. in _____
(give town and building)

The show is open to the public free of charge.

(Use this paragraph to give names of participants, addresses and 4-H clubs
and briefly describe their act.)

Outstanding acts from county fun fests were selected for the district show,
according to Wayne Bath, associate state 4-H Club leader at the University of
Minnesota. The repertoire will include instrumental, vocal, dance and dramatic
numbers as well as original stunts and skits.

From each of Minnesota's six district events, 15 to 18 acts will be selected
for the state Share-the-Fun Festival held annually during the Minnesota State Fair.
Participants for both district and state festivals are chosen on the basis of their
performance, audience appeal, appearance and the ability to contribute to a
versatile program.

The program emphasis is not competitive, says Bath. Instead, the events are
designed to promote fun and fellowship for participants, encourage creativity, and
develop confidence and leadership as the 4-H'ers share their talents with others.

Share-the-Fun is jointly sponsored by the University of Minnesota Agricultural
Extension Service and Cargill, Inc.

-blk-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 15, 1964

To all counties
ATT: HOME AGENTS
Immediate release

CUES GIVEN TO
KEEP NYLON FROM
DISCOLORING

Have your white nylon garments discolored in the wash -- turned yellow or gray?
Are they wrinkled when you take them out of the dryer?

The answers to those problems lie in using proper laundry techniques, say extension clothing and home improvement specialists at the University of Minnesota.

Discoloration of white nylon fabrics may be the result of ineffective washing action, mixing of white and colored garments in the laundry or exposure to high temperatures. Ineffective washing action includes the use of insufficient or improper detergents; insufficient cleaning action and time; inefficient rinsing and use of hard water. Avoid washing white nylon with colored clothing, since it will quickly pick up any dye in the water.

Use of a moderate amount of bleaching agent -- chlorine or other bleach -- will help to restore the fabric to its original whiteness.

High washing and drying temperatures tend to set wrinkles in nylon clothing. Water temperatures of 105 to 120°F. are recommended. Higher temperatures may occasionally be desirable, but avoid temperatures above 140°F. In the dryer, use a cool setting. Most "wash and wear" or "delicate" settings are satisfactory. Be sure to remove nylon garments as soon as the drying cycle is completed; otherwise wrinkles may be set which even ironing cannot remove.

If it is necessary to iron a nylon garment, use a nylon or rayon setting -- no higher temperature than 275°F. Temperatures above 300°F. may cause glazing and shrinkage.

For complete satisfaction with nylon, the first step is to make sure you have a completely launderable garment when you buy. Check seams to see that they are wide, smooth and flat. Decorations and trimming should be firmly attached and colorfast. In men's and boys' coats and jackets, lining should be washable as well as colorfast.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 15, 1964

To all counties
Immediate release

AGRONOMISTS STUDY
SORGHUM PRODUCTION

Technology has made sorghum adaptable to areas in southern Minnesota, and current research is helping spell out the management principles for this crop.

Annual weeds are the biggest problem but they can be controlled by herbicides. Therefore, row spacings are not limited by cultivation equipment, and variety of spacings are possible when using herbicides.

With these facts in mind, agronomists at the University of Minnesota conducted trials over a three year period to determine the effect of various row spacings and plant populations.

In trials at Waseca, Lamberton, and Morris, they compared 10, 20, 30, and 40 inch rows, each planted with 78,408, 156,816, and 313,632 seeds per acre.

Yields increased as rows narrowed from 40 inches to 10 inches. The 10 inch rows outyielded the 40 inch rows by 1,277 pounds.

The percent moisture in the panicle tended to increase as the rows got narrower in the Lamberton and Waseca trials. However, the reverse was noticed at Morris. The panicle is the flowering cluster of the plant.

The agronomists found that the percent grain per panicle, seed weight, bushel weight, and plant height decreased in the narrower rows. There was a greater number of seeds per panicle and more lodging in the narrow rows than in the wide rows.

Plant populations apparently had little effect on yield, bushel weight, plant height, and date of heading. Percent moisture in the panicle, seed weight, and number of seeds per panicle tended to decrease as populations increased. Lodging tended to increase under the heavier populations.

-more-

add 1 - agronomists study

When rows narrowed and populations decreased, a greater percentage of seeds established plants and produced panicles. The agronomists feel that this is due to decreased intra-row competition.

The agronomists suggest that medium high populations be used rather than low populations. They base this suggestion on the lack of effect of populations on yield and the fact that high populations result in lower panicle moisture.

Also, higher populations will tend to reduce gaps in stands and provide more competition against the weeds.

The agronomists state, however, that extra seed is required and more lodging may occur in the higher populations.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 15, 1964

To all counties
Immediate release

CATTLE INHERITANCE
AND ENVIRONMENT:
NEW LIGHT ON
AN OLD ISSUE

It's an old question about livestock performance in general, and for dairy cattle in particular.

Which has the greater impact on performance--inheritance or environmental factors? Is dairy production tied more closely to breeding, or to herd management?

A University of Minnesota dairy scientist, Charles Young, says research data from around the nation and the world indicate that with milk cows, only about 10 percent of the difference between herd averages is due to genetic differences.

But this is not the same as saying breeding is only a tenth as important as feeding and management. What it does mean is that dairymen have been more successful in improving management than they have in improving breeding.

Far from being unimportant, good breeding is simply more difficult to come by, Young says. It takes more than work, knowledge and desire to develop a genetically superior herd.

Dairymen who have seriously tried to improve production through management and feeding have been remarkably successful. On the other hand, dairymen who have tried to breed better cattle have often fared no better than those who pretended to know nothing about genetics and breeding.

Old lady luck has played a major role in breeding--but luck is not generally so helpful in management.

On what evidence do scientists say 10 percent of herd performance is due to genetic differences?

-more-

add 1 - cattle inheritance, environment

One type of study is the carefully controlled experiment. In New Zealand, researchers selected 20 higher producing herds and 20 lower producing herds. All were Jersey cattle. During each of three years, two heifer calves from major sires and average cows within each of the 40 herds went to an experiment station where they were all handled under comparable environmental conditions.

Heifers that stayed in the "high" herds produced 1,880 pounds more milk and 121 pounds more fat yearly than heifers kept in the lower producing herds. What happened to heifers that went to the station?

The results were revealing. Heifers brought in from high herds averaged the same in amount of milk produced in a year as cows from the low herds. About the only difference was that heifers from higher producing herds produced 12 pounds more fat.

Apparently, all difference in milk yield and about 90 percent of the differences in fat yield were eliminated through putting heifers in comparable environmental conditions.

During the same research period, the station sent identical twins out to the same herds that had sent heifers in. One member of a twin pair would go to a high producing herd, the other to a low herd.

Results here were much in line with other findings. Members of twin pairs that went to higher producing herds produced an average of 1726 pounds more milk and 98 pounds more fat than their twin sisters placed in low producing herds.

The New Zealand research men concluded that the genetic difference between the average of animals in the two groups of herds was quite small. For fat production, they figured that about 19 percent was apparently due to genetic difference.

Another experiment, this one using fraternal twins, was conducted in England. Results were gathered from 24 pairs of twins (Holsteins, Ayrshires, Milking Shorthorns) which were split, with one member going to a high producing herd, the other to a low producing herd.

add 2 - cattle inheritance, environment

In the English study, twins in high herds produced 1,630 pounds more milk than twins in low herds. This difference is apparently due to environment.

The English researchers used these twins to study differences in the herds as a whole. The heifers in the high herds produced 2,130 pounds more than heifers in low herds. The difference for the twins placed in these herds was 1,630, which subtracted from 2,130 leaves 500 pounds, which can be said to be due to genetic differences.

This 500 pounds represents about 23 percent of the total difference between averages for the two groups of herds.

Another research approach to the genetics-vs.-environment question is to analyze herd effects where cows are either unrelated or related and estimate the importance of each factor through statistical measures.

Still another approach is to analyze effects of sires that have been used in more than one herd.

A good deal of research involving these techniques has been done in Iowa, and the results tend to fit with the kind of findings reported in New Zealand and England. One Iowa study, involving 2,903 Holstein heifers and 735 of their dams, indicated that 6.5 percent of the difference between herds for both milk and fat yield is genetic when the analysis is done within a given year.

Studying effects of sires used in different herds, Iowa researchers estimated that 14 percent of herd differences for Jerseys and 10 percent for Holsteins were due to genetic differences.

As a result of such research, Young says, .10 has been established as the fraction of differences between herd averages due to genetic differences. The U. S. Department of Agriculture uses this figure in sire evaluation.

Yet, Young cautions that .10 is an average figure, and will not be very accurate in many cases. There are probably cases where all difference between two herds is genetic. And there may be cases where a herd with low production is genetically superior to one with a much higher average.

add 3 - cattle inheritance, environment

But even where the 10 percent figure holds, it can mean great improvement in a dairy herd. Young says a dairyman using artificial breeding from bull studs having sound young sire sampling programs, should improve his herd genetically by at least 1 percent yearly. Starting with cows averaging 12,000 pounds at the start, this would mean a genetic improvement of 1,200 pounds per cow over a 10-year period.

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Department of Information
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University of Minnesota
St. Paul 55101 -- Tel. 647-3205
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Immediate release

BEST STATE 4-H TRACTOR DRIVER TO BE NAMED NEXT WEEK

Eighteen 4-H tractor drivers, each a winner in his county, will vie next week for top honors in the State 4-H Tractor Operators' Contest, Stanley Meinen, assistant State 4-H Club leader at the University of Minnesota, announced today.

Scheduled during the State 4-H Junior Leadership Conference, the event will include a driving test, to be given on Machinery Hill of the State Fair Grounds Wednesday, June 24, at 8 a.m., and a written test Thursday morning on the University's St. Paul Campus. Participants will also hear a talk on safety by Glen Anderson, Group Health, Inc., St. Paul, and on careers in agricultural engineering by Evan R. Allred, professor of agricultural engineering at the University of Minnesota.

The winning operator will represent the state in the Western U. S. 4-H Tractor Operators' Contest at New Mexico State University, Las Cruces, Oct. 4-6. He will receive an expense-paid trip to the regional event and other awards from American Oil Foundation.

Taking part in the state tractor driving event will be these county winners: Vernon Backstrom, 15, Aitkin; Lowell Perry, 18, St. Cloud; James Hollerich, 16, Garden City; David Janni, 17, New Ulm; Marvin Jensen, 16, Montevideo; Ronald McCoy, 16, Cannon Falls; Curtis Thuman, 16, Goodhue; Jerry Abramowski, 16, Bellingham; Ralph Stassen, 16, Taunton; Larry Stromberg, 16, Elmore; Kenneth Schoenfelder, 15, Rochester; Ronnie Wasvick, 18, Fergus Falls; Gary Skibicki, 17, Goodridge; Dick Fields, 16, Jasper; Donald Christen, 18, Albany; Gerald Kottschade, 16, Kellogg; David Trout, 17, Wadena; and Richard Fastenau, 17, St. James.

Each contestant will demonstrate his knowledge and skill in servicing and operating a tractor. Driving skill and safety will be based on handling a tractor with a two-wheel trailer and then with a four-wheel wagon attached. Knowledge of tractor care, mechanics and safety will be tested by a tractor checkup and the written quiz.

The 4-H tractor operators will be working for the lowest score rather than the highest. Penalty points are assessed each contestant for unsafe procedures, excessive time requirements, quiz questions missed and improper checking and driving procedures.

The tractor operators' contest, conducted by the University of Minnesota Agricultural Extension Service, is only one phase of the 4-H tractor project, Meinen says. Throughout the year some 1200 4-H'ers in the state have been learning care and maintenance of tractors and other farm machinery through meetings and clinics.

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64-152-jbn

Department of Information
and Agricultural Journalism
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University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 16, 1964

Immediate release

FISHING--BIG BUSINESS IN MINNESOTA

One hundred million dollars! That's the total annual cost for fishing in Minnesota, and it's not a fisherman's story.

Thomas Waters and Lloyd Smith, Jr., from the Department of Entomology, Fisheries, and Wildlife at the University of Minnesota say Minnesota fishermen spend about \$70 million dollars each year. The remainder comes from nonresidents.

The average fisherman will catch about 17 pounds of fish each year. Walleye makes up about 30 percent of his catch. If you're average, you'll go fishing 10 times each year and bring home some fish 70 percent of the time.

Of Minnesota's legendary 10,000 lakes, about 3,000 can be classed as good fishing lakes. In addition, there are nearly 2,000 miles of trout streams and many warm-water fisheries in our larger rivers.

Minnesota has three groups of small inland lakes. The group from Mille Lacs northward to Leech Lake is noted for small, weedy bass and panfish. The group between the north shore of Lake Superior and the Canadian border is famous for lake trout, walleyes and smallmouth bass. This area is also excellent canoe country. In the lakes of south and southwestern Minnesota, techniques of fishery management are often tested.

The large inland lakes include Mille Lacs, Leech, Cass, Winnibigoshish, Upper and Lower Red Lakes and Lake of the Woods. Walleye is the main catch in these lakes.

Waters and Smith point out two trout stream areas in Minnesota. The northern streams run into Lake Superior along the North Shore and the other group lies in the southeastern corner of the state.

Minnesota's larger rivers, mainly Minnesota, Mississippi and St. Croix, offer good catches of walleye, northern pike and smallmouth bass. Certain fishes are found in the Mississippi and St. Croix that are not found in any other waters in Minnesota--white bass, channel catfish, sturgeon and American eel.

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 16, 1964

Immediate release

JAMES SWAN NAMED EXTENSION SOILS SPECIALIST AT UM

James B. Swan, Madison, Wis., has been named extension soils specialist in the University of Minnesota's Institute of Agriculture.

He will join the staff July 1, taking part in soil science phases of the Agricultural Extension Service's educational program throughout the state.

His specialties have to do with the physical aspects of soils, such as soil moisture and temperature, tillage and water resources.

Originally from Illinois, Swan this year is receiving his Ph. D. in soil physics at the University of Wisconsin. He received his B. S. with high honors in 1955 and his M. S. in 1959, both from the University of Illinois.

Swan's appointment was approved by the University Board of Regents at its recent meeting.

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64-154-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 16, 1964

Immediate release

4-H YOUTHS TO STATE LEADERSHIP CONFERENCE

Nearly 800 young people will attend the 44th State 4-H Junior Leadership Conference June 23-26 on the State Fair Grounds and the University of Minnesota's St. Paul Campus.

The delegates, representing every county in Minnesota, were selected for their achievements in 4-H club work and their contributions through the junior leadership project. They range in age from 15 to 20.

Purpose of the conference, according to Leonard Harkness, state 4-H Club leader, is to improve the leadership skills of the junior leaders and to help them understand their role in their clubs.

Following a welcome by Harkness, LaVern Freeh, director of Agricultural Short Courses at the University, will speak on "Leadership--Opportunity and Obligation" at the opening assembly in Coffey Hall Auditorium at 1:45 Tuesday afternoon, June 23.

John H. Furbay, a national adviser to the Civil Air Patrol, U. S. Air Force and a permanent member of the staff of the World Seminar on Education in Geneva, Switzerland, will address the young people at the Wednesday morning (June 24) assembly on "Countdown for Tomorrow."

Workshops are scheduled for the 4-H'ers Wednesday afternoon, and on Thursday University students representing various political groups on campus will discuss issues of the 1964 election.

Other events will include tours of the University and Twin Cities colleges and vocational schools to familiarize 4-H'ers with opportunities in various careers, a hootenanny, attendance at the Minnesota Twins game, a chicken barbecue at Como Park and the annual banquet.

Slated for the final assembly are the installation of new state federation officers, the election of the 1965 continuation committee, and the presentation of a certificate to the winner of the 4-H Tractor Operators' Contest.

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64-153-jbn

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101--Tel. 647-3205
June 18, 1964

Immediate release

DISTRICT 4-H SHARE-THE-FUN FESTIVALS SCHEDULED

Six 4-H district Share-the-Fun festivals have been scheduled for July.

They will be held as follows: July 7, State School, Owatonna; July 8, High School Auditorium, Slayton; July 9, High School Auditorium, Buffalo; July 14, University of Minnesota, Morris; July 15, High School Auditorium, Thief River Falls; July 16, State School, Brainerd. All programs start at 8 p.m. Participants register at 2:30 p.m., have a dress rehearsal at 3 p.m. and dinner at 6:30 p.m.

Boys and girls who display their talents at the district events were chosen from county Share-the-Fun shows. They represent nearly every county in the state. The number appearing at each festival ranges from approximately 30 to more than 100. The acts will include instrumental, vocal, dramatic and novelty numbers, pantomime, ballet, puppet show, baton twirling, as well as folk dancing, skits and hootenannies.

From these programs 15 to 18 acts will be chosen for the state Share-the-Fun Festival held during the Minnesota State Fair, according to Wayne Bath, associate state 4-H leader at the University of Minnesota, in charge of the district and state contests. Participants are chosen on the basis of their performance, audience appeal and appearance and their ability to contribute to a well rounded program.

Share-the-Fun festivals are sponsored by the University of Minnesota Agricultural Extension Service and Cargill, Inc. Purpose of the program is to encourage creativeness, develop confidence and promote fun and fellowship among 4-H'ers, Bath says.

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64-156-jbn

Department of Information
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University of Minnesota
St. Paul 55101--Tel. 647-3205
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Immediate release

LANDSCAPING SUGGESTIONS GIVEN IN U PUBLICATION

What kind of shrubs will do well on the shady side of the house? What small trees or large shrubs are recommended for sandy soil?

These are among numerous questions on woody plants that are answered in a newly revised bulletin, Landscaping Your Home, published by the University of Minnesota's Agricultural Extension Service. Author of the publication is C. Gustav Hard, extension horticulturist at the University.

In a section called "Woody Plants for Minnesota" Hard lists trees and shrubs adapted to Minnesota and suitable for lawn specimens, for screens, for border, foundation or background plantings, for hedges and for a variety of conditions. Many gardeners will be interested in the listing of woody plants that attract birds.

Main purpose of the publication is to provide the amateur gardener with information that will lead to a functional, attractive landscape setting. The personality and needs of the family, the lay of the lot and the architecture of the home are all significant in determining the design, Hard says. He gives detailed suggestions for planning the landscape design, beginning the planting and using the landscape for family living.

Copies of Extension Bulletin 283, Landscaping Your Home, are available free of charge from Bulletin Room, Institute of Agriculture, University of Minnesota, St. Paul, Minn. 55101.

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Department of Information
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Immediate release

PROF. A. J. SCHWANTES RETIRES FROM UNIVERSITY

A. J. Schwantes, head of the Department of Agricultural Engineering at the University of Minnesota since 1940, will retire July 1.

Schwantes, a teacher and researcher in farm power and machinery, has guided the development of a college professional curriculum for agricultural engineers and has stimulated a shift in research toward more intensive study of theoretical principles which have implications for a variety of agricultural problems.

He joined the University staff in 1921 to teach and do extension work in land clearing demonstrations. These efforts continued until the late 1920's, when he was put in charge of farm power and machinery.

Among his early research efforts were some 60 separate tests which Schwantes and his colleagues conducted on design, efficiency and use of the combine harvester.

He was an intensive student of the shift from animal to mechanical power in agriculture. During the 1930's, Schwantes, in cooperation with agricultural economists, did a number of studies on tractor design and efficiency--including fuel consumption, use of tractors of different horsepower ratings, and cost of operation.

(more)

add 1--A.J. Schwantes retires

He studied draft requirements of plows, in relation to plow depth and speed.

While earlier research was based largely on observations of farm machinery under operating conditions, Schwantes led the department in later years in a trend to more fundamental study of engineering problems in terms of theoretical principles.

He played a key role in development of the Department's professional curriculum, whose first graduates received their degrees in 1930.

Developed to meet the employment needs of changing times, the curriculum is conducted jointly with the Institute of Technology and has been fully accredited since before World War II. The more than 400 students in the program over the years have met with abundant job opportunities in equipment manufacturing, in distributing firms, and in public agencies.

In 1952-53, Schwantes served as an engineering adviser in farm mechanization in Egypt. A major concern in this tour was use of farm machinery stations, a principle which he believes might well be considered for many developing areas.

Such machinery stations, he says, make it possible for farmers with small private holdings to still have some of the mechanization advantages of large scale operations. In Egypt, for example, half the privately-owned farms are an acre or less.

Along with his teaching, research, and administrative activities, Schwantes has been active in farm safety education. He reasons that new developments in technology brought a need for measures to promote safer designs and an appreciation on the part of operators for the inherent dangers.

Schwantes has been chairman of the farm section of the Minnesota Safety Council, and has been a member of the board of directors and a president of the Farm Conference of the National Safety Council.

These efforts in farm safety involved cooperative work with industry to alter designs to improve safer operations. An example of improved safety design is the power takeoff shaft shield which does not interfere with usefulness of equipment.

(more)

add 2--A. J. Schwantes retires

With his experience in engineering education and research, Schwantes has a number of reflections on agricultural engineering of the future.

One trend he sees is more research attention to farmstead mechanization, particularly with electricity. "We are just beginning to really harness electrical power for farmstead operations," he says.

He sees immense possibilities for reducing labor and improving quality of farm products through farmstead engineering. He also believes that "the development of electronics will make available to agricultural engineers new tools, the applications of which are bound to change significantly the design and operation of farm equipment."

He suggests that with growing experience with mechanical equipment, its use, and durability, farmers will become different kinds of customers for this equipment.

"The farmer", Schwantes says, "is likely to become more discriminating in decisions to buy and replace equipment. More and more, farmers will purchase and dispose of machinery only as changes influence costs."

Professor Schwantes is a native of Wisconsin. He received his B. S. in agriculture from the University of Minnesota in 1925 and his M.S. in agricultural engineering from the University of Wisconsin in 1930.

His honors include a Meritorious Service Award by the Minnesota Safety Council in 1954 and an award for Outstanding Service by the National Safety Council in 1958. He was national president of the American Society of Agricultural Engineers in 1948-49, and served as chairman of the power and machinery division and of the education division of the society. He also served as chairman of the Minnesota section of the American Society for Engineering Education.

Professor and Mrs. Schwantes reside at 1815 Fairview Ave. North, in St. Paul.

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64-158-pjt

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 22, 1964

To all counties
Immediate release

EMBRYONIC MORTALITY CAUSES LOSSES

One type of death loss that doesn't always show up in the record books is cause for continuing concern among dairymen.

It's embryonic mortality, meaning the early death of the embryo or fertilized egg.

Embryonic mortality leads to the greatest loss through delaying new lactation periods. The dairyman ends up milking the cow longer during the low production--and therefore least profitable--phase of lactation.

Schultz points out two kinds of embryonic mortality. In one type, fertilization occurs, but the fertilized egg dies before it can interfere with the recurrence of the next heat period. These are known as the repeat breeders.

In the second type of embryonic mortality, there is fertilization, some development and growth, followed by death of the embryo. The period of growth and development has been long enough to interfere with the heat periods of the cow.

Before the cow can come in heat, she must reabsorb or expel the dead embryo, and the reproductive tract must return to the normal non-pregnant state. These cows have long extended heat periods.

Accurate breeding records are essential if one is to detect these problem cows, says Schultz.

He lists many causes for embryonic mortality. Brucellosis, vibriosis, trichomoniasis, and leptospirosis are infectious diseases causing fetal losses. Active programs are underway to eliminate these diseases.

-more-

add 1 - embryonic mortality

Aging or senility of the germ cell is another cause. The egg and sperm go through periods of youth, adulthood and senility, and these affect fertilization and survival of the fertilized egg. The dairyman must observe heat closely so his cows can be bred at the optimal time. If the egg or sperm cells are in the reproductive tract too long prior to fertilization, the fertilized egg may not be healthy enough to survive the early stages of development.

Genetics also influences the rate of embryonic mortality. Certain genetic defects will cause death of the embryo. Inbreeding tends to increase the incidence of lost embryos, too.

Schultz says abnormal uterine environments also cause early embryonic mortality. Examples are altered hormonal function, improper nutrition, and other factors not understood at the present time.

Schultz is presently determining the chemical composition of the internal fluids of normal and repeat breeder cows. When the normal internal environment is known, he will be able to study what factors will alter this environment and what effect the altered environment will have on the embryo.

To reduce the incidence of early embryonic mortality, Schultz makes some general recommendations at the present time:

- 1) Keep accurate breeding records.
- 2) Keep only the high fertility cows.
- 3) Breed cows at the proper time with the best semen available.
- 4) Maintain good herd health.
- 5) Provide cows with the proper nutrition levels.

Schultz says more specific recommendations will be made as work continues in this area.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 22, 1964

To all counties

Immediate release

FORESTERS STUDY
WOOD EXPANSION

Have a sticky door in your house?

Roland Gertjejansen, forest products engineer at the University of Minnesota, says this is caused by wood swelling in hot, humid weather.

He turns to the anatomy of wood to explain shrinking and swelling. Wood is composed of small fiber tracheids which are held together by lignin. These tracheids are like miniature drinking straws. They are hollow inside and have walls of cellulose.

In green wood, water is held in two ways. Some is held in the hollow part of the tracheids, and some is held in their cellulose walls. Gertjejansen says a green, red pine board three-fourth inches thick, 12 inches wide and 16 feet long would contain about 22 pounds or two and a half gallons of water. About one and a half gallons of water would be held in the hollow part of the tracheids and one gallon in the tracheid walls.

When the board is dried, it may or may not shrink, depending upon how much water is removed says Gertjejansen. The water held in the hollow portion of the tracheids will leave first. Virtually no shrinkage takes place when this water is removed. With further drying, shrinkage occurs as water begins to leave the fiber walls.

In the drying process, water is removed so the wood is more or less stabilized to the humidity conditions where it will be used. Wood for houses would be dried to the average humidity conditions of the normal home. This would hold shrinking and swelling to a minimum.

-more-

add 1 - one-way expansion

Gertjejansen says the dimensions of our pine board will change with the relative humidity. When going from a hot, humid, summer day to a cold, dry, winter day, the width will change about three-sixteenths of an inch.

Knowledge of wood shrinkage and expansion is valuable in construction work. For example, a sticky door could have been eliminated if the carpenter had only made an allowance for expansion during humid weather.

Materials are known that will swell wood more or less than water, and certain combinations of materials with water will swell wood more than either water or the material alone. Gertjejansen says as more knowledge is gained of these materials, there may be practical means of eliminating changes in dimension with changes in relative humidity.

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St. Paul, Minnesota 55101
June 22, 1964

To all counties
Immediate release
(For use no later
than June 27)

IN BRIEF.....

Corn rootworm eggs have started to hatch and may cause some trouble, especially on land which has been in corn for two or more years. But even where a soil insecticide wasn't used at planting time, some control is still possible, according to John Lofgren, extension entomologist at the University of Minnesota. To determine need for treatment, dig up some plants from around the field, and check the soil around the roots for whitish worms with dark heads. Treatment will probably pay if (1) there are 10 or more worms in the soil and on roots of each plant, or (2) if more than half the roots show tunneling by worms. Treatment now should be part of a lay-by cultivation. Use granular diazinon, Thimet, parathion or 4072 at 1 pound actual chemical per acre. Direct granules to the base of the stalks and cultivate soil over the insecticide.

* * * *

Farmstead mechanization is a growing area for research attention by agricultural engineers, according to A. J. Schwantes, retiring head of the department of agricultural engineering at the University of Minnesota. He believes farmers are just beginning to really harness electrical power for farmstead operations, both for reducing labor and for improving quality of farm products.

* * * *

A hundred million dollars--that's the annual expenditure for fishing in Minnesota, according to Thomas Waters and Lloyd Smith, Jr., fisheries researchers in the University's Institute of Agriculture. Of this outlay, about \$70 million comes from Minnesotans, the rest for nonresidents. The average fisherman? He goes fishing 10 times a year, brings home fish about 7 of those times, and catches 17 pounds in total.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 22, 1964

To all counties
Immediate release

ENTOMOLOGIST RECOMMENDS CONTROL
FOR POTATO LEAFHOPPERS

What crops does the potato leafhopper invade? You guessed wrong. It invades alfalfa in addition to potatoes.

John Lofgren, extension entomologist at the University of Minnesota, says damage caused by potato leafhopper is most severe when the first crop is cut early. These insects suck the sap out of the regrowth causing a yellowing of the foliage and a stunting of the plants.

Lofgren says that yields and quality can be saved if the second regrowth is treated when it is eight to 10 inches high. Treating with diazinon at one-half pound per acre or carbaryl(Sevin) at one pound per acre are effective control measures.

Lofgren says you must observe the recommended waiting periods between treatment and harvest. Check the labels on the container of the insecticide for these time periods.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 22, 1964

To all counties
4-H NEWS

(7th in a series on
teen-age career
exploration)

HORTICULTURE OFFERS
VARIETY OF CAREERS

Whether you prefer laboratory, desk or outdoors, there is a place for you in horticulture.

Horticulture means more than merely raising flowers and shrubs, says C. J. Weiser, associate professor of horticultural science at the University of Minnesota. Horticulture is the art and science of the growing, handling, processing and storing of fruits, vegetables and ornamental plants.

It is also one of the most rapidly developing industries in the world. And because there are more jobs available in horticulture than trained people to fill them, salaries are high in this field. Starting incomes for horticulture graduates average about \$5,800 a year, just as much as starting salaries in such fields as law or engineering.

Areas of horticulture in which a student can specialize are: fruits, vegetables, food handling and processing, landscaping, floriculture, arboriculture and turf and nursery management.

Young people enrolled in the 4-H gardening project may want to seriously explore the possibility of a career in horticulture.

Prospective horticulturists should have a strong curiosity and an interest in figuring things out. In high school they often excel in inductive subjects such as biology. A horticulturist generally likes the outdoors and the non-regimented existence associated with it.

Graduates in horticulture find careers in business, industry or agriculture. A horticulturist might choose a job as a garden magazine editor, landscape architect, orchard owner and grower, plant breeder, researcher in the United States or in foreign countries or as a technologist with food or agricultural chemical companies. He might manage a greenhouse, florist shop or garden store, or he might become a college or university professor of horticulture.

Young people interested in a horticultural career may obtain more information by writing to the Department of Horticultural Science, Institute of Agriculture, University of Minnesota, St. Paul, Minnesota 55101. A free 26-page brochure entitled Exploring Horticultural Science As Your Career -- is available on request.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 22, 1964

To all counties
ATT: HOME AGENTS
(last in a series
on laundering man-
made fibers)

WARM WATER
IS BEST FOR
WASHING RAYON

Immediate release

Read the directions on the hang tag on a rayon garment before you buy to be sure you are getting the ease of care you want.

Most rayons and rayon blends have good wash-wear properties, but a wash-wear fabric does not necessarily produce a wash-wear garment without proper styling and tailoring, say extension clothing specialists at the University of Minnesota; hence it's important to read and follow instructions carefully.

Here are some general directions to keep in mind:

. Use the warm water setting on the machine for cotton-rayon and rayon-polyester blends in wash-wear garments.

. For sheer rayon lingerie and for such fabrics as batistes and lawns, use the delicate cycle on the machine.

. Use low temperature and a minimum of agitation for throw rugs or bath mats with backing material.

. Handle rayon when it is wet more carefully than you would cotton or linen. It is weaker wet than dry.

. Tumble dry wash-wear rayon, rayon-cotton and rayon-polyester blend garments when possible. Line drying of wash-wear garments is acceptable, but tumble drying produces a superior overall appearance. A final cooling cycle is an aid to reduction of wrinkles.

Use of bleach on rayon garments depends on the finish. Chlorine bleaches can be safely and successfully used on rayon fiber. However, avoid chlorine bleaches when the rayon has a resin finish, unless the label says it is safe to use them.

Remove oily stains before washing resin-finished fabrics. Washing may set the stains permanently.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 23, 1964

Immediate release

FINAL PLANS BEING MADE FOR EXPERIMENT STATION FIELD DAYS

Final preparations are being completed for seven field days at branch experiment stations of the University of Minnesota's Institute of Agriculture.

The field days will be at the Southwest Experiment Station, Lamberton, July 2; Southern School and Experiment Station, Waseca, July 7; Agricultural Research Station, Rosemount, July 8; West Central School and Experiment Station, Morris, July 9; Northwest School and Experiment Station, Crookston, July 14; North Central School and Experiment Station, Grand Rapids, July 23; and Northeast Experiment Station, Duluth, July 24.

Visitors will hear the latest ideas on soils and crops research at each field day. Tours through the variety trials will show the actual performance of different varieties when grown under the same conditions.

Weed control plots will show the effectiveness of different herbicides. At the plant pest clinic, specialists will identify diseased plants, insects and weeds brought in by the visitors.

(more)

add 1 -- field days

Waseca is featuring minimum tillage and a display of the latest minimum tillage equipment being used. Tours through the plots will compare conventional planting, wheel track planting, and methods of once-over planting. William Larson, minimum tillage authority from Iowa State University, and soil specialists from the University of Minnesota will be on hand to answer questions.

Soil structure plots at Waseca will compare fall vs. spring plowing and minimum vs. conventional tillage and its affect on the response of nitrogen.

At Lamberton visitors will tour the maximum yield plots which show the effect of different rates of fertilizer and plant populations. A tour through the phosphorous placement plots will show comparisons of band vs. broadcast applications on corn. The studies of nitrogen on continuous corn and soil compaction will also be explained.

Following the morning tours at Morris, a panel discussion will follow. Representatives from the departments of agricultural economics, biochemistry and agronomy at the University of Minnesota will discuss industrial crop uses, export possibilities and specialized cropping practices.

At the Rosemount field day, the newest crops and crop varieties will be seen in the test plots. Horse beans, crambe, mustard, rape, millet, safflower, false flax and oilseed radish are among crops to be seen. Several of these crops can be seen at the Crookston field day too.

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64-160-klb

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 23, 1964

*DO NOT RELEASE BEFORE *
*6 pm Thursday, June 25 *

MINNESOTANS HONORED AT 4-H CONFERENCE

Seven Minnesotans who have shown active interest in 4-H Club work were honored tonight (Thursday, June 25) at the 44th State 4-H Junior Leadership Conference banquet, held in Coffman Memorial Union at the University of Minnesota.

Recognition as "Friends of 4-H" went to three persons for their outstanding contributions to the Minnesota 4-H Club program. They are: Skuli H. Rutford, director emeritus of the Minnesota Cooperative Extension Service; Clifford Cairns, general manager, Wilson and Co., Albert Lea; Hadley Waring, Fullerton Lumber Co., Minneapolis.

Each was presented with a plaque and an honorary membership in the Minnesota Key Club, an organization of 4-H'ers having received the Key Award, one of the highest achievements in the club program.

Alumni recognition awards were presented to four former 4-H members whose accomplishments, following their club membership, exemplify effective community leadership, public service, service to 4-H Club work and success in their chosen careers.

The alumni honored were: Mrs. Ruth Gebert Nelson, Cushing; Betty Ann Malcolm, South St. Paul; Charles Simpson, Waterville; and Dr. F. W. Gehrman, Minnetonka. They received plaques from Olin Mathieson Chemical Corporation, Chemicals Division-Agricultural, Little Rock, Ark.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 23, 1964

Immediate release

RED LAKE COUNTY OSEDP DESCRIBES NEEDS FOR THE FUTURE

Self-analysis on a county-wide scale has become a central part of the pattern for social and economic therapy in some two dozen counties around Minnesota.

The analysis referred to here, usually called an Overall Social and Economic Development Plan (OSEDP), has been completed by about 20 of the state's 37 counties. The latest to complete such a report is Red Lake County in northwestern Minnesota.

The OSEDP arose through Red Lake's efforts in Rural Areas Development, in which an educational and organizational role is played by the Agricultural Extension Service of the University of Minnesota.

Elmo Skare is agricultural extension agent in Red Lake County. He coordinated efforts of scores of local people in writing the report. The OSEDP starts with the assumption that recognizing the problem is a first step in redevelopment.

Through the pages of the report there unfolds a story of every phase of county activity--agriculture; health, education and welfare; industry and marketing; recreation and tourism; finance and banking; transportation; and forestry.

Red Lake County has its base in agriculture and the report sees a trend toward larger family units. This means a decline in population which will have a severe social and economic impact on the rural political, educational and business centers.

Right now extensive farming, with high land use and low labor requirements, is predominant. If the loss of population is to be stemmed, the report says, it will hinge on establishment of a market for intensive crops such as sugar beets, field peas and sweet corn which require a high labor and low land use balance.

The median family income in the county is \$4,045, about \$1400 dollars below the median for the state. Even more discouraging is the 33 percent of the families which are below the \$3000 level, set by the President's report as the cutoff for those considered poverty stricken. This, plus the 22 percent whose family income is below \$2000 per year, indicates the job of economic revival will be a long uphill battle.

(more)

add 1 -- Red Lake County OSEDP

Despite these statistics the people of the county are determined that there will be an improvement.

The report calls for lower credit restrictions to young farmers who meet qualifications. This will, the committee hopes, offset the loss of a young and aggressive labor force which is now migrating to the urban areas.

Among the many other recommendations offered in this lengthy volume are: build water control structures which could assist industry, strengthen county extension programs in adult education and provide greater educational efforts in modern farm techniques.

School dropout is a problem in this county as elsewhere in this highly technological era. A special program is called for to assist those who leave school and to provide counseling and special courses for low achievers and those in need of remedial reading and speech therapy.

A note of moderation is felt throughout the report. These people are not asking for massive financial support by outside agencies and neither are they supporting a hasty search for "new businesses." They are calling for education and understanding of the problem.

Of course they want to obtain new industry for the area. And they do have advantages to offer for the mixed light industry they hope to interest.

For example they have a large labor force that is willing to work. They have lower wage levels, due to the lower cost of living, which could work an advantage for any new business ventures. And in some instances they have natural resources to offer which would facilitate certain new industry.

If the theme of the report were boiled down to a short sentence it might be: "We've fallen behind the times and it's up to us to help ourselves to catch up."

The Red Lake County OSEDP, its writers feel, is a first step in the right direction which should allow each resident of the county, now and in the future, to profit by its forthrightness.

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 25, 1964

Immediate release

4-H FEDERATION ELECTS STATE OFFICERS

A 17-year old girl from Warroad was elected today (June 25) to head an organization of some 55,000 Minnesota 4-H Club members.

She is Joyce Thompson, elected president of the State 4-H Federation during the 44th State Junior Leadership Conference held on the University of Minnesota's St. Paul Campus.

Other officers elected by voting delegates from every county in Minnesota were: Tom Murphy, 17, Winnebago, vice-president; Pamela Stearn, 18, Sanborn, secretary; and Ron Meiss, 17, Hancock, treasurer.

All officers have been active in eight or more years of 4-H club work.

Joyce, a nine-year member, was Roseau County's voting delegate to the 1963 Junior Leadership Conference where she was a candidate for Federation treasurer. For five years she was named to the Roseau County Dress Revue Court of Honor. Joyce was the 1963 grand champion entomology exhibitor in her county and has also exhibited three times at the State Fair.

An honor graduate and salutatorian of her 1964 graduating class, Joyce has a scholarship to Bemidji State College where she will major in elementary education and music. Other titles she holds include outstanding musician of Roseau County, Roseau County dairy princess and the state winner of the D.A.R. Good Citizenship Contest.

Chosen the outstanding boy in Faribault County, Tom is a senior at Winnebago High School with plans to study animal husbandry at the University of Minnesota. He has been awarded three State Fair trips to demonstrate and exhibit livestock, has participated in the 4-H Junior Livestock Show and was a delegate to the State 4-H Conservation Camp.

(more)

add 1 -- 4-H Federation officers

Pam, who will enter the University of Minnesota next fall in home economics, already holds a major 4-H office as president of the Redwood County 4-H Federation. She attended the Governor's Conference this spring and is a three-time blue ribbon winner for State Fair demonstrations. In 1963 Pam was selected for the Court of Honor at the State Fair Dress Revue and attended the Junior Leadership Conference as a voting delegate.

Pam participated in more than 20 different activities at Sanborn High School, including regional and state music competitions.

Of Ron's 4-H experiences, he regards his demonstration work as having been most valuable and electricity and tractor his most challenging projects. The Stevens County youth has exhibited twice at the State Fair.

Ron has spent five years in his high school band and chorus, will participate in a district 4-H Share-the-Fun festival in July and plans to enter the University of Minnesota at Morris next fall to major in music education.

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64-165-blk

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 25, 1964

Immediate release

SCHOOL OF AGRICULTURE REUNIONS SCHEDULED

Alumni members and former students in the School of Agriculture on the St. Paul Campus will gather for three district reunions during the month of July.

The reunions are for former students of the School of Agriculture, which was in operation from 1888 until 1960 on the St. Paul Campus of the University of Minnesota. Representatives of the School of Agriculture Alumni Association along with a staff member of the College of Agriculture, Forestry, and Home Economics will be present at each meeting.

The reunion for District I, Southeastern Minnesota will be July 12 at Silver Lake Park on the north edge of Rochester off Broadway Avenue. Representing the Board of Directors of the School of Agriculture Alumni Association there will be William Dankers, University extension economist, Al Mayers and Miss Virginia Barwise, both of St. Paul. Officers of the District Association are Lester Howat, Lake City, president; Vincent Heise, Lake City, vice-president; Mrs. William Beiser, Route 2, Glenville, secretary-treasurer.

The reunion for District II, Southwestern Minnesota will be July 19 at the Sportsman Club, 4 miles south of Gibbon. Representatives of the School of Agriculture Alumni Association will be Kenneth Law, Hastings, member of the Board of Directors and Truman Nodland, staff member, St. Paul Campus, president of the School of Agriculture Alumni Association. Officers of District II Association are Cletus Frant, Lafayette, president; Henry Lippman, Gibbon, vice-president; and Kenneth Havemeier, Fairfax, secretary-treasurer.

The reunion for District III, Northern Minnesota will be July 26 at the Lake Koronis Community Park, south of Paynesville on the south shore of the lake. Representatives of the School of Agriculture Alumni Association will be Victor Dose, St. Paul, past president of the association and Miss Martha Hawkins, Minneapolis, secretary-treasurer/ ^{of the School of Agriculture Alumni Association.} Officers of District II are Glenn Pearson, Paynesville, president; Richard Eckman, Kimball, vice-president; and Peter Borsheim, Paynesville, secretary-treasurer.

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64-162

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 647-3205
June 25, 1964

Immediate release

ROSEMOUNT AGRICULTURAL EXPERIMENT STATION PLANS FOR VISITORS

Hundreds of visitors are expected to attend a field day at the Rosemount Agricultural Experiment Station, July 8.

Al Heine, superintendent of the Rosemount Station, says visitors will see the latest results in crops, soils and livestock research.

Visitors will tour hundreds of acres of the varietal trial plots, where many varieties of the same crop are being compared when under similar growing conditions. Horse beans, false flax, vetch, crambe and oilseed radish are some of the new crops that can be seen.

Tours of the weed control plots will show the effectiveness of various herbicides. Agronomist Richard Behrens from the University of Minnesota will guide visitors through the plots.

Heine asks visitors to bring specimens of problem weeds, insects and diseased plants, which will be identified at a plant pest clinic.

Specialists from the University of Minnesota will demonstrate the safe handling of poison. A civil defense exhibit will be on the grounds too. The garden and forestry projects will be of special interest to the ladies.

Visitors will be able to tour the dairy, swine, poultry, sheep and agricultural engineering farms too.

Tours begin at 9:30 and continue until 2:30.

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64-163-krs

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul 55101 -- Tel. 6473205
June 25, 1964

Immediate release

YOUTH WINS STATE 4-H TRACTOR OPERATORS' CONTEST

State winner in the 4-H Tractor Operators' Contest is Lowell Perry, 18, St. Cloud.

He won the state championship by proving his skill in tractor operation and maintenance. He competed with 18 other county winners in a tractor driving test Wednesday (June 24) on the State Fair Grounds and in a written quiz Thursday (June 25) on the University of Minnesota's St. Paul Campus. Lowell has been in 4-H work for three years and in the tractor project for two.

His winning score makes him eligible to compete with 22 other state champions at the Western United States 4-H Tractor Operators' Contest at New Mexico State University Oct. 4-6. His award of an expense-paid trip to the regional event will be provided by the American Oil Foundation. Jerry Kottschade, Kellogg, took second place and Kenneth Schoenfelder, Rochester, finished third. Other blue ribbon winners were Ronald Merkel, Spring Valley; David Trout, Wadena; Richard Fostenau, St. James; and Dick Fields, Jasper.

Each contestant performed a daily check-up on the tractor and demonstrated his driving skills with a two- and a four-wheel wagon attached to the tractor. The written quiz was on safety, mechanics and other aspects of tractor care. Penalty points were deducted for violation of safety rules, faulty operation and check up and incorrect quiz answers.

The operators' contest and the 4-H tractor program are conducted by the University of Minnesota Agricultural Extension Service. More than 1200 members are enrolled in the 4-H tractor program in Minnesota.

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 29, 1964

To all counties
ATT: HOME AGENTS
Immediate release

BEEF, PLUMS
HEAD LIST OF
JULY PLENTIFULS

Consumers can look for an abundance of beef and of fresh plums at attractive prices during July.

These two items lead the U. S. Department of Agriculture's list of plentiful foods. In generous supply also will be turkey, canned pink salmon, watermelon, early summer vegetables and vegetable fats and oils -- all of them good buys. From this list homemakers can whip up a variety of summertime menus -- cold or hot.

Beef supplies this summer will continue at record levels, according to USDA economists. Food markets are featuring a variety of high quality cuts at the lowest prices in several years. You should have no trouble getting Choice grade steaks for Fourth of July cookouts.

Turkey is another possibility for your Fourth of July picnic. Farm marketings of tender young turkeys are as much as 10 percent greater than a year ago.

Stocks of canned pink salmon remain particularly high. Salmon has many possibilities for summer meals -- as a loaf, casserole, salad or sandwiches.

One of the most bountiful harvests this summer will be fresh, tree-ripened plums. California has a crop 35 percent above average. Larger than usual plantings of watermelons should yield ample quantities of ripe, juicy melons for July eating. Both these fruits are ready-made desserts for July picnics.

Local supplies of garden-fresh summer vegetables will vary from market to market -- but as the month progresses, look for locally grown green beans, tomatoes lettuce and sweet corn.

For your homemade salad dressings and many other cooking uses, supplies of vegetable fats and oils will be plentiful.

-jbn-

Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 29, 1964

HOME ECONOMICS,
BUSINESS OFFER
EXCITING CAREERS

To all counties

4-H NEWS

(8th in a series on
teen-age career
exploration)

Immediate release

Never has there been a better time for home economists to find employment in the business field, says Roxana Ford, assistant director of the School of Home Economics at the University of Minnesota.

The combination of home economics and business offers stimulating and challenging varied careers to the person with creative ideas, a flair for promotion and a desire to meet people. Opportunities are abundant for those willing to go where the jobs are.

The home economist in business represents the homemaker's point of view to her employer. In turn she helps him develop his product and presents it to the homemaker. Her approach is usually educational or promotional but she must be sales-minded as well.

Companies with which a business-trained home economist may select a career include:

*Retail stores where opportunities are wide open and there is no "typical day." A home economist in retailing may work as an interior decorator and advise in the selection of furnishings. She might work with the store's advertising, display, or promotion departments. Perhaps she'll start out in an executive training program and work up to the position of buyer or fashion coordinator.

*Manufacturing companies whose home economists develop products and present new and interesting ways to use them. A woman in this field might travel as a company representative to schools, stores, clubs and national events, arranging promotional meetings for teachers, editors and others interested in the company's products. She might supervise fashion and food photography or the production of educational films and TV commercials. Possibly her career will be with a clothing, textile or pattern manufacturer.

add 1 - home economics careers

*Public utility companies where the home economist demonstrates the use of new equipment and helps plan laundry and kitchen areas. Perhaps she may answer homemakers' letters and phone inquiries and convey their desires and expectations to her company.

Specialization in an area of home economics such as clothing and textiles, food and nutrition or related or applied art provides a desirable background for these business careers. Part-time and summer jobs that provide selling experience are also strongly recommended.

For further information on careers in home economics and business and on college preparation for this expanding and multi-sided field, write to the School of Home Economics, University of Minnesota, St. Paul, Minnesota 55101.

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Department of Information
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 29, 1964

To all counties
Immediate release

IN BRIEF.....

Self-analysis on a county-wide scale has become a central part of the pattern for social and economic study around Minnesota. As part of their efforts in rural areas development, some 20 of the state's 87 counties have completed Overall Social and Economic Development Plans (OSED's). The latest to finish such reports are Red Lake, Aitkin, and Mahnommen counties. In many of these counties, scores of local people, sitting on committees in agriculture, industry and marketing, health-education-welfare, recreation, finance and other areas have written these reports. The University of Minnesota Agricultural Extension Service plays an educational and initiating role in these activities.

* * * *

Face flies on cattle: They can be controlled by spraying a material called DDVP to the cow's face. According to extension entomologist John Lofgren at the University of Minnesota, the solution can be mixed at home. Or you can use a one to two percent cidrin solution.

* * * *

Water--A vital Minnesota resource--is the subject of 15 articles in the current issue of Minnesota Farm and Home Science, a University of Minnesota Agricultural Experiment Station publication. One of the articles, by soil climatologist D. B. Baker, points out that water use today can be described only as "luxury" consumption. Minnesota's 14,000 lakes present a deceiving illusion of an area abundant in water. But lakes and rivers do not supply moisture to the state, as many authors in Farm and Home Science state. In terms of water available for consumption, Minnesota ranks below about three-fourths of the states. And water, of course, is vital to the state's economy.

* * * *

Field days are in final planning stages at UM branch experiment stations. They're set for these July dates: 2, Lamberton; 7, Waseca; 8, Rosemount; 9, Morris; 14, Crookston; 23, Grand Rapids; and 24, Duluth. The public is invited to all these events. They will feature crop variety trials, results of field management studies, and livestock research.

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Department of Information and
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Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 29, 1964

To all counties
Immediate release

HAY STORAGE
BRINGS DANGER
OF BARN FIRES

A temperature check deep inside that first crop hay may avert a disastrous fire in many Minnesota barns.

With most first crop hay already in the barn, and the second crop near the cutting stage, many farmers are facing some danger from spontaneous combustion in hay that was put in the barn while too damp.

Some barns may already have heating hay, according to Jim Justin, extension agronomist at the University of Minnesota.

Justin has some advice for checking hay temperature. He explains that good hay normally retains its green color at temperatures well below 120 degrees. At 120 degrees or slightly higher, hay will lose its color and some of its feed value. At 150 it turns dark brown, takes on the odor of cured tobacco and has very low nutritive value.

Once the temperature goes above 150 degrees, the hay will bear close watching. At 190 the hay is reaching the danger point. It should then be soaked with water and removed from storage.

At about 230 degrees gases develop and fire can start with explosive force.

How can you check the temperature? Most thermometers do not record temperatures high enough for this job. But Justin suggests that a one-half inch rod can be used as a simple tester.

He suggests breaking the rod into sections 4 or 5 feet long. Shove the rod into the hay and leave it for 10 minutes. As you pull the rod out, keep touching it and check for the hot spots.

-more-

Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 29, 1964

To all counties
Immediate release

MANAGEMENT AIDS
FEED EFFICIENCY
IN POULTRY FLOCK

Careful management can help cut poultry feed costs--the major expense in a poultry operation.

D.C. Snetsinger, poultry scientist at the University of Minnesota, says feed efficiency (pounds of feed per pound of gain) can be improved by:

- 1) decreasing the feed intake while holding gains constant,
- 2) by increasing gains while holding feed constant, or
- 3) by a simultaneous decrease in feed and an increase in gains.

Snetsinger says birds that are gaining rapidly or hens that are laying heavily will have the best feed efficiencies. These birds are using more of their feed intake for production and less for maintenance, compared with slow gainers or low producers.

Since feed intake and gain make up the feed efficiency ratio, anything that can be done to improve either will increase feed efficiency of your flock.

Just what can be done to increase the gain part of the ratio? Snetsinger says installing proper lighting and breaking up broody hens as quickly as possible will increase egg production. The eventual adoption of a high producing small-bodied bird will also help.

In a broiler operation, good management and a fast-gaining strain are necessary for peak efficiency.

On the other half of the ratio, several things can be done. Ration formulation is one of the easiest ways to increase feed efficiency. By formulating a ration with a high nutrient density (a large quantity of nutrients per pound of feed), you decrease the pounds of feed required to produce a pound of gain. This is practical, up to a certain point, says Snetsinger.

add 1 - management aids

Under practical conditions, 24 pound turkey toms have been produced with a feed conversion of less than three pounds of feed per pound of gain. The usual feed efficiency is four pounds of feed per pound of gain.

Snetsinger points out that rations must be properly balanced to meet the nutritional requirements of the birds. In a protein supplement-grain feeding program, grit is real important if the birds are to do an efficient job of converting the feed. Grit will enable the birds to fully utilize the nutrients in the grain and supplement portion of the feed.

Cutting down feed wastage, reducing the incidence of disease and eliminating rodents from the premises are important in increasing feed efficiency too.

Birds will waste nearly 10 to 15 percent of the feed in a nearly full trough-type feeder. From the same feeder two-thirds and half full, birds will waste seven to ten and two to four percent, respectively.

Snetsinger says the design and height of feeders will also affect feed wastage. Feeder troughs or pans should be slanted outward from the base, so feed beaked out by the birds will be caught. For older birds, feeders should be hung so the bird's back and the pan of the feeder are at the same level. This will cut down on feed contamination in addition to feed wastage.

Feed consumed by rodents? A couple of rats will consume as much as one turkey breeder hen. Rodents are also carriers of disease.

A healthy flock cannot be overemphasized says Snetsinger. If the full potential from your flock is to be realized, it must be free of disease.

Temperature will also affect the efficiency of your flock. Hot weather will decrease rates of gain and egg production, while cold weather will increase the feed required to maintain body temperatures.

Try to keep temperatures above 50 degrees Fahrenheit. But try, also to minimize the stress of very high temperatures.

Snetsinger says that all these methods may not be adaptable for use in your operation. However, some of these may be helpful in reducing your feed costs.

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Department of Information
and Agricultural Journalism
Institute of Agriculture
University of Minnesota
St. Paul, Minnesota 55101
June 29, 1964

To all counties

Immediate release

AGRONOMIST
STUDIES
FLAX SEED DEVELOPMENT

Ever wonder why your flax yields fluctuate from year to year? There are many reasons, including time of planting and weather.

USDA agronomist J. H. Ford at the University of Minnesota, studied the effect of weather at the time of flowering on the development of capsules, or the seed containing structures.

In 1958, Marine, Army, Redwood, and B 5128 were sown at four weekly intervals. During blooming, 100 flowers in each plot were marked at three different stages. In the 1959 trials, Marine was sown on six different dates, and 125 flowers from each planting were tagged at five successive stages of bloom.

Ford measured boll set (percentage of flowers forming capsules that remained on the plant until harvest), seeds per boll, and seed weight. The temperature and humidity at ground level were recorded during the blooming and seed-development periods of both years. In 1959, the soil moisture at the one and two foot levels was also recorded.

Ford found late sowing tended to reduce yield, test weight and the time required to reach maturity. In 1959, a 63 percent reduction in yield was noticed between the first and sixth date of sowing. Ford says sowing after the first week in May will reduce yield, test weight and the time required to reach maturity. This is magnified in St. Paul by the higher mid-summer temperatures than is common in most north-central flax growing areas.

Time of flower formation has a major influence on flax seed development. Boll set, seeds per boll and seed weight were all reduced as flowers were formed later in the season--regardless of the date of sowing or stage of bloom.

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add 1 - flax study

High temperatures during blooming tend to reduce boll set or the percentage of flowers that form capsules and remain on the plant until harvest, says Ford. The 1959 experiment showed a rapid reduction in boll set during the last part of the blooming period of the May 29 planting. The flowers formed during the latter part of the blooming period produced fewer bolls and fewer seeds per boll in 1959.

There was a gradual reduction in seed weight from flowers formed later in the season. This is contributed to by the mean temperature during the two to three weeks after bloom. Ford says seed weight and yield shows a delayed response to high temperatures.

Ford observed no significant relationship between moisture and seed development in his study.

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YOUTHS FROM 40 COUNTIES TO U CONFERENCE

Approximately 100 rural young people from 40 counties around the world will attend a conference on the University of Minnesota's St. Paul Campus Aug. 4-8.

The youths, all participants in the International Farm Youth Exchange, are learning the American way of life by living and working with farm families in this country for six months. All of them will have spent three months in one state before attending the St. Paul meeting--called the Mid-Point Conference because it is being held at the mid-point of their stay in this country. Each exchangee will go to another state after the meeting.

Purposes of the Mid-Point Conference are to renew acquaintances with other exchangees from their country who speak their language and to share experiences with each other; to broaden their outlook by becoming acquainted with exchangees from other parts of the world; and to review the objectives and discuss the operations of the IFYE program. The program for the sessions will also attempt to fulfill needs of the IFYEs yet to be met, according to Stanley Meinen, assistant state 4-H Club leader.

Preceding the Mid-Point Conference some 30 of the exchangees will meet for a Rural Youth Leaders' Workshop July 30-Aug. 2 on the St. Paul Campus.

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*For release at noon, *
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LAMBERTON VISITORS DISCUSS WEATHER AND FERTILITY

LAMBERTON--What affects crop success most--weather or fertility?

Curt Overdahl, soil specialist at the University of Minnesota, had some new insights into this question for visitors at the Southwest Experiment Station here in Lamberton today.(Thurs., July 2).

Weather influence is more important than often realized.

Yields over a four year period varied from 26 to 132 bushels per acre on corn plots receiving no additional fertility. That's over 100 bushels variation per acre.

This difference, said Overdahl, is due mainly to soil moisture and temperature. Too much or too little moisture will reduce yields greatly.

What about fertility? Results over these same four years showed fertility to be important too. Plots fertilized in each of these years tended to yield more than the unfertilized plots.

Plots receiving 160, 80 and 40 pounds of nitrogen per acre yielded 23, 15 1/2 and 15 bushels more per acre than the unfertilized plots.

Just how do corn yields of Lamberton area farmers compare with the maximum yields obtainable? Research at Lamberton has been looking into this question.

Plots representing the rates used by Lamberton farmers were planted in 1963 with 15,000 plants per acre and were fertilized with 125 pounds of 8-24-12 and 40 pounds of nitrogen per acre.

On the high yield plots, researchers pushed the fertilizer up to 300 pounds of 8-24-12, 500 pounds of 0-30-15 and 200 pounds of nitrogen per acre. These plots had 30,000 plants per acre.

The high yield plots in 1963 averaged 23 bushels more per acre than those planted and fertilized as done by most Lamberton farmers. However, Overdahl said, this difference was not enough to cover costs of extra seed and fertilizer.

Fertilizer's effect on soybeans, Overdahl said, is still open to question. On heavily fertilized plots planted here a year ago, there was a 12 bushel increase over the plots receiving no fertilizer.

Visitors also toured the soil compaction, phosphate placement, weed control and varietal trial plots. Specialists gave their research findings at each of these.

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HARDINESS RESEARCH TO BE CONDUCTED AT U

Research on plant hardiness by University of Minnesota horticulturists may mean a drastic reduction in the millions of dollars now lost each winter in the state from cold injury to fruit and ornamental plants.

The research, started several years ago, has been given a new impetus with a \$195,065 grant from the Louis W. and Maud Hill Family Foundation, according to L. C. Snyder, head of the University's Department of Horticultural Science. C. J. Weiser, associate professor of horticultural science, will be research leader of the project.

The project will involve basic and applied research on the nature of cold injury and acclimation in plants, the development and testing of adapted varieties and the promotion of cooperation in hardiness research in the plant sciences.

For more than 200 years numerous investigators have worked on the complex problems of cold injury. The University Department of Horticultural Science has had a continuous research program in hardiness problems since 1912, but critical research has been limited up to this time because of lack of facilities. Much of the early hardiness work was of little practical application because there was no real understanding of the basic factors involved in either winter injury or a plant's inherent ability to avoid injury, according to Weiser.

(more)

add 1 -- hardiness research

Furthermore, up to the present horticulturists have had no way of scientifically assessing the exact causes of winter injury, Weiser says. The procedure has been to observe winter injury to plants in the spring, then go over temperature records and make a conjecture as to the cause of the damage.

Now, with the use of growth chambers recently acquired by the horticultural science laboratories, it will be possible to characterize the basic nature of winter injury and the natural mechanisms by which plants become acclimated to cold. In the chambers the plants will be exposed to various degrees of cold and heat to learn their precise reactions to specific temperatures.

These findings will then be applied in the programs of the Fruit Breeding Farm and the Landscape Arboretum at Excelsior in developing and testing hardy plants.

Ultimate aim of the project is to find a practical means of reducing winter injury on a field scale. Practical field treatments to reduce winter injury could save millions of dollars on horticultural crops in Minnesota alone, Weiser believes. Frost damage to fruit blossoms and early planted annuals, winter burn on evergreens, winter killing of landscape, forest, orchard, perennial forage crops and winter-seeded cereals account for a staggering economic loss.

Establishing laboratories for research on plant hardiness is of significance, not only to Minnesota, but to the whole continent, Weiser points out. No real center of plant hardiness research and graduate training exists in North America comparable to the Institute of Low Temperature Research in Japan. The occurrence of winter damage to plants in the northern states would make the results of this project of potential significance to any field of plant science, including forestry and agronomy, as well as horticulture.

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