

1 Kansas 2 State coll. of agric. + applied science

bf

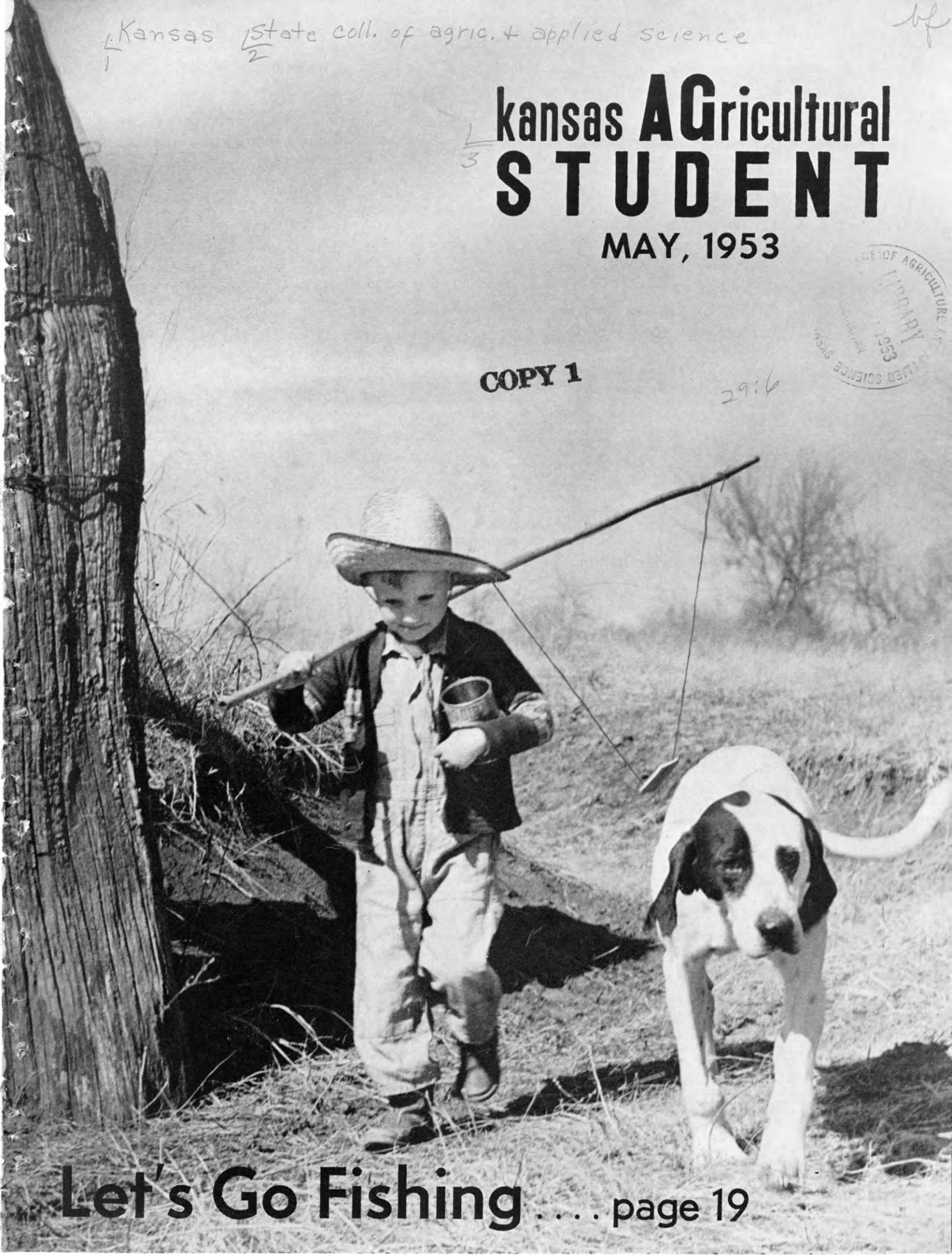
3 kansas **AG**ricultural
STUDENT

MAY, 1953



COPY 1

29:6



Let's Go Fishing page 19



A Soliloquy

"I've heard it said the world's a dismal place.
But I know better . . .

for I have seen the dawn, and walked in the
splendor of a morning's sun . . . blinked at the brilliance
of the dew, and beheld the gold and crimson
of an autumn landscape.

"I've heard it said the world is sad.
I can't agree . . .

for I have heard the cheerful songs
of feathered masters . . . heard the low laughter
of the leaves, and the everlasting chuckle
of a mountain brook.

"I've heard it said the world's a musty, sordid thing.
It can't be true . . .

for I have seen the rain . . . watched it bathe
the earth, the very air . . . and I have seen the sky,
newly scrubbed and spotless, blue from end to end . . .
and I've watched the Winter's snow drape tree and bush,
to look like Nature's freshly laundered linen hung to dry.

"I've even heard it said the world is evil.
But they are wrong . . .

for I have known its people . . . watched them die
to save a freedom, bleed to save a life . . . spend of themselves
to stem disaster, of their wealth to ease distress . . . and
I have watched them live, love, and labor . . . watched them
hope, dream, and pray, side by side.

"I have heard them say these things.
But I would disagree . . .

because, for every shadow, I have seen a hundred rays
of light . . . for every plaintive note, I've heard a
symphony of joy . . . for every pennyweight of bad, I have
found a ton of good . . . good in Nature, in People,
in the World.

And I'm thankful I belong."

Copyright, John Deere

YOU CAN GET THOSE BIGGER CROPS TOO!

When you plant **KANSAS CERTIFIED SEED** you are assured high yield and superior quality by years of scientific breeding and testing, plus careful field and seed inspection.

The responsibility of **CERTIFIED SEED** growers is to protect pure seed of superior crop varieties.

CERTIFIED SEED insures bigger and better crops for **KANSAS FARMERS.**

*For Descriptive
DIRECTORY OF CERTIFIED SEED
Send Coupon Today!*

*The Kansas Crop
Improvement
Association*
MANHATTAN, KANSAS

Kansas Crop Improvement Association
Kansas State College, Manhattan, Kan.

Please send me without obligation a copy of
your most recent seed directory.

Signed.....

Address.....

.....

THE KANSAS *Agricultural Student*

Vol. XXIX

May, 1953

No. 6

EDITORIAL STAFF

Dick Fleming Editor
Herb Lee Associate Editor

ASSISTANT EDITORS

Diane Blackburn Dan Henley
 Hayes Walker

PHOTOGRAPHERS

Dick Steffens Bob Ecklund
 Nick Kominus

FACULTY ADVISER

Stan Creek

BUSINESS STAFF

Chuck Bellman Manager
Walter Schoen Assistant
Warren Shaw Assistant

ADVERTISING STAFF

Bill Bergman, Leonard Slyter, and
Hayes Walker

CIRCULATION STAFF

Wayne Walter Manager
Paul Barber Assistant

STAFF REPORTERS

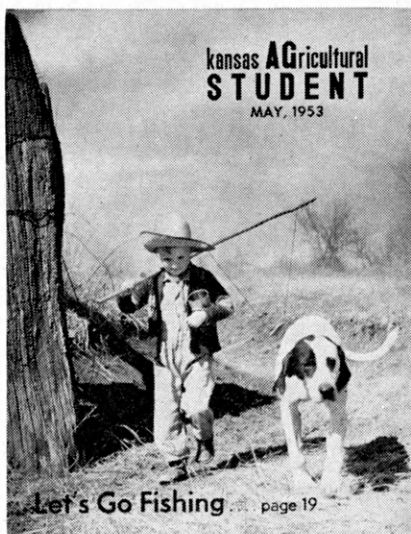
Hayes Walker, Agricultural Economics; Arlin Potwin, Agricultural Education; Tom Pettit, Agronomy; Thomas Meuser, Animal Husbandry; Joe Armstrong, Dairy Husbandry; Lois Ottaway, Horticulture; Charles Imthrun, Poultry Husbandry; Nancy Brecheisen, Veterinary Medicine; Bill Smalley, Entomology; Dan Henley, Flour and Feed Milling Industries; Helen Hamilton, Home Economics, and George R. Runge Jr., Wildlife Conservation.

Published by the Agricultural Association of Kansas State College of Agriculture and Applied Science, Manhattan, Kansas, on or before the Tenth Day of the months of October, December, February, March, April, and May. Subscription rates \$1.50 per year; 2 years for \$2.00; single copy 35c.

Entered as Second Class Matter, November 9, 1945, at the Post Office at Manhattan, Kansas, under the Act of Congress of March 3, 1879. Accepted for mailing at special rate of postage provided for in Section 1103, Act of October 2, 1917, authorized November 9, 1946.

In This Issue

Chit Chat	Dean Clyde W. Mullen	4
Ag School Angles	Herb Lee	6
Make Hens Strangers	William Jewell Elliott	9
Grow Strawberries	Herb Lee	10
Sheep Make More Money	Dan Henley	12
Ag School Constitution		14
Cooking at Home	Diane Blackburn	16
Royal Tops Them All	Herb Lee	18
Let's Go Fishing	George R. Runge Jr.	19
News Pictures		20
Hoof Trimming Table	Edward Schukman	22
Weber Portrait		28



ON THE COVER

EVERY BOY should have a dog to grow up with and a farm to grow up on, and if the farm should happen to provide a fishing hole, a boy's life is nearly perfect.

Larry (Butch) Ecklund, luckily, is supplied with all the essentials. What matter that the fishing hole is a farm pond, as long as it supplies plenty of "small fry" perch and bullheads, enough to delight the heart of any true fisherman. His old hound-dog, Ranger, furnishes more companionship and protection than his sad expression might indicate. Though only five years old, "Butch" has been an ardent fisherman for the past two summers.

Editorial . . .

ONE THING STANDS out plainly in the predicament farmers of the Blue Valley are in as construction on Tuttle Creek Dam goes on and farm after farm is gobbled up. That is the power of a few men to control the destiny of a people. In this way, Tuttle Creek Dam is a test of our democracy to see if it is still guided by the principles our forefathers set down. The recent cut in appropriations may slow construction of the dam, but the real test will be whether another rump congress can put through another last minute bill like the one that started construction on the dam.

Men in responsible positions who know the facts about big dams report that Tuttle Creek cannot do the job. The report from the Kansas Industrial Development Commission's committee shows that dams already completed in the state gave only local protection in the big flood of 1951. While backing soil conservation in principle, they say watershed programs could not have stopped the 1951 deluge either.

The president's Missouri Basin commission says to stop Tuttle Creek too. The Kansas City program cannot be solved by providing more and bigger reservoirs. The present justification for Tuttle Creek and other similarly situated reservoirs must be seriously questioned.

Isn't that proof enough that big dams are not the whole answer to flood protection for cities and towns up and down the Kaw and Blue Valleys? The truth of the matter is that we need small dams, terraces, and other soil conservation practices to stop the rain before it starts washing the soil towards the river. In some cases dams may be necessary to supplement conservation practices when a deluge like that in 1951 occurs.

Many experts agree on these points, but the Blue Valley and many other areas in the United States are experiencing the effects of what powerful pork-barrel legislation can mean. People in every state in the nation are being subjected to similar situations of losing their homes and farm lands, and, most important of all, their individual liberties. Nothing but a wholehearted grass roots movement can do anything to stop such a program.

After having government policies shoved down their neck a few times, farmers and others soon lose interest in their government. Actions like voting through wasteful big dam projects stifle individual initiative and resourcefulness.

We Americans cannot afford to sit back and let the principles our forefathers fought for be shelved in favor of power politics. Instead we must start from the bottom and work right up through our government, breaking up secret agreements and alliances which work to the detriment of the people in this country. Only then can Americans everywhere continue to live in peace and harmony as the fathers of this country destined it to be.—df



Photo Credits

BOB ECKLUND, cover, page 2; KSC News Bureau, page 4; Dr. A. M. Guhl, page 9; KSC Horticulture Department, pages 10, 11; Kansas Agricultural Experiment Station, pages 12, 13; Dick Steffens, pages 15, 16, 17; Royal Purple, page 18; Dick Steffens, page 18; Floyd Hanna, page 20; KSC Animal Husbandry Department, page 28.

*Give the
newest for*

Graduation
at
The College
Drug



Point never
dunked...
never gets
messy

Sheaffer's
SNORKEL® PEN

Give the pen with the point that never touches ink. Just twist—filling tube reaches out to drink the ink. Touch down—pen fills instantly. Twist—tube retracts. Point is always clean—never needs wiping. There's nothing newer, nothing smarter, for every gift occasion.

Sheaffer's Valiant Snorkel Pen \$17.50
Other Sheaffer Pens from \$3.75

**COLLEGE
DRUG**

in Aggieville

Chit Chat

By Dean Clyde W. Mullen



Dean Mullen

THERE MAY BE a lot more inter-fraternity, political rope-pulling going on than we know anything about (we are naive that way), but at the April 9 election of Ag Association officers, the hatchet was buried deep, deep, deep.

One of the strongest speeches supporting the nomination of a candidate for an important office was made by a member of Farm House fraternity in support of an Alpha Gamma Rho man.

Independent men were supporting fraternity men for certain offices. Fraternity men were supporting independent men for one very important office.

That is the way it ought to be in matters affecting the Agricultural Association and its officers. We need to elect men well-fitted for each job,

and let fraternity chips fall where they may. Of course, in the recent election, everyone could have voted under blindfold and no mistakes could have been made. It was a strong and competent "slate." And no single fraternity, no fraternity-combine, no independent group is inclined to crow, "We won." The Agricultural Association members won. And the process was democratic!

Procedure Questioned

When it came time to vote on amendments to the constitution, the president of the Agricultural Association (with the approval of the faculty sponsor) wished to save time in counting the votes by suggesting that the sentiment of the group be tested by show of hands. If it had

been apparent that a clear three-fourths majority favored the amendments, the chair would have declared the amendments approved.

Then, from the gallery came a challenge to the procedure. Could the presiding officer determine with accuracy and certainty that less than one-fourth of the members present were voting against the amendments?

Although it was not anticipated there would be opposition to any of the amendments, the chair was quick to realize there probably was merit in the challenge and at once instructed the voters to mark their ballots. All amendments carried by more than a three-fourths majority.

Gene just couldn't sit there and let us man-handle a constitutional amendment in a manner that was in violation of our own constitution and in a manner that could not be supported by Robert's Rules of Order. If took a bit of courage to challenge the procedure, but Gene did it in a nice way. We all had a good lesson in PARLIAMENTARY PROCEDURE.

Royal Mementoes

We have extended our congratulations to everyone we have met, faculty member or student, who had anything to do with the Little American Royal of 1953. It was a great event, and, as usual, everything was bigger and better. There were more entries (approximately 150), more classes, more showmen, and a larger crowd.

It might be of interest to calculate

(Continued on page 24)

We Buy

CATTLE and HOGS

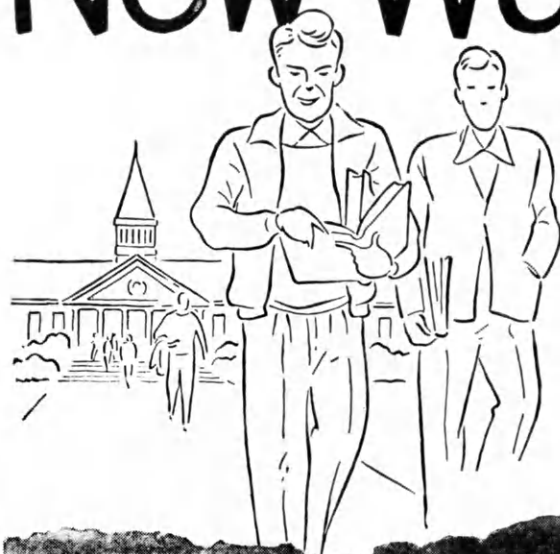
Also producers of
Ranchouse Meat Products

Buyer: L. R. Northern—Phone 6353

**C-K PACKING HOUSE
COMPANY**

Salina, Kansas

New Ways.....



OF FARMING FOR THE NEW GENERATION EAGLE HITCH Farming



There was a time when skipping off to the big city seemed the smart thing for the farmer's liveliest boys to do while their less venturesome brothers stayed home to till the stubborn soil. That is no longer true.

The fast-growing mass of technical knowledge the farmer must have and use takes a mind that works fast, sees ahead, ties loose ends together.

Such a superior mind is the product of the training and experience you are getting right now in the field, in laboratory and class. Insecticides, fertilizers, defoliant. Crop drying, herbicides, hybridization. Hydraulics, theoretical hitch points, lines of draft. New methods and new machines challenge old habits, promise new rewards. A brilliant, almost revolutionary approach to all manner of farm work is Eagle Hitch Farming. A mighty stride in conserving soil and increasing crop yields, in making every man-hour more productive, it answers the aspirations of your generation.

The Case Eagle Hitch Hammer Mill takes but a few minutes to mount on the tractor—no belting up, no staking down. Lift it with hydraulic power and zip away to the job. Dozens of other Eagle Hitch Implements make Eagle Hitch Farming the most exciting farm equipment advance of a generation. J. I. Case Co., Racine, Wis.

CASE

SERVING AGRICULTURE
SINCE 1842

Ag School Angles

By Herb Lee

WHO SAYS FARMERS are dumb? If that's your opinion, then don't let these two brains hear you.

They are J. Elton Zimmerman, Animal Husbandry, with a grade point of 2.809 and John R. Brethour, Agriculture, 2.76, who won the Gamma Sigma Delta award for top senior and sophomore in the Ag School, respectively.

Gamma Sigma Delta, national honorary agriculture society, annually elects to membership the top 10 percent of the graduating class in the Ag School and when someone with an exceptionally high record comes along he is honored. The sophomore is honored on the same basis.

Special recognition for their contributions to the field of Agriculture went to Dean A. D. Weber, and to

Roy Freeland, Secretary of the State Board of Agriculture, a K-State grad of 1937, at a recent banquet.

Red Faced Aggies

Everything happens to an Ag Journalist! When a group of them were returning from Kansas City where they attended the Kansas City Press club banquet for Sigma Delta Chi members at the Muehlbach hotel, Dick Fleming, a senior, driving Stan Creek's car, got on the wrong road. He drove eight miles before anyone noticed it.

But Fleming has nothing on Everett Browning, another senior. Browning and two of his colleagues got locked in a filling station restroom in the wee hours of the morning. Oren Campbell, technical journalism student, slept away in the car near by while the boys pounded on the door for 45 minutes before help came.

Fortified Corn Cobs

Don't waste your corn cobs! Fortified corn cobs, when fed to growing beef cattle, have about the same energy value as prairie hay.

Corn cobs are deficient in protein,

minerals, vitamin A, and low in available carbohydrates, but these deficiencies can be met with supplementary feeding. Purdue Supplement A is one of the most efficient supplements to bolster the nutritional level of the cobs. This supplement aids the rumen bacteria in breaking down the cobs to a more digestible state.

Best results have been obtained when the cobs were ground by using a one-half to five-eighths screen to make them small enough to be handled easily by the cattle. Experimental results indicate that other roughages should be fed for the most complete utilization of the ground cobs.

Although cobs are fed mainly for growing and wintering cattle, there are a few instances where they are used for fattening purposes. Cobs are equal to one-half to two-thirds of the feeding value of the total ration. When cobs are used in a fattening ration the cheapest gains are produced when low grade cattle are fed over a long feeding period.

VE Strikes Again

The hog disease that gave college

(Continued on page 24)



Sunflower Sam Says:

"This is for the farmer who plans—"

An insurance program with the world's largest farm organization—

FARM BUREAU

• **BUILD A STRONG LINE OF PROTECTION** •

Auto-Truck-Combine

Farm Liability

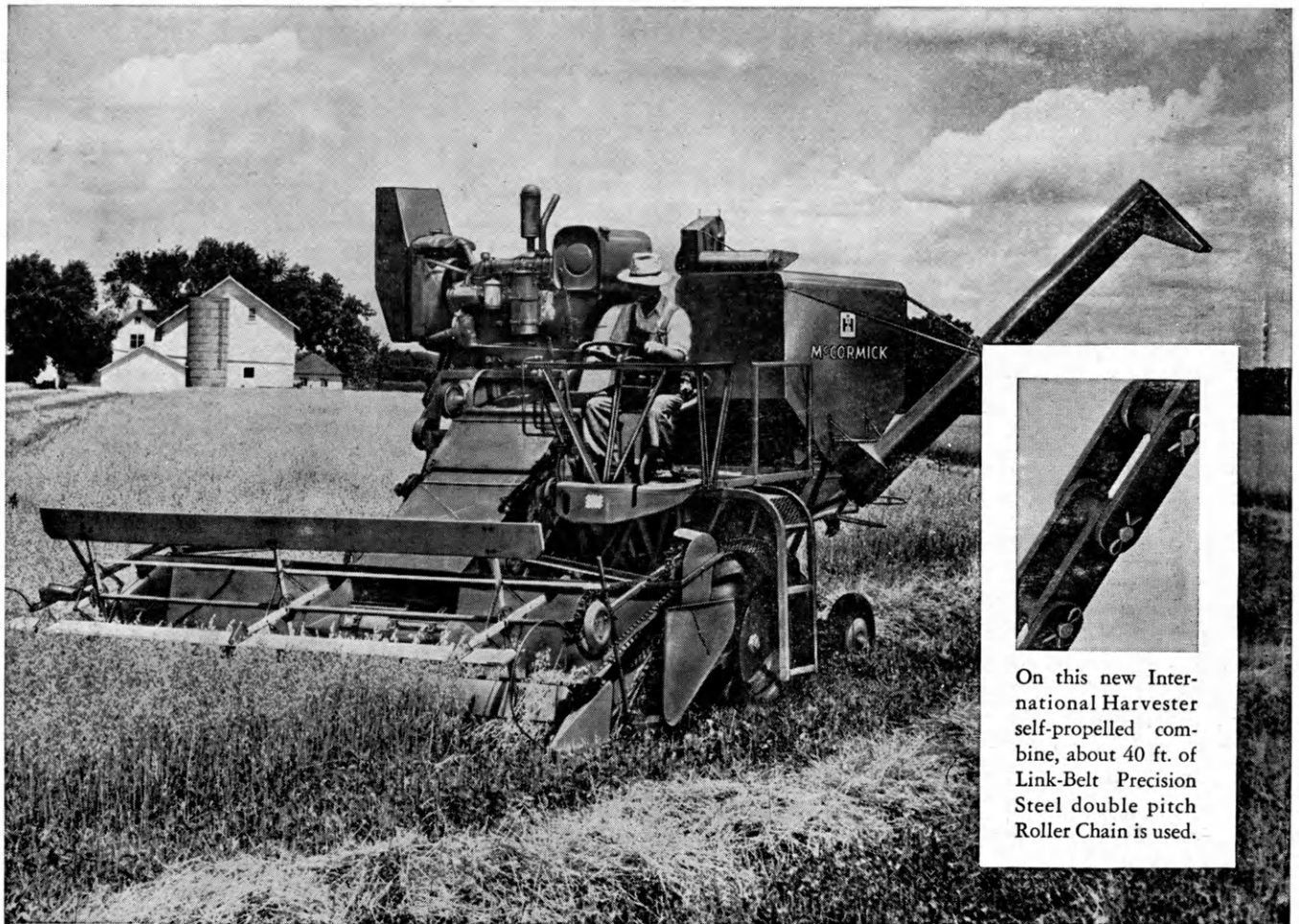
Fire and Windstorm

Life Insurance

See your own county General Agent

Farm Bureau Mutual and Kansas Farm Life Insurance Companies Inc.

Manhattan, Kansas



On this new International Harvester self-propelled combine, about 40 ft. of Link-Belt Precision Steel double pitch Roller Chain is used.

If today's farm machines depended on yesterday's drives...

WITH "yesterday's drives," the modern farmer could not approach the production he achieves with his present equipment. And before a designer can submit a faster, larger-capacity machine, he must have drives that will transmit the greater power where it's needed at higher speeds. These drives, as well as conveyors, must be smooth, positive, long-lived, unaffected by weather.

This is where Link-Belt research and engineering play an important part in making farming easier and more profitable. The extra wear built into every length of Link-Belt Chain, for example, is the result of continuous field and laboratory testing. It pays off in delivering smooth, trouble-free power to the

cylinder and auger of a combine . . . to the wagon elevator of a corn harvester . . . on many another demanding job.

Since 1875 Link-Belt has worked hand-in-hand with America's manufacturers to step up farm production. Today more than 300 of the leading builders of farm machinery utilize one or more types of Link-Belt Chain.

LINK-BELT

CHAINS AND SPROCKETS

One source . . . one responsibility for materials handling and power transmission machinery



THIS NEW AUTOMOTIVE LABORATORY at Standard Oil's Whiting Research Laboratory

is now in operation testing and developing new and improved gasolines and lubricants.

They help design the future

• In the laboratories of today, the world of tomorrow is taking shape—test by test, experiment by experiment.

What man will be capable of in years to come, how he will work and play, how he will travel, all depend to a large extent on the fuels and lubricants that will power the machines of the future.

More than a quarter of a century ago Standard Oil opened its first automotive laboratory, and from time to time has enlarged the facilities.

Now Standard Oil has added still another unit. The new building located at Whiting, Indiana, is devoted entirely to the testing

and development of automotive fuels and lubricants.

Full-scale testing is conducted in a room containing every needed facility for the measurement and control of operating conditions. The test engines include the principal types used today or anticipated for the future. Each of 16 engines, with its dynamometer, is mounted on a separate concrete foundation, isolated from other parts of the building to eliminate vibration.

In the expansion of our laboratories, young technical men find evidence that the challenge of the future, with its stimulation and rewards, is being met at Standard Oil.

Standard Oil Company

910 South Michigan Avenue, Chicago 80, Illinois



Make Hens Strangers

WANT TO KEEP egg production up? Then take hens out of your flock when they get real sick, lose feathers around the head and neck region, or when their combs become pale and shriveled.

Why? Because hens recognize each other by features of the head and neck region. When there are changes in this region they start fighting. To prove it just leave an open can of oil or paint around the chicken yard and watch the wild fight that develops after one of the birds sticks her neck in the stuff.

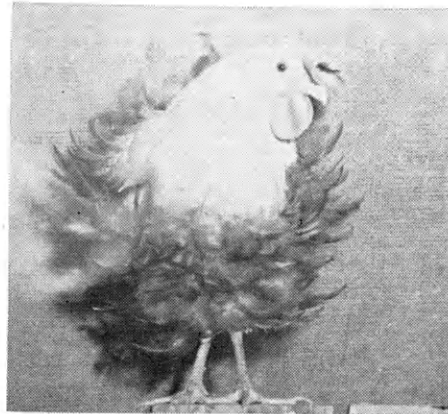
To find out these facts, Dr. A. M. Guhl, of the Zoology department at K-State, watched a group of hens for some time, noting the peck order. Once the "boss of the flock" was determined, the remaining positions were filled by the winners of the pecking until only the sad "private" remained in the lowest position of the peck order.

Then Guhl chose a hen near the middle of the peck order. He chose this bird because she would be pecked by hens above her in the order and in turn would chase and peck the hens below her if they did recognize each other. If, on the other hand, the hens did not recognize the bird, a fight would start immediately after the stranger was placed in the flock.

Neck Feathers Do It

Guhl added various colored feathers to the tail region of the bird he chose, to begin the experiment. When put back in the flock, the bird was still recognized by the other chickens. Then he removed the bird, making changes in the feathers farther forward on the back and under side, each time returning her to the flock. Finally he placed extra colored feathers around the base of the neck.

When put back in the flock, all the chickens crowded into one corner of the pen to keep away from this stranger. At no time was she at-



ALTHOUGH this hen looks unnatural, she was recognized by others in the flock because her head and neck were not changed.

tacked. This proved there was a total loss of recognition and all the other hens in the flock were afraid to peck this new "boss of the flock."

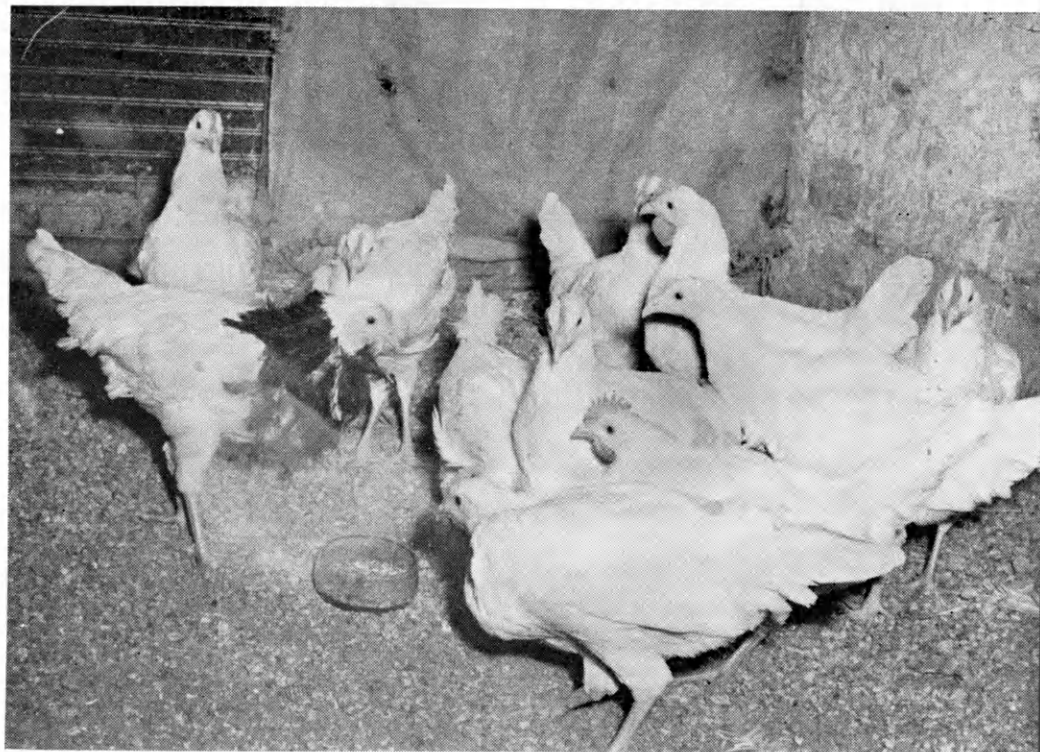
By continuing to change the appearance of the head and neck region,

Guhl discovered that the greatest loss of recognition was caused by changing the comb. This he accomplished by using false combs and scotch taping the original comb into different shapes. A comb shaped like a cone seemed to give the most remarkable and noticeable loss of recognition.

Guhl also has found that a gradual change of color or shape in the head region does not cause any loss of recognition. Only sudden changes make the difference.

Fights do not always occur when there is a loss of recognition, however. Guhl explains that strangers sometimes may look too tough to whip and the rest of the flock may decide to let the stranger become the new boss. This is similar to an Indian chief dressed in war paint and feathers to frighten the enemy.

These findings which prove that hens do recognize each other make it more important to remove sick hens before they disturb the entire flock by not being recognized. Not only will egg production go down if these unrecognized birds are left in the flock, but if fights occur one or more birds may die.



THESE HENS are backing away from the hen at left with extra feathers on her neck. By noting these reactions, Dr. A. M. Guhl, of the Zoology department, has proved definitely that hens do recognize each other but only by the head or neck region.

Want a fruit fortune in your back yard?

Grow Strawberries

By Herb Lee



PICKING BERRIES in this seven-acre field is John Theden, a horticulture student at K-State. John's grandfather has been a commercial berry grower for 60 years. Kansas could stand a number of fields such as this one without experiencing a glut on the market.

HOW DO YOU like your strawberries? With ice cream? On breakfast food? As jam? In strawberry pie? On shortcake? Frozen with plenty of sugar? Or are you the type of person that likes to pick and eat ripe, red, juicy berries right from the patch?

If you have a natural craving for strawberries, then why not start a patch of berries in your own back yard? A small bed of strawberries can easily fill your needs and provide several extra quarts when the neighbors or relatives drop in. If the plants produce too much fruit for everyday consumption, the fruit can be preserved by freezing. In recent years more strawberries have been frozen than any other food. Providing you don't have the time or soil on which to grow berries, they can be purchased for a reasonable price from commercial growers during the peak of the Kansas strawberry season. Or, better yet, why not go to a nearby field and save money by picking the berries yourself?

Weed Control Difficult

Most people shy away from raising strawberries because of the weed control problem. Weed control has long been a difficult problem for gardeners and a costly one to the commercial grower. Many methods have been suggested, but using geese for eradicating weeds provides an unusual twist. Five geese to the acre are considered sufficient to keep strawberries free of weeds. Of course, in gardens the patch would have to be fenced in or the geese might devour the rest of the garden. "Geese

have never been of economical importance as weeders," R. W. Campbell, associate professor of Horticulture, said. "They're just a novelty."

Tests that Campbell has conducted show that Crag herbicide is effective for weed control if used in the right proportions. Campbell recommends not over 2 to 3 pounds per acre. A larger amount will damage the plants. The herbicide must be applied when the weeds are small to be effective.

Irrigation could do wonders for berry production throughout Kansas, Campbell explained. "Last year as hot as it was, we irrigated our test plots on the Hort farm and plants produced an excellent set of runners."

Diseases No Problem

Another talking point for strawberry production in Kansas is the fact that diseases are not as severe as in the high-producing southern areas. Leaf spot is severe during wet weather, but may be controlled by letting the plants dry thoroughly before picking berries and by spraying with Dithane or Bordeaux mixture.

To grow strawberries successfully you must select an adapted high-yielding variety. Campbell recommends Senator Dunlap for Southeastern Kansas because it is widely adaptable and has excellent flavor. Blakemore is best for the Kaw Valley, Sioux for Western Kansas, and Premier for the Northeast part of the state. After three years of breeding and selection work on the characteristics of high production and quality, and disease, drought, and cold resistance, Campbell hopes to have some new varieties to send out to test plots over Kansas next spring.

While picking berries in the garden will result in little more than a backache, obtaining labor to pick a large field is next to impossible. Picking strawberries is tedious work and it takes a good man to keep at the job all day. Campbell pointed out that the development of a high-yielding berry which produces fruit on long, upright stems would make picking much easier.

In his strawberry breeding work, Campbell grows his berry plants from seed. He has a rather unique way of extracting the seed for planting. He takes a fully ripened berry and mashes it up in a small amount of sand. This sand, berry seed and all, is sprinkled in a small eighth-inch indentation in a flat of soil. The flat

is placed under a spray mist to keep the sand from drying out and it is not long before tiny strawberry plants appear.

Home patches of strawberries are found throughout Kansas and commercial production on a limited scale is nearly equally extensive. At present more than half of the commercial plantings of strawberries in Kansas is in Doniphan county. The industry is expanding in Wyandotte, Johnson, Shawnee, and Leavenworth counties.

Actually, Kansas farmers could grow berries profitably near every urban area for retail and some wholesale trade, Campbell explained. Each year berries are shipped into Kansas by the carload from other states. The berry industry could especially stand expansion in eastern Kansas communities.

The flood destroyed a large acreage of berries and the dry weather last year hurt them considerably. Berry production in Kansas declined during World War II, but jumped back up afterwards. Prices of \$8 to \$12 per 24-quart crate provided the impetus for increased production. A good yield is 5,000 quarts an acre, Campbell said. Some farmers in the Kaw Valley were reported to have netted \$1,200 to \$1,500 an acre on their berries before the flood.

One of the oldest and most experienced commercial strawberry growers in Kansas is Herman Theden of Bonner Springs. He started growing berries 60 years ago, and his son Frank Theden is carrying on the tradition with him. The flood destroyed their seven-acre field, but the growers will have five acres ready to harvest this spring and they will plant another two acres. Theden, a Master Farmer in 1927, came over from Sweden when a little boy and now is one of the largest berry growers in the state.

Grandson at K-State

Herman Theden's grandson, John Theden, a student in Horticulture at K-State, says berry growing is hard. The berries are planted with a setter pulled by mules. "We use mules, since a tractor can't be geared slow enough for successful planting," John said. Fertilizer is applied in the form of several carloads of manure. Tons of straw are used for mulch each spring.

The harvest season in Theden's



LUSCIOUS and large, this box of strawberries is typical of the good quality fruit that can be grown in your home garden.

field is one of colorful activity. Pickers are stationed over the field at various intervals. The number of pickers will vary from four to eight for each acre. It does not hurt to school pickers in such things as stage of ripeness or color to look for in picking berries, clean picking, picking by the stem instead of grasping the berry, and sorting while picking.

Pick Carefully

In picking for wholesaling the berries must not be overripe or water-soaked. Several heavy rains may ruin a crop or reduce the price considerably.

Theden set up a sorting and packing shed in his field before the flood to speed up preparation of the berries for market. They sell most of their berries on the Kansas City wholesale market, although they also have built up a good retail trade.

Here are some tips for gardeners or farmers who will be planting strawberries this spring.

A well-drained soil, but one with good water-holding capacity, is needed for strawberries. The soil must definitely be free of standing water. Sandy loams give best yields of berries. Strawberries should follow a cultivated crop, never a cereal or grass crop, since the soil will be low in nitrogen.

For gardens and commercial production, runner propagated plants

(Continued on page 30)

Sheep Make More Money

Pound for pound than any other breed of livestock

By Dan Henley

SOME FOLKS SAY sheep are a poor risk. Others say sheep are money makers. Why this difference of opinion? It's a long story that boils down to good management.

The cattleman (or any other person for that matter) who has never raised sheep will say you can spend all your time on a small flock and still they die. Those that don't die are even more trouble because they must have good shelter, the best of feed, and can always eat more than you can carry to them. The sheepman will say the same for cattle and they both will be right. For no matter whether a farmer is feeding sheep or any other kind of livestock, management is of supreme importance.

There are many good flocks of sheep in Kansas making good profits, but only because their owners know how to take care of them. There is room for many more sheep here, too, and many farmers, if they start out right, will be glad in a few years they started raising sheep.

Sheep fit well into most farm programs. They require little care during the spring and summer when farm work is heaviest and require the most attention in the winter when other work is light.

Lambing time is the most critical period of the entire year and it can be the most profitable or expensive time of year. Newborn lambs, like any other young animals, are weak

and timid. Sometimes it is necessary for the sheepman to stay up all night caring for new lambs and their mothers, but it's not hard to do when each lamb saved may be worth \$25 or \$30 in a few short months.

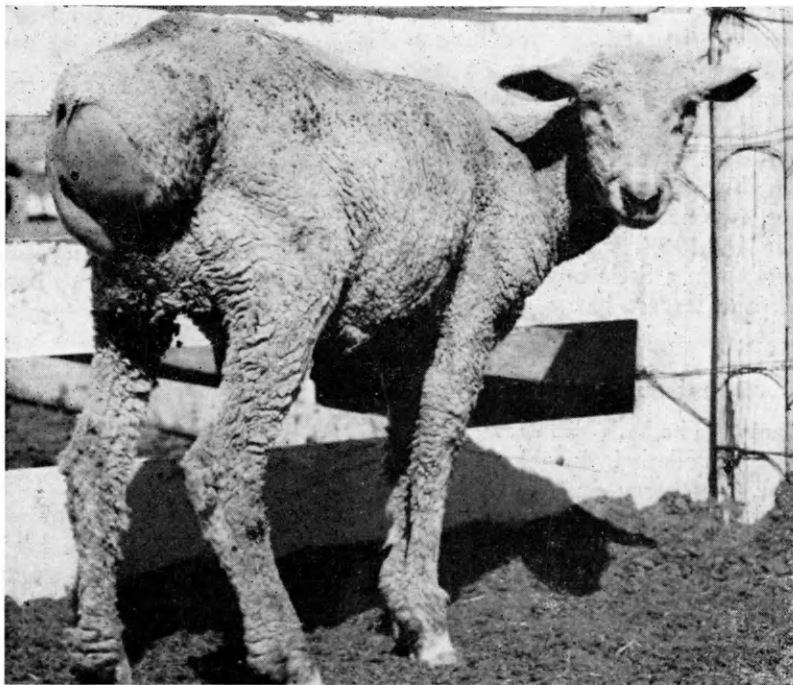
Lambs fatten easily if in good health. However, there are several diseases which can cause great losses to the sheep raiser. Fortunately, good medicines are available for most of them. Stomach worms, controlled simply by adding a little chemical to the feed, and ticks, eradicated by spraying or dipping, are examples of troublesome pests. Coyotes and dogs are always a threat to the herd, but good fences and organized hunts have reduced the danger of loss by these pests.

A favored and highly profitable sheep breeding plan in this area is a cross between the western type ewes, sturdy, alert and active with medium to heavy wool, and purebred rams of any of the three main mutton type native breeds: Hampshire, Shropshire or Southdown.

Make Fast Growing Lambs

The result is lambs that are large with good wool coats, that grow fast and are capable of fattening easily and quickly. Of course there are many other crosses which may be just as good or even better than the ones mentioned.

The branch experiment stations over the state have been carrying sheep feeding projects for several years to determine which feeds in what amounts produce mutton at the least cost. Most recent of this work has been with hormones which increase rate of gain of fat lambs. Dr.



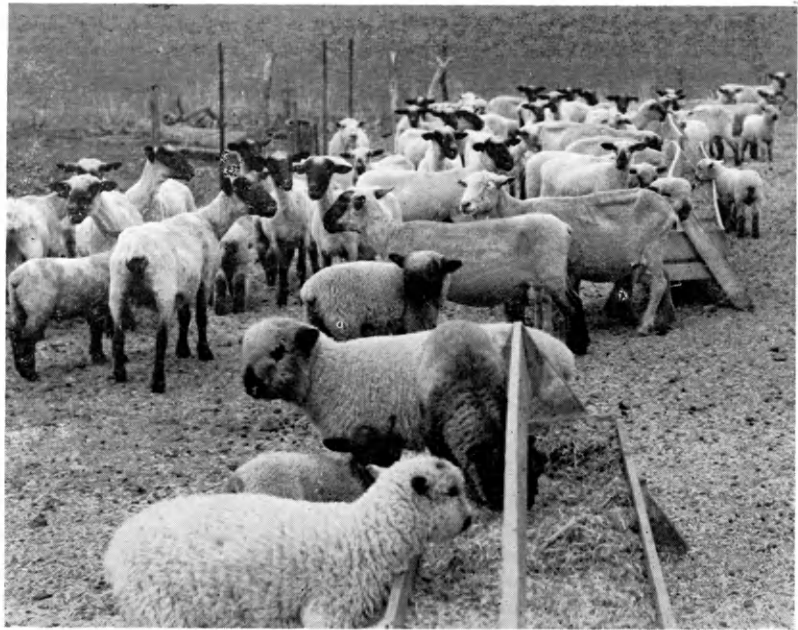
THIS WETHER LAMB shows advanced piles caused by stilbestrol, the growth stimulating hormone. It can also cause "water belly." The hormone can thus cause death by closing off the rectum and urinary bladder. Its use is illegal.

T. Donald Bell of the Animal Husbandry department at K-State says the tests show the hormone stilbestrol increases rate of gain one-third to one-half but reduces the quality of the lamb carcass.

Sheep producers are beginning to use this hormone to speed up fattening lambs. The tests conducted, however, have shown that the hormone increases the rate of mortality among lambs treated. At present, the Animal Husbandry department at the College is rushing the publication of a report on this research and is warning against using hormones in lamb feeding.

Kansas has been ranked at the top in number of lambs on feed 6 of the last 12 years. Every sheepman has his own method of fattening lambs and those in the western half of the state probably do it the easiest and most economically. Thousands of lambs are shipped in from Texas, New Mexico, and other southwestern states during the fall and are fattened on the wheat fields of Western Kansas. Little if any other feed is needed, as the lush cereal grasses supply all the needed nutrients for quick growth and high rate of gain.

Eastern Kansas supports a different kind of feeding program for the lambs. Dry feedlots where hay and concentrated grain and supplement mixtures are fed can be found in every eastern county. The lambs to fill these feedlots usually are raised on the same farm from a herd of



NEWLY SHORN Blackface ewes are the second and third cross of Hampshire and Suffolk on grade Rambouillet ewes. With proper management sheep make good returns and utilize roughages normally passed up by other stock.

breeding stock that is maintained year after year.

Another program for mutton and wool production, probably the most common in all but extreme Western Kansas, is the maintenance of a small flock of sheep as a supplement to the other farm enterprises. These flocks usually consist of 30 to 40 head of western or mixed ewes and a ram, often purebred. The lambs raised are allowed to run with the flock on summer pasture, with some grain to increase fattening rate. The lambs eat cheap feed most of the fattening

period, but are not sold until about 9 to 10 months old. Average weight is often 110 pounds for lambs produced in this manner.

The flocks which are least in number but by no means least important are the purebreds. It is in these comparatively few flocks where quality is maintained and reproduced for distribution to the common farm flocks in the form of large, sturdy, high-producing ewes and rams.

Sheep aren't a "get rich quick" proposition. Nor do most farmers expect them to be. Both wool and mutton (or lamb if preferred) are produced in Kansas. This double income from each flock, though not excessive, goes to make good profits for the time and expense of production. As yet, the price of raw wool, though not outstanding, is a desirable factor toward producing more sheep.

Poor Time Stock

There were 414,000 head of breeding stock in the state in January of this year—nearly a 50 percent decrease from the 800,000 head in 1942. Dr. Bell says when crops are good and other livestock prices high, sheep production drops as it has the last few years all over the U.S. When conditions get a little tougher, help scarcer and crops poorer, sheep start occupying the lands where other crops had been and then, just as now, they bring a good return when managed right.



ORPHAN LAMBS pose a big problem to the sheep breeder. They require considerable hand labor, but when the farmer knows that in a few short months they will be worth \$25 or \$30 it's easier to spend time with them.

Ag School Constitution

PREAMBLE

We, the students of the School of Agriculture of Kansas State College, in order to further the best interest of the School of Agriculture, to unite the efforts of the students of the School of Agriculture for more effective work, to maintain and support all meritorious student activities of the School of Agriculture, and to conduct such other business as may from time to time come before the agricultural student body, do hereby organize the Agricultural Association of Kansas State College.

Article I. NAME

Section 1. The name of this organization shall be "The Agricultural Association of Kansas State College."

Article II. ELIGIBILITY

Section 1. Any student regularly enrolled in the School of Agriculture shall be a member of the association.

Article III. GOVERNMENT

Section 1. Officers of the Agricultural Association shall be president, vice-president, secretary, treasurer, manager of the Ag Barnwarmer, and assistant manager of the Ag Barnwarmer.

Section 2. There shall be an editor of the Kansas Agricultural Student who shall be selected by a majority vote of the Agricultural Council from applicants for the position, this editor to serve a term of one year beginning on the first day of the second semester and ending with the last day of the first semester the following academic year. Said applicants must be presented to the Council not later than two weeks before the close of the first semester. The newly selected editor shall carry full responsibility, with the assistance of the retiring editor, for the publication of the Kansas Agricultural Student beginning with the March issue (1954).

Section 3. There shall be an Ag-

ricultural Council for the School of Agriculture. This Council shall be composed of one elected representative of each department or departmental club, the Student Governing Association representatives of the School of Agriculture, and elected president, vice-president, secretary, and treasurer of the Agricultural Association and one faculty adviser appointed by the Dean of Agriculture. The elected officers of the Agricultural Association shall act as officers of the Agricultural Council. The editor of the Kansas Agricultural Student shall be an ex-officio member of the Council, without voting privilege.

The Council members shall be departmental majors and qualified according to the Student Governing Association constitution and by-laws.

Candidates for the Council shall be nominated by petitions carrying a minimum of fifteen signatures of Agricultural Association members. Said petitions must be submitted to the respective departmental heads at least five days prior to the election date and posted. Members of the Council shall be elected respectively

THE SOIL

Smell the soil freshly turned now
Into the warming sun of spring,
Drink in its fragrance and give
thanks
That again it is awakening
To raise the crops for a hungry
world.

—Herb Lee

at departmental seminars sponsored by the student departmental clubs. Those members of the Agricultural Association who have declared their majors shall vote in their respective departmental seminars, and all other Association members may vote in any one departmental seminar. Announcement of the meeting at which the election shall take place shall be posted at least three days prior to the

meeting, and shall clearly state that the Agricultural Council representative is to be elected, and that any departmental major is eligible to vote at this meeting.

These seminars shall be on or before the second Thursday of April, at which elections the presidents of the respective departmental clubs shall preside. Agricultural Education majors shall be recognized as an agricultural department in connection with the Council Election.

This Council shall function as a policy-developing group concerned with interschool affairs and relations, and agricultural student matters. Minutes of each meeting shall be filed with the Dean of the School of Agriculture and a copy shall be posted on each departmental bulletin board.

The Agricultural Council shall meet at least twice a month, or as called by the president of the Council.

Section 4. No person shall be eligible to hold office who has not been a member of the association for two semesters.

Section 5. Officers of the association shall be nominated, two for each office, by a nominating committee. Nominations may also be made from the floor on the day of election.

The nominating committee shall be made up of the presidents of all the departmental clubs of the School of Agriculture, including the Agricultural Education Club, and the Plow and Pen Club, whose terms expire during the second semester of the current college year, and including the members of the Agricultural Council as described in Section 3. The nominating committee shall elect its own chairman from its own group.

Nominations shall be made at least 10 days before the date of election and shall be published in the Kansas State Collegian on Tuesday before election on the following Thursday.

Section 6. Election shall be held at the regular meeting of the Agricultural Association in April.

Officers shall be elected by ballot which shall bear the names of the candidates who have been nominated by the nominating committee and shall provide space for the write-in of any nomination that may be made from the floor on the day of election.

Section 7. Newly elected officers shall be presented to the assembled members of the Agricultural Association in May and shall take over the duties of their respective offices at that time, except—

The editor of the Kansas Agricultural Student who shall take over the duties of his office as prescribed in Section 2.

Section 8. If any office of the Agricultural Association or of the Agricultural Council becomes vacant, the nominating committee consisting of the presidents of all departmental clubs at the time of the vacancy and members of the Agricultural Council shall nominate two persons as candidates for such vacated office, and these nominations shall be voted on by ballot at the next regular meeting of the Association. Nominations to fill such vacancy may also be made from the floor on the day of election.

Article IV. DUTIES OF OFFICERS

Section 1. It shall be the duty of the president to preside at all meetings of the association, which meetings shall be concurrent with regular meetings of the Agricultural Seminar, and to preside at meetings of the Agricultural Council, sign all orders and other documents of the association officially drawn by the secretary, and call special meetings of the association and the Agricultural Council.

Section 2. It shall be the duty of the vice-president to assume the duties of president in the absence of or at the request of the president.

Section 3. It shall be the duty of the secretary to keep the minutes of the meetings of the association, and the Agricultural Council, to issue all orders, and assist with the checking of student attendance at Agricultural Seminar, and perform such other duties as the office of secretary may require.

Section 4. The manager of the

Ag Barnwarmer shall appoint a chairman of such committees as he may designate to assist him in promoting the event and shall call on the assistant manager to assist him in such a manner as may be necessary in the training and experience of the assistant manager. The assistant manager will be considered a likely candidate for manager in the year following his service as assistant manager.

The treasurer of the Agricultural Association shall serve as treasurer of the Ag Barnwarmer and have charge of ticket sales.

Section 5. The editor of the Kansas Agricultural Student shall appoint an associate editor and business manager.

The editor shall be responsible for editing and publishing six issues of the Kansas Agricultural Student per year, two in the fall and four in the spring.

Section 6. It shall be the duty of the Agricultural Council to assist in promoting all divisional student activities.

Section 7. It shall be the duty of the Agricultural Council to transact the business of the association, subject to modification after referendum petition has been submitted to the president, which petition is signed

by 25 percent of the members of the association.

Article V. AMENDMENT

Section 1. This constitution may be amended by a three-fourths vote of the members present at a meeting of the association, provided that such amendment shall have been presented at the previous meeting of the association.

BY-LAWS

Article I

This association shall convene for special meetings at the call of the president.

Article II

A quorum shall consist of 100 members.

Article III

Dues of this association shall be included with and made a part of the regular Agricultural Seminar fees and shall include a subscription to the Kansas Agricultural Student.

Article IV

In all cases not covered by this constitution and by-laws, Robert's Rules of Order shall be the standard of authority.

Seven Spokes . . .



"BIG WHEELS" in the Ag Association. Left to right, sitting, Leonard Slyter, asst. Barnwarmer manager; Warren Prawl, vice-pres.; Harold Reed, Barnwarmer mgr.; Walt Shoen, sec. In back Dick Brown, pres.; Dick Pickett, treas.; and Herb Lee, Ag Mag editor.

Cooking at Home

By Diane Blackburn

ECONOMICAL!!! I should say!" exclaim Ag students who have set up housekeeping while going to college. Aggies find that \$20 a month is plenty to spend on food, that is, if they cook their own meals.

The hardest part about doing your own cooking is washing the dishes, says John Markley, who keeps house with Jim Murray, a pre-vet student. "We have a pretty good system, though. Whoever gets home first does the cooking and the other one does the dishes. We have classes at different times so the cooking and the dishes come out about even."

Monte Dutcher, Jim Heath, Jim Lowder, and Jack Conover, all Aggies, have a small place, only nine rooms, Dutcher says laughingly. Two of the boys do the cooking and the other two wash the dishes. At

noon the fellows fix a light lunch and have a heavy meal in the evening. Roast, steak, and other meat dishes are always on the menu for the evening dinners.

Steer Cuts Costs

"First semester we bought a steer and put the meat in the locker so that helped us cut down on meat costs," Dutcher says.

The Slyter brothers, Damon and Leonard, and their cousin Dean Slyter stay in a small basement apartment and do their own cooking. They take turns cooking and each fixes his own breakfast and lunch. The boys say they are gaining weight as they eat twice as much as they would if they ate in a cafe and find it more economical.

"One think I can't fix is gravy," says Damon. "Dean is the specialist on making gravy so we always let him fix it."

Spare the Broom

When asked how they manage to keep their apartment tidy they say that every once in a while all three of them get together and clean it. But, they are afraid they don't get together as often as they should.

"We haven't had any Home Ec courses, but the course in meats in the Animal Husbandry department has helped us cook meats. We cook meats many different ways and enjoy doing it, too," Dean says.

Lloyd Christie takes great pride in fixing cocoa. He takes great pains

to get the right amount of ingredients, reports his roommate.

John Bradshaw and Larry Henry find that they can eat on a dollar a day easily. Larry and John, however, each does his own cooking, as neither can fix foods to suit them both. John likes his meat well-done while Larry prefers it rare. Each likes his eggs fixed differently, so they get along fine by each cooking his own food.

One week John cleans the apartment and the next week it is Larry's turn. "It always seems to rain the week when it is Larry's turn so he has the mud to clean up," John says.

Delivery Saves Money

"We have the milk delivered so we save a few pennies that way, too," John adds.

Maynard Englebrecht, Dick Talbot, Ed Larson, and Boyd Forester also find it economical to do their own cooking. They fix all their own meals except on Sundays and special occasions when they eat at the AGR house.

The boys say they clean the thirty-first of each month, whether their apartment needs it or not.

A College greenhouse provides a unique apartment for Bob Layton, John Theden, and Gene Campbell. They have a room in the back part of the floriculture greenhouse. They work in the greenhouses and do their own cooking in their apartment.

"We always have meat, potatoes, salad, a vegetable, drink and dessert at every meal except breakfast. We



DINNER'S OVER and it's time to do the dishes. Dutcher washes the dishes while Aggies Lowder and Conover do the drying.



TONIGHT, DINNER will be served from the oven by these boys who do their own cooking in a nine-room house. Jim Heath is holding the lid while Monte Dutcher adds potatoes to the roast. Jim Lowder seems to be trying to add a little salt while Jack Conover enjoys overseeing fixing of dinner.

fry fish quite often, which helps cut down on the budget," Campbell says. He likes to fix the salad but hates to fry fish.

After trying to keep house Bill Frizell has decided that the woman definitely has a place in the home. He believes that there must be an easier method of keeping house than the system he and Joe Compton, his roommate, have adopted.

Instead of taking turns washing the dishes and cooking as it seems most of the Aggies do, Bill does the cooking and Joe washes the dishes.

After a successful hunt last fall, they have been having venison which aids in cutting meat costs.

Veteran Cooks Meals

Jim Marstall, who was a cook in the Army, prepares the meals for Aggies Gary Krause and Cecil Rhoades. Jim believes he's getting the boys well oriented in the art of

cooking so they can take over before long. These boys also do their own washing and ironing.

Some of the other Aggies who are practicing a little home economics are Max Zahner, Al Smith, Jerry Shadowen, Bob Ecklund, Milton Wendland, Jim Andrews, Tom Miller, and Meredith Willodean.

It all adds up to the fact that if you can do your own cooking and don't mind washing the dishes, an apartment with kitchen privileges can really cut your living costs while you go to college. These Aggies have proved it.

A motorcycle cop pulled up beside a car parked on a country road in the wee small hours of the morning.

"Hey," he yelled. "What business have you got to be out at this hour of the morning?"

"This isn't business," came a voice from within. "It's a pleasure!"



LOOK OUT, MAYNARD, that pan's hot! It is being taken from oven by Maynard Englebrecht as Bo Forester stirs the gravy.

Tops Them All

PARADING TO THE music of the Clay Center high school band, 150 contestants clad in white coveralls or blue jeans and work shirts proudly led their well-groomed animals into the Field House for the 25th birthday of the Little American Royal March 28.

Leading the grand entry before 5,000 persons, the largest Little Royal crowd in history, was Captain Robert Borg and his dancing dressage horse.

It was the colorful entry parade and Borg's entertainment that made this a better show than previous ones, Warren Prawl, chairman of the event, said.

Grand champions of the Livestock and Dairy divisions of the Little Royal were John Brink, a freshman in Agriculture from Le Roy, and Harold Tuma, a sophomore in Agriculture from Narka.

Ray Sis, an Animal Husbandry senior from Belleville, won the reserve championship in the Livestock division and Ernest Butell, an Agri-

By Herb Lee



THIS LAZY HOG apparently doesn't know 5,000 people are watching him. Contestants used brushes and canes on animals.

culture freshman from Baldwin, won the reserve award in Dairy.

Brink showed an Angus heifer and Sis a Duroc hog in the Livestock division sponsored by the Block and Bridle club. In the Dairy division, sponsored by the Dairy club, Tuma won with a Holstein cow and Butell with a Guernsey.

A thrilling moment of hesitation before the judging started gave contestants and spectators time to take a full view of the splendor of the Little Royal. The centerpiece, a silver cup with the letters "25" inscribed beneath appropriately marking the anniversary of the Royal, provided the nucleus of pomp. Ringmasters in tuxedos and judges in dress suits were most noticeable prancing around the four rings of animals. And the purple and white of Kansas State hung in drapes around the arena. A special section for celebrities was decked out in flags of various



PRESIDENT EMERITUS F. D. Farrell presents Harold Tuma with the grand champion award in the Dairy Husbandry Division.

countries. Amid it all band music set the proper atmosphere.

The show progressed rapidly, interrupted only by two performances by Borg and his dancing horses. Borg's trim animals floated to the music, performing their steps like polished dancers, bringing waves of applause from the crowd.

Millicent Schultz, Home Ec freshman from Pawnee Rock, drew the numbers for four purebred gilts that were awarded to FFA and 4-H club members.

Phil Wiederholt was grand champion in the sheep division and Loris Lugenland reserve champion. In beef cattle John Brink was tops and Hugh McDonald was reserve. Ray Sis won the hog division and Dick Pringle was runner-up. Max Teeter was top man in horses.

On the dairy side Walt Schoen was grand champion of the Ayrshire division and Joe Armstrong was reserve. Guernsey champ was Bob Stutz followed by Duane Traylor. In the Jersey breed Jerry Thompson won the top award and Clarence Dreger took reserve honors. Harold Tuma won the Holstein division award and Allan Phillips was reserve.

Judges at the show were Fred Foreman, Columbia, Mo., and Ivan Strickler, Iola, in the Dairy division; R. M. Karns of Newton judged swine; Fred Paulsen of Zenith, sheep; Frank Wilson of Brookville, beef cattle; and E. J. Gutschenritter of Garden Plain, horses.

The grand champion awards were made by F. D. Farrell, president emeritus of K-State; Walter Atzenweiler, Kansas City, Mo., commissioner of agriculture, placed the final contest.



JOHN BRINK receives the grand champion award in the Block and Bridle Division of the 25th annual Little American Royal.

Let's Go Fishing

By George R. Runge Jr.

ARE YOU ONE of those Aggies or farmers who has to travel 50 miles or more to a crowded, over-fished lake or river? And then the crawdads, turtles, and little fish nibble away all your bait? You come home empty handed and mad at the world in general.

All this is needless. Ever think of stocking that pond down in the pasture? It can be done easily and cheaply and then there'll be fishing for the whole family, especially for that overworked college Aggie when he comes home for the weekend.

First, let's consider the kind of fish you will want in the pond. They should be adapted to pond life, be able to reproduce, and maintain their numbers. They must be desirable to you, the fisherman, for food and sport and be able to maintain a balance with their food supply and other species of fish.

Fish To Stock

The following species and numbers of fish per surface acre are recommended for Kansas ponds. They are: 100 bass plus 300 bluegills, for clear water; 100 bass plus 100 crappies plus 300 bluegills for slightly muddy water; 100 bass plus 100 channel catfish plus 100 crappies for muddy water; 200 channel catfish alone; or 100 bass plus 300 bluegills plus 100-200 bullheads if desired. These fish are fingerling size.

The bluegill is the sunfish that should be stocked in Kansas ponds. Other varieties of sunfish such as green, orange spotted, and long provide too many offspring for bass and other fish to utilize as food. Thus they multiply too rapidly. They may be caught on wet and dry flies as well as the common earthworm or "fishing worm." Some tempting baits to the bluegill are wasp-grubs, crickets, cutworms, and grasshoppers. Blue-

gills are excellent fish for ponds and are good eating. Occasionally bluegills weighing two pounds are caught, but for the most part fish weighing three to eight ounces are predominant. The bluegill lives mainly on insects that live in the water. However, they do feed on smaller fish sometimes, including their own young. They are very prolific, producing from 2000 to 10,000 or more young.

Fighting Fish

Bass are considered one of the gamest fish and are well adapted to ponds. They are taken mainly on wet and dry flies. Among the live baits used, minnows are the most important, while grasshoppers, worms, crayfish, frogs and other live baits may be very effective. Bass weighing over 10 pounds have been caught, but the average size runs from 12 ounces to 2 pounds. Young bass feed on water-fleas, water insects and other small animals while the larger fish feed on small fish, crayfish and frogs.

Crappies are a less desirable fish than the others but are suitable for ponds. They prefer deeper water than either the bass or sunfish. The crappie does not put up as much fight as the other fish. They are caught largely on minnows, although fresh chunks of fish and other baits are used. The flesh is soft but has a good flavor. Crappies that weigh five pounds have been caught, but the average weight is from four ounces to one and one-half pounds.

Catfish, both channel and bullheads, are very popular fish in Kansas. Catfish attain a very large size and the flesh is considered very palatable. Catfish can be caught on most of the live baits listed above. It has often been stated that channels will not spawn in farm ponds but Mr.

Seth Way, the fish culturalist of the Forestry, Fish and Game Commission, believes they will if there are suitable spawning sites. They like to spawn in logs, holes in banks, roots, and other places of this nature.

Channel cats will eat almost anything in the farm pond from vegetation and bottom debris to crayfish. Because of this it is believed that they will produce more pounds of flesh than bass or bluegills. Bullheads are partial vegetarians and therefore utilize food materials that would not otherwise be used by bass, sunfish and others.

Fish for new farm ponds, or farm ponds that have been drained, may be obtained from the Forestry, Fish and Wildlife Commission at Pratt or the U.S. Department of the Interior Fish and Wildlife Service. Application cards may be obtained at Farlington, Kansas, or post office box 1306, Albuquerque, New Mexico. The Commission will deliver fish from September to December and the applications should be made before December, as communities are usually visited but once a year. Instructions are sent to the applicant as to the meeting place and type of containers to bring.

Most Kansas farm ponds will support from 200-500 pounds of fish, while those in Alabama support only from 40-200 pounds. It is not necessary in Kansas to fertilize unless you think some benefits will be gained. Fertilization may increase the food available to the fish and may aid in the control of undesirable water weeds. Experiments have shown that infertile ponds that already contain bass and bluegills provide excellent fishing when fertilized. The disadvantages to fertilization are the cost, and the excess growth of the plants which prohibits swimming and boating.

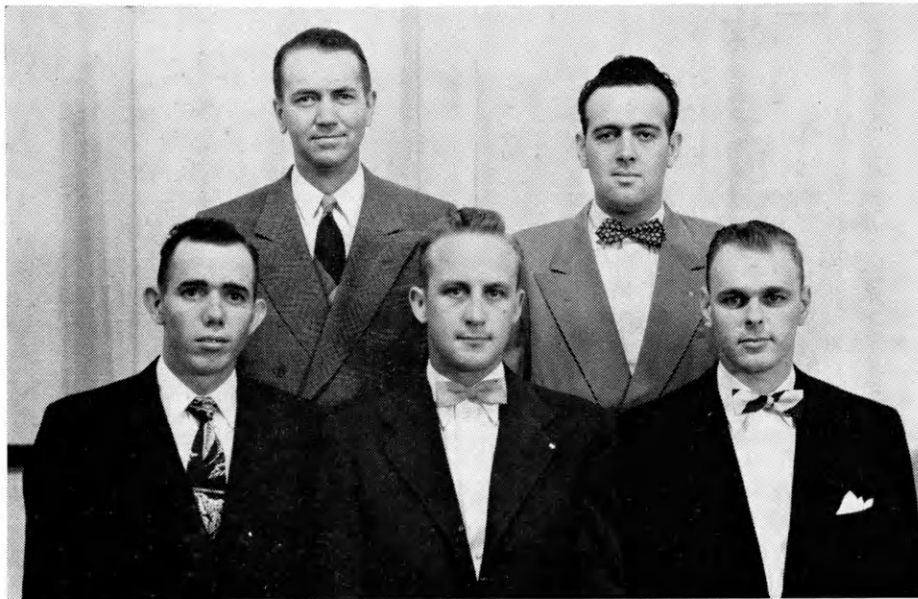
Take Fish Regularly

Once the pond is well-stocked and fish reach frying size, don't be afraid to fish when you feel like it. Ample fishing is considered necessary as a part of good management. What more desirable means of harvesting a fish crop can you find than relaxing after the work's done in the evening and catching a tasty breakfast? If no fish are taken from the pond, there will be little or no room left for fish to grow and multiply.

News

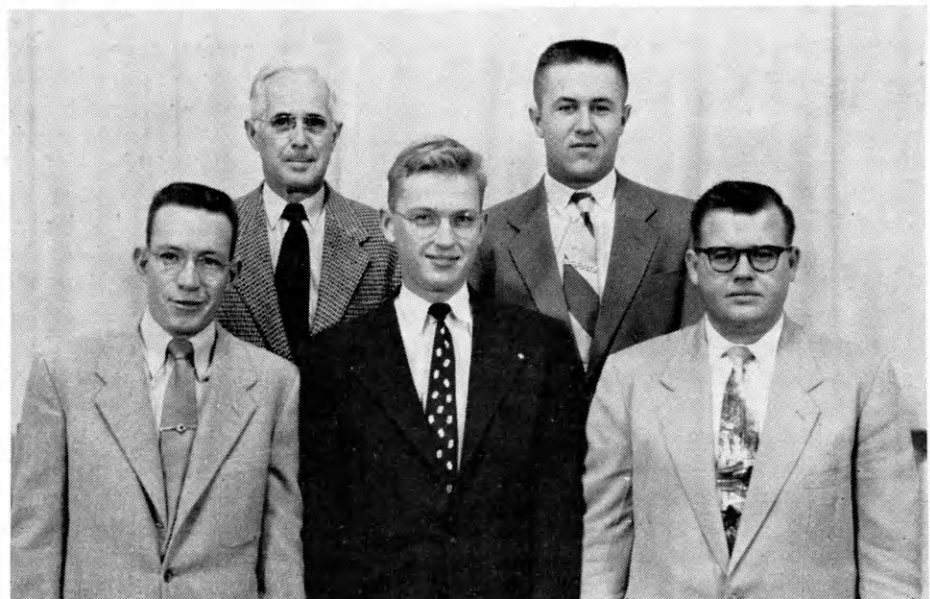
Pictures

THE FIRST SPADE of soil for the new feed technology building is being turned by John Vanier, member of the feed milling advisory committee. Looking on from left to right are: Loren V. Burns, Pres. James A. McCain, and Dr. J. A. Shellenberger.



K-STATE'S DAIRY husbandry team placed fifth at Waterloo, Iowa, this year. Team members are bottom, left to right, Joe Armstrong, Duane Traylor and Jim Schuh. Back row, left to right, are Dr. Glen Beck, coach of the team, and Glen Krumme.

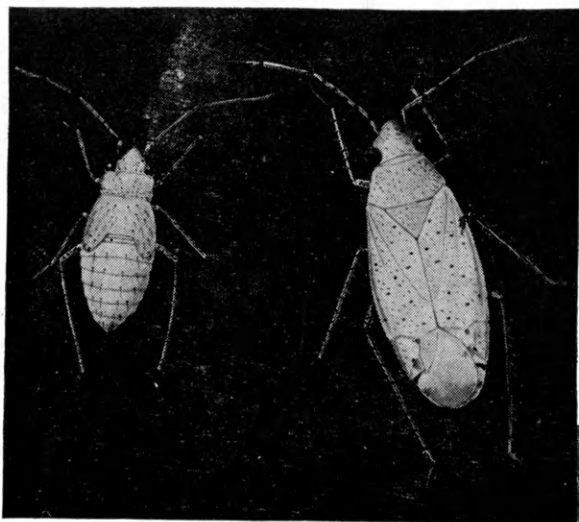
MEMBERS of the Dairy products judging team are bottom, left to right, Lambert Mills, alternate, Dick Brown, and Harry Warren. Back row, left to right, Prof. Willard H. Martin, coach, and Bill Lang. The team placed 10th in their Chicago contest.



insects

YOU SHOULD KNOW

*How to Identify
These Crop Destroyers*



COTTON FLEAHOPPER

Psallus seriatus (Reut.)

The fleahopper pierces and sucks sap from the terminal buds and newly formed squares . . . breeds on goatweed (croton), primrose, horsemint, and other plants. One field of goatweed may hatch millions of fleahoppers. The adult is a flattened, oval-shaped, pale-green winged insect approximately $\frac{1}{8}$ " long. The body is spotted with four black marks near the wing tips. The young cotton fleahopper is very small, green, and wingless.



CUTWORMS

Family *Noctuidae*

When you find young plants cut off at the ground, a cutworm is probably responsible, and might well be found in a small burrow in the soil close by. A cutworm is the larva, or caterpillar, of a night-flying moth. There are many kinds. The commoner ones are stout, well-fed, soft-bodied, smooth or nearly smooth, and cylindrical, with color varying from gray to brown or nearly black. Sometimes they are spotted or marked with stripes.



MEADOW SPITTLEBUG

Philaenus leucophthalmus (L.)

Spittlebugs attack alfalfa and other legumes. The yellow- or coral-colored immature bugs are first found in tiny specks of foam or froth on the plants in early Spring. They suck sap from the young, tender plant parts as they travel upward, always enlarging the spittle masses. In June, the bugs develop wings and swarm over the fields as brown or gray, wedge-shaped, quick-jumping hoppers which infest hay.

toxaphene

DUSTS • SPRAYS

*For full color booklet showing
these and other insects write to Hercules*

Naval Stores Department, **HERCULES POWDER COMPANY** 911 King Street, Wilmington 99, Del.



NX53-5

Cows Can't Kick On

Hoof Trimming Table

By Edward Schukman

A NEW PORTABLE hoof-trimming table in the animal husbandry barns is designed to prevent cattle from struggling while having their feet trimmed. Many farm ani-

mals are lost each year in the United States as a result of struggling while having their feet trimmed.

The new table was built by Profs. Don Good of Animal Husbandry and

Harold Kugler of Agricultural Engineering and two Agricultural Education students. It is patterned after a similar operating table at the WRS ranch near Hutchinson, Kansas, owned by Charles Summers.

The frame for this table was made of three-inch pipe. Pine planks were then bolted to this frame. Holes were drilled in the planks where the head and feet rest. Ropes were run through these holes to secure the animal's head and feet to the table during the hoof-trimming operation.

When the table is being used to mount an animal it is set up at a ninety-degree angle. The animal is then led next to the table and the belt placed around the animal and fastened to the roller. Next the belt is rolled up until it secures the animal to the table, with just a slight pressure on the belt. The roller is then locked in place and the table lowered until it rests on the sled frame. The animal is now ready for the hoof-trimming operation.

Besides being safer, the new portable hoof-trimming table will enable Norman Minks, herdsman, to trim hoofs of all show and breeding animals in a shorter period of time.

A Tasty Cup
of



makes that
break complete
ENJOY YOURS

at
the

CANTEEN

South of the Campus

**HIDES
WOOL
FURS
SHEEP PELTS**



**Kansas Hide &
Wool Co.**

2nd and Osage
MANHATTAN, KANSAS

CAMPUS CLEANERS

Colors Brighter
Whites Whiter

No Odor

Dial 2323

1219 Moro

Hey

FELLOWS

NEED A
BOOK

or

A PENNANT

or a

GISMO

for that

Lab?



**College Book
Store**

*Your Friendly Book Store
Nearest the College*

Service to Twenty Million Readers and Listeners—

Facts and accuracy in the news have been the foundation upon which the Capper papers and radio stations were built.

Both Kansas State College and Capper Publications have grown great through a common dedication to the service of agriculture. We have worked together through the years in our mutual efforts to make farm living pleasanter and more profitable.

Capper Publications, Inc.

THE TOPEKA DAILY CAPITAL	MISSOURI RURALIST	OHIO FARMER
THE KANSAS CITY KANSAN	CAPPER'S FARMER	MICHIGAN FARMER
THE KANSAS FARMER	HOUSEHOLD	W I B W
CAPPER'S WEEKLY	PENNSYLVANIA FARMER	K C K N

Ag School Angles

(Continued from page 6)

experts such a headache last summer—vesicular exanthema—has broken out again.

State health authorities killed about 2,200 hogs valued at \$80,000 at the feeding pens of the George Bennett Construction company in Kansas City last February.

This is the second time in less than half a year that the Bennett company has lost hogs because of the disease. The company holds the city garbage collection contract and the disease is believed to have been transmitted through that medium.

The only control known is to quit feeding raw garbage. Uncooked pork scraps carry the exanthema virus.

Recently Maine became the 33rd

state to be infected in the past eight months.

Hog losses are made up by the state and federal governments. Already the Federal government has paid out \$1,200,000 in indemnities, and \$240,000 in other costs.

This is how ridiculous government payments for diseased hogs can get: One mid-western garbage feeder was paid indemnities on 4,500 pigs. He re-stocked, and went on feeding raw garbage. VE hit the second time, and now he's asking for indemnities on 2,200 more hogs.

The USDA is considering a ruling that will stop second payment on indemnities on establishments where raw garbage is fed.



... WHEN YOU SKIP INOCULATION TO SKIMP ON SEEDING COSTS

It costs you plenty when you get only half a legume crop. By trying to save a little time while planting you may gamble away a whole season's work. Just a few minutes to inoculate can help you guard against upset rotation plans—can help assure success with your legumes.

YOU'RE PLAYING SAFE...



Mixing inoculants with clovers, alfalfa and soybean seed is swift and simple insurance that helps cut crop risks . . . reduces soil losses. Use any effective method that gets plenty of the fresh bacteria into ground with your seed.

... WHEN YOU INOCULATE ALFALFA, SOYBEANS, PEAS, AND CLOVERS

Fast-starting inoculated legumes get a better, safer foot-hold against damaging drought and winter-killing. By giving plants extra vigor, extra growth—NITRAGIN helps you grow surer stands of hay and pasture. For just a few cents an acre you can inoculate with NITRAGIN to boost your meat and milk income.

READ THE GUARANTEE And You'll Insist on NITRAGIN

For Best Results With LEGUMES Inoculate With **NITRAGIN**

THE ORIGINAL LEGUME INOCULANT

Red Guarantee — PAGES ONE BILLIONS OF LEGUME BACTERIA BEST QUALITY AT LOWEST COST

Every NITRAGIN can carries a bacteria-count guarantee. Clearly listed for your protection is the number of billions of superior strain NITRAGIN bacteria packed in each orange-colored can. With NITRAGIN you know what you are getting—for best results with legumes.

THE NITRAGIN CO., INC.
3269 W. Custer Ave. • Milwaukee 9, Wis.

Chit Chat

(Continued from page 4)

the number of man hours that went into the grooming and training of the animals, making records of entries, preparing the program, taking down the bleachers, preparation of the ring, decorating; finally, clearing and cleaning the Field House. Let's put the figure at 8,000 man hours!

Three Orchids

Spotlight Norman Schlesener, the sophomore major in Animal Husbandry who for the second year has designed the centerpiece for the LAR show ring. The pieces have been artistic, well balanced, of good symmetry, and the color designs have indicated real artistic sensitiveness.

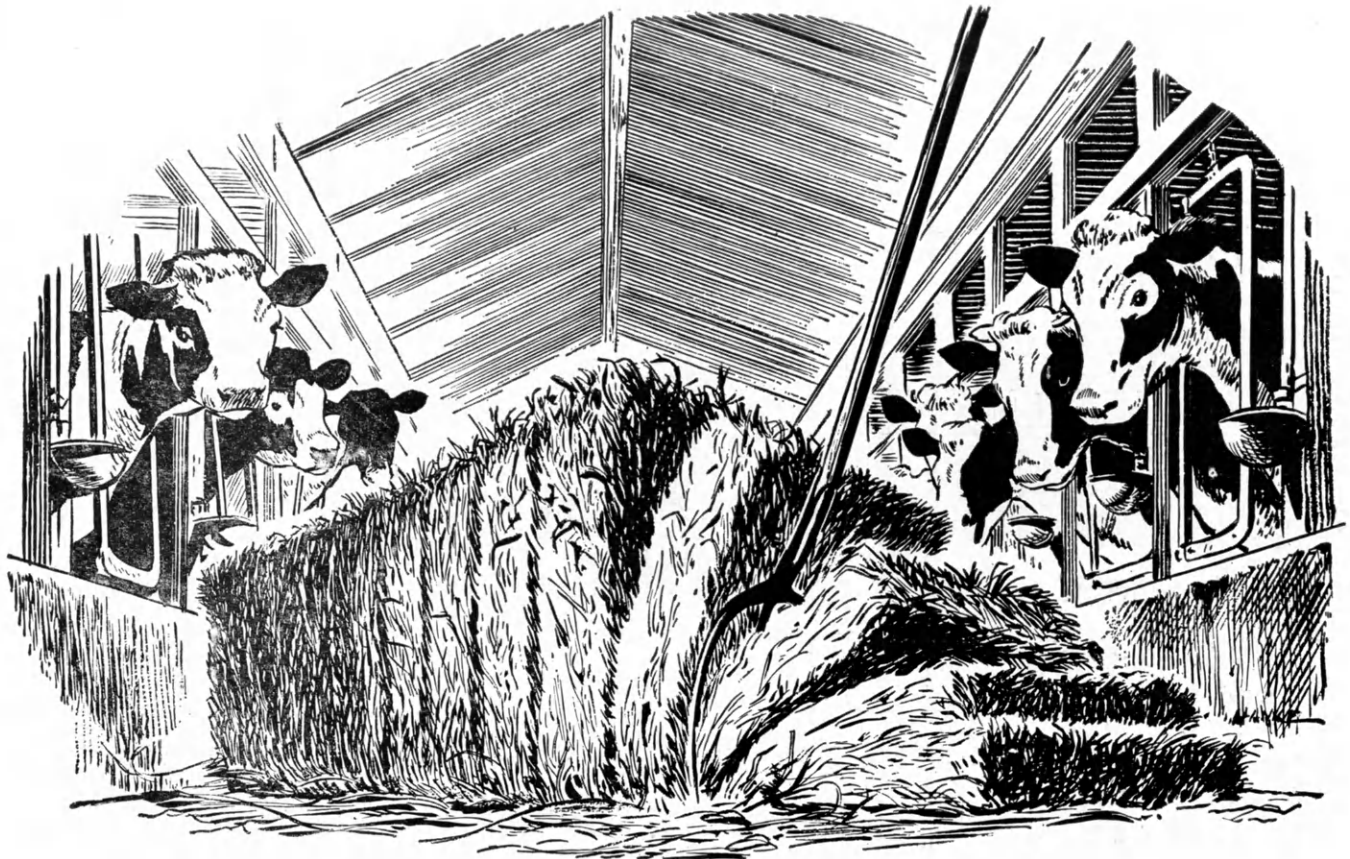
Congratulations to Norman and all the lads who helped with the preparation of the Little American Royal color centerpiece!

Said a visitor to the campus at the Little American Royal, a man who seemed very much interested in the beef classes and in the quarter horses:

"This is one of the most important uses that can be made of this marvelous Field House."

Barnwarmer Beauties?

Here are suggested nominations for queens for the Ag Barnwarmer next fall. Nominate any one, or all, of the plucky little girls who trained, groomed, and showed animals in the LAR. All are beauties and all are Aggies at heart. Let's try to see to it that some nominations come out of that group next fall.



What's in it for them?

A BALE OF HAY can be tasteless roughage for a cow to nose around and chew halfheartedly . . . or it can be a palatable feed, rich in protein and vitamins. What makes the difference?

The University of Wisconsin looked for an answer. They found that an acre of good alfalfa, cut at the right time and put up fast was about 57% leaves and yielded 3 tons per acre. The feed value of those three tons equaled a ton of linseed meal and a ton of corn and cob meal.

The same hay, left to dry and deteriorate in the hot sun, was only 30% leaves. That's the same as losing 1,100 lbs. of linseed meal and 700 lbs. of corn and cob meal, or, about \$70 per acre!

Speed is the answer. Once hay has reached the right stage of curing, the faster you get it out of the field the richer it will be. This richness shows up fast in improved grain-milk, grain-weight ratios.

New Holland long ago saw the value of speed in harvesting hay. Today, New Holland balers have the highest capacity of any on the market up to 10 tons an hour, up to 100 tons a day!

Engineering based on farm research is a basic rule at New Holland. It's the reason why farmers turn to New Holland for grassland machines they can depend on. The New Holland Machine Company, a subsidiary of The Sperry Corporation.

YOUR FUTURE IN FARMING

Each year, New Holland selects graduates of agricultural courses for training in engineering, sales and other fields of the farm machinery industry. For information, write to the New Holland Machine Company, Dept. _____, Box 16, New Holland, Pa.



NEW HOLLAND

"First in Grassland Farming"

New Holland, Pa. • Minneapolis • Des Moines • Kansas City • Brantford, Ontario

Advertisers' Index

May

Aggie Hdwe. & Elec. Co.	26
Campus Book Store	28
Campus Cleaners	22
Capper Publications Inc.	23
C. H. Hyer & Sons	32
C-K Packing	4
College Book Store	22
College Canteen	22
College Drug	3
Darby Corp.	31
Davis & Son's	27
Deere and Co.	Inside Front Cover
Don and Jerry	26
Farm Bureau Mut.	6
Hercules Powder Co.	21
Hereford Journal	30
International Harvester	Back Cover
Jerry Noll's	30
J. C. Penney	28
J. I. Case	5
KABSU	31
Kansas Angus Breeders	28
Kansas Crop Imp. Asso.	1
Kansas Hide & Wool	22
Kansas Power & Light	30
Kansas Wheat Imp.	32
Laundrette	32
Link Belt	7
Manhattan Camera Shop	26
Minneapolis Moline Co.	Inside Back Cover
New Holland	25
New Idea Farm Equipment	29
Nitragin	24
Reed & Elliott	31
Standard Oil Co.	8
Shellabargar	31
Stevensons	32
Studio Royal	28
Wash Tub	26
Wyatt Mfg. Co.	26

Style
Headquarters
Where



Are Sold!

Styled to fit you
and priced to fit
your budget.

Don & Jerry
CLOTHIERS
309 Poyntz

PHOTOGRAPHERS

Cameras
Films
Developing
and
an assorted
amount of camera
supplies

**Manhattan
Camera Shop**

311½ Poyntz

WE FRAME PICTURES

200 Molding Samples
to Choose from

We make frames
and mats to fit the
individual picture.

**Aggie Hardware
& Electric Co.**

G. W. GIVIN

1205 Moro

Phone 2993

SELF SERVICE LAUNDRY

Under New Management

THE WASH TUB

Automatic

Maytag Washers

715 N. 12TH ST.

Across from Murphy's

Golden Anniversary 1903-1950

JAYHAWK and BAZOOKA FARM IMPLEMENTS

Hydraulic Loaders
Hay Stackers
Truck Hoists
Cornstalk Lifters
Windmills
Grain Handling Equipment

**Wyatt Manufacturing
Co., Inc.**

500 North 5th St.

Salina

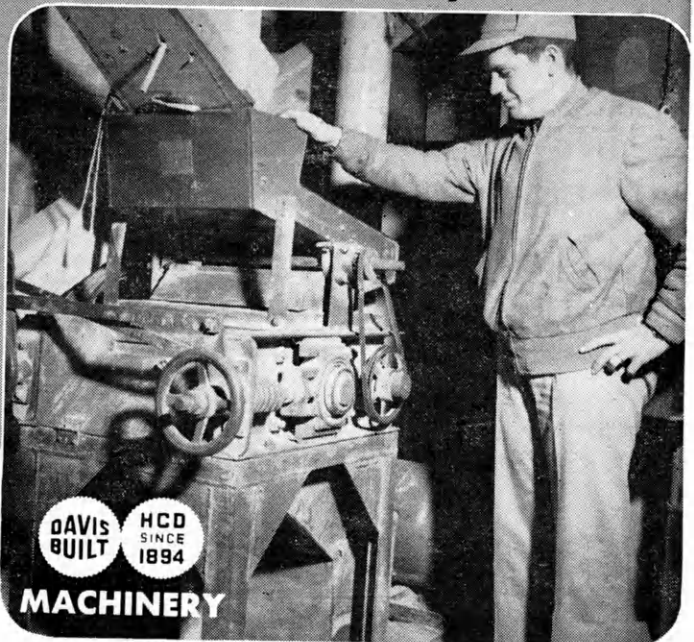
Kansas

a Pair of Purebreds

... at Walnut Hill Ranch, Great Bend, Kansas



J. O. DUKE PRIDE II, shown here with John and Tom Taylor, of the Walnut Hill Hereford Ranch, was top bull at L. L. Jones and Son Sale, Holcomb, Kansas, (also a Krimper-Kracker user) at \$15,100. He is the son of WHR Duke Pride. This fine bull is the product of years of experienced breeding, feeding and care.



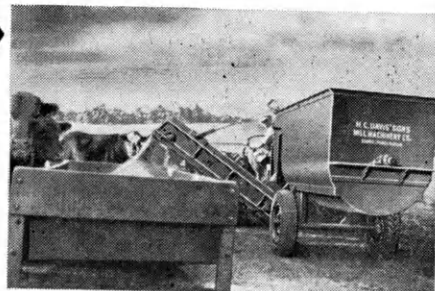
THIS 9x18" DAVIS-BUILT MILL is served from overhead bins, and, by simple adjustment, genuinely roller shelled corn, oats or barley and maize. The Taylors have used only **crimped grains** from Davis machines for 20 years. **DAVIS HAS MADE FINE MACHINERY FOR 58 YEARS.**

TODAY more than 2000 Krimper-Krackers are in operation . . . used and endorsed by hundreds and hundreds of prominent breeders like the Taylors. They all know that any Davis-Built Krimper-Kracker helps make four bushels of grain do the work of five. Cattle absorb nearly 100% of the feed value of crimped grains, and cash savings on feed actually pay for Krimper-Kracker in a few months. Grains crimped with Krimper-Kracker don't have any of the clogging dust found in ground grains. Krimper-Kracker operates with far less maintenance and power cost, too. Built in a complete range of types and sizes. 1/2 HP to 20 HP; 25 bushels on up to 2800 bushels hourly capacity. Prices start at \$159.50. Write today for free literature on Krimper-Kracker, and on Corn and Cob Granulator, Stationary and Portable Feed Mixers.

NOW! Cost Cutting Is the Order of the Day. →

The more than 650 users of **TRANSIT FEED MIXERS** wouldn't think of going back to grandfather's feeding methods.

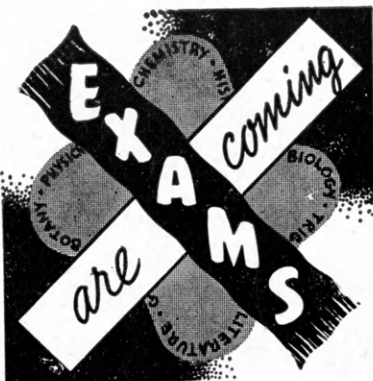
Abolish scooping, backache and guesswork on your feed lots with our Transit Mixer and Bunk-Filler. Truck mounted or Tractor drawn. Hand labor is today's costliest method of doing things. Users declare that results are apparent on their cattle within a few days after starting use of Transit Mixers and feeding complete, accurately mixed feeds.



Write today for **FREE** literature on the Complete Line of Davis-Built Machinery . . .



H. C. DAVIS SONS, DEPT. AY 9 BONNER SPRINGS, KANSAS

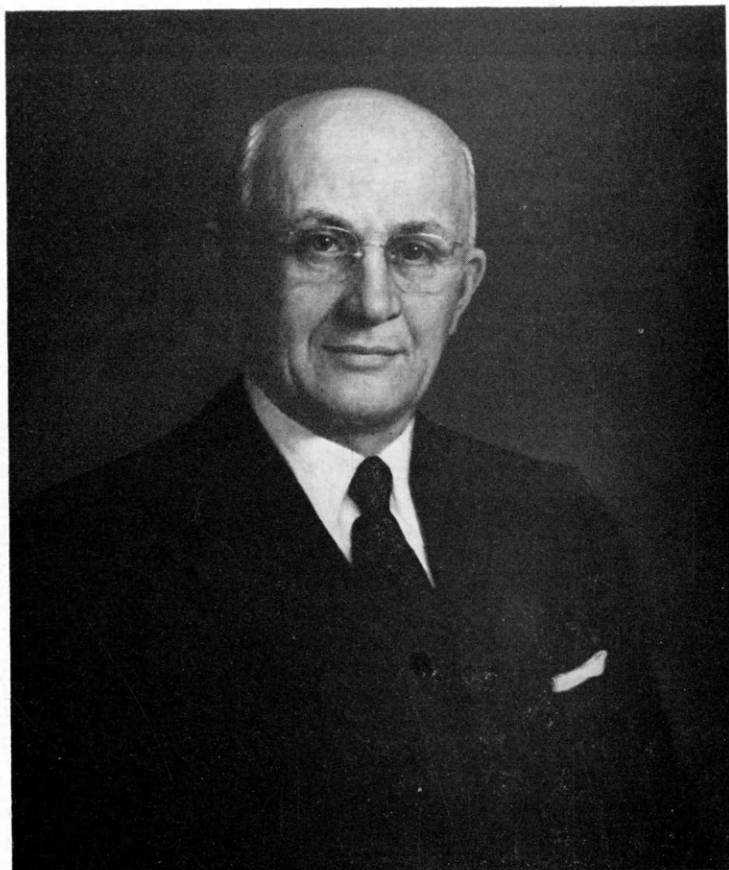


But...
THERE'S AN "A" IN YOUR FUTURE
if you prepare now with the
COLLEGE OUTLINE SERIES

CAMPUS
BOOK STORE

Weber Portrait

THIS IS A picture of the portrait of Dean Arthur D. Weber which was presented to the College at Feeders' Day by the American Society of Animal Production. It is a copy of the original portrait which was hung in the Saddle and Sirloin rooms' famous gallery of stockmen in the Stock Yards Inn at Chicago last fall. K-State's portrait will be hung in the new connecting wing of Waters Hall temporarily until the animal husbandry wing of the new Animal Industries building is completed.



SHOP and SAVE
ALWAYS FIRST QUALITY
J. C. PENNEY CO.

Manhattan, Kansas

KANSAS ANGUS BREEDER INDEX

E. T. Tatge & Son	- - - - -	Ramona
Fairlawn Angus Farms	- - - - -	Ellis
Fred J. King	- - - - -	Ellis
Blueline Angus Farm	- - - RFD 3,	Junction City
C. T. Eubank & Son	- - - - -	Coats

GRADUATES



Have Your
 Portrait
 Made for a
 Lasting Record

STUDIO ROYAL

1200 Moro

Dial 3434



New Idea one-row picker

When you and your Dad talk about farming

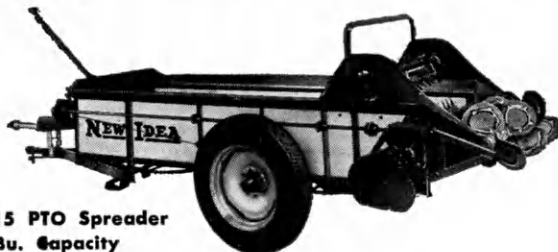
We would like to think that the subject of New Idea equipment will come up—either because you are now using some on your farm or because you are thinking about new equipment.

New Idea has been helping farmers increase their efficiency for over half a century . . . producing the first practical manure spreader with a widespread distributor and the first successful mechanical corn picker.

Today New Idea offers a wide line of quality implements to harvest hay and corn crops, to improve soil fertility . . . all the result of top-flight engineering combined with down-to-earth farm experience.

Two brand new additions to the New Idea line are the big No. 15 power-take-off Spreader and the W-5 Baler.

If you will check the tools listed in the coupon, fill in your home address and send the coupon to us, we will send full information which you and your Dad can talk over. He appreciates your interest in the business of farming and we believe both you and he will find this literature interesting.

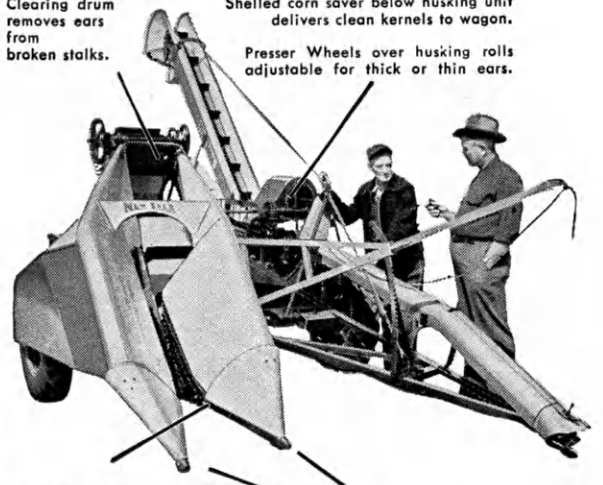


**No. 15 PTO Spreader
120 Bu. Capacity**

Clearing drum removes ears from broken stalks.

Shelled corn saver below husking unit delivers clean kernels to wagon.

Presser Wheels over husking rolls adjustable for thick or thin ears.



Lower gathering chain and gate prevent ears from sliding through.

Floating points keep picker from riding over crooked or down stalks.

New Idea two-row picker—has many outstanding features . . . plus big farm capacity.

NEW IDEA DIVISION **AVCO** DISTRIBUTING CORPORATION
FARM EQUIPMENT CO.

Coldwater, Ohio

Send free folders as checked:

- | | |
|--|--|
| <input type="checkbox"/> Manure Spreaders | <input type="checkbox"/> Tractor Mowers |
| <input type="checkbox"/> Lime Spreaders | <input type="checkbox"/> 4-Bar Rakes & Tedders |
| <input type="checkbox"/> Hydraulic Loaders | <input type="checkbox"/> Balers |
| <input type="checkbox"/> Stalk Shredders | <input type="checkbox"/> All-Purpose Elevators |
| <input type="checkbox"/> All-Steel Wagons | <input type="checkbox"/> Corn Pickers |
| <input type="checkbox"/> Steel Wagon Boxes | <input type="checkbox"/> Transplanters |

Name _____

Address _____



HEREFORDS THE BEEF BREED SUPREME

You can read about Herefords and Polled Herefords twice a month in
THE AMERICAN HEREFORD JOURNAL
 —the meeting place of buyers and sellers of Hereford cattle for more than
 forty-two years

Published on the first and fifteenth of each month

**500 GRAPHIC ARTS BLDG.
 KANSAS CITY 6, MO.**

Service with a Smile—

JERRY NOLL'S TEXACO SERVICE

Claflin and Denison Roads

(At NW Corner of Campus)

Call 2347

Lubrication	Battery Charging
Gas	Car Washing
Oil	Car Accessories



Reddy Kilowatt

wishes luck to all graduates, and remember, your faithful electric servant is always ready to serve you with plenty of electric power — at home, at work, at play.

**THE KANSAS POWER
 and LIGHT COMPANY**



Strawberries

(Continued from page 11)

are used. A home berry bed 30 x 50 feet would require 230 plants set 20 by 48 inches apart. An acre set at the same widths would need 6,600 plants. The berries are set on ridges and allowed to mat over these, with only a small walking area left between. Berries yield well for two or three years, then they should be removed.

In Kansas the best season for planting strawberries is early spring, usually March 15 to April 15. Fall transplanting is possible, but it is usually too hot and dry for successful planting at that time.

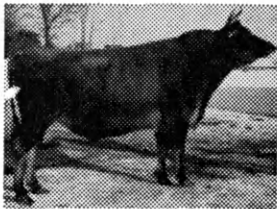
Nearly all Kansas strawberries are grown by the matted row system. However, plants should not be allowed to become completely matted. A hill system also is used. By this method the plants are allowed to set neither runners nor blossoms the first season. This concentrates the growth and makes for production of larger berries.

In setting out berry plants the tip of the crown should be above the

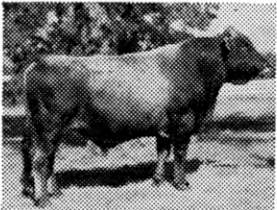
(Continued on page 32)

VISITORS WELCOME
KANSAS ARTIFICIAL BREEDING SERVICE UNIT
1953

The Sign of Progress

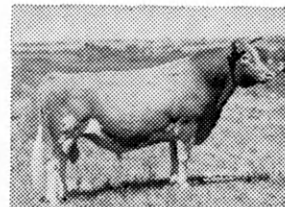


JERSEY

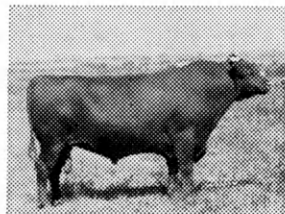


BROWN SWISS

Department
of
Dairy
Husbandry



GUERNSEY

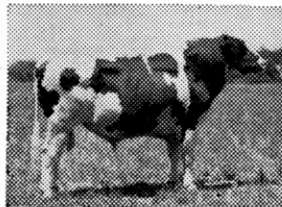


MILKING SHORTHORN

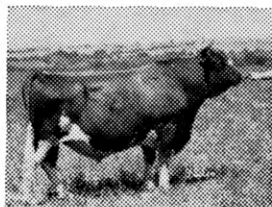
COOPERATING WITH MORE
 THAN 65 COUNTY ASSOCIATIONS

Future Herd Improvement

- ★ BETTER TYPE
- ★ MORE UNIFORMITY
- ★ HIGHER PRODUCTION



HOLSTEIN



AYRSHIRE

Herd Sire Service

- ECONOMICAL ★
- RELIABLE SERVICE ★
- TOP QUALITY SIRES ★

DIAMONDS
 WATCHES
 JEWELRY
 SILVER

A good choice, honest value



REED & ELLIOTT
Jewelers
 Campus Theater Bldg.

THE DARBY
 Corporation

Kansas City, Kansas

FABRICATORS
 and
 ERECTORS

of Steel Products

A Kansas
 Corporation

Serving the Midwest
 and the Nation

- Tanks—
- Process and Pressure Vessels
- Farm Implements—
- Bins—Stacks—Breeching—

SPECIALIZED CUSTOM
 FABRICATION

MORE FEEDING
 ECONOMY

when you feed

SHELLABARGER
 Fortified Feeds

Get More for Less

See Us
 at

SALINA, KANSAS

Phone 3171

Kansas Wheat Products World Famous

Top Varieties—Pawnee, Comanche, Wichita,
Kiowa, Ponca

Good Production and Handling Methods
Excellent Milling and Baking Properties

Have given them an Envious Reputation

LET'S RETAIN IT

Kansas Wheat Improvement Association

MANHATTAN, KANSAS

*The Friendly Store of
Styles for Dress for 31 Years*

KUPPENHEIMER
BOTANY 500
KINGSRIDGE
CLOTHCRAFT
Suits

ARROW
Dress Shirts

ARROW & MCGREGGOR
Sport Shirts

Stevenson's

317 Poyntz

The Store for Men and Women

Washing—Fluff Drying

Starching—Tintex Dyeing

WE DO IT

Shopping—Reading

Knitting—Relaxation

In Spacious Air

Conditioned Comfort

YOU DO IT

LAUNDERETTE

1129 Moro

Aggieville

Dial 2082



Comfort
from the
First!

You don't have to break them in to feel comfortable in your new Hyer Boots! Hyer's exclusive boot lasts give you a boot that fits the contours of your foot . . . smooth and glove-like over the instep, with spring steel shanks under the arch for extra support. Made of choicest materials and fully leather lined. Quality . . . even where it can't be seen! Try on a pair of Hyer Boots at your dealer's, or write:

C. H. Hyer & Sons, Inc.

Dept. KA-1, Olathe, Kansas

Makers of Fine Boots Since 1875

Strawberries

(Continued from page 30)

soil line. Cultivation should begin as soon as the berries start growth or weeds appear. Strawberries should be planted on rich soil if possible. Fertilizer applied two to three weeks before the plants are set out has been found most effective. A 4-12-4 mixture after setting may do the job.

A four to six-inch layer of straw should be applied on the strawberry bed during mid-December. This mulch prevents heaving of the soil and the resulting breaking of the roots of the plants, keeps the berries clean, and reduces winter injury.

Freshman: I enjoy the Ag jokes when they're not over my head.

Senior: That's the same way I feel about pigeons.