

*Kansas State College*  
**AG STUDENT**

APRIL 1957



**Little American Royal... Page 14**



There's a **GOLD MINE** in the Sky



**T**HE air over a single acre of land carries about 35,000 tons of gaseous nitrogen. If all this nitrogen could be transformed into a fixed form such as ammonium nitrate, it would have a value of over \$5,000,000 as commercial fertilizer.

The key that unlocks this untold wealth is legumes. When properly inoculated, limed, and fertilized, legumes can take nitrogen from the air and change it into usable fertilizer. True, they need some of this plant food for their own growth; however, a good share of it is stored in nodules on their roots for the use of crops that follow.

Legumes, storing up nitrogen and producing an abundance of organic matter,

are a tonic for all other crops in the rotation, yet they more than pay their way. A season's growth of good alfalfa, for instance, not only produces a profitable crop but will fix from \$10 to \$20 worth of nitrogen per acre.

Another part of this story is that modern farm equipment is designed to help farmers work this "gold mine in the sky." Ask any John Deere dealer for more information on this equipment



**JOHN DEERE**  
MOLINE, ILLINOIS

*Quality Farm Equipment Since 1837*

# Kansas State College AG STUDENT

Vol. XXXIII

April, 1957

No. 5

## In This Issue

### On the Cover

It is the dream of every Little American Royal showman to bring home a grand champion ribbon. A month and a half is spent by the showman grooming his animal and working for the grand finale in the showing.

The real value of the Little Royal, however, does not lie in the ribbons and trophies given. Instead its value is in the experience its participants will get. To fit and show an animal develops a sense of pride and responsibility. Only through hard work and individual effort can a show animal be ready for the winner's circle.

Experience in organizing and planning the Little Royal is also given K-State students, since the show is student managed.

No wonder the Little Royal is becoming a bigger and better show each year. A high quality of entertainment will not let the show lack an audience, and the value it has for participants will not let it lack contestants.

—Gary Yeakley

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# Chit Chat

By Clyde W. Mullen, Assistant Dean

**M**ANY of you juniors will recall the fall of 1954, when you were freshmen, we began a program titled "Personnel Study of College Students in Agriculture."

In your group were 245 freshmen who took the first battery of tests on a Thursday afternoon in 1954.

You are all juniors now. How many do you suppose are enrolled this second semester out of the original group of 245?

The answer is a bit depressing. Enrolled right now in the School of Agriculture are only 107 of the original group.

The fall of 1955, 140 returned; 105 disappeared at the end of the first year. Now we are down to 43 percent of the original group yet in college. Total loss from the class, 138.

Were their time, money, and energy wasted?

Were the time, energy, and facilities of Kansas State college a total loss? What were the unforeseen factors that contributed to this attrition?

It could be that a more useful study could be made among the 138 who have been lost to the campus, than the study that is continuing among the 107 yet in college.

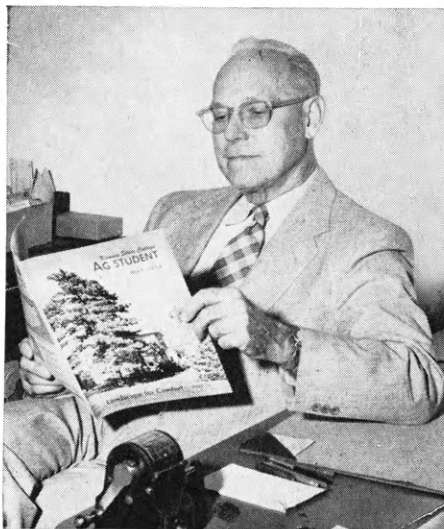
It is commendable that a dozen or more of our boys who are majoring in animal husbandry attended the organizational meeting of the Junior Kansas Livestock association at Wichita, March 16.

The new organization starts with 100 charter members. Twenty-five are from colleges in Kansas. Elected to responsible offices: Charles Andrews, Fr., president; Bill Root, Sr., vice-president; Don Springer, Sr., secretary; Jim Gammell, Sr., treasurer; John Balthrop, So., reporter;

Lynn Perkins, Jr., corresponding secretary.

In future years, it could be quite an honor to have been a charter member of the Junior Kansas Livestock association. It will be an honor, if the association takes advantage of its opportunities.

Fresh on the browsing shelves in the reading room is the News Letter of the Kansas State Poultry Science club. Its cover is an eye-catcher. Its contents read smoothly. Pages are packed with interesting contributions. Don't push it aside to pick up Life. Editor Frank Cunningham and his staff get this month's orchid for this meritorious job.



Dean Mullen

President McCain believes all students in the School of Agriculture should be able to complete the following statements:

The Federal legislation which created the land-grant college system was the \_\_\_\_\_.

The governing board of Kansas State college is the \_\_\_\_\_.

Names of members of the governing body follow:

The number of teachers, scientists, and extension educators on the College staff is \_\_\_\_\_.

The College spends for operations in one year approximately \_\_\_\_\_.

Of this amount, students contribute approximately \_\_\_\_\_.

The three principal divisions of the College are \_\_\_\_\_.

(See bulletin board for answers.)

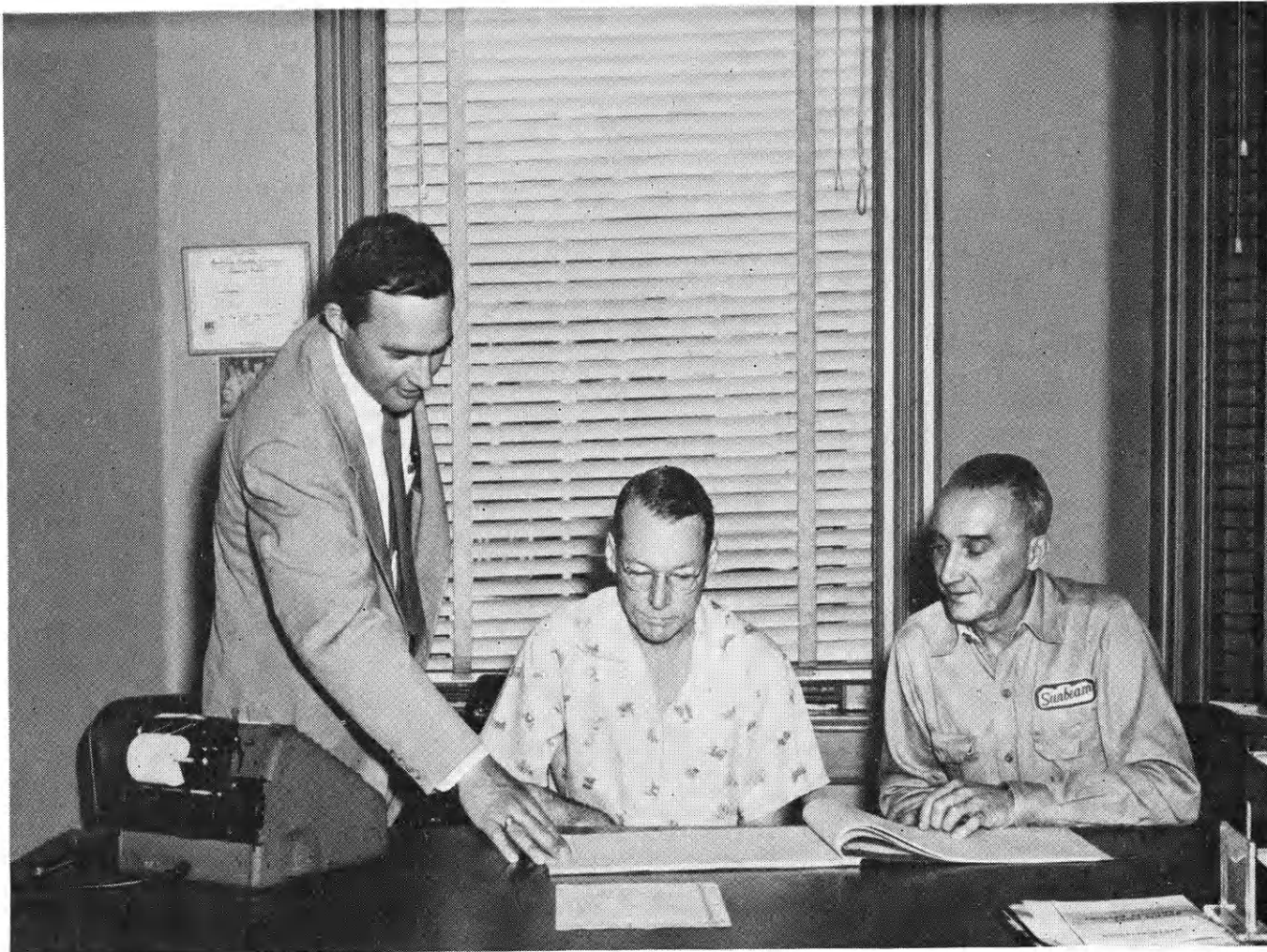
There are students who make the dean's honor roll. A few attain honors and high honors at time of graduation. Others are elected to Phi Kappa Phi, Gamma Sigma Delta, and Alpha Zeta.

Then there are the fellows who make the Ag Student honor roll. Here they are, the eight students in the School of Agriculture who made straight A grades during the fall semester, 1956-57:

	Hours	Points
Russell Adams	17	51
Theodore Goering	18	54
Duane Johnson	18	54
Darrell Rosenow	14	42
Lloyd Sherrod	14	42
Donald Stuteville	16	48
Terry Turner	17	51
Harold VanHorn	16	48

Then, there was Clinton Peirce who made a grade of B in band. His other grades were at the top level.

Among new dishes encountered in the United States, one of our foreign students from Korea favors our fried chicken over others; another lad from Holland thinks most highly of our "Mexican" chili. Can we take credit for that?



*Arne Steivang and Charles Baumann of Federal Bakery Co., Winona, Minnesota, receive engineering service and product data from Stan Nelson (left), of Standard Oil, to help keep maintenance costs low on Federal's truck fleet.*

## How to write a success story

STANLEY NELSON, automotive engineer, is typical of many young men we like to tell about in the Standard Oil organization. He keeps proving to be the right man in the right job as he advances with us.

Stan likes engineering, of course. He graduated from the University of Minnesota with a B.S. degree in Mechanical Engineering in 1950.

He likes people. He especially likes to get into business problems with them where he and his company can help. Truck maintenance, lubrication, and fuel consumption are big items to fleet operators, large and small, who have found that help from Stan pays off—for them.

And he likes selling. He functions frequently as a key man for the sales department. His

intelligent analysis of a problem in his field may either improve our service to a valued customer or help us to secure a new one.

He likes to keep moving, too, and he's done that. He held several sales positions in Minnesota and attended Standard's intensive Sales Engineering School in Chicago before being promoted to his present position in which he works out of the Mason City, Iowa, division office.

As men like Stanley Nelson earn their way upward in our organization we have frequent openings for ambitious college men to follow them. You might find a career in engineering, research or sales with this stable and progressive company rewarding, too.

# Standard Oil Company

910 South Michigan Avenue, Chicago 80, Illinois



# Outguessing the Cattle Market



by Fred Clemence

**C**ATTLE marketing is the second largest resource of farm income in Kansas. Proper marketing time of cattle can mean profit or loss to a feeder. Along with the time of marketing, the grade of steers plays an important part in determining the price paid. The majority of Kansas-fed steers grade choice, so the seasonal fluctuation of choice steers is of more interest to Kansas feeders than the other grades.

## Market Variation

In planning a cattle-feeding program a farmer must make many estimates of future prices and production conditions. There are two kinds of fluctuations in livestock prices. One may be termed "general trend," affecting prices over a considerable period of time, and is usually associated with changes in prices of other commodities. The other consists of daily, weekly, monthly, and seasonal fluctuations due largely to variations in supply and is not associated with other commodities.

In general the price of choice steers weighing from 900 to 1,100 pounds is increased when the supply decreases and vice versa. The prices of choice steers on an average seasonal price index from 1947 to 1953 were highest in October, November, December, and January. The lowest months on this seasonal index were April and May.

One of the decisions a feeder must make is to determine the most profitable season of the year to market his cattle. Seasonal patterns of prices may be put into seasonal indexes. Such indexes are merely a convenient way of showing the combined pattern of a large number of seasons. An aver-

age month is given an index of 100. High months will have an index of greater than 100 and low months will have indexes lower than 100.

## Using Seasonal Index

One can get an idea of how to use a particular seasonal index by looking at a graph of the index. On each graph there is a horizontal straight line which represents an average for the entire year. This value is called 100 merely as a basis to compare the indexes of other months. The actual value for the index of each month is shown by the heavy black line going up and down from month to month. This line is called the seasonal trend.

A shaded band appears around the seasonal trend line. This band is called the "index of irregularity." The band represents the extreme the seasonal trend line may be expected to stay within for a majority of years. The

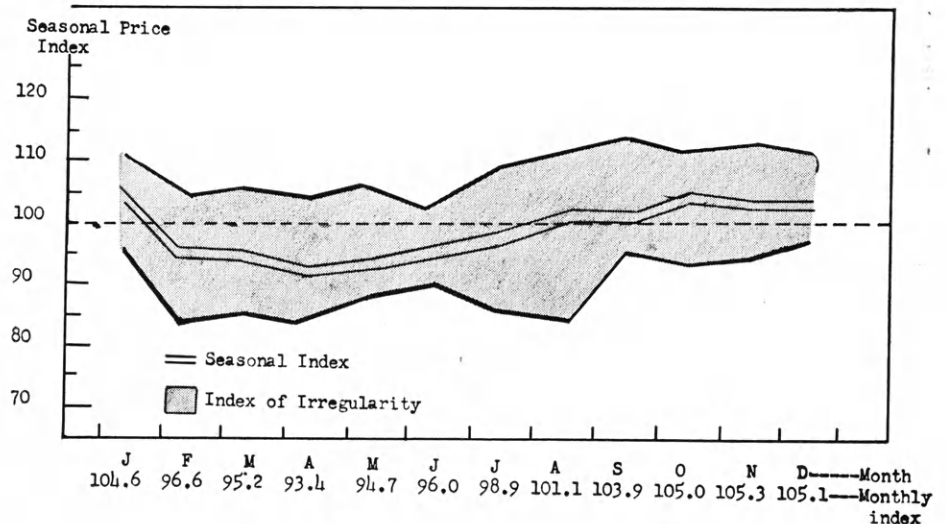
width of the band gives some idea of the reliability that can be placed in a given seasonal trend. The narrower the line the more reliable is the trend.

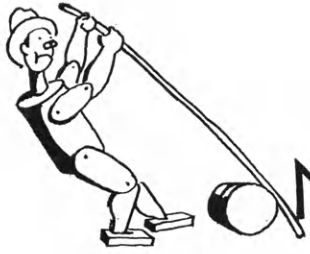
A seasonal index gives an indication of the changes that can be expected throughout the year. A more direct application is made in estimating prices in some future month, with today's prices. This estimate is obtained by dividing today's prices by the price index for the current month and multiplying the results by the price index for the future month.

## Plan Feeding Program

Seasonal indexes can become a broad guide in the feeding operations of farmers. A producer can alter his feeding program to take advantage of seasonal prices, but if large numbers of producers make the same adjustment to seasonal trend, they may find the general seasonal pattern changing.

The approximate price steers will bring can be estimated by taking the May steer price into the May seasonal index and multiplying by the seasonal index of the future month. If May steers sell for 20c, the price of steers in October can be found by taking 20c into 95 and multiplying by 105. This index was based on the market from 1947 to 1953.





# New Farm Uses for Hydraulics



by Dave Templeton

**T**HE THEORY that "liquids will not compress" has opened an enormous field to the development of hydraulic equipment. Advancements made in 1957 machinery show a surprising increase in the use of hydraulic controls.

Three major machinery companies recently introduced a system called "the hydraulic traction control system." This system shifts the weight of the implement toward the rear wheels of the tractor, providing more traction. It can be regulated by means of a hydraulic cylinder to get the amount of traction needed. Each company has a similar system that increases traction several times over that of the old wheel-weight tractor.

"The hydraulic system to fit the farming need" is the promoting factor of one of the machinery companies. It is selling a custom-made hydraulic system. The farmer may buy the size system he needs and in case he finds he can use a larger hydraulic outfit, rather than buy a completely new hydraulic system, he simply makes an addition or additions until he reaches the size for his need.

## Hydraulics for Convenience

Another convenience provided by this company makes use of one or two remote cylinders that can be operated individually or simultaneously. In this way a farmer cultivating point rows can lift one side of his cultivator and finish out a point row with the other side.

Many hydraulic devices have been used to ease the comfort of the driver. A new seat is available that will provide just the right amount of cushion

for the weight of the individual. It can easily be adjusted by the flick of a lever to provide for a change of drivers.

Many tractors are using the hydraulic depth control system. This provides for even plowing and discing, in hard or normal soils, over ridges, and in depressions. By setting the depth control lever at the depth desired, a more even job over an entire field can prevent the possibility of a patchy crop.

Recently the three-point hitch has become very popular, along with the fast hookup. Most of the major lines of machinery have developed the three-point hitch so the driver never leaves his seat. He simply backs up in line with a piece of machinery, and as the tractor comes in contact, the machine snaps into place. With the

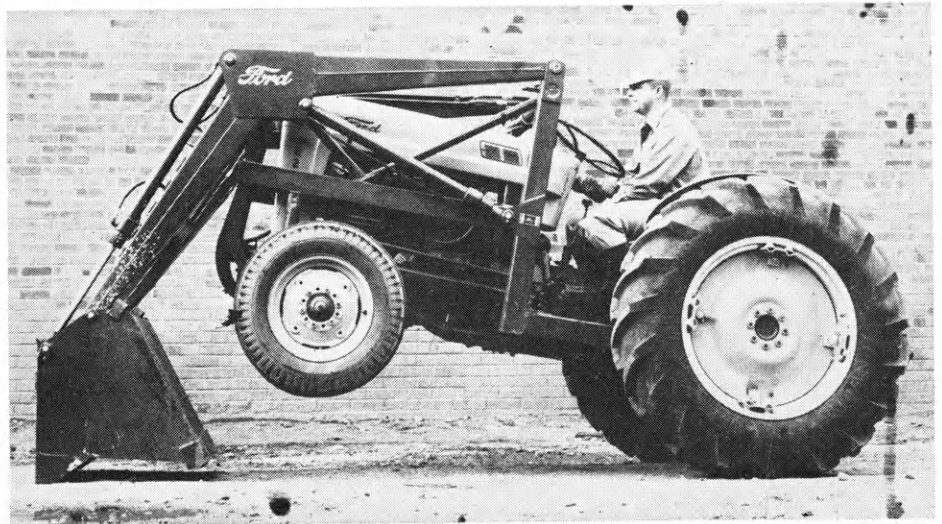
three-point hydraulic system the machine is lifted up and carried to the field for further operations.

## Hydraulics for Comfort

Power steering is another driver ease becoming very popular. Most of the new model tractors are coming out with power steering; however, several companies are making units that can be attached to older tractors. In some cases an independent pump is used for the steering, while in others the power steering operates from the central pump used for equipment.

In the past ten years advancements have been rapidly developing in the field of hydraulic equipment. Through this simple discovery that liquids will not compress, man has found many ways to save his back.

**A trick? No, merely the power of hydraulic machinery. Hydraulic power can raise the front end of the tractor off the ground as easily as it can do other labor-saving jobs.**



## DAILY NEWS

# ALFALFA APHIDS THREATEN

### Spotted Aphids Overwinter In North Kansas This Year

Especially in dry seasons Kansas crops will take a beating to our newest insect, the spotted alfalfa aphid. The aphids simply sap the plants dry. Despite the fact that the aphid is only about 1/16 of an inch in length, its reproductive potential enables it to multiply fast enough that a field of alfalfa can be wiped out in a year.

Aphids have been no problem before because they are new to this country. They are native to the Mediterranean area of Europe. They are no great problem there because they have many natural enemies lacking in the United States.

A parasitic wasp keeps the native American pea

aphid under control, but the wasp will not attack the spotted alfalfa aphid. Purpose of scientific study is to try to determine why the wasp will not attack the species.

One of the aphid's parasites in the Mediterranean area, a fungus, is being introduced into the United States to help fight the insect.

Alfalfa is the major crop damaged by the spotted alfalfa aphid, although it will feed on other crops. Its damage is not entirely confined to sucking the juices from plants until they die. A sticky "honeydew" secreted by the aphid clogs farm machinery to further plague the farmer.

### Kansas Crops Suffer Aphid Mass Invasion

Only two years ago the spotted alfalfa aphid was discovered in the United States. The insect apparently had worked its way north from Mexico where it was brought, probably by boat, from the Mediterranean area of Europe.

In these past two years the aphid has increased by the millions and works its way farther north each year. Last year aphids were found overwintering in southeastern Kansas, but this year the insects are overwintering on the northern border of the state.

This means the first cutting of alfalfa will be infested in Kansas this year. Last year aphids were not present in Kansas in large enough num-

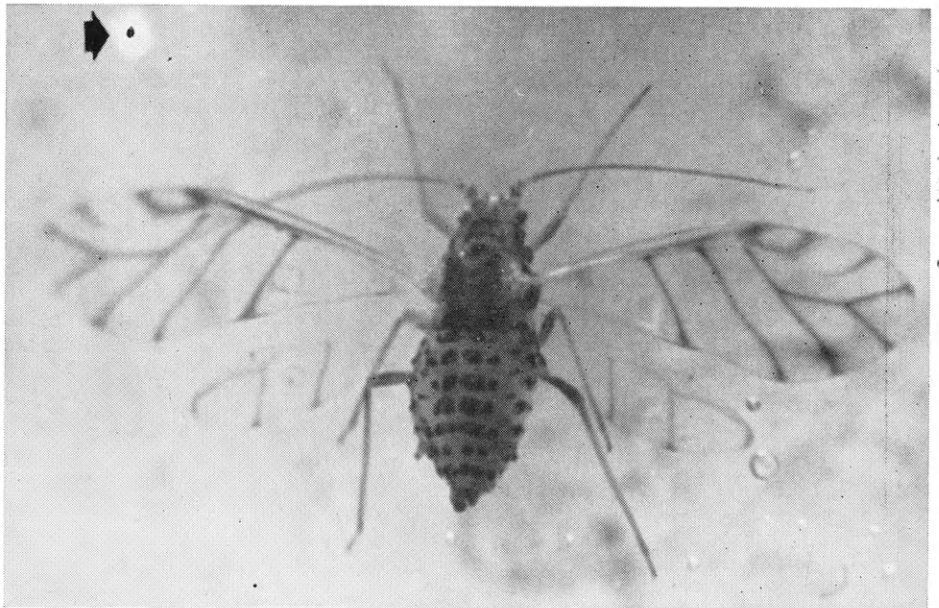
# The Spotted Alfalfa Aphid

by Bob Ljungdahl

**T**HE WORST alfalfa pest in the book, the spotted alfalfa aphid, is spreading like wildfire! It is now a threat to all the Midwest—north to the Canadian border—and east to the Atlantic coastal states.

First discovered in California two years ago, it has fanned out rapidly over the Southwest. By last fall it had marched across Kansas and Arkansas, and over much of Missouri and Nebraska. Last summer it spread north and east into Iowa, Minnesota, South Dakota, Illinois, and Indiana. By this winter the pesky aphid covered more than thirty states.

The spotted alfalfa aphid is a small, whitish-yellow insect. It is often confused with the pea aphid, but the two can be distinguished easily. The spotted alfalfa aphid is only about one-fourth as large as the pea aphid.



Magnified and actual sizes (indicated by arrow) of the spotted alfalfa aphid are shown.



It usually feeds lower down on the plant and causes much more damage.

The spotted alfalfa aphid appears both with and without wings. It measures from one-sixteenth to one-eighth of an inch long, with six rows of irregular black spots running down the back.

### Carried by Wind

According to the USDA, the winged females are carried to new fields and new areas chiefly by wind currents, and multiply fast after invading an area. A female can produce five offspring per day, and these young can be producing in a week.

The greatest losses were reported in Kansas, California, Oklahoma, and Texas. Infestations developed in the West and Southwest in January, and as late as November, heavy populations were at work in Nebraska and Kansas. The pest has been found at elevations up to 5,000 feet.

Just where the aphid came from, or how it got into the United States, is not known. Aphids of almost identical appearance are found in the Mediterranean area.

Arizona entomologists are trying Thimet seed-treating dust, a systemic that gets inside new seedlings. They say that it is promising.

Natural enemies such as parasitic wasps have shown promise in holding the aphids in check in the Southwest. The USDA shipped thousands of wasps into Missouri and Kansas where they were turned loose in several counties on a trial basis.

At the Fort Hays station, 80 percent of the plants in a stand of Lahontan alfalfa have resisted the aphid. Lahontan is not adapted to the northern half of the country, so scientists are working to get aphid resistance bred into adapted varieties.

Aphids damage alfalfa in many ways. They are capable of killing all the plants of a new stand and hence cause a dropping of the leaves. The aphids secrete large quantities of honeydew. This honeydew interferes with harvesting by clogging the machinery with sticky material, and may even cause the breakage of sickles. Also, honeydew causes difficulty in the dehydrating process. The alfalfa meal made from the infested alfalfa is sometimes dark. Although

cattle are reported to like it, the protein content of the meal may be reduced.

### Control with Insecticide

For best control of the spotted alfalfa aphids, heavily infested fields should be treated with the most effective insecticide available. Complete coverage is essential, since any place skipped in the application creates a focal point for rapid reinfestations. Proper timing of insecticide applications is largely a matter of experience. It is difficult to base applications on aphid numbers because of the rapid reproduction of the species.

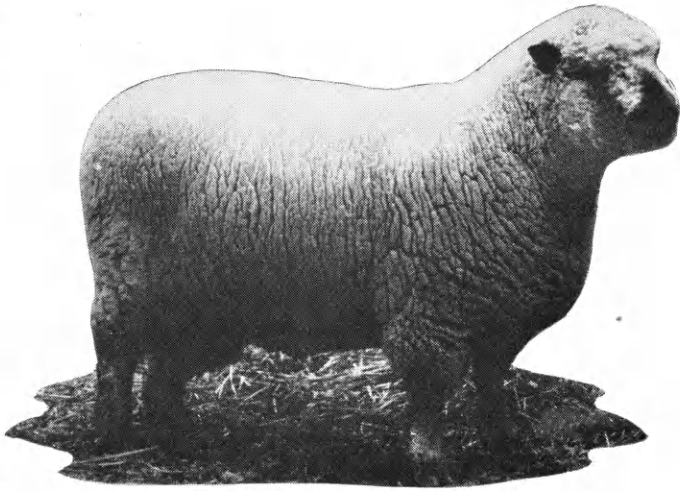
Several insecticides are effective in controlling the spotted alfalfa aphid; malathion and parathion are the most promising. Chemical control with

parathion at 4 ounces per acre or malathion at 8 to 12 ounces per acre has been found to be most effective. Caution must be taken in the use of these chemicals, especially parathion, which should be applied only by airplane or ground sprayers whose operators are thoroughly trained and skilled in the use of parathion. At least two weeks must elapse between spraying and harvesting for foliage or drying. Reinfestation from neighboring unsprayed fields has been rapid.

With the aphids raging through more than thirty states and no real protective, alfalfa prices may go higher than ever. For this reason scientists are working around the clock to find something to stop the millions of dollars' worth of damage that the aphids may do again this year.

**This alfalfa patch in southeastern Kansas was practically ruined last year by an aphid attack. The aphid magnified in the center is at work on an alfalfa stem. (The spotted alfalfa aphid may be winged or wingless.) His reproductive potential is so great that in a single season enough juice-sucking aphids may be present to destroy the alfalfa.**





*"Just between ewe and me,  
Grandpa was wild and woolly."*

# History of Sheep

*by Walt Martin*

**I**MAGINE a wool coat more than 6,000 years old. Hard to believe? Yes, but scientists have discovered evidence indicating people even then recognized the importance of wool for clothing. Sheep are pictured on the earliest Egyptian monuments, which date between 5000 and 4000 B.C. That the general public in Bible times was familiar with sheep is verified by the fact that sheep and shepherds were frequently referred to in Biblical parables.

In addition to being one of the first animals to be domesticated, sheep have been one of the most useful to man. They provided early man with wool for cloth, meat and milk for food, and skins for shelter.

The exact origin of sheep has not been established, and it is doubtful if the domestication can be traced to any single region. However, the origin of breeds of economic importance in this country can be traced to one of two areas, Spain or England.

## Classes of Sheep

Before going further into the origin, it will be necessary to classify the various breeds as to type and primary purpose. Since sheep are a dual-purpose class of livestock, producing

both wool and meat, there are various means of classification. Sheep may be divided into three classes according to the type of wool produced: fine wools, medium wools, or long wools.

### Fine-wool Sheep

The fine-wool or "western"-type sheep was developed in Spain. Even before the year 1000 Spain boasted great flocks of Merinos, the principal fine-wool breed. The fleece was of exceptionally fine fiber, although the

sheep were very wrinkled and lacking in mutton characteristics. Spain, by using anti-export laws, held a monopoly on Merinos for many years. In the nineteenth century, however, Napoleon invaded Spain, overthrew the government, and shipped Merino breeding stock to several other countries. Today, American Merinos are divided into three types—A, B, and C, or Delaine Merinos. Differences in these types consist of increasing size,

*(Continued on page 23)*

**"Grandpa" is of the Old Scottish Blackface breed originating over 200 years ago in the rugged climates of northern Scotland. His long coarse wool is often called carpet wool.**



# Hospitality Day

## Attracts High School Girls

by Carol Ward

**K**ANSAS high school girls are invited to join "Alice in Home Ec Land" at the annual Hospitality Day, April 13, at Kansas State college.

The purpose of the day is to show prospective students the job opportunities and careers in home economics. Most of the planning and work on exhibits and programs has been done by the home ec students themselves, with Verlene Sobke, from Council Grove, as general chairman.

Calvin hall, the home economics building, has been dubbed "Looking Glass House." Plans will be on display for the new home economics building, which is tentatively scheduled for 1960.

After "the White Rabbit" presents the home economics dean, Doretta Hoffman, and Chairman Sobke at the opening assembly, he will guide the high school visitors through Home Ec Land.

### Department Exhibits

Exhibits outlining opportunities in twelve fields have been planned: family economics, clothing, textiles, extension, nursing, foods and nutrition, journalism, art, institutional management, child guidance, dietetics, and teaching.

"Queen Alice," portrayed by Virginia Roenbaugh from Fellsburg, will rule over the fashion show, where clothes appropriate for college will be modeled. High school visitors will be served box lunches at "the Queen's Croquet Ground," and will end the day with "the Mad Hatter's Tea" in the freshman girls' dormitories.

"Who Stole the Tarts" will be the



"Alice in Home Ec Land," Virginia Roenbaugh, Fellsburg, watches Loyce Cheatham, Beloit, drape fabric on a figurine for a textile-clothing exhibit, one of 12 home ec exhibits.

theme of the dietetics and institutional management exhibit, which will feature an actual tart-making project. Tarts will be given to visitors of the exhibit.

Nursing students will bring "Humpty Dumpty" back to health, and "Advice from a Caterpillar" will be offered in a teaching exhibit.

"Alice's Evidence" will be presented in a series of colored pictures showing a day's work in the life of an extension agent. "It's My Own

Invention" expresses the theme of the art exhibit, in which student crafts will be exhibited.

"The Mock Turtle's Tale" will tell about opportunities in journalism. Step-by-step construction of a blue and white pinafore for Alice will be featured in the clothing and textiles exhibit.

Tours of the campus and a career program, "Adventures in Home Ec Land Come True," will also be presented.



by  
Loren  
Henry

**T**HE first Little American Royal was held in 1924 for the benefit of people attending Farm and Home week. It consisted of a livestock parade and exhibition sponsored by the Block and Bridle club and the animal husbandry department.

In 1927 the dairy department and Dairy club held a contest to test the ability of students to fit and show animals. Two years later the Block and Bridle and Dairy clubs combined their shows to form a single show. The show was an attraction of Farm and Home week until 1942 when it was changed to later in the spring so the animals would be able to shed their heavy winter coats.

The Little Royal, originally started as an afternoon program, increased in size until an evening program was necessary with the selling of tickets for admission to

assure guests of seats. Also in 1935 assistance was obtained from the Agricultural association in staging the show.

World War II came, and the Little Royal was discontinued mainly because of the decrease in enrollment. The show was resumed under the co-sponsorship of the Block and Bridle and Dairy clubs. After the break for the war the show was scheduled in the spring instead of February during Farm and Home Week.

Formerly, eleven days were allowed for showmen to fit their animals. Now the contestants draw for college animals six to seven weeks before the show, giving them time to prepare the animals for showing. The animals are judged at the time of the drawing so the judge can know how much improvement has been made on the animals. Not all emphasis is placed on improvement of the animal; 50 percent of the placing is on how the showman presents his animal to the judge.

The Little Royal moved to Ahearn Field House in 1951 from the livestock pavilion. At that time the pavilion had permanent seats, but was not large enough to hold the ever increasing crowd. Held in the north section of the building where the most space was available, the Little Royal had more than a hundred contestants, which made it crowded, and the show lasted so long that the crowd became tired and restless.

A loudspeaker was added in 1934 to announce the different classes. Before 1937 only one show ring was used. This took too much time, so another ring was added, one ring for the Block and Bridle division and

# History of Little



Each year the centerpiece, dominating the center of the arena of the Little American Royal, is of a different, colorful design.



one for the Dairy division. In 1951 when the Little Royal was moved to Ahearn Field House four rings were used. This is considered the greatest advance in the whole show because it speeded the show by twofold.

Since 1930 the grand champion showmanship award has been given to the overall livestock showman in the animal husbandry division. In this show, under the supervision of the Block and Bridle club, any K-State student can show beef cattle, sheep, swine, or horses.

Since the start of the dairy show, 1927, the grand champion showmanship award has been given to the showman who can not only fit and show his own animal the best, but who can show anyone else's animal. Actually the Little Royal is two shows combined into a single show. There is no grand champion winner of the Little Royal but the championship is shared by the champion showman of each, the livestock and dairy divisions.

Awards are given to winners of each of the divisions in the show, with the second place showman getting a ribbon. The grand champion showmen in the animal husbandry and dairy shows have received trophies presented by the American Royal, Kansas City Stock Yards, and the Kansas City Chamber of Commerce. The ribbons for other contestants are presented by the Little American Royal Association.

Formerly the centerpiece has been only two-dimension, but this year it was made into three-dimension. It was a flat revolving picture of some animal or object pertaining to agriculture made from dyed sawdust. This year's centerpiece had three cow heads located in a

vertical position revolving so the crowd could see all three cow heads, Holstein, Guernsey, and Ayrshire. The pictures of the three heads formed a triangle which held the trophy for the winner of the Dairy division. The rotating centerpiece was used first in 1955. This was the fourth year that the Dairy club and Block and Bridle club have alternated the selection of the type and breed of livestock used.

A strange coincidence happened in the 1940 and 1941 Little Royal when Merrill Abrahams won the livestock division showing a gilt following his twin brother, Maynard, who had won it the previous year, also showing a gilt. There have been only two girls win the show and they have both been in the dairy division. They are Margaret Glass in 1933 and Millicent Schultz in 1954.

By 1941 several more steps were taken to improve the Little Royal. First, an outside judge was secured to make the placings in the dairy show. He was George Cooper, manager of a dairy farm in eastern Kansas. Second, was the practice of having the first and second place winners of each class show for division or breed champion. This enables two exceptional showmen in the same division to compete for grand champion showman.

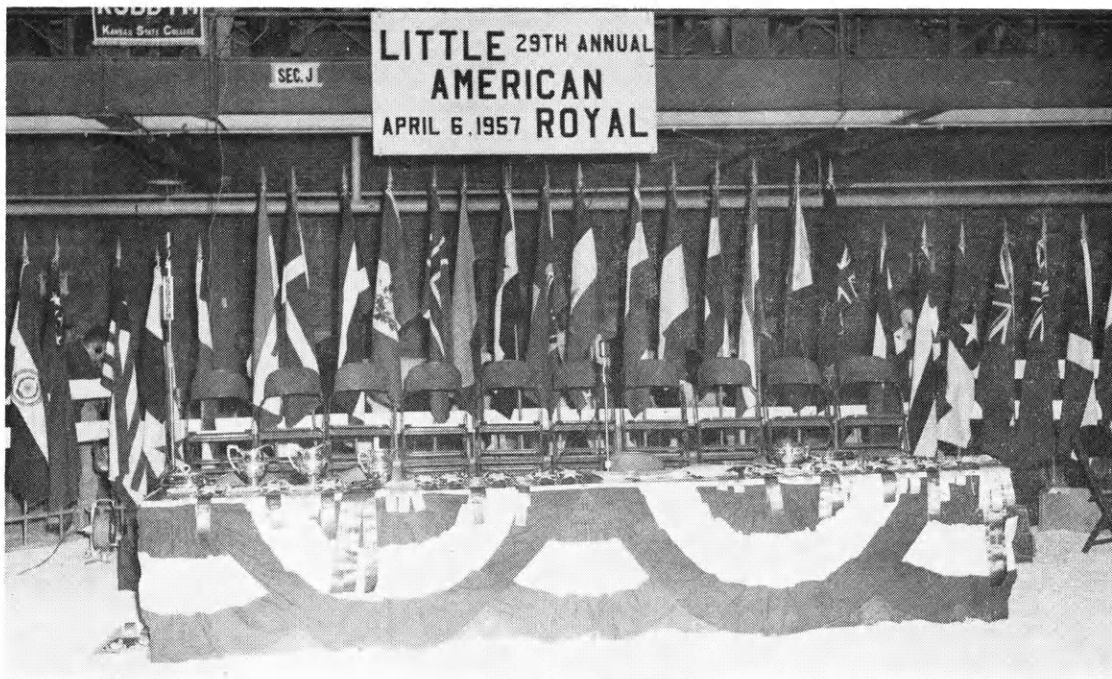
Over 2,000 students have shown down through the years including about 35 girls. It is not the trophies that is the real award coming from the Little Royal, but the practical experience gained. This type of competitive experience is not obtained in the classroom. The history of the Little Royal is a story of progress and it will continue to progress.

# American Royal



The LAR centerpiece is always student made from dyed sawdust mounted on a revolving platform that slowly turns during the show.





# Little American Royal

by Ed Kocher

**D**ON MACH and Dick Dunham were the grand champion trophy winners in the 29th annual Little American Royal April 6, in the K-State Field House.

The Royal, co-sponsored by the Block and Bridle and the Dairy clubs, is an annual event at K-State. It is a contest among K-State students who draw for animals and prepare them for the show ring. The winner is judged on the improvement of the animal and the ability of the showman in the ring.

Mach, winner of the Block and Bridle division, was showing a Hereford steer in the Royal this year. In order to qualify for the grand champion trophy, he had to win the mixed-steer class, and then compete with the winners of the other Block and Bridle livestock divisions for the championship. Leon Sucht, sheep winner, was reserve champion behind Mach in the Block and Bridle division.

Dunham, dairy division winner,

first won the Guernsey cow class, and then competed with the other dairy breed winners to take the championship. Larry Hall, showing an Ayrshire heifer, was reserve champion.

## Procedure

In order to compete for the grand championship of the Dairy and the Block and Bridle divisions the showmen must win either first or second in their breed class. In the Block and Bridle division when there is more than one class per type of livestock the first and second place winners of the classes compete for the championship of the livestock division. The winners of these then go to compete for the grand champion trophy.

In the different classes of animals the showman will show only his own animal, but in grand champion competition each showman must not only show his own animal but also the animals shown by the other competitors for the championships. This

proves the winner's ability in showing, not only his own animal, but other animals and other types of livestock.

## Breed Champions

The breed champions were—beef cattle, Mach; sheep, Sucht; swine, Jim Wittum; horses, Buddy Schepler; Holsteins, Jack Van Horn; Jerseys, Emery Corbett; Guernseys, Dunham; and Ayrshires, Hall.

The breed reserve champions—beef cattle, Bill Root; sheep, Janice Gaddis; swine, Dean Armbrust; horses, Ray Sis; Holsteins, Harley Butts; Jerseys, Gene Allen; Guernseys, Lawrence Odgers; and Ayrshires, John Anderson.

## Centerpiece

Over the past years the oldest and most impressive attraction at the Little American Royal has been the centerpiece. During the past few years the Block and Bridle and Dairy clubs

have been alternating the building of the centerpiece.

This year's centerpiece was an alteration from previous years, since it was built triangularly on a round turntable where it was formerly just a sawdust base. This year the Dairy club deviated as they went from the usual one-breed centerpiece to the present three.

### Special Attractions

Other highlights of the Royal were the precision riding and horseback square dancing by the Sand Springs Saddle club, which is made up of men and women interested in riding. Another highlight is a drawing in which two 4-H and two FFA members receive gilts. The two 4-H members who were lucky in drawing a gilt were Bill Balthrop and Susie Allen. Balthrop from the Achiever club in Wichita was winner of a Poland China gilt bred by Albert Morgan, Alta Vista. Susie Allen from the Peppy Progressive 4-H, Liberty, drew the Yorkshire bred by Wallace Wolf, South Haven.

Melvin Bryan, Paola FFA chapter, was winner of the Berkshire gilt. Dean Funston was the Berkshire representative. Bill Bowman, Council Grove, was the FFA member who received the gilt from the Block and Bridle club.

Under this program the 4-H and FFA members who draw gilts will take them home and one gilt out of the first litter will be returned to the FFA chapter or the 4-H club for the continuation of the program.

This year there was a total of 121 K-State students competing for two grand championship trophies. The students that competed in the various classes of livestock this year are as follows:

Beef: Duane Broddle, Reece; Bill Root, Medicine Lodge; Norval Ralstin, Mullinville; Gerald Hanneman, Peabody; Alice Gardner, Staten Island, N.Y.; Bryce Davidson, Americus; Bill Clark, Barnard; Estel Schultis, Great Bend; Marvin D. Jones, Linwood; Gerald Schmidt, Freeport; Wanda Swenson, Council Grove; Roy Davis, Rossville; Ray Bradley, Manhattan; Thomas Appleby, Cedar Vale; Charles Couch, Kingsdown; Robert Howell, Croft; Benjamin Leibbrandt, St. Francis; Kenneth Visser, Marysville;

Gary Cummings, Kingsdown; Jarvis Brink, Le Roy; Frederick Charles,



Don Mach (top) shows his Hereford steer to grand championship of the Block and Bridle division. Dick Dunham (bottom) receives the ribbon and silver cup for being grand champion showman for the dairy division. Lawrence Morgan presents the awards.



**Champion swine showman Jim Wittum holds the sterling silver cup he was presented with in the Block and Bridle division. The showman standing behind Wittum is Dean Armbrust.**

Jetmore; Don Perkins, Howard; Robert Glanville, Cottonwood Falls; Jerry V. Schuetz, Mercier; Lynn Perkins, Howard; William Billings, Jetmore; Ronald Sweat, Cedar; Gerald Brune, Lawrence; Donald Mach, Narka; Robert Carswell, Alton; Dale Dickson, Miller;

Don Argabright, Leavenworth; Ben Brent, Alton; Darrell Keener, Olmitz; Earl Wineinger, Norwich; Donald Miller, Everest; Howard West, Yates Center; Lloyd Peckman, Paola; Howard Stroup, Milwaukee, Wis.; Ronald Schultz, Trousdale; Edward Swiercinsky, Republic.

Sheep: Billy Bevelhymer, Wichita; Loris Luginsland, Dunlap; Janice Lee Gaddis, Wichita; Dwight Jackson, Rose; Loy Reinhardt, Erie; Allan Henry, Colby; Chuck Hammon, Valley Falls; Delmar Rieger, Hiawatha; Jim Hundley, Horton; Judy Fisher, Virgil; Lionel Chambers, Wichita;

Loren Henry, Colby; Allen Tilley, Frankfort; Dale Schilling, Havens-

ville; Ralph Gilmore, Cedar Vale; Gordon Cunningham, Mankato; Rae Luginsland, Dunlap; Leon Sucht, Rozel; Coy Allen, Liberty.

Swine: John Balthrop, Wichita; Joe Bailey, Garnett; Fred Clemence, Abilene; Dean Peter, St. Francis; Bill Sears, Eureka; Dean Armbrust, Ellsworth; Gerald Blazek, Cuba; Gary Peterson, Arcadia; Ben Handlin, Geneseo; Larry Laverentz, Bendena; Don Miller, Hoisington;

Jim Gammell, Cottonwood Falls; Jim Wittum, Caldwell; Tom Knappenberger, Olathe; Clyde Armstrong, Trent, Texas; Phil Welch, Saffordville; Melvin Martinek, Silver Lake; Alice Nagel, Valley Center; Don Wittum, Caldwell; Brad Broady, Johnson, Neb.; Darrell Weber, Winfield; Jerry Karr, Emporia; Ray Ely, Superior, Neb.

Horses: Don Springer, Pratt; Ray Sis, Manhattan; Buddy Schepler, Wichita; Alice Whitney, Manhattan; Tom Swearingen, Horton; Herman

Kameran, Brooklyn, N.Y.; Murray Fudim, Westbury, N.Y.

Dairy: Stanley Smith, Latham; Harold Haun, Larned; Harlan Ross, Hardy, Neb.; Jack Van Horn, Pomona; Lowell Satterlee, Macksville; Fernando L. Oliver, Puerto Rico; Charles Michaels, Michigan Valley; Ray England, Paola; Kenneth Kirton, La Harpe; Harley Butts, Topeka;

Gary Albright, Delia; Walter Burling, Partridge; Richard Pieschl, Minneapolis; Joan Krodus, Milwaukee, Wis.; Dwight Haddock, Arkansas City; Gene Allen, Silver Lake; Ray Schooley, Stark; Emery Corbett, Ottawa; Jack Daniels, Independence; Lawrence Odgers, Salina; Dick Dunham, Stark; Tom Rogler, Kincaid;

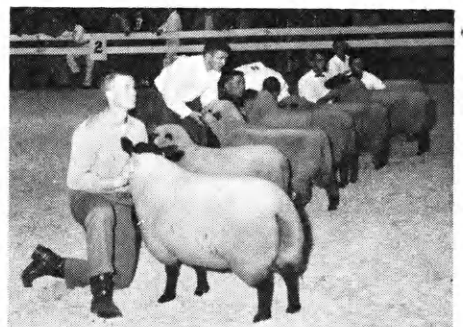
Karen Dusenbury, Caldwell; David Templeton, Burns; Chester Peterson, Falun; John Anderson, Jamestown; Rodman Williams, Hutchinson; C. Herbert Annis, West Rockport, Maine; Albert Smith, Carona; Edward Hart, St. Joseph, Mo.; Larry Hall, Eureka.

#### **Judges**

The judges who placed the classes are: Willy Watson, Ayrshire breeder and national classifier; John Oswald, Jersey breeder and K-State graduate who judged the Dairy division.

The judges for the Block and Bridle division were Wayne Davis, Spotted Poland China breeder; Gene Francis, sheep executive secretary for the St. Joseph Livestock Exchange, K-State graduate; Bob Acre, Quarter horse breeder and K-State graduate; Bill Ljungdahl, K-State.

All trophies were donated by the American Royal Livestock Show, the Kansas City Stockyards Company, and the Kansas City, Missouri, Chamber of Commerce. Grand champion trophies were presented by Lawrence Morgan.



**Leon Sucht heads this class of sheep, and later went on to receive reserve champion showman of the Block and Bridle division.**



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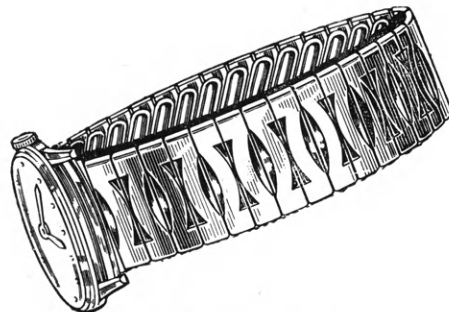
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A stand of big bluestem (right) will yield good permanent pasture after it has had a chance to establish itself. A hard-to-beat temporary pasture is sudangrass (left).

# Summer Pasture

*By Chester Peterson*

**T**HE FEED shortage in Kansas necessitates the proper care of native and temporary grasses and is becoming an increasingly important problem. Proper pasturing of grasses is the most important step. If a pasture is overgrazed the grass may be killed, but in turn, if it is undergrazed the producer is not getting maximum yield from it.

Permanent pastures are those that are covered with perennial self-seeding grass plants kept for grazing indefinitely. Many farmers depend solely on native pasture for grazing during the hot and often arid summer. One method of keeping the land in proper form is to apply topdressing of the right amounts of nitrogen, phosphorus, and potash fertilizer to provide more succulent spring grazing. In some localities

topdressing will lower the plants' drought resistance, so is not recommended for all localities.

A good farm manager must determine how much manure, lime or commercial fertilizer will need to be used by having his soil tested in a reliable laboratory. Although the common practice is to apply fertilizer only to cropland where visible value is returned, proper fertilizing of pasture will help most localities.

### **Don't Overgraze**

When a native pasture is overgrazed the existing plants are weakened and weeds take over. Reseeding to a mixture of recommended grass varieties is possible only with readily accessible and reclaimable land. Some grasses just need a rest from heavy grazing. By giving them a rest, the

added expense of reseeding can be avoided. Some varieties that can be used in reseeding are blue grama, buffalograss, side-oats grama, sand-lovegrass, sand bluestem, switchgrass, Indiangrass, and little bluestem. Contact should be made with a specialist to get the proper grass adapted to an area.

Carefully prepared seedbeds give the best results for replacing grasses. The use of a stubble mulch helps to maintain surface water infiltration, prevents erosion by wind and water, and prepares a firm seedbed. A weed-free environment keeps weed seedlings from competing with the grass for moisture. A satisfactory stubble mulch, recommended by Dr. Kling Anderson of the agronomy department, can be prepared by drilling



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res

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...in Kansas

sudangrass or another sorghum in narrow rows before sowing grass.

Seed should be planted as soon as possible after the last killing frost. This prevents the grass from being choked out by weeds later in the summer. The seeds should be sowed between one-half and three-fourths inches deep. Broadcasted seeds need be only slightly covered. It may be from one to three years before a newly seeded pasture can be grazed.

#### **Critical Period**

Early spring is the grass plants' most critical period, and excessive use during this time will weaken it. Early grazing practiced in a succession of years will reduce the established sod. Proper care of permanent summer grasses includes: prompt adjustment of livestock numbers to the available

supply; proper location of water, fences, and salt to keep grazing even; and keeping the kind of stock that will graze most economically.

Summer pastures of annual grasses are usually established in the better cultivated cropland. Summer grasses make a very rapid growth and are higher in yield than native grasses. A way to get even grazing and economical gains is to use a rotation method. This is done by dividing the grazing area into four different pastures and letting the livestock graze on one area while the other three are growing.

An example of a summer pasture is sudangrass, which is adapted very well to Kansas. Sudangrass is drought resistant and has regrowth ability. When preparing a seedbed, freedom from weeds and a compact seedbed

are necessary. Seeding dates vary from May 15 to June 15.

When pasturing sudangrass, hydrocyanic poisoning may occur. This poisoning occurs before the plants reach a height of 18 to 24 inches, or on a regrowth after it has been eaten off. Different ways to avoid the poisoning are to use a certified variety, allow it to gain sufficient growth, test with a "guinea pig" animal, or use field rotation.

#### **Use Good Management**

Whether a temporary or permanent grass is used, the maximum value can be obtained by good management. Overgrazing is serious during a drought and will cause more failures in a pasture program than any other factor.

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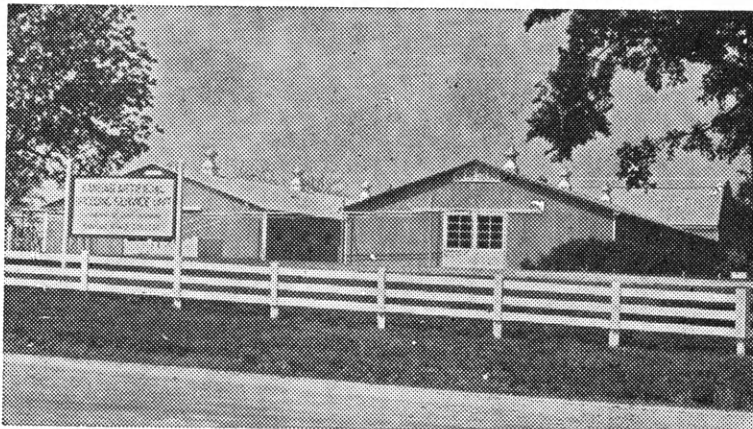
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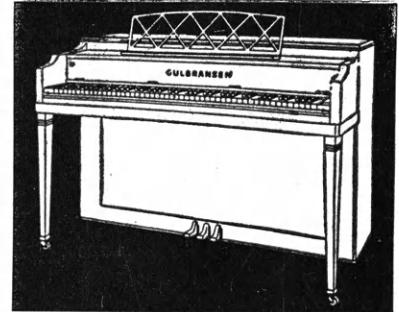
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# History of Sheep

(Continued from page 10)

ruggedness, and mutton qualities, and decreasing skin wrinkles from A to C.

The most popular fine-wool breed in the United States today is the Rambouillet. Rambouillets originated in France on a government farm about forty miles west of Paris, and acquired their name from a village near which the farm was located. Spanish Merinos were their principal ancestors, although Rambouillets display more size, ruggedness, and mutton qualities.

## Mutton Type Sheep

The medium-wool and long-wool classes known as mutton sheep were developed primarily in England. The medium wools are blockier, lower set, thicker meated animals that produce lighter fleeces of coarser fibered wool than fine-wool breeds. On the other hand, the long-wool breeds produce a large, very coarse-fibered fleece with a fiber length of ten to sixteen inches as compared with two to five inches for fine and medium-wool types.

Long-wooled breeds are of declining importance in the United States today. The origin of four long-wool breeds is of interest because of their prominent place in the development of other breeds. The Leicester, through inbreeding and selection of the native breeds of central England, became a distinct breed before 1800. Between 1860 and 1890 the Cots-



To get desirable mutton and yet high yields of wool, crossbreeding of mutton type rams with fine wool ewes will enable producers to get a double income from their investment.

wold, Lincoln, and Romney breeds originated in various parts of England through the improvement of native breeds of the particular area by use of the Leicester. The long wools as well as the medium wools generally received their name from the county or area in which they originated.

The first medium-wool breed to become distinct was the Southdown, which originated in extreme southeast England before the turn of the nineteenth century. The Cheviot was also established as a breed in northern England and southern Scotland before 1800.

About 1848 the Shropshire originated in central England from the crossing of Southdowns, Cotswolds, and Leicesters with unimproved breeds of the area. Ten years later the Hampshire originated from

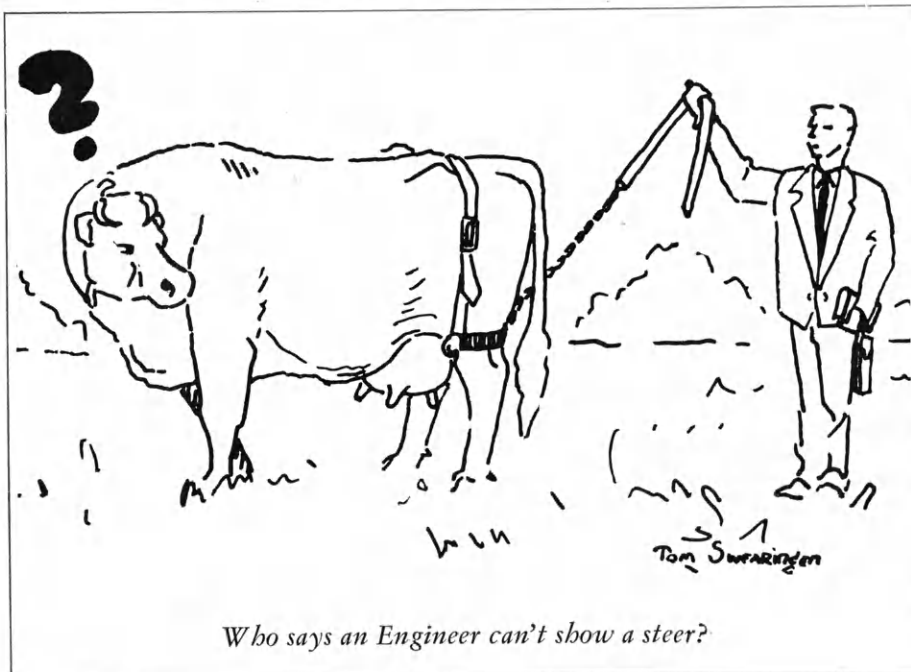
crosses of the same established breeds on the native sheep of extreme southern England. Also in southern England the Dorset was established as a distinct breed through selection and improvement of native horned breeds.

During the latter half of the nineteenth century in south-central England the Oxford became recognized as a breed through Hampshire-Cotswold crosses. Meanwhile in southeast England the Suffolk developed from crosses of the Southdown and the old Norfolk.

Even during the twentieth century new breeds have been established. Most of these have developed from the crossing of fine-wool and long-wool breeds. The result is a medium-wool sheep of acceptable mutton characteristics which produces a larger, longer staple fleece than conventional medium-wool breeds. The first of these breeds to be established was the Corriedale, which was developed in New Zealand. The Columbia, Panama, and Targhee are some of the similar breeds which have developed in the United States.

Probably the most recently developed recognized breed is the Montadale, for which a breed association was organized in 1945. The Montadale developed from a Columbia-Cheviot cross.

Today, there is emphasis on crossbreeding in the commercial sheep industry, especially in the range country. Medium-wool rams are crossed with fine-wool or fine-wool cross-type ewes. The resulting lambs have more desirable mutton characteristics than straight fine-wool lambs. The ruggedness, flocking instinct, and desirable wool clip of the fine-wool ewe flock are retained.



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# In the Aggies' World

## Junior Stockmen

**H**ISTORY was made in Wichita the week-end of March 15 and 16 when the Kansas Junior Livestock association was formed. This is a junior to the long-standing Kansas Livestock association, and was formed for the purpose of preparing members for membership in the senior organization.

With a charter membership of 99 members, the organization is on its way to being one of the strongest in the state for youth under 21 or still in school. The present age of this membership ranges from one year to twenty-five. The formation meeting was held in the Broadview hotel at 10:00 a.m. March 16 with the adoption of the constitution and election of officers and directors.

The officers are: president, Charles

Andrews, AH Fr. from Kanopolis; vice-president, Bill Root, AH Sr. from Medicine Lodge; secretary, Don Springer, AH Sr. from Pratt; corresponding secretary, Lynn Perkins, AH Jr. from Howard; treasurer, Jim Gammell, AH Sr. from Cottonwood Falls; and reporter, John Balthrop, AH Jr. from Wichita.

A board of nine directors was elected according to Kansas congressional districts with districts 4, 5, and 6 each having two. Those on the board of directors are Paul Hatfield, AEd Jr. from Valley Falls; Savina O'Brien from Hiattville; John Floyd, AA Jr. from Sedan; Bill Brethour, AH Jr. from Maple Hill; Mike Murphy, AH So. from Protection; Gale Carswell, AH Sr. from Alton; Dave Essex from Kanopolis; and Gary Cummings, Ag Fr. from Kingsdown.

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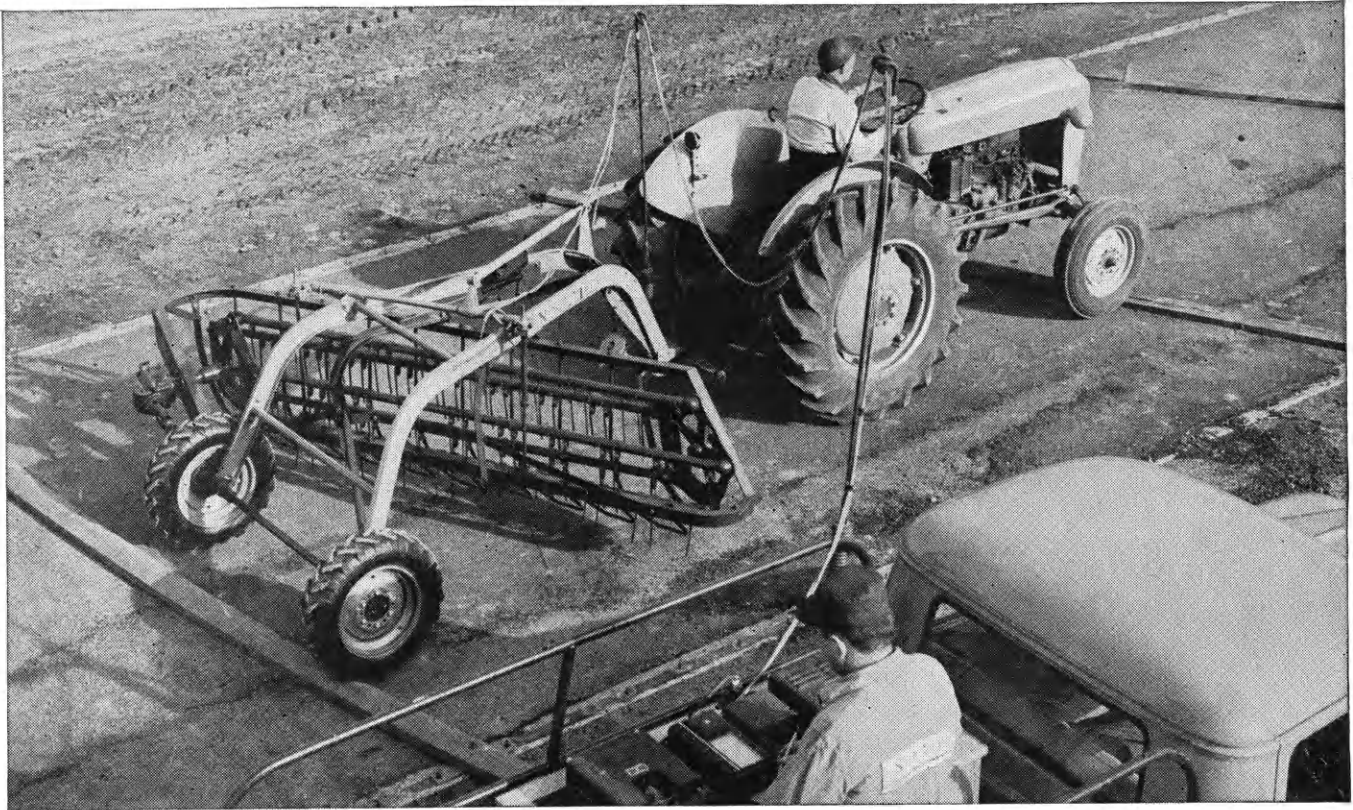
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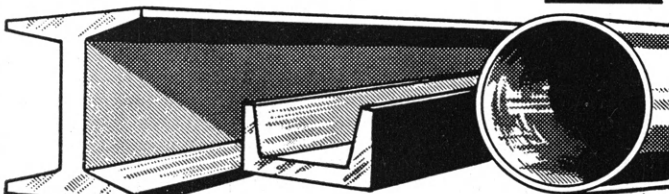
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