

MINNESOTA EXTENSION SERVICE NEWS

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FARMERS MADE ONLY

BARE LIVING IN 1921

Cost Studies Show Average Returns of \$772 for 65 Hours of Work Each Week of Last Year.

(By G. A. Pond, Farm Management Division, University Farm)

The division of agronomy and farm management has been keeping detailed cost accounts on a group of twenty-four farms in Cottonwood and Jackson counties since March 1, 1920. Figures presented in the following table show the average financial returns per farm for the year ending March 1, 1922, for twenty-one of these farms. Eight of these are operated by the owners, ten by renters and three are partly owned and partly rented. They average 178 acres in size. The acreage is distributed as follows: 55 acres corn, 47½ acres small grain, mostly oats, 12 acres tame hay, 12½ acres wild hay, 2 acres alfalfa, 36½ acres pasture and 12½ acres in farmstead, roads and waste land.

Average Financial Returns

The average crop yields in 1921 were: corn, 45 bushels; oats, 33 bushels; silage, 8 tons; tame hay, 1½ tons; wild hay, 1.1 tons, and alfalfa, 2½ tons. The average investment in working capital was, livestock (including horses), \$3,190; machinery, \$1,671, and feeds and supplies, \$653. The average financial returns per farm on the Windom route for 1921 were:

Receipts:	
Cream and other dairy products.....	\$366
Cattle	313
Swine	899
Poultry	159
Sheep	59
Crops	224
Miscellaneous and outside work.....	118
Total	\$2,138
Expenses:	
Hired labor	\$ 71
Threshing, twine, seed and other crop expenses	95
Livestock purchase and expense.....	211
Feeds purchased	76
Machinery expense and repairs.....	200
Building and fence repairs.....	63
Taxes	139
Interest	194
Rent	165
Miscellaneous	41
Total	\$1,255
Excess of cash receipts over cash expenses	\$ 883
Value farm products used in house.....	230
Estimated house rent (12 per cent of \$2,000)	240
Total income (not counting decrease of inventory	\$1,353
Business expenses not cash:	
Decrease of inventory.....	\$ 288
Value of unpaid family labor except operator's—1,464 hours at 20 cents....	293
Total	\$ 581
Excess of business income over expenses	\$772

The figures are averages for the twenty-one farms and include items of receipts and expenses not incurred

on every farm. For example, there is an expense item of \$165 rent. As a matter of fact only nine farmers actually paid any cash rent, but the total amount of rent paid is averaged over the whole group. The table gives a picture of the financial returns from farming in the community rather than returns for any individual farm.

\$883 in Real Money

The receipts and expenses as listed represent only cash transactions covering the farm business. No items of personal expense are included and no interest on capital or land charge other than that which is actually paid in cash. The excess of receipts over expenses, \$883, represents the actual cash which the farmer has to spend for food, clothing, doctor bills and other personal and living expenses. In addition to this he has a house to live in and meat, milk, butter, eggs, etc., for family consumption. The house rent has been estimated at \$20 a month and the farm produce at farm prices. Obviously this latter is much lower than the city man would pay for the same commodities delivered at his door.

The estimated value of these items brings the farmer's income up to \$1,353. This cannot, however, be considered net income since the farmer employs considerable capital and family labor in his business. Even if we made no charge for the use of this capital except what is actually paid as interest or rent, the depreciation on this capital must be considered. It is true that this is merely a "paper loss" from the cash standpoint, and yet it represents a consumption of capital. Machinery has depreciated through wear and tear and there is less feed on hand at the end of the year than at the beginning. Then, too, not only does the farmer devote his time to the operation of the farm, but he is assisted by members of the family who are paid no regular wage. If going wages for this time and actual depreciation on the working capital are allowed, the farmer has left as a return for his own time and capital \$772.

Farmers Not Striking

For this meager return the farmer worked an average of 10.1 hours per week day and 4.6 hours per Sunday. If one allows for the time lost through bad weather and other causes at various times of the year, it is evident that the farmer puts in much longer hours many days in order to maintain this average throughout the year. Holidays are few and far between. There were only three and a half week days during the year on which the farmer did no work at all, and only six out of

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FIRST POTATO TOUR

WILL START JULY 31

Field Meetings and Demonstrations Planned for Eight Counties in and Near Red River Valley.

Agricultural extension service men of the university are perfecting plans for the first inter-county potato tour held under the auspices of the university. The tour will start July 31 from Long Prairie, Todd county, and end August 5 at Bemidji, Beltrami county. Such leading potato growing counties as Wadena, Ottertail, Becker, Clay, Norman, Polk, Red Lake and Clearwater will be traversed. Potato centers like Verndale, Wadena, Detroit, Moorhead, Crookston and Clearbrook will be visited.

R. C. Rose, extension specialist with the university, assisted by the various county agents, will be in personal charge of the tour. Minnesota substations and schools and other universities in the west will send representatives. Dean W. C. Coffey of the university's department of agriculture and Director F. W. Peck of the agricultural extension division have been invited. From 50 to 75 auto loads are expected to make the tour. The main object, says Mr. Rose, is educational, in other words, to encourage better potato production. Another object of first importance is to give potato growers and dealers of other states an opportunity to view Minnesota as a seed producing state.

Informal field meetings and demonstrations will be held along the way between points. Seed plots will be inspected and demonstrations made of all kinds of potato growing machinery, including spraying. Problems as they appear in the field and in actual practice will be studied, as will the result of seed treatment for diseases and insect control.

It is planned to inspect various potato warehouses along the tour and if possible to look over the North Dakota agricultural college at Fargo, which is only a step from Moorhead, where one of the evening stops is to be made. Programs for evening discussions and entertainments will be worked out for the different points.

Mid-central and southern potato growers, who have found that northern grown seed is the best for them to plant, are expected to take part in the tour.

Community Club at St. Peter

A community club with headquarters at St. Peter is being organized through the efforts of Earl Sprenger, Nicollet county agent, and Judge Frank T. Wilson of the general extension division of the University of Minnesota.

NO REST FOR AGENTS IN SPRING MONTHS

One Hundred and One Things to Do at the Season's Jump-Off—Resume of Activities Southeast

During April agents in the southeast were more than busy getting demonstration plots started, locating and exchanging desirable seeds, arranging variety tests and seed treatment, visiting boys' and girls' club projects, assisting with disease control, holding pruning and spraying demonstrations, pooling farmers' orders for spray material, lime, seed, etc., arranging livestock tours and summer picnics, and in answering innumerable office calls and correspondence.

One county supplies all township directors, local leaders, and county commissioners with a copy of the year's program and other information from time to time so that they can readily answer questions as to what the extension service is doing. About 12 counties in the district have legally amended their articles to include the township unit plan of organization. Two counties took on assistant agents for five months to help with club work. One county has started local office days at one or two points. Three other counties have decided not to adopt it, feeling that the unit and community meetings will suffice and economize on the time of the agent.

Township Unit Baseball League

Three or four counties report assistance given in improving the county fair premium list. Two counties organized a county baseball league by township units and finals are to be played off at the farm bureau picnic or county fair.

One agent held a demonstration meeting on treating acid soil. Twenty-five farmers brought in samples, 70 per cent of which were strongly acid. There has been much interest in fertilizer and lime plots, over a third of the district pooling lime orders.

Agents have rendered more service this spring in locating and exchanging good seed than in any previous year. Much emphasis has been placed on legumes and substitute forage crops where the clover winter killed.

Problems Encountered

There has been increased interest shown in hog feeding and hog pasture demonstrations and in futurity shows. One agent says that 80 per cent of inquirers on hog feeding troubles have no pastures. Another says the monthly records from the poultry coöperators show nine eggs less per hen in some cases due to poor feed and care and poor housing. It's the old story that "care and feeding should precede breeding" and this applies to all animal life.

Three counties have arranged livestock tours and judging contests. Most of the agents have visited the calf and pig club members, advised on feeding, and helped locate desirable club animals. Four or five counties held junior short courses for the club members. Labor located during the month has ranged from 3 to 50 men per agent.

FARMERS MADE ONLY BARE LIVING IN 1921

(Continued from Page 1)

every ten farmers were fortunate enough on the average to get even one Sunday off during the year. When the 65-hour week for these farmers is compared with the 30-hour week for which the coal miners are striking the conclusion is almost irresistible that there is a serious mal-adjustment of hours of labor between different industries.

All things considered, these figures give a very fair picture of the returns from farming in southwestern Minnesota for the year ending March 1, 1922. In size these farms are a little below the average for that section of the state, but in crops grown, kind of livestock kept and percentage of tenancy they are fairly typical.

Receipts Less; Net Income More

It is true that 1921 was an abnormal year. So was 1920. The receipts from livestock, especially dairy cattle and poultry, were much higher and the receipts from crops much lower proportionately than they would ordinarily be. Butterfat, poultry and eggs are relatively higher in price than corn and oats, the principal cash crops. It is only as we compare these figures with those collected on the same group of farms in 1920 that we find anything encouraging in this showing.

The cash receipts were \$3,213 in 1920 as compared with \$2,138 in 1921, but the expenses were \$2,439 as compared with \$1,255. Receipts dropped about one third, but by cutting expenses approximately 50 per cent the farmer had an excess of receipts over expenses of \$109 higher in 1921 than in 1920. The value of farm produce used in the house in 1920 was 50 per cent greater in value than in 1921, but this was more than offset by a larger depreciation of working capital and a larger amount and value of unpaid family labor. Instead of an excess of income over expenses of \$772 as was secured last year, the income in 1920 failed by \$472 of covering the expenses. In other words, the return for the farmer's labor and capital on this basis was \$1,244 more in 1921 than in 1920. This improvement is encouraging even though the return is far from satisfactory as yet.

SIX COUNTIES FORM JUNIOR FARM BUREAUS

All the junior clubs have been federated into what is known as a county boys' and girls' club, or junior farm bureau, in the counties of Kanabec, Todd, Milaca, Waseca, St. Louis, and Fillmore. In St. Louis county an annual convention was held to which each club sent regularly elected delegates. The county club idea seems to be an excellent one and is worth fostering, says T. A. Erickson, state leader.

Testing Increases Production

Praise for the work of cow testing associations is given by T. G. Stitts, Meeker county agent. When their cow testing association was organized last fall, he said, its members had a very low average. Now 24 herds in the organization are averaging 25 pounds and better.

FIRST STEPS TAKEN FOR "STORE BUREAU"

Experimental Work Started in Eight Progressive Towns by the Minnesota Community Service

A store bureau for merchants and men of the towns has been launched without flourish of trumpets by the Minnesota Community Service represented by Judge F. T. Wilson, community adviser, University of Minnesota, and James M. Ford, supervisor of the work.

Representative merchants from ten Minnesota towns indorsed the project at a conference held with university officials, and experimental work is now in progress in the towns of Hopkins, Waterville, Jordan, Henderson, Le Sueur, New Prague, St. Peter and White Bear Lake. H. O. Roberts, secretary of the Retail Hardware association and chairman of the executive committee of the Minnesota Community Service, presided at the conference. Temporary organization was perfected with Mr. Smetana of Hopkins as president, Mr. Duffy of Chaska as vice president and Mr. Bliss as secretary-treasurer. These with Mr. McHale of Henderson constitute the temporary executive board. Thus a beginning has been made.

Mr. Ford, who is promoting the store bureau project in coöperation with Judge Wilson, says the objects sought are:

More economical merchandizing methods.

Closer personal and business relations between merchants and farmers.

A program of community work mapped out and executed in cooperation with the farm bureau.

Further effective extension service by the university and state and national departments of commerce.

Making the store bureau a valuable factor in promoting the university's program of community service.

Fostering mutual confidence and self improvement through an organization of merchants.

Methods by which the bureau can be developed and operated are thus set out by its promoters:

Enrolling business men who can work unselfishly with each other for the good of the community.

Establishing local bureaus in at least ten towns.

Demonstrations by experts on advertising, window trimming, credits, collections, and other problems of the small town merchant.

Building home trade by a continuous coöperative campaign for superior service.

Carrying on a definite yearly program, funds to be provided by the local bureaus.

Holding noonday luncheons and monthly community sales days after the plan followed by merchants of Montevideo.

"The store bureau program is now being carried out," says Judge Wilson. "The whole purpose is in the nature of an experiment which, if successfully conducted, will be of great interest to the communities of Minnesota and reveal large possibilities of helpful service to the small town merchant."

Phosphate in Big Demand

A 40-ton carload of phosphate has been distributed to farmers in Pennington county, J. J. McCann, county agent, reports. So many farmers are using this fertilizer that it will be necessary to ship in two more carloads this fall, he predicts.

COMMUNITY WORK CREATES GOOD WILL

Friendships Formed Rather Than
Number of Dress Forms Made the
True Gage

The report of Mrs. Francis White, who has been the local leader in her community in Koochiching county, shows that the results of the work are not merely a matter of so many dress forms made, but, what is so vitally important, neighborliness and friendship. This work was initiated by County Agent M. M. Abbott, assisted by Adele Koch, assistant state leader of home demonstration agents.

"There seems to be very little to tell, but will tell you how we have done it," she writes. "Two of us went to International Falls last August to the demonstration Miss Hough gave and learned how, and each took back a completed form. We then tried to interest the women in them. All seemed interested, but not enough to put up the money to buy the paper in ten-roll lots, as we had to do in order to get it at the lowest cost. So we asked our farmers' club to advance us \$5 to buy the paper to make forms, which they did. For the \$5 we received twelve rolls of paper instead of ten, as we had expected, on account of the drop in price. The secretary of the club took care of the paper and secured the vests on which the first four forms were made.

Day Off Taken

"We set a day and met at the Forsyth school. Twelve women were present and we made the four forms. We enjoyed a picnic lunch at noon and again before leaving for home. We did this on three different Saturdays, and made twelve forms altogether. We

would have made fifteen, but the last two, for whom we were to make these, were unable to come on account of sickness. We have enough paper out of the twelve rolls to make fourteen forms.

"After the first lot were made, some of the women secured their own vests on which to make them and some the secretary got at less than the 50 cent rate. As each paid \$1 for the form, the balance went back into the treasury. So we find we have made or have material for fourteen forms and have paid back into the treasury \$7.40 besides paying 45 cents for sponges to use in making forms.

More Real Friendliness

"While we were doing this, there has been a much better feeling established among us. We had a good time at each meeting and learned to know each other much better. The question now pending is, 'Couldn't we have a day once a month on which the women could get together and study our home problems aside from the club meeting day, for there the mother has her family along and, with the club business, there is little time or place to discuss anything else?' I should have said that the men coöperated with us in making the forms, as they brought us and came for us at the end of the day and took care of the children at home during the day.

"We also gave a demonstration at Littlefork where five forms were made. They took five more rolls of paper for five others to be made at once, making a total, counting the two forms made at the Falls, of 19 forms made by the Forsyth unit. I might say that practically all the forms have been mounted and the women are busy doing their sewing on them."

BARNUM HAS SECOND STRING TO ITS BOW

University Livestock Specialist Says
Community Will Become Famous
for Its Purebred Dairy Stock.

L. V. Wilson, livestock specialist, says that visiting the Barnum Cow Testing association recently was a revelation in more ways than one. "Much has been said concerning the progress of that community along the line of egg production," says Mr. Wilson. "It seems a little publicity with relation to its progress in dairying is well worth while.

"It has been proved many times that the establishment of a breed in a community is advantageous in many ways. Northfield, Waukesha and others are renowned for their extensive establishment of breeds.

"The association tester at Barnum is conducting butterfat tests and tabulating records for 48 farmers each month. Forty-six of the 48, according to his report, are the homes of grade and purebred Guernsey cattle. This great piece of work has come as a result of the efforts of men like H. C. Hanson, Jesse Doane and others. The effect of a 'bred for production sire' can be traced throughout the community established by a son of the great May Rose bull, 'Jethro Bass.' The two year old daughters of this bull at the end of the first year in a cow testing association showed 100 to 200 per cent greater production as two year olds than that of their common cow dams at maturity.

"The grading up process has been going on steadily and now with five months of the second term of testing having elapsed it is not uncommon to find several cows in several herds that will make more than 400 pounds of butterfat for the year on twice a day milking. Several of the breeders are buying or leasing highly bred bulls for service in different sections of the community, paying in one case \$500 for the privilege of leasing the senior herd sire of one of the leading northern Minnesota Guernsey herds.

"Forty-three cents a pound for butterfat was the average price received during April. The outcome of concentrated efforts of this kind can easily be foretold. Carlton county, particularly the Barnum community, will be a source of high grade and purebred Guernsey cattle, and the name of the community will become as well known as Northfield, Waukesha and Chester."

CANNING CLUB JUST AS POPULAR AS EVER

Club leaders report increased interest in home canning this year. Canning schools of one or two days have been arranged for Freeborn, Dodge, Goodhue, Kanabec, Milaca, Watonwan, Douglas, Jackson, Fillmore, Mower, Lyon, Carlton and Cottonwood counties. These schools are held for the purpose of organizing the clubs and getting the members started in canning by the cold pack method. Each county having canning clubs can send a demonstration team to the state fair. Thirty counties have already signified their intention of sending such teams.



EXTENSION SPECIALISTS TREATING SEED POTATOES BY THE HOT FORMALDEHYDE METHOD ON A BIG POTATO FARM IN PIPESTONE COUNTY. THIS DEMONSTRATION WAS ATTENDED BY 35 OR 40 COMMUNITY POTATO GROWERS.

Everything was well set for giving seed potatoes a hot formaldehyde bath, when R. C. Rose, agricultural extension specialist, and A. E. Enerson, the Pipestone county agent, arrived at the John Foss farm near Jasper, which is the center of a big potato producing region. The farmer and his help had a tank heater in readiness and a fire trench under the tank, so that it was no trick at all to treat 75 bushels of seed potatoes in less than two hours. Nearly 40 potato growers, some coming from across the

line in South Dakota, were impressed by the simplicity and efficacy of the treatment. The hot formaldehyde treatment is somewhat quicker but no more effective, says Mr. Rose, than the corrosive sublimate treatment. The plant pest specialist helped to hold four demonstrations in Pipestone county, where there is usually a large potato acreage, and has also been holding such demonstrations in Beltrami, Becker, Kittson and various other counties.

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PERMANENT BENEFITS SHOULD BE GOAL

In discussing "Organized Agriculture and Its Problems" in the Breeders' Gazette, Dean Eugene Davenport of Illinois makes a very appropriate statement with reference to farm bureaus supporting an agricultural program that means permanent benefits and fostering agriculture as a great national enterprise. The following is quoted from his statement:

"Coöperative marketing, which just now seems to be extremely popular, is to be regarded as an advance step, not as a panacea; nor is coöperative effort by organization likely to be able to take full care of all of us. The farmer of the future as in the past will be an individual enterpriser. He will both make and lose money, but in the interest of everybody these losses should be as few and as small as possible.

"The farm bureaus have some special obligation in all these matters. They are semi-public organizations, being founded upon a federal statute and appropriation. By inheritance the federations, state and national, partake largely of this obligation to regard agriculture not only as a class industry, but as a great national enterprise.

"Because this is true, the farm bureaus do well not to be diverted from the legitimate field of agricultural progress into those dissipations of energy that go along with the buying of binding twine, potatoes and farm seeds, or even fertilizers, for no other or better reason than that a few cents or dollars can be saved thereby to a special membership.

"By the same token the farm bureaus are not selling organizations. If the communities are not well served by trade, then let the farm bureaus be active in securing better service, and go along about their legitimate business. The practice of making a kind of handy-man of all work out of the county agent is one that will render the higher and real work of the bureau impossible, and ultimately wreck the organization.

"The internal problems of agriculture are mainly those of production and of maintaining a family life of that old-fashioned institution known as the

homestead. If we ever get very far from these ideas as the impelling force that lies back of our agricultural organizations we shall have left behind the greatest possibilities of success.

"We have in the farm bureau and its federations an almost ideal machinery for agricultural progress. The local unit known as the farm bureau can address itself, if it will, almost wholly to the problems of production. The state and national federations are in a position to attend to the larger relations of agriculture, and to secure that information and coöperation which the enterprise needs for its best success and service."

DEMONSTRATION TEACHING

We are beginning to realize and uniformly appreciate the fact that the people of a community will not change their habits all at once. However, every community does have at least a few progressive leaders who are willing to experiment with, try out, or demonstrate the desirability of certain methods and practices under their local conditions.

County Agent J. B. McNulty of Winona county has located and lined up 58 coöperators on crop projects, according to his April report, as follows:

- One testing 15 oat varieties
- Four on certified oats
- Two on certified wheat and barley
- Twenty-seven on soybean varieties
- Eighteen on alfalfa
- Three on biennial sweet clover
- Three on Hubam clover (annual)

This indicates the right conception for one who has formerly been a livestock specialist. In addition hog futurities for three breeds have been organized and may be classed as demonstrations at the fair. A series of demonstrations for women is in progress. Soils, local marketing, livestock work and disease control are also well under way.

Proof that the demonstration method of conducting extension work gets results is reflected in the fact that the Winona county farm bureau was glad to rehire its agent for two years at the same salary in spite of the fact that he is already one of the better paid agents in the state. The extension service as at present organized is especially designed to serve rural communities by the demonstration method in coöperation with the "local live wires."

"WORKING WITH THE BOY"

Were he living Theodore Roosevelt would be the cordial friend and supporter of boys' and girls' club work as promoted by the agricultural extension service of our various universities. Roosevelt once said: "If you are going to do anything permanent for the average man, you must begin before he is a man. The chance of success lies in working with the boy and not with the man." Thousands of boys in Minnesota are receiving training by means of club work that will make them even better farmers than their sires.

WHERE ARE WE GOING?

We are impressed with the tremendous rush of every day business and with the expression on people's faces as we meet them on the street that seem to say, "I am on my way, and in a hurry."

It has often occurred to us that very few of these expressions we notice carry the idea that they know just why they are going, and where they are going. A definite goal, particularly for specific activities, is an excellent thing to have in mind because it gives one a definite landing place at some stage of the work. However temporary such a landing place may be, it tends to mark progress, to stimulate interest, and to make more valuable the effort expended.

Unless we stop occasionally to ask where we are going, and why we are traveling the pace we set, we often find ourselves going around in a circle instead of straight ahead. It is worth while even as busy as we all are to stop and take a close look at what we are doing, why we are doing it, and where we are going.

This may result in economy of effort, a better selection of necessary activities, a more fundamental understanding of the business in which we are engaged, and will probably increase the chances for obtaining more valuable results of the particular service being rendered.

PLANS FOR NEXT YEAR

The plans of work for the fiscal year beginning July 1 have been prepared and copies sent to the United States Department of Agriculture for approval according to the coöperative arrangements under which the extension service is operating.

There is a distinct advantage to the individual extension worker in preparing a program of work with a definite statement of the object, the methods, and the goal towards which his effort is directed. The plan contains a tentative calendar of work showing as specifically as possible where and when the various projects will be in force.

We are finding that these statements help to define the object of putting on specialized extension work; they clarify the minds of the workers as to methods of procedure, plans for publicity, and the need of organization for the best extension effort.

The fall schedule of the specialists from September to December, inclusive, will be prepared probably in July. July and August are difficult months for sustained meetings and is the period of vacation for most of the state workers. We are preparing to start off September first in our specialists service with renewed energy, stimulated interest, and a desire to put over a better winter's work than we have in the past. We intend to aim to do this every year and actually to make each year's work more valuable than the preceding one.

EXTENSION PEOPLE AT U FARM VISIT 'ROUND

Divisional Chiefs "at Home" to Field Workers While Experiment Work Now in Progress Is Explained

Monday, the only day of the week in which extension service people are gathered in force at University Farm, has been devoted of late in part to visiting the headquarters of other divisions in order that the field workers may acquire a better understanding of the activities and matters of organization and administration of the university's department of agriculture. The idea, advanced by Director F. W. Peck of the extension service, has met with a cordial reception from the chiefs and sectional leaders of the different divisions. Following conferences concerning subject matter and project work, the extension service people have been given opportunity to inspect class rooms, laboratories, work shops, barns and other buildings used by the different divisions.

Beginning with the animal husbandry division the last of March, the extension specialists have since paid visits to the divisions of veterinary medicine, dairy husbandry, agronomy and farm management, and agricultural engineering with a side trip on Monday, May 15, to the headquarters of the Central Coöperative Commission association at South St. Paul. It is the intention to continue these "little journeys" until all the divisions have been visited and studied. By that time the extension staff probably will be ready for the second round.

At South St. Paul

Dean W. C. Coffey and Director F. W. Peck accompanied the extension party to South St. Paul, where Manager J. S. Montgomery of the Central was in waiting to do the honors. The visitors were shown through the offices and a good sized rest room—something new in the livestock shipping business—which the Central has provided for the comfort of shippers and farmers.

The delegation was then taken to the unloading chutes and through the pens used for hogs, cattle and sheep. The association has 67 pens for hogs, the combined capacity being between 4,000 to 5,000 animals. The cattle pens are divided into four classes, one for steers, another for she stuff, the third for milking cows and springers, and the fourth for veal calves. One interesting sight was the deftness and skill shown by a company employee who sorted the hogs into different grades for shipment.

Further Saving to Be Made

At each stop Manager Montgomery explained the methods of handling various classes of livestock to meet market demands to the best advantage. Efforts were being made, and with success, he said, so to moderate the shipping practices of farmer coöperators that the peak load of the week, now almost invariably received on Wednesday, will be distributed through Tuesday, Wednesday, Thursday and Friday. A survey taken in January, February and part of March had shown, he said, that the best prices

had been paid not on Wednesday, according to common belief, but often on Thursday and Friday.

Mr. Montgomery predicted that the Central would so develop and change the system of handling stockers and feeders that a material saving would be made for both buyer and seller. Stockers and feeders shipped to South St. Paul are often sold to farmers who come from the locality from which the stock was consigned. The animals are then shipped back and a second freight bill paid. It is hoped to work out some plan by which the buyer and seller can be brought together on their native heath.

Figures Surprise

When extension staff people to the number of 30 visited the agricultural engineering division headquarters, Prof. E. A. Stewart, in charge of the section of agricultural physics, submitted some startling percentages concerning the use or rather lack of use of running water in farm houses. Minnesota rural homes, he said, were "short" in the matter of modern conveniences and decidedly "long" in the matter of automobile ownership and operation. Quoting from census figures he showed that 57 per cent of Minnesota farm homes have autos as against a percentage of 29 in Vermont and 35 in New York. On the other hand, only 6.4 per cent of Minnesota farm homes are equipped with anything like modern water systems. In Iowa the percentage is 15.7, in New York 23.4, in Vermont 62, and in California 65.

Professor Stewart thought the slogan, "Running water in every farm home," ought to be adopted. "We ought to treble the percentage as to water supply in farm homes in the next 10 years," he said. "I estimate that about 40 per cent of Minnesota homes are equipped with windmills which are pumping water only for livestock. Power plants of this order ought to be pumping water for the farmer's family as well."

Projects in Drainage

H. B. Roe, in charge of the section of drainage, said that drainage was primarily an extension problem based upon the latest investigations. Four projects are now receiving attention in this section as follows:

1. Costs and methods of farm drainage installation.
2. Drainage and water control of peat land development.
3. Study of the influence of soil types on proper depth and spacing of tile drainage lines.
4. Securing a lasting tile in alkaline and acid soils and under deep freezing conditions.

Professor Roe said he regarded project No. 3 as the most important, because Minnesota has such a wide variety of soil types.

Farm Buildings, Tractors

H. B. White of the section of farm buildings, said that 972 students were given instruction in 1920-21, and that some 20,000 students in all have taken this work at University Farm. The special project just now is the collection of data for farm building plans

GIRLS' ONE-DISH MEAL APPEALS TO MOTHERS

Miss Inez Hobart, specialist in nutrition, gives the following account of coöperation given by the high school girls in Marshall county:

"The nutrition project was started in February with three groups in Marshall county. In each community the home economics department of the local school has given splendid assistance.

"The mothers at Stephen were very much interested at the meeting on 'Meal Planning' in the 'One-Dish Meal' which the home economics girls prepared in a fireless cooker of their own manufacture. They have since requested a demonstration of the making of the cooker.

"For the work in child feeding, this same group prepared an exhibit on 'School Lunches.' These girls have become so interested that those who are underweight are now following a definite plan to bring themselves up to weight. The mothers and teachers are helping them in every way.

"At Warren the home economics girls prepared an exhibit on 'Right Food for Growing Child.' The mothers were especially interested in the variety of vegetables included in this dietary.

"Miss Hilweg at Stephen arranged a home economics program for the Parent-Teacher association on the evening of the April meeting and requested the specialist to talk to the group on importance of vegetables in the diet."

WOMEN'S AUXILIARY AIDS TOWNSHIP UNITS

A women's auxiliary of the Watonwan county farm bureau, Mrs. W. J. Monroe of St. James township as county chairman, will do much to help the township units along, thinks Lloyd E. Hudson, Watonwan county agent. "If this organization gets into working order," he says, "it will help divide the work of keeping the units going and will also do much to swing public opinion in favor of the farm bureau. Many women from the small towns have taken part in women's organizations."

Club Tours

One of the most effective "follow up" methods in boys' and girls' club work is the club tour. Many agents are planning these during June. Last year more than 20 were held.

used in class work and furnished county agents and extension specialists for use in the field. These plans now number 104, 18 of which are for houses and 15 for barns. Lists are furnished county agents for ordering purposes, and nearly 10,000 plans have been sent them.

William Boss, chief of the division, discussed the question of available farm power and predicted that the farmers themselves would eventually produce the fuel needed for heat and power on farms. Tractor ownership should be based, he said, on the profitable use that can be made of them.

Fruit List Recommended for Minnesota

The selection of the right varieties of fruits for planting in Minnesota is extremely important. Prof. W. H. Alderman, chief of the division of horticulture, is chairman of a committee on fruit list of the State Horticultural society and spent much time last year in working out a list of fruits suitable for the varied conditions of soil and climate which prevail in this state.

For convenience, the state is divided into six districts, beginning with the most favored in the south-eastern part of the state along the Mississippi river, and then to the least favored in the western and northern parts of the state. County lines have been followed in most cases, but it does not mean necessarily that a variety planted on one side of the line will succeed while it will fail if planted ten feet away on the other side. The districts must be considered relative and not exact.

To use the list a person must consult the map, and note the district number and then refer to the list to find the varieties recommended for that district. This is the first time this list has been prepared in such detail. Its use will make it possible for planters to select more suitable varieties for their respective locations. Of the varieties mentioned, 17 originated at the state fruit breeding farm near Excelsior. Most of these are still on the trial list, and have not been propagated by the nurserymen very extensively.

GRAPES

Explanation of characters: *, Leading variety; cov, covering or protection required; †, Favorable locations only.

	I	2	3	4	5	6
Campbells Early ...	*	cov	cov	cov	cov	
Moore's Early	*	cov	cov	cov	cov	
Worden	*	cov	cov	cov	cov	
Alpha	*	*	*	*	*	**†
Beta	*	*	*	*	*	**†
Hungarian	*	*	*	*	*	**†
Brighton	*	cov	cov	cov	cov†	
Delaware	*	cov	cov	cov		
Diamond	*	cov	cov	cov†		
Concord	*	cov	cov	cov†		
Niagara	*	cov	cov	cov		
Agawam	*	cov	cov			

APPLES

Explanation of characters: C, commercial; HO, Home Orchard; *, Leading variety; †, Favorable locations only; T, Trial.

	Fruit Districts (See Map of State)					
	1	2	3	4	5	6
Yellow Transparent..	HO	HO	HO	HO	HO	HO
Blush Calville					HO	HO
Charlamoff	HO	HO	HO	HO	HO	HO
Oldenberg (Duchess)	C*	C*	C*	C*	C	HO
Iowa Beauty	HO	HO	HO	HO	HO	HO
Okabena	HO	HO	HO	HO	HO	HO
University	HO	HO	HO			
Anisim	HO	HO	C	C	HO	
Wolf River	HO	HO				
Superb	HO	HO	HO			
Brett	HO	HO	HO	HO	HO	
Hibernal	HO	HO	HO	C	C	HO
Pattens Greening ..	C*	C*	C*	C*	C	HO
Wealthy	C*	C*	C*	C*	HO	
Eastman	HO	HO	HO	HO	HO	
McIntosh	C†					
Grimes	HO					
Jonathan	HO					
Fameuse	HO					
King David	HO					
Delicious	HO					
Milwaukee	HO	HO	HO	HO		
Windsor Chief	HO		HO	HO		
Salome	C	C	HO			
N'western Greening..	C*	C†	C†			
Malinda	HO	HO	C	HO	HO	

Varieties for Trial

Folwell (Minn. No. 237), Red Wing, Minnehaha (Minn. No. 300), Red Warrior, Wedge (Minn. No. 207), Erickson, Perkins, except Districts 4, 5 and 6.

STRAWBERRIES (Protect by mulching)

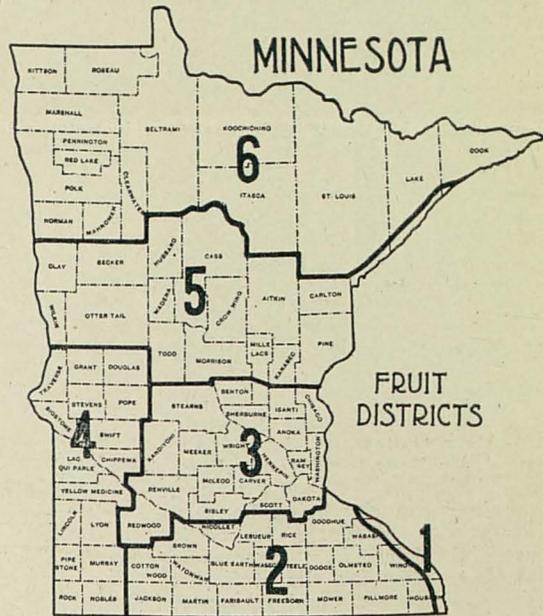
Perfect flowers: (June Bearing) Bederwood, Senator Dunlap, Chaska (Minn. No. 801), Nokomis (Minn. No. 489), Minnehaha (Minn. No. 935).

Imperfect flowers: Warfield, Easypicker (Minn. 775).
 Everbearing: (all perfect flowers) Progressive, Superb, Deephaven (Minn. No. 41), Duluth (Minn. No. 1017).

PLUMS AND HYBRID PLUMS

Explanation of characters: *, Leading variety; †, Favorable locations only; T, Trial.

	I	2	3	4	5	6
Opata	*	*	*	*	*†	T
Underwood (Minn. No. 91)	*	*	*	*	T	
Assiniboine					*	*
Winnipeg					*	*
Wolf (Freestone)	*	*	*	*	*	*
Sapa	*	*	*	*	T	
Tonka (Minn. No. 21) ..	*	*	*	T	T	
Compass					*	*
Wyant	*	*	*	*	*	*
Waneta	*	*	*	*	*†	T
Stella	*	*	*	*	T	
Loring	*	*	*	T	T	
Red Wing (Minn. No. 12)	*	*	*	T	T	
Zumbra	*	*	*	*	*†	T
Mound	*	*	*	T	T	T†
Monitor (Minn. No. 70) ..	*	*	*	T	T	
Terry	*	*	*	*	*	*
De Sota	*	*	*	*	*	*
Elliot (Minn. No. 8)	*	*	*	*	*†	T†
Anoka (Minn. No. 118) ..	*	*	*	T	T	
Winona (Minn. No. 30) ..	*	*	*	T	T	



MINNESOTA FRUIT DISTRICTS

RASPBERRIES AND BLACKBERRIES

Explanation of characters: Same as for grapes.

	I	2	3	4	5	6
Raspberries						
King (Red)	*	*†	cov	cov	cov	cov
Cuthbert (Red)	*	cov	cov	cov	cov	cov
Herbert (Red)	*	*	*†	cov	cov	cov
Sunbeam (Red)				*	*	*
Ohta (Red)				*†	*†	cov
Latham (Red)	*	*	*	*†	*†	cov
Columbia (Purple) ..	cov	cov	cov	cov	cov	cov
Cumberland (Black) ..	cov	cov	cov	cov	cov	cov
Plum Farmer (Blk) ..	cov	cov	cov	cov	cov	cov
Gregg (Black)	cov	cov	cov	cov	cov	cov
Blackberries						
Eldorado	cov	cov	cov	cov	cov	cov
Ancient Briton	cov	cov	cov	cov	cov	cov
Snyder	cov	cov	cov	cov	cov	cov

COUNTY BOARDS GIVE HEARTY COOPERATION

Number of Appropriations for Extension Larger Than Any in Past at Corresponding Date

To date 24 boards of county commissioners have made their appropriations in support of the county extension work for the current year. Five counties, Carlton, Hennepin, Itasca, Ramsey and St. Louis, make their appropriations for the year beginning January 1. The remainder of the counties make their appropriations for the year beginning July 1. County appropriations which have already been made for the coming year are given below, comparisons being made of the appropriations extended in 1921 to those voted for 1922:

Counties	1921	1922
Anoka	\$2000	\$2000
Beltrami	2000	4000
Brown	2000	2000
Carlton	1200	2300
Crow Wing	2500	2500
Faribault	2500	2000
Goodhue	1000	1000
Hennepin	3000	5000
Houston	1500	1500
Itasca	3000	3000
Koochiching	3000	3000
Lac qui Parle	2000	2000
Le Sueur	2000	1500
Mahnomen	1200	1200
Murray	2000	1850
Nicollet	1500	1500
Ramsey	2500	2500
Roseau	1800	1800
St. Louis	10,000	14,000
Sherburne	1500	1300
Steele	2500	2500
Stevens	1800	1800
Watonwan	3000	3000
Wilkin	2500	3000

This is the largest number of appropriations in support of the work made this early in the year. The cooperation extended is evidence of a splendid indorsement of the work on the part of boards of county commissioners.

JUNIORS ORGANIZE OWN FARM BUREAU

Eighty boys and girls, all members of junior clubs, enrolled for three days of short course work at Mora, Kanabec county. Willis Fairbanks, county superintendent, and E. A. Larson, county agent, were in charge. T. A. Erickson, the state leader, helped to conduct the classes and gave several short addresses.

The course ran for three days with work, recreation and play mixed in the right proportions. All the boys and girls joined in organizing a county junior farm bureau, which now has a membership of about 150. The young visitors from the farms were entertained in the homes of the people of Mora, and, what is more, were made to feel at home for the three days of their stay. Many courtesies were shown the young people by business men.

"Kanabec county was a pioneer in club work," says the state leader, "and the recent short course fully upheld its traditions. The county has made a splendid record in all club enterprises and we are proud of it."

First Potato Spray Ring

R. C. Rose, extension specialist, and C. C. Hickman, Sherburne county agent, organized a potato spray ring at Elk River recently. Charter members are five farmers who are growing 50 acres of potatoes. Other farmers in the vicinity will join the ring. The cooperators will buy spraying materials in bulk and will hire a man by the season to do the spraying.

Gopher Poisoning Interests

Gopher poisoning demonstrations in 13 towns in Mahnomen county interested many farmers. Much enthusiasm was shown at the meetings and large numbers of farmers are now using methods demonstrated in the warfare against gophers, says F. L. Behling, Mahnomen county agent.

WORK IN CLOTHING GETS GOOD RESULTS

Clothing work has been a main project in Morrison county for the last year, reports Susan Hough, home demonstration agent. Twenty-two communities are interested in this project. Six communities have completed the clothing work and about half of the communities have but one more meeting to complete such work. The dress form which is so popular, still demands a good deal of the agent's time, and in May fifteen forms were made at a saving of \$150.

A local leaders' class in textiles was held in Little Falls and thirty delegates came from twenty-five to thirty miles. Miss Ryan, the clothing specialist, conducted the meeting. The women who attended these meetings take the work back to their own communities so that the specialist's work will reach a large number.

Three demonstrations were held in short cuts in sewing, and in Upsala two meetings a day were held to accommodate all those wishing to have the work in the clothing project. Two lessons in decorative stitches, two in color, line, and design, one in cutting and fitting were held.

Several of the communities which finish the clothing project at their next meeting are planning to have each woman exhibit a garment or several garments she has made or in which she has used the suggestions given at the demonstrations during the series.

The work in clothing has been in such great demand that a second series should be arranged for the coming year, says Miss Hough.

Egg Circle Grows

In April, 1922, the Orchard Gardens egg circle shipped as many eggs as in the first five months of its existence, June 1 to November 1, 1921. April shipments this year amounted to 1200 dozen. The five months' period showed a total shipment of 1205 dozen.



BOYS AND GIRLS ATTENDING THE COUNTY SHORT COURSE AT MORA, KANABEC COUNTY DROP WORK AND PLAY TO POSE FOR THE CAMERA MAN

EGG-MARKETING PLAN GATHERS MOMENTUM

University Farm Extension Forces Help to Work Out State-Wide System of Buying and Shipping.

Nine district creamery supervisors, about as many nearby county agents, eleven freight and express company agents, several retail meat dealers of the twin cities and members of the extension division from University Farm attended an egg marketing conference called by A. J. McGuire, organization manager of the Coöperative Creameries association, and conducted by N. E. Chapman, poultry specialist.

An expert candler from the Isenmenger market, St. Paul, gave an interesting demonstration in egg candling. No eggs coming to St. Paul are graded for color, he said, as is the case in the eastern markets, and there is considerable variation in size, quality, and cleanliness. In candling it is essential to weed out every defective egg before going into storage. Blood spots, rots, molds, etc., are especially to be guarded against and the candling should be done at the points of origin.

Hard or Soft Boiled?

The candler also stated that ordinary country eggs coming to the Twin Cities usually contain from one to three dozen so-called "rotten eggs" per case and in extreme cases have gone as high as five or six dozen of poor eggs per case. The producer stands this loss. The speaker further said that in shipments from country merchants who candle, grade, and handle their eggs in a good way they seldom find more than two or three bad eggs per case and consequently encourage the business from such country shippers by paying them a higher price, which in turn is reflected in the price paid to the producer.

One case fresh from the country, taken off the transfer truck in St. Paul the morning of the conference, was put up by a community paying some attention to grading and shipping and for good quality. In this case the candler found one boiled egg, but the case was of a uniformly good size, all white, reasonably clean, well packed and having no broken eggs. Early in the spring good packing and grading means one and one-half to two cents per dozen more for eggs, but later in the summer the spread is much greater per dozen on eggs poorly graded and packed.

For Better Marketing Methods

Mr. McGuire called the conference to order and said that with 300 creameries already in the state organization and ten of the sixteen districts organized with their field men to help standardize and market butter in carlots, they also found it advisable to become thoroughly familiar with better egg marketing methods. N. E. Chapman, poultry specialist of the university, had been asked to take charge of the poultry marketing school. Mr. Chapman called for a word from President Reed of the Minnesota Farm Bureau Federation, N. J. Holmberg of the state department of agriculture, and Dean W. C. Coffey of the college of agriculture, all of whom pledged their hearty support and coöperation.

Statistics presented by W. L. Cavert showed that the bulk of surplus eggs in United States is produced in regions having cheap feed and that Minnesota has cheap feed compared to most other sections. Incidentally, Minnesota has cheap eggs, averaging on the farm for 1921 about 30 cents a dozen. He also showed that California, shipping twice as far to market, was able to get within 2 cents of the New Jersey white price and that with adequate shipping arrangements Minnesota could increase her returns because of cheaper feeds. Most of Minnesota's surplus comes from the southern part of the state. Mr. Cavert also pointed out the advantage of carlot shipments and the following illustrations proved this point:

Express Rate on Eggs

Renville-Minneapolis	\$1.03
Carlot rate—Minneapolis to New York	1.55½
Total	\$2.59½
Carlot rate—Renville to New York....	1.81½
Carlot saving per cwt.....	.78
Saving per case.....	.416

Mr. Chapman then explained the seven steps in marketing eggs to the creameries and the seven steps of handling eggs on the farm as outlined in mimeograph circular prepared by his office. He also stated that in 1920, Minnesota marketed 37 million dozen out of 66 million dozen produced. This surplus amounted to 3,136 carloads of 400 cases per car. In 1921 the average farm price in Minnesota was about 30 cents, the average purchase price in New York 37 cents and the average retail price in New York 49 cents per dozen. Carlot shipments will reduce the first spread from 30 to 37 cents by at least 2 cents per dozen and another 5 cents can be secured through better grading, packing and improved quality, or a total of 7 cents per dozen. This increase will be secured when the farmers bring in well selected eggs to the creamery which can regrade and handle them on a quality basis. Mr. Chapman exhibited cartons and cases of eggs well selected, well graded and well packed in contrast to the general run, emphasizing the great importance of producing and marketing firstclass quality.

Slides Used to Show Defects

A. S. Sibbald of the dairy and food department explained its regulatory functions in helping to improve the quality of Minnesota eggs, and by use of slides pointed out some of the defects to be noted in the candling process.

County Agent C. L. McNelly reported for the egg marketing committee of the creamery association. A demonstration in car loading showed the proper way to load and pad straight carloads of eggs or mixed carloads of eggs and butter. A model demonstration car and cases were used for this purpose and then those attending the conference went down to the depot where the loading of a car was demonstrated and explained.

Farming Cost Tour Scheduled

Tours for studying the cost of producing livestock and various farm crops have been set for June 1 around Windom and June 22 in the Owatonna country.

RECOURSE PROVIDED SHIPPERS OF PRODUCE

Rights of Consignors Under the Law Explained by State Department—Four Rules Laid Down.

The state department of agriculture through Hugh J. Hughes, its director of markets, is advising shippers of farm products how they may protect themselves against unfair practices on the markets and especially avoid shipping to unlicensed firms.

A state law requires the dealer in farm products, other than hay, grain, straw or livestock, to be licensed and bonded to the state in an amount not less than \$2,000 before engaging in such business. This law includes as commission merchant transactions all purchases except where the produce sold is paid for in final settlement at the time it leaves the hands of the seller. For example, a veal shipped from Middle River, Minn., to St. Paul without solicitation of the dealer at the receiving end makes the latter a commission merchant if he receives the veal. Under the law such dealings must be settled for on the basis of the quality and amount claimed by the shipper, or else the receiver must apply to the state department of agriculture for inspection in order to establish the condition of the shipment at the time of arrival.

Inspection is open to both shipper and receiver. It is mandatory upon the receiver whenever he desires to claim a quality inferior to that which is claimed by the shipper. The inspection report forms the basis for settlement. Mr. Hughes says that shippers of veal, wool, potatoes, cabbage, onions and other farm vegetables, berries, apples, farm hides, etc., should avail themselves of their right of protection under the law by

Shipping only to dealers licensed as commission merchants by the Minnesota state department of agriculture. (Lists will be furnished upon application.)

Noting on the manifest or bill of lading the amount and the quality of the shipment made.

Demanding, in writing, on the manifest or bill of lading state inspection unless the receiver accepts and is willing to pay for the shipment upon the basis of the amount, the quality and the price which such quality is bringing on the market.

Reporting any infraction of the law to Minnesota department of agriculture, St. Paul.

More Short Courses

Several boys' and girls' club short courses were held last month. Waseca county has two, one at New Richland and one at Waseca, with total attendance of 120 club members. The one for Mower county was held at Austin with an attendance of 100 boys and girls. The one for Beltrami county was held at Bemidji with 60 present. The course at Ada in Norman county had attendance of 125. The short course is one of the most effective ways of getting good results in club work.

Farm Bureau Supports Baseball

Through the efforts of the Dakota county farm bureau, a county athletic association has been organized. The association will have charge of baseball games this summer, and has selected umpires and other officials.