

# THE VISITOR

Devoted to the Interests of Agricultural Education in Minnesota Schools

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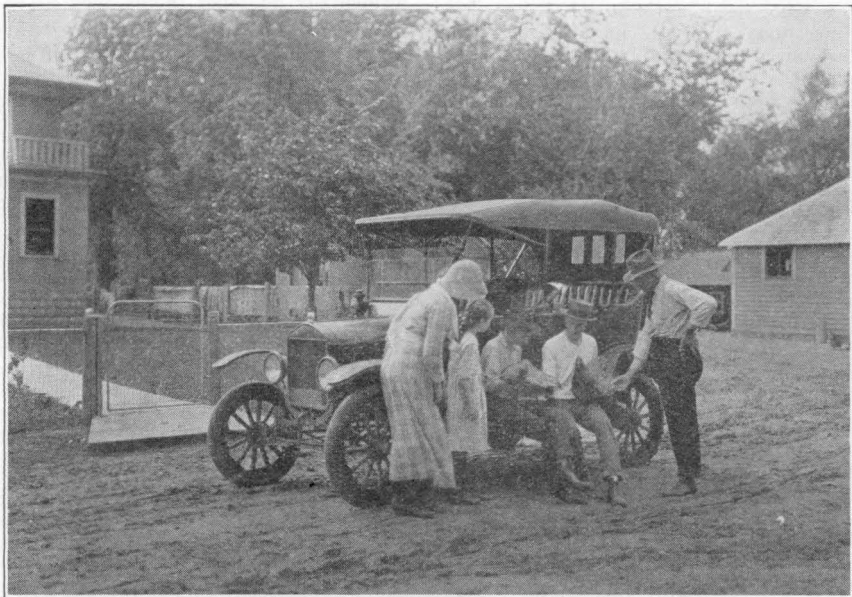
No. 4

## THE TEACHER OF AGRICULTURE<sup>1</sup>

Many students in high schools, especially in the farming sections of Minnesota, plan to become farmers. They have grown up on farms and have received valuable "pick up" training for farming. They need instruction which will directly help them to become successful farmers in competition with the highly trained farmers of the future.

In the regions about these high schools are boys who have left school anywhere from the sixth grade to the last year of high school. A study by L. E. Jackson<sup>2</sup> shows that in eighteen townships of western Dane County, Wisconsin, in 1925, there were 640 young men between the

seventy-one young men were either renters or hired hands. A very few of these young men from fourteen to twenty had finished high school. In the same townships were 231 young men between the ages of twenty-one and twenty-four on their home farms and 108 who were hired out or were operating farms as renters or owners. Adding the two age groups together, 1,050 young men between the ages of fourteen and twenty-four were found in an area roughly thirty miles by twenty miles. The same study of hundreds of areas in Minnesota would probably reveal large numbers of young men out of school working on farms. These



A teacher of agriculture is discussing a supervised farm practice problem with one of his boys and the rest of the family.

ages of fourteen and twenty out of school working on their home farms. Of the same age group and also out of school,

<sup>1</sup> This discussion is intended for students in high school or college who are considering the teaching of agriculture as a career.

<sup>2</sup> Master's thesis, University of Wisconsin.

persons need and desire instruction in agriculture.

Add to high school students, and this out-of-school or part-time group, a third group, adult farmers. In every farming community are many farmers who de-

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## THE STAFF

A. V. STORM  
A. M. FIELD  
L. E. JACKSON

D. D. MAYNE  
F. W. LATHROP  
V. E. NYLIN

sire to study their immediate farming problems. For example, dairy farmers would like to know how to combine their available feeds into the most effective ration. During the fall and winter of 1922-23, 709 farmers enrolled in evening school classes in Minnesota.

In the area about every rural high school we find regular high school students, part-time students and adult farmers who need agricultural instruction. Since 1909, the state of Minnesota has recognized this need by contributing toward the salaries of teachers of agriculture in high schools. In 1917 the Congress of the United States passed the Vocational Education Act under the terms of which money is granted to the states for the training of teachers of agriculture and for the salaries of teachers of agriculture. Since the passage of that act, agriculture departments have been established in the high schools of all the states. For the year ending July 1, 1927, forty-seven Minnesota high schools employed teachers of agriculture under the terms of the Vocational Education act. Of the states around Minnesota, Iowa had 115 agriculture departments in high schools, Wisconsin 74, South Dakota 29 and North Dakota 20. Some other states had larger numbers of departments, for example, Texas 212 and Ohio 186.

The purpose of the facts and figures given so far has been to show that the teaching of agriculture in rural communities is now nation wide. Young men of the proper ability and training are in demand as teachers for this work. The teaching of agriculture offers unexcelled opportunities for a busy, interesting life and a large measure of service.

### The Work of a Teacher of Agriculture

The teacher of agriculture is employed twelve months in the year. His year begins July first. We can get an idea of

the teacher's work if we follow him through some of his tasks as he begins his work in a community where an agriculture department has been newly established.

The study of his community will constitute one of his first tasks. The farming in every Minnesota community varies. The teacher of agriculture needs to know soon what the farming of his community is like because it determines largely what he teaches, what equipment he needs and what his community work will be. As long as he teaches in the community he must be a close student of its farming. He will obtain information from all possible sources. Bankers, merchants, members of farm organizations and others can give valuable information. The most reliable and useful data comes from a systematic survey of the farms. The teacher will secure data from fifty to one hundred farmers concerning such things as crops and animals raised, products sold, crop varieties, animal breeds, and the like. As he travels from farm to farm he will incidentally do other things such as becoming acquainted with farmers, noting persons of the three groups referred to above who are interested in agricultural instruction, collecting specimens to use in teaching, such as plants, seeds, disease specimens and insects, and noting for later use such teaching materials as herds, barns and machinery. It might be said in this connection that farmers welcome such visits from a teacher of agriculture.

When the information is collected, the teacher will need to tabulate, summarize, and draw his conclusions. This study gives him a view of what a person must know and be able to do in order to farm successfully in that community.

Later in the summer the new teacher will visit certain boys and adults to explain to them what agricultural instruction is and what its advantages are. Usually the people of a community do not understand the purpose of an agriculture department. The teacher must place his department before the community. If he is wise, he will seek out certain individuals who are leaders and tell them about his work. In addition to personal contacts, he will write for the local newspaper, set up an exhibit for the local fair, speak before gatherings of farmers and others. Several teachers, for example LeRoy Uptagrafft of Chatfield, fill a special column in the local paper each week.

If the agriculture department has been in existence during the previous school year, the boys who have been enrolled in

the regular high school and part-time classes will be at work on farms. These boys, in addition to their regular farm work, will be working at special tasks under the supervision of the teacher of agriculture. This supervised farm practice, as it is called, will be as varied as the activities of the several farms. Two examples, furnished by Minnesota teachers will illustrate.

Mr. A. C. O'Banion, teacher of agriculture at Park Rapids, Minn., has given the following description of the work of Wilfrid Norman: "Wilfrid Norman was 14 years of age when he enrolled in the Freshman class. The home farm consisted of 160 acres. Dairying was the major enterprise with a herd of twenty high grade Jersey cows. Cream was marketed at a co-operative creamery seven miles distant. Wilfrid had been a member of the dairy calf club for two years previous and was the owner of a high grade two-year-old heifer and a senior yearling grade heifer.

After discussing plans with his father and teacher, the following arrangements were made: Wilfrid was to take charge of the herd during the coming year. He felt that the butterfat production of the herd was not as high as it should be, compared with what certain neighbors were getting. This was due, he thought, to poor rations fed, which he believed were poor because they were not balanced. He needed more legume hay so he planned to put in a field of alfalfa for future needs and to purchase clover hay in the meantime. He was to have ownership of all the heifer calves from that time on.

A scale was purchased and the production of each cow was recorded. Milk was tested for butter fat at the school once each month. A record of the feed consumed was also kept. In the fall he plowed a five-acre field to be planted to alfalfa in the spring. He put on two tons of marl per acre, purchased certified Grimm alfalfa seed and used oats as a nurse crop. The result was a fifty bushel crop of oats and an excellent stand of alfalfa.

As a result of the rations being balanced and fed according to the production of the individual cow, the butterfat average for the herd was increased twenty pounds per cow for the year. At the end of the year he owned besides the two original club heifers eight high grade heifer calves.

The financial statement is not nearly as important as the knowledge and skills acquired by Wilfrid. These are the true

measure of the success rather than the money made. The plan is to give the ownership of a good herd to Wilfrid by the time he is through school."

Two brothers on their home farm near New Prague, Minn., are conducting some supervised farm practice of a different sort. The description is contributed by Harold G. Sandhoff, their agriculture teacher.

"The elder brother, Emil Dietz, is 21 years old and is in the part-time class. The younger brother, Ben Dietz, is 19 years old. Last year he was in the part-time class and this year has entered high school. Dairying is the most important enterprise on the farm. The boys keep detailed milk and feed records and as a result have culled two cows. They have disposed of the sire and bought a pure bred bull. The milk house has been rebuilt.

"The boys have also taken an interest in the poultry flock. The feeding of an egg mash has made a noticeable improvement in egg production. The floor and furnishings of the poultry house have been improved. Better lines of breeding have been introduced. The old roosters have been sold off. Some caponizing has been done.

"The boys have changed the breed of swine, bought a good boar and six pure bred gilts and are following the best known feeding practices. A minor rotation was established and rape and alfalfa pasturage provided for the swine. The pasturage involved a re-arrangement of the fencing.

"It was decided that the oat yields were too small. The boys bought Gopher seed oats, treated them for smut and are running a seed improvement plot. They planted ten additional acres of alfalfa. The farm buildings were painted."

Up to the time when the boys enrolled for agricultural instruction, the farm on which they lived was not different from the other farms of the community. The changes made are due to the program of supervised farm practice which Mr. Sandhoff stimulated and assisted.

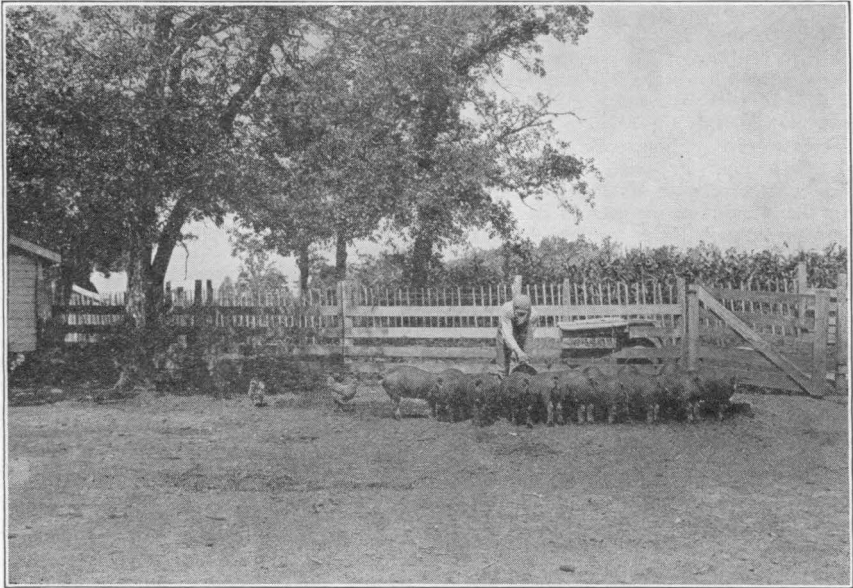
If the teacher of agriculture has twenty or more boys like the ones in the two illustrations, he will need to do much visiting. Nearly every day some sort of supervisory trip will be necessary. He will do some of his most effective teaching with these boys on their home farms.

A task awaits the new teacher at the school, especially if the department is just starting. The new department must

be equipped. Equipment must be ordered, some from supply houses and some locally. Valuable free materials such as charts, samples and booklets must be sent for. The agriculture library must be selected and organized. The number of agriculture books published is large and a selection of the most valuable forty or fifty books must be made with care. The available bulletins are almost unlimited in number and variety. In addition a few of the most suitable farm periodicals must be selected. When all these items of equipment are assembled, the teacher must arrange his equipment most effectively, considering such things as lighting, seating arrangement, location of cabinet and the like.

teacher visits the home farms of new students and makes contacts with the parents. This is the season of fairs. The supervised farm practice is in progress. There are not enough hours in the day at this season.

It is not necessary to describe in detail the class work of the teacher of agriculture. His methods are perhaps more varied than those of other high school teachers. The agriculture classes take trips to nearby farms, have special provision for supervised study, have periods in the shop, perform exercises such as testing milk, observe demonstrations, engage in classroom discussions. The nature of the subject matter should appeal to the interests of the students. The



The father has turned over to this boy the management of the swine herd as a part of his supervised farm practice.

In many departments there are shops in which the teacher gives instruction in the mechanical phases of farming. The selection and arrangement of the shop equipment is another problem for the new teacher.

The tasks mentioned so far suggest that the teacher will be busy during July and August. Then comes the opening of school in early September. The first days of school are busy ones. The teacher of agriculture must advise and enroll students. The class work starts. The

teacher of agriculture has a fine opportunity to become the most effective teacher in the school, as he frequently is.

There are still other activities in which the teacher of agriculture engages during the school year. In every school having an agriculture department, a course in elementary agriculture must be offered to the seventh or eighth grades. Such instruction has a variety of aims, the most important being to show to the class the possibilities of farming as a vocation. A course in elementary agriculture fre-



quently results in pupils electing the agriculture courses when they enter high school. For example, all except one pupil in an elementary agriculture class taught by Elmer Quist at Bertha, Minn., entered the vocational agriculture class the next year.

The need of out-of-school young men on farms for instruction has been mentioned. The first responsibility of the teacher is to discover these persons and interest them in a class during the slack season on the farm. Usually such persons need and desire instruction in such subjects as English, arithmetic and the like along with agriculture. The teacher of agriculture sometimes teaches these additional subjects. Usually an extra teacher is hired to teach some or all of them. Many of the young men left school because it did not seem worth while to continue. They need to be shown the worthwhileness of the subjects they study and perhaps need a more concrete presentation than the regular high school classes receive. Shop work often appeals to this group. Frequently a number of these part-time students leave home during the period of instruction and board near the school. The teacher then feels some responsibility for their living conditions and wholesome recreation.

Evening school instruction for adult farmers is one of the most interesting activities of the teacher of agriculture. Farmers have definite ideas as to what they want. The teacher must deal with their vital problems in a practical way. Moreover, these farmers may be expected to put their instruction into practice. Mr. J. B. Holger, formerly teacher of agriculture at Hinckley, sent an inquiry to the members of one of his evening school classes and received twelve replies. These replies showed that as a result of their instruction all tested soil for acidity, six started weighing and testing milk, two started feed and milk records, one grew soybeans, one grew sweet clover and several used lime. Teachers who engage in evening school work usually organize and teach one or two groups. Some teachers of agriculture secure an additional instructor and organize several groups. In 1922, Mr. L. H. Thurwachter at Albert Lea organized eleven groups, enrolling 258 persons.

Some teachers of agriculture do extension work. The teacher co-operates with the county agent, if there is one in charge of extension work for the county. This extension work may take

the form of boys' and girls' club work, participating in demonstrations, giving lectures, and the like.

The participation of the teacher in the affairs of the community is sometimes an important part of his work. Just to mention a few types, Felix Kaplan of Hinckley plays in the local band, H. O. Anderson of New Richland plays an important part in the local fair, and H. J. Johnson of Fosston is a member of the State Legislature. The writer once attended a choir rehearsal with a teacher of agriculture whom he was visiting. Two previous teachers had sung in the choir and the present teacher was expected to carry on. As a teacher of agriculture he ranked much higher than as a vocalist but he did his best. The teacher of agriculture is expected to do his part in local organizations.

### How One May Become a Teacher of Agriculture

A teacher of agriculture should have three kinds of training. First, he must have a thorough practical knowledge of farming and the ability to farm successfully. A lifelong experience on the farm is especially desirable. Second, he must know the technical side of agriculture, that is, he must know the facts and principles of agriculture which have been discovered by scientists and the experience of successful farmers. We have come to assume that this training may best be obtained by pursuing a four-year course in a college of agriculture. Such a course must be varied enough so that the student shall be trained in all the more important branches of agriculture. The teacher of agriculture cannot teach his favorite subject to the exclusion of all other subjects; he must teach all the phases of agriculture that are important in his community. It is necessary for him to study such subjects as he would need in order to prepare himself to engage in general farming as contrasted with some specialized type like poultry farming.

In addition to practical and technical training, the teacher of agriculture must have professional training. Professional training has as its aim making a person able to teach. Such training does not make a teacher of one who has no aptitude for teaching. It does enable a person to make the most of what aptitude he has. Along with his technical courses in agriculture, the prospective teacher takes a group of professional courses. Not only does he study principles of education, methods of teaching agriculture

and the like, but he observes the teaching of agriculture and obtains practice in teaching.

The University of Minnesota has been designated as the institution to train teachers of agriculture for the state of Minnesota. When the student in training has completed the prescribed course, he receives a certificate which entitles him to teach agriculture in the high schools of Minnesota.

### Opportunities in Teaching Agriculture

The description of the work of the teacher of agriculture has perhaps suggested that his work gives many satisfactions and rewards which cannot be measured in terms of money. The outlook for a reasonable monetary return is also good, especially if one considers the somewhat lower cost of living in rural and village communities. The average salary of a teacher of agriculture in Minnesota for the year 1925-26 was \$2,125. The highest salary paid was \$2,820 and the lowest \$1,650.

One who is considering the teaching of agriculture as a career may wish to know what the opportunities are for advancement or for changing to other occupations. The writer recalls 62 teachers of agriculture who left their positions during the period 1921-27 in Minnesota. Twenty-two of these went to other

schools to teach agriculture and are teaching agriculture at present. The following list shows the present occupations of the forty other former teachers of agriculture:

County agent, 8; farming, 7; school superintendent, 6; business, 5; teacher training in agriculture, 2; graduate student, 2; assistant state leader of boys' and girls' club work, 1; state director of vocational education, 1; state supervisor of agricultural education, 1; teacher of other subjects in high school, 1; athletic coach, 1; present occupation unknown, 4.

The duties of a teacher of agriculture afford him contact with other occupations. He often discovers some special fitness for one of these occupations, notable examples being county agent work and school administration. He has a special incentive to succeed as a teacher of agriculture in the fact that supervisory and teaching training personnel is selected from the successful teachers of agriculture.

### References

Further interesting points of view on the work of the teacher of agriculture may be found in the following references:

Stewart, R. M. and Getman, A. K.  
Teaching Agricultural Vocations.  
Chapter 1.  
Quick, Herbert. The Brown Mouse.

Case, J. F. Tom of Peace Valley.  
These books should be found in your school or town library. F.W.L.