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THE USE OF THE TABULATING MACHINE IN LIVESTOCK JUDGING CONTESTS

The steady growth in attendance at the annual livestock judging contest for boys enrolled in Agriculture in Minnesota High Schools make the accurate scoring and tabulating of the results increasingly difficult.

Immediately after the contestants are through with their judging the insistent demands for results bring increased pressure on the tabulators who are working under heavy pressure and strain. To relieve this situation the past year the tabulating machine was tried out in Minnesota with excellent results. In the judging contest in Minnesota the contestants use special comparative placing guide cards¹ similar to the cards that are used in the National Contests held for

sible the recording of all required data for each contestant.

The scoring of the contestants in the judging contest is based on the placing of a set of five factors, or reasons, and on the final order of placing. The factors for dairy cattle, for example, are as follows:

1. Style and General Appearance
2. Dairy Conformation
3. Constitution
4. Capacity
5. Mammary Development
6. Final Order of Placing

A card was printed for each of the six items. Each contestant received a set of six cards for each ring of stock judged. Figure 1 shows a copy of the tabulating machine card for one of the items.

In the Minnesota contest six rings of dairy cattle are judged. In order to help

1. DAIRY CATTLE Class..... Indicate your placing as to 2. DAIRY CONFORMATION by putting the number of the animal in the proper blank below. First.. Second.. Third.. Fourth..	Team No.	Man. No.	Group	Class	Pont. No.	Judges Placing	Contestants Placing	Grade
	* 0 *	0	0	0	0	0 0	0 0 0 0	0 0 0
	1 1 1	1	*	1	1	1 1	1 1 1 1	1 1 1
	2 2 2	2	2	2	*	2 2	2 2 2 2	2 2 2
	3 * 3	3	3	3	3	3 3	3 3 3 3	3 3 3
	4 4 4	4	4	4	4	4 4	4 4 4 4	4 4 4
	5 5 5	5	5	5	5	5 5	5 5 5 5	5 5 5
	6 6 6	*	6	*	6	6 6	6 6 6 6	6 6 6
	7 7 7	7	7	7	7	7 7	7 7 7 7	7 7 7
	8 8 8	8	8	8	8	8 8	8 8 8 8	8 8 8
	9 9 9	9	9	9	9	9 9	9 9 9 9	9 9 9

Figure 1. Copy of one of the six special tabulating machine cards for Dairy Cattle.

* Indicates punch holes.

Vocational Agriculture Students. These cards are prepared in a form which makes it easy to make duplicate cards that can be handled by the tabulating machine. Since the tabulating machine requires a card special in composition as well as in size of card, the blank cards were purchased and printed to correspond with the comparative placing guide cards. The special cards must have code numbers for the records of the teams, the individuals on the teams, group of livestock judged, scores made by contestants and final scores of teams. The code numbers of the columns on the cards, as shown in Figure 1, make pos-

sible a contestant to avoid making any mistake six colors are used in the printing of the cards. Each contestant receives a simple set of directions giving the class of livestock to be judged, together with the color of the cards to be used for the class. The group leaders receive only cards of the color specified for the class to be judged. For example Holstein aged cows may be judged on white cards. In this case only white cards would be turned in.

Previous to the contest the cards are punched in code in preparation for the

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THE STAFF

A. V. STORM A. M. FIELD
V. E. NYLIN

contest. An example of a code used on the above card, Figure 1, is as follows:

Team number	30	Team number	
Man number	6	Boys name	
Group number	1	Dairy cattle	
Class	6	Guernsey cows	
Point number	2	Dairy conformation	

When the contestant enters the contest he receives a set of cards for the contest. From this point on he does not need to remember his name or number. If Holstein aged cows are judged, he has a slip which states that the Holstein aged cows class calls for the use of white cards. When a group begins to judge a given class, the group leader again reminds the group that white cards are to be used and the class is aged cows. When the cards are turned in a check again is made to see that only white cards have been used. In this way two possible chances for errors are eliminated because the contestant cannot lose his identification nor mistake the class of stock judged. As soon as the cards are collected scoring and punching for final tabulation may begin.

The cards are sorted by contestants' placings 1-2-3-4 or 1-3-2-4 and so on and gang punched. They are then taken to a machine sorter and sorted by "class" indicated on the card, Figure 1. If the classes judged during the day are numbered consecutively only one sorting will be required. Then each "class" would be sorted by "point number" Figure 1. As soon as the first class has been sorted the gang punching of the Judges' score can begin. As each group of cards is gang punched, they can be grouped according to the judges score from 1 to 24. The "final order of placing" cards are kept separate because they receive greater weight in scoring.

When the judges' scores have been recorded each group of "final order of placing" having the same judges' score are sorted by student placings which will require two sorts. All sorting is, of

course, done by the machine sorter at the rate of about 400 cards per minute. When the placings and grades have been punched the cards are again sorted to bring them back to the individual and team number and the scores tabulated. The printed results of the tabulator give the complete data for teams and individuals as shown in Figure 2.

Team	Individual	No. of Cards	Individual Score	Team Total
3	1	36	1,024	
3	2	36	930	
3	3	36	764	
				2,718

Figure 2. Sample of data recorded by the Tabulating Machine

In Figure 2 the first column represents the team number, the second the numbers assigned to individuals of the team. The third column shows that all the cards are accounted for. This serves as a check on the persons tabulating or if 35 cards should appear it shows that one card is overlooked. The fourth column gives the individual score and the fifth column the team total.

If detailed records are desired, the tabulator may be set to print all individual cards, which would be 36 separately tabulated cards rather than the summary as shown above. If further study is desired, the tabulator may be set to print in addition the placing of the contestant, the judges' placing and the score the pupil received. —V.E.N.

FUTURE FARMERS OF AMERICA



SPRING GROVE CHAPTER Reviews of the First Year Accomplishments

B. Watson

We had twenty-eight active members, eight associate members and one honorary member in our F.F.A. Chapter last

year. Two of the active members were raised to the higher degree of Future Farmers; they were Elling Solum and Irvin Gran. We had three delegates to the state meeting of the Future Farmers of America; they were Harold Halvorson, Silmir Haugland and Herbert Larson. Our active members received pins which they may own as long as they are worthy of them.

We had five members demonstrating at the County Fair and three of these went to the State Fair and brought back honors to their school, town and county. They are Alice Munkel, who won grand championship in judging of bread; Ruth Munkel and Barbara Roverud, who won the grand championship in the sewing demonstration.

The following projects were carried on and completed by our active members.

Eleven dairy projects finished, thirty-six farm accounts, five thrift, three leadership, three marketing, three butter-making accounts, four sewing, one swine, two baby beef, three poultry, one sheep, one corn, and two fertilizer.

We sponsored and put on a play called *Kindling the Hearth Fires*. This was given in co-operation with the 4-H Club members. For some of the money gotten from the play we bought a film strip camera.

We had our meetings once a month, which means we had twelve meetings during the year. One of these meetings was in the form of a picnic at the Johnsrud farm, and at another meeting we entertained our parents in the school auditorium. At one meeting we entertained the members of the evening school and another was held in connection with the Parent Teachers' Association. The other eight meetings were just the members of the Future Farmers of America Chapter. At a majoring of these meetings we had refreshments and also an hour of recreation.

Besides these activities, we sponsored the planting of shrubbery on the school lawn, which improves its appearance very much.

We also sponsored an evening school for adults at which certain dairy and other farm questions and subjects were discussed. We had one radio program over the LaCrosse radio station, WKBH. These are the important accomplishments of last year.

BERTHA F.F.A. CAME THROUGH

Last fall the local chapter decided to carry on some 4-H club work. We called a central meeting of the rural

schools at the Bertha High School on May 15 at which time about 10 of the adjoining schools were present. We divided the group of about 125 into different sections according to the locality where they lived. The different boys in the F.F.A. chapter took a group each and met with them about ten times during the summer months. They then had the members show their stock at the county fair in which contest our boys won four first, three seconds, one third and Grand Champion in the calf club.

The Chapter has just recently put on a local school fair in which the boys of the agriculture department made a great showing of the products raised on their farm and through demonstration booths demonstrated very interestingly and clearly the work they carried on in their course last year, which consisted mainly of the dairy enterprise. There were 487 cows tested and an accurate record kept for the past year. The show created much attention as there was a crowded house for the evening program which consisted mainly of a talk by R. C. Rose of the University Farm, who talked on the improvement of potatoes.

The Fair was financed by local business men who contributed to the prizes. The prizes were all given in the form of certified seed or a partial payment on a purebred animal. Our motive in giving prizes of this nature was to improve the quality of the products grown in the community and the boys seemed very glad to receive prizes in this form.

WHAT IS THAT PLANT?

How often this question must have come to the minds of folk in Nature's Great Outdoors: Perhaps it has been asked of you many times and if the wild flower thus noticed did not blush because of such unusual attention probably you did on account of the embarrassing question, because, as you know, agriculture teachers are frequently expected to be walking encyclopedias.

It is really surprising, in view of all the propaganda for outdoor recreation, how few people really know even a relatively few of our 2,000, more or less, species of flowering plants. This is not to be wondered at when one considers the limited facilities and means at hand for becoming acquainted with our outdoor neighbors, the native plants. A rumor last year stated that only two high schools in the state taught botany as such without making it a part of the general science course. Students in colleges of agriculture seem not to secure more than

a passing knowledge of wild plants in the course in general botany. Ecology, Physiology and Taxonomy, subjects fundamental to Agriculture, seem not to be stressed. Their programs are usually so filled with required courses that but little opportunity remains for electives. Probably the idea is that there are so many courses necessary to fit the student for the business of farming that subjects a little less practical are omitted. Yet in the face of this we see gigantic physical equipment for sports and play. This equipment for golf alone represents huge outlays, not to mention the time spent in its utilization. Still there are but few who think it is not worth the price. Some states even maintain huge organizations to sell or advertise their resort and natural playground resources. Along with their vivid descriptions of beautiful lakes, limped pools, babbling brooks, rushing streams, verdant forests, blue skies and hungry fish, we see little or no mention of our native flora, which equally well might give big returns in pleasure, recreation, information and food for thought to the man who is equipped to notice them, know their names, study their histories and enjoy their wonders. In truth, a short intimate sojourn amidst wild plants is a wonderful panacea for faded muscles and shattered nerves. Even the appetite might be stimulated. We see no well advertised and developed plan to assist in this.

One with a decided fondness for the outdoors, an observing eye and a willingness to work by trial and error methods, can secure books that will help. This is a slow and tedious method in which discouragement is apt to arrive before the secrets of plants begin to unfold. If only the name could be learned, the rest would be easy, as guiding literature is abundant.

The farmer should be interested in plants both good and bad, and in this day especially the latter, because weeds may be vivid in his mind. Noxious weeds are spreading, and new ones are coming in. If he knew the name of the pest, it would be easy to find information as to its habits and methods of eradication, and possibly save him much worry and loss.

It has been a question as to how interested the teachers of Vocational Agriculture are in learning to know the names of plants, that they may enjoy them and pass the information on to those with whom they work. It is wondered how interested they might be in a method for securing the names of plants, and would

they utilize the information and assist, if all that was necessary was to collect and press plants, send them to some central agency for naming and pay a small fee for the service. The small fee would become a part of a fund for the maintenance of such a service. Would this interest you? The section of Agricultural Botany, University Farm, would like to know.

—A. H. Larson

Are you interested? The question raised by Prof. Larson is important and timely. If the teachers of Agriculture are interested in a plant identification service they should make their interests known to Professor Larson, because those in charge of the section of agricultural botany are anxious to establish helpful co-operative relationships with persons in the state who need help in plant identification activities.

—A.M.F.

COMPLETE SOURCE MATERIAL IN RURAL SOCIOLOGY

The literature of rural life has just been enriched by the contribution of a "Systematic Source Book in Rural Sociology," the work of Professors Pitirim A. Sorokin, Carle C. Zimmerman, and Charles J. Galpin. The book, in three volumes, is published by the University of Minnesota Press. Professor Sorokin was formerly in the Department of Sociology here, and is now chairman of the Sociology Department of Harvard. Only the last six years of his life have been spent in this country. He was condemned to death by the Russian Soviet government, and finally banished from his native country in 1922. He is now a naturalized American citizen. Professor Zimmerman is a member of the Minnesota Department of Sociology, but is on leave this year in Siam, where he is studying social conditions. Professor Galpin is with the United States Department of Agriculture.

The "Source Book" is unique in its field. It includes material translated from many languages, including Chinese, Japanese, Persian, and Bohemian. Writers on rural life whose work is included, range from Plato to Kropotkin and from Virgil to Lenin.

Each volume contains approximately 650 pages. The price is \$6.50 for each volume, or \$15.00 for the set of three books. The first volume is now ready for delivery; the second will be published early in 1931, and the third as soon thereafter as practicable.