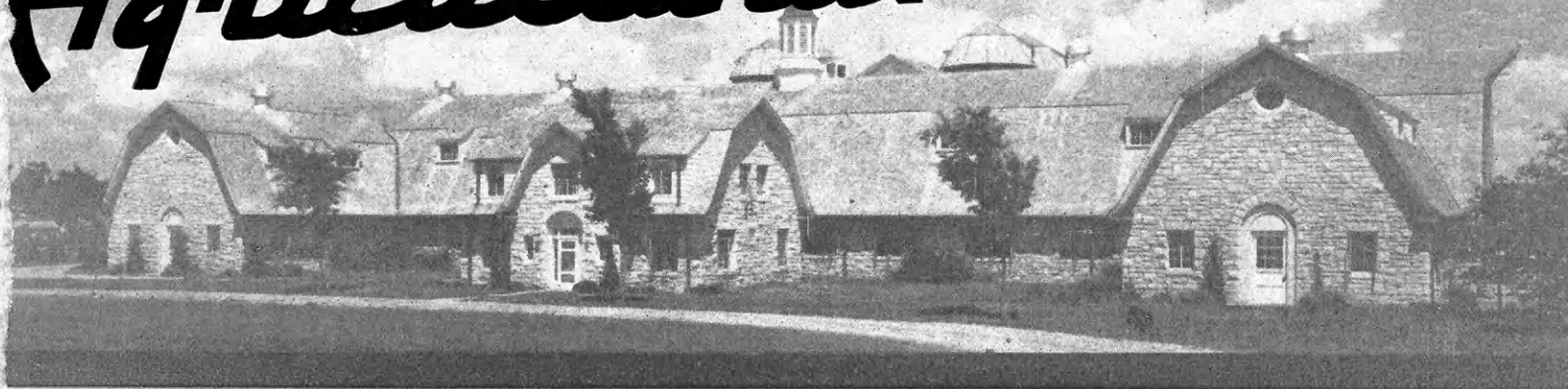


THE KANSAS

Agricultural Student



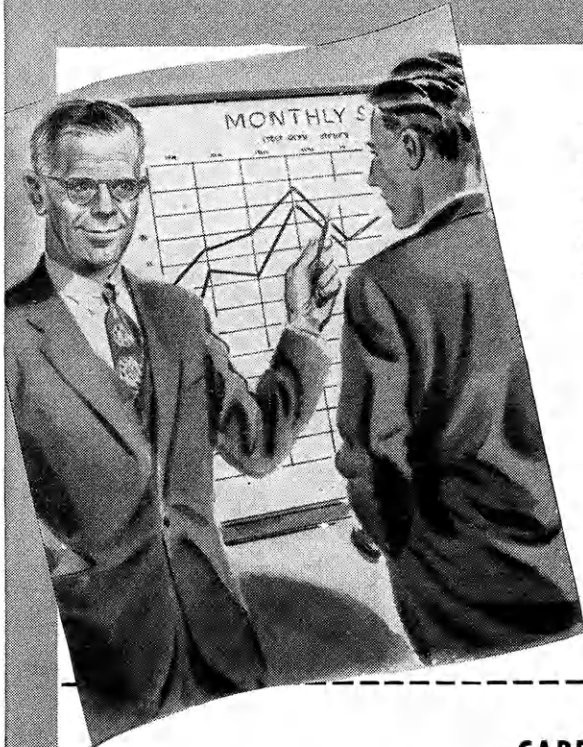
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CAREERS AT GENERAL ELECTRIC



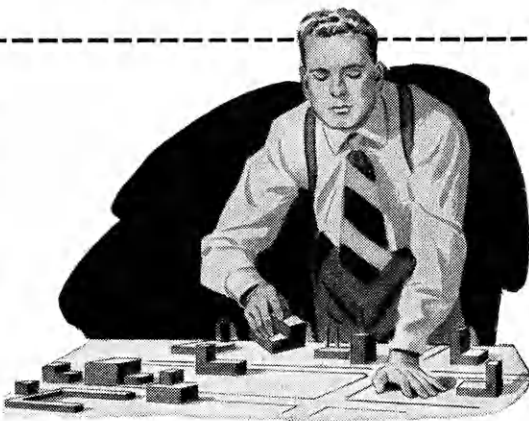
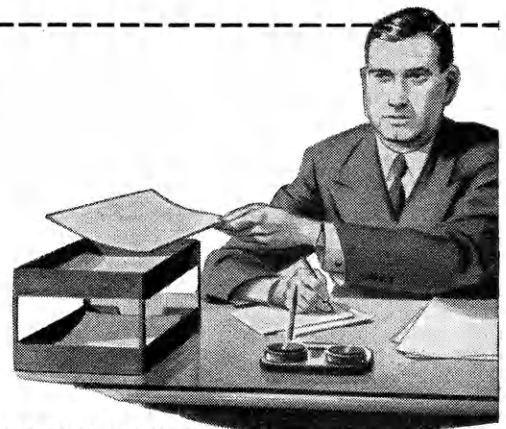
General Electric is not one business, but an organization of many businesses, offering opportunities in virtually all the professions. Here three G-E men brief the career-possibilities which the company offers to the marketing specialist, the accountant, and the manufacturing trainee.

FUTURES IN MARKETING

C. H. Lang (Michigan), Vice President responsible for all sales activities of Apparatus Dept.: "I believe that the need for increased sales efforts to maintain the current high level of business activity provides new and greater opportunities in the marketing of industrial products. Extensive training is offered in all phases of our marketing program—selling, application and service engineering, market analysis, and advertising and sales promotion."

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H. A. MacKinnon, Assistant Comptroller and member of Company Education Committee: "New products coupled with the company's growth are providing excellent openings in business management. Since 1919, our Business Training Course and travelling auditors staff have provided direct channels through which young men have progressed into all types of accounting and financial management positions with General Electric."



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For further information about a BUSINESS CAREER with General Electric, write Business Training Course, Schenectady, N. Y.—a career in TECHNICAL FIELDS, write Technical Personnel Division, Schenectady, N. Y.

GENERAL  ELECTRIC

THE KANSAS *Agricultural Student* KANSAS STATE COLLEGE OF AGRICULTURE AND APPLIED SCIENCE MANHATTAN, KANSAS

On the Cover--- Collegiate 4-H'ers Give Weekly Radio Program

By DALE APEL

On the cover of this issue are Floyd Ricker and Rosemary Wright discussing Rosemary's musical number on the Collegiate 4-H radio program over KSAC. Floyd has been a "sparkplug" in the Collegiate 4-H Club's radio program since he has been at Kansas State. Last year as a freshman he was chairman of the program and this year he is co-chairman with Dale Watson, both Agricultural Administration sophomores.

The 4-H radio program chairman is appointed by the president of the Collegiate 4-H Club; 4-H Club members interested in working on the program are selected at a 4-H Club meeting early in the year. All of those interested meet at least once a semester to plan the year's programs in advance.

Designed to appeal to 4-H Club members over Kansas, the weekly radio program is one of the major activities of the Collegiate 4-H Club. The club cooperates with the State 4-H Club department and the KSAC staff in the preparation of the Saturday afternoon program.

What to have on the program is the first question. This year, 4-H Club news, a special feature discussion, a county salute, and music comprise the 15 minutes. The news is selected from items released by the state club office and from articles submitted by 4-H Club listeners over Kansas. In the special feature section, Collegiate Club members discuss a timely topic of interest to 4-H Club members. Some of these are recreation, 4-H record books, parliamentary procedure, music appreciation, etc.

Each week a different county is selected and a summary of the outstanding and different things of 4-H Club work in that county is reported. A musical number by some member of the Collegiate 4-H Club rounds out the program.

Organized in 1929, the radio program is only one of the many activities of the Collegiate 4-H Club, a campus-wide organization for former 4-H Club members. Social activities for the members of this largest campus organization with over 500 active members are many and include a fall dinner dance, a spring semi-formal dance, a spring picnic, parties at frequent intervals, and a varied recreation program at meetings held on first and third Thursdays.

However, there is something else besides recreation and dancing. Approximately 200 Collegiate 4-H'ers annually work on the Who's Who, Kansas 4-H Club yearbook published by the Collegiate 4-H Club as a service to Kansas 4-H Club members. Collegiate 4-H Club members work as county representatives of the Who's Who in 104 counties.

The Collegiate 4-H Club cooperates with the State Club office and the Extension Division in acting as hosts for Rural Life members at the State Rural Life conference in March and for 1200 4-H Club members and leaders attending the State 4-H Round-up here in June. Collegiate 4-H Club members have helped with the drive for funds for the State 4-H Camp at Rock Springs Ranch, and the club plans to make a definite contribution to the camp. The Collegiate 4-H Club quartet sings at many on and off campus events each year.

The club has purchased the dining room service and kitchen equipment to serve 750 people, and the stage equipment for the 4-H encampment building at the State Fair grounds at Hutchinson.

Cooperation with college officials has resulted in a contribution of \$4,500 in war bonds to the Student Union building by the club, the purchase of a choir stall in the Memorial Chapel, and the participation of the club in Memorial Chapel fund drives among the students.

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MARCH, 1949

No. 3

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PINT-SIZED SHADOW

Many a farmer has a pint-sized shadow that tags him all over the farm . . . shrilly repeats his pet words . . . dresses like a tiny twin. Like most little boys, he can't wait to grow up. The thing he wants most in the world is to be a farmer just like his dad.

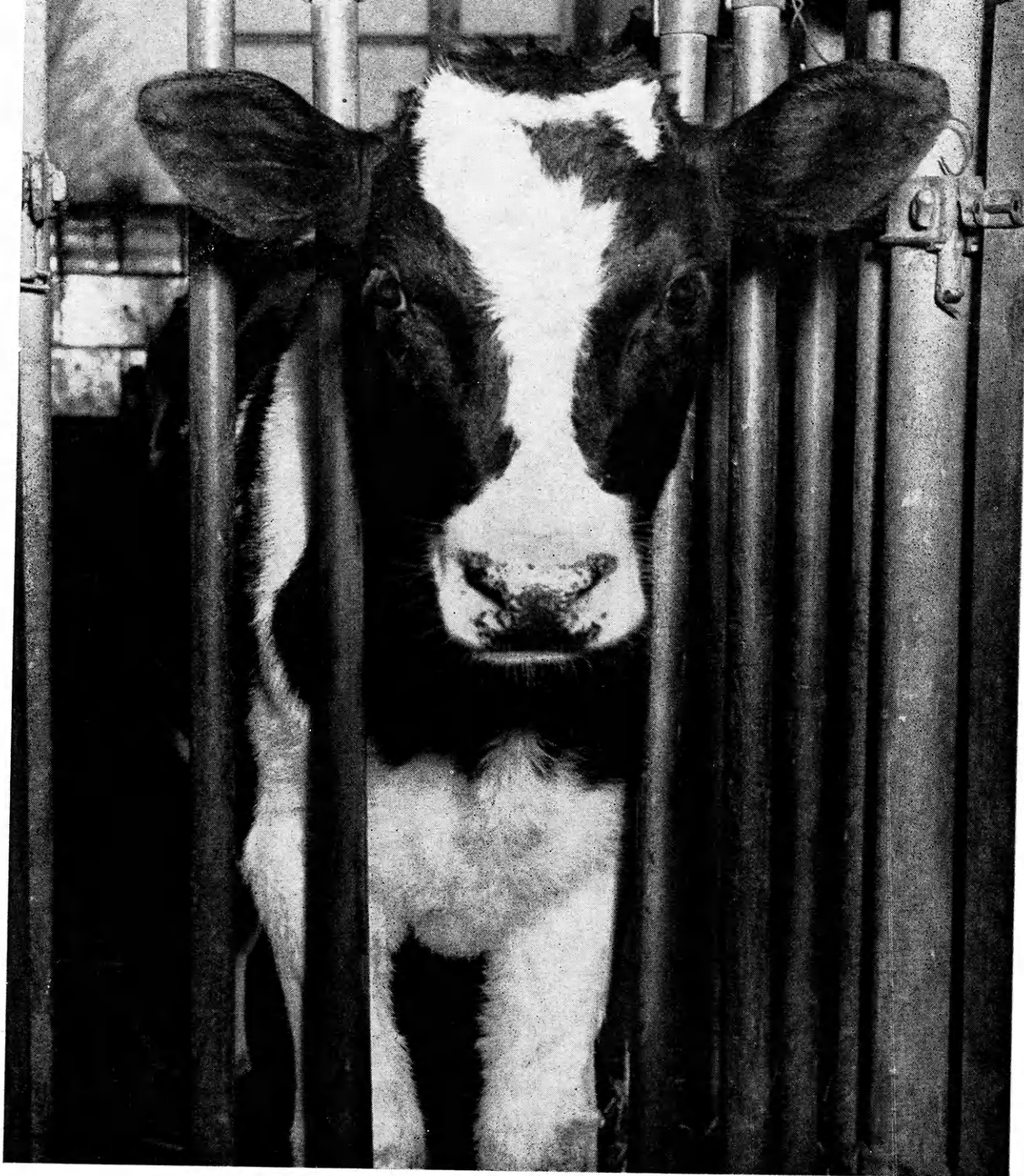
Old-fashioned farming, with its never ending toil, often shattered this childhood dream—sent the boy off to the city to seek his fortune. Today, it's easier to keep him on the farm. Better crops and improved farming practices have boosted yields and farming profits. Modern John Deere power equipment has taken over much of the muscle work, and

chopped hours from the old dawn-to-dusk work day.

No wonder more and more farm boys are staying with the land—realizing a childhood ambition to follow in their fathers' footsteps. This is a good sign. These young farmers will hasten the fuller mechanization of our agriculture, pioneer new farming practices, and bolster vital food production.

Yes, labor-saving, profit-making farm equipment is helping to raise our most valuable crop—young Americans who love the land. In such hands the future of our agriculture, and of America, will be secure.

John Deere
MOLINE • ILLINOIS



Wyman White's winning entry in the 1947 Ag Student Photo contest.

THE KANSAS

Agricultural Student's 76

By JIM ORTON

(Ag Student Staff Photographer)

Again this year all of you Ag students have a chance to compete for prizes in the 3rd annual photo contest sponsored by the Ag Student magazine.

More than 50 pictures have been entered in each of the past two contests with subject matter ranging from the hog wallow to research in the scientific laboratories. You can't ever tell what the judges will

decide is a top picture.

Last year, Lyle Snider won first place with his shot of Anderson Hall taken as he tramped through slush and snow to school. In 1947, Wyman White, staff photographer for the Ag Student last semester, won first with a picture of a Holstein calf locked in a stallion.

Charles Herrick's wife had to persuade him to enter the second place winning photograph. He didn't think his shot of an old sow fresh from the wallow

Contest Rules

1. Contest is limited to the students enrolled in the School of Agriculture. Members of the staff of the Kansas Agricultural Student will not participate in the contest.
2. Pictures submitted must have been taken by the student submitting the prints; however, it is not necessary that the developing and enlarging be done by the entrant. Each contestant may enter four prints.
3. Judging will be based on subject material, composition, and technical quality; judges decisions will be final. The contest will be judged by a faculty committee selected for their interest and ability in photography.
4. Subject material may be selected from the following:
 - a. Agricultural scenes.
 - b. Farm animals, crops or activities.
 - c. Campus shots of agricultural interest.
 - d. Agricultural research.
5. Prints must be 5x7 inches or larger on single weight, glossy paper. Back of print must carry the following information.
 - a. Name of entrant.
 - b. Name of camera.
 - c. Type of camera—folding, view, box, press, or 35 mm.
 - d. Approximate date the picture was taken.
6. Prizes will be offered for the first eight placings.

No person will be permitted to receive more than one prize. (This does not include the special award for the best box-camera print.)
7. Prints must be submitted to the Ag Student office, East Waters Hall, Room 105, not later than noon, April 16, 1948. All prints become the property of the Ag Student.



Lyle Snider won first in the 1948 Ag Student Photo contest with this snow scene of Anderson hall.

Plenty of Prizes

- FIRST PRIZE—\$5.00 cash and \$10.00 in merchandise at the Campus Book Store.
- SECOND PRIZE—\$4.00 cash and \$5.00 in photographic paper and chemicals by Manhattan Camera Shop.
- THIRD PRIZE—\$2.00 cash and \$5.00 in merchandise at the Palace Drug Store.
- FOURTH PRIZE—\$2.00 in cash and an 8x10 salon mounted print of 4th place photograph from Guerrant's Photo Shop.
- FIFTH PRIZE—\$2.00 cash and badminton set from Cowan's Camera and Sport Mart.
- SIXTH PRIZE—\$2.00 cash and 8 number 11 or number 5 flash bulbs from Burk Photo Service.
- SEVENTH PRIZE—\$1.00 cash and a roll of 20 exposure, K 135 film by the College Drug Store.
- SPECIAL AWARD—\$1.00 cash for best box camera print.

Third Annual Photo Contest

had a chance. It didn't show glamour but the judges thought it was a typical farm scene.

Some students think you need a high-powered camera and a lot of experience before you have a chance to win a prize in this contest. But that isn't the case.

Box camera pictures have an equal chance of winning. Judges will take into consideration the type of camera used when they look for composition and detail. That is why we ask for the type of camera

used to be written on the back of each photograph. This year we have a special award for the best box camera print.

So all Ag students, get out your cameras, select subject material according to the rules above, and turn in a winning picture. Make it hard for the judges to decide which pictures are the best. Judges are faculty members selected for their interest in agriculture and their ability in photography.

Discover New Weed Control

Studies by Zahnley and McCall Prove TCA Compounds
Will Kill Noxious Perennial Grasses

By DELMAR HATESOHL

ANOTHER advance in chemical weed control was announced by the Kansas Agricultural Experiment Station when it was found that noxious perennial grasses can be controlled with the trichloroacetates. Although there have been spectacular successes achieved through the use of 2,4-D, up till now there has been no chemical which would satisfactorily control established stands of noxious perennial grasses without sterilizing the soil for a long period of time. Trichloroacetic acid and its derivatives, which are abbreviated TCA, are a group of compounds relatively new to chemical weed control, and they seem to provide a solution to this problem.

The grass killing properties of TCA were first discovered when ammonium trichloroacetate was tested in the Pest Control Research Laboratories of E. I. duPont de Nemours & Co., Inc. This test was carried out as a part of an herbicidal research program which that company conducts. It was found to be useless as a contact herbicide, but it did completely kill all grass

plants that were used in the test. Since these preliminary tests were quite promising, experimental quantities of this chemical were released to various investigators throughout the country. A large number of the field tests were conducted at the Manhattan experiment station. The work here was under the supervision of J. W. Zahnley, agronomist, and G. L. McCall, biologist of the E. I. duPont de Nemours & Co., Inc.

Trichloroacetic acid is a colorless, crystalline compound having a slight characteristic odor. The chemical is a very strong acid and reacts readily with ammonium or sodium hydroxide to form salts. These salts are preferred as weed killers because they are highly soluble in water and are more conveniently packaged and handled. Professor Zahnley stated that it is a very potent chemical and proper precautions should be taken when using it. Hands shouldn't be allowed to become wet with it, and sprayers should be cleaned immediately after using.

As to the method of application, the TCA is dissolved in water and applied as a spray in sufficient quan-

tity to give adequate coverage. As a rule 50 to 100 gallons of solution per acre are used. Applications of 80 to 100 lbs. of TCA per acre are sufficient to control most perennial grasses. Much less will be required for stands of young annual or seedling grasses.

Some of the factors which affect the herbicidal efficiency of TCA are character of root system, soil conditions, time of application, and plant species. For deep rooted grasses, foliage applications often give better results than do equal amounts of TCA applied to the soil after the tops have been removed. Shallow rooted grasses usually are controlled more effectively by application directly to the soil.

Soil texture has a bearing on the efficiency of TCA. The chemical gives better results pound for pound when applied to light soils than it does when applied to heavy soils. Rainfall is necessary to carry the TCA into the soil before it can become effective, but excessive amounts will result in leaching of the chemical.

Best results have been obtained when the TCA was applied to the plant just before or during bloom.

TCA will affect some species of



On the left is an untreated prickly pear, on the right is the remains of a treated specimen. The new chemical is very effective against perennial grasses. TCA has not been produced commercially yet and with its recent discovery, good pictures have not been made.

plants more than others. It doesn't harm broad-leaved plants having deep tap roots as much as it does the grasses which have a shallow fibrous root system.

TCA offers one of the most practical means of control of noxious perennial grasses where they exist in small patches along roadsides, irrigation ditches, and in cultivated fields. It also shows much promise of eradicating the prickly pear cactus from the pastures and ranges of the Southwest. Johnson grass and Bermuda grass, which are quite troublesome in Kansas, can be controlled by this chemical. One of the main advantages of TCA is that soil sterility is temporary, although severe. The sterile condition disappears within 30 to 90 days, depending upon the amount of rainfall.

Since TCA has been regarded as an experimental product, the chemical is not yet in the hands of many retail dealers. It is believed that it will be available in limited quantities in the near future.

New Kansas Wheat Varieties Increase Acreage Yields, Add to Milling Qualities

By EVERETT BEEMAN

New wheat varieties now put 30 million bushels of wheat in the farmers' granaries each year, Dr. H. H. Laude, Kansas State agronomist, says. Increased yields have come without increasing the acreage.

Pawnee, a new variety of wheat, has upped the average yield 10 bushels per acre over Turkey, the original hard winter wheat. Turkey wheat has an average of only 25 bushels per acre, and Pawnee, the new variety, has an average yield of around 36 bushels.

Research work done at the Kansas Agricultural Experiment station throughout Kansas has been largely responsible for the progress enjoyed. Other desirable characteristics besides increased wheat yields have been developed. Laude explains that some strains have been developed which are more resistant to bunt, leaf rust, smut, and the Hessian fly. This resistance to disease has increased wheat quality and weight and has enabled the crop to be grown on land that has been previously unproductive in wheat.



J. W. Zahnley, agronomist, Kansas State college, and G. L. McCall, biologist, E. I. duPont de Nemours and Co., Inc.



Atomic Energy to KSC

Radioactive Isotopes to Become Key Materials in Research

College Scientists Plan for Use as Tracer Elements

By NORVILLE GISH

USE of atomic energy by-products in peacetime pursuits may soon become a major research project at Kansas State. Members of a college committee appointed by President Milton S. Eisenhower have announced that preparations for the reception and use of radioactive materials in certain research projects are under way.

Since the unveiling of the atomic bomb and the end of the war, increasing use has been made of atomic energy in peaceful productive channels as well as in war production.

Tracer techniques have been developed in research work in a number of different fields. The use of radioactive isotopes as tracer elements in studying the internal functioning of plants, animals, and humans is gaining support.

Many colleges and universities throughout the country are cooperating with the Atomic Energy Commission of the federal government in developing uses for atomic products. Kansas State is a participating institution in the research program of the Argonne National Laboratory.

Once the college has completed certain requirements set up by the Atomic Energy Commission regarding the use and handling of radioactive materials, research may be started here.

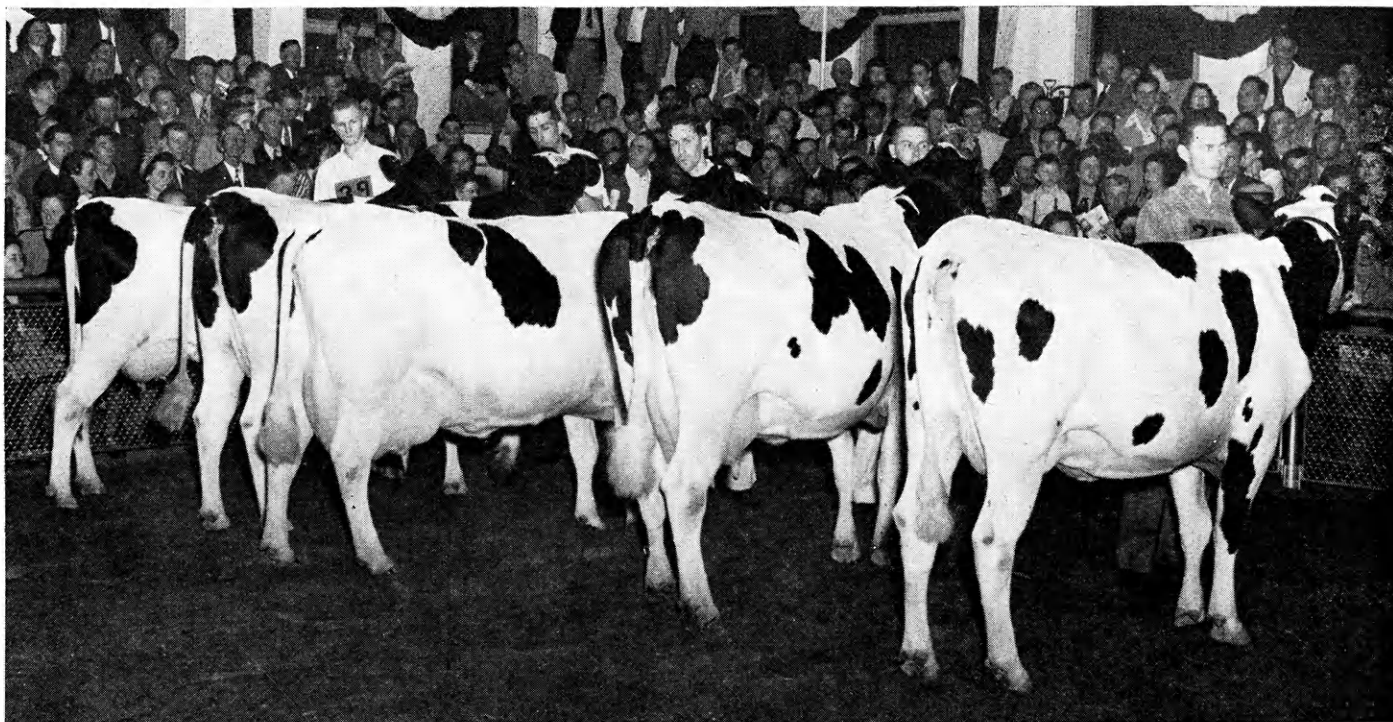
Qualified personnel must be trained in proper methods of handling the materials. Adequate safety precautions also must be taken and research projects must be approved.

Once these standards are met, radioactive materials may be secured from the commission and brought to the campus for use here.

Kansas State currently is working to complete the standards set up by the commission. A committee on isotope control, appointed by the president, has arranged a series of educational seminars and drawn up a set of regulations which will govern the handling and use of radioactive materials on the campus.

The seminars, 12 in number, were begun several weeks ago and will continue through the month of March. Instruction is being given in nuclear theory, principles of health physics, the use of isotopes in plant, animal

(Continued on page 22)



Little American Royal showmen in the aged Holstein class are eyed critically in the 1948 show. Harry Ainslie was grand champion showman of the Dairy division last year.

Committees Have Big Plans For

Colorful Little American Royal in April

Congressman Clifford Hope to Present Trophies
At Ag School's Biggest Event of Year

By DOUGLAS GEORGE

CONGRESSMAN Clifford Hope of Garden City has accepted an invitation to present trophies to the grand champion winners in the 21st annual Little American Royal at Kansas State April 9. Two students will receive awards from Hope, according to Richard Spare, chairman of the executive council. The show is sponsored by the Dairy Club and Block and Bridle Club.

The Little American Royal annually competes with Homecoming as the most colorful event on the hill during the year. The livestock shown by the students are judged on preparation for show and showmanship.

The college pavilion will be decorated for the event. A ringmaster dressed in a tuxedo, a bugler to call the classes, and a centerpiece design made from dyed sawdust with a back-

ground of flags and bunting, will add color to the show.

Last year President Milton S. Eisenhower awarded trophies to Harry Ainslie, winner of the dairy division, and to George Smith of the Block and Bridle division. Ainslie who showed a Jersey cow received a desk set topped with a small bronze cow, from the Interbreed Dairy Association of Kansas. The American Royal of Kansas City awarded Smith a beautiful silver serving set for showing a Belgian mare to the championship.

An attractive program will be printed again this year for distribution to the crowd. Last year a policy of selling advertising space in the program to Kansas breeders was initiated. This permitted a more attractive program and also allowed the sending of 2,000 copies to breeders of pure bred livestock in Kansas, agricultural colleges, breed and farm

magazines and newspapers, county agents, vocational ag teachers, and veterans on the farm training teachers.

Twenty-two classes of livestock were shown in 1948 by 140 students who participated for the two trophies and nearly 100 ribbons. It is hoped that other prizes and awards can be added for this year's show.

Although the show is sponsored by students, faculty members and loyal livestock men of the state aid the show to a great extent. Many prominent men act as judges of the show, including John Weir of Geuda Springs, Jerry Moxley of Council Grove, and Professor F. W. Bell of the college who were last year's judges. The herdsmen at the respective barns also spend many hours working with students.

Entertainment and feature acts

(Continued on page 26)

Use of Multiflora Rose as Wildlife Cover Revives Living Fence Theory

Kansas Forestry, Fish and Game Commission
Plans to Distribute 150,000 Plants

By NORMAN COLLINS

OF increasing interest in Kansas is the possibility of using a living fence—not the old osage orange hedge, but a multiflora rose. Impetus is being given this movement by the Kansas Forestry, Fish, and Game Commission in an effort to replace the rapidly diminishing cover for wildlife.

Multiflora rose is a dense, thorny shrub. Full grown, these plants will provide a fence six to eight feet high and from eight to twelve feet wide. Dusty pink or white blossoms appear late in May. These are followed by masses of marble-sized fruit. The fruit turns red and will last until winter or until eaten by the birds.

As evidenced by the interest of wildlife organizations in the shrub, one of the primary advantages comes in providing shelter for the wildlife population. Authorities warn that

due to the comparatively high prices of grain crops and resulting larger acreage being put into these cash crops, numbers of game birds and animals are decreasing because of the reduction of such necessities as cover, food, escape areas, and nesting sites.

The dense nature of the multiflora rose provides nesting sites for many of our song birds. The density and reclining nature of the branches provide escape and winter cover for quail and pheasants.

Prime among the advantages to the farmer is the shrub's use as a living fence row. All common farm animals except poultry can be confined by the natural fence. Once grown, it needs little care for upkeep. One advantage of the multiflora rose is that trimming, pruning, training, or supports are not necessary.

Both wind and water erosion are reduced. Experimental data show

that the rose does not deprive adjacent crops of moisture.

Other uses include contour line and irregular fencing. Regular fences are sometimes too difficult to build on contour because of the pull on the posts.

Provision of shelter for songbirds and parasitic insects has proved to be instrumental in reducing insect damage. Such pests as chinch bugs are found in greatest numbers in bunch grasses and not in woody plants. By planting woody shrubs, the usual weed growth along the conventional fence row is eliminated.

As yet the value of multiflora rose under Kansas conditions—especially central and western parts of the state—has not been accurately determined. Of interest will be the results obtained here at Kansas State. Two seedlings were planted in the spring

(Continued on page 27)



On the left is a close-up of a five-year-old multiflora rose fence in summer condition showing the dense, green barrier provided. This fence turned livestock at the end of the second year. On the right is a grassed waterway fenced by multiflora rose. The mature plant normally grows to a mature height of 6-8 feet and covers an area 6-8 feet in width.

Sixty Campus Cowhands to Mount Broncs In 3rd Annual Chaparajos Club Rodeo

By SAM A. KOURY

ON April 22, 23, and 24, the Chaparajos of K-State will sponsor their third annual Intercollegiate Rodeo at Griffith Stadium.

Instead of nine men with a hickory club trying to knock the stuffing out of one ball, some sixty campus cowboys will attempt to take the tallow off fifty head of fighting, running, bucking livestock.

Nine schools to date have been invited to the rodeo: Wyoming University, Oklahoma A and M, Colorado A and M, Arizona University, Texas A and M, Western Colorado State at Gunnison, New Mexico State, Trinidad (Colo.) State, and Sul Ross State College at Alpine, Texas.

Four of the above schools sent teams to last year's whing-ding. They were Oklahoma A and M, Colorado A and M, Western Colorado State, and Wyoming University. Cowboys from Arkansas City Junior College and Dodge City Business College also competed.

A college rodeo team, as defined in the rules of the Chaparajos rodeos, consists of two men in each event. However, more contestants always



John Hart, Kansas State sophomore, rides a bronc out of the chute in last year's Chaparajo rodeo.

have been welcome in the past. Some schools sent as many as eight extra men to compete on their own.

The college cowboys unanimously agree that each year their rodeos are a little better than the last, due to the fact that many "bugs" are ironed out

through hard experience.

Last year's show was produced by the famous Ken Roberts of Strong City, Kansas. In all respects it was a professional fast-moving affair. Some \$1400 in prize money was given away, as well as a trophy for the winning school and a gold and silver belt buckle for the All-Around Cowboy. Wyoming University now has the trophy, and one member of the team, Bill Whitney of Saratoga, Wyoming, won the all-around.

This year, the cash awards will total a similar amount. Added prizes include a \$60 pair of boots from Hyer's of Olathe, a broken-jawed bit from Porter of Arizona, three pairs of Levis from Levi-Straus Company, and a Lee "Rider" jacket and pair of pants from Jim Bell of Strong City.

Competitive events for college students will feature saddle bronc riding, bareback bronc riding, calf roping, bull dogging, and Brahma bull riding. Stock for these five events is to be furnished by Slim Pickering, local rancher who was associated with Clyde Miller's rodeo.

(Continued on page 27)



An exhibition of bulldogging is given by Leo Roberts, Oklahoma A and M. Wyoming University had the all-around winning team last year.



Prof. A. L. Clapp, agronomy department, receives a certificate of honorary membership in the International Crop Improvement Association from Frank Parsons, president.

International Crop Improvement Association Awards A. L. Clapp Honorary Lifetime Membership

By GARRETT SEATON

Prof. A. L. Clapp, formerly secretary of The Kansas Crop Improvement Association and past president of the International Crop Improvement Association, was awarded honorary membership in the International at its annual meeting in Kansas City last December.

Professor Clapp, commonly known as "Al", graduated from Kansas State in 1914, majoring in farm crops. For his first job he became superintendent of the Agronomy farm. Since then he has served as a vocational teacher, county agent, agricultural specialist with a coal company in Ohio, and extension agronomist in charge of cooperative experiments at Kansas State college. In this time he became a leader in crop improvement work. Between the years 1935 and 1946 he served as secretary of the Kansas Crop Improvement Association; from 1935 to 1939 he was secretary-treasurer of the International Crop Improvement Association, and then served as president of that organization for one year. He was chairman of the General Certification committee for the I. C. I. A. from 1945 to 1946 and still

serves on many important committees.

Mr. Clapp is the third person ever to receive a certificate of honorary membership from the I. C. I. A. The other two were M. A. McCall of the United States Department of Agriculture and O. S. Fisher, extension agronomist for the U. S. D. A. Mr. Fisher received his award at the same meeting at which Mr. Clapp was honored. Mr. Frank Parsons, previously assistant secretary of the Kansas association and now secretary of the California association, presented the awards to Mr. Clapp and Mr. Fisher.

The Kansas Crop Improvement Association selected as honorary members this year A. L. Clapp, L. E. Call, and J. C. Mohler for their interest in progressive agriculture.

Under the guidance of Mr. Clapp the K. C. I. A. developed from a small, financially helpless group to one of the state's strongest and most progressive non-profit agricultural organizations. In addition to his regular work "Al" has prepared many agricultural articles and publications. He can always find time to offer thoughtful assistance whenever it is most needed.

Spring Semester Enrollment In School of Agriculture Drops Along With KS Total

By DONALD L. PLAGGE

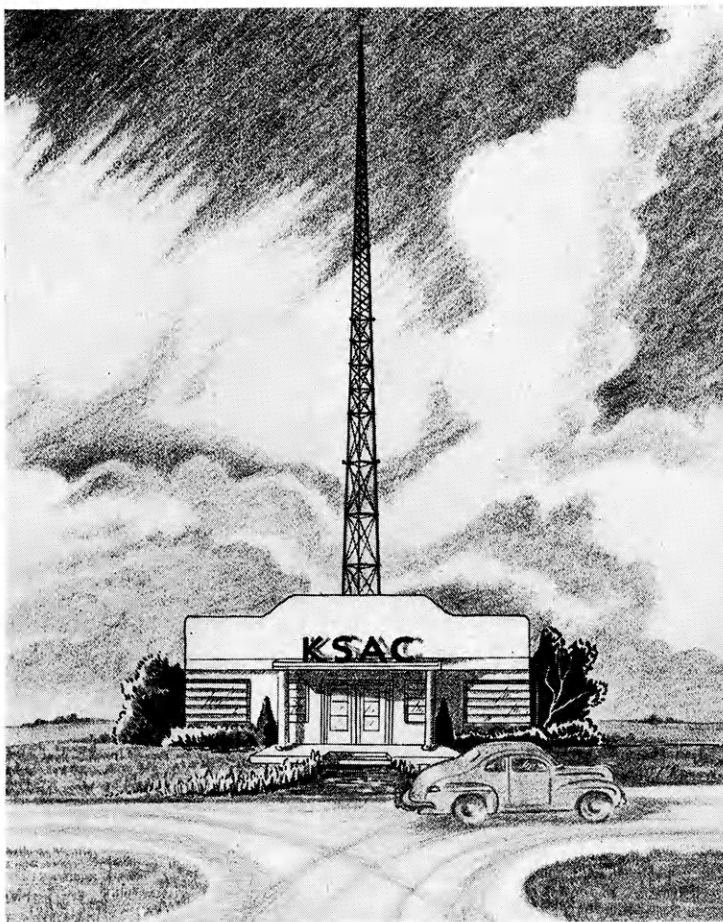
For the first time since the spring semester of 1945, when an all-time low of 41 students enrolled, the Ag enrollment has dropped. There were 1293 Ag students enrolled for the 1949 spring semester, compared to 1368 Ags who enrolled for the 1948-49 fall semester.

Whether the drop of 75 students is an indication of fewer Ag students is questionable. The plentiful source of students, the veterans, is being depleted, but it remains to be seen whether or not the new crop of high school graduates who will be seeking a college education will offset this decline in veteran enrollment. However slight this decrease may be, it may indicate a trend toward fewer students temporarily.

Students are distributed throughout the Ag school in somewhat different numbers than they were a year ago. Those enrolled in Milling Administration have jumped from 27 to 56 in one year. Agricultural Education climbed from 146 to 192, while Agricultural Administration enrollment is up from 196 to 213. Two-year Ags have dropped from 114 to 102, and the General Agriculture enrollment also dropped from 483 to 472. Other Ag curriculums have only slight changes of one or two in their total enrollment. There are 90 enrolled in Soil Conservation. Milling Technology and Floriculture and Ornamental Horticulture are tied with 37 each, followed by Landscape Design with 26; Agricultural Journalism has 24, while Milling Chemistry and Dairy Manufacturing each have 19.

The number of special students has exactly doubled, having risen from 7 to 14. Two students are enrolled in both Agriculture and Veterinary Medicine, and there are three special students.

An extension staff of 340 men and women, assisted by more than 20,000 voluntary local leaders, carries the Kansas State College educational program in agriculture, home economics, and rural engineering to every community in Kansas.



Two miles north of Manhattan, this radio tower represents one of the greatest milestones in the history of KSAC. The tower and the 5000 watt transmitter were completed in October, 1947.

From Hilgendorf to Longsdorf

College Radio Station Provides Entertainment, Education

History Shows the Voice of Kansas State
Wasn't Always So Loud

By HAROLD RAMSEY

Radio station KSAC, "The Voice of Kansas State College," has not always enjoyed the prominence in campus and college activities which it holds today.

In 1912, the Department of Physics obtained a license for station 9YV under the provisions of national radio law. During the same year, staff members commenced broadcasting daily weather forecasts in Morse code by wireless. Farm boys and others with crystal sets who learned enough of the code could make use of these broadcasts. Amazingly enough, station 9YV was picked up as far distant

as Wichita and Winfield. These forecasts are believed to represent the first broadcasting, in this section, of weather reports by radio on a fixed schedule.

Upon entrance of the United States into World War I, the station was ordered to be dismantled but lab work was maintained. In 1919, station 9YV was permitted to resume its activity, and daily weather forecasts were again provided.

In a short time, 9YV was converted into the 100-watt radio telephone station WTG from which were sent out spoken and musical broadcasts from the college. Later, it was sug-

gested that the powerful station KFKB at Milford, Kansas, be used for trial broadcasts by remote control through a telephone line from Manhattan. This plan succeeded and the "College of the Air" opened on February 11, 1924.

An extension radio curriculum was offered consisting of daily broadcasts in the following courses: poultry, dairying, general livestock, crops, soils, agricultural economics, and home economics. Radio fans were invited to register. The school lasted for 10 weeks, several hundred enrolled, and thousands listened without enrolling. Upon completion of the curriculum, an examination was given which entitled students to certificates of graduation from the first school of its kind ever conducted.

During the following years, KSAC continued to expand its facilities for servicing its listeners with non-commercial, educational radio programs. Studio and transmitter were located on the campus, in Nichols Gymnasium. The two towers west of the gym supported the antenna.

A year ago last summer a new transmitter was set up off the campus.

Located two miles north of Manhattan is the 433-foot radio tower which represents one of the greatest milestones in the history of the station. At the base of this tower is housed the 5,000-watt transmitter, first used October 1, 1947. This increase in power over the preceding 1,000-watt transmitter has boosted the potential audience to over 5,000,000 listeners.

A wide variety of subject matter may be found in program content. Daily KSAC broadcasts of the "Farm Hour" and "Homemakers Hour" disseminate information of current interest to workers in the fields of agriculture and home economics. Departments of the college not represented on these two programs are featured on "The College of the Air." Time is also devoted daily to weather, market, and news coverage. State activities in 4-H club work consume part of the three and one-half hours daily which the station is on the air. Recently, facilities were set up to make possible the broadcasting of all-college assemblies. During the seasonal peak of the pigskin parade, all home football games are sent out over

(Continued on page 30)

Kansas the Leading Lamb Feeding State

By ED MCGINNESS

Lamb feeding in Kansas became a major industry only recently. Experiments in feeding range lambs at the Kansas Agricultural Experiment Station proved that lambs can be fattened successfully and efficiently on sorghum grain and roughage. These findings disproved the belief that the standard ration of corn and alfalfa was the only feed that could produce a top quality fat lamb.

A lamb feeding project was set up at the Garden City Branch Experiment Station in 1933 with one double-deck car load of range feeder lambs. F. A. Wagner was appointed superintendent of the project with Dr. R. F. Cox of the animal husbandry department, Kansas State college, in charge at all times.

Lambs are purchased in October from range producers in New Mexico, Colorado, or Wyoming, fed 80 to 120 days (depending on method of feeding used) and marketed at the major market most favorable at marketing time. The lamb carcasses

are examined in the packing plant to determine the degree of finish obtained on the ration used in feeding them.

Lamb feeding experiments were started primarily to determine the value of sorghums and wheat pasture in fattening feeder lambs in the southwest. Relatively cheap land and abundant roughage combined with favorable climate and geographical location, between range producing areas and major markets, gives a decided advantage to feeders in this area. Feeders in the corn belt have a high overhead in expensive equipment due to wet weather and high priced land.

Increased experiments doubled the size of the project in 1937 and two double-deck carloads have been fed each year since then. Many combinations of sorghum grain and roughage comparisons are tried, as well as methods of feeding and handling. Different varieties of sorghums have been tested in feeding experiments and comparative values deter-

mined. Protein supplement value in the ration has been emphasized, and feeding $\frac{1}{4}$ ounce of ground limestone per head per day when there is no legume in the ration has proved to be of value.

Death losses due to a ration too rich in concentrates long has been a factor to be reckoned with in feeding lambs. Range lambs are not accustomed to having any concentrates in their ration and are more likely to die from eating too much grain if they are pushed too fast in the feed lot. It has been known for some time that death losses could be greatly reduced by feeding less grain per day over a longer period of time and allowing a period at the beginning to get the lambs used to grain by starting them on very little grain and gradually increasing the amount until they are on full feed. Only recently has it been found that feeding sodium bicarbonate at the rate of $\frac{1}{5}$ ounce per head per day would greatly reduce feedlot death losses in lambs. The Kansas

(Continued on page 30)



The lamb feeding project at Garden City has been popular from the standpoint of practical use, especially from the feeder's viewpoint. The project is self supporting.

FFA Program Here May 2 and 3 Features Visit By 1000 High School Boys

By MERLE HOWES

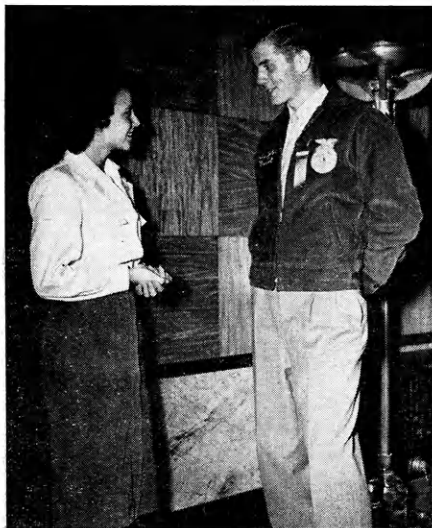
Approximately 1,000 boys from Kansas high schools will attend the 26th annual vocational agriculture judging and farm mechanics contest at Kansas State May 2 and 3. In connection with the contest the Kansas Association of Future Farmers of America will hold its 21st annual program.

Contests in agriculture include judging poultry, crops, dairy and beef cattle, sheep and swine. In farm mechanics, the contestants will be given an opportunity to try out their proficiency in farm power, sharpening tools, soil conservation, concrete work, welding, farm machinery, and farm carpentry.

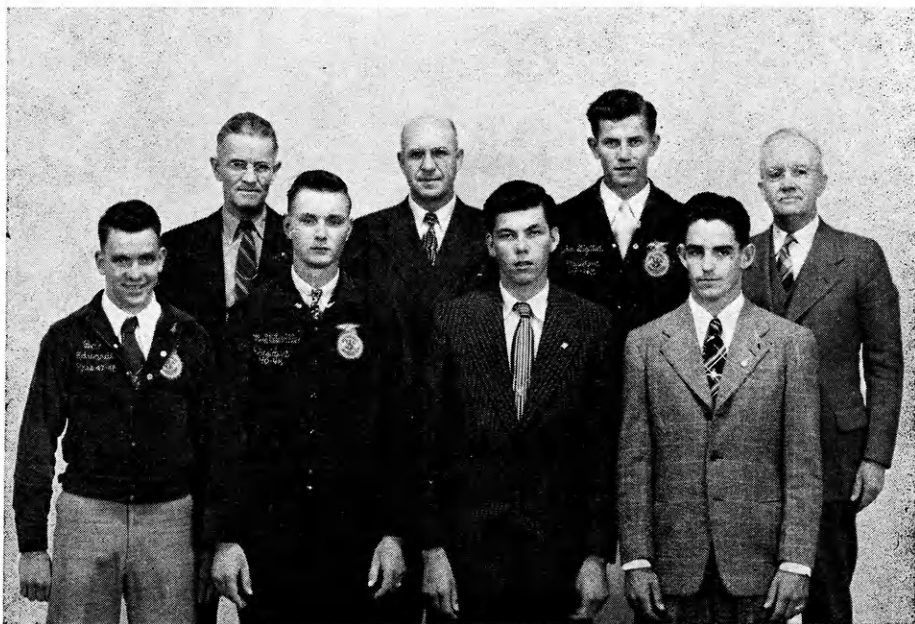
Each high school is permitted to have one team of three members in the agriculture contests and a team of two members in the farm mechanics contests. Schools not represented by teams in the contest will be permitted to enter one or two individuals in each contest.

A box lunch will be sponsored by the Agricultural Education Club and will be served both Monday and Tuesday.

Among the activities of the annual



Shirley Osborne, Harper, Kansas, National president of the Future Homemakers of America, and John Gigstad, Effingham, president of the Kansas Future Farmer Association, represent two of the largest rural youth organizations.



These 1948 Kansas State FFA officers will preside at the twenty-sixth annual state convention to be held in May on the college campus. They are (front row—left to right) Robert Edwards, Emporia, vice-pres.; Donald Stuteville, Parsons, secretary; Carlodon Broadbent, Beloit, reporter; Lon Crosson, Minneapolis, treasurer; (back row—left to right) L. B. Pollom, state adviser; L. F. Hall, state executive secretary; John Gigstad, Effingham, president; and A. P. Davidson, state executive adviser.

meeting of the Kansas Association of F. F. A. will be the election of the 1949 class of State Farmers, the F. F. A. speech contest, ranking of the chapters in the state chapter contest, and election of officers for the ensuing year. State President John Gigstad of the Effingham chapter will preside. The delegation will be addressed by one of the national officers.

The Future Farmers will be housed in Nichols Gymnasium through co-operation of extension and the athletic department. Kenney L. Ford, secretary of the alumni association, will be in charge of housing. Tours of the campus and experiment station will be sponsored by the department of economics and sociology, with Prof. Merton Otto in charge.

A banquet in Nichols Gymnasium will be provided by the Manhattan Chamber of Commerce. The entire event is in charge of the College Contest committee which includes Dr. H. E. Myers, Dr. A. D. Weber, Prof. J. A. Hodges, Prof. F. W. Atkeson, Prof. F. C. Fenton, Prof. A. P. Davidson, and Prof. L. F. Payne, chairman.

L. B. Pollom, Topeka, is state adviser of the Kansas Association of F. F. A.

The Department of Home Study at Kansas State College in Manhattan has sent out 40,000 lessons during the past two years.

The first college building in the United States for the sole use of home economics was erected in 1898 at Kansas State College, Manhattan.

Courses in first aid and home nursing were offered to 584 women students at Kansas State College last year. These courses were given at the request of the American Red Cross.

In the Kansas State College War Training Program, nine special courses ranging in length from 8 to 18 weeks, have been offered at the College from one to nine times each. The total number of students enrolled in these courses is 524.

Dairy, Beekeeping, Agronomy Meetings Held During Ag Week

By DEAN REESE

The 81st annual Agricultural Week was held at Kansas State college February 1-3, with approximately 400 people attending the dairy, agronomy, and beekeeping meetings.

Dairymen met the first two days of the conference. During their meetings the group listened to lectures concerning the dairy business, world food supply, dairy farm management practices, breeding better dairy cattle, and the relationship of soil fertility to the nutritive value of feed crops.

The beekeepers divided their program, with separate meetings for beginners and advanced apiculturists. Beginners had lectures on bee colony needs for the year and types of honey production, and saw movies on honey bees at work.

The advanced keepers listened to lectures on marketing, production, and keeping records. Both beginners and advanced keepers visited the experiment station apiary.

The agronomists attending Agricultural Week discussed hybrid corn the first day of their meetings. Reports were given on the use of 2,4-D in controlling weed in corn, results of the corn performance tests in 1948, corn fertility plots in the Kaw valley, and making parent seed stock available for hybrid seed growers.

Wilfrid Johnson was reelected president of the Kansas Hybrids association.

The last day, The Kansas Crop Improvement association meetings were held. L. L. Compton gave a review of the 1948 certification. J. W. Zahnley told of the new soybean variety, Wabash. Other lectures were given of Iowa's seed improvement, the farmer's obligation to the college of agriculture, and certified seed from the dealers' viewpoint. Reports of committees were heard and a seed cleaning and processing demonstration were given.

Walter Pierce was reelected president for the coming year.



During the last day of the Agricultural week these men were reelected officers and directors of the Kansas Crop Improvement Association. They are (left to right) F. J. Raleigh, vice-pres.; C. C. Cunningham, director; L. L. Compton, secretary-treasurer and Walter Pierce, president. The Association's state fair exhibit is in the background.

Even You Have a Chance

Crops Judgers to Vie for Prizes In Annual Tri-K Contest April 30

By GARRETT SEATON

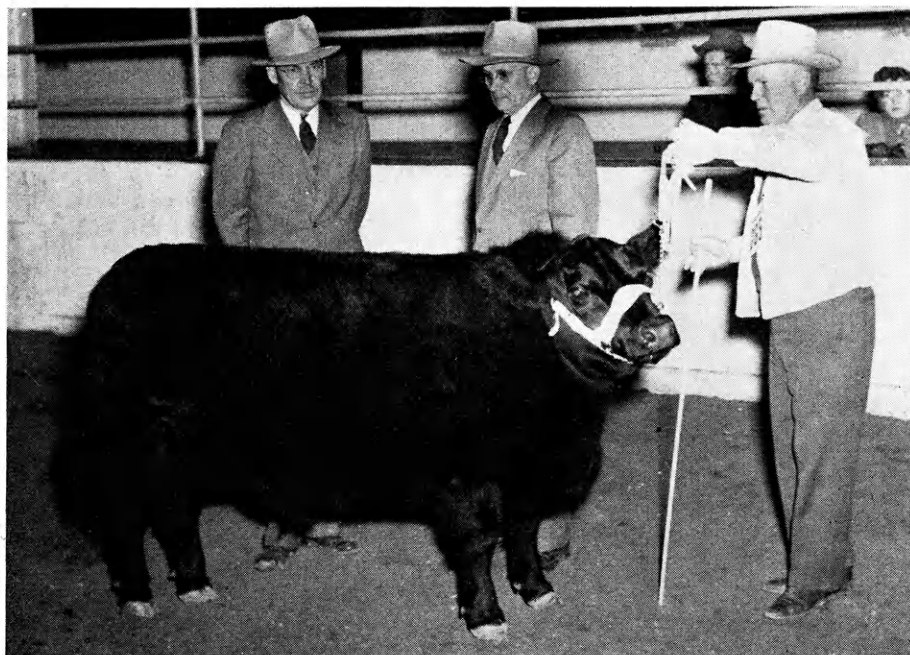
To all students who can tell wheat from barley, oats from sweet clover, and soybeans from sorghums, your heyday is just around the corner. On April 30 the annual crops judging contest will be sponsored by the Klod and Kernel Klub.

As usual there will be three divisions in the contest. A student who has had no college course in crops will be in the freshman division, one who has had or is now taking Farm Crops will be in the junior division, and the student who is taking or has taken Advanced Grain Grading and Judging will be in the senior division. Each division has three separate parts, identification of crops and weeds, grain grading, and grain judging. The participants in the freshman division will not enter grain grading.

The following is a partial list of contributors and the prizes they are giving: Missouri Hybrid Corn Company, one bushel of seed corn; La-Motte Chemical Company, two soil test kits; Urbana Laboratories, one

pint Rich or Poor solution and one dozen vials; Peppard Seed Company, one bushel of seed corn; Southwestern Miller, \$5; DeKalb Agricultural Association, \$20; Oliver Corporation, \$10; Anaconda Copper Mining Company, one bag treble superphosphate; Kansas Farmer, one three-year subscription, one two-year subscription, one one-year subscription; Earl E. May Seed Company, two bushels of seed corn; Successful Farming, one one-year subscription; Henry Field Seed and Nursery, \$5 in trade; Sears Roebuck Foundation, \$15, and Ed. F. Mangelsdorf Brothers Incorporated, one bushel of seed corn.

Chase Bag Company, toweling and sack material; John Deere Company, \$10; Corneli Seed Company, one bushel seed corn; Barteldes Seed Company, one trombone-type spray pump; Kansas Hybrids Association, one bushel of seed corn; Associated Millers of Kansas Wheat, \$10; Capper's Farmer, three one-year subscriptions; International Harvester, \$5; and the Atchison, Topeka and Santa Fe Railway System, \$5.



The champion Angus steer and the reserve grand champion steer in competition with all other breeds at the National Western Livestock Show in Denver, was exhibited by Kansas State College, Manhattan. Above left to right are Al Darlow of Oklahoma A & M who judged the show, A. D. "Dad" Weber of Kansas State College, and Jim Hollinger of Chapman, Kansas, at the halter.

College Agronomists

Recommend Two Corn Hybrids Plus New Soybean Variety

By HAROLD DALBOM

Two new corn hybrids and a new soybean variety have been recommended for distribution by the Kansas Agricultural Experiment Station and approved for certification by the Kansas Crop Improvement Association.

K1646 is a yellow hybrid in the same maturity class as Illinois 200. The performance of this hybrid over a period of years has been very similar to that of Illinois 200. It is superior, however, in its ability to stand and hold its ears, and so lends itself to husking by mechanical pickers.

K2299 is a white hybrid in the same maturity class as K2275 and K2234. Yield test results show that K2299 yields higher than K2234 in all sections of the state, with the exception of south central Kansas. It has good drying qualities and high shelling percentage in addition to its superior yielding ability, compared with K2234. It is very much like K2275 in maturity, standing, drying, and ear holding abilities. Its yield was higher than that of K2275 in north central, south central, and southeast Kansas in 1948.

Due to the wide adaptation of this new white hybrid it may be given a regional name rather than the number under which it has been tested in Kansas.

Wabash soybeans are a pure line selection from a Dunfield-Mansoy cross. The maturity of Wabash is about the same as that of Chief, or three or four days earlier than Gibson. The average height of Wabash is 38 inches, and the oil content is about 1 percent higher than that of already approved varieties. Characteristics which make the new variety adapted to combine harvesting are uniformity in ripening and formation of the pods well above the ground. These beans have erect growth, are resistant to lodging, and have excellent seed quality.

The seed supply of these new varieties is limited at the present time but an adequate supply for planting should be available for 1950.

Prof. A. L. Clapp, Dr. Lloyd A. Tatum and Prof. J. W. Zahnley, of the agronomy department, have been in charge of the development and testing of these crops.

Weber Writes Piece For Country Gent Beef Cattle Series

By ED MCGINNESS

"What is a good Shorthorn," a feature article written by Dr. A. D. Weber, head of the Department of Animal Husbandry, will appear in the April issue of *Country Gentleman*, national farm magazine. The article will be the third in a series on the major beef breeds. It will be illustrated in color.

A. E. Darlow, head of the Department of Animal Husbandry, Oklahoma A and M, was the author of "What is a good Hereford" in the February issue of the magazine. "What is a good Aberdeen-Angus" by Dean H. H. Kildee, Iowa State College, appeared in the March issue of *Country Gentleman*.

These three prominent livestock judges were selected by *Country Gentleman* to give the history, background, and characteristics of the breeds in a presentation of the "basic characteristics" of animals that will give producers more, better, and cheaper beef.

A DAY OF YOUR LIFE

If you are an adult weighing about 175 pounds, in 24 hours—

Your heart beats 103,689 times.

Your blood travels 168,000,000 miles.

You breathe 23,040 times.

You inhale 438 cubic feet of air.

You eat 3¼ pounds of food.

You drink 2.9 pounds of liquids.

You lose in weight 7.8 lbs. of waste.

You perspire 1.43 pint.

You generate in energy 450 foot tons.

You turn in your sleep 25 to 35 times.

You speak 4,800 words.

You move 750 major muscles.

Your nails grow .000046 inches.

Your hair grows .01714 inches.

You exercise 7,000,000 brain cells.

Now say you haven't done anything today!

—The Open Book.

Ag Judging Teams Capture Honors

By DON WILSON

The Kansas State College livestock judging team finished sixth to the winner, Oklahoma A and M, in the International Livestock Judging Contest held at Chicago during the International Livestock Exposition.

Contest competition has been increasing annually, and this year 31 college teams judged in the contest. Thirty colleges from the United States and the Ontario Agriculture College of Canada completed the entry.

The team with Don Good as coach included Tom Carleton, Wakarusa; Dick Sheets, Topeka; Glen McCormick, Cedar; Norman Minks, Greensburg; Lloyd Lewis, Emporia; and Fred Germann, Manhattan.

The team came out with sixth place in the meet. Two of the boys won top honors in two different classes. Glen McCormick was head man in cattle judging and Fred Germann won first in horse judging. The K-State team was also tops in horse judging.

The teams, coaches, and contest officials were entertained at a Sunday dinner in the Saddle and Sirloin Club at the Stockyards Inn. Here awards and announcements were made to the qualified winners.

By MAX FRIESEN

Equipped with magnifying glass, forceps, handbooks of official grain, hay, and cotton standards, and a memory filled with facts, the K-State Crops Judging team entered the Kansas City national collegiate grain judging contest, November 23, and the Chicago international collegiate contest, November 29. Many hours had been spent in preparation for the contests by James Wood, James Barr, Max J. Friesen, and the alternate, Milton Thomas, who made up the team.

The contests consisted of three main divisions—grading, identification, and judging. The grading of the grain, hay, and cotton was done according to the respective United States Standards of each commodity. Eight classes of grain were judged by

each contestant with the reasons being given to accompany the placing.

Probably the division requiring most preparation was identification. One hundred eighty grain or plant samples of corp varieties, plant diseases, or weeds were on the eligible identification list with the common and scientific name and region of adaptation required for each.

The K-State team placed fourth in the Kansas City contest and dropped down to fifth in the International. Oklahoma A & M swept top honors in both contests. The teams from University of Nebraska and Texas Tech. took second and third respectively in the Kansas City event. The schools in order of their placing at Chicago were: Oklahoma A & M, Texas Tech., Texas A & M, University of Nebraska, Kansas State, University of Minnesota, South Dakota State and Pennsylvania State.

Bob Wright of the Oklahoma A & M team set somewhat a record as he is the first individual to be high man at both contests. Max Friesen was high individual of the K-State Team for both contests and was fifth high individual in the National. James Barr was high individual in grading at the Chicago contest.

Professor J. W. Zahnley, of the Agronomy Department, again coached the team for the 21st consecutive time. He helped organize the Chicago contest in 1923 and has been coaching the K-State team since that time. Prof. Zahnley now holds the honor of being the only remaining active coach of the original men who started the contest. Hats off to this man who has been the guiding hand for all K-State crops judges.

By DON WILSON

Harold Dalbom of the Kansas State livestock judging team placed first in cattle judging at the Southwestern Exposition and Fat Stock show January 29 at Fort Worth, Texas.

Out of 14 colleges represented, K-State livestock judges placed ninth. New Mexico University won the team championship.

Twelve classes of livestock were judged, among them two classes of quarter horses, four of cattle, three of sheep and three of swine. K-State ranked fifth in sheep judging and seventh in cattle.

None of the judging team that participated at the Denver show earlier this month were allowed to go to Fort Worth. College tradition does not permit students to participate on junior teams but once.

Enroute to Fort Worth, the team stopped at Oklahoma A & M college at Stillwater for practice judging.

The team with Don Good as coach included Harold Dalbom, Viola; Bennie Bird, Protection; Richard J. Chase, Tribune; Kenneth D. Carson, Hartford, Ky.; Robert E. Acre, Bucklin; and Charles L. Reese, White Cloud.

By DEAN STRATTON

The Kansas State college judging team ventured to Denver, Colorado, January 14, to compete with twelve other state college teams at the Denver Livestock show.

On Friday, the teams judged car lots of livestock. They judged four cars each of fat steers, bulls, feeder steers, fat hogs and fat lambs. Oklahoma walked away with first prize. The Kansas State team placed sixth.

Saturday, the teams judged twelve classes of livestock. The Nebraska team took first place while the Kansas State team ranked eleventh. Kenneth Griffith was tenth high individual on all classes judged.

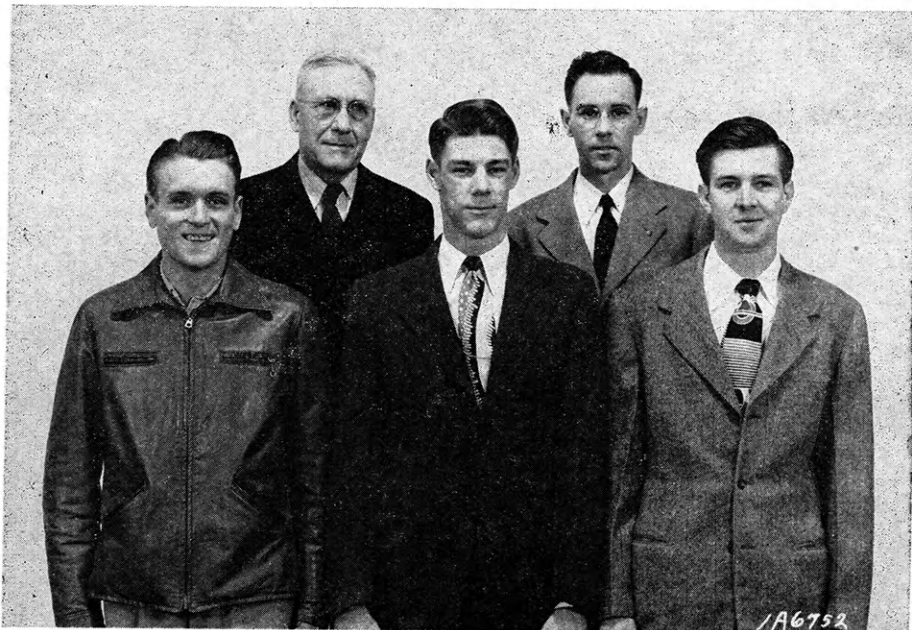
The members of the team were: Charles Dutton, Kenneth Griffith, Robert Cannon, Jack McClaskey, Wilbur Levering, and Don Brock.

By TOM JAMES

The group was tense as the high individual of the 25th annual Inter-collegiate Poultry Judging Contest was about to be announced. Everyone was expectant as to who it would be, and then A. G. "Chick" Phillips, former Kansas State College graduate and now vice-president of Allied

(Continued on page 32)

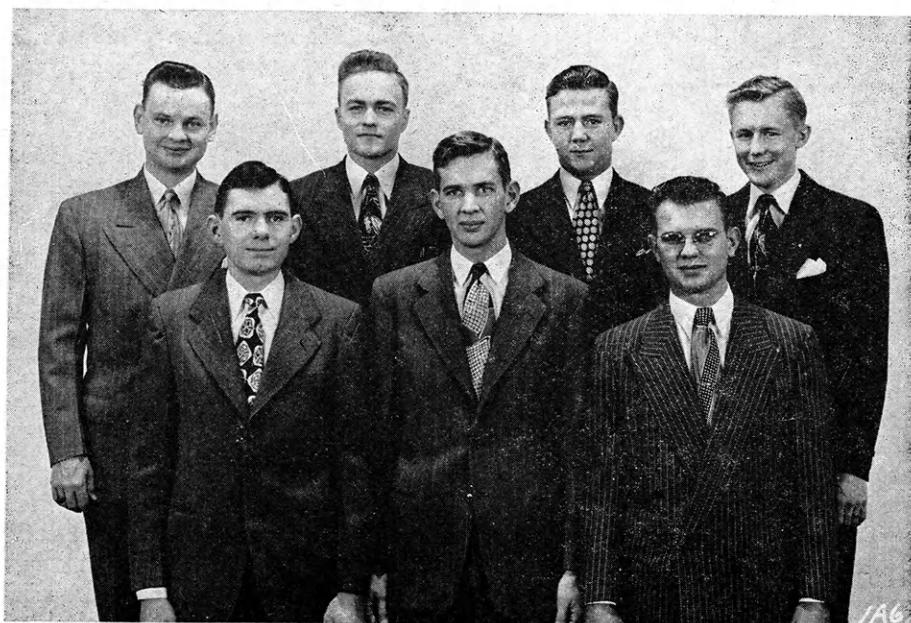
Kansas State's Judging Teams



The Crops team of Kansas State at the International was represented by, back row, Prof. J. W. Zahnley, coach, and Milton Thomas, alternate. Front row, James Wood, Max Friesen, and James Barr.

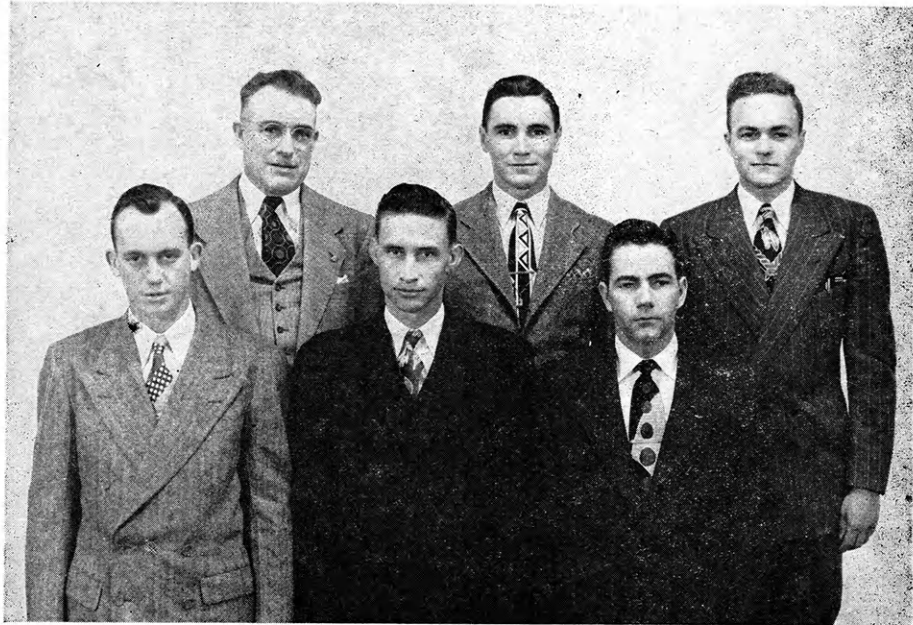


At the International Livestock show the following men represented Kansas State: Lloyd Lewis, and Fred Germann. Front row, Tom Carleton.



The following men represented Kansas State at the Fort Worth Livestock Show. They are, back row, Don Good, coach, Richard Chase, Bob Acre, and Kenneth Carson. Front row, left to right, Charles Reese, Harold Dalbom, and Ben Bird.

Compete at Fort Worth and Chicago



The Meats team was composed of Prof. D. L. Mackintosh, coach, Dale McClaskey, and Richard Chase. Front row, Clyde Smith, Harold Smith, and Charles Medcalf.



Following men judged: Back row, Glen McCormick, Don Good, coach, Dick Sheets, Norman Minks, and



Representatives of the Poultry team were Prof. T. B. Avery, coach, and Bill Johnson. Front row, Dick Winger, alternate, Tom Keigwin, and Sykes Trieb.

American Quarter Horse Holds His Own Despite Advance of Modern Machine Age

By ED MCGINNESS

Harness horses have been replaced by the automobile and work horses have been largely replaced by mechanized equipment, but the Quarter Horse is assured of three places in economic use. They are valuable in handling livestock, in rodeo arenas, and racing under saddle at short distances.

The Quarter Horse is a particular breed which has been developed with two purposes: first, to develop a stock horse with an inborn "cow sense", and second, to develop a fast racing horse at short distances, usually under one-quarter of a mile. Hence came the name, "Quarter Horse".

Historically, the racing aspect probably came first, but both purposes became merged so early that they are almost inseparable. It can be stated truthfully that the original Quarter Horse handled cattle on work days and raced on holidays.

The Quarter Horse is used for all

kinds of ranch work under saddle or harness. He is prominent in the rodeo arena, and in the performance classes for stock horses at modern shows. During the 19th century, the Quarter Horse was one of the most prized of polo horses. At the present time there is an expanding market for range-developed horses to move eastward after they have been used four or five years for ranch work.

The Quarter Horse had his beginning in the early days of the Virginia and Carolina colonies. By 1611, seventeen horses were imported from England.

Early cavaliers became interested in racing their horses and the so called quarter-racing or "short racing" became an established sport by 1656.

Some of the Rhode Island colonists also developed race horses of Spanish Barb or Arab breeding at about the same time as the Virginia Quarter Horses. Racing rivalry between these two groups, with the resulting suc-



Pretty Buck, Grand Champion American Quarter Horse stallion, Southwestern Livestock Exposition, Ft. Worth, 1947. A top roping horse as well as a champion show horse. Owned by E. P. Waggoner, Ft. Worth, Texas.

cess of the Rhode Island stock, led to the interbreeding of these two strains of horses.

The eastern strain of the Quarter Horse moved westward with the opening of new land. One of the greatest areas for Quarter Horse production was finally located between Springfield, Illinois, and Springfield, Missouri. Another was located in Tennessee. Some fine Quarter Horses were produced in Kansas fifty or more years ago.

The eastern Quarter Horses eventually reached Texas where another infusion of Spanish blood took place. The time of the blending of eastern and southwestern strains has never been definitely established. However, it was coincident with the settling of the southwest, and the subsequent improvement of the horse stock of that immense range area.

Throughout the history of the breed Thoroughbred blood has been used from time to time. Thoroughbred breeding is found in some of the pedigrees of present-day animals a few generations back.

During the last part of the 19th

(Continued on page 34)



The Deuce, Grand Champion Quarter Horse stallion, American Royal, 1947. Ridden by his owner, Dan D. Casement, Manhattan, Kansas. A daughter of The Deuce was also Grand Champion mare at the same show.

Pioneers Conquered This Land With Their Hands...

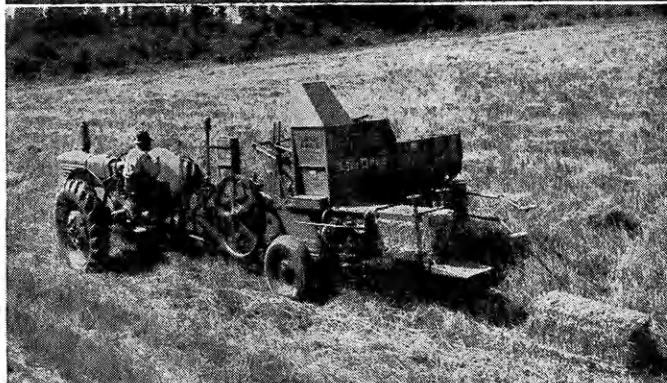


Modern Machines Made It a Land of Plenty!

PIONEERS came with their axes, guns and hoes, their wooden plows, iron plows, steel plows, oxen and horses; and through hard work, unimaginable hardship and drudgery carved for themselves homes and farms from a rugged, new land. Their farming tools were in many respects quite the same as those used in Biblical times and not much better. But unlike the people of older times, men in this land had equality, opportunity, aggressive ingenuity, freedom from oppressive restrictions... time and opportunity to think and plan. And men prospered... invented machines to help do their tasks faster and better. The last 100 years was a period of sudden, swift progress... real progress... and it parallels the history of the farm machinery industry. More progress was made in the last fifty years than in all the ages before.

That progress continues under the American system of free enterprise and capitalism. Men who plan beyond tomorrow know that modern methods of agriculture will assure posterity of fertile, productive soil. That is why more and more progressive farmers demand MM MODERN TRACTORS, MACHINES, and POWER UNITS. They know that the MM trademark is the recognized symbol of highest quality since 1865. Today MM modern machines of proved dependability and economy... machines built to do the work with comfort, convenience, and safety enable the farmers of America to supply the world with food, fiber, and oils.

Today's farmers using modern methods and modern machinery are truly *Pioneers of Progress!*



PIONEERS OF PROGRESS

MINNEAPOLIS-MOLINE

MINNEAPOLIS 1, MINNESOTA



Perfect Blue White DIAMONDS

- Free from carbon spots and flaws—
- Beautiful color—
- Full cut and perfectly proportioned for greatest possible brilliance—
- All of which means **QUALITY** in Diamonds—
- And **QUALITY** is our pride and satisfaction will be your pride thru years to come should you select a **REED QUALITY DIAMOND** for HER.
- Mountings—a big selection we have—and—we mount the diamond for you in this store—ourselves.

REED'S TIME SHOP

SOSNA THEATRE BLDG.

AGGIEVILLE

German Inventor

Visits KSC Milling School To Speak at Seminar

By JIM ORTON

New ideas in milling industry and a comparison between European and American milling methods were explained to milling students and faculty members at a recent seminar by Dr. C. W. Brabender, internationally known milling physicist, engineer, and inventor of testing equipment for the milling industry.

Dr. Brabender, who now has a milling school in Germany with 50 students, is inventor of the Farinograph, Extensograph, Amylograph, and other devices and processes used by millers.

"The most striking difference between the European and American milling industries is the men in charge," Dr. Brabender said. Here the salesmen are most prominent, he explained, while in Europe the technicians are the high salaried men.

Likewise, most of the milling managers over there are old men—60, 70, and 80 years old, he stated. No young men are there to take over who know the trade. Most of the managers started out long ago on water powered mills and have worked up to the large modern mills, he said.

Mr. Brabender was in Manhattan 12 years ago when the late Dr. C. O. Swanson was head of the milling department. Dr. Swanson visited Dr. Brabender in Germany in 1930. Dr. J. A. Shellenberger, now head of the KSC milling department, made plans to study with Dr. Brabender in Germany but World War II prevented.

RADIOACTIVE ISOTOPES

(Continued from page 7)

and chemical research, and many other subjects.

Members of the committee on isotope control include Dr. R. H. McFarland, chairman; Dr. B. W. Lafene; Dr. W. G. Schrenk; Dr. R. V. Olson; and Dr. G. K. L. Underbjerg.

Purposes of the committee include nearly all of the phases of the problem. The committee will arrange for the procurement of isotopes, protec-



Dr. C. W. Brabender

tion of the health of research workers, encouragement of research problems, and education of those intending to use radioactive materials in research. In addition, the committee will plan for the disposal of radioactive waste material and assist in planning research problems.

Present plans for the work at Kansas State include the establishment of a chemical laboratory to handle incoming samples and a physics laboratory to handle physical equipment associated with this particular type of research work.

There are three general uses in research for radioactive isotopes: (1) as tracers, (2) as sources of radiation, and (3) for medical diagnosis. Their use is valuable in several fields, including plant physiology, animal physiology, plant diseases and pests, livestock studies, fertilizers, bacteriology, metallurgy, petroleum industry, rubber and rayon, and fundamental chemistry and physics.

Marketing Classes Visit Kansas City Trade Centers

By CHARLES GLENN

During a blinding sleet storm January 10, 70 marketing students left on a field trip to Kansas City. Students were from the Livestock Marketing, Grain Marketing, and Marketing Farm Products classes.

The group went in two busses. Upon arriving in Kansas City one bus went to the Livestock Exchange building and the other to the Board of Trade building.

When they arrived at the Exchange building the class was met by Joe Daniels, traffic manager for the stockyards company. He had arranged trips through the yards and talks by various members of the exchange and stockyards company. The group was broken up into smaller sections and considerable time was spent out in the yards in the face of a January blizzard watching the actual transactions of buying, selling, and trading.

After the group left the exchange building they visited the large six-story warehouse of the Midwest Wool Marketing Association. Here the complete process of buying, handling, and grading was explained in detail.

The group visiting the Kansas City Board of Trade was met by Jerry Parks, chairman of the educational committee. They were taken down to the board of trade floor to observe buying and selling. The organization and operation was explained here.

From the Board of Trade the group moved on to visit the Midland Flour Milling company to view terminal elevator operations and the Kansas Grain Inspection and Weighing Board.

More than two-thirds of the Land Grant Colleges, most of the state universities, all the departments of the federal government, and many private colleges and universities now have a retirement policy for employees.

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Some of 'Em Even Get Paid

Mid-Term School of Agriculture Grads Accept Positions in Outside World

By BILL FOWLER

Seven students received Two-Year certificates from the School of Agriculture in January. These included Richard M. Alexander, Wellington; Arnold T. Anderson, Manhattan; Howard L. Breitenbucher, Trenton, Mo.; James A. Engler, Chapman; Ralph L. George, Paola; Joe L. Howard, Newton; and Billy Langhofer of Plains.

Lowell Adece obtained his bachelor's degree in agriculture in January. Lowell is now living in Topeka. A cattle buyer for Rath Packing Co. at Waterloo, Iowa, is Tom Carleton, also a mid-term graduate. Carl W. Carlson is now working on his master's in soils at Kansas State College and will have an assistantship in August.

Sam Claar, an agriculture major from Greeley, Colorado, is working at the Farm Bureau office in Garden City. An Ag Education major from Wichita, Lester Crandall, is teaching vocational agriculture at Miltonvale. Bernard Davidson of Cimarron is with the Soil Conservation Service at Lakin, Kansas. Also from Cimarron, John Robbins is a new research assistant in the Division of Irrigation at the University of California. Melvin Deweese, formerly of Greenleaf, can be found now at the Farm Bureau office here in Manhattan. Melvin was an Agricultural Administration major. Jim Leathers, formerly president of the Agricultural Economics club, now spends his time as 4-H Club

agent at Winfield. Another Agricultural Administration man, Don Loyd, is Crawford County's club agent. Art Trojovsky, Ag Economics major from Horton, is now teaching veterans' agriculture in his home town.

Samir Ali Shadid of Palestine has wandered south to Texas A and M college where he will do graduate work. Doing graduate work here at K-State is Harry B. Phelps from Ransom, Kansas. Howard E. Ray, Iola, has a research assistantship in agronomy at Kansas State. George Krause of Harper is in Westcliffe, Colorado, as an On-the-Farm-Training instructor for Pueblo, Colorado, Junior College. John Leitt, here from Kansas City, received his degree in Agriculture this time. Soil Conservationist Joy Livingston of Manhattan also graduated in January. Another Manhattanite, Cloral Lovell, received his degree in Milling Technology. George Peddicord can be found on his farm near Wamego. George majored in Agricultural Administration. Another "double A" man, Paul Thompson, is in the cattle business near his home town of Howard.

After successful completion of the Agriculture curriculum, Charlie Dutton is returning to his farm at Concordia. Another graduate, Robert Fanshier, of Great Bend, also majored in Agriculture. Other men who followed the curriculum of Agriculture who graduated in January were Thomas Gatie, Asherville; Eugene Francis, St. John; and Douglas George,

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Lebo. Formerly on the senior judging team, Fred Germann is now devoting his time to farming eight miles north of Manhattan. Other agricultural graduates include Jim Gilmore, Atchison; Loys Guest, Manhattan; Doran Jackson, Hill City; Bernard Knowles, Salina, and Robert Lansdowne, Parsons.

Donald Lawrence, Overland Park, graduated in Agricultural Education. A milling graduate from Manhattan is William Katz. William Griffith is now a special agent for the Rain and Hail Bureau at Wichita. Allen Holeman, Norton, is now agricultural agent for Morton county. Allen obtained his degree in Agriculture this January. A soil conservation major now with the Soil Conservation Service at Abilene is Daniel Holmes from Lincoln. Teaching vocational agriculture at Hill City is John Lacey. William Findley, Lawrence, is now a graduate assistant in the agronomy department, working on alfalfa. Lorna Dell Gore, graduate in Floriculture and Ornamental Horticulture, has returned to Larned. El Dorado's Ross Laybourn is with the Soil Conservation Service at McPherson. Also with the S. C. S. are Glenn Nicholas, now of Holton, Dale Smith recently located at Junction City, and Raymond Tompkins of Great Bend. Richard Matthew, graduate in horticulture, manages the Matthew Greenhouses in his home town of Concordia. John Petford, Saffordville, is waiting on a position with International Harvester. A research assistant and graduate student in Plant Breeding and Genetics at Pennsylvania State College is Herbert M. Schaaf, formerly of Topeka. Dean L. Schowengerdt is doing graduate work in Agricultural Economics at Kansas

State College. He is from Reserve.

Kenneth C. McGinness from Barnard, Missouri, has finished his course of study in the Department of Agricultural Economics. Charles Manke, Manhattan, and George Nelson, Smolan, have graduated after having successfully completed the curriculum of General Agriculture. Ralph Parks, Reading, is now an On-the-Farm-Training instructor. He majored in Agricultural Education. In August Ralph will become a vocational agriculture teacher at Burlingame. Victor L. Reed whose home was Rose, Kansas, is now assistant county agent of Riley County. Ward Smiley, a graduate in Agricultural Administration, has listed his address as Norton, Kansas. Lyle Snider of Talmage, who took General Agriculture, also wound up his business at Kansas State in January.

James Wood, after completing his agricultural work here, is at present helping his brother in their home town of Clifton. The new 4-H Club agent in Saline County is Richard Winger of McCune. Now with the California Spray and Chemical Corporation as an assistant technical sales representative is Robert Yapp. He still uses his Manhattan address. Wyman White of Maysville, Oklahoma, is with the Farm Bureau insurance company here in Manhattan. Harold Yeager of Admire, Kansas, is another Ag Education grad. Charles Watkins, Kiowa, graduated in Agriculture. Vernon Yaussi has turned to farming after finishing in Agriculture. Vernon, who was from Hiawatha, is now living near McLouth.

Greek was eliminated from the Kansas State College curriculum in 1872. Latin was abandoned in 1875.

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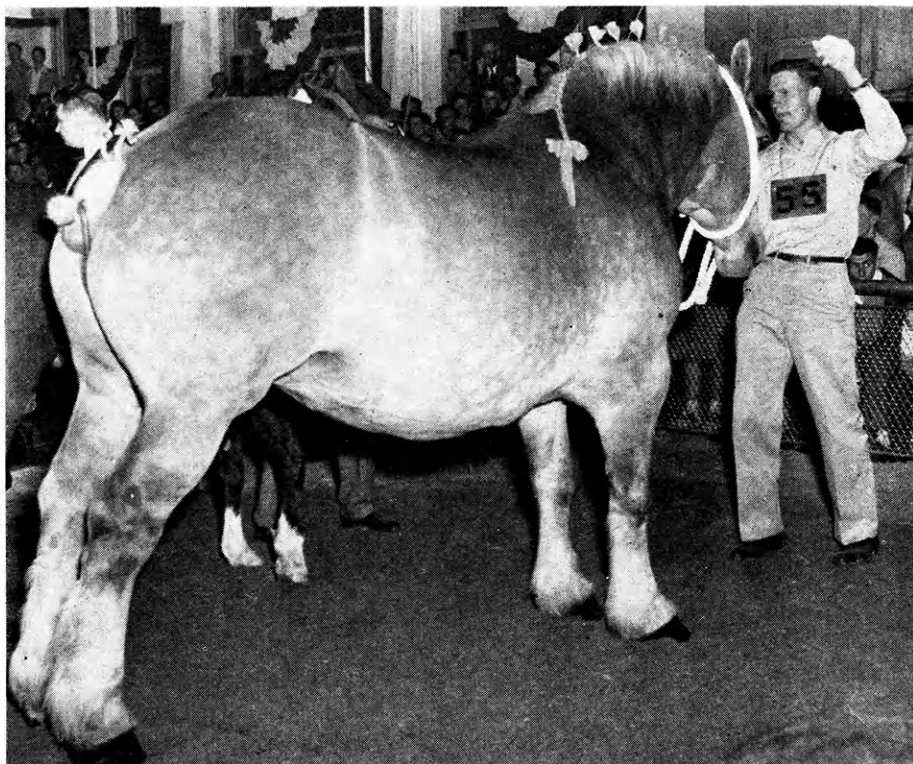
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George Smith won the Block and Bridle division Championship in the 1948 Little American Royal by exhibiting the aged Belgian mare, Roberta de la Barre.

LITTLE AMERICAN ROYAL

(Continued from page 8)

add to the show. They include rope twirling, clowns and musical numbers, along with the presentation of a queen.

The biggest problem the students face in putting on the show is the handling of the crowd. Before the war, the clubs held their shows in different sides of the college pavilion. Now, however, part of the pavilion has been converted to a frozen food laboratory. Last year, bleachers were obtained from the athletic department and approximately 1,000 spectators were admitted, with more than 400 people being turned away. How-

ever, with the cooperation of radio station WIBW announcer Gene Shipley, a transcribed broadcast of the Royal helped people visualize the colorful show.

Other students besides Spare who are playing a big part in organizing the show are William Edwards, Manhattan; Glen McCormick, Cedar; and Lloyd Lewis of Emporia. Prof. D. L. Mackintosh and Prof. Glen Beck of the college are advisers to the council which has 11 committees composed of 44 students working under them.

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MULTIFLORA ROSE

(Continued from page 9)

of 1943. These are six feet high at the present time. During the extremely cold period on January 4, 1947, when temperatures dropped to 31° below, 75 percent of the top growth on these two plants was killed.

Although the multiflora rose has been used successfully in areas east of Kansas, the cold of western Kansas coupled with the winter dryness seems now to be a serious limiting factor in its use. Prof. L. R. Quinlan of the Department of Horticulture stated that "it is doubtful if the multiflora rose will be adapted to the western half of Kansas."

According to Professor Quinlan, Dr. A. C. Hildseth of the U. S. Horticultural Field Station at Cheyenne, Wyoming, has found that the rose would not thrive under Cheyenne conditions. This would tend to show the vulnerability of this shrub to dry and cold conditions.

Although not adequately proven yet, the multiflora rose possesses qualities which make it desirable on many farms. During the next year, the Forestry, Fish, and Game Commission is planning to distribute 150,000 plants in Kansas with a goal of between one and one-half million plants for the following year. This program will test the value of the multiflora rose under Kansas conditions.

CHAPARAJA RODEO

(Continued from page 10)

In addition, Orville Burtis, noted cattleman of Riley county, will take charge of a cutting horse contest. This event will be open to non-students from Riley and adjoining counties. Mr. Burtis will also furnish 35 to 40 head of cattle for this event.

The newly organized Manhattan Round-Up Club has been offered the opportunity of sponsoring a roping event for non-students, and they have shown enthusiasm for it.

Organized in the spring of 1946, the Chaparajos' objective is to further the interest in light horses, but not necessarily cow horses. All types of equestrians are welcome to membership in the club.

In 1947, the college riders held their first rodeo for the purpose of raising enough money to acquire a

barn. That first show was intercollegiate, but was also "open to the world", there being many professional rodeo men competing. Colorado A and M, the only visiting student team, rode off with the honors.

The Chaparajos barn is located on the north side of Bluemont Hill, and has facilities for eight horses, with 25 acres of ground adjoining. Vacancies are available for others who may de-

sire to keep their horses here at the College.

Students of K-State who are interested in a riding club of this type, whether they own a horse or not, and regardless of their curriculum or school, are invited to attend the meetings the second and fourth Tuesdays of each month in East Ag 7.

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Are They Good To Eat?

Brahma, Shorthorn Cross Gives New Beef Breed Start

By CHARLES GLENN

"Are they good to eat?" That is the question frequently asked by visitors to the King Ranch in Texas as they view the Santa Gertrudis cattle developed on this ranch. Developing the new strain of cattle was undertaken by Robert Kleberg, Jr., after World War I when he started cross-breeding Brahman with Shorthorns.

It was found that the Hereford and Shorthorn, whose ancestry originated in cooler climates, were not adapted to the hot, humid summers of Texas coast country. They would spend many hours in the shade to escape the sun when they should have been grazing. Also they are hindered by mosquitoes and flies and are easy prey for the parasitic screw worm and fever-spreading cattle tick.

In an effort to find a breed of cattle suited to the climate of Texas the Brahman was introduced. Being a tropical beast it didn't mind the sun or heat and would graze on the grass while other cattle hunted for cover. Also its tough hide was impervious to insect pests and parasites. Brahman cattle were far from the desired beef type, however, with great humps on their shoulders, and long ears and large folds of loose skin.

It was 1910 that Tom O'Connor gave the King Ranch a half breed Shorthorn-Brahma bull. He was turned in the pasture with purebred Shorthorn cows, and it was noticeable that the part-Brahman calves were superior to calves from regular beef breeds. It was found that these calves, while not all uniform, were in every

case larger, heavier, and fatter calves than the purebred Shorthorn and Hereford calves. Robert Kleberg, Jr., undertook the complex problem of creating a new breed of cattle by cross-breeding Brahman with Shorthorns. Over a period of nine or ten years various crosses of Brahman-Shorthorn with purebred Hereford and purebred Shorthorn were conducted and differences were noted. Since there are many types or breeds of Brahman cattle it was necessary to select animals with desirable characteristics such as early maturity and good beef carcasses. He finally produced a desirable strain that would hold true, and would repeat its type through successive generations. The new breed is three-eighths Brahman and five-eighths Shorthorn. The cattle are named Santa Gertrudis after the original grant of land from the Crown of Spain on which the King Ranch was founded in 1852.

A typical steer of the new breed is an animal which when mature may weigh 1,500 pounds. He has the heat-proof characteristics of the Brahman, the beef characteristics of the Shorthorn, and an ability all his own to get the most out of grass. He is cherry-red in color, has a good beef conformation, and carries a deep covering of flesh. The hump has almost disappeared, as have the loose folds of skin, though he still has a few of the characteristics that make him look like a fugitive from a rodeo.

Grass fat Santa Gertrudis steers have dressed as high as 61.6 percent. Their normal dressing percentage runs from 3 to 5 percent higher than for regular beef breeds. There has been little discrimination towards the dressed carcasses of the new breed, and cooks have pronounced the steaks from these animals as the best.

Kansas cattlemen, not having insect and heat problems of coastal Texas, will probably find it more practical to produce good quality cattle of the Hereford, Shorthorn, or Angus breeds, states Dr. C. W. McCampbell, animal husbandry department, Kansas State College.

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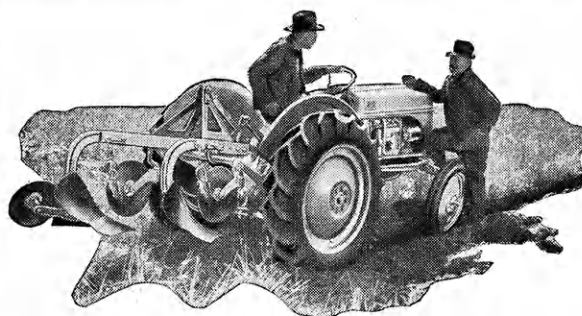
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RADIO STATION

(Continued from page 12)

the air waves. All home basketball games are carried cooperatively by KSAC and her sister station, WIBW, which divide time on the 580 K. C. frequency. Facilities are also provided for training students in radio, speech, journalism, and music.

The addition of tape recording machines to KSAC's equipment has enabled the staff to increase greatly the program coverage. Possibilities of FM are now being investigated.

Under the guidance of Prof. L. L. Longsdorf, program director, and Robert Hilgendorf, program supervisor, KSAC has been instrumental in carrying the educational and cultural atmosphere of Kansas State College into thousands of farm and urban homes alike over Kansas and surrounding states.

LAMB FEEDING

(Continued from page 13)

Agricultural Experiment Station was the first to feed sodium bicarbonate and proved it to be successful.

Experiments have proved that feeder lambs can be fattened completely on wheat pasture alone in western Kansas, but it is also recommended that a supply of roughage be available in case of severe weather conditions. Field feeding (lambing down) sorghum crops has been tested but is not recommended unless yields are low or the price of the grain is extremely low. Lambs waste as much or more feed than they eat in the harvesting operation.

Grinding of grain for feeder lambs has been proved unnecessary when hand fed, but to prevent death losses, grain and forage must be ground and thoroughly mixed when self fed, as the lambs will soon learn to pick out the grain from the forage if it is not ground.

This lamb feeding project at Garden City has been popular from the standpoint of practical use and feeders' viewpoint.

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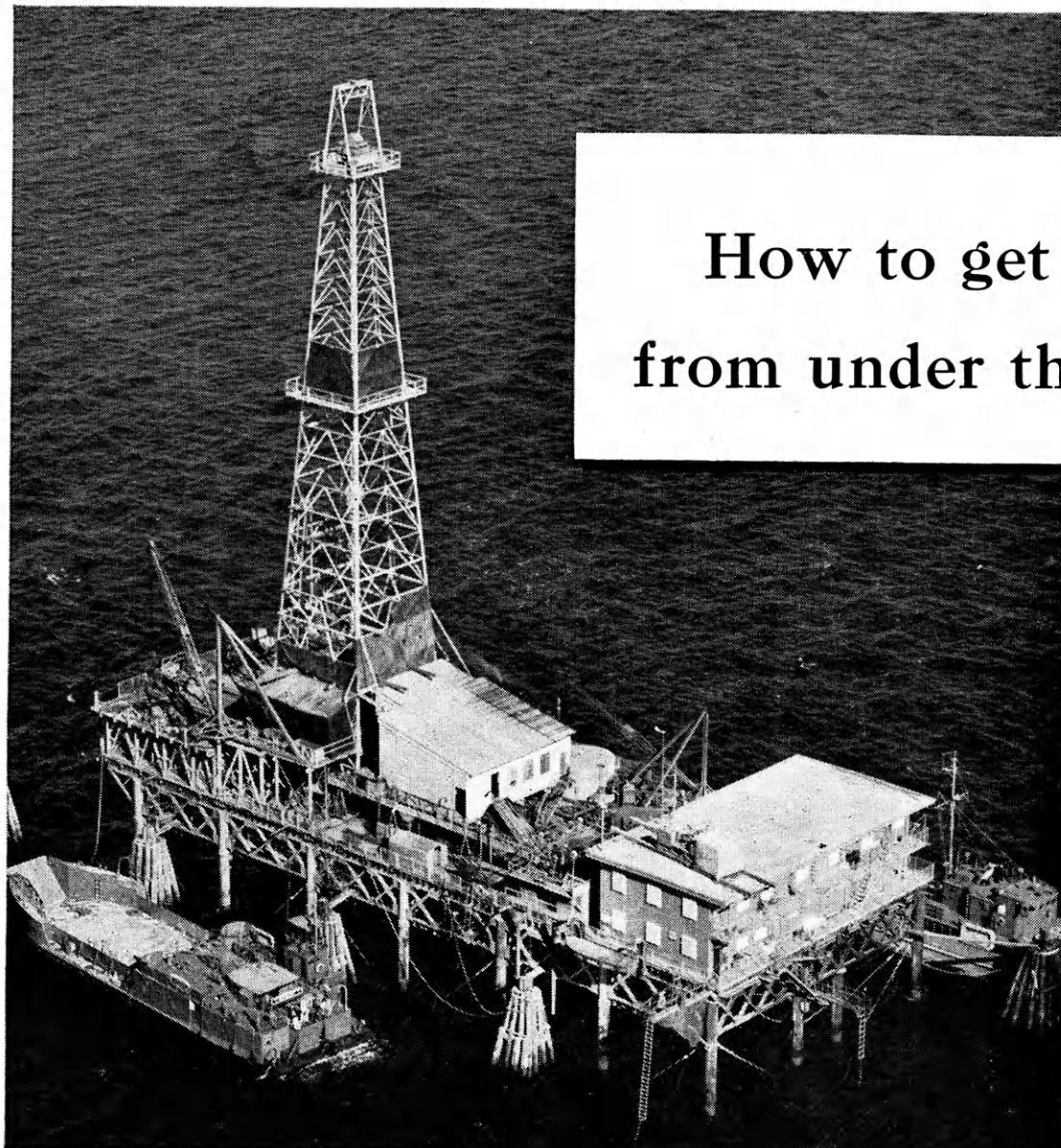
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JUDGING TEAMS

(Continued from page 17)

Mills, called out, "Tom Keigwin, please come forward." That was the big moment everyone had been waiting for. Kansas State had done it again. Tom, a junior majoring in poultry husbandry, was awarded high individual of the entire contest. The contest was held in Chicago on November 30 and December 1, 1948, and 16 teams were participating.

The contest was divided into three divisions. These divisions were Market Products, Exhibition and R. O. P. Flock Selection, and Production.

Scores for the Market Products Division were announced first. Kansas State placed Bill Johnson, a junior, on top. He had compiled a score of 491 points out of a possible 500, this being the highest score ever made by a student judging in this division. Tom Keigwin placed second with 483 points. Sykes Trieb, third member of the poultry team, had 466 points. Kansas State placed first in this division of the contest with 1440 points out of 1500 and the team was awarded a trophy for this accomplishment. This division of the contest included the grading of dressed and live market birds and the candling of market eggs, all according to U. S. Standards of Quality.

Exhibition Judging and R. O. P. Flock Selection was announced next. After the smoke had cleared Kansas State was on top again. The team had racked up a total of 1310 points out of 1500. Tom Keigwin was high individual with 460 points out of 500, Bill Johnson tied for third with 440 points, and Trieb had 410 points. Kansas State received a trophy for this division also.

Awards for the Production Division were given then. Arkansas won this division and by doing so, won the entire contest. They had 1450 points out of the possible 1500, while Kansas State had but 1290. This margin was enough to offset the early lead held by Kansas State. The scores showed that Arkansas was on top with 4110 points out of 4500 and Kansas State second with 4040 points.

High individual of the entire contest went to Tom Keigwin of Kansas State with 1393 points out of 1500. A prize of \$50 in cash was given him and a wrist watch valued at \$150. Bill Johnson was eleventh for the con-

test with 1331 points, he also received money. The team as a whole won some \$150 in cash besides Johnson winning a medal in Market Products, and Keigwin winning one in Market Products and another in Exhibition.

The team representing Kansas State was comprised of Tom Keigwin of Bushnell, Illinois, Bill Johnson of Bentley, Kansas, Sykes Trieb of Kansas City, Kansas, and Dick Winger of McCune, Kansas, as alternate. The team was coached by Assoc. Prof. T. B. Avery of the poultry department at KSC.

Another honor went to Bill Johnson when he was elected president of the National Collegiate Poultry Club for the coming year. He succeeds Tom James, also of Kansas State. Professor Avery was re-elected as national adviser for the organization.

By DON WILSON

Teams representing eighteen colleges were represented at the Intercollegiate Meat Judging Contest at the International Livestock Exposition at Chicago.

Canada was represented along with seventeen different states. Like most judging meets as the International, the rivalry between the teams ran fairly high.

The team winding up in first place was Oklahoma A & M College. Ohio came in for a second in the contest with the team from Ontario, Canada, following close for third. Our own team ended with fourth place. The total scores for the top teams were as follows: Oklahoma A & M—2463, Ohio State—2409, Ontario, Canada—2383, and Kansas State College—2374.

The team, with Professor David L. Mackintosh as coach, included Richard Chase, El Dorado; Dale McClaskey, Girard; and Harold L. Smith, Sedan.

Teams entered in the contest had to judge four classes. These classes were beef, pork, lamb, and identification and grading of beef carcasses. Oral reasons were given in three classes. In the ranking of the ten high men, Harold Smith won the honor of fifth for Kansas State. K-State ranked seventh in beef judging and fifteenth in judging pork. In lamb judging K-State and the University of Missouri tied for sixth place.

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Agronomist Claims Good Results From Combining Grasses

By EVERETT BEEMAN

Grasses can be harvested satisfactorily with the combine, says Dr. H. H. Laude, Kansas State agronomist. There is a tendency for grass heads to dry out ahead of the stems, causing shattering to take place due to reel action. The reel speed should be adjusted to the ground speed to lay the cut grass heads back on the platform with a minimum of beating.

The cylinder speed for most grasses ranges from 1,000 to 1,200 revolutions per minute. If the seed is tough, more speed may be required. To prevent overloading the chaffer and tailing return, it may be necessary to cover the perforations in the grate on small combines with blank channels, or to replace perforated concave sections with blank sections.

The adjustable sieve usually can be set for grass seeds, but occasionally the small round-hole sieve will get better results. A section of one-quarter inch wire mesh laid over the extension fingers will reduce materially the amount of tailings returned. It may be necessary to close the fan blinds completely and to cover the balance of the openings with cardboard.

If facilities are available for recleaning, it is better to save all the seed you can, Laude said.



Harold Ray won second place with this photo in the 1947 Ag Student Photo contest.

QUARTER HORSE

(Continued from page 20)

century and the first part of this century, racing at short distances became almost extinct. Greater emphasis has been placed on the longer races. As a result quarter racing has seldom been heard of during the past 50 years, except on small tracks. Despite this decline in short racing, ranchers continued to raise Quarter Horses for stock work. However, no organized effort was made until quite recently to keep the blood pure or to improve the breed.

During the time when Quarter Horses were not receiving much attention, William Anson of Texas kept faith in them and proposed the founding of a registry association, but he did not live to see his dreams fulfilled. Mr. Dan D. Casement, Manhattan, Kansas, was another man who kept interest aroused in them through his writings in livestock magazines. He obtained his first Quarter Horse in 1897, and is still actively producing representatives of the breed. He was one of the original directors of the American Quarter Horse Association and is still a member of the board.

The Quarter Horse has been well described as "the greatest cow-horse ever developed . . . speed to overtake the fastest calf, weight to hold the heaviest steer, endurance to work day after day, and finally a desire to work cattle".

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or less. The tractor wheels can be spaced for planting or cultivating 1 to 6 rows. Speeds range from $\frac{1}{4}$ to 7 miles per hour, including a special low creeper gear.

This is the tractor to replace that last team of horses. It operates on 2 to 3 quarts of fuel per hour, far thriftier than feeding a team the year 'round.

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The Last Word



Be Careful How You Flip Your Butt

'Campus Flippers' Cause Fire Hazard Through Carelessness

By JOE BRADY

Are you a "Campus Flipper"? A "campus flipper" might be defined as an individual who goes about the campus flipping "live" cigarettes in every direction, having no thought as to where they may land. Every year several fires on the campus are started in this manner. Last year an arborvitae tree at the south entrance and a Red Cedar tree at the east entrance of Anderson hall were destroyed.

This year there have been two such fires that will cut down noticeably on campus beauty of the future. The first occurred early last fall along the walk between the southwest corner of the auditorium and the northeast corner of Nichols Gymnasium. The dry leaves, lying among the stems of a clump of double white flowering

lilacs, were very inviting to a smoldering cigarette, thrown there unknowingly by a student or faculty member. Result? There will be no white lilacs this spring.

The accompanying picture tells a story by itself. This fire occurred at the southwest corner of Dickens hall. This beautiful Pfizer Juniper was completely destroyed and can no longer be pointed out by instructors as a fine vigorous specimen. This shrub was between 18 and 20 years old and could not be replaced now for less than \$25, providing a plant of this size and beauty could be found.

Why not rake the leaves away from shrubs and trees on the Campus? That is a good question, but there are three good answers.

1. Leaves form an effective mulch

- which helps keep soil temperature down, thus preventing growth from starting too early in the spring.
2. Leaves enrich the soil by the addition of organic matter.
3. Campus funds will not permit the removal of leaves from around shrubs and trees over the entire campus.

At the present time, due to the abundance of moisture, we do not think much about campus fires. But spring will soon be here and the dried leaves and grass of last fall will again become a hazard. You have undoubtedly heard this question and answer—"Do you smoke?" "No, I'm too green to burn!" That may be true of humans, but not so of plants, especially evergreens. "Where there's smoke there's fire"—if you step on your "smoke" we will have no fires.

So step on it, buddy! Step on it!

Experience Needed?

During the next several weeks, many Ag students will be participating in student judging contests sponsored by the various departmental clubs of the Ag school.

More important than winning prizes and their honors in these contests is the vast experience gained by those who enter, whether they place or not. Many students enter all or several of the various contests. This widening of agricultural horizons by the students is an invaluable opportunity offered by no other medium.

The contests give Ags an opportunity to test their abilities. Some of the high placers in the past years have later been members of Kansas State's intercollegiate teams. The contests certainly are worthy of the time and effort of the men and the organizations which make them possible. So Aggies, let us take advantage of these contests.—M. C.

If you always watch the clock you'll remain one of the hands.

The greatest disasters result from not knowing when to be satisfied.

I eat my peas with honey,
I've done it all my life.
It makes the peas taste funny
But it keeps them on my knife.



Carelessness results in ugliness. This picture shows how a 20 year old juniper was nearly ruined by a live cigarette.