AG STUDENT

April 1958

LONGER WEAR-LESS CARE ...page 14

NEW JOHN DEERE EQUIPMENT

Brings Chemistry to the Cornfield

GREAT strides for increasing corn yields have been taken by chemists in the past few years. They have given corn growers the chemicals to increase yields with high-analysis fertilizer and reduce losses through positive control of weeds and insects that rob growers of millions of dollars each year.

New Planter, New Attachments

And John Deere is 'way out ahead with equipment that provides a practical means of taking full advantage of these profit-boosting chemicals. The new 4-in-1 494 Planter sets the stage for higher yields by planting with top speed and accuracy. The fertilizer attachment deep-places to-day's high-analysis fertilizer . . . places the plant food in a band to one side and below the seed, right where most authorities agree it should be placed.

What's more, the new 494 Planter has a pre-emergence weed sprayer that applies weed-killing chemicals on top of the soil over the planted rows. Weeds are killed before they emerge. The corn is undamaged.

Equipped with its matching insecticide attachment, the 494 deposits granular insecticides in the soil. Damage and losses from wireworms, cutworms, grubs, army worms, and other profit-thieves are a thing of the past.

New DDT Applicator

The new John Deere DDT Applicator provides fast, efficient, and positive control of corn borers. The applicator deposits granular DDT in the whorls of the corn—right where the worm-like larvae live and do their damage. In heavily infested areas, the John Deere DDT Applicator can increase yields up to 25 per cent.



Plant the corn accurately . . . "feed" it properly . . . and wage chemical warfare against weeds and insects ALL in one time- and money-saving operation. That's just what owners of the new 494 Four-Row Planter can do. For 6-row planting, there is the new John Deere 694 that offers the same features.



John Deere DDT Applicators are available in 4- and 6-row sizes. As the illustration shows, the John Deere Applicator is front-mounted to give the operator a good view of his work.



On the Cover

John Anderson, senior in agronomy, is preparing for graduation by looking over the new blends in suits at a local store. John is in the same situation as many other students, as he wants to get a suit that will wear a long time and still cost less money than a 100 per cent fibered suit. You will again see John in the accompanying story on page 14 selecting a pair of socks, tie, slacks, and a sweater.

According to all research natural fibers, as wool, cotton, silk, and other fibers blended with man-made fibers, as rayon, Orlon, Dacron, and others will give longer wear and still look as nice as an all wool suit. Clothing made from these blends is usually cooler in summer and does not wrinkle as readily as the 100 per cent clothes.

Most of the suits will look the same as the old 100 per cent garments because the colors and styles have not changed. The dark blue, gray, or black suits are still popular; however, some stripes are becoming popular.

Newly elected officers to the K-State Klod and Kernel Klub are Dwight Jackson, Ag Jr, president; John Weseloh, AEd Jr, vice-president; Dean Armbrust, TA Soph, secretary; Lawrence Stoskopf, Ag Fr, and Walter Burling, Ag Jr, reporter and Ag Council representative.

Faculty advisors for the Klod and Kernel Klub include Dr. Hyde S. Jacobs and Dr. Kling L. Anderson of the Agronomy department.

Ten K-State students have been initiated into Alpha Zeta honorary fraternity for agricultural students.

The new members were initiated at the recent Alpha Zeta banquet. Russ Hannibal, K-State speech instructor, was the guest speaker at the banquet.

Students initiated were Martin L. Apley, FT Soph; Alvin J. Edwards, VM Jr; William F. Kelsey, VM Jr; Paul A. Kiger, VM Jr; Harold J. Macy, AEd Sr; Ronald W. McCune, AEd Soph; Ray R. Schooley, DH Sr; Donald L. Stuteville, AEd Jr; and James A. Will, VM Soph.

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Over the Director's Desk

By C. Peairs Wilson Director of the School of Agriculture

FACULTY committee is busily A at work reviewing the curriculum structure in the School of Agriculture. There are at least four good reasons for this review.

1. There has been rapid development of new knowledge in the basic sciences underlying modern agricul-

2. This new knowledge is being, and will continue to be, applied in

agriculture.

3. The application of new scientific and technological knowledge is having far-reaching effects in the agricultural sector of the national and world economy. (I use the term "agricultural sector" here in its broadest sense to include not only farming and ranching, but also the marketing, processing, and distribution of farm products; and the production, marketing, and distribution of farm production supplies.)

4. There is need to review our curriculums to see that they are keeping abreast of the changes that are taking place and to anticipate and prepare our students for the responsibilities that will be placed upon them in the years ahead.

The faculty is, of course, continuously concerned with courses and curriculums. I believe it is fair to say

that changes in courses and curriculums in recent decades have taken place as specific problems and questions have arisen, but a comprehensive and thorough review has not been



Director Wilson

made in recent decades. The principal changes in curriculums during this time have been in the nature of splitting of specialized areas of work and developing additional full-fledged four-year curriculums and developing specialized options to attach to existing options.

A look at the College catalogue for 1924-25 shows that there were three curriculums in the School of Agriculture. These were a curriculum in Agriculture; a curriculum with special training for Landscape Gardening; and a curriculum for Animal Husbandry and Veterinary Medicine.

In the curriculum in agriculture, it was possible to major in: agricultural economics, agronomy, animal husbandry, dairy husbandry, horticulture, milling industry, poultry husbandry, agricultural engineering, and shop practice.

Agricultural Curriculums

Today, there are eleven curriculums as follows: agriculture, agricultural economics, technical agricultural economics, technical agronomy, dairy manufacturing, horticulture, landscape design, milling technology, feed technology, agricultural education, and agricultural journalism.

In the curriculum in agriculture it is possible to major in ten areas. There are three options in agricultural economics, four in technical agronomy, three in milling technology, three in feed technology, and four in horticulture.

Requests for additional curriculums and options have been received. It would seem appropriate to stop and take stock before additional curriculums and options are added to see if some reorganization of the curriculum structures might not be in order.

It would seem appropriate to raise several questions in searching for the best course of action.

(1) Is a student who has just graduated from high school and who has an interest in agriculture capable of choosing wisely among eleven or, more specialized curriculums?

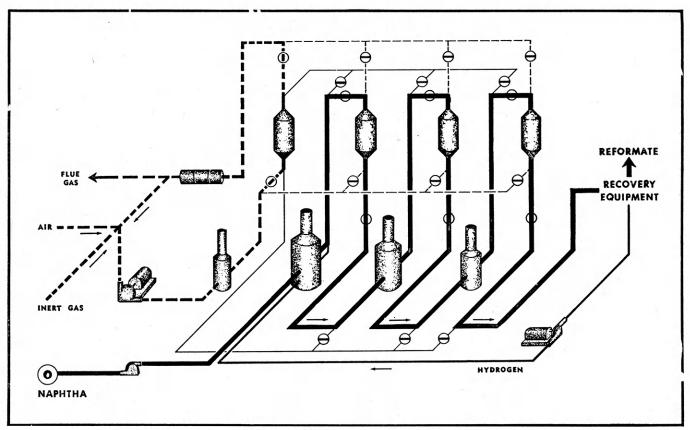
(2) How far should the undergraduate curriculums in agriculture go in the direction of general educa-

(3) How far should the undergraduate curriculums in agriculture go in the direction of basic scientific professional proficiency?

(4) How far should the undergraduate curriculum in agriculture go in the direction of vocational spe-

cialization?

Further consideration to these questions will be presented in a later issue.



The diagram, with a minimum number of reactors, illustrates cyclic regeneration. Piping arrangement permits the swing reactor to substitute for any other reactor in the system. High activity of catalyst is maintained —without interrupting production—in the ULTRAFORMING process.

HOW TO KEEP \$1,000,000 WORTH OF CATALYST ON THE JOB

When you have a million dollars' worth of platinum catalyst in a single refinery unit, you hope you can keep it steadily on the job. That's too much money to be standing around idle. Also, you'd like to keep the catalyst working it high efficiency.

Most catalysts lose activity with use. The platinum that "reforms" 40-octane gasoline to 100-octane gasoline is no exception. And the higher the octane number, the faster the catalyst loses activity.

For years activity could be restored only by taking the catalyst out of the unit and sending it away for special treatment. To keep from having too many of these shutdowns, refiners had to operate at relatively low octane numbers.

Standard Oil research scientists came up

with a better answer. They developed a new type of platinum catalyst, and they learned how to regenerate it repeatedly—while it is still in the unit. When a swing reactor is provided, the unit need not even be shut down. The new process is called ULTRAFORMING.

During a year of ULTRAFORMING at Texas City, one reactor was regenerated 53 times. The unit is still producing 100-octane gasoline.

ULTRAFORMING also gives high yields of by-product hydrogen. The hydrogen can be used in upgrading other oil products. Or, it can be reacted with nitrogen from the air to make ammonia.

ULTRAFORMING is only one of the many major achievements credited to the scientists who have made careers at Standard Oil.

Standard Oil Company



New Uses for Time-Old Heat Source

THE SUN

by Ken Hylton and Harlan Forslund

IN THE FUTURE heat from the sun may be used for many farm operations. This heat source, which has remained virtually untapped throughout the ages, is now showing promise as a supplemental heat source for several farm operations.

Heat through Absorption

The principle of solar radiation energy collection is to absorb the heat from the sun on a dark surface, preferably black. Through absorption, the radiant energy is trapped and made available for heating purposes. For water heating, water tubes are connected directly with the absorbing surface. For other heating purposes, air ducts from the heat collectors can be incorporated as a part of the particular building that the heat is to be used for.

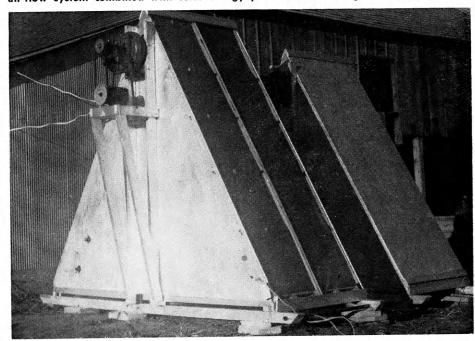
Work done at K-State by Chester P. Davis, Jr., research engineer for the U.S. Department of Agriculture, and Prof. Ralph Lipper and Gerald Zachariah, research engineers for the agricultural engineering department, shows that this supplemental heat can be used efficiently on several farm heating jobs, including heat for the home. Davis, in 1956, showed that

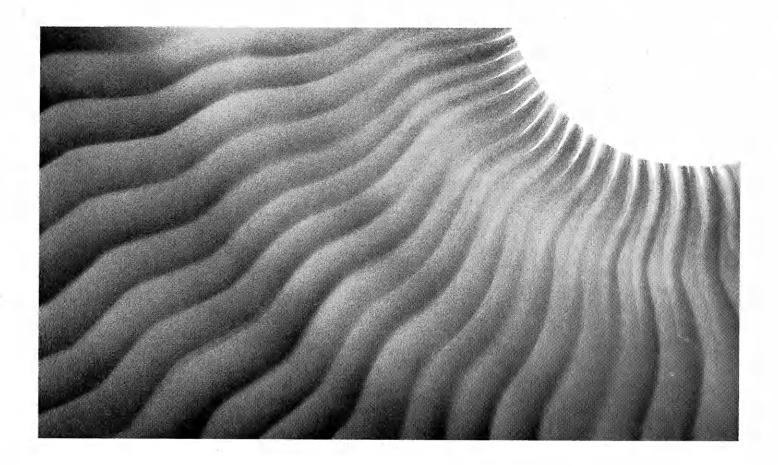
solar heat could increase the winter operational efficiency of the heat pump, which is essentially a refrigeration unit, used to heat and cool the home the year around.

Another use of solar energy on the farm would be in reducing the humidity and keeping livestock shelters

such as cattle sheds, dairy parlors, and chicken houses dry during the winter months. Water used in the house as well as that used by the livestock could also be heated by solar energy. "Water is being heated by this method at the present time in some southern states," Davis said. An elec-

A valuable use for solar energy may be in the drying of farm grains and hay. Here, an air-flow system combined with solar energy provides excellent grain drying facilities.





tric fencer could be operated by a solar cell and battery by a process called photoelectric generation of electricity.

Grain Drying with Solar Energy

One of the most promising uses of solar energy is for drying farm products such as hay, grain, and certain vegetable crops. Solar energy is especially valuable for grain drying, where it is used as a supplemental heat source. The temperature of natural air is raised while being drawn through the heat collector. The heated air then passes through the floor, into the bin, and is exhausted from the ceiling above the grain by electric fans. For the most efficient heat collection during the winter months, the degree of elevation from the ground should be equal to the latitude plus 21, or about 60 degrees in this area. For early fall or spring drying an elevation of about 45 degrees is more efficient, according to Davis.

Grain-drying facilities could be constructed for either rapid drying or storage drying. "Drying in storage would be best accomplished by one square foot of collector surface for each three to five bushels of grain dried," said Davis. Rapid drying would require more collecting sur-

In an experiment conducted by Davis, milo with a moisture content of 21.5 per cent was placed in two grain bins of approximately 130 bushels capacity on October 30, 1957. Both bins were constructed with an air-flow system consisting of air being drawn through the grain by electric fans. One bin had a collector, a four-foot by ten-foot black polyethylene absorbing surface (though conventional corrugated sheet-metal works just as well), covered by a transparent plastic to provide a solar trap. There was a one-inch spacing between the collecting surface and the bin and between the collector and the transparent cover.

Air Flow and Size Constant

Air flow was the same in both bins, being approximately two cubic feet per minute per bushel for a grain depth of approximately seven feet. Air was circulated continually for the first two days of the drying process, after which the fans were controlled by humidistats. Air was circulated during the first three-week period when the ambient air relative humidity was less than 80 per cent. The humidistat was then lowered to 65 per cent for the rest of the drying period.

Solar Heat Speeds Drying

On December 31, 1957, the grain stored in the bin equipped with the solar collector had a moisture content of 12.3 per cent, while the grain stored under natural air conditions had a moisture content of 16 per cent. The electric fan used 1.2 kwh per bushel of grain during the drying period. The more rapid drying in one bin was due to the collector raising the temperature of natural air 15 degrees by 9:00 a.m. and as high as 40 degrees by 12:30 p.m.

By using solar radiation to dry grain, the farmer can at least partially combat one of his age-old enemies. the weather. In the past it was necessary to have the grain at the correct moisture percentage before putting it in the bin but this new process makes it possible to bin grain when the moisture content is far above the safe storage percentage. By the effective use of solar heat the technicians are making it possible for the farmer to make hay while the sun shines and dry it while it rains.

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Hospitality Day Features

In the Home Ec Universe

Tours—Fashion Exhibits—K-State Hour—Skits

by Lynn Moxley

IN THE Home Ec Universe is the theme for Hospitality Day April 26 at K-State. The annual event is sponsored by the Home Economics school to acquaint Kansas high school girls with the college and the opportunities in home economics.

An eventful day is planned for the

more than 1,200 girls who will attend. They will register in the Union and be divided into groups for the rest of the day. Mrs. Doretta Hoffman, dean of the Home Economics school, will welcome the visitors at an assembly in the auditorium where a preview of the day will be given.

The various groups will attend a fashion show and exhibits. Clothes made and modeled by students in home economics will be presented at the show in the Union little theater. "New fashions—new horizons" is the theme and background for the style show.

Booths of 17 Fields

The ten phases of home economics will be presented in 17 booths exhibited in Nichols gymnasium. Planning booths are institutional management, extension clothing and textiles, art, foods and nutrition, family and child development, home economics journalism, family economics, home economics teaching, and home economics and nursing.

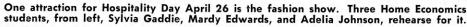
The exhibits will be co-ordinated with the general theme, "In the Home Ec Universe," presenting the various fields of home economics.

Skits for Careers in Home Ec

A new idea, careers program, has been introduced in the schedule this year. This program will show, with skits, the opportunities for girls in home economics. Free time will allow the guests to tour the classrooms. home management houses, nursery school, and the institutional management facilities.

For the first time, lunch will be served at the freshman dormitories. K-State coeds will act as hostesses for the lunch and conduct tours through

(Continued on page 24)





Farm Machinery

Buy-Repair-Hire ?

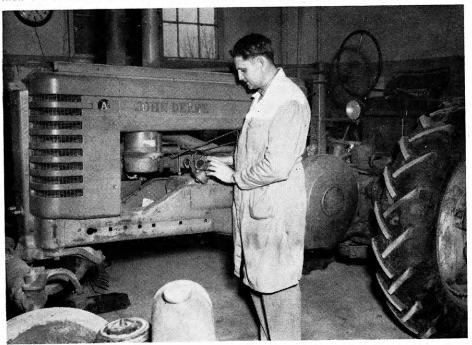
by Hal Ramsbottom

L AST SUMMER, Jack Smith, an eastern Kansas farmer, was faced with the problem of repairing a gear box on his old-model tractor or buying a new model. Mr. Smith needed to decide whether to spend \$400 for a repair bill and lose valuable field

time or to trade his tractor, which would bring very little money, in for a new tractor.

This same problem could be faced by any farmer at any time during the busy summer months. The influence of power and machinery on the nation's agricultural production has been phenomenal. Improved farming practices have played an increasing role in agricultural production, but the most important factor in the increase of production per agricultural worker has been the development of larger and more efficient machine units.

To repair the old tractor or to buy a new one is a problem faced by many farmers when their old tractor needs overhauling, but small repairs can be done in the farm shop.



Study Angles

Before making a decision Mr. Smith needed to know the annual cost of owning the tractor, the price of a new tractor, and the prices charged by custom operators. Smith had to look at these facts from many different angles to make a wise decision.

The annual costs, related to the ownership of the machine, are depreciation, interest, repair costs, taxes, insurance, shelter, fuel and oil, supplies, and labor.

Depreciation is the loss in value and service capacity resulting from wear in use and obsolescence. The fixed depreciation cost may be calculated by dividing the cost of a new machine by the number of years the machine is expected to last.

Interest on the investment in the machine is considered, since money used to buy the machine cannot be used to purchase land, livestock, bonds, or other productive enterprises. Interest on the capital investment may be calculated by multiplying one-half the new machine's original cost by six per cent.

Repair costs are difficult to estimate, as they depend on the nature of the work done, extent of use, how well the machine is maintained, and handling of the machine. One to 1.5 per cent on disk harrows, grain drills, and manure spreaders to five per cent on trucks and listers and seven per cent for tractors are the expected repair costs of the original purchase price. A farmer who trades equipment frequently will have a lower repair cost, but will have higher depreciation, interest, and taxes on his implements.

Taxes on implements are calculated as the average paid over the life of the implement. An average assessed valuation of 25 to 30 per cent of the original cost is used.

Insurance is not considered a universal practice but, if an owner does not insure he, in effect, carries the risk himself. An annual charge of .25 per cent of the initial cost is used to cover farm machinery insurance.

Even though shelter for farm implements is not too important, a cost of one per cent should be figured along with the other costs. Shelter is more important in eastern Kansas than in central and western Kansas due to the variation in rainfall. If no shelter is provided the life of the implement is decreased.

Fuel and oil costs vary with the type and size of the tractor; however, with a larger sized tractor more work is accomplished in one operation. The amount of fuel can be estimated from material supplied by the manufacturer.

Baler twine, sprays, grease, and other supplies must be supplied when the farmer is doing his own work, but are not included in the charge for custom operators.

Labor, one of the important costs of machinery operation, is figured on the prevalent pay scale. Labor is included as part of a per-unit charge, and custom hiring may free farm labor for other rush jobs.

Advantages of Custom Hiring

Mr. Smith, by hiring his work done by a custom operator, would have no capital investment in the equipment



A farmer gets the advantages of the newest developments in farm machinery by buying a new implement; however, the additional cost can keep a farmer from buying the machine.

along with the servicing, reconditioning, storage, and financing problems. Custom-operated machines get more work done per season than farm-operated machines.

With many hours of work per season the custom operator becomes an expert on his machine and can provide rapid and timely work, reducing loss from having to stop for repairs. Farms having small acreage can produce crops that require equipment the farm cannot support, and more labor and machine work can be brought into use for the immediate job at hand.

Custom Hiring Disadvantages

A custom operator is not always available to work when the farmer is ready for an operation to be done. Some custom operators will not move their equipment very far for a small operation, and under unfavorable weather conditions they are inclined to become impatient and do an unsatisfactory job.

Labor supplied by a custom operator is often an added cost that the farmer is obliged to hire but may not need. Charges for custom work are subject to considerable variation and can be misunderstood, causing the farmer additional cost. The transportation of noxious weed seeds from one farm to the next is another disadvantage.

Machinery Partnership

An alternative would be for the farmer to go into partnership with a neighbor and purchase an implement. This has its disadvantage, since both farmers would probably want to use the implement at the same time.

The size of a farming operation is the deciding factor as to whether a farmer should own his own equipment or hire a custom operator to do his farm work.

An increase in custom operation of farm machinery is a logical development due to higher priced machinery and a greater capacity to do work. It was estimated that 50 per cent of the record 1952 wheat crop of 306 million bushels was harvested by custom-operated combines.



Little American Royal

by Larry Laverentz

G ARY CUMMINGS of the Block and Bridle division and Lawrence Odgers of the Dairy division were selected as the grand champion showmen of the 30th annual Little American Royal March 29, in the new Animal Industries arena.

First Performance in Al

This inauguration performance of the Little Royal in the Animal Industries building found approximately eighty students showing animals. Reserve champion showman of the Block and Bridle division was Don Nelson and of the Dairy division, Ray Schooley.

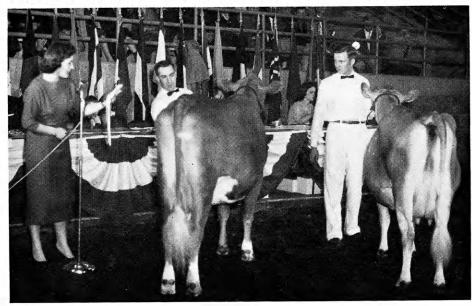
Cummings, winner of the Block and Bridle division, showed an Angus heifer. In order to become grand champion he had to win in his own class of Angus heifers. He then competed against the winners of the other classes of the beef division. He won the grand champion award by winning over each of the other three division finalists.

Nelson, reserve champion showman, won the horse division and then placed second to Cummings in the final contest. In the final contest, before winning the grand champion award a contestant must demonstrate his ability to show the other three types of livestock.

For the dairy division championship, Odgers won in the Guernsey competition and then competed against the three other breeds for the top award. Schooley, reserve champion, was top Jersey showman and then placed second to Odgers for grand champion showman.

Marilyn Trent, a sophomore from Manchester, furnished sparkling entertainment on her Roman horse rid-

Barbara David, left, Ag Queen, presents Ray Schooley, right, with the reserve champion award of the Dairy division. Lawrence Odgers was later named the Dairy grand champion.



ing team. Marilyn previously made an appearance at the Little Royal in 1952 with Jimmy Adams. She has also made performances at Madison Square Garden and Boston Gardens and appeared with Roy Rogers.

Charles DeGeer, Ag freshman, and Charlie Andrews, Ag Economics sophomore, furnished extra enjoyment with their clowning acts.

Centerpiece

This year's centerpiece featured a 16-foot rotating scene with a large black and white 30 on a green background. Ribbons around the outside of the centerpiece spelled out Kansas State College and Little American Royal. Dyed sawdust effectively furnished the different colors.

The executive council for this year's Little Royal were Lloyd Peckman, chairman; Dick Dunham, vice-chairman; Jack VanHorn, secretary; and Harry Todd, treasurer. Master of ceremonies was Ben Handlin assisted by Loy Reinhardt and Bill Brethour. Ring masters for the 1958 Little Royal were Don Mach, Charles Michaels, Bill Clark, and Dwight Glenn.

Dairy Placings

The top placings in the Dairy division were Holstein cows, 1. Jim Swiercinsky, 2. Eugene Harter, 3. Stanley Smith, 4. Harry Wullschleger, 5. Walter Burling; Holstein heifers, 1. Norman Helmke, 2. Janet Ellis, 3. Gerald MacFee, and 4. Larry Larson. Jim Swiercinsky was grand champion showman of the Holstein division and Eugene Harter was reserve champion showman.

Placings in the Jerseys were 1. Ray Schooley, 2. Emery Corbett, 3. Robert Rhoades, 4. Richard Stroade; Guernseys, 1. Lawrence Odgers, 2. Doyle Neher, 3. Don Stinson, 4. Jim Lewis; Ayrshire cows, 1. John Anderson, 2. Chester Peterson Jr., 3. C. Herbert Annis, and 4. Dan Johnson. Lawrence Odgers and Ray Schooley went on to win the grand champion and reserve champion trophies, respectively.

B & B Placings

Block and Bridle division placings were Sheep Class VI: 1. Dale Schilling, 2. Allan Henry, 3. Donald Balch; Sheep Class VII: 1. Judy Fisher, 2. Darrell Webber, 3. Steve Sellers, 4.



The grand champion trophy of the Block and Bridle division is presented by Dean Arthur D. Weber to Gary Cummings who won over Don Nelson, horse division winner, at the LAR.

Paul Faidley, 5. Jim Houck. Judy Fisher was grand champion and Darrell Webber was reserve champion of the sheep division.

In the beef cattle division, Gary Cummings was grand champion showman, with Vernon Lindell as reserve champion showman. The ratings for each class were Bulls, 1. Gerald Schmidt, 2. Frank Filinger, 3. Jerry Doornbos, 4. Gerald Brune, 5. Hall Moxley.

Steers, 1. Melvin Hubbell, 2. Ardyth Good, 3. Bryce Davidson, 4. Walt Rudolph, 5. Chuck Hamon; Hereford heifers, 1. Alfred Baker, 2. Don Shepard, 3. Arnold Good, 4. Tom Appleby; Angus heifers, 1. Gary Cummings, 2. Vernon Lindell, 3. Jim Dicken, 4. Norval Ralstin, 5. J. D. Fowler.

Duroc hogs, 1. Douglas Bolt, 2. James Forrest, 3. Dean Armbrust, 4. George Eisle, 5. Harold Click; Poland China hogs, 1. Hal Ramsbottom, 2. Alice Nagel, 3. James Booth. Douglas Bolt and Hal Ramsbottom went on to place grand champion and reserve champion, respectively. Horses, 1. Don Nelson, 2. Jack Engelland, 3. Ted Stolfus, 4. Darrell Keener, and 5. Rae Luginsland.

The Little Royal is sponsored annually by the Block and Bridle and Dairy clubs. The first performance was in 1924, which at that time was a part of Farm and Home Week. During World War II the Royal was discontinued for a few years.

Awards Basis

The awards were based on the performance of the showmen and not the animal type. Ability to show the animal in the ring and improvement in the appearance of the animal each constituted an equal basis for awards. The animals were drawn two months previous to the show. The showmen worked daily to get their animals prepared for competition.

Judges for the 1958 Little American Royal were, Dairy division, John Weir, Geuda Springs, and Chase Wilson, St. Joseph, Missouri; and Block and Bridle division, Glenn F. Wiswell, Spring Hill, swine, R. L. McMillen, Manhattan, horses, Jim Collier, Alta Vista, beef cattle, Harold Johnson, Hutchinson, sheep.

The trophies for this year's Royal were donated by the American Royal livestock show, the Kansas City Stockyards Company, and the Kansas City, Missouri, Chamber of Commerce. Ribbons were furnished by the Little American Royal.

Man-Made Fibers Give

Longer Wear-

In Men's Fashions

by Ruth O'Hara

RE YOU in the market for a new spring suit? If so, you will probably consider the fabric of the article along with the style. Tags marked 65%—35% or 45%—55% appear on much of men's clothing.

Here is John Anderson wearing a bright red Orlon sweater while examining a tricot tie.



What do these numbers mean to you, the purchaser?

Percentage of Each Fiber

Percentages mean the amount of different fabrics contained in the article. A new high has been reached in combining two or more different fibers. Both natural fibers (wool, cotton, linen, and silk) and manmade fibers (nylon, Orlon, Dacron, Vicara, Acrilan, and others) are combined to secure maximum performance by developing the most desirable characteristics in each fiber used.

Nylon Adds Strength

Nylon is added to over-alls and dress pants as well as work pants, uniforms, and boys' clothing. Strength, longer wear, light-weight fabrics, wrinkle resistance, and reduced shrinkage are the results of blending nylon with other fabrics. These qualities will be present in the fabric according to the proportion or amount of nylon used. For obtaining the best qualities, blends containing 40 to 50 per cent nylon should be purchased.

Dacron's strength, long wear, wrinkle resistance, and quick drying qualities are responsible for its growing popularity in blending with cotton, rayon, wool, and silk. According to one manufacturer's tests, 55 per cent or more Dacron is needed for the best performance in a summerweight Dacron-wool suit, while 30 to 65 per cent is needed in a winterweight suit. When used with cotton, Dacron reduces shrinkage, increases permanency of pleating, reduces wrinkles, and gives longer wear. The cotton is absorbent and reduces static.

Wool combined with Dacron is softer and lighter in weight. For maximum retention of pleats and shape, watch for Orlon-wool blends with at least 50 per cent Orlon. In a cotton-Orlon blend, Orlon adds strength with light weight, resistance to wrinkles and sunlight, and ease of care.

Blends Economical

As well as improving performance, blended fibers provide possibilities for new effects in design and texture. And if you are wondering about the cost of blended fabrics, you are in

_ess Care



John looks sharp in a Dacron-wool striped coat and wool slacks. He contemplates the blended cotton-rayon socks.

for a surprise. Blends are economical. Often a properly blended fabric will give satisfactory performance and be lower in cost than a 100 per cent fabric.

Blends To Look For

After being briefed on the "whys" of blending, you will want to know what some of the blends are that will be found in spring shopping.

Suits will be tailored from fabrics of Dacron-wool. These suits provide maximum comfort, a tailored appearance, and are less than one half the weight of conventional suitings. The Dacron-Orlon combination found in summer suits and slacks is cool, crisp, and easy to wash. "Baby cords" of 75 per cent Dacron and 25 per cent cotton will be popular as will the ultra-light weight, but durable wash-wear work pants of 65 per cent Dacron and 35 per cent cotton.

A new summer suiting "Cordoni" is blended of rayon, acetate, and nylon and gives a slubbed effect. Also for men's warm-weather suits is a cord suiting of Dacron and rayon. Orlon and wool will appear in year-around weights in worsted-type flan-

nels and fleeces, tweeds, and shetlands. White flannel slacks and light colors are becoming practical in Orlon and rayon blends that add to the ease of washing. Acrilan blended with wool or rayon is appearing in wash-and-wear slacks. Flannel and gabardine weaves are found in the Acrilan-wool blends, bengalines, flannels, sheers, and slubbed weaves.

In the array of blends, even footwear has not been forgotten. Patterned socks of bright washfast colors are blends of rayon and cotton, while stretch socks are combined of nylon, cotton, and rayon. Ties, too, are not neglected. Cotton tricot and Dacron are among the newest blends for ties.

Styles Are Slow To Change

You may wear your new suit for several years, as men's styles are slow to change. Naturally, you will want to make the best selection when shopping for clothing. Miss Virginia Twitty, K-State extension clothing specialist, gives the following buying guides for proper selection.

Outside of knowing a well-informed sales person, the best information you can obtain about your purchase is on the label. Good labels contain the fiber content, directions for care, and laundering instructions. The percentage and type of wool (new, reprocessed, or reused) is required by law to be stated on the label. Any other fibers and their percentages used may or may not be stated. Generally, if a list of fibers contained in the article of clothing is given, the fiber with the largest percentage is given first.

Fit Blended Garments Loosely

Take a scrutinizing look at the fit of the suit coat. Blended fiber suits of Dacron-wool and Orlon-wool should fit slightly looser through the shoulders and elbows than all-wool suits, to allow ample ease. The manmade fibers do not have the natural resilience or "give" that wool has. Some clothing manufacturers have recognized this and are sizing their suits accordingly.

Men, you are challenged by the multitude of fibers combined for performance, beauty, and economy. Selection is larger this spring than ever before, so you, too, can dress in the height of fashion and style.

Agriculture's Largest Surplus

The Farm Gully

by Chester Peterson

THE FOOD we eat is literally being taken out of our mouths by force. Soil erosion has indirectly contributed to the downfall of many once-powerful empires such as Egypt, Rome, and Babylon. Agricultural men cannot for long overlook the destruction caused by soil erosion.

Nature attempts to retard the processes of erosion by maintaining a vegetable cover that protects the soil from excessive rainfall runoff. Man, to use the land to his best advantage, usually clears it and then plows the grass under.

Gully Formation

Without the protection of grass, sloping cultivated land is easily gullied. Rainfall is absorbed by the soil to a certain extent, after which the water starts to wash down the slope. Heavy rains do the most damage. After the runoff gains sufficient velocity, it starts to pick up soil particles, which form small rivulets that in turn form larger gullies.

Gullies may be formed by waterfall erosion which leaves U-shaped ditches or by channel erosion which cuts V-shaped ravines. Alternate freezing and thawing, coupled with wetting and drying, help nature's processes. Topsoil is washed down from the uplands and deposited on bottom-lands, where it destroys or reduces the bottomland fertility by covering it. The loss of topsoil reduces crop yields due to the drying out of soil and reduction of soil fertility. It makes ditches that are hard to cross with machinery, thereby making smaller fields of large fields. Unheeded erosion in an advanced stage may even cause the abandonment of

a field. The eroded soil may cause the silting of reservoirs and irrigation canals.

Proper land use is the only way to fight these persistent gullies. For a starter it is a good idea to replan the whole farm. Land that resists cultivation should be returned to grass. Excess runoff must be disposed of quickly.

Gully Prevention

A successful farmer will make efficient use of grass waterways, crop rotations, cover crops, stripcropping, and contour farming, and not overgraze his pastures. Terracing is not the only preventive measure; however, it is very useful in slowing down runoff by taking the water around a slope at a drop of .2 to .3 of a foot per hundred feet instead of a drop of 1 to 6 feet, as on an unterraced hillside.

Gullies are controlled to protect the land from damage. It is common knowledge that uneroded farms command much higher prices than gullied land. Also the farmstead is better looking. By keeping the topsoil where it belongs, the value of crops grown will not decrease every year. The most important reason why we fight soil erosion and its resultant gullies is to insure future generations of a constant food supply and still have fertile land upon which to grow it.

Patrick Henry once said, "The best patriot is he who conserves the most soil."

Increase land value by the use of contour farming. Along with keeping the soil at its origin, this method lessens the risk of gullies and erosion which is costly to farmers.



Beekeeping in Kansas



by Lon Nelson

ANSAS, especially the eastern part and the Garden City area where clover and wild flowers flourish, is well adapted for beekeeping and honey production.

The bee is talented in many ways. It manufactures honey and beeswax and is the sole means of pollination

for many plants.

Aside from the production of honey, bees are proving their importance in the pollination of flowers. In some areas of the country beekeeping is more profitable for pollination than for honey, although this is not true in Kansas and the Midwest.

Increase Pollination

Alfalfa seed production can be increased threefold through the use of bees for pollination. Just a few hives per acre are required. Besides the income received from bee rental for this service, alfalfa nectar produces a

tasty honey.

However, different bees must be brought in periodically for alfalfa pollination. This is because of the odd floret structure of the alfalfa plant. When the bee enters the top of the floret and begins to take nectar, the tip of the sexual column whacks the bee on the head, which causes pollen grains to lodge on the head. Upon visiting the next floret, cross-pollination is effected.

After a time, the bees wise up and avoid entering an alfalfa floret because even bees dislike being knocked silly. This is the time when new

hives of bees should be brought in to maintain the effectiveness of their cross-pollination ability.

The fees charged for pollination services will usually vary with the market price of the crop; in other words, a percentage basis. However, a flat rate per hive per acre may be charged.

Beeswax is an important bee product and is in demand for use in manufacturing cosmetics and making church candles. A small but steady market exists for pollen for use in producing anti-allergic injections.

Bees may be purchased in various size packages, of which the most common is the two- or three-pound package. Each package contains a queen, and a can of sugar syrup for food during transit. Ordinarily there are about 5000 bees per pound but if fed sugar syrup before weighing, the number may be reduced to 4000 per pound. The best insurance against being "short-beed" is to buy package bees from a reputable apiary supply.

Only one queen is present in a colony of bees. Other queens are produced but the most fertile and prolific one is the only one to live. The others are killed by the workers or by the queen herself. A queen may live five or six years but her life as an egg-layer is two years.

The availability of clover, alfalfa, and wild flowers is important in choosing an apiary site. A worker bee will fly as far as two or three miles in search of nectar, but for

efficiency the bees should not be required to fly more than one-half mile. On short trips during the clover bloom, a hive will produce 15 pounds of honey a day. As much as 200 pounds of honey per season has been produced in parts of Kansas and the Midwest. The average production for Kansas is 65 pounds per hive.

Clover, alfalfa, Spanish needle, and the various fruit trees all produce a distinctive honey. Certain rare flowers furnish nectar that is made into premium honey commanding a higher price.

Know Bee Habits

One should have a thorough knowledge of the bee business before attempting it. Above all, you must like bees. The best way to begin is to work with an established apiarist. Begin at the bottom and work up. When ready to venture on your own, don't go "whole hog" at first but start modestly. It is probably best to keep bees as a sideline at first and then enlarge gradually as capital and time permit.

Long hours and hard work are a requirement of the apiarist. At honey-extraction time a beekeeper will work as many as 90 hours a week. Supers full of honey can weigh tons at the end of a day. You must be able to get along with bees. Anyone sensitive to bee stings or who suffers continued abnormal reaction to bee stings should not attempt to work with bees.

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Prairie View Swiss Farm Earl Webber, owner Arlington, Kansas

Swiss Knoll Floyd O. Coen, owner Elkhart, Kansas

James Hess LaHarpe, Kansas

Fairlawn Swiss Farm F. W. Webber, owner Kingman, Kansas

Harper Dox Swiss Farms K. A. Bush, owner Harper, Kansas

AYRSHIRE

Du-Ayr Farm M. B. Dusenbury Route 1 Caldwell, Kansas

GUERNSEY

Bertholf Dairy Green Pasture Farms W. H. Bertholf, owner Rt. 2, Wichita, Kansas

Cee Jay Farms
C. J. Graber, owner
Rt. 1, Newton, Kansas

POLLED SHORTHORN

Cedar Lane Shorthorn Farm J. C. Banbury and Sons Plevna, Kansas

SPOTTED POLAND CHINA HOGS

Walter Rothe Ness City, Kansas

Opportunities in the Graduate School

by Dean Peter

Is YOUR conception of a graduate student a narrow-minded, baldheaded, little man wearing bifocal glasses? If so, consider the entomology professor who is an accomplished musician and who maintains an excellent literary collection or the dean of our own School of Agriculture, Dr. Arthur D. Weber, whose grasp of many and varied fields is nearly unbelievable.

Have you considered doing graduate work? Many students merely shrug their shoulders and shove the thought aside, saying they are either incapable of doing graduate study or they will think about it later. It may be a serious mistake to overlook graduate school, by-passing the opportunity to better prepare for a vocation and for a fuller, more enjoyable life.

Many students think the added

This grad student in Dairy Manufacturing is performing a Mojonnier test for fats, solids, moisture, and dry matter in milk.



monetary rewards are not worth the extra trouble of graduate study. Although there are definitely added financial rewards with an advanced degree, the increased growth in appreciation and awareness in other fields is definitely more valuable in developing a full life. Although work in graduate school tends toward specialization in a particular field, other unrelated interests are encouraged, as indicated by the examples previously cited.

Requirements

Although there are rare cases of students who are not capable of doing the work, entering graduate school, the reverse is generally the case, with many capable students never giving a second thought to an advanced degree. Students are generally much more capable of doing graduate work than they believe.

If a student decides to wait and see later whether or not he wants to do graduate work, he may find himself at a disadvantage. Even though it is not possible to decide definitely, which field to specialize in, students can prepare for graduate study anyway by taking certain types of courses. The first of these would be a language, since one of the universal requirements for graduate school is knowledge of a foreign language. Other courses that would be especially helpful are the "tool" courses such as mathematics, physics, chemistry, speech, and report writing. These courses would benefit any stu-



This agronomy student studies various soil types that need supplementary nutrients.

dent, regardless of whether or not he entered graduate school.

If a student is definitely interested in doing graduate work, it is advisable for him to talk with those who have done work in the field and to contact the dean of Graduate school, Harold Howe. These men will be able to help plan a program of academic work to fit the particular needs of the student. They will help the student plan for the specific needs of his curriculum.

Various schools that offer graduate degrees in the field of special interest to the student should be contacted. This will enable the student to choose a school that offers the most suitable combination of assistantships, facilities, and personnel to fit his desires.

Kansas State college offers a master of science degree in 63 fields and a (Continued on page 26)

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For the Homemaker

Weaving as a Hobby

by Karen Peterson

A SIMPLE LOOM can open a wide new world of creative enjoyment. In the past few decades, weaving as a hobby has increased rapidly in popularity. The variety of articles that can be made on a loom or with hand-woven materials is limited only by the imagination and ingenuity of the weaver.

Only a few generations ago the hand loom was an economic necessity in every household. Since then, these pieces of equipment have been discarded or shoved into dusty attic corners and remote barn-lofts. Many of these looms can be put back into working order and used, or a new loom can be purchased.

Types of Looms

There are two types of looms in general use today, the table loom and the floor loom. The table loom is a small loom that, as the name implies, rests on a table. The harnesses are operated by hand, and the width of a finished piece of weaving is limited to about 18 inches. A good, wellbalanced floor loom may be used equally well to weave a two-inch belt, a sheer place-mat, a wide piece of upholstery, or a heavy rug. A practical floor loom for home use has four harnesses and weaves a cloth about 45 inches wide. The frame of the loom rests on the floor and the harnesses are operated by treadles. A good table loom may be purchased for about \$75; a floor loom of similar quality costs about \$150. A very elementary loom may be made at home, however, for as little as \$5.

Many common things such as wood shavings, strings of watermelon or squash seeds, suede strips, pipe cleaners, cellophane, corn husks, wheat straw, and cattail leaves are suitable materials for weaving. Although they can't be laundered, they provide interesting contrasts in texture when combined with conventional warps, or lengthwise threads.

Bamboo sticks and wood slats are often used in making place-mats and

The different weaves a woman can perform on a loom are governed by her imagination.



cafe curtains. Wood slats may be purchased in varying widths and in a range of natural colors from pale beige through deeper browns to dark gray. Slats can be made from old venetian blinds cut into strips and shellacked. In making curtains with colored bamboo, it is often more satisfactory and less expensive to buy curtains ready-made and take them apart than to dye the natural bamboo at home.

Types of Yarns

Yarns available for weaving include wool, cotton, silk, and linen, as well as rayon and other man-made fibers. They may be smooth, loopy, or knotted; soft or firm; bulky or slender; or glossy or dull. Plastics and a variety of metallic threads are also used. There are a number of companies that deal exclusively in yarns for handweaving. Regular knitting yarns are not suited to weaving because of their elasticity.

It is possible to create a wool tweed that can't be matched anywhere for as little as \$4 a yard. Domestic wools from the United States and Canada are readily obtainable, and yarns can be imported from overseas. The latter takes a much longer period of time, often nearly six months, but has the advantage of lower price and the choice of a wide range of subtle colors not found in this country.

Hand-woven linens are beautiful but impractical for garments. There is no home method for giving them the wrinkle-resistant finish found in

commercially made fabrics.

It is a sound idea to make a "sample warp" before starting on a big project. With a sample warp, which is only about seven inches wide, it is possible to try a number of different warp-weft combinations at the cost of only a small amount of yarn. To get a clear idea of the over-all appearance of the finished cloth, one combination should be used for about eight inches before changing to a different one.

A nearby college or high school may offer a course in weaving. If not, there are many books and periodicals on the subject. Contemporary Handweaving, by Overman and Smith, offers a comprehensive study of the craft and contains many excel'ent photographs.

Shirley has a little swing It isn't hard to find For everywhere that Shirley goes The swing is just behind

Sentry: "Halt! Who goes there?" Returning AWOL: "Friend, with bottle."

Sentry: "Pass friend; halt bottle."

Manicurist (to playboy in barber chair): "I don't think I ought to go out with you; I'm married."

Playboy: "Ask your husband. I'm sure he won't mind."

Manicurist: "You ask him. He's shaving you."

"Was your friend shocked over the death of his mother-in-law?"

"Shocked? He was electrocuted."

Toastmaster: "I'm sure that Mr. Jones of the Soils and Fertilizer department will give you a pleasant half-hour. He is just full of his subject."

Joe: "Do insects ever get into your corn?"

Jr.: "Yeah, but we fish 'em out and drink it anyway."

A good golfer has to break 70 but a chorus girl only has to bust 36.

Customer: "Do you serve women in this bar?"

Bartender: "Nope—You gotta bring your own."

If students call a professor "Prof," guess what they call his assistant.

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In the

Aggies' World

by Larry Odgers

Professor Davidson Recognized

A Kansas State College educator has received a distinguished service award of the office of education's division of vocational education.

Prof. A. P. Davidson, a member of the K-State department of education since 1919, has been cited for contributions to the cause of agricultural education at the Central Regional conference in agricultural education. A. W. Tenney of the United States office of education presented the award and citation.

Davidson also addressed the conference, reviewing the development of vocational agriculture work in the central region since he entered the field.

The K-State teacher trainer has assisted with the professional preparation of teachers in vocational agriculture since 1920, and he became head resident trainer in 1944.

Among other accomplishments to be mentioned in Professor Davidson's citations are his 43 years of teaching, including 38 years at K-State; 28 years as state executive advisor of the Kansas association of Future Farmers of America; and 24 years as book reviewer of the Agricultural Education magazine.

Davidson has written 15-year and 25-year histories of the Kansas association of FFA, and presently is working on a 41-year history of vocational agriculture in Kansas. He expects to complete this volume before his retirement June 30, 1958.

Dr. Weber Honored by Faculty

DR. ARTHUR D. WEBER, dean of Agriculture, was honored at a recent faculty dinner given in the Student Union.

Dr. Weber, guest speaker for the occasion, said, "A new long-time objective for applied agriculture is urgently needed to solve the knotty problems facing agriculture in the years ahead. Throughout the world hunger is the main factor of unrest and revolt."

He spoke of foreign countries in comparison to the high agricultural standards in the United States. He said that "more than one-half, or perhaps two-thirds, of humanity remains in a permanent state of hunger."

Dr. Weber said that by 1975 an additional 150 million acres of agricultural productive land will be required to meet the demands of population increase.

To solve the problems of production and consumption, Dean Weber said, "The really important consideration is for agricultural scientists to face the fact that there have been far-reaching changes in American agriculture, changes of such magnitude that to deal with them will require vision and imagination and a willingness to break with tradition, if need be, to find the answer."

Dean Weber was one of two K-State staff members chosen by the graduate faculty to be honored this year.

Dairy Club Honors "Prof At"

PROF. F. W. ATKESON was honored at the spring Dairy club banquet. Professor Atkeson is head of the K-State Dairy department and has been with the college for almost a quarter of a century.

The annual banquet is given in honor of an outstanding person who has worked with the students in the School of Agriculture and particularly those educators concerned with the betterment of dairy training.

Professor Atkeson was unable to be at the banquet but was presented a tape recording of the ceremony. He was presented a certificate of honor for his assistance and education given to dairy students.

Ray Schooley, dairy husbandry senior, was the master of ceremonies, and the student address was given by Jack VanHorn, dairy husbandry senior. Dr. Glenn Beck, director of Agricultural Experiment station, was the main speaker for the evening. Dr. Beck gave a brief summary of the accomplishments of Professor Atkeson.

Professor Atkeson was presented a bound volume of letters that had been written by former students and friends of him.

Soils Judging Contest

K-STATE will host a Regional Soils Judging contest May 10, according to Russell S. Adams, TA Sr, president of Klod and Kernel Klub.

The judging will be in Geary and other nearby counties because of the representative soils located in this area. The contest, taking in a seven-state area, will be the first of its kind to be held in this section of the country. The contest is sponsored by the National student section of the American Association of Agronomy.

To date, only two of the seven regions in the United States have conducted such contest. Four contests will be held this spring. Other states in the Kansas region include North and South Dakota, Minnesota, Nebraska, Iowa, and Missouri.

Klod and Kernel committee men include, score card, Elson Seitz, TA Sr; selection and preparation of the site, Larry Zavesky, TA Sr; awards, Dean Armbrust, TA Soph.

Hospitality Day

(Continued from page 9)

the dormitories. Another new feature of the day is the K-State Hour, which is planned to introduce the guests to the campus and college life. Talks, skits, and music by the College staff and students will allow visitors to see, not only the home economics side of K-State, but the many other activities as well.

Steering Committee

A steering committee is appointed each year to plan the event. This year's committee is headed by general chairman Darlene Larkin of Ottawa. Other members of the committee are assistant chairman, Mary Beth Mc-Coy, Hiawatha; exhibits, Wilkins, Walnut; publicity, Dixie Good, Topeka; buying, Norma Duell, Ruleton; kick-off assembly, Diane Manhattan; lunch, Koon, Koerner, Topeka; fashion show, Alberta Timm, Kansas City, Mo.; guides and tours, Barbara DeLange, Girard; signs, Carolyn Pults, Horton; special arrangements, Betty Emery, Little Rock; registration, Mardy Edwards,

Adelia Westmoreland; assembly, Johnson, Wichita; hostesses, Kay Wadsworth, Carbondale; morning program, Bonnie Hafford, Kansas City, Mo.; afternoon program, Barbara David, Winfield; and theme, Jo Lydick, Kansas City, Kan.

Changes in Schedule

"This year's Hospitality Day has a new look and a different schedule," Miss Larkin said. "We are especially glad to have the exhibits located conveniently at one place. Lunch should be more enjoyable for the guests, since they will actually eat at the dorms. The K-State Hour, I think, is a wonderful idea to sell K-State to the high school girls."

All girls enrolled in home economics at K-State help with the event by working on exhibits, tours, style show, and decorations. The entire day has been planned around the general theme.

Overheard on the dorm steps: Night Watchman: "Young man, are you going to kiss that girl?"

Freshman: "No, sir." Night Watchman: "Then hold my flashlight."

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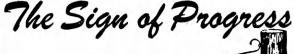




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Joe Wallace

Dairy Herdsman

by Gary Sullivan

MY JOB as herdsman is interesting as well as challenging. I like to work with the boys and watch them develop into more experienced dairymen." This is the way Joe Wallace summarized his work as herdsman at K-State's dairy barn.

"I enjoy handling and caring for good cattle," Joe continued. "At the barn, I am able to watch the research projects and gain first-hand information on new developments in dairy-

Many students have met Joe when they were grooming animals for the Little American Royal or when their classes were visiting the dairy barn on field trips. Joe also has many friends among the students who have worked at the barn. Joe says he considers these friendships one of the most rewarding parts of his work.

As herdsman, Joe explained, he is responsible for the care and health of 300 animals in the herd. He supervises the feeding and milking of 110 cows now in production. Currently, 20 to 25 students are employed parttime at the barn. This enables them to help pay for their education and gain valuable practical experience at the same time.

Joe remembers one student in particular who benefited from the experience he received at the barn. This student had little experience in dairying before he came to K-State; however, he worked at the barn while studying for his bachelor's and master's degrees. At the present time he is employed as an extension dairyman in one of the larger dairy states.

The dairy barn is maintained for educational and research purposes, according to Joe. In addition to the regular herd, the dairy husbandry department owns several sets of identical twins that are used in research work. The College owns six animals with fistulas or "windows" opening

into the rumen or first stomach, enabling research workers to study the activity of the rumen bacteria and the functioning of the digestive tract.

A commercial dairy operation has a small profit margin, Joe explains, so it is necessary that it be well managed. The dairyman must feed balanced rations and high-quality roughages. Replacement heifers and herd sires must be carefully selected, if the herd is to have cows capable of high production. A good dairyman will notice the likes and dislikes of the individual cow and give each individual the care she needs. It takes contented, well-cared-for cows to develop a profitable herd, according to Joe.

Always Part of Dairying

Joe has spent all his life in the dairy industry. He was born and raised on a dairy farm in Morris county. In 1926 Joe graduated from K-State with a degree in dairy husbandry. He has served as Dairy Herd Improvement association supervisor and farm manager of several farms in Oklahoma and Arkansas.

Before coming back to K-State in 1947, Joe operated his own farm in Oklahoma. In 1952, he went to Nashville to work as manager of a Guernsey farm. Joe returned to K-State in the fall of 1955 as herdsman of the barn.

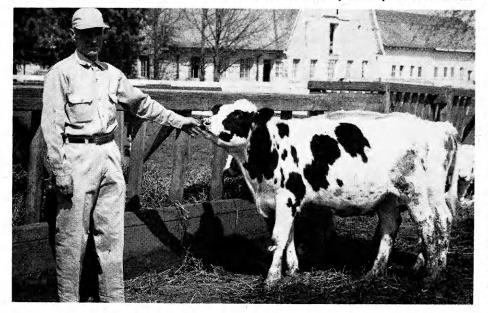
The Wallaces are the proud parents of a six-year-old son, Douglas, who will start school next fall.

The campus has changed a lot since he was a student here, Joe commented. The dairy barns were located west of Waters hall in the area now occupied by the Military Science building. The present site of the Military drill field served as the cow lots.

"Of course, there is a bigger enrollment and many new buildings, but the most obvious difference is the parking problem," Joe said. "When I was a student very few students owned cars and as a result the girls got a lot of exercise walking when they went out on dates."

K-State is fortunate to have an experienced herdsman like Joe Wallace. The students greatly appreciate the time and cooperation Joe always gives them. Joe says that he enjoys helping students and is happy to discuss dairying with them. If you get a chance, you should meet Joe. He is really an interesting person to know.

Joe Wallace, dairy herdsman for the past eight years, has noted many changes during the development of the campus. Joe admires one of K-State's many fine replacement heifers.



Opportunities

(Continued from page 19)

doctor of philosophy degree in 13 fields. Of these, 17 and 7, respectively, are in agricultural or related fields. Some of the fields pertaining to agriculture that Kansas State college offers advanced work in are agronomy, animal husbandry, animal nutrition, botany and plant pathology, agricultural chemistry, dairy husbandry, agricultural education, entomology, flour and feed milling, genetics, horticulture, and poultry husbandry.

Enrollment Requirements

Enrollment in graduate school at Kansas State college is made on two bases. They are full and provisional enrollment. To be admitted on a full enrollment basis there are three requirements that a student must meet. Students must 1) have a bachelor of science degree equal to one offered at Kansas State college, 2) have an undergraduate average of B or better during his junior and senior years, 3) have undergraduate training equal to that offered at Kansas State college

in the specific subject matter. A provisional enrollee may become a full enrollee by removing the deficiency or deficiencies he had upon enrollment.

If you have never considered the possibility of graduate school, now is the time to do so. The sooner a decision is made, the better you will be able to prepare yourself if you decide it is graduate work for you.

Engineer: "If I start at a given point on a given figure and travel the entire distance around it, what will I get?"

Coed: "Slapped, Sir."

English Instructor: "Your term paper should be written so even the most ignorant will understand it."

Freshman Aggie: "Yes, sir. What part don't you understand?"

Leo: "I saw your car parked on a side road last night. Tire down?"

Joe: "Nope, didn't have to."

Dave: "Do you believe in free love?"

Harriet: "Have I ever sent you a bill?"

Boss to employee coming in late: "You should have been here an hour ago."

Employee: "Why, what happened?"

A hillbilly, who had to spend a night in Little Rock, saw an electric light for the first time in his life.

Returned to his mountain shack, he told his wife, "Don't know how them city folks catch any sleep. There was a light on in my room all night long."

"Why didn't you blow it out?" asked his wife.

"Gol dang it, I tried, but the doggone thing was in a bottle."

Captain: "I'll bet you wish I were dead, so you could spit on my grave."

ROTC Cadet: "No, sir, I hate to stand in line."

She doesn't drink, She doesn't pet, She doesn't go to college yet.

Prof: "How is steel wool obtained?"

Aggie: "By shearing hydraulic rams."

Certified Seed

will be in demand for spring planting by progressive Kansas farmers who want to know what they sow. The following certified seeds will be available:

Alfalfa Buffalo

Barley (spring) Beecher

Custer Otis

Corn-Hybrid

K1639 K1784 K1830 K1859

U.S. 523W

Grasses

Achenbach Smooth Brome Blackwell Switchgrass Caddo Switchgrass El Reno Sideoats Grama Oats

Andrew Cherokee Kanota Mo. 0-205 Nemaha

Sorghum-forage

Atlas Axtell Early Sumac Ellis Kansas Orange

Sorghum-grain

Coes Martin Midland Plainsman Westland Sorahum-hybrid

RS 590 RS 610 RS 650

Soybeans Clark

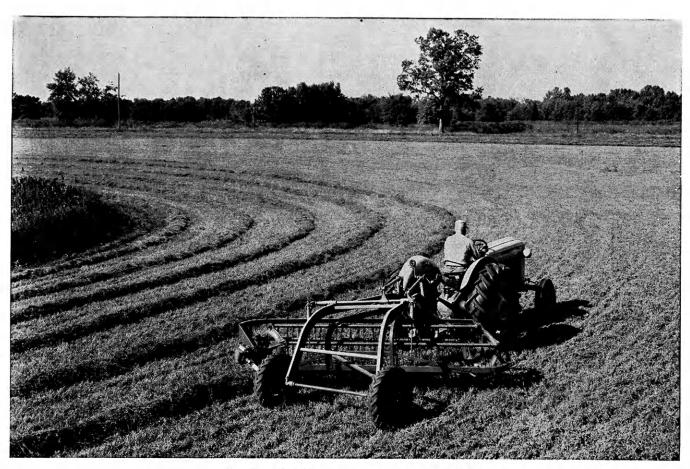
Sudangrass Greenleaf Wheeler

Sweetclover Madrid

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The Kansas Crop Improvement Association

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NEW IDEA rakes are designed to turn tender, high-protein leaves into the center of the windrow where they cure away from the searing sun. Hard-to-cure stems are turned outward for faster curing. More of the feed value in the hay gets to the barn and livestock.

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