

THE KANSAS AGRICULTURAL STUDENT

MANHATTAN, KANSAS



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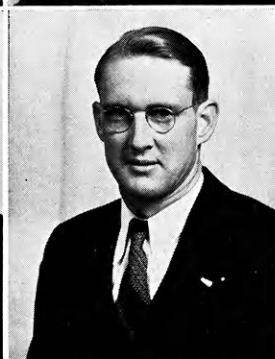
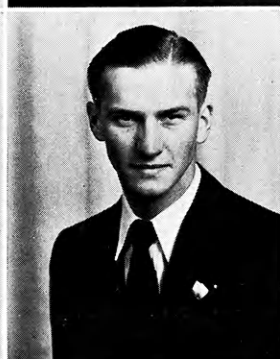
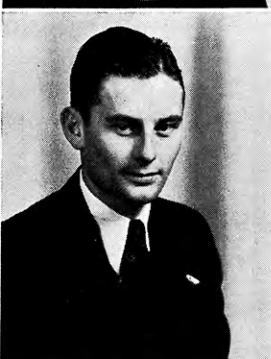
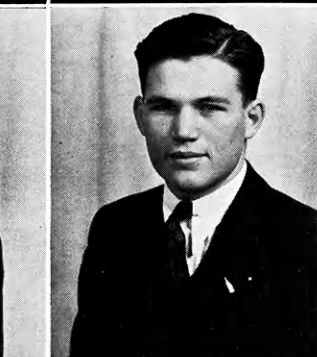
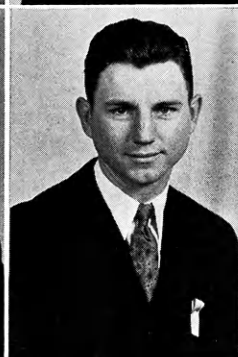
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ALPHA ZETA

Initiates

1932-'33



Walter M. Lewis
Nevlyn R. Nelson
Albert A. Thornbrough

Pius H. Hostetler
Orville F. Denton
Charles E. Fisher

Frank G. Parsons
Erwin Abmeyer
Harold L. Kugler
Wilfred H. Pine

Eugene E. Sundgren
Wayne W. Jacobs
Harold W. Coberly
Arthur C. Thomson

The Kansas Agricultural Student

VOL. XII

Manhattan, Kansas, May, 1933

No. 4

Soft-Curd Milk

W. H. Riddell

Associate Professor of Dairy Husbandry

Milk is the most complex of natural foods. Because of its important place in the diet, a great deal of investigation has been carried out, seeking to explain its remarkable nutritive properties. There are still many first-class discoveries to be made. A recent finding, which has an important bearing in nutrition, concerns the nature of the curd formed from milk at the time of digestion.

Milk which enters the stomach as a liquid is changed into solid form on coagulation. Proof of this is very frequently furnished when infants are changed from breast feeding to bottle feeding and cow's milk. In many cases the child has difficulty in retaining the milk and vomits pieces of tough, rubbery curd. If this condition persists for any length of time it can frequently prove a critical period in the youngster's development and a trying time for the mother.

Years ago, before commercial methods of milk distribution were developed, doctors frequently noted that the milk of certain cows agreed with some infants better than others. We now have the probable explanation. This difference between the milk of individual cows appears to be largely a question of the kind of curd formed on coagulation in the stomach. The milk from some cows produces a soft, clabbery curd, loose in texture and readily penetrated by the digestive fluids, while that of others gives a tough, rubbery mass, which is at best only slowly digested. The majority of cows range between these extremes in curd character. Cow's milk, in general, produces

a curd much firmer than that produced from human milk.

Within the last few years a simple and practicable method of measuring curd hardness or curd tension has been developed by Dr. R. L. Hill of the Utah Agricultural Experiment Station, who has made the most extensive studies of the subject. Briefly, the procedure consists in coagulating a definite amount of milk with a coagulant solution of pepsin or rennin and calcium chloride under controlled conditions of time and temperature. The relative softness or hardness of the curd is measured by noting the tension required to cut through the curd with a knife of definite size and shape. The result is expressed in grams of curd tension. With the development of a ready means of measuring curd tension a good deal of attention has been attracted to the subject. Soft-curd milk is now being marketed in many cities throughout the United States and its use is spreading rapidly. In Kansas, it is already being sold in six of the larger cities.

The character of the curd determines its ease of digestion in the stomach. Recent experimental work has shown that doubling the curd tension increases the length of the digestion period as much as 65 per cent, and the range is undoubtedly wider with milks of harder curd character. The advantage of feeding milk of soft-curd qualities, particularly during the early stages of the child's development, is apparent.

The Department of Dairy Husbandry

(Continued on page 118)



SCENES FROM THE STUDENTS' LIVE-STOCK JUDGING CONTEST, MAY 6, 1933

Student Judging Contests

During each college year four student judging contests are usually held in which one-fourth to one-half of the students in the division take part. This spring three of these contests were held; namely, the crops judging contest, the contest in the judging of dairy cattle, and the animal husbandry live stock judging contest. The winner of each section in each of these contests is presented in (B) of the accompanying illustration. Those who placed first, second, and third in the senior division and those who placed first, second, and third in the junior division of the animal husbandry contest, also the high man on any class of live stock not included in the six placings before mentioned are shown in (A) of the illustration. The full-page illustration gives a general view (A) of all participants in the animal husbandry contest with one group of horses just after the horses have been moved for the observation of the contestants. The four closer views (B), (C), (D), and (E) present the contestants divided into four groups. Group (B) are judging fat barrows; (C) fat lambs; (D) fat steers; and (E) draft horses.

A brief description of each contest giving many of the winners and also their winnings follows:

STUDENT CROPS JUDGING CONTEST

The annual contest in the judging of crops was held Saturday, April 22, with 35 students competing.

The contest consisted of judging and commercial grading of crops and identification of the more common weeds, crop plants, and seeds. There were freshman, junior, and senior divisions. All students regularly enrolled as undergraduates, who had not taken part in intercollegiate crops contests, were eligible to enter. The contest was sponsored by the Klod and Kernel Klub, student organization of the Department of Agronomy.

The winners were:

Senior division—John O. Miller, Meriden, first; Herbert T. Niles, Olivet, second; Wilfred H. Pine, Lawrence, third; Thomas E. Hall, Manhattan, fourth; Harry W. Coberly, Gove, fifth; and John R. Latta, Holton, sixth.

Junior division—J. Willett Taylor, Lawrence, first; Donald R. Cornelius, Wheaton, second; Walter M. Lewis, Larned, third; George A. Rogler, Matfield Green, fourth; Floyd E. Davidson, Madison, fifth; and J. Warren Mather, Grinnell, sixth.

Freshman division—Leon E. Wenger, Powhattan, first; Royse P. Murphy, Norton, second; Karl G. Shoemaker, Pomona, third; J. Edwin McCole, Emporia, fourth; E. F. Collins, Wellsville, fifth; and Earl W. Parsons, Winfield, sixth.

Silver trophies were awarded John O. Miller, winner of the senior division, and Leon E. Wenger, winner of the freshman division. The fifty-dollar scholarship fund contributed by the Kansas City Board of Trade was awarded to the high men in the junior division as follows: J. Willett Taylor, \$25; Donald R. Cornelius, \$15; and Walter M. Lewis, \$10.

Other contributors making possible the splendid prize list, amounting to more than \$135 in trophies, cash, and merchandise, were: Kansas Crop Improvement Association; Kellogg-Kelly Seed Company, St. Joseph, Mo.; The Weekly Kansas City Star; D. O. Coe Seed Company, Topeka; Henry Field Seed Company, Shenandoah, Iowa; Earl E. May Seed Company; Shenandoah, Iowa; Hays City Flour Mills, Hays; Capper Publications, Topeka; Red Star Milling Company, Wichita; Daily Drivers Telegram, Kansas City; Meredith Publishing Company, Des Moines, Iowa; Barteldes Seed Company, Lawrence; and Crowell Publishing Company, New York City.

—A. B. Erhart, '33.

(Continued on page 112)

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WHAT WILL IT COST TO ATTEND COLLEGE THIS YEAR?

Possibly many able and ambitious high school graduates are asking the above question. Among conservative, purposeful students there is a large variation. Read the answers to questions I and II (page 105). Let us state the spread as \$275 to \$600. Students have paid for their past college year in K. S. C. with less than \$275, all expenditures considered. Others without being extravagant have spent as much as \$600. These figures are not extreme limits.

Men whose total expenditures for the year have not exceeded \$275 have denied themselves the privileges of a fraternity and usually of a boarding club or public dining room. They have been frugal often to the point of sacrifice, but have usually reached their real objective in a creditable way. Many young men students whose past year in college cost from \$275 to \$400 are nonfraternity men. Some may be accepting fraternity advantages in a very limited way. They have enjoyed

many of the traditional advantages of a boarding club. They have been frugal but usually not to the point of sacrifice.

In answer to question II (page 105) a fraternity man's yearly expenses are estimated at \$600. To allow for the good sense of K. S. C. fraternities, let us say, the total expenses of conservative fraternity men last year ranged from \$475 to \$600. No fair fraternity man will say it costs nothing to be a fraternity man, though he may maintain that the extra fraternity expenditure brings larger returns than any other.

We do not mean to say to prospective young men students. Pay your money and take your choice. There is truth in that old saying, however, in budgeting the expenses of a college year and it is worth while for the prospective college student to budget his outlay within the limits of his income, and to persevere in living up to this budget. To follow such a course is a character training in itself, and college training that doesn't strengthen the character of the student is an empty show at best.

QUESTIONS AND ANSWERS

I

Q. How can college living expenses be reduced?

A. Determination to secure a college education coupled with limited funds has led many students to resort to various methods of reducing living expenses. The most common method of working one's way through college has been to secure part-time work from the college, business concerns, or in private homes for which either money or room and board are received.

An increasing number of students, both men and women, are cutting their costs of living by light housekeeping. By this method many students have been able to eat at a cost of \$6 to \$8 per month during the past year. The cost of food, however, depends greatly upon the amount received from the home farm, care in selection, the amount of actual cooking done, and the number of students in a group. Light housekeeping rooms for two or more students have been obtained at a cost of \$4 to \$6 a student per month. The cost of board and room with this system will depend largely upon the care and judgment of the students concerned, but \$10 per month, under present conditions, is a possible minimum and \$12.50, a safe minimum.

Laundrying expenses can be reduced materially by mailing one's laundry home. Careful students report they have kept this item within \$2 a month. The amount of money spent for clothing and recreation will vary greatly with the individual and could hardly be estimated.

Many students have demonstrated during the past college year that they can live very economically at Kansas State College if it is necessary in order to continue their work. Due to present low prices, college training can be secured at a small cash outlay.—A student who did it.

II

Q. What is the minimum a college student should spend to get a well-rounded social life?

A. In some ways the costs of a college education are about the same today as they were in more prosperous times. Less money is available, however, and the student must necessarily trim his budget accordingly. The question is just what part of the budget can the student cut.

Clothing, shelter, and medical and dental needs are necessities that represent costs which are relatively inelastic. Registration and laboratory fees, books and supplies, represent charges over which the student has no jurisdiction and which at the present time are high in comparison with other values. About the only relief left for the financially-distressed student is to reduce living expenses and cut out certain social and recreational expenditures. Here are about the only places he can economize.

It has been estimated that about 7 per cent of total fraternity students' expenditures go for recreational and about 7 per cent for fraternity fees. In other words, 14 per cent of a fraternity man's expenditures are for his social life. The normal fraternity man's expenses for one school year may be very conservatively set at \$600. The cost of the social side would accordingly be \$84 or around \$9.25 a month. The conservative nonfraternity man's expenditures may average around \$400 for the school year, with an outlay for social activities of \$3 a month or \$28 for the school year, which is 7 per cent of his total expenditures. This sum should take care of his social needs if he is careful in his selection of social functions. It is obvious, of course, that no two individuals are exactly alike in this respect. One individual's social life

may be perfectly rounded out at half the expense that it takes for another individual.

There are certain healthy, thick-skinned youths, used to work from childhood, who work their way through college without feeling the lack of a social fraternity. These same individuals may make Phi Kappa Phi, be outstanding leaders, and yet spend 7 per cent or less for social affairs. Such people are the exceptions rather than the rule. The college boy's primary purpose is to learn, but the student's standing in the community depends on whether he belongs to the right clubs and takes an active part in student affairs. The nonfraternity man is handicapped because the fraternities control most of the student activities and all the politics of the school. It is difficult, indeed, for a nonfraternity man to make the social contacts that are possible for an individual in an organized group.

It would thus appear as if the nonfraternity man's social expenses are only about one-third the amount of his fraternity friends, but likewise his chances for social influence are only about one-third as good. It remains for each individual to analyze his financial and social needs and budget his expenditures accordingly.—Franklin L. Parsons, '32.

III

Q. Are opportunities in college and research work for scientifically trained young men likely to improve in the next 10 years?

A. Sound scientific training is as useful to agriculture as it is to manufacturing or other industries. There is as much reason to believe that there will be opportunities in the future for young men scientifically trained in the field of agriculture as in any other profession. During this period of depression there is little demand for the service of scientifically trained men in any field. With improved business this condition will change. The service of scientifically trained men in agriculture

will again be in demand. Young men who secure an agricultural education during this period of depression will be prepared to render useful and necessary service when conditions improve.—L. E. Call, Dean, Division of Agriculture.

IV

Q. Is a college education likely to be as important and valuable to a young man during the next 20 years as it was to the youth of the last 20 years?

A. In my opinion a college education will be more important and valuable to a young man during the next 20 years than it has been to the youth of the past because our civilization and economic life are rapidly becoming more complex each year. With more complex conditions prevailing, it will be the better trained and better educated men who will be capable of understanding the situations that arise and of using them for the advancement of themselves and of society. The man without a college education will find it increasingly more difficult in the future to compete successfully with other men.—R. I. Throckmorton, head of Department of Agronomy.

V

Q. Why place greater emphasis on the business phases of agricultural education?

A. The farmer of tomorrow will be more concerned with business problems than was his father. Each year sees increasing opportunities for the use of business knowledge in farming. This is true because of the increasing competition in farming and the trend toward more organized activity among farmers. The men with college education in agriculture stressing the business phases, should, with experience, advance to responsible positions of leadership. Agriculture is in need of more leadership of this type and will use it as it becomes available.—W. E. Grimes, head of Department of Agricultural Economics.

VI

Q. Should I, a member of a high school class of '33, enroll in college this fall or wait a year?

A. During "good times" a commonly heard reason for not attending college is that the high school graduate can get a good position at once and consequently needs no further education. There is a fallacy in this reasoning but at the present time consistency should beckon high school graduates to the colleges. Their time can now be put to no more profitable use.

Delay is dangerous. A young man can't stand still, so what is put off this year may never be done. No one knows what the conditions may be the following year, but the chances are they will not make enrollment in college any easier. If a one-year gap in a young man's education becomes necessary, it often works out that it should come between the junior and senior college years rather than between high school and college.

Beyond mere material views of this question lies a field of intellectual and spiritual values; a field which will in all likelihood never be trodden by a young man's feet unless he hastens to follow the lane leading to it as quickly as circumstances will permit.

Country-wide and life-long experience dictates, "Able students should lose as little time as possible between high school and college work."—R. J. Barnett, head of Department of Horticulture.

VII

Q. Has the depression lessened the desirability of a college education?

A. The depression has not lessened the desirability of a college education. It is true that some recent college graduates are unemployed and jobs are difficult to secure regardless of one's education. However, few college graduates are finding it necessary to depend upon charity. Also, officials of many business firms definitely state that as times

improve and they are in a position to increase their employees, they plan to give more preference to college-trained men than they have in the past. The man with the education will be in position to grasp the opportunity when it comes.—W. E. Grimes, head of Department of Agricultural Economics.

VIII

Q. Will the opportunities for a well-trained man on a Kansas farm be better in the future than they have been during recent years?

A. The economic crisis of the past three years has added a new and important factor to productive farm land as a desirable and dependable asset. In view of the fact that such land is now available at the lowest prices in forty years, this statement may seem paradoxical. I am, however, convinced of its truth. This new and intangible value lies in an almost universal recognition of the fact that a farm affords the greatest possible security of livelihood. Low prices and greater values offer sound inducements for intelligent and industrious young men to get on the land. Successful farming has become increasingly a skilled and specialized undertaking. Of all vocations it is the most indispensable to human life. As never before it offers a well-rounded, deeply satisfying career to the trained youth of courage, industry, and right vision.—Dan D. Casement, Manhattan, Kan. (A leading Kansas cattleman.—Ed.)

IX

Q. Will commercial work with farmers' cooperative companies draw more heavily upon college-trained men in the future?

A. Without question and without hesitancy the answer to the above question is "Yes." In the realm of the college-trained agricultural mind today, there is no field that offers the opportunity of the farmers' cooperative organizations. Some college-trained

men are now being used in these organizations and the leaders are turning to these men for helpers to train as future managers.

The college-trained man will find this avenue of endeavor will tax the best he has. It will lead him to a field wherein he has wonderful opportunities for service to his fellow men, which will compensate him not only in cash but also in the satisfaction of service rendered, provided he is willing to start at the bottom and work up. Probably no other field offers as little competition for the college-trained man among college-trained men. This fact, however, does not mean competition is not keen in this field.—Vance M. Rucker, Extension Marketing Economist.

Thinning Apples

Wilbur A. Copenhafer, '32

Thinning apples is a western custom which has proved valuable in the production of high-grade fruit. The practice is becoming more common because it is recognized as one of the factors that has helped western apples to compete successfully on eastern markets.

Thinning fruit is one way of bringing about a balance between the demand for food and the nutrients available for fruit production. It helps conserve the vigor of the tree by decreasing the number of developing seed, which are a serious drain on the tree, without seriously lessening the pounds of fruit produced. It also promotes an even distribution of fruit, thus avoiding the breaking of branches and the necessity of props.

Apples infested with codling moth, railroad worm, or affected by fungous diseases may be eliminated during the thinning process, leaving for harvest only those which are free of defects. This, together with the fact that the apples are larger than unthinned fruit, will result in a higher percentage of

No. 1 apples and will aid materially in grading.

Thinning should begin just as soon as the "June drop" is over. The worker should start at the top of the tree and work downward to permit the removal of apples that may have been bruised by apples falling during the process of thinning the upper portions of the tree. It is important to work systematically around a tree, or many clusters will be missed.

To thin apples begin by removing all defective fruits, such as wormy or diseased ones, those that are under sized, and those that show limb bruises or other similar defects. Thin down to a uniform distance apart as a uniform distance gives uniform fruit. Western orchardists recommend thinning apples to as much as 8 or 10 inches apart. It is a good plan for a beginner to thin to one fruit to a fruit spur gradually eliminating those which are too close together as his confidence in himself increases.

Since moisture supply is an important factor in the development of the proper size and color of fruit, thinning will consequently produce more favorable results during seasons when the rainfall is deficient.

A. E. Murneek of the Missouri Agricultural Experiment Station, reported that to thin trees yielding 10 to 15 bushels of fruit, would cost approximately 3 cents per harvested bushel and that with the scale of wages around 25 cents per hour, low-headed trees could be thinned for 2 cents per bushel. On higher trees the cost increased to 4 cents per bushel. Too many things such as variety, pruning, age, etc., enter into the operation of thinning to give a very definite estimate as to its cost, but as all apples must be picked sooner or later the time at which they are picked should not greatly influence the cost of picking.

Pius H. Hostetler, '34, is working in the Fairmont Creamery at Concordia.

State Vocational Agriculture Judging Contest

Harold L. Kugler, '33

On May 1 and 2, 1933, the thirteenth annual state high school vocational agriculture judging contest was held. There were 63 teams present, 36 of which participated in all four sections of the contest. The number of contestants totaled 189. Last year 67 teams were present and the total number of contestants was 203, as one school entered two individuals.

The contest was divided into four sections. Section I, dairy judging, consisted of placing four classes of dairy cows and giving oral reasons on two of the classes. Section II, animal husbandry judging, consisted of placing two classes each of horses, beef cattle, swine, and sheep, and giving oral reasons on one class of each kind of animals. Section III, crops judging, consisted of the identification of grain and forage crops, weeds, weed seeds, and plant diseases; commercial grading of wheat, grain sorghums, shelled corn, and alfalfa; and judging the seed and market value of alfalfa seed, ear corn and wheat. Section IV, poultry judging, consisted of placing four classes of hens for past production and a written examination on the American Standard of Perfection.

In Sections I and II, 50 points were allowed for reasons and 50 points for placing, making a total of 300 points in

Section I and 600 in Section II. In Section III there were eight classes, each given an allowance of 100 points making a total of 800 points. In Sec-



WINNING TEAMS IN THE STATE HIGH SCHOOL CONTESTS
IN FARM MECHANICS (A) AND THE JUDGING
OF FARM PRODUCTS (B)

(A) Team from the Decatur County Community High School (Oberlin) and its coach, S. H. Howard. From left to right the members of the team are: Irwin Miller, high individual in the entire contest, and Kenneth Van Vleet.

(B) Team from the Newton High School and its coach. Standing, left to right: R. M. Karns, coach, Clement White. Seated: John Renich, high individual in the entire contest, and Carl Claassen.

HIGH TEAMS IN THE ENTIRE CONTEST

High School	Score					Coach
	I	II	III	IV	Total	
Newton H. S.	633	1,322	1,734	987	4,676	R. M. Karns
Lebanon H. S.	593	1,430	1,518	1,072	4,613	F. A. Blauer
Hill City R. H. S.	580	1,406	1,593	997	4,576	S. S. Bergsma
Washington H. S.	604	1,471	1,581	874	4,530	H. H. Brown
Fairview R. H. S.	634	1,324	1,595	959	4,517	R. E. Regnier
Lawrence H. S.	610	1,404	1,525	950	4,489	W. R. Essick
Ottawa H. S.	643	1,265	1,514	1,053	4,475	C. O. Banta
Tonganoxie R. H. S.	644	1,343	1,466	944	4,397	O. M. Williamson
Concordia H. S.	624	1,376	1,425	933	4,358	A. G. Jensen
Alton R. H. S.	597	1,364	1,527	851	4,339	F. H. Schultis

HIGH INDIVIDUALS IN THE ENTIRE CONTEST

Contestant	Score				High School	Coach
	I	II	III	IV	Total	
John Renich	216	455	617	357	1,645	Newton H. S.
Emerson Cyphers	237	464	589	345	1,635	Fairview R. H. S.
Elmer Dawdy	254	324	523	329	1,630	Washington H. S.
Ralph Bethel	211	483	557	350	1,601	Hill City R. H. S.
Max Vernon	194	461	575	336	1,566	Decatur Co. Com. H. S.
Doyle Reed	207	506	507	342	1,562	Lawrence H. S.
Harold Wright	198	511	489	355	1,553	Lebanon H. S.
Max Shoemaker	229	456	523	343	1,551	Ottawa H. S.
Ronald Russell	207	461	510	355	1,533	Lebanon H. S.
Stanley Dowds	212	515	511	293	1,531	Alton R. H. S.
						F. H. Schultis

HIGH TEAMS IN EACH SECTION OF THE CONTEST

High School	Sec.	Score	Coach
McDonald R. H. S.	I	676	C. K. Fisher
Clay Co. H. S.	I	676	Edwin Hedstrom
Mound City H. S.	I	665	E. L. Raines
Marysville H. S.	I	661	R. W. Russell
Arkansas City H. S.	I	653	T. C. Faris
Washington H. S.	II	1,471	H. H. Brown
Arkansas City H. S.	II	1,455	T. C. Faris
Atwood Com. H. S.	II	1,447	A. H. Hilpert
Marysville H. S.	II	1,446	R. W. Russell
Waterville H. S.	II	1,438	J. R. Wells
Newton H. S.	III	1,734	R. M. Karns
Fairview R. H. S.	III	1,595	R. E. Regnier
Hill City R. H. S.	III	1,593	S. S. Bergsma
Washington H. S.	III	1,581	H. H. Brown
Delphos H. S.	III	1,561	H. W. Schaper
Lebanon H. S.	IV	1,072	F. A. Blauer
Ottawa H. S.	IV	1,053	C. O. Banta
Shawnee Mission R. H. S.	IV	1,045	H. D. Garver
Reading R. H. S.	IV	997	H. C. Wood
Hill City R. H. S.	IV	997	S. S. Bergsma

HIGH INDIVIDUALS IN EACH SECTION OF THE CONTEST

Contestant	Sec.	Score	High School
Martine Brecht	I	256	Chase Co. Com. H. S.
Leo McLeod	I	254	Marysville H. S.
Elmer Dawdy	I	254	Washington H. S.
Clarence Stanberry	I	246	Blue Rapids H. S.
Orville Knapp	I	243	McDonald R. H. S.
Winzer Petr	II	534	Waterville H. S.
Grayson Murphy	II	528	Norton Co. H. S.
Melvin Thomson	II	525	Arkansas City H. S.
Elmer Dawdy	II	524	Washington H. S.
Stanley Dowds	II	515	Alton R. H. S.
John Renich	III	617	Newton H. S.
Junior Payne	III	607	Delphos H. S.
Emerson Cyphers	III	589	Fairview R. H. S.
Charles Linderman	III	575	Hill City R. H. S.
Max Vernon	III	575	Decatur Co. Com. H. S.
John Fryback	IV	362	Lebanon H. S.
Montford Radcliffe	IV	361	Hill City R. H. S.
Raymond Carpenter	IV	359	Ottawa H. S.
Paul Dillman	IV	359	Shawnee Mission R. H. S.
John Renich	IV	357	Newton H. S.

the examination, making a total of 400 points. The total of all four sections made a possible individual score of 2,100 points and a team total of 6,600 points.

Awards and prizes were announced following the F. F. A. banquet at the community house, Tuesday evening, May 2. The President's prize—a parchment certificate—awarded the team making the highest score in the entire contest was won by Newton High School, competing against 44 teams throughout the entire contest. Last year the team from Newton placed second in the contest. The Dean's prize—a parchment certificate—awarded to the individual making the highest score in the entire contest was won by John Renich of Newton High School, competing against 107 individuals throughout the entire contest. Kenneth Fisher of Newton High School was high individual of last year's contest. Two consecutive first placings of individuals in the entire contest speak very highly for their coach.

The team ranking highest in each section of the contest received a parchment certificate from the department sponsoring that section of the contest. The college departmental clubs presented medals to the highest-scoring

tion IV, 75 points were allowed for placing each class and 100 points for

individuals in each section of the contest. The teams winning these certificates and the individuals winning the departmental club medals may be noted in the accompanying tables, one of which gives the team and individual scores up to tenth place in the entire contest and another the five highest teams and the five highest individuals in each section of the contest.

The contest this year lasted two days and was brought to a close with the F. F. A. banquet Tuesday evening. The awards were made in the presence of a group of 450 F. F. A. enthusiasts following the F. F. A. banquet program.

Annual State Contest in Farm Mechanics

W. Newell Page, '33

On May 1 and 2, 1933, the annual state high school vocational agriculture farm mechanics contest was held by the Departments of Agricultural Engineering and Shop Practice of K. S. C. Teams from 18 schools participated.

The agricultural engineering portion of the contest was divided into three sections: Section I, gas engine timing; Section II, concrete work; Section III, farm machines. There were also three sections of the work in the farm shop: Section I, welding; Section II, identification of shop equipment; and Section III, a test of skill in carpentry. In each of the three sections of both contests there was a possible individual score of 1,000 points, making a possible two-man team score of 12,000 points in the entire contest.

A certificate awarded the team making the highest general average was won by Decatur County Community High School (Oberlin), S. H. Howard, coach. A certificate awarded the high individual was won by Irwin Miller of the Oberlin team. A certificate awarded the team making the highest general average in agricultural engineering

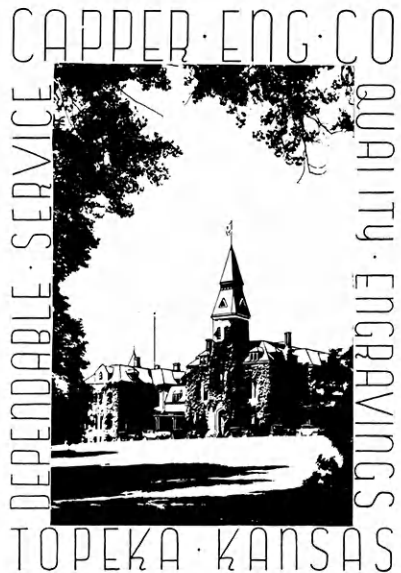
was won by the Winfield High School, Ira Plank and John Lowe, coaches. Certificates awarded the highest individual in each section of the agricultural engineering portion of the contest were won as follows:

Section I.Austin Hammett, Manhattan H. S.
Section II.Charles Jordan, Beloit H. S.
Section III.Irwin Miller, Decatur Co. Com. H. S.

High teams in the entire contest were as follows:

High School	Score	Coach
Decatur Co. Com. H. S.....	7,348.....	S. H. Howard
Chase Co. Com. H. S.....	6,372.....	A. W. Miller
Mound City H. S.....	6,312.....	E. L. Raines
Winfield H. S.....	6,287.....	Ira Plank
Carbondale R. H. S.....	6,084.....	E. I. Chilcott

H. W. Marston, who was an instructor in animal husbandry in K. S. C., 1921 to 1927, is now employed by the United States Department of Agriculture. Part of his duties at the present time include inspecting work at the various state agricultural experiment stations that is partially maintained by federal funds. He spent a few days recently checking and inspecting the work of the Kansas Agricultural Experiment Station.



STUDENT JUDGING CONTESTS

(Continued from page 103)

STUDENT DAIRY CATTLE JUDGING CONTEST

The annual students' contest in the judging of dairy cattle was held Saturday afternoon, April 29. The contest, sponsored by the Dairy Club, consisted of the judging of a class of heifers and a class of cows for each of the four breeds of dairy animals: Jersey, Guernsey, Ayrshire, and Holstein. This year, for the first time in the history of these events, a special contest for young women was held. The men's contest was divided into a senior division for those having had advanced dairy judging and a junior division for those not having had this course.

There were 49 entrants in this year's contest, 19 in the senior division, 27 in the junior division, and three in the girls' division. Top placings in the three respective divisions were taken by John I. Miller, Prescott; J. Edwin McColm, Emporia; and Miss Virginia Wagner, Richmond.

Miller scored 1,025 points to take first place in the senior division. J. Willett Taylor, Lawrence, was second with 1,023 points, and Frank S. Burson, Monument, third with 992 points. Other high placings, in order, were Walter M. Lewis, Larned; Wesley S. Coblenz, Great Bend; Walter W. Babbitt, Willis.

In the junior division McColm scored 1,003 points. Harold P. Walker, Bucklin, was second with 998 points, and Vernon E. Burnet, Manchester, third with 976 points. The next high contestants were L. Wayne Herring, Tulia, Tex.; R. M. Miller, Lawrence; Howard A. Moreen, Salina.

In the girls' division, Miss Virginia Wagner placed first.

The pictures of the three winners are shown in the accompanying illustration. Miller was awarded a silver loving cup; McColm, a pen and pencil set; and Miss Wagner, a silver medal.

The presentation of prizes was made at the Dairy Club meeting, May 9. Ribbons were presented for the top five placings in the junior and senior divisions and for the three placings in the girls' division. A ribbon was also awarded the high individual on each breed in each division. Other prizes consisted of subscriptions to breed magazines and a history of the Holstein breed.—Walter W. Babbitt, '33.

STUDENT LIVE-STOCK JUDGING CONTEST

J. E. Mouw, Edgerton, Minn., and Robert R. Teagarden, La Cygne, took top placings in the two divisions of the annual students' live-stock judging contest, Saturday afternoon, May 6. The winners in the contest, which was sponsored by the Block and Bridle Club, were announced at the annual banquet of the organization, held Monday evening, May 8, in Thompson hall.

The contest consisted of judging two classes each of horses, beef cattle, hogs, and sheep. It was divided into a senior division for those who had had advanced live-stock judging and a junior division for those who had not. Each class consisted of three animals in the junior division and of four in the senior division.

Robert R. Teagarden, scoring 508 points, was first in the senior division, and J. E. Mouw, scoring 544 points, was first in the junior division. There were 81 entrants in the entire contest, 23 in the senior division, and 58 in the junior division. By making the highest score in the entire contest Mr. Mouw won the championship and was awarded a silver water pitcher, donated by the American Royal Live Stock Show, and a purple rosette ribbon, for this distinction. A gold watch, donated by the national office of the Block and Bridle Club, was Mr. Teagarden's prize.

Bronze medals were awarded the second and third place winners in each division and ribbons were awarded for the top five placings for each of the

four classes of animals judged in each division. Fourteen subscriptions to breed magazines were also awarded.

The winner of the senior division and the winner of the junior division of the contest are shown with the win-

ners of other student judging contests in (B) of the accompanying illustration and the outstanding contestants in both sections of the live-stock contest are shown in (A) of the same illustration.



WINNERS IN STUDENT JUDGING CONTESTS

(A) Winners in the live-stock judging contest May 6, 1933. Left to right, front row: Charles W. Myers, Robert R. Teagarden, Robert W. Lukens, Paul W. Griffith. Back row: Walter W. Zeckser, Howard A. Moreen, Royse P. Murphy, Leon E. Wenger, J. E. Mouw.

(B) Those placing first in each section of each of the student judging contests. Left to right, front row: Robert R. Teagarden, J. Willett Taylor, Miss Virginia Wagner, J. Edwin McColm. Back row: J. E. Mouw, John I. Miller, Leon E. Wenger, John O. Miller.

In the senior division, Robert W. Lukens, Beloit, was second with 497 points; Walter W. Zeckser, Alma, was third with 496 points; and Wesley S. Coblentz, Great Bend, and Charlie B. Team, Wichita, tied for fourth place, each scoring 485 points. In the junior division, Charles W. Myers, Bancroft, placed second with 531 points; Howard A. Moreen, Salina, was third with 527 points; J. Edwin McColm, Emporia, fourth with 515 points; and Edwin C. Sample, Council Grove, fifth with 508 points.

The three high men placing first, second, and third in each class of live stock in each division are shown in the following tabulation:

**Class of
Live Stock**

		High Men
		Senior Division
HORSES	{	1. Robert W. Lukens
		2. Robert N. Craft
		3. Harry W. Coberly
	{	3. Charlie B. Team
		Junior Division
		1. J. E. Mouw
BEEF CATTLE	{	2. Edwin C. Sample
		3. Howard A. Moreen
		Senior Division
	{	1. Walter W. Zeckser
		2. John O. Miller
		3. Wesley S. Coblentz
HOGS	{	Junior Division
		1. Leon E. Wenger
		2. Edwin C. Sample
	{	3. Dale S. Romine
		Senior Division
		1. Paul W. Griffith
SHEEP	{	2. Robert R. Teagarden
		3. J. Warren Mather
		Junior Division
	{	1. Royse P. Murphy
		2. Lee J. Brewer
		3. Donald K. Long
	{	Senior Division
		1. Paul W. Griffith
		2. Frank S. Burson, Jr.
	{	3. Harvey C. Holm
		Junior Division
		1. Howard A. Moreen
	{	2. Charles W. Myers
		3. Eugene E. Sundgren

At the banquet the awards were presented by Dr. C. W. McCampbell, head of the Department of Animal Husbandry. Short talks were also given by John I. Miller, president of the Block and Bridle Club for the past year, and Howard A. Moreen, president-elect; by J. E. Mouw and Robert R. Teagarden, contest winners; by Prof. Hugh Durham, assistant dean, Division of Agriculture; and by Profs. F. W. Bell, A. D. Weber, C. E. Aubel, and R. F. Cox of the Department of Animal Husbandry. John I. Miller acted as toastmaster.

Better Live Stock Day at the Hollinger Farm

Gaylord R. Munson, '33

The eighth annual better live-stock day was held April 20 at J. B. Hollinger's "Wheatland Farm," near Chapman, Kan. The occasion is sponsored by the Aberdeen-Angus breeders' association of Geary and Dickinson counties. Hollinger's farm marks the center of an Aberdeen-Angus community which includes 60 pure-bred and grade herds of the Angus breed.

Angus breeders in this community have been active in the last ten years and have built up a strong business through their cooperative efforts and are still enjoying a strong demand for their best breeders.

The object of the field day is, as the name implies, to stimulate the production of better live stock. Although it was a group of Angus breeders acting as hosts on this occasion, the program was not limited to Angus cattle but was dedicated to "better live stock."

About 700 persons attended, registering from a distance of more than one hundred miles. The program consisted of a judging contest held in the forenoon in which 285 contestants took part, 33 of whom were Kansas State College students, most of the remaining number being 4-H Club members

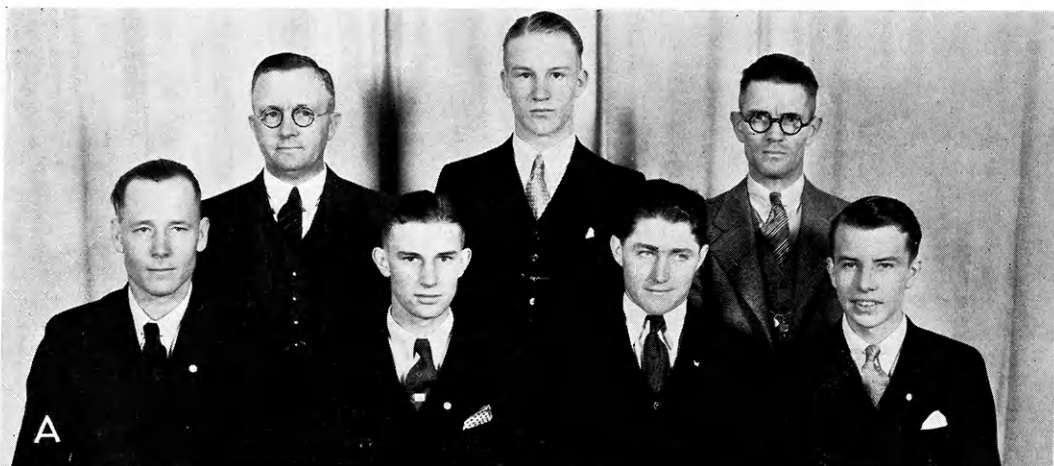
(Continued on page 116)

State Congress of Future Farmers of America

L. F. Hall, '23

The fifth annual State Congress of Future Farmers of America was held in connection with the 13th annual state high school judging contest held at K. S. C., May 1 and 2, 1933. State Future Farmer officers in charge of the two-day program were: Waldo Cox, Mound City, president; Everette Miller,

Ottawa, vice president; Frank Sawyer, Atwood, secretary; Allan Nottorf, Abilene, treasurer; Vincent Fuller, Miltonvale, reporter; L. B. Pollom, State Supervisor of Vocational Agriculture, Topeka, State Advisor; and Prof. A. P. Davidson, K. S. C., Executive Advisor. Each local F. F. A. chapter was en-



STATE FUTURE FARMER OFFICERS FOR 1933-'34 AND THE 19 FUTURE FARMERS ELECTED TO THE DEGREE OF STATE FARMER AT THE FIFTH ANNUAL STATE CONGRESS OF F. F. A.

(A) Officers of the State Association of F. F. A for 1933-'34. Left to right, front row: Wayne D. Trail, president, Colby; Max Shoemaker, secretary, Ottawa; Alfred Taylor, treasurer, Winfield; Delbert C. Richardson, vice president, Lawrence. Back row: A. P. Davidson, state executive adviser; Mabry Wheeler, reporter, Mound City; L. B. Pollom, state adviser.

(B) The 19 men raised to the degree of State Farmer by the Fifth Annual State Congress. Left to right, front row: Fred Lohrding, Coldwater; Keith Lindsay, Frankfort; Arthur Grillot, Parsons; Delbert Richardson, Lawrence; Almarin Nottingham, Lawrence; Fred Vanschoelandt, Merriam. Middle row: Max Shoemaker, Ottawa; Mabry Wheeler, Mound City; Charles Bredahl, Fairview; Hilbert Thaete, Lebanon; Wayne D. Trail, Colby; Elmer Musil, Blue Rapids; Donald Cover, Merriam. Back row: Fred Muret, Winfield; Ernest Finlayson, Washington; Clifford Blount, Coldwater; Robert Nason, Auburn; Harold Jones, Concordia; Alfred Taylor, Winfield.

titled to two official delegates.

At the annual meeting of the House of Delegates, Monday evening, May 1, the following officers were elected for 1933-'34:

President.....Wayne D. Trail, Colby
Vice president, Delbert Richardson, Lawrence
Secretary.....Max Shoemaker, Ottawa
Treasurer.....Alfred Taylor, Winfield
Reporter.....Mabry Wheeler, Mound City

At this same meeting, 19 Future Farmers were elected to the degree of State Farmer.

The State Farmer degree represents a balanced record of achievement including scholarship in all high school subjects, leadership, character, project program, and supervised home practice work. The following is the list of Future Farmers elected to the State Farmer degree: Wayne D. Trail, Colby; Delbert Richardson, Lawrence; Hilbert Thaete, Lebanon; Mabry Wheeler, Mound City; Alfred Taylor, Winfield; Fred Vanschoelandt, Shawnee Mission, Merriam; Almarin Nottingham, Lawrence; Charles Bredahl, Fairview; Fred Muret, Winfield; Donald Cover, Shawnee Mission, Merriam; Harold Jones, Concordia; Robert Nason, Auburn; Clifford Blount, Coldwater; Max Shoemaker, Ottawa; Fred Lohrding, Coldwater; Ernest Finlayson, Washington; Arthur Grillot, Parsons; Elmer Musil, Blue Rapids; Keith Lindsay, Frankfort.

The pictures of the officers of the state association of F. F. A. for 1933-'34 and the 19 Future Farmers raised to the degree of State Farmer by the fifth annual State Congress are shown in the accompanying illustration.

Tuesday morning the F. F. A. public speaking contest was held, and in the opinion of the judges it was the best contest to date. Mabry Wheeler of Mound City won first place. The subject of his address was "The Future of the American Farmer." Delbert Richardson of Lawrence placed second. His subject was "A New Voice is Heard." Raymond Muret of Winfield placed third with "The New Frontier" as his

subject.

The annual banquet was held at the Community House, Tuesday evening. The entire program was in charge of the State Association of F. F. A. The banquet program was opened by the state officers through the medium of the regular opening exercises. Tom McClung of Manhattan led the singing, Prof. "Dick" Jesson, of the Department of Music accompanying. An outstanding feature of the musical part of the program was the splendid manner in which Glenn Woolpert, an F. F. A. member of the Miltonvale chapter, sang the National F. F. A. song, "Hail, the F. F. A." Another musical number which was especially well received was the group of cowboy songs by Raymond Bryan, a Future Farmer from the Ottawa chapter.

The State Officers conducted the ritual in raising the 19 Future Farmers to to the State Farmer degree.

The Kansas Association was fortunate in having W. A. Ross, national executive secretary of the F. F. A., present at both the meeting of the House of Delegates and the banquet. He made his characteristic inspiring talks to the group.

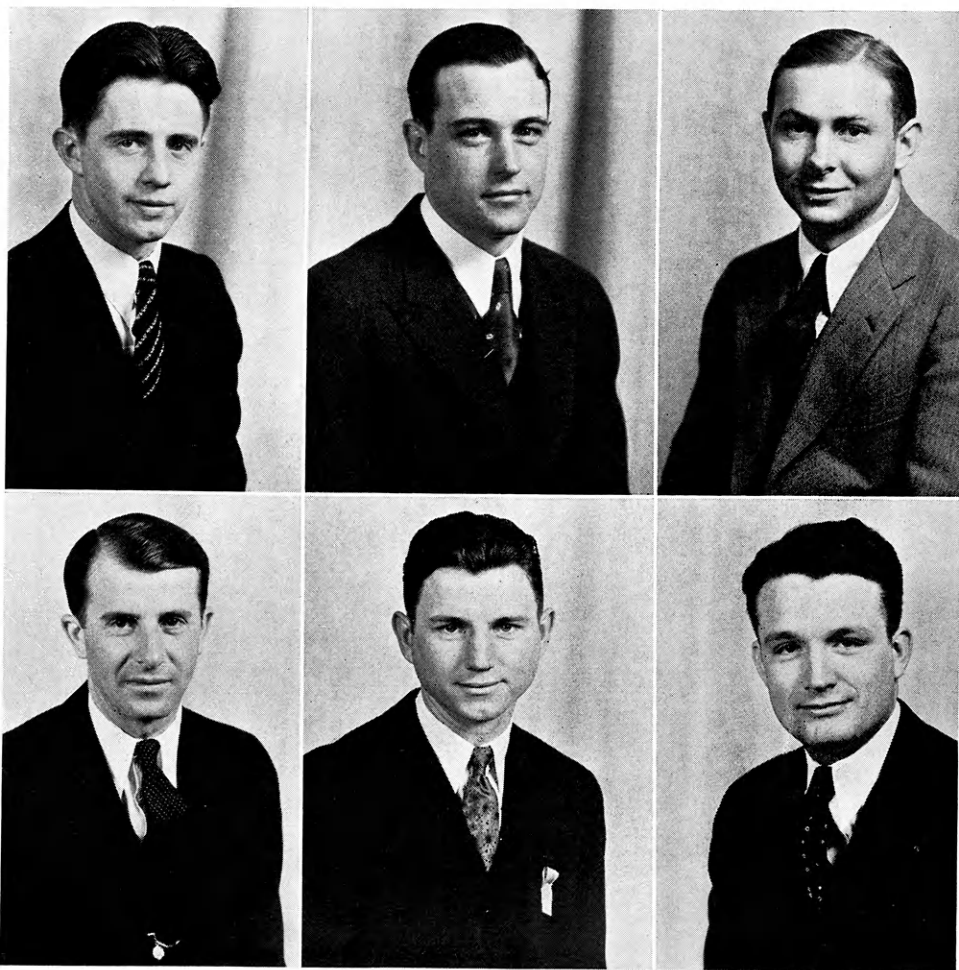
Following the address by Mr. Ross the meeting of the Kansas Association of F. F. A. was formally closed by the state officers. President Waldo Cox then turned the meeting over to Prof. C. W. McCampbell, who had charge of announcing the winners of the various judging contests and presenting the awards.

BETTER LIVE-STOCK DAY

(Continued from page 114)

and high-school students in vocational agriculture. The contest consisted of placing eight classes of Angus cattle selected from the herds of J. B. Hollinger, Andy Schuler, and Ralph Poland.

The Blue Rapids high-school team composed of Enos Honeycutt, Kenneth Wiggins, and Theodore Musil, placed



AGS ELECTED TO PHI KAPPA PHI

Andrew B. Erhart
Orville F. Denton

John I. Miller
Erwin Abmeyer

Boyd R. Cathcart
Luke M. Schruben

first in vocational agriculture. The high 4-H Club team, beating out a field of 22 three-men teams, was the Geary County Who's Who 4-H Club team and as a result of this team's third consecutive victory they have permanent possession of a fine trophy. Among the college students, first place went to Walter W. Zeckser of Alma.

The women of the association served a splendid dinner to the large crowd following the judging contest. The crowd formed in lines to be served 820

pounds of beef, plus dressing and gravy, 150 dozen doughnuts, 200 loaves of bread, and 10 pounds of coffee.

A successful program was carried out as scheduled. Dr. C. W. McCampbell, head of the Department of Animal Husbandry at the college, introduced the speakers. Dr. Howard T. Hill, in charge of public speaking, entertained on the afternoon program. Prof. H. J. Gramlich of the University of Nebraska, spoke on "Meeting our

(Continued on page 119)

SOFT-CURD MILK

(Continued from page 101)

of the Kansas Agricultural Experiment Station purchased a curd-testing apparatus last summer and considerable work has been done already in studying some of the factors involved. At the present time the herd is being tested regularly each month. The tests for April show the following percentage distribution for cows of various curd tensions:

	Number of cows tested	Grams of Curd Tension				
		30 or below	31 to 50	51 to 70	71 to 90	91 to 100
		Per cent	Per cent	Per cent	Per cent	100 or more Per cent
Ayrshires.....	21	9.5	57.2	9.5	23.8	0.0
Holsteins.....	25	16.0	52.0	24.0	8.0	.0
Guernseys.....	10	10.0	40.0	30.0	20.0	.0
Jerseys.....	7	.0	28.6	.0	14.4	28.5



INKA HIJLAARD WALKER

Inka, as she is commonly called, is probably the most famous dairy cow in Kansas. The above picture was taken in November, 1922, and shows her pair of twin heifers born July 29, 1922. Inka is now 17 years of age and has produced over 150,000 pounds of milk and 5,500 pounds of butter fat to date. She is also an outstanding producer of soft-curd milk, the curd tension of her milk averaging below 30 grams.

The irregular distribution in these results can be accounted for by the relatively few cows involved. A curd tension of 30 grams or below is considered soft curd. It will be observed that the Holstein breed has the highest percentage of soft-curd producers in the college herd. Dr. Hill, in his extensive

tests, has found that the Ayrshire and Holstein, the lower fat percentage breeds, lead in this respect. All breeds, however, have their soft-curd producers. In tests run at the Kansas station a range of 10 grams to over 200 grams curd tension has been obtained in the milk from different cows.

An interesting finding in this field is that the curd character, in addition to being an individual characteristic of the cow, remains fairly uniform

throughout each and successive lactations. In other words, once a soft-curd producer, always a soft-curd producer. This naturally makes the cost of testing relatively inexpensive. It also raises the question as to whether this characteristic is inherited. There is no definite evidence on this point as yet, but there is every reason for the belief that it is inherited according to Mendelian laws. It is entirely possible that the dairyman who plans on engaging extensively in the production of soft-curd milk in the future will need to give consideration to the curd transmitting abilities of his herd sires, as he does now to butter-fat percentage.

The feed which the cow is receiving apparently has little or no effect on the nature of the curd in milk. It is like the other stable constituents of milk in so far as environmental influences are concerned.

Our present knowledge would indicate that the curd character of milk is more closely related to the casein content of milk than any other constituent. This is natural since the casein is the principal protein of milk and forms the bulk of the curd in the co-

agulation process. However, other factors undoubtedly contribute and some interesting research remains to be done in this field. Since the principle of the curd test is essentially that involved in the cheese making process, the question arises as to the quality of cheese from soft- and hard-curd milk. In this respect, soft-curd milk is at a distinct disadvantage. In addition to giving a lower yield of cheese, the texture, body, and flavor of soft-curd cheese is inferior.

Since soft-curd milk has distinct merits in the feeding of infants, it is likely that its use will increase. Some rather striking results have been obtained in the feeding of delicate babies and younger children. It is said also to have particular value in cases of chronic adult indigestion and gastric ulcer.

Soft-curd milk is being produced in the station dairy herd at the present time and sold in Manhattan. In view of the extra expense involved, this product will sell at a premium of 2 to 5 cents per quart over regular market milk prices, depending on the locality where it is marketed. Mr E. P. Miller, Junction City, Kan., is combining the production of soft-curd and vitamin D milk and is probably the first dairyman to do so in the Middle West. The vitamin D content of the milk is increased very materially by feeding irradiated yeast to his soft-curd cows. This is one of the really striking findings in the field of nutrition research in the past several years. The combination product makes an especially desirable one for baby feeding and does away with the objectionable feeding of cod-liver or fish-liver oils. The vitamin feeding is carried on through permission of the Wisconsin Alumni Research Foundation which holds the patent rights.

Modern research has contributed much to our knowledge of the nutritive value of milk. The studies on the curd character are a good example of recent findings. While milk can no longer be

described as the perfect food, its important place in the human diet has been more firmly established than ever before.

BETTER LIVE-STOCK DAY

(Continued from page 117)

Consumer Demand." He stressed the importance of marketing stock young. Other speakers were W. A. Cochel, managing editor of the Weekly Kansas City Star; Dean L. E. Call of the Division of Agriculture of the college; and W. H. Tomhave, Chicago, secretary of the American Aberdeen-Angus Breeders' Association.

This event is outstanding in fellowship and educational purpose. The chilly atmosphere, rain, and gray skies could not keep such an enthusiastic crowd away and they will happily look forward to another meeting next spring.

An Old Book on Poultry Raising

W. O. Wilson, M. S., '33

"The Art of Hatching and Bringing up Domestic Fowls of all Kinds at any Time of the Year, Etc." By M. DeReaumur of Royal Academy of Sciences at Paris.

This book was published before the Revolutionary War and it is surprising how much the people knew at that time about poultry culture. The book was first printed in French in 1749 and in 1750 translated into English. The arrangement of the book is unique in that the chapters were called memoirs and the last word of the preceding page is always at the top of the new page. For the lower case "s," the small "f" was used.

Many of the practices which are considered of recent origin were being used at that time. For example, caponizing was practiced at that time and

(Continued on page 124)

College Notes

STUDENTS HONORED BY GAMMA SIGMA DELTA

Ten seniors in the Division of Agriculture were among the twenty-one initiates of Gamma Sigma Delta national honor society of agriculture, this spring. They were:

Erwin Abmeyer, Grantville
Boyd R. Cathcart, Winchester
Herbert W. Clutter, Larned
Orville F. Denton, Denton
Andrew B. Erhart, Timken
Glenn S. Fox, Rozel
Everett John McNay, Clay Center
John I. Miller, Prescott
John B. Roberts, Manhattan
Luke M. Schruben, Dresden

Others initiated were:

Seniors in Veterinary Medicine
Elmer F. Finke, Buckner, Mo.
Harlow K. Hudson, Manhattan
William H. Lindley, Vicksburg, Miss.
Richard D. Turk, Ash Grove, Mo.

Senior in Agricultural Engineering
Donald E. Christy, Scott City

Graduate Students

John Edmond Anderson, Belvue
John T. Correll, Manhattan
E. L. Gann, Burden
L. O. Gilmore, Freeborn, Minn.
Laurel L. Kingsley, Tolley, N. Dak.
Maynard H. Solt, Manhattan.

Initiation ceremonies were held April 10, immediately preceding the annual Gamma Sigma Delta banquet at which the new members were guests. Dr. L. S. Palmer, noted biochemist of the University of Minnesota, delivered the principal address at the banquet. Doctor Palmer's subject was "Heredity and Nutrition."

Dr. J. E. Ackert, dean of the Division of Graduate Study, gave the welcoming address for the new members at the banquet. Responses to the welcome were given by John T. Correll and John I. Miller.

Approximately one hundred persons attended the banquet and a much larger group was present for Doctor Palmer's address.

AGRICULTURAL ASSOCIATION ELECTION

The annual meeting of the Agricultural Association for election of officers for 1933-'34 was held at Agricultural Seminar, Thursday, April 27. The following officers were elected:

President, John R. Latta, Holton
Vice president, Albert A. Thornbrough, Lakin
Secretary, Paul W. Griffith, Edmond
Treasurer, Harry W. Grass, La Crosse

FOR AG BARNWARMER

Manager, Robert R. Teagarden, La Cygne
Assistant Manager, Frank G. Parsons, Winfield
Treasurer, Frank S. Burson, Jr., Monument

FOR THE KANSAS AGRICULTURAL STUDENT

Editor, Pius H. Hostetler, Harper
Business Manager, Howard A. Moreen, Salina

EDITORIAL AND BUSINESS STAFF FOR 1933-'34

The student editorial and business staff of The Kansas Agricultural Student for 1933-'34 are as follows:

Editor, Pius H. Hostetler, Harper
Associate Editor, George A. Rogler, Matfield Green
College Notes, Kenneth S. Davis, Manhattan
Alumni Notes, Ben C. Kohrs, Elmo
Farm Notes, J. Warren Mather, Grinnell
Business Manager, Howard A. Moreen, Salina
Assistant Business Manager, Eugene E. Sundgren, Falun

Departmental Staff

Agricultural Economics, Albert A. Thornbrough, Lakin
Agronomy, Frank G. Parsons, Winfield
Animal Husbandry, Paul W. Griffith, Edmond
Dairy Husbandry, Wayne W. Jacobs, Harper
Horticulture, Kenneth R. Hougland, Olathe
Poultry Husbandry, Clarence L. Gish, Abilene

W. Newell Page, '33, has accepted a position as principal of the Emmett Rural High School.

Earl H. Regnier, '32, will be in charge of recreational instruction during the 4-H Club Roundup at K. S. C. June 5 to 10, 1933. Earl has been attending the National Recreation School in New York City.

Judging Contests at the Fort Hays Agricultural Experiment Station

L. C. Aicher, '10

The annual judging contest for high school students and 4-H Club members held as a forerunner to the annual roundup and feeders' day at the Fort Hays Agricultural Experiment Station took place on April 28, and as usual attracted a large number of earnest young folks from all over western Kansas.

In the live-stock contest the youthful judges placed eight classes as follows: (1) Hereford bulls; (2) Hereford heifers; (3) Holstein cows; (4) Holstein heifers; (5) Duroc gilts; (6) Duroc fat barrows; (7) draft mares; and (8) mules. Oral reasons were given on four of these classes.

The contestants in the crops judging contest were required to identify 100 different samples or varieties and kinds of the major local crops, weeds, grasses, legumes, plant diseases, and defects in harvested and stored grains; and to judge and place nine classes of major local crops, including head samples, threshed samples, and samples of ear corn. Written reasons were taken on each of the nine classes in the judging section of the contest.

The girls in the clothing judging contest were required to judge and place four classes of articles of clothing as follows: School dresses, undergarments, and shoes. Oral reasons were given on each class. Before the contest began the girls were given some instruction on the points to consider when judging.

Twenty-six teams competed in the high-school live-stock judging contest. The Colby Community High School won first place. Second place was taken by the Atwood Community High School and the team from Falun placed third. Vincel Sundgren of the Falun High School was high individual in this contest. Albert Boeka of

Colby was second, and Harry Cook of Colby, third.

In the 4-H live-stock judging contest 36 teams competed. First place was won by the Golden Valley 4-H Club of Edwards county. The Thomas County 4-H Club was second and the 4-H Club from Pawnee county was third. Joe Lewis of the Pawnee club was the winner of high individual honors. Ed Keller of Cheyenne county was second and Lester Ljundahl of Thomas county, third.

The winning team in the high-school crops judging contest represented the Ford High School. The team from the Quinter High School placed second, and the Delphos High School team, third. The highest-ranking individual in this contest was Harold Melia of Ford. Levi Long of Quinter was second and Vernon Huck of Coldwater, third.

The Coldwater 4-H Club won the 4-H crops judging contest. Second place went to the Ford 4-H Club and third place to the 4-H Club from Pawnee county. The individual members of the Comanche County 4-H Club from Coldwater were very consistent judges for they won first, second, and third places in the individual awards in this contest. Fred Lohrding was high individual, Clyde Bibb was second, and Clifford Hunt, third.

In the clothing judging contest for girls there were 26 teams competing. The winners of this contest hailed from the Lincoln Jayhawkers club from Ford county. The Menlo club from Thomas county won second place, and the team from the Rosebud club from Rice county, third. The highest ranking clothing judge was Bernice Preston of the Lincoln Jayhawkers. Emma Jones from the same club was second, and the winner of third place was Anna



SCENES AT THE HAYS JUNIOR JUDGING CONTESTS

(A) The live-stock judging contest.

(B) Giving instructions in front of the office building previous to the contests. Note the office building and several other buildings, including three residences, in the background of (A).

Berniece Olson of the Pioneers 4-H Club of Russell county.

The contest was very ably conducted by the various leaders. M. H. Coe, state club leader, had charge of the live-stock judging contests; D. A. Savage, forage crop specialist at the Fort Hays Agricultural Experiment Station, had charge of the crops judging contest; and Miss Mabel Smith, assistant state club leader, had charge of the clothing judging contest.

Luke M. Schruben, '33, will teach manual training, general agriculture, and physics and coach basketball and

track in the Axtell High School the coming year.

Andrew B. Erhart, '33, will work at the Tribune Branch Agricultural Experiment Station this summer.

Stephen Vesecky, '33, will begin work with the Washburn-Crosby Milling Company the latter part of the summer.

Glenn S. Fox, '33, has been employed by the Farmers National Grain Corporation. He is working through the Hall-Baker Grain Company of Kansas City, Mo.

The Kansas Income Tax Law¹

Nevlyn R. Nelson, '34

One of the most important of the laws passed by the 1933 Kansas legislature is, "An Act providing for the levying, collecting, and paying of an income tax on individuals, fiduciaries, and corporations, providing for the administration of the law, fixing penalties for violation, and providing for the distribution of the tax collected."

This act applies to incomes received on and after January 1, 1933. The tax is complete in that it will be imposed on individuals and corporations. The first tax payment will be due April 15, 1934, and will be on the basis of income earned during the calendar year of 1933.

The question of who is to pay the tax and at what rate is of greatest concern to the taxpayer. In the imposition of the tax the law states that in the case of individuals the tax is to be imposed, "Upon the entire net income of every resident, and upon the net income of every nonresident derived from sources within this state, which tax shall be levied, collected, and paid annually at the following rates, after deducting the exemptions provided in this Act:

	Per cent
\$0 to \$2,000.....	1
\$2,000 to \$3,000.....	2
\$3,000 to \$5,000.....	2 ½
\$5,000 to \$7,000.....	3
All over \$7,000.....	4

There are a few terms which demand explanation. In the computation of the taxable net income the terms "gross income" and "net income" are frequently used. Under "gross income" there is a long list of kinds of income part of which include such gains as profits derived from salaries, wages, or compensation from all kinds of business growing out of the ownership, interest in, or use of such property. There is

also another list of kinds of incomes designated as exempt that are not included under the term. From the taxable types of "gross income" a certain number of deductions are allowed. These deductions include charges and expenses incurred through the operation of a trade or business. After the deductions are subtracted that which remains is the "net income." It is from this net income that the exemptions are made in the personal income tax to arrive at the taxable net income.

The personal exemptions are as follows: (1) In the case of a single individual a personal exemption of \$750; (2) in case of head of a family or a married person living with husband or wife an exemption of \$1,500; and (3) for each dependent such as a child or a person incapable of self-support because of mental or physical unfitness, an exemption of \$200.

In computing an individual's tax, one might use the example of the head of a family, with two children, earning a net income of \$4,000. The deductions to be made would be \$1,500 family exemption, and \$200 for each child, or a total exemption of \$1,900. The taxable net income, then, is \$2,100. The rate of 1 per cent would apply on the first \$2,000, or \$20, and 2 per cent on the part over \$2,000, or \$2, making a total tax of \$22.

The tax on corporations is different from the individual tax in that it is proportional rather than graduated. Regardless of the size of the income, a rate of 2 per cent is imposed on the entire taxable net income derived from property located and business transacted within this state during the taxable year. A long list of corporations are listed as exempt. Most of those listed are non-profit organizations and are organized for the mutual benefit of members such as labor, agricultural, or horticultural associations; religious, charitable, or benevolent corporations;

1. The writer desires to acknowledge the assistance of Prof. Harold Howe, Department of Agricultural Economics, in the preparation of this article.

and societies operated on a cooperative basis.

Another question that might be asked is, "What provisions or penalties are made for those who fail to file a return or pay the tax at the due date or time required?" This question is not easily answered because the penalty varies with the seriousness of the offense. If a taxpayer unintentionally fails to file a return or pay the tax when due, but voluntarily files a correct return of income or pays the tax due within 60 days, an additional amount equal to 5 per cent is added to his tax plus interest at the rate of 1 per cent per month. If he does not voluntarily file a return of income or pay the tax within 60 days after the time required, the tax is doubled, and the doubled tax is increased by 1 per cent per month from the original due date. Should the taxpayer fail to file a return within 20 days after notice of the State Tax Commission, the commission shall determine the income of the taxpayer and assess him at not more than double the amount determined.

The law, however, attempts to be reasonable in all cases. It specifically provides that whenever in the judgment of the State Tax Commission a taxpayer has reasonable causes for delinquency the commission may waive or reduce any of the penalties upon making record of its reasons.

On the other hand, the law may not be so lenient. If a taxpayer fails to file a return of his income or fails to comply with provisions stated under the law with fraudulent intent, the penalty may be very severe. Fines of not less than \$2,000 or more than \$5,000 or imprisonment at hard labor for not less than one year or for not more than five years may be imposed on the person convicted of felony under the provisions as stated in the Kansas Income Tax Act.

The powers for administering the new income tax are vested in the State

Tax Commission. For the purpose of making an estimate of any taxpayer's taxable income the commission may designate an agent or representative to examine any books, papers, or records pertaining to the return. The tax commission on or before the first Monday of each month, is to pay the amount collected the previous month to the state treasurer. Before making the annual ad valorem property tax levy for the state general fund the tax commission shall deduct the amount collected from the income tax plus the amount estimated to be collected during the remainder of the year and make the levy only large enough to produce the difference.

There is reason to believe that the new Kansas income tax will be a success. It is not probable that the imposition of this tax will cause extravagance for at the present time the state is practicing more economies than heretofore. The income tax is to supplement the general property tax and not displace it. It will broaden the tax base and introduce into the revenue system a tax which surpasses all other forms of tax as a measure of ability to pay.

AN OLD POULTRY BOOK

(Continued from page 119)

the capons utilized as leading mothers (or fathers as the author suggests) for incubator-hatched chicks. A most unique method was outlined for giving the chicks to the capon so he would take care of them. It consisted of giving the capon wine and making him drunk, then placing the chicks with him. When he recovered he would think that he was their mother and take care of them. The modern method of getting capons to accept chicks was also given.

The thermometer used for chicks raised by hand consisted of a bottle that contained butter and tallow mixed in such proportions as to be-

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Annual Kansas Cattle Feeders' Day

Raymond B. Wagner, '33

Approximately 2,000 visitors attended the twenty-first annual Kansas Cattle Feeders' Day held May 27, 1933. The purpose of the meeting was to give out information and data collected on experiments conducted by the Department of Animal Husbandry of the Kansas Agricultural Experiment Station.

Previous to 10 a. m. many visitors inspected the sheds and the stone barn where the experimental animals are fed and show prospects kept. At 10 a. m. a meeting in the college judging pavilion was called to order by James Tod, president of the Kansas Live Stock Association. Pres. F. D. Farrell gave an address of welcome, which was followed by a talk by Dean L. E. Call, director of the Agricultural Experiment Station, on "Refinancing the Farmer."

Dean Call quoted some figures to show why farmers have had financial difficulties recently. "When the total income for the American farmer was 11,950 million dollars, as it was in 1929, interest charges on debt amounted to 7 per cent of the farm income, but when the annual income dropped to 5,240 millions, as in 1932, the percentage of the total income required to meet interest soared to 15 per cent—more than one-seventh of the entire farm income." To help alleviate this condition he advocated the establishment of agricultural credit corporations throughout the state to provide the farmer with a continuous source of intermediate credit. The machinery for these credit associations is provided by the federal government with the responsibility for their development resting with the commercial banks of each community.

Recent farm relief legislation, as enacted by Congress, has as its primary purpose to restore the prices of farm commodities to the pre-war basis, which includes the period from 1909 to

1914, according to Prof. R. M. Green of the Department of Agricultural Economics. This is to be obtained in three ways. First, raise farm prices and then hold them up by controlling production and distribution. Second, scale down debts and lower interest rates. Third, increase the quantity of money and credit in the United States. The success of this farm relief legislation depends on whether the cutting of salaries and reducing of office personnel will more than offset the benefits derived. On the other hand will the farmers restrain from increased production when prices do advance?

Governor Alf M. Landon in an address urged the development of the home farm, based on a high standard of ethics and sound judgment. "Prosperity," he said, "does not originate in New York or other large eastern cities, but lasting prosperity must come from the farms and villages of the country."

At noon the Block and Bridle Club served luncheon. In the afternoon reports on the feeding experiments were given by Dr. C. W. McCampbell, head of the Department of Animal Husbandry, and Prof. W. E. Connell and Prof. A. D. Weber of the department research staff. Results of experiments on feeding yearlings on bluestem grass, of adding limestone to a cattle fattening ration, and the comparative value of different protein supplements and mixtures of them were among the important things discussed.

Three methods of utilizing grass in fattening young cattle for market were reported. On the basis of profit these three methods ranked as follows: (1) Wintered well, grazed 90 days, then full-fed 100 days in a dry lot. (2) Wintered well, grazed 90 days, then full-fed 100 days on grass. (3) Wintered well, full-fed 146 days on pasture.

One pound of alfalfa hay contains as much calcium as 100 pounds of corn. Carbonaceous roughages such as prairie

rie hay and silage are low in calcium. Since alfalfa hay is relatively high in price, tests were conducted where silage made up the roughage portion of the ration and in addition some lots were fed one-tenth of a pound of finely ground limestone per head daily. The lots fed ground limestone gained and graded approximately the same as the lots fed alfalfa hay. Conclusions from these tests show that where the roughage portion of the ration is composed of carbonaceous feeds, one-tenth of a pound of finely ground limestone should be fed daily, but when alfalfa hay is used no increase will be secured from the use of limestone.

The calves fed linseed oil meal or mixtures containing one-third or one-half linseed oil meal were fatter when marketed than calves fed corn gluten meal, cottonseed meal, or a mixture of cottonseed meal and corn gluten meal. These results show that mixtures of cottonseed meal and linseed oil meal, half and half, or linseed oil meal and corn gluten meal, half and half, or a mixture of cottonseed meal, linseed oil meal, and corn gluten meal, equal parts, are all better than feeding either one by itself, but where a single protein supplement is used, linseed oil meal usually gives the largest gains. Linseed oil meal, however, is sometimes too high in price compared with cottonseed meal and corn gluten meal to justify its use in the ration.

AN OLD POULTRY BOOK

(Continued from page 124)

come a liquid when the temperature was about right for brooding. Feed was placed in feeders outside the pen and the chicks placed their heads through bars and ate. The same practice is followed today in battery brooders and in hen batteries as a sanitary measure.

The curative factor of sunlight was said to prevent the chicks from having rickets. One of the greatest vices of the modern method of brooding is cannibalism. It was a factor then and was

treated in about the same manner as today. The prevention given is not to crowd the chicks and to keep the various ages separate.

The feeding of poultry has changed somewhat. At that time it was recommended to feed the chicks when 24 hours old. Until a few years ago the recommendation in this country was not to feed until 48 hours old. Recently it has been found to make no difference if the chick is fed as soon as it is hatched.

The feed was moistened to fatten poultry then as now. The economy of egg production is discussed and it is recommended not to expand the flock beyond the food supply. Government control of storage eggs and extension work were recommended. Records should be kept and the size of the egg as well as the number should be taken into consideration—a fact which we only recently rediscovered. Some hens laid two eggs a day.

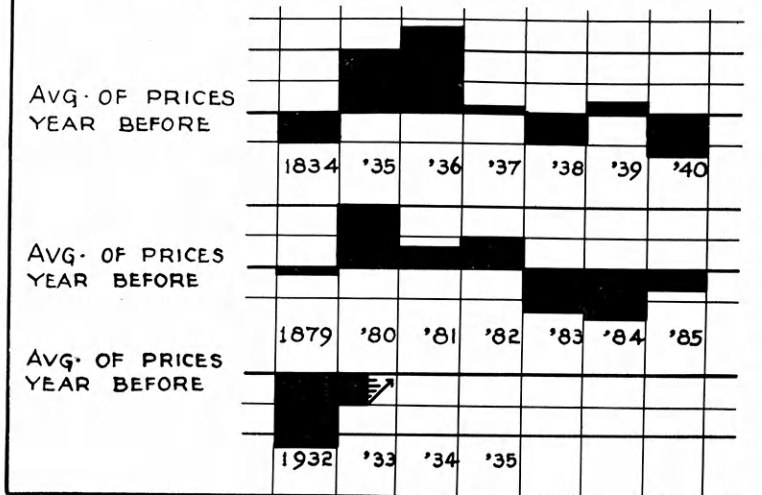
The annual egg production per hen of France at that time was estimated at 75 eggs. This is higher than the average given for the United States in 1930.

There is no best breed of poultry. The eggs may taste like the feed. Infertile eggs keep better than fertile. Eggs to be stored were painted with oil. Lastly the author states that it was fashionable to raise birds in penthouses but this does not necessarily mean Lennox Avenue.

Carl C. Conger, '33, is testing milk for the Wichita Milk Producers Co-operative Association. He has been with the company since finishing his college work here at the end of the first semester of this college year.

Marvin E. Vautravers, '33, who completed his work for the bachelor's degree at the end of the first semester, has been working on the Robbins Ranch at Belvidere. He is engaged chiefly in turkey raising. They aim to raise 10,000 poults this season.

REACTIONARY INFLATIONS



Taking a Desperate Chance

Mutual expense and income cutting in depression periods usually proceed so much faster than debt reduction that an intolerable situation finally arises. Expenses and incomes have been cut except taxes and debt payments. Private expense for and government income from taxes are finally cut. Income from interest and payments on debt alone stand fixed. Interest and debt cannot ordinarily be paid with produce. They require money or bank credit. With a strong demand for money for debt settlement purposes and less demand for a large supply of produce, money increases in value. It is, therefore, a good thing to hold just as is wheat, when it is going up in value. The holding of money off the market adds to its scarcity with respect to others than the holders.

People turn loose of a thing when it doesn't look profitable to hold it longer. Money and credit, like other things, go down in value if large supplies are produced and thrown onto the markets rather than held. A stage in depression is finally reached in which people are willing to risk tainting the value of money a little if, by so doing, they scare holders into releasing a little onto the markets. This sets the stage for a trial at inflation of some kind or other.

In two earlier depressions (see above illustration) there were inflation periods of about three years' duration as reactions against declines of 55 to 60 per cent in commodity prices from the former peak. Two main elements support or crumble these inflationary periods in the midst of depression. If these two things can be handled, there might be a reactionary inflation big enough to end depression; otherwise not. In the first place reductions in wages, salaries, and number of hired workers must be checked and re-employment show a net gain over dismissals. Secondly, production must be kept under control as prices start to advance or it will, in a few years, break any agency that tries to hold up prices.

—R. M. Green, Professor of Agricultural Economics.



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