

MINNESOTA EXTENSION SERVICE NEWS

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HOBSON IMPRESSED BY CLUB WORK IN STATE

Washington Leader Finds It Is Strong Factor in Solving Local Farm Problems Encountered in Minnesota

Ivan Hobson, a national leader, finds that boys' and girls' club work has been well presented and is strongly entrenched in Minnesota. Outstanding features of visits of inspection which he recently made with T. A. Erickson, the state leader, to Polk, Hubbard, Itasca, St. Louis, Lake, Washington and Hennepin counties, and also some comment and observation on problems of the day, were summarized by Mr. Hobson on his return to University Farm as follows:

"1. Farm people everywhere seemed to be acquainted with and in support of boys' and girls' club work. A large percentage have had actual contact with it and were anxious to see it broadened in scope.

Meets Local Needs

"2. The lines of work in which the boys and girls are engaged in each county seemed to fit admirably into the type of agriculture practiced locally and is helping to solve the local farm needs. This is especially true in the northeastern counties where, in the outlying districts, farming is being conducted under pioneer conditions. The parents living on farms where the cleared acreage consists of from one to eight or ten acres feel that they have been justified in turning over to the boys and girls a part of this precious clearing. The reason lies in the fact that the boys and girls in these cases have been able to increase the yield of marketable potatoes, to bring in a greater variety of vegetables in the garden work and to increase the egg production on farms where the number of hens has been too small or their production too low. In several communities visited gardens formerly consisted of the root vegetables, such as carrots, beets and turnips; but members are rapidly introducing crops such as peas, beans and cabbage. To those farmers where the living of the family depends on a few cleared acres the poultry, garden and potato club work is a practical means of bringing a greater cash income to the family.

"3. The friendly relationship of various organizations to the boys' and girls' club work has made it possible for more and better work to be done. In Itasca, St. Louis and Lake counties the school systems have taken active part in fostering the work.

"4. Local leadership in scattered districts is always difficult to find, but a part solution is being found in the use of older club members.

Must Reach Older Groups

"Some of the problems that the county extension agents are facing are, first,

how to get hold of the older farm boys and girls and how to carry those now in the work up to a higher age. An analysis in one county showed that in the potato club work during the last seven years about 12 boys have carried the work until 19 years of age and then passed out of the influence of extension work. Extension people are beginning to feel that they will need to find and use new methods adapted to this older age-group in order to make use of the ability of these older people.

"Another problem consists in increasing the size of the job performed by the boy and girl to a point where it will be more convincing to the community. In one county in the poultry work it seems difficult to get the boys and girls to set more than one or two settings of eggs, which has resulted in raising only two to a half dozen fowls. The agents are feeling that a demonstration carried out with four or five fowls is not as convincing to people of a community as if an average size farm flock were involved.

Strength in Numbers

"A third problem that agents are giving attention to is increased number of members in a given line. They are concentrating on fewer lines of work in the community and getting enough members in each line to give volume to any certain practice which the members may demonstrate. That is, an approved practice probably becomes common to the community sooner if there are ten boys and girls carrying on a line than if there are but two or three. There seems to be a tendency, therefore, to cut down the number of lines of work in each community to the point where a larger number of boys and girls may engage in each. Mr. O'Banion, the Hubbard county agent, is meeting this problem in good shape.

"One has a feeling that to conduct extension work in some of the northern counties of Minnesota it is necessary to go back to the elements of citizenship. There are so many cases where parents are unable to speak English and are unfamiliar with American customs and government that the boys and girls through their club work are doing a remarkable work in developing an interest in sound community life as America knows it. Such a step is probably necessary before extension work with these fathers and mothers is possible."

EXTENSION SERVICE CONFERENCE NOV. 20-21

Director F. W. Peck gives notice that the annual conference of agricultural extension workers will be held at University Farm, Nov. 20 and 21. The program will appear in the October number of Extension Service News

FACTS SHOW VALUE OF EXTENSION WORK

Savings Made and Production Increased Under the County Agent System—Some Cases in Point

(By W. J. Corwin)

It is difficult to measure accurately the value of county agricultural extension work but facts given below indicate that it is worth many times what it costs to maintain a trained employee in each county. In going over the county records for 1921, one finds an abundance of proof for the foregoing statement.

Forty-nine counties ran various fertilizer test plot demonstrations, showing all the way from 0 to 200 per cent increase in crop production. A majority of these were in the northwest and southeast parts of the state. One striking example of the lack of phosphate in the soil and in the vegetation was found in the northwest section. The phosphate treated plots gave much higher yields, containing more of the mineral salts that the animals of this section seem to crave, as indicated by so many of them having what is termed "depraved appetites." Feed shipped in from other regions seems to correct this tendency.

New Wealth Added by Drainage

Thirty counties did some drainage demonstration work involving more than 12,000 acres, on which the increased land value—not counting the annual crop production—is estimated at \$400,000, or more than the annual cost of all the agricultural extension work in the state. The eastern half of the state is interested in liming problems and a majority of these counties conducted liming demonstrations to find where lime was or was not beneficial. Legume campaigns were common in most of the counties. Testing out soybean varieties, starting alfalfa on more farms as a community demonstration, showing how to grow it successfully, helping to locate desirable seed grains, variety test plots and disease and pest control assistance—all these figured in the efforts of the agents to improve crop returns. A total from the county records for 1921 gives the following for grain, potatoes and small grains:

Improved Seed—
Secured for farmers, 98,930 bushels.
Produced, 207,822 bushels.
Certified Seed—
Secured for farmers, 15,729 bushels.
Produced, 132,325 bushels.

Potato variety standardization work in some counties has reached a point where 80 to 90 per cent are practically of one or two varieties, in contrast to a few years ago where several varieties were found in one wagon load.

Last Laugh the Best

County extension work with livestock revolves around better care and

management, better breeding stock, and education on disease prevention. Last year the county agents assisted the farmers in selecting more than 5,000 better animals, besides assisting in organizing 126 breed and cow testing associations. In addition, more than 2,400 individuals were assisted in feeding problems, and 179 swine pasture demonstrations were held. In one community a farmer was induced to test his herd for tuberculosis. He lost 15 out of 17 head and his neighbors laughed at him. The agent assisted this same farmer to locate and buy four good cows, and when his neighbors found that his cream checks from six cows were larger than from the original 17, the laugh was on them.

In poultry culling, 986 demonstrations were held, 3,838 flocks culled, discarding 100,000 out of 313,000 birds, and in practically all cases the egg production remained at the same level. At these demonstrations local people were trained so they can do this work for themselves.

Creamery Saved

Helping 13 creameries by introducing improved business methods and in securing a better quality of raw material is illustrated by the following case: The Odin creamery was about to disband when the county agent induced the people to take hold of egg marketing at the creamery, to remodel the building and bring in sweet cream. In a few months the patrons increased in number from 16 to 139 and all the butter scored 92 or better. Stories of this kind come from many counties. Some of the southern counties were short on potatoes, but through county agents were put in touch with counties having a surplus. A large number of so-called cooperative elevators did not meet the requirements of the state law, and were assisted and reorganized on a cooperative basis.

Definite work with farm women on home conveniences, water supply, nutrition and dress making problems was conducted in 25 counties. Boys' and girls' club work increased over previous years, reaching more than 18,000 youngsters. County employees aided them in developing their crop, livestock and household projects.

Results Not Instantaneous

In every county one finds more details concerning some of the facts mentioned in this article. All the value of such educational work is not realized in one year. For instance, in Carver county in 1918 it was not the general custom to spray fruit trees. In 1922 most everyone sprays and believes in spraying. The first county agent had difficulty in getting anyone to try spraying. The present agent is kept busy answering calls on how to spray and what methods to use.

One might say the northwest would have developed without railroads, but we all know it developed faster with them. The best agricultural information would reach and be used by the people some time, but it is getting to more people in less time through county agricultural extension service than it otherwise would.

CITY WOMEN PRAISE WORK OF HOME BUREAU

Substantial Saving Made, Health Improved and Toil Lightened by Activities of Duluth Agent

Home demonstration work is not only of great help to the rural woman, but the city woman also cooperates successfully with the urban home demonstration agent. Miss Sylvia Richardson, home demonstration agent of Duluth, gives the following graphic picture of the needs of the city women and the home bureau's capacity for meeting these needs:

"If I could only have had the opportunity before I was married that school girls are given today of learning to sew, cook, care for and feed babies, I should not have made so many mistakes. But I can not say enough for the home bureau, nor tell how grateful I am that it has made possible for me the opportunity of learning so many things which have been a tremendous help to me in my housekeeping."

"These are the words of one of the Duluth home bureau members, who is only one of the 5,000 women taking advantage of the opportunities which that organization offers.

Office vs. Home

"A girl applied for work at an office. She was asked her preparation and experience, also for recommendations. Last week she was married and began on the most important of her work—her life's job—homemaking. She had no experience and no preparation. When application was made for the marriage license the only requests were that she must be a resident of the county and 18 years old. It does seem absurd.

"Isn't it a pity that so many homemakers begin this most important job with no real preparation for it? Experience is a dear teacher, and too often it is the only teacher for these young housewives. It is because so many of these women, through their mistakes, have come to feel very keenly their lack of preparation, that they are eager to join with other groups for the purpose of discussing the various phases of homemaking.

"Not only these, but older and experienced housekeepers, who want to learn to do their work in a quicker, easier and more efficient manner, are making use of the home bureau.

Savings Achieved

"During the year ending June 30, some 190 women met at the bureau and completed the clothing project. The estimated saving of these women in cost of garments made was \$4,750. One hundred sixty women made dress forms. On each form we estimate that \$12.50 is saved, which is the difference between the cost of one completed form and a ready made one, which really would not be so satisfactory. These women have then effected a total saving of \$2,000 on the forms. Because the women have had these forms, many have made and remodeled garments which they would not otherwise have done and have thereby saved not only the cost of new material, but also of making. Eighty women joined

millinery groups and through their work saved approximately \$250.

"Fifty-two fireless cookers were made at the bureau. In making these, the women actually save \$10 apiece. Added to that \$520 then is the saving in gas and time. Three women reported a saving of 50 hours apiece in time. If we make a conservative estimate then, we can say that 2,600 hours have been saved these women, giving each more rest. If we value the time at 30 cents an hour, \$780 has been saved there. It is almost impossible to estimate the gas saved through the use of the cooker, but it would amount to much more than the saving in the cost of the cooker.

"Eighty women enrolled in the nutrition groups and learned of the right foods to feed the family for health.

Always Ready to Help

"The home bureau is always ready to aid any housekeeper in solving her problems, whether to suggest a remedy for a stained textile or to give a recipe or a pattern. In performing this service, there were 2,593 telephone calls and 1,714 office calls. Two hundred forty-two patterns were given out, and 5,232 bulletins distributed. The demonstrations and lectures numbered 279, to which there was a total attendance of 4,652.

"A group of deaf women, with the aid of an interpreter, were given work in nutrition and clothing, and are now more interested in their homemaking than ever before. Ten colored women learned simple problems of millinery. Cooperating with the St. Louis County Health association, we conducted a nutrition clinic. A group of foreign-born women met regularly twice a month, spending half of the time in dealing with clothing problems and half in food preparation.

"The year's work not only amounted to an actual money value of \$8,807, but improved the health of children and older members of the family through better feeding; lightened the work of many housekeepers by application of more efficient methods, and contributed in a good measure to the feeling of neighborliness among those who have been enrolled in groups."

FARM HOMES SHOULD HAVE RUNNING WATER

The household engineering specialist, Miss Shepperd, reports that in 18 counties 25 families have installed water carrying and sewage disposal systems and six other families have systems planned or under construction.

Each of these water systems incorporates principles and methods of installation advocated by the state specialists in household and rural engineering.

Some kind of water system is a necessary household convenience and the simplest types are inexpensive enough to be available for every farm home.

This is a good time to be considering the installation of a water system and to consult the specialists at University Farm.

Here's Rule to Make the Work Table Fit the Homemaker



WADENA FARMERS SIGN UP FOR MORE ALFALFA

County Farm Bureau Project Aided by University Extension Men—Pledges for 500 Acres Expected

More than 150 Wadena county farmers pledged 300 acres of alfalfa during the first week of Wadena county's "grow alfalfa" campaign conducted by the county farm bureau and extension specialists of University Farm from Aug. 7 to 12. The drive, which will continue all fall and winter, is expected to enlist 500 farmers with a pledge of at least one acre each. Pledges so far have varied from one to 10 acres.

Fifteen meetings were held in as many sections of the county with Ralph Crim, extension agronomist; S. B. Cleland and F. J. Brown, assistant county agent leaders, and W. A. Peters, county agent, as the principal speakers. Representatives of well known northwest agricultural papers attended.

Seed and Lime at Low Cost

Through arrangements effected by the alfalfa committee of the Wadena county farm bureau, business concerns will furnish seed and lime at minimum cost. Prospecting for marl has been undertaken in an effort to find adequate local supplies. According to Mr. Cleland, a surface bed of marl has been found near Huntersville which tests 94.6 per cent lime. Soil samples are being tested for acidity by the soils division of the university.

All alfalfa seeded in the project must conform to "standard acre" requirements, which mean a soil test for acidity, liming if necessary, fall plowing, sowing without a nurse crop, inoculation, Grimm seed, good drainage, sowing in late spring and no crop to be taken off the first year.

Needs Alfalfa, Says Cleland

"This is one of the most important projects that could have been adopted by the Wadena county farm bureau at this time," said Mr. Cleland. "The county is an important dairy district and needs alfalfa to supplement other feeds. Just as much clover as ever should be grown with a good acreage of alfalfa besides. The alfalfa is not so much a substitute for clover as it is for grain, since it has practically the same feeding value as wheat bran, ton for ton."

Left—The McGregor home management group determining the proper height of work table for each woman.

Stand erect, measure from the waist line to the floor, subtract six inches. The resulting distance is the height of table best suited for such tasks as dishwashing.

Right—Figure No. 1 would need to raise this standard table to make it of comfortable working height for her. No. 2 finds it just right for her when washing dishes, and No. 3 will need it raised two inches.

FIRST STATE POTATO TOUR A REAL SUCCESS

Headed by R. C. Rose, plant pathologist with the agricultural extension division, and A. G. Tolaas, in charge of potato seed certification, potato growers of 10 counties participated in the first annual state potato tour which closed Aug. 5. The extension division, the seed potato certification office of the state department of agriculture, county farm bureaus and county agents cooperated in staging the project.

Farmers, business men and representatives of commercial fertilizer companies and potato equipment concerns spent the week visiting potato seed plots, warehouses, potato implement factories and fertilizer demonstration plots enroute. Potato varieties, diseases, storage methods, fertilizers, insect pests, spraying and other subjects pertinent to potato production were discussed and demonstrated. Twin city business men who made the trip became greatly interested and commented favorably upon the project.

Although some damage has been done by prolonged dry weather in the Moorhead district, the potato outlook in the Crookston area, which has received more rain, was excellent. Considerable leaf hopper damage was reported.

The tour, which began at Long Prairie and ended at Bemidji, included Todd, Wadena, Otter Tail, Becker, Clay, Norman, Polk, Red Lake, Clearwater, and Beltrami counties. County agents planned and routed the tour in their respective counties.

University Bred Berry a Winner

Redpath raspberries developed by university fruit breeders are proving hardy and good yielders in Aitkin county.

CHAPMAN BACK FROM TRIP TO PACIFIC COAST

"Better satisfied with Minnesota than ever before," was N. E. Chapman's first comment when asked concerning his recent Pacific coast trip. "Minnesota offers superior advantages for poultry raising over any state I visited."

After attending the annual convention of the American Association of Poultry Instructors and Investigators at Corvallis, Ore., at which he spoke on poultry demonstration communities and egg marketing through cooperative creameries, Mr. Chapman visited important poultry centers on the coast, including the Alderwood Manor, Hollywood, and Beal Breeding farms at Seattle, the West Washington Experiment station at Puyallup, where an international egg-laying contest is now in progress, the Rio Linda district near Sacramento, the Petaluma district near Oakland, the Santa Cruz where the University of California is conducting a state egg-laying contest, the Pomona area near Los Angeles, where four county farm bureaus are carrying on a cooperative laying competition, and the Van Nuys district at Los Angeles.

"Climate is the main advantage of these much heralded poultry centers," said Mr. Chapman, "but with proper housing Minnesota poultrykeepers can readily surpass them in profitable egg production."

RECENT CHANGES MADE IN EXTENSION FIELD

Three Minnesota agricultural college graduates figure in recent changes in the agricultural extension service. Irving Meade of Alexandria, who was graduated this year and who is now county club leader in Polk county, will become agent in Stevens county the first of October. Allen W. Edson, a 1917 graduate, has resigned as county agent in Stevens county to take charge next month of the poultry and bee department at the West Central School of Agriculture at Morris. E. J. Haslerud, college '21, formerly county club leader in Polk county, has gone to Bozeman, Mont., to take charge of dairy production work for the agricultural college of Montana.

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POTATO CROP EMERGENCY

The potato growers of the state are facing a serious situation in selling potatoes at a reasonable price this year. It appears to us that if there ever was a time when a quality product should be emphasized and when we needed to pay more attention to the marketing of a crop it is this year with this crop.

While the drouth has undoubtedly affected the yield, and while it may be necessary to make a considerable adjustment in the estimated production of potatoes, all authorities agree that there is a large crop; also that transportation difficulties add to the problem and that unless the very best grading practice is established in potato centers there will be a very low market, if any at all, for a part of the crop. With this end in view, the extension division is anxious to place all the emphasis it can upon more and better grading, more storage and more knowledge of shipping and selling potatoes.

While the price received for even the best potatoes may not be as profitable as we would desire, certainly the returns for ungraded, blemished, disease infected stock are certain to be inadequate at such a time as this.

MINNESOTA FIRST

The Press Bulletin of the University of Wisconsin says that Polk county in western Wisconsin is the first county in America to market its eggs through its creameries.

Coöperative creamery associations in Minnesota have been marketing the eggs of their patrons the last two or three years. Dodge and Meeker counties are leaders in this new departure. Minnesota has pioneered the way for coöperative egg marketing, as well as for coöperative butter marketing.

But what is of real significance and interest in the Wisconsin publicity item is the statement that Polk county farmers are clearing eight cents a dozen above the local market after all shipping costs are paid.

TUBERCULOSIS IN SWINE

An earnest effort is being made to study the result of the infection of swine with tuberculosis, and a weekly report is being sent out by the livestock commissioner of South St. Paul of the extent to which this disease is spreading in the northwest. We have before us reports for the last three weeks and note that more than one-fifth of the hogs used by two of the large packers of South St. Paul are infected with tuberculosis. This does not mean that all this meat is condemned, but it does indicate a very serious situation that is apparently growing worse in this section of the country. To our mind this is an indication for the need of more extension work in the control of animal diseases on the farms.

This weekly report also gives a statement of the bruised hogs with an indication of the effect of bruising on the economic return for this product. For the last three weeks out of 88,000 hogs there were more than 14,000, or 16 per cent, damaged by being bruised in handling and shipping. This is reported to have entailed a loss of more than \$28,000.

It is worth asking the question, who eventually will suffer this loss? Perhaps there are ways that this condition can be brought to the attention of the shippers and producers to the end that there will be a much smaller loss both from tuberculosis and from bruising than exists at present.

EXTENSION HERE TO STAY

Diagnosing the extension service as an agency to develop contact between the university department of agriculture and the farmers of the state, Dean W. C. Coffey made the following statement in the course of a recent public address:

"Through the federal funds provided for in the Smith-Lever law, and the offset state money which must be provided for before the federal funds can be used, we are able to maintain a staff of extension workers. They are in contact with all of the farmers' organizations of the state for the purpose of rendering service to agriculture. It is their mission to carry to groups of farmers the best information available concerning all phases of farming and all activities related to it. They are 'go betweens.' They carry to the farmers the information we develop here in the experiment station and they bring suggestions relative to investigations back to us from farming communities. Extension was made a very large activity by the Smith-Lever law because it was realized that farmers in general were not getting as they should the information coming out of our experiment stations. And the time has come when extension is as permanent as resident teaching and experimentation in our agricultural institutions.

"Agriculture more than any other industry needs every agency available for the dissemination of knowledge pertaining to its various phases. Why? Because every farmer is much more than a laborer. He is an enterpriser in charge of a plant which involves a considerable amount of capital. He is his own director, and the result of his enter-

prise depends in large part on his own knowledge of this enterprise which everyone acknowledges is complex. No other class of enterprisers or business men contains as many numbers as the farmer class and few businesses are as complex. Minnesota has 1,502 banks, 2,628 doctors, 1,874 lawyers, and 178,478 farmers. The wide difference in numbers is enough to show why agricultural extension should be, in fact must be, a large activity if our farmers are to be kept abreast of the times in their business.

"Extension is performing another very important function. Because of their numbers it is more difficult for farmers to get together for the solution of common problems than it is for other classes of business men. As a result they have been slow to act in coöperation. In order to function well as an agent of education, the workers in extension have found it necessary to resort to organization, and, growing out of this organization, have come some of the most significant movements ever undertaken by American farmers such as coöperative marketing and the state and national farm bureau federation."

COUNTY EXTENSION PROGRESS

H. W. Gilbertson, of the States Relations Service of the United States Department of Agriculture, who spent the week of Aug. 14 in studying the progress of county agent work in Minnesota, feels that the county agent has more than justified his existence.

"When demonstration work started in Texas with county demonstration agents in 1906," he said, "no one realized how rapidly the movement was destined to spread. At first it was felt that this work would serve primarily to assist the cotton farmer in controlling the boll weevil. The idea was first adopted in the north as a means of dealing with the so-called abandoned farm sections and less prosperous farm areas in New York state.

"The movement, however, has now spread until today more than 2,000 of the 2,700 agricultural counties of the country have county agents who deal not only with problems of production, but also, and increasingly so, with problems of marketing.

"The aim of the county agent today is to encourage, not more cows or more acres, but more profit per cow and more profit per acre. And as farming becomes more profitable the purchasing power of the farmer increases so that all industries benefit."

COUNTY AGENT TO VISIT EUROPE

A county agent granted sabbatical leave for one year for study in European countries! This could happen only in California where county extension agents are given the same status by the university as faculty members. Under this plan the agent for Napa county will spend a year in Europe studying agricultural extension methods, farmers' coöperative business organizations and agricultural education systems. Some trip and some chance for observation and study.

How Bordeaux Mixture Increases Potato Yields -- Growing Season Lengthened by Pest Control



THIS PICTURE OF CYRUS ENGBERG'S POTATO FIELD IN CHISAGO COUNTY WAS TAKEN AUGUST 13. THE EIGHT ROWS TO THE LEFT WERE SPRAYED WITH PARIS GREEN ONLY AND THE VINES WERE DEAD WHEN THE PICTURE WAS MADE. THE VINES ON THE REMAINDER OF THE FIELD, SPRAYED WITH BORDEAUX AND POISON APPLIED UNDER HIGH PRESSURE, WERE AT DATE GREEN IN COLOR AND STILL GROWING.

(By R. C. Rose)

Potato growers from the sandy section of Minnesota have had some very light crops the last few years. Some of the growers laid it to early blight, some said it was the dry weather, and others asserted it was due to leaf hoppers. The plants seemed to dry up prematurely, the crops were light, and the percentage of very small tubers was high. It is possible that all three of the above forms of injury may have been found on many of the fields; nevertheless, experiment station workers tell us that the same control measures can be used against all three.

Bordeaux mixture when properly applied will prevent both early and late blight infection; it will act as a repellent to a certain extent for such insects as leaf hoppers and flea beetles; and the film of bordeaux covering the leaves will protect them from the excessive heat of the sun on hot days. To get the best results from bordeaux mixture, it should be applied as a very fine mist and must reach the under sides of the leaves. This means that a three nozzle to the row high pressure machine must be used. Machines of this type cost around \$200, and on account of the price many growers have not used bordeaux or have attempted to get results by using it in low pressure machines which cannot apply it in the right manner.

Cyrus Engberg, a progressive young man living near North Branch, Minn., was one of the first potato growers in Chisago county to give bordeaux mixture a thorough trial. He had noticed his potato fields dying early in previous years and had decided that if he could prevent this his investment would be paid for. In the spring of 1922 he pur-

chased a high pressure machine, and with County Agent C. M. Morck made his plans for a spraying demonstration.

The field where the demonstration was carried on was on the main highway about nine miles north of Center City. It was a fairly uniform piece of ground and was planted with Early Ohio seed which had been treated with corrosive sublimate. The entire field was planted at the same time and all conditions were alike when the spraying started. The first eight rows were sprayed with paris green applied with a low pressure sprayer. The remainder of the field was sprayed with bordeaux and poison applied with a high pressure sprayer. Both sides of the field were sprayed the same number of times and as near the same time as possible.

The accompanying picture was taken on August 13 just after the fourth spray had been applied. It will be noticed that the first eight rows are dead, while the rest of the field is green and still growing. The field has not yet been dug, but appearances indicate a good difference in yield in favor of the bordeaux plot.

The point to note at this time is that the potatoes in the first eight rows are made and all growth stopped, while in the remainder of the field the tubers are still developing and will develop as long as the plants stay green.

University's No. 2 Rye Makes Hit

More than 200 acres of Minnesota No. 2 rye have been certified in Becker county this year. The high yielding qualities of this university bred strain are commending it in preference to common rye, according to E. C. Johnson, county agent.

MILLION POUNDS PICRIC ACID IN YEAR

According to the Official Record of the United States Department of Agriculture, Minnesota carries the banner for making use of picric acid, a surplus war explosive being distributed by the Bureau of Public Roads for land clearing purposes. Since August, 1921, Minnesota farmers have taken 1,044,300 pounds. At the rate of 25 pounds to the acre, this would be enough for more than 41,000 acres of land, and had it not been for the financial depression there would have been much more used. That the farmers appreciate the opportunity for cheap explosives is shown by the fact that its use is spreading into southern and western parts of the state. Demonstrations in the use of picric acid in removing stones and stumps have been given in many parts of the state where explosives have been rarely used in the past, and with the demands from these sections a still larger use of the explosive may be anticipated for the coming year.

MISS SICHLER WINS MICHIGAN PROMOTION

Miss Ida Sichler, the home demonstration agent of Dakota county, has resigned to go to Michigan as assistant state home demonstration leader. Miss Sichler has been in Dakota county for a year of successful work. Her successor has not yet been appointed.

Sugar Beet Pest Causes Loss

Sugar beet web worm has been causing some damage in Red Lake county.

ONE "CLASS A" WINNER BAKES FOR HOUSEHOLD

Spirit Behind the Prize Is What Counts, She Writes—Girl Bread-makers Recount Experiences

It's not alone the badge you wear
That counts when the day is done,
But the spirit behind the prize that tells
Whether or not you've won.
The applause of the crowd alone is no test,
The real one is won when you've done your
best.

After coping with obstinate ovens, streaky dough, and the unfavorable comments frequently characteristic of the brothers in the family Catherine Withrow of International Falls says the verse expresses the way she feels after two years of breadmaking work in the International Falls break baking club. That she surmounted all her difficulties is indicated by her selection as representative of Koochiching county at the coming state fair, where as the best bread baker of the county in Class A she will compete for the state championship.

"Since there are eight members in our family and three are boys," she writes in her "achievement story," submitted to T. A. Erickson, state club leader, "we eat quite a bit of bread. I do most of the baking as mother has other things to do, and usually I bake from six to nine loaves at a time. I have enjoyed the bread work and shall go on trying to live up to the club motto, 'To make the best better.'"

Cuts Down Bread Bill

Frances Jensen, of the Brook Park bread club, baked her way to the county individual championship in the Class B division. Although she has been accorded the honor of representing Pine county in a free trip to the state fair, she has done "real things" for her family in reducing the cost of living.

"In my home before I joined the bread club," she reports, "we bought all our bread as my mother did not have time to bake it. But after I had learned to make good bread, mamma let me make part of the bread used at home. She said it helped to decrease the cost of living quite a little bit, as making bread costs about two-thirds as much as when you buy it from the bakery and saving money is very important in most of the homes in this community. One of my greatest wishes is that every girl in the world today would learn to make better bread and so help to make a healthier nation."

Lays Wager With Papa

Three busy bread bakers of Buhl, St. Louis county, recently won free trips to the state fair by defeating all comers in Class A in 10 counties of the northeastern district. They are Barbara Donnell, Tillie Wadd, and Leslie M. Smith, and determined bread-makers of St. Louis, Pine, Lake, Koochiching, Itasca, Crow Wing, Carlton, Cook, Aitkin and Cass counties were vanquished only after a hard fought battle.

One hundred and five loaves of yeast bread, three loaves of quick bread and ten and one half dozen rolls or other forms of quick bread comprise the record of little Miss Donnell.

"I suppose you may wonder why I was so anxious to bake a loaf of bread," she wrote in her "how I made my bread and what I learned making it" report to Mr. Erickson. "It was really papa's fault, for he made a bet with me that if I could make a loaf of bread worth eating he would give me the wrist watch that I had been longing for. I wanted that watch very badly; but I hated making bread for I thought it was terribly hard, but the watch was worth trying for."

Wins Wrist Watch

"The day had come at last and now that it was really here I was afraid I would lose. It seemed as though everything went wrong that day. I forgot the salt and didn't know how to knead the dough. When I took that loaf out of the oven it looked simply terrible, but to make matters worse, the bread had fallen. I brought it home, showed it to papa and told him that I had given up for I had tried my best and could not make bread. He immediately gave me the watch and said that he was very glad that I had at least tried."

"I went up to my room and did some thinking. I finally made up my mind that I wasn't going to let a loaf of bread get the better of me for anything. I was going to make a loaf of bread that would make papa proud of me, so he could think that I had earned my watch. A week later I made another loaf that turned out just wonderful. I put it at papa's place that evening and when he spied it he looked so happy and praised it a lot for he knew I had baked it."

Young Breadmaker Real Help

With 73 loaves of yeast bread and 19 dozen biscuits or other forms of quick bread as her record, Miss Wadd,

another member of the team, finds that learning how to bake a loaf of bread is not the only benefit derived from the bread club. "I not only helped myself by becoming a member of the bread club," she writes, "but I also helped my mother a great deal. She says I have helped her more by baking all the bread than by anything else. I think that every boy and girl ought to take up some project of the boys and girls club because it not only benefits themselves but the community as well."

Vivid experiences in making her first loaf of bread are recalled by Leslie Smith, third member of the Buhl team, in her achievement essay. "When I made bread the first time, I followed the 'simple' directions in the cook book. That bread. Even the dog refused to eat it! If I didn't get another thing from club work than the ability to make a decent loaf of bread, I would be satisfied."

"Club work has taught me how to work efficiently with others. In a bread team more than in most anything else good team work is essential. Three girls may have all the facts and may be wonderful individuals, but if they get into each other's way when they try to get together, they will never make a good team."

New Field for Miss Hough

Miss Susan Hough, who was county home demonstration agent in Morrison county for four years, is to be the joint home demonstration agent of Blue Earth, Faribault, Steele, and Watonwan counties. Her headquarters will be in Mankato, Blue Earth county. Miss Hough has been attending summer school in Teachers' College, Columbia university.

Club Girls Leaving "U" Camp for Fair



COUNTY PRIZE WINNING BREADMAKERS AND CANNERS AND MEMBERS OF BREAD, SEWING AND CAKE MAKING TEAMS ARE ENCAMPED AT UNIVERSITY FARM FOR STATE FAIR WEEK. EVERY DAY A SQUAD IS DETAILED FOR PARTICIPATION IN CONTESTS AND DEMONSTRATIONS AT THE STATE'S BIG EXPOSITION.

HOME ECONOMICS WORK TO BE STRENGTHENED

Eventually It Will Be Made an Independent Bureau, Wallace Tells National H. E. Conference

Adele Koch, assistant state leader of home demonstration agents, attended the annual convention of the American Home Economics association at Corvallis, Ore., August 1 to 5. Nearly 700 persons were present. Thirty-five states were represented, also Japan and Canada.

The extension division of the home economics section had a good program and was represented on the general program by C. W. Pugsley, assistant secretary of agriculture, who discussed the reorganization plan. He said:

More and Better Work Predicted

"If this reorganization does not bring about more and better home economics work in the United States I shall feel that it has been a failure. In times of financial stringency home demonstration agents are more likely to be dropped from the budget than are farm agents, thereby cutting off the regular means of reaching the women of the farm. Because the home on the farm is so closely linked with the operation of the farm itself, home demonstration work is as important to a successful farm life as is the farm demonstration work. An administrative organization which will compel the consideration of the two together is to be recommended. That is what the new organization means.

"Many extension directors," he further stated, "are beginning to insist that balanced programs be worked out in counties. In other words, the project work which they will approve for the county will contain some home economics and junior work, even though there is not a home demonstration or club worker within the county. To secure this kind of a program, one that would consider all forms of extension work equally and make a 'balanced' program was the thought which prompted the reorganization of the office of extension."

Word from Wallace

Mr. Pugsley read a letter from Secretary Wallace which contained the following announcement which is of interest to all who are concerned with the best development of home economics work and home economics extension:

"We have in mind to strengthen greatly the scientific work of the department as it may be related to home economics. Ultimately I have in view making the home economics work an independent bureau, ranking with the other bureaus of the department, and placing at the head of it a woman of executive ability, thorough scientific training, and a broad and sympathetic understanding of what is needed to make such a bureau most helpful to the women of the country."

Pine County Pines for Picnic

Pine county has purchased 105,000 pounds of picric acid to date for use in land clearing operations, according to F. S. Idtse, county agent.

JUNIORS HOLD FAIRS AND GIVE PROGRAMS

Special club programs, junior livestock shows and special club days are a few of the ways in which Minnesota club boys and girls are aiding in making the 1922 county fair season a conspicuous success.

In Washington county, the grownups have had no county fair for several years. "We're going to have one," said the calf and corn and bread and sewing club members. They got it, and clubs, schools and the Lake Elmo Commercial club united in making the Washington county club fair, held Aug. 10 at Lake Elmo, one of the best attended events of its kind staged in the state.

Lake county boasts of so many enthusiastic club boys and girls that it was forced to hold three county club fairs in three towns—Two Harbors, Knife River, and Toimi, on Aug. 14, 15, and 16. Lake county clubs are especially proud of their shows because Mr. Hobson, leaders of boys' and girls' club work in the United States Department of Agriculture, was present to "see how it's done in Minnesota."

Every one of the 40 county fairs coming before the State Fair is having a special club program, says T. A. Erickson, and most of them are designating a special club day. The Dodge County Junior Livestock show on Aug. 24 had an unusually large number of entries in sheep, dairy calf, baby beef and hog classes. Olmsted county boys and girls staged a summer livestock show on their special club day at the Olmsted county fair at Rochester on Aug. 28. There are more than thirty members in the dairy calf club alone.

WILSON GIVEN HIGH POST AT DAIRY SHOW

L. V. Wilson, dairy specialist with the agricultural extension division, will be official superintendent of cattle at the National Dairy Show to be held at the State Fair grounds Oct. 7 to 14. Mr. Wilson was assistant superintendent of cattle at the 1921 show. He has been assistant superintendent of dairy cattle at the Minnesota State Fair for the last two years and will serve again this year. He was official judge of all breeds of dairy cattle at the recent Stevensville, Mont., dairy show. Also at the Iowa State Fair he officiated as judge of Brown Swiss and Guernseys. He has been secretary of the Minnesota State Guernsey Breeders' association for the last three years.

Rieke Takes Bride

News has been received at University Farm of the marriage Aug. 5 at the home of the bride's mother in Storm Lake, Iowa, of Ben W. Rieke, Freeborn county's agent, and Miss Marion Johnson. Mr. and Mrs. Rieke will reside at Albert Lea.

Leach Doing Club Work

Paul J. Leach, a recent attache of the dairy division at University Farm, is now assisting County Agent J. B. McNulty of Winona in finishing up the program of club work for the year.

EXCHANGE RATIO ALL AGAINST THE FARMER

His Hard Earned Dollar Now Lacks 30 Per Cent of Its Buying Power of the Pre-War Days

(By W. L. Cavert)

Recently I saw a farmer deliver 1,000 bushels of No. 1 wheat for which he received \$1,000. As a pre-war average, this wheat would have brought \$900. When he spent the thousand dollars for food and clothing for his family and for the purchase of machinery, building material, etc., the United States Bureau of Labor Index of all commodities standing at 50 per cent above the pre-war level would indicate that the \$1,000 of wheat money would be worth only \$740 in terms of pre-war prices.

Other products that this farmer raises for sale are cattle, butterfat and hogs. In the case of none of these items is his exchange ratio more favorable than that of wheat, except possibly butterfat. He also has a few oats to sell. These were selling at 22 cents. The pre-war price was 35 cents. This figures out that 1,000 bushels of oats will buy only about the same quantity of goods as 430 bushels during the five pre-war years. On the average it seems that the present-day dollar of the Minnesota farmer will buy about 70 per cent as much goods as during the five pre-war years.

Must Figure Closer

The showing is even worse when one takes into account that taxes are 150 to 200 per cent of pre-war, and therefore a larger share of the crop must be set aside for cost of government than formerly. Does the farmer like it? Not at all. Does he strike? No. He defers the purchase of machinery, his wife makes over the family clothing that is already threadbare, the employment of hired help is curtailed and every effort is made to make the farm furnish as large a portion of the family living as possible. He is more cheerful about this program than might otherwise be the case because he knows that his is among the most fundamental of industries and that in the long run the world will take his raw materials for food and clothing in exchange for the goods that he needs in the home and on the farm at a fair basis, because otherwise a portion of the railway men, miners and other workers will find themselves permanently out of a job for lack of an adequate farmers' market and their only recourse will be to try their hand at raising wheat, cattle, hogs, etc.

Has Right to Be "Peeved"

However, we can not blame the farmer if he is peeved that workers in essential industries refuse to accept a slight reduction from war wages when he has temporarily taken a 30 per cent cut from his pre-war returns. In particular he is going to be very insistent that government forces see to it that men have an opportunity to take the jobs at the lower wages if they wish.

POULTRY MEN WILL HAVE NATIONAL SHOW

Organization Completed for Poultry Congress in Twin Cities at Time of National Dairy Classic.

The agricultural extension service of the university is taking a leading part in the organization of the National Poultry Congress which will give its first exhibition in connection with the National Dairy Show on the Minnesota State Fair grounds, Oct. 7 to 14.

George W. Hackett of Minneapolis has been chosen first director of the congress. Associated with Mr. Hackett on a general committee of five on arrangements and promotion are George Henkel of Savage, president of the Minnesota State Poultry association; A. J. Fetsch of St. Paul, president of the Minnesota State Fanciers' association; J. L. Thompson of St. Paul and N. E. Chapman, poultry specialist from the university. Mr. Fetsch, as chairman of this committee, has appointed an executive committee, consisting of Vivian Johnson of St. Paul, secretary of the Minnesota State Fanciers' association, and Messrs. Hackett and Chapman.

Mr. Hackett, the first director, has been a leader in the poultry world for many years. He was the government poultry specialist in Minnesota during war times until promoted to the district superintendency of eight states. At present he is the divisional director of the American Poultry association and chairman of the educational program of that organization.

"The congress will be really international in scope," says Professor Chapman, "for Canada will be asked to cooperate in making it a success. We are assured of the active cooperation of the Dairy Show management, and of leading farm paper editors and the poultry interests everywhere, and we purpose to enlist every enterprise possible. The club boys' and girls' organization will be a strong factor in attracting interest. Demonstration and judging teams will come from many states. Agricultural colleges will also be represented by judging teams and various exhibits. Work on the premium lists has been started. Prizes will be liberal and attractive.

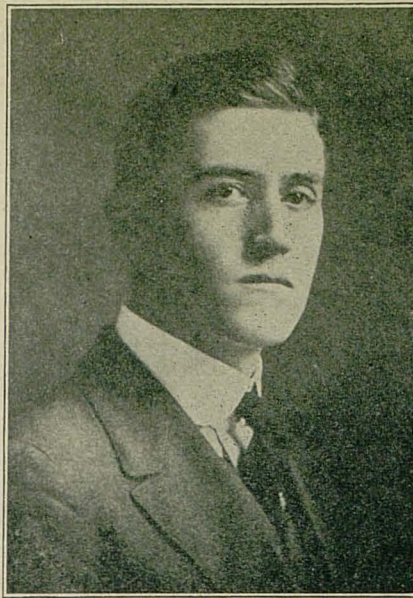
"The congress will be housed in the big Agricultural building, which will afford space for all exhibits, demonstration areas and lecture rooms. We will have speakers of national reputation on our daily programs."

Good Work by Juniors

G. F. Howard and H. G. Zavoral represented the extension service in a stock judging tour put on Aug. 19 for junior club members of Dakota county. Thirty-eight boys and girls accompanied by their leaders spent a day in judging general livestock on different farms of the county. Three of the club boys secured 245 points out of a possible 300.

Two Favorites in Norman

Mindum wheat and Minnesota No. 2 rye are producing superior results in Norman county.



A. A. DOWELL

Who Has Joined the Extension Service Staff to Work in Sheep, Horses and Beef Cattle

DAY SCHOOLS OFFERED STATE CATTLE FEEDERS

During October and November, one-day Cattle Feeders' Schools will be offered counties that have a goodly number of cattle feeders. As there are only a few cattle feeders in most localities, the plan will be to hold these schools or cattle feeders' conventions at one or two central points in a county.

A. A. Dowell, livestock extension specialist, will give instruction in the selection of feeders, rations for feeding cattle and feed lot management, while William L. Cavert, farm management specialist, will give instruction in the economic phases of cattle feeding. This will include estimating the cost of grains and the necessary spread between buying and selling prices under prevailing conditions.

Other economic phases that will receive attention will be the usual seasonal trends of the market for feeders and fat cattle and a discussion of the question as to what farmers should engage in feeding operations.

Miss Burgan Weds

She who was Miss Genevieve Burgan, assistant state leader of boys' and girls' clubs, is now Mrs. Meybohm. She was married in St. Paul Aug. 6 to H. A. Meybohm of Omaha, Neb. Mr. and Mrs. Meybohm will live in St. Paul and the latter will continue her work with the extension division.

F. B. Units Plan Contest

Carlton county farm bureau units will hereafter be pitted against each other in keen competition for an efficiency cup awarded annually to the best unit, if plans now under consideration mature. The units will be scored according to the percentage of paid-up members, the projects accomplished, the percentage of membership at meetings, and the like, according to S. A. Aldrich, county agent.

PAYS TO KNOW YOUR OWN SEWING MACHINE

One of the important steps towards greater efficiency in sewing is a more adequate understanding of the sewing machine, which will result in using quicker methods of work. To many women the box of machine attachments means very little more than equipment which comes gratis. These attachments when properly used will save time, money and produce better workmanship.

One half day's shopping will tell the seamstress what trimming is in style; whether binding, tucking, cross-tucking, couching, or braiding it can be done with her machine. Another useful attachment is the cutting gauge; this is not used on the machine but on the shears. Its purpose is to cut narrow bias or straight pieces evenly.

French seams can be made with the hemmer. This requires but one length of thread for the seam, and also insures the seamstress that there will be no raw edges on the right side of the garment. The binder is a time saver in making buttonholes, binding seams or edges, also in trimming as folds and piping.

Thirty-two women from two counties, who are carrying on the clothing project, give the following report covering a period of one month:

Attachments	No. Times Used
Binder	91
Hemmer	104
Tucker	35
Gauge	85
Braider	32
Ruffler	34
Without Attachment	
Couching	119
Hemstitching	89
Total number times attachments used	559
Number of others helped.....	50
Number of women reporting.....	32

STORE BUREAU GETS START IN TEN TOWNS

Judge Frank T. Wilson, community advisor, and James M. Ford, state manager of the Minnesota store bureau, report that one district of 10 towns is now fully organized, and that two more districts in southern and southeastern Minnesota will soon put the system into operation.

The bureau is a state organization of merchants and business men interested in distribution, and is a new development in cooperative competition in retail business. It was organized with the cooperation of, but with no financial assistance from, the university. Its objects were outlined in the June number of Extension Service News.

The store bureau is in full swing in the towns of Hopkins, Waterville, St. Peter, Elysian, Shakopee, Jordan, Belle Plaine, Le Sueur, New Prague and Montgomery. Wholesalers and jobbers of the Twin Cities have cooperated with the bureau in furnishing speakers for weekly meetings in each town and by guaranteeing \$300 a month for a period of six months to establish a central office and to maintain extension work to the point of making the organization self-supporting.