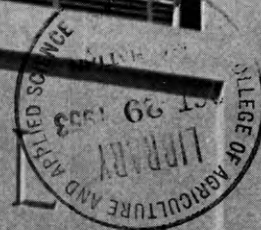


WATERS HALL

301



Kansas

State College of Agriculture and Applied Science

kansas **AG**ricultural  
**STUDENT**

301

# “...to Wrestle with Mondamin”



THAT'S an Indian name—Mondamin. Ojibway Indian.

Mondamin was a spirit—the spirit who wrestled with Hiawatha on four successive days and over whose grave, after his defeat and burial by the young brave, there grew a wonderful tall, green, long-leaved plant.

That, says the legend, was the origin of corn. And, thereafter, in the Autumn, when the long, green leaves turned yellow and the tribe spoke of harvesting the corn, they spoke of “wrestling with Mondamin.”

The legend of Mondamin is one of the many stories—some fact, and some fancy—attending the glorious history of corn.

And today, with the new No. 227 Corn Picker, John Deere writes another great chapter to that history. For this big-capacity, two-row mounted picker—the result of many years of intensive engineering, experimentation and field testing—supplies the muscle, the stamina, the speed, and championship performance demanded “when the long, green leaves turn yellow”—when, season after season, the time rolls around “to wrestle with Mondamin.”



In lengthy and extensive field tests, the new John Deere No. 227 has worked around in corn from the Rio Grande Valley of Texas through the Corn Belt and on up into the corn-producing northern states. It has won its spurs in dry, brittle corn . . . in tough, heavy crops and in light yields . . . in corn-borer-infested crops . . . in soft, wet, snow-covered fields . . . and in badly down-and-tangled crops. It's a young, tough, seasoned campaigner, ready, willing, and able to handle the harvests in the years ahead.

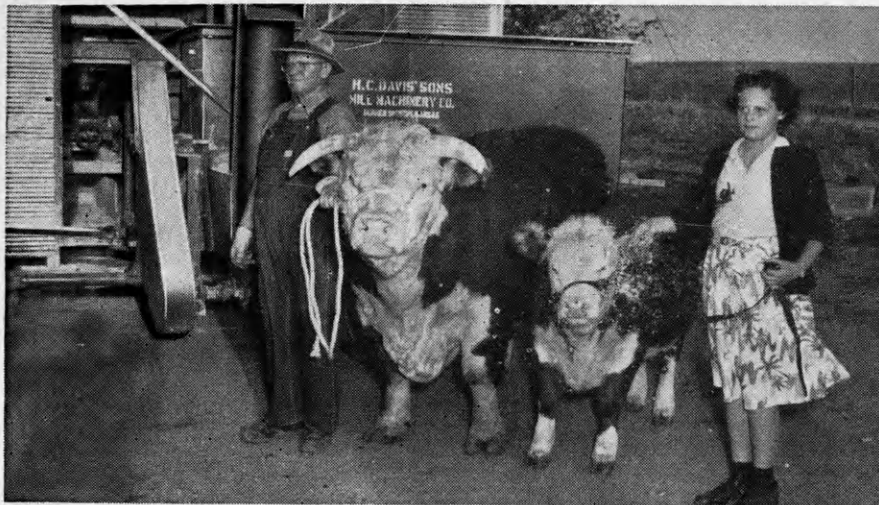


**JOHN DEERE • MOLINE, ILL.**

QUALITY FARM EQUIPMENT SINCE 1887



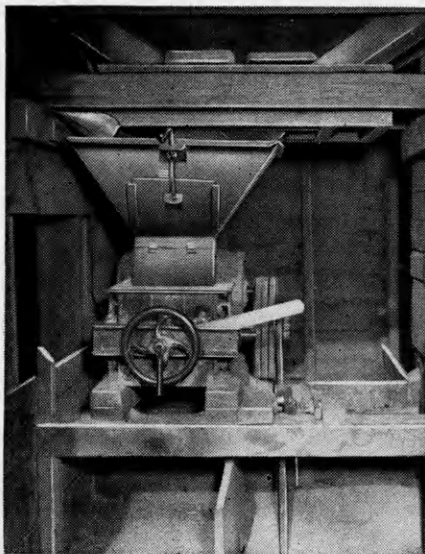
“I don't see how we could get along without our  
**DAVIS ROLLER MILL and TRANSIT MIXER**” *says . . .*



Young ones shown here are Mr. Ellis's 10-year-old granddaughter and the first calf J. O. Duke Pride the 24th has sired for Mr. Ellis, since he was purchased.

**ROY W. ELLIS  
VALLEYVIEW RANCH  
COLDWATER, KANSAS**

Mr. Ellis takes no chances with J. O. Duke Pride the 24th and the rest of his prize Herefords. They're all fed dust free rolled grain from the Krimper-Kracker inside that door. Rolled grains are completely mixed with supplements in the tractor - drawn Transit Mixer. That way every animal gets a perfect ration with every mouthful.



Overhead grain bins drop milo maize, oats, barley, shelled corn into Mr. Ellis's 3 H.P. motorized Krimper-Kracker. Crimped grain is conveyed to elevator pit where it is discharged, with supplements, into Transit Mixer, and blended accurately with chopped hay or other roughages.



Mr. Ellis and his Herdsman Kenneth Webb handle nothing but thorough-breds, that goes for their machinery and their Herefords.

**CHEAP ELECTRICITY** makes the Ellis Krimper-Kracker a real bargain to operate. When you add that saving to the extra beef Mr. Ellis gets from crimped grains, you've got real economy. That means *extra* profits! Mr. Ellis tells us he tried several roller mills before he discovered the one-and-only Krimper-Kracker.

You aren't making maximum profits if you aren't using Davis equipment. Ask for **FREE CIRCULAR "HOW TO SLASH FEEDING COSTS."** Get your name on our mailing list to keep informed of the latest developments in Feed Processing. *Write Today to:*



**H. C. DAVIS SONS' MILL MACHINERY COMPANY**

**Dept. KS-10, Bonner Springs, Kansas**

# THE KANSAS *Agricultural Student*

Vol. XXX

October, 1953

No. 1

## In This Issue

<b>Chit Chat</b> .....	Dean C. W. Mullen	<b>6</b>
<b>Ag School Angles</b> .....	Diane Blackburn	<b>8</b>
<b>Barnwarmer Boom</b> .....	Diane Blackburn	<b>10</b>
<b>From Granddad's Days</b> .....	Leonard Slyter and Dan Henley	<b>12</b>
<b>East Meets West</b> .....	Bill Bergman	<b>14</b>
<b>Farmers Look to Irrigation</b> .....	Nancy Brecheisen	<b>16</b>
<b>Where Shall I Live</b> .....	Tom Pettit and Bill Deyoe	<b>18</b>
<b>Wheat Mosaic Secrets</b> .....	Herb Lee	<b>20</b>

### EDITORIAL STAFF

Herb Lee .....	Editor
Dan Henley .....	Associate Editor
Diane Blackburn .....	Associate Editor

### ASSISTANT EDITORS

Hayes Walker	Tom Pettit
--------------	------------

### PHOTOGRAPHERS

Bob Ecklund	Dick Steffens
	Fred Perez

### FACULTY ADVISER

Lowell Brandner

### BUSINESS STAFF

Chuck Bellman .....	Manager
Walter Schoen .....	Assistant

### ADVERTISING STAFF

Bill Bergman	Leonard Slyter
--------------	----------------

### CIRCULATION STAFF

Wayne Walter .....	Manager
--------------------	---------

## Young Waters Hall

Your face is new,  
Few steps have sounded through  
your halls,  
You stand lonely against the sky  
In this year of your birth.

You have a reputation now to  
make,  
That of the sister buildings by  
your side.

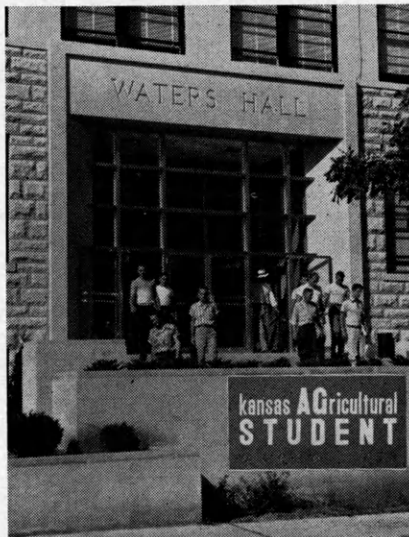
Men must be made,  
Knowledge discovered,  
Within your offices, laboratories,  
and classrooms.

From it all must come  
A better agriculture,  
A greater wisdom and happiness  
For those who will study and  
work here.

They must go on to higher  
works,  
So live on, young Waters Hall,  
And fulfill your purposes.

Herb Lee

+ + +



traffic both into and out of the building. This typical shot by staff photographer, Bob Ecklund, depicts a Farm Crops lab class leaving on a field trip via the new doorway.

Published by the Agricultural Association of Kansas State College of Agriculture and Applied Science, Manhattan, Kansas, in October, December, February, March, April, and May. Subscription rates \$1.50 a year; 2 years, \$2; single copy by mail 30c, at office 20c.

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.

## ON THE COVER

**A**N added attraction on the campus is provided students by this spacious entry of the new Waters hall wing. The generous glass doorway provides an easy flow of



# Editorial...

This issue has a number of firsts attached to it. First of all, the staff has attempted to put out a special issue featuring completion of the connecting link between East and West Waters halls.

Also this is the initial time the Ag Mag has been produced in the new Waters hall. And this marks my first issue as Ag Mag editor. So as you can see, the magazine has really been converted to a youngster this year.

For future issues we are asking all interested to contribute articles or tips to the office (Waters 138) or a member of the staff. Aggies, it's your magazine and the small staff would have an impossible task keeping up with all the top news and research of the Ag School without your co-operation.

We hope this new product will grow rapidly in quality and be a credit to the School of Agriculture and perhaps add still another first—that of becoming the top college student agriculture magazine in the nation.

Herb Lee, Editor

## 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

DIAMONDS  
WATCHES  
JEWELRY  
SILVER

**A good choice, honest value**



**REED & ELLIOTT**  
*Jewelers*  
Campus Theater Bldg.

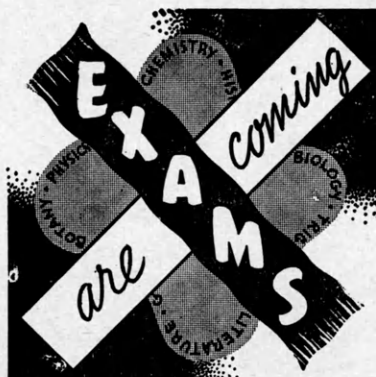
**Golden Anniversary  
1903-1953**

**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



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

**CAMPUS  
BOOK STORE**

## 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

# Chit Chat

By Clyde W. Mullen

Assistant Dean

THE new center wing of Waters hall gives the north side of the campus a new dignity. The bright, well-lighted offices of the dean and his staff cannot help but give new students a better impression of the School of Agriculture; and the new offices for so many staff members in other departments increase the stature of the College in the minds of former students.

Even our faculty members must have a feeling that the prestige of the College has attained a new level and that teaching and instruction must continue to be on the highest possible level.

It seems reasonable to assume that the School of Agriculture is at the brink of new attainments to which further impetus will be added when

the new Animal Industries building enters the charmed circle with Veterinary Medicine and Extension across the road north of Claflin Drive. Bright and promising days are ahead for agricultural training at Kansas State.

## Reassignments Easier

It was an innovation this semester to use original assigners in connection with reassignments. We hope it gave the students better service. It should have been easier and quicker to get to an assigner than to get to our desk for reassignment.

Last semester we handled nearly six hundred reassignments in the dean's office. This semester the reassignment load is scattered among 35 assigners in the School of Agriculture. Even then, we have originated more



C. W. Mullen

than one hundred reassignments right in our office.

Excepting in those instances where an original assigner has been out of town, we hope students have been able to get reassigned without too much difficulty.

## Apt Remarks

Those who heard it got a good laugh out of the following situation: President McCain at a General Assembly had introduced President Hovde

(Continued on page 24)

The Preferred Fire  
Insurance Company  
A Stock Company

Home Office

701 JACKSON STREET  
TOPEKA, KANSAS

Writing Automobile and all classes of Fire and Windstorm Insurance, including Farm Buildings and Contents, Live-stock, Farm Machinery and Hail on Crops.

John J. Mangle  
President

M. S. Lake  
Secretary

If You Don't Know Diamonds,  
It Pays to Know

Paul Dooley  
Your Trusted  
Keepsake Jeweler



Paul Dooley  
JEWELER

Aggieville

Since 1924

The Friendly Store of  
Styles for Dress for 31 Years

KUPPENHEIMER  
BOTANY 500  
KINGSRIDGE  
CLOTHCRAFT  
Suits

ARROW  
Dress Shirts

ARROW & MCGREGOR  
Sport Shirts

FLORSHEIM & FREEMAN  
Shoes

Stevenson's

317 Poyntz

The Store for Men and Women



# MAN CAN NEVER MAKE A FEED LIKE THIS!

On these golden ears is, without a doubt, the greatest feed ever created. No feed manufacturer has ever been able to cram as much real nutrition into so small amount of space as Nature has put into a kernel of corn.

## FEED VALUE IN CORN MUST BE RELEASED

But, fed straight—nearly  $\frac{2}{3}$  of it is wasted. Only  $\frac{1}{3}$  is converted into meat, milk and eggs. The reason—corn, though packed with abundant "energy value," needs something *with* it to release that energy... to make more of it become a part of the animal or fowl.

## MINTRATE RELEASES FEED VALUE

And that's where MoorMan's Mintrate\* steps into the picture. For Mintrate is more than a feed. Mintrate is a scientific combination of minerals, vitamins and proteins that—when added to home-grown feeds will literally explode and release more of the "energy value" of these feeds. Mintrate virtually unlocks a greater percentage of the digestible nutrients in corn, forage and other feeds—makes them "go farther"—makes them stay in the body of the animal or fowl in the form of meat, milk or eggs, instead of passing through.

## MINTRATES MAKE LIVESTOCK PROFITS

We believe MoorMan's Mintrates are the most economical feed you can buy... because they allow livestock to make better use of home-grown feeds and forage. For example, only one part of MoorMan's Hog 45 added to 11 parts of your own yellow corn makes an economical fattening ration for your hogs. And your only out-of-pocket cost will be for the Mintrate. One part of MoorMan's Chick Mintrate added to 3 parts of your own ground corn will make an excellent ration for growing pullets.

## MINTRATE IS THE CONCENTRATE

MoorMan's Mintrates are highly concentrated concentrates. They contain only minerals, vitamins and proteins livestock and poultry need for fast, thrifty growth, but which you cannot raise or process profitably yourself. MoorMan's Mintrates contain no fiber, no filler, no grain. They are designed specifically for you to mix with, or feed with home-grown feeds... to "wring" from those feeds extra digestible nutrients—to wake up sleeping and latent energy and turn it into fast growth-power for livestock and poultry.

## A MINTRATE FOR EACH KIND OF LIVESTOCK

There are 6 different Mintrates—each carefully developed and balanced to fit the needs of a particular class of livestock. Their exclusive formulas are the result of more than 68 years of nutritional research in laboratory and on the farm. Each is designed to help animals and fowls extract more energy value from the feeds they eat. Ask your MoorMan Man to tell you about the particular Mintrate that best fits your need. Or, if a MoorMan Man does not call, write MoorMan Mfg. Co., Dept. O4-10, Quincy, Ill., for complete details.

**MoorMan's**  
Since 1885

\*Trade Mark Reg. U. S. Pat. Off.

MAKERS OF VITAMINIZED PROTEIN AND  
MINERAL CONCENTRATES FARMERS NEED, BUT  
CANNOT RAISE OR PROCESS ON THE FARM



# Ag School Angles

By Diane Blackburn

**W**HAT is it? As the Ag Mag goes to press a real mystery is yet unsolved in the Ag School.

Ag Mag photographer Bob Ecklund brought in a soil sample recently. He consulted Dean R. I. Throckmorton, long known as a soils expert. "Throck" said, in all his experiences, he had never seen anything like it.

The material looks like rock wool, but has, to say the least, mysterious qualities. Ecklund said his brother had dug 14 feet of a test well when he hit a four inch layer of the wool-like substance. Clay promptly peeled off, leaving soft brown granules.

After the mysterious substance had been drilled through they began to hear odd noises coming from the test hole. The sounds began as frequent rumblings, as of a heavy truck passing. These built up to a high pitched whine, then faded away only to be repeated at varying intervals.

Prof. Joseph Chelikowsky, Department of Geology, examined the sample and pronounced it as definitely not a natural mineral formation. He speculated on the possibility of it being part of an unknown Indian burial ground.

A chemical test was inconclusive, indicating only that the material was highly resistant to acids and resistant also to alkaline. Burning of a sample left a carbonaceous residue.

## Tasty Treat

Sheep Production students never had it so good. Popcorn will be served during class movies. Lewis Holland, assistant professor of Animal Husbandry, has okayed the privilege, according to Prof. T. Donald Bell.

## First Coed Ag Writer

The first girl in the history of the Ag School to enroll in the curriculum of Ag Journalism is Elaine Olson, Council Grove.

Miss Olson's farm experiences have been quite unique. For instance, she won the beef championship at the Hutchinson fair this fall with a Here-

ford and her Angus was reserve champ. She was tops in showmanship in 1952 and '53 and also high individual in 4-H livestock judging.

Elaine estimates she's fed 175 head of cattle and she has a cow herd besides on her parents' 1,200 acre ranch.

She knew a girl would have a hard time raising livestock. So when Ralph Lashbrook, K-State journalism head, heard of her expert abilities and asked her to consider Ag Journalism, she thought it a good idea. Miss Olson will take electives in Animal Husbandry along with Ag Journalism. She hopes to some day write for a livestock publication.

## Anything for a Dog

It's a small world—an Animal Husbandry student's love for animals sent an Animal Husbandry truck into Animal Husbandry Professor Don Good's home.

Here's how it happened! Bud Heitschmidt, the driver, Bob Sayre, and Dick Pringle were on their way to an Animal Husbandry pasture about 7 a.m. when a dog ran across the road in front of the truck. Heitschmidt swerved to miss the dog and the door flew open and he was thrown out.

Pringle and Sayre made desperate attempts to grab the wheel as the truck jumped the curb and bounded from the front porch steps through a picture window, stopping in Don Good's living room.

The dog trotted off unharmed, but the shaken up Dick Pringle spent a day recuperating at Student Health.

## All-State Frosh

The Ag School has a sixteen-year-old freshman this fall who was high point man for the entire Future Farmers of America agricultural contest held at K-State last spring. Roger Adamson, Cherryvale, is majoring in Technical Agronomy.

Adamson set a record which should last for a long time in the FFA contests. He won the public speaking contest, was tops in poultry with the only perfect score in contest history, and was high point man in the crops contest.

He won the regional public speaking contest this summer at Ames, Iowa. Adamson won second place for the central region in the national FFA speaking contest October 12 in Kansas City, Missouri. Four regions of the U.S. and Hawaii competed.

**Kenmore  
Appliances**

**Coldspot  
Refrigerators  
Freezers**

**J. C. Higgins  
Sporting  
Goods**

**All-State  
Auto  
Accessories**

**Craftsman  
Hardware**

**Homart  
Plumbing —  
Heating**

**David Bradley  
Farm  
Equipment**

**SHOP AT  
SEARS  
AND SAVE!**



**Pilgrim  
Men's  
Furnishings**

**Boyville  
Boys' Clothing**

**Honeysuckle  
Infants' Wear**

**Kerrybrooke  
Women's  
Fashions**

**Charmode  
Lingerie**

**Fairloom  
Yard Goods**

**Harmony  
House  
Floor  
Coverings,  
Curtains**

4th and Houston — Phone 2435





**THE BEST YEARS** of his life are not all past for Tom Toman (left) of Casper, Wyoming. Tom retired over five years ago after 26 years with Standard Oil. He's here shown fishing on the North Platte River, with

his son, Rudy, now one of our employees at Casper. Every month Tom receives retirement income provided through his and the company's contributions to Standard Oil's retirement plan while he was working.

## TESTED WAYS TO BETTER LIVING

**B**ETTER LIVING can begin with your job. The fact that 19,900 employees of Standard Oil and its subsidiary companies have been with us for more than 10 years is evidence of that.

What do all these people find in their jobs that keeps them happy?

Steady work at good pay comes first to mind. But in addition to being assured of better-than-average earnings with a growing and progressive company, Standard Oilers can work with the company toward security for themselves and their families. Employee benefits have been steadily improved since the company's first retirement checks were mailed to Standard Oilers in 1903. Our present retirement plan, in which more than 90% of our eligible employees participate, is part of one of

the broadest employee benefit programs in any industry.

These benefits help guard against financial stress in case of accident—on or off the job—or sickness, and bring such things as hospitalization, regular savings, and stock ownership more easily within reach.

Every job here is important in some way to every other job, too—so that all our 51,000 employees, pulling together, help make Standard Oil an even better place to work.

Finally, when you know that your efforts are important to your community and to your country, you can feel you not only make a good living, but you're living well.

### Standard Oil Company

910 South Michigan Avenue, Chicago 80, Illinois



**DADDY'S PROUD**—and relieved. Melvin Long of our Champaign, Illinois, bulk plant paid a large part of the expenses of daughter Patricia Ann's arrival through Standard Oil's contributory Group Hospital Expense and Surgical Operation Insurance Plan, which covers employees and their immediate families.



**IT'S NO FUN TO BE SICK**—but Lydia Wagener and her visitor, Sophie Szkarlat, both of our Detroit office, know she is protected under Standard's Sickness and Disability Benefits Plan, and its Occupational Illness and Injury Plan. Employees receive substantial payments in emergencies caused by sickness or injury either on or off the job.



**SAVINGS PAY OFF** double at Standard Oil. Catherine Lynch and Elizabeth Faller help issue bonus stock certificates. Under our Savings and Stock Bonus Plan, 29,410 employees have bought U. S. Savings Bonds and received, in turn, shares of company stock at no cost to become stockholders-owners of Standard Oil.

## "Dull Ag Week" Becomes

# Barnwarmer Boom

By Diane Blackburn

**W**HAT began as a "dull Ag Week" as elaborated in the campus daily ended with explosive force, creating one of the largest Barnwarmer booms in history.

Queen Rachel Schoneweis, Delta Delta Delta, sophomore in Home Ec Nursing from Miltonvale, will have a host of stories to tell about her 1953 Ag Week experiences in future years, as will most of the huge crowd of 850 that attended the all-college dance in Nichols gym.

### Crowned by Weber

Miss Schoneweis was crowned by Dean of Ag Arthur D. Weber, on her throne of straw under a lucky horse-shoe. She received a small radio with a gold plated inscription "Ag Barnwarmer Queen of 1953."

A revote was necessary, since some unidentified culprit made off with



Photo by Fred Perez

**BARNWARMER QUEEN, Rachel Schoneweis, skips to the bunny hop soon after she was crowned before a crowd of 325 couples.**

### He's an Aggie . . .

the ballot box. Names of the Queen choice were merely written on the back of each ticket. Quick work on the part of the Queen's committee soon had the ballots counted and the crowning took place as scheduled.

The Queen was attended by Carol Tannahill, Van Zile hall; LaWana Grant, Southeast hall; Sandra Tatge, Pi Beta Phi; and Jerry Swaffar, Kappa Kappa Gamma.

### Made Money

Though the Aggies are not mercenaries, they like to conduct their business on a sound financial basis. So it is worth reporting, as manager Harold Reed says, that the Barnwarmer was a success financially. The dance is supposed to break even and provide

a little fun at a price an Aggie can afford even after he sells a few steers for less than he paid for them and has only half the yield he expected before his College-forty got hit by drought. Profits totaled about \$150.

### Ag Week Late

A student holiday after the football win over Nebraska marked the first official day of Ag Week and the traditional horse tank was not set up until Tuesday. Horse tank chairmen, Wayne David and Eldon Johnson, started loading the charge in the Barnwarmer guns by dunking 13 non-conforming Aggies, one Vet who tried to dump dye in the tank, and two unsuspecting dogs.

The bullets, so to speak, were really flying when Aggies fought off two Vet onslaughts on the tank the next day, sousing the horse doctors freely. A few shirts were torn and hats mashed in the battles, but only minor bloodshed was in evidence.

### Editorial Stirs Aggies

All this was customary procedure so an industries Collegian reporter called Ag Week "dull" in an editorial. Among other things, he said the Aggies had dilute tomato juice in their veins. Bob Chisham, technical journalism senior, also lamented that the tank had been used only 14 times. When the fracas was over it had been used 19 times. Aggies said Chisham was hot and it took five duckings to get him to stop sizzling. Interest in Ag Week picked up as he cooled down.

That night the "Chisham Trail" depicting the route the Aggies took



Photo by Fred Perez

**NECKERCHIEF AND HAT are in style for "Waldo" after he was ducked twice during Ag Week. Tom Frisbie supplies the garb.**





*Photo by Dick Steffens*  
**BARNWARMER QUEEN Rachel Schoneweis**  
 (center) and left to right Sandra Tatge, Jerry  
 Swaffar, LaWana Grant, and Carol Tannahill

in dragging Chisham out of Kedzie hall and to the horse tank near Willard hall was marked off in white-wash.

### Dunk Girl Reporter

A persistent Collegian reporter, Lorelei Johnston, grew a little too inquisitive, according to Aggies, and she became the only girl to be placed in the horse tank since Queen Diane Blackburn was thoroughly dunked two years ago for not wearing Ag Week apparel.

Engineers became aroused to the call of adventure and tried to find the horse tank, which was hidden on the Agronomy farm Thursday evening. But several carloads of Aggies chased them off and the tank was saved for the final day of dunking.

### Chop Hole in Tank

An unidentified student in coveralls pulled out an axe and chopped several holes in the tank Friday morning. He was promptly hauled out into the country and left with only scant apparel for the return trip. The tank was repaired.

In the Queen's contests held Thursday of Ag Week, Queen Rachel Schoneweis seemed to have the upper hand, though no official score was kept. She was tops with five pounds of milk and was the first to finish building a hog trough. The candidates also roped a calf, saddled and rode a horse, drove a tractor, and unloaded and reloaded a hay wagon.

Queen's committee chairmen, Dick Pringle and Ed Larson, had the candi-

dates escorted out of town until dance time to avoid them being kidnapped by some rival faction.

### Dance Runs Smoothly

But the dance ran smoothly and at 10:30 Miss Schoneweis received a round of applause and the radio for her queenly efforts. She sat all smiles under a blue horseshoe ornamented with white corn mounted on a pyramid of bales of hay. Below her were seated the attendants. Nearby was the strawstack bandstand and the in-

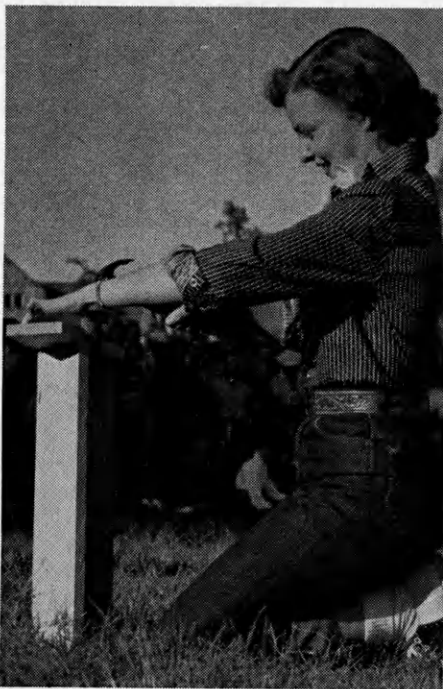
to Washington, D.C., last election. The Aggies danced everything from the polka to the bunny hop, with a few square dances thrown in.

All the output of energy caused a consumption of 1,200 doughnuts and 100 gallons of cider, according to refreshment committee chairman Dean Hammond. The Aggies who returned early Sunday morning to clean up the gym took care of the few bits of food that were left.

### Responsible for Success

Responsible for the success of the Barnwarmer were committee chairmen and co-chairmen: Harold Reed and Leonard Slyter, over all committees; Herb Lee and Dick Steffens, publicity; Neal Atkinson, Dale Fooshee, decorations; Dick Pickett, Lloyd Christie, properties; Max Teeter, Mark Drake, clean-up; Walt Schoen, Al Phillips, tickets; Karl Karst, Ronnie Parks, music and entertainment; Dean Hammond and Philip Rohrer, refreshments; Dick Pringle, Ed Larson, queens; Herman Knocke, Dick Horchem, fire control and checking wraps; Wayne David, Eldon Johnson, horse tank. Milton Manuel, associate professor of economics and sociology, was faculty sponsor.

## Genuine Farm Girl . . .



*Photo by Fred Perez*  
**FINISHING UP her hog trough first in the Ag Week contests is Rachel Schoneweis. She was also winner in dairy cow milking.**

scription in rope of "Ag Barnwarmer."

### Decorated As Haybarn

The remainder of the gym was decorated in the style of the old haybarn back on the farm. The entrance was built as a barn with the door leading into a loft of hay spread to the edge of the dance floor. The archway to the floor was of bales of straw and bales were also used as seats around the gym. Lanterns added to the barn appeal.

Music was supplied by the Louie Kinman band of Iola. Kinman's band followed the Republican delegation

## Everybody's Wet . . .



*Photo by Fred Perez*  
**VETS GET A SOUSING by the three Aggies in the rear as they try to dump dye in the traditional horse tank during Ag Week.**

**K**-STATE granddads didn't have all the opportunities for college training we have today, so if they got a chance to come to K-State back in the old days, they must have considered themselves lucky.

The College seemed to be quite popular with the girls during the early years, though. The ratio of boys to girls was near the popular point of 1 to 1. In 1871, 119 students—64 gentlemen and 55 ladies—were enrolled, according to early records. Of these, 10 were in agriculture.

Of course, campus parking wasn't what it is now. There was quite a bit of traffic, however, with all the instructors and some of the wealthier students driving to class. Garages were even furnished in the parking lots in those days. Of course, they were called buggy sheds then, but the only rent was a bag of grain to keep the equine motor quiet and content during the long school day.

#### Early ROTC Optional

From the first days of the college, military training and drill were available, but were not compulsory. Later two years of military were required of all men. Commissions weren't given to those who took four years of army, however. Military was strictly for credit and enjoyment.

Grandpa didn't have to walk far between classes. In fact, he didn't have time. Five minute breaks were the rule until fairly recent times. There were only a few buildings on the campus, all located between the "old barn" (Farm Machinery hall) and what is now Anderson hall.

The old Farm Machinery hall claims its share of the history of Kan-

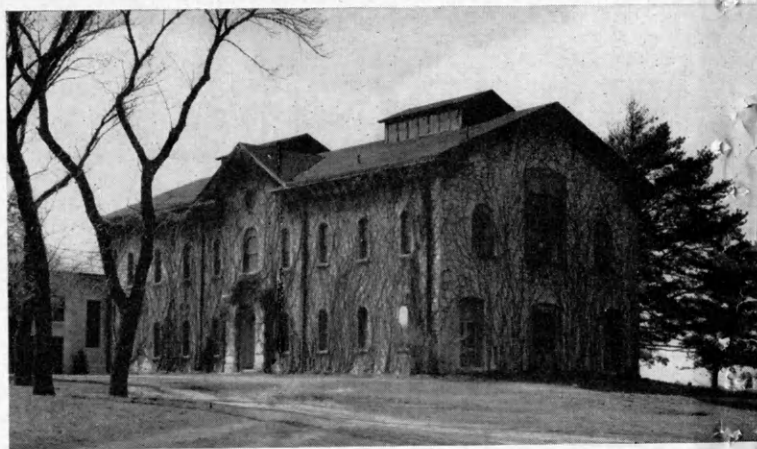
sas State. Long condemned as being unsafe and unfit for classes, it is still used as sort of an all-college attic and as housing for the Agronomy wind tunnel. The old barn, as it was then called, was the first building on the present campus. Built there in 1871 when the original Bluemont college was located one mile west, it sheltered the livestock used in the agriculture classes. While the college students were struggling along attending classes in the inconvenient, poorly constructed buildings of Bluemont, the livestock were "living in luxury"

in the new stone barn located much closer to the small town of Manhattan and sitting on a rise surrounded by the picturesque, perfect, campus site.

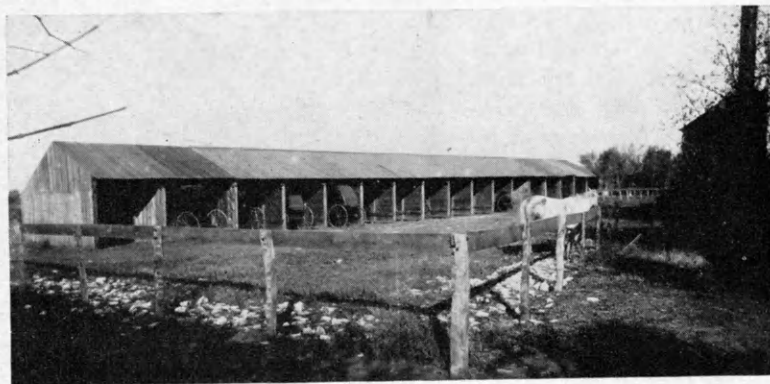
There could be only one outcome from such circumstances. The students, being the smarter, soon had possession of the new barn and the animals were crowded out. In 1875 the barn was remodeled for classes. Other much needed campus buildings were started nearby.

Early school years at K-State included three terms: fall, winter, and

**THE FOUNDATION** of K-State, Farm Machinery Hall, was the first building. Its ivy covered walls at times housed livestock, classes in ag and for a time was home for the ag prof.



**THE PARKING LOT** of yesteryear, this old buggy shed from early K-State may have housed your grandfather's hotrod. Picture yourself going on a date in one of these one-horsepower convertibles on a snowy night.



spring. Tuition for each 13 week term in 1863 was \$5 for regular courses, \$10 for piano. Incidental fees for fuel, sweeping, and bell-ringing amounted to 50 cents a student each semester. Board with private families amounted to \$2 to \$3 per week.

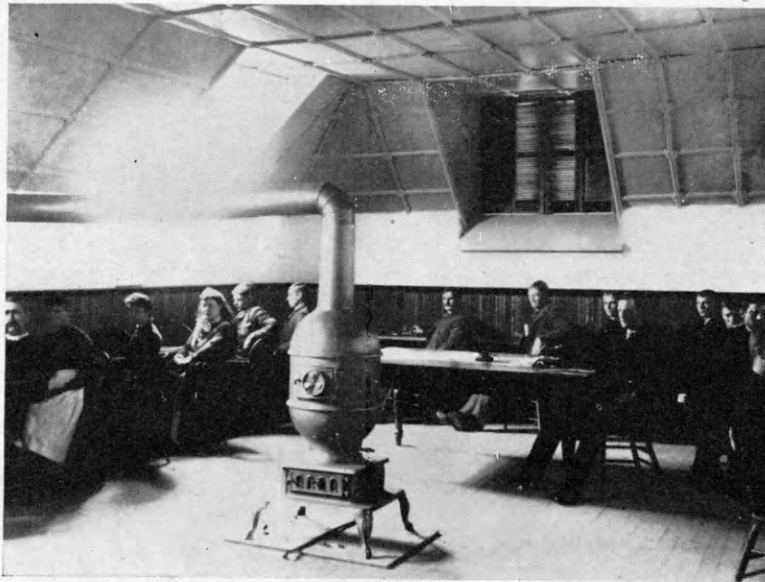
All students were required to work two hours a day at healthful, educational manual labor. For the boys in the ag curriculum, this amounted to care of livestock, seeding or working the small acreage of land owned by



# to Our Modern Ways

and Dan Henley

*Photos courtesy KSC Historian*



**CENTRALIZED HEATING**, in the center of each room, scattered classes or drew them close, depending on the weather and the efficiency of student fire tenders. Part time wood choppers were always needed in that day.

the college, or cleaning the barns and chicken houses.

Students could also find many jobs around the campus sweeping floors, firing the old wood stoves in each classroom, chopping wood for those stoves, and many other odd jobs. All received the basic college hourly wage of 10 cents.

## Shelton Head in '74

Prof. E. M. Shelton was appointed head of the agricultural division of K-State in 1874. He was responsible for much of the reputation the college soon acquired for experimental and research activities. When the Kansas Experiment Station was set up here in 1888, no drastic changes in activities had to be made as the college already was well on its way in the field of agricultural research.

As enrollment in General Agriculture increased, it was inevitable that the department would have to be split up. The Dairy department was formed in 1901, Animal Husbandry in 1902, and the remaining parent department was renamed Agronomy

in 1906. The School of Agriculture was created in 1912. A. D. Weber, present dean of the school, is the sixth man at that post.

The strong competitive spirit of K-State students has produced many top-notch livestock and crops judges. One example of outstanding judging, a product of K-State's judging teams, is Dean Weber. He was the high individual in his college team at the International Livestock Show in Chicago and has since gained national fame as a professional judge.

Judging teams originated at K-State a half-century ago when the livestock judging team went to the 1903 International. The dairy cattle judging team was formed in 1908, the crops team in 1913, poultry team in 1921, meats team in 1927, and the wool judging team in 1950.

This year the Aggies celebrated the 24th anniversary of the Ag Barnwarmer. The first Barnwarmer was held October 21, 1927, in Nichols gym. Apparently the Aggies of that year were quite athletic as the only



**NO CHLORINE** in the water here. Even after running water came, students preferred the well for drinking.

entrance to the gym was a rope ladder into the hay loft. Cider and apples were served between dances and music was furnished by June Layton and his Rhythm Rustlers.

After all the girls had been escorted home, the boys went back and cleaned the gym. Not a trace of the big dance remained by morning.

Back in Ag School history the Ag Student Magazine got its start. Dean F. D. Farrell, later president of the college, believed an agricultural student publication was possible for this school in 1921. After getting assurance from students and alumni that such a magazine was desired, the Ag Student staff was selected and the first magazine printed.

## 40 Years Building

East Waters hall came in 1913 and West Waters in 1923. Now the Waters triplets are complete.

Waters hall was named after top agriculture figure, Henry Jackson Waters. He was a former president of K-State coming from Missouri U. where he was ag dean. One of the ag buildings at M.U. is also named in honor of Waters. The educator turned journalist and edited the Weekly Star until his death.

Looking to the future, the educational picture of the Ag School is bright and promising. Animal Industries, Vet Medicine, Feed Technology, and Extension buildings some day will find a place in Ag School history.

*New Ag Wing*

*Belies Kipling's*

*Ballad*

*as . . .*

**A** DREAM ORIGINATING in the early 1900's has become a reality—the connecting wing between East and West Waters was completed during the summer.

### Reading Room . . .



## East Me

Only slight finishing touches remain although some of the new agriculture offices have come up short of furniture. The huge four story limestone structure devoured the fund of \$655,000 before all furnishings could be purchased.

Sister buildings East Waters hall built in 1913 cost only \$125,000, while West Waters, 1923, cost \$275,000.

### Completely Modern

Nothing has been overlooked in making young Waters hall modern in every way. From the outside the building looms as a spotless white monument against the sky—a true house of knowledge. Above two sets of transparent doors "WATERS HALL," a name synonymous with Kansas State agriculture is deeply imprinted. Upon entering, one cannot help noticing the large sunflower imprinted on the tile floor symbolizing the state flower.

### Tile on Floors

Offices have soft white plaster walls with all floors laid in linoleum

tile. However, the halls are bordered with glazed tile to a height of four feet. The entire building is equipped with gray steel furniture and illuminated with diffused fluorescent lights. Laboratories have sound deadening ceilings and green chalk boards. Stair railings are of metal composition.

Two tanks on each side of the entrance just inside the doors probably have created a good deal of curiosity among Aggies. The tanks will be filled with soil for raising house plants. A yet unfinished elevator is another unusual facility.

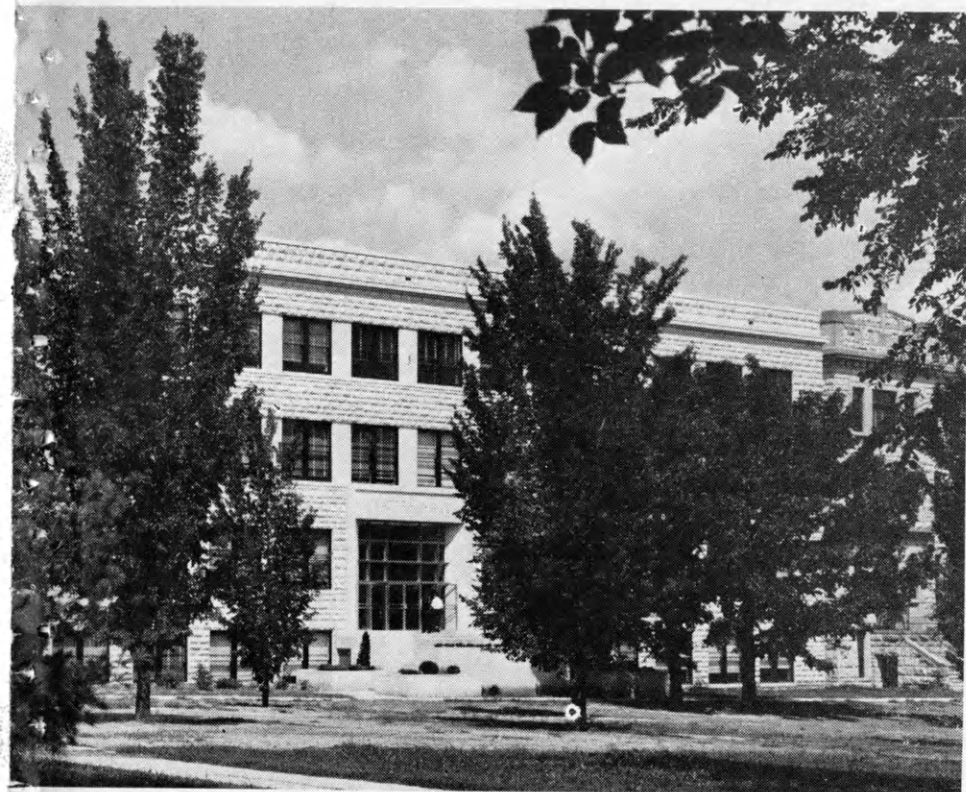
A main feature of Waters hall is a large student reading room on the main floor. It is finished in Philippine mahogany paneling and has a sound absorbent ceiling. Trophy cases are built into the east and west walls, and a magazine rack is built into the south wall. The room is not yet furnished with new furniture. It is estimated the room furnishings, for which no money has been provided, will cost \$1,500. It was suggested in an Ag Council meeting last spring that money for these furnishings be



*Photo by Fred Perez*

**MAKING GOOD USE** of the new reading room in Waters hall is the Ag Barnwarmer committee. Ceilings are sound absorbent.





*Courtesy KSC News Bureau*

# ets West

raised or provided by the departmental clubs in the School of Agriculture, but this has not yet been definitely decided.

Adding prestige to the main floor is a new conference room. The desert sage color of its furniture was chosen by Prof. John F. Helm, architecture, to match the mahogany walls. The dean's offices along with the ag publicity and Ag Student magazine offices are also on the main floor.

## Hort from Dickens

The Horticulture department moved its offices, classrooms, and other facilities from Dickens and Holton halls to the new wing, thus rejoining the Ag school. Horticulture has a large landscape design studio, office, and a topography room on the third floor. Most of their other offices, a seminar and conference room, a lab for advanced students, and a research lab are on the second floor. A research lab for experiment station work and two fruit and vegetable cold storage rooms are in the basement.

The Agronomy department re-

ceived four new offices on the second floor. Provisions were also made for two new soil research laboratories.

## Profs Get Space

By moving into new Waters hall, the Department of Economics and Sociology has been able to reduce overcrowding of office personnel. They have two accounting offices, two land economics offices, two sociology offices, one farm management, and four general economics offices on the top floor.

The Dairy department has two new offices on the second floor of the new wing and a quality control laboratory in the basement. Animal Husbandry has three offices in the basement, Poultry, one lab on the second floor and Milling, two offices in the basement.

Most of the agricultural extension specialists moved from the old barracks into the new wing. The livestock specialists moved into the basement, and agricultural planning, farm management, and marketing offices are on the top floor. Extension specialists who moved to the second

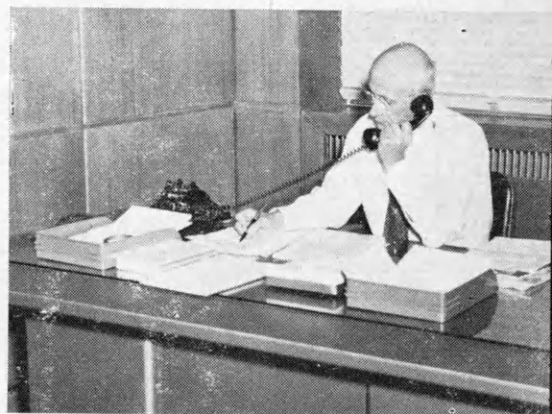
AWAITING THE RETURN of students shortly before the fall term, long planned Waters hall stands as a lonely monument against the sky. Soon after, members of the Hort department, dean's offices, and others brought activity to the new structure.

*By Bill Bergman*

floor are in poultry, agronomy, landscape, forestry, soil conservation, and soil testing.

The connecting link of the Waters hall family has reduced the crowding and improved the educational facilities for both the students and the staff of the School of Agriculture.

## Dean's Office . . .



*Photo by Bob Ecklund*

**HARD AT WORK** in his new office is Dean Arthur D. Weber. The spacious room has mahogany paneling and steel furniture.

*Drought Has Kansas Farmers Looking to*

# Irrigation

*By Nancy Brecheisen*

**A**FTER TWO YEARS of drought many Kansas farmers are turning to irrigation and scores more are considering buying systems. They are finding, however, irrigation to be profitable must be considered scientifically. It's new to most farmers and too risky on poorly-planned and operated farms.

It has been proved that irrigation is valuable even in areas of heavy rainfall. On the average a crop needs two inches of rain each week. If it doesn't rain for two weeks or so, crop

growth will be adversely affected.

Russell L. Herpich, K-State irrigation extension specialist, said, "The number of sprinkler systems in Kansas has increased 50 per cent in the last year. There were more than 180 systems in use during the summer. Furrow irrigation was being used widely in western Kansas where all available well diggers were kept busy searching for water. Central and eastern Kansas farms adjacent to rivers were found more suitable for sprinklers as were sandy and hilly

areas, especially those of south-central Kansas."

Those who used artificial rain not only boosted crop yields, but prevented complete losses which occurred in many unirrigated areas.

Too many farmers purchased systems and used them without proper knowledge for most efficient operation, Herpich believes. "Farmers should be thinking about irrigation now and getting the 'low-down' on how to irrigate their farms."

Here's what a farmer who wants to irrigate should do:

(1) Check soil for suitability for irrigation; that is, its general fertility, drainage characteristics, water-holding abilities, and presence or absence of undesirable salts.

A soil test by the county agent or K-State Agronomy department will determine plant nutrients present. The Soil Conservation Service will look over the drainage problem. The K-State Agricultural Experiment Station, or the Garden City branch station, can test soil to determine its ability to hold water. As a general rule water should be applied to sandy soil more often than heavy. Agronomy will check for salt concentrations.

(2) Determine quantity and quality of irrigation water.

## Check Water Supply

Rivers, creeks, ponds, dams, or wells may all be used to supply water. If one is skeptical of his water source he may consult the report of the U.S. Geologic Survey at Lawrence, or the state Division of Water Resources at Topeka. If a well must be dug, the

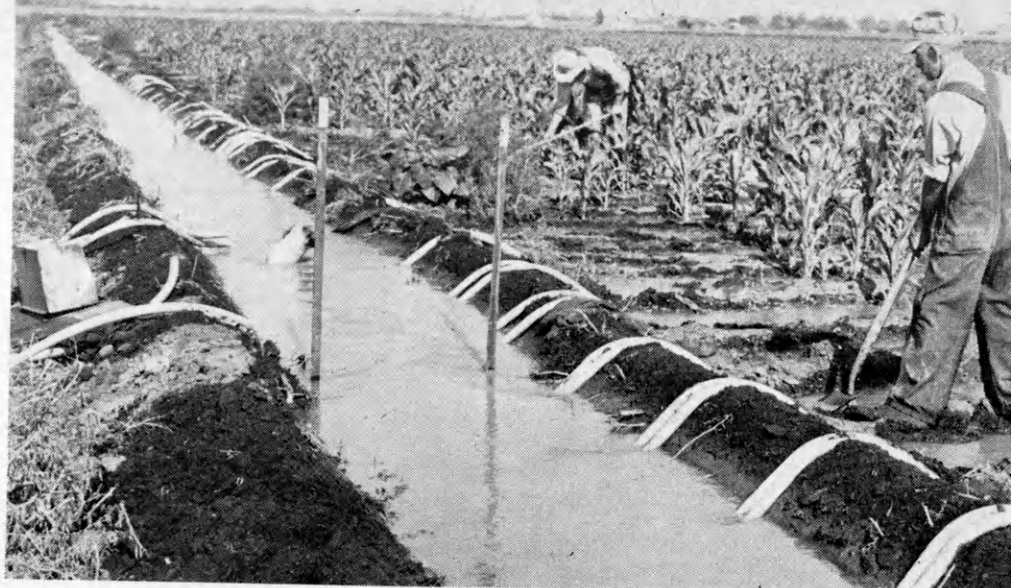
**CABBAGE RECEIVES** a much needed drink on this eastern Kansas farm soon after rain ceased in early spring. There are now over 180 sprinkler systems in Kansas, according to K-State experts. The number increased 50 per cent during the drought plagued past year.

*Courtesy Kansas City Star*





# Higher Yields, More Money, No Failures



*Courtesy Weekly Star Farmer*  
**NORTH CENTRAL KANSAS farmers give their parched corn roots a good soaking. Furrow irrigation is also highly popular in drought stricken western Kansas. Irrigated corn yields up to 120 bushels, says Russell L. Herpich, K-State extension irrigation specialist.**

grower might select the location with well drillers in the area and have them put down a test well.

(3) Determine crops suitable to the area that give best results under irrigation.

In general, vegetables and truck crops are the best money makers near cities. Sorghum (forage or grain), alfalfa, sugar beets, and irrigated pastures are top irrigated crops in western Kansas. Corn, forage sorghum, alfalfa, and irrigated pasture do well in central and eastern Kansas.

## Plan Ahead

(4) Determine acreage of each crop to be grown.

This should be done well ahead of time so an irrigation plan may be worked out.

(5) Calculate irrigation requirements of each crop and total crop acreages.

College bulletins should aid here. Usually small vegetables and row crops require 1 or 2 inches of water every five days, while larger crops such as corn, alfalfa, soybeans, pastures, will do well with 4 to 5 inches every 10 days.

This information can be used to determine peak water requirements from the pump. The total acreage of each crop may be limited, of course, by the area of irrigable land and water supplies available.

(6) Design a system to satisfy peak requirements.

This can be done by consulting an irrigation expert. The K-State Engineering Extension Service, Soil Con-

servation Service, or F.H.A. state water facilities may be able to help.

Herpich says if you have a system don't wait until the dry weather hurts the crop. Start irrigating early and keep it up. Furrow seems to be the most ideal irrigation method if the land is gently sloping. Land leveling costs from \$30 to \$100 an acre, while the initial cost of a sprinkler system runs from \$30 to \$150 an acre. Furrow is best for row crops and sprinkler for pasture and alfalfa.

The College has given free advice to Lindsborg farmers in return for data on their irrigated crops. Herpich reports at the Lindsborg farms last year corn yielded 106 bushels, sorghums 97, and hay 7 tons. Many of the unirrigated farms in that area had almost complete crop failures.

## Aim for 120 Bushels

"Our goal this year is 120 bushels on corn and grain sorghums, and 25 tons on silage," Herpich said.

K-State also has been experimenting with irrigation for a number of years at Garden City. Andy Erhart, station superintendent, reports alfalfa will yield up to seven tons under irrigation. Forage sorghums produce good roughage with common yields of 10 tons of air-dry fodder and 20 to 30 tons of silage. Combine grain sorghums, he said, should yield more than 75 bushels to pay off.

Proper management for good irrigated pasture involves choice of grass-

es and legumes, adequate irrigation, weed control, and proper grazing methods, Erhart says. An alfalfa-brome mixture is the best combination. Sudan grass also makes good pasture with sweetclover, ladino clover, hairy vetch, and rye next in line.

Wheat has not yet proved too good under irrigation, but new varieties, better management, and the value of winter pasture leave it with possibilities. Irrigation brought wheat up last fall and saved several farmers' crops. Corn has not produced consistently high yields under furrow irrigation in western Kansas.

## Fewer Acres Required

An irrigated farm can be much smaller than an unirrigated one and still be profitable, Erhart believes. "Livestock and irrigation are a good combination. The livestock use the roughages produced, permit more year-round efficiency of labor, and provide manure for fertilization."

The farmer who irrigates must be prepared to maintain high fertility. The high yields produced by irrigation remove large amounts of plant nutrients which must be replaced. Barnyard manure, commercial fertilizers, and legumes in the crop rotation should be increased.

Planned and operated in the right manner, irrigation can do much toward pulling Kansas farmers through the drought years that may be ahead and toward boosting crop yields to new highs.

# Where Shall I Live

By Tom Pettit

## Fraternity?

Dear Editor:

I've found there are many schools of thought on fraternities. In fact, opposition frequently has been raised against them. They have been labeled unconstitutional and prejudiced. Most accusations, however, have been made as a result of the conduct of a few shady persons associated with the fraternity.

Perhaps the two items that bring the most criticism to fraternities is secretiveness and selectiveness. But without secrecy the fraternity could not exist. There would be no basis for a common bond among the members. And without selectiveness students uninterested in achieving a common purpose would degrade the fraternity.

What can I get out of belonging to a fraternity, you may ask yourself? Any fraternity, like any other organization, will benefit a member only in proportion to what that member gives to it.

The benefits of a fraternity are many and long lasting. You will re-

**BUDDIES ALL, Farm House members learn table etiquette and social poise as that of Eldon Johnson. Housemother Taylor assists.**

*Photo by Dick Steffens*

**HOUR DANCES are a part of fraternity life. Aggies Mike Cornett (left) and Glen Beyer (right) glide through a smooth number.**

*Photo by Dick Steffens*



ceive first-hand training in social graces, etiquette, and how to meet people. In so doing, you will become more self-confident and benefit both yourself and your organization. That, in itself, is invaluable training for the later life of a college man. You will identify yourself with a group that is known both on and off the campus. Everything you do will reflect on that group.

You will also learn how to live with men of different temperaments, talents, convictions, and backgrounds. You will make lifelong friends and contacts. Most important, you will share with other members a true sense of companionship that may be strong enough to surmount personality conflicts and minor differences.

Fraternity pledgship is another item that has raised skeptics' eyebrows. Actually, it is but a period during which you receive training that will help you prove yourself worthy to become an active member. Pledge duties are merely small forerunners of the responsibilities of actives. The manner in which they are carried out is an indication of how well important

fraternity duties will be executed when pledgship is over.

The cost of belonging to a fraternity has been deemed unreasonable by many people. Last year research by the K-State Interfraternity Council proved that the average independent student spent \$2.50 more each month for room and board than the average fraternity man.

If you are going to be a fraternity member, be a good one. In so doing you will gain the respect of your fellow members. In addition, you will help raise the esteem outsiders hold for your fraternity, thus strengthening a great American collegiate institution, the fraternity system.

Tom

**ALONE AT HIS BOOKS is James W. Smith, agriculture senior. Seclusiveness for good studying is a point for independent houses.**

*Photo by Bob Ecklund*





# Independent House?

By Bill Deyoe

Dear Editor:

I'll bet you thought I'd failed you. I have in a way. I don't think I can write a story worth printing (no confidence). However, I'll try to give you my ideas on the subject.

I never gave a thought to anything but being independent. I hated to have any controls placed over me. I like to line up my own woman, one who knows how to cook as well as neck. And how I'd hate to dress up most every night. In general, I didn't think I'd like the things frat men had to do.

My oldest brother once said, "If you want to join a fraternity, join the army." I figured he was right. You can get in an independent house sometimes that is just as noisy as a frat house, though. Our rooming house got pretty rowdy at times.

As far as food, entertainment, and rent are concerned, I always figured I could get along cheaper as an independent. Maybe I didn't enjoy it, but it was cheaper. Food doesn't cost too much if you don't mind starving to death. I usually got around to eating once a day.

Room rent is cheaper if you share a crowded room with two or three others. For entertainment a person can sleep, go to the show about once a month, play cards, or join a bull session. I always found I could have just as much fun without formal dances and such. They're just not meant for an old farm kid like me.

I think my grades were as good as or better than most frat men's. I had a 2.21 average for the first two semesters. Of course, with no pledge duties to bother with, I had plenty of time to study and to scrub floors to help foot the college bill.

I don't think I'll earn that high a grade average again. Not this year anyway. I volunteered for the draft. I was inducted September 10. Wasn't that a fool stunt to pull? If I'd waited

for them to take me and if I'd had a deferment, it would have probably been a year before I'd even had to take my physical. But no! I had to go ask them to take me, right away! I'm not sorry I did it though. Only the Good Man knows where I'll be stationed. Maybe at Ft. Riley. Ha! Who knows?

Bill



Photo by Bob Ecklund

**INDEPENDENTS INDULGE** in one of their favorite pastimes. Left to right are Aggies Bob Lynch, Francis Pieschl, Bob Schneider.

**THEY MET TO DISCUSS** market quotas for the 1954 wheat crop. Left to right are Wendell Becraft, Kansas PMA chairman; L. C. Williams, Kansas State extension head; Gene Fortune, Kansas Farmers' Union president; Herman Praeger, Kansas Farm Bureau president; James A. McCain, KSC president; Senator Frank Carlson; and Arthur D. Weber, Ag School dean. Ray Teagarden, Kansas Grange president, was unable to attend the meeting.

Courtesy Guerrant



# Wheat Mosaic

By Herb Lee

**I** WON'T GET one bushel from this 100-acre wheat field," said a western Kansas farmer back in 1932 when he walked into the field and found the plants stunted and yellow streaked. "What's wrong? Grow-

ing conditions were fair this year. Insects weren't bad."

Now, 20 years later, even the scientists are still baffled by the wheat mosaic virus that in 1949 destroyed an estimated 15 million bushels of

wheat worth \$30 million, and was the same disease that killed that 100 acres in 1932. But Kansas State scientists and those of other institutions are beginning to find out secrets about the virus. Kansas State now has a \$100,000 wheat mosaic research program.

The latest discovery has been that of a tiny mite as the carrier of the dreaded wheat streak mosaic. Dr. J. T. Slykhuys, Dominion Research Laboratories, Lethbridge, Alberta, detected the mite this spring. His findings were later confirmed by Richard Connin, USDA entomologist working at K-State, and a Nebraska researcher.

A special high power microscope must be used to view the tiny white mite. It is less than one-thousandth of an inch long and is very prolific. Since it doesn't fly, it is believed to be spread by wind. Research men do not rule out the possibility that other insects may be carriers of mosaic or that the tiny mite may hitch rides on larger insects.

## Mites Roll Leaves

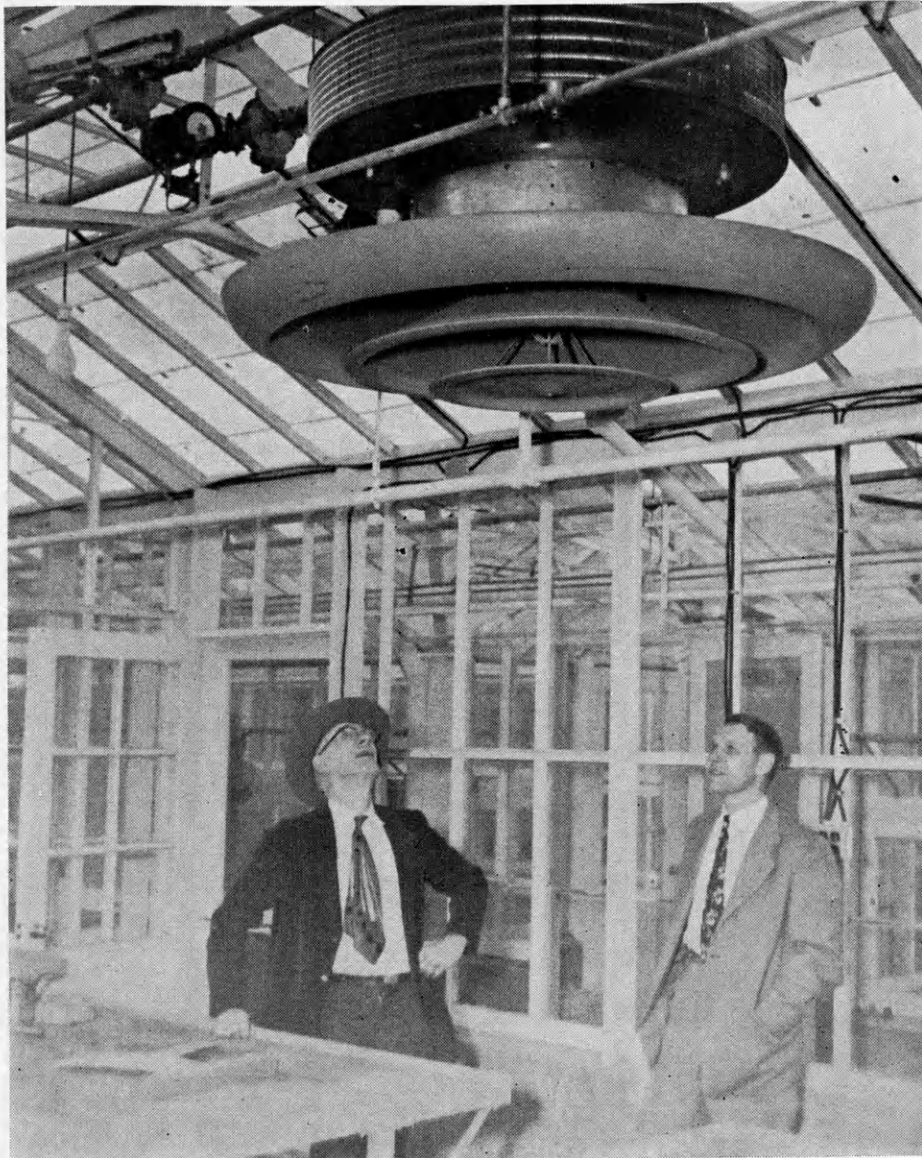
Feeding mites cause wheat leaves to roll with the mites feeding in the rolled portion. The search goes on for a control, in all probability an insecticide, since a resistant variety seems impossible. Nearly all breeding stock has been found susceptible. However, there is hope a variety resistant to the mite may still be found.

"There are at least two economically important wheat mosaic diseases in Kansas—soil borne and wheat streak," said Dr. Webster Sill, state pathologist stationed at K-State.

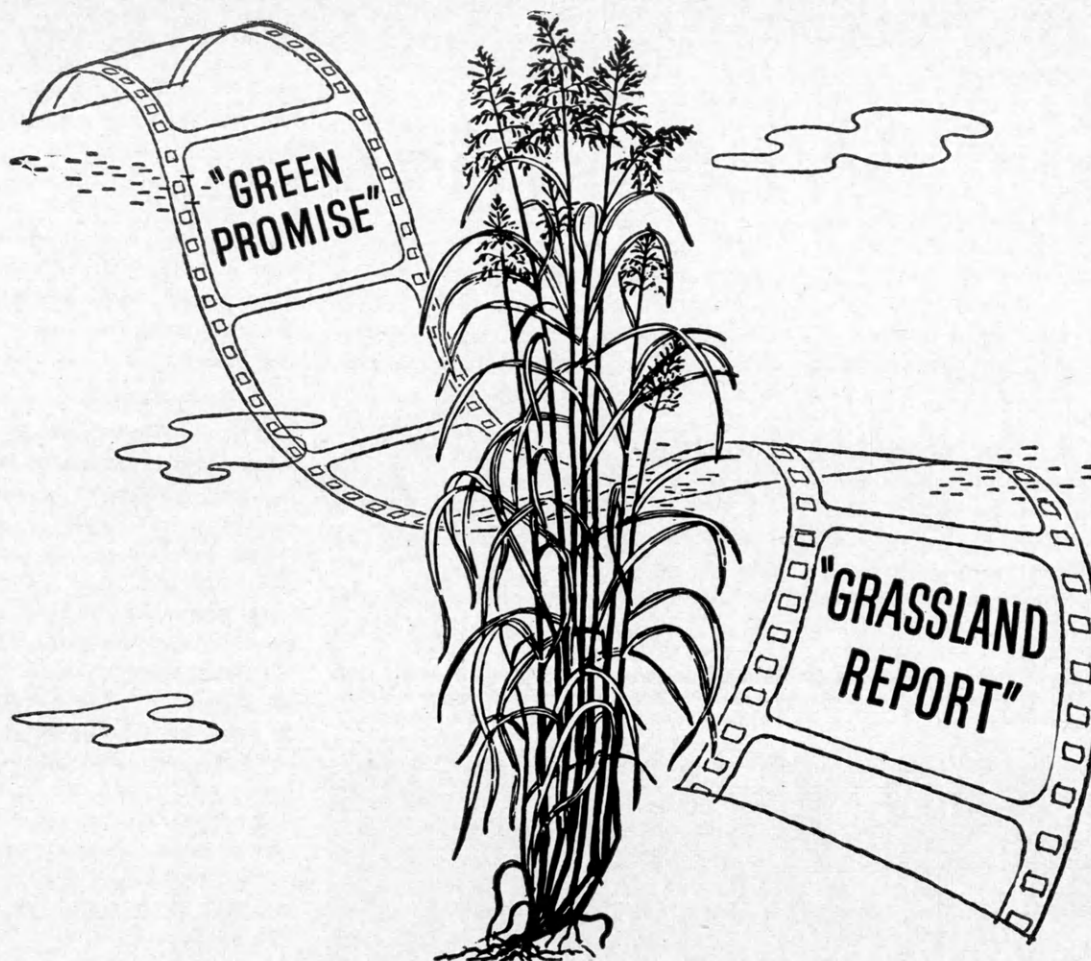
Both types are characterized by yellowish green mottling and streaking of the leaves. Wheat streak mosaic becomes more severe and the leaves more yellow in the later stages, while yellow markings on wheat infested

**A SPECIALLY INSTALLED fan in one of the new wheat mosaic research greenhouses is being examined by Dr. Hurley Fellows, USDA pathologist, and Dr. Webster Sill, state pathologist. The fan circulates hot air, which is piped into the house in winter, Dr. Sill said.**

*Photo by Dick Steffens*







## Grass stars again!

**G**OOD NEWS TRAVELS FAST, but too often the details are lacking. So, to give farmers practical demonstrations of the "why, how, and when" of Grassland Farming, New Holland took sound cameras and color film into the field.

First production was "Green Promise." Here, famous experts, Hugh Bennett, Carl Bender and Henry Ahlgren told the basic story of grass in terms of conservation, stock feeding, crop rotation, and mechanization.

**Now**, "Green Promise" has been followed by a new film, "Grassland Report." Just released, it follows newsreel reporting techniques to bring farmers the latest in new grassland farming practices.

"Grassland Report" is narrated by Ed Thorgeren, ace newsreel commentator. The film sweeps the U. S. and Canada searching out new ways of cutting costs, keeping profits up, making jobs easier. Burying baled hay in Massachusetts, harvesting oats with a forage harvester in Canada, feeding Texas cattle on Pennsylvania grass.

Here are ideas that farmers and ranchers can profit from—put to work on their land.

**If you haven't seen** these two remarkable 16mm color films, you're honestly missing an inspiring, exciting show. Schedule a showing through your local New Holland dealer or by sending in the coupon below.

The New Holland Machine Company, a subsidiary of The Sperry Corporation.

For a free showing of "Green Promise" or "Grassland Report," write to: New Holland Machine Co., Dept. I-15 Box 16, New Holland, Pa. Write in advance to assure prompt delivery.

Please send: \_\_\_\_\_  
 \_\_\_\_\_  
 "Green Promise"  
 "Grassland Report"

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Organization: \_\_\_\_\_

Date of showing: \_\_\_\_\_



# NEW HOLLAND

*"First in Grassland Farming"*

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

## Wheat Mosaic

(Continued from page 20)

with soil borne mosaic usually disappear as the plant matures. But in the intermediate stages even a virus specialist cannot tell the two apart.

"It is the wheat streak mosaic, found in western Kansas, that we are most concerned about," Sill said. Hundreds of varieties have been checked in the search for completely resistant varieties to the wheat streak mosaic and Triumph so far seems to be the best.

Several observers have noticed that late planted wheat seems to escape severe infection with the wheat streak mosaic virus. According to these repeated field observations, late planting still can be recommended honestly as a probable control method. It is

now known that wheat must be infested while young to be severely injured by the disease.

"We're midway in our research program," Sill said. "We have had our new greenhouses in operation since late summer."

Dr. John Schmidt, Agronomy professor, is doing breeding work in one section of the greenhouses, while Richard Connin, USDA entomologist, and Dr. Reginald Painter, professor of entomology, are working on insect transmission. Dr. Hurley Fellows, USDA pathologist, is continuing his experiments to find varieties resistant to wheat mosaic and Sill is trying to find the different strains of viruses that occur in Kansas.

Current research projects are designed primarily to find a control for

the mite and a variety resistant to mosaic. During the summer it was confirmed by K-State scientists that the grazing and trampling by livestock, the moving of machinery, the abrasive action of blowing soil are not involved in the transmission of wheat streak mosaic. Some transmission was noted by the lashing action of infected leaves on healthy leaves. Wheat streak mosaic was severe in only restricted areas this year.

### Modern Greenhouses

The new greenhouses are in eight sections, each a complete laboratory in itself. Actually, each section has all the conveniences a research man could ask for, except refrigeration. They are insect and fumigation proof. Overhead steam heaters in one of the greenhouses eliminate steam pipes in the laboratory proper. Hot air will be piped into the laboratory in the winter and distributed by a specially installed fan. An automatic ventilation system will make it possible to use outside air in the winter for research on soil borne mosaic.

Hot and cold water and compressed air will be available in every room. An implement sterilizer, a tool cabinet, and a place to store sterilized soil will be provided, as will a special sprinkler system to keep up the humidity. In one greenhouse, two heaters are installed in each room for better air distribution. Benches are so constructed that the soil in each can be sterilized without removal.

This new equipment along with a larger staff should put the research program in high gear at the College. The result can only be a quicker solution to the viruses causing wheat mosaic and more profits for Kansas farmers.

Someone sent an abacus to Farmer Brown after the birth of his seventeenth child and followed it up with a visit.

"Why don't you throw some rocks at the darn stork and chase him away?" the friend asked.

"Aw, he ain't doin' much harm," said Farmer Brown. "He's just kiddin' around."

Wholesale meat buyer—"Those hogs are pretty thin, mister. How do you keep them from running through the knotholes in the pig pen?"

Farmer—"I just tie knots in their tails."

**WHEAT DAMAGED** by wheat streak mosaic is being held by Dr. Reginald Painter, state entomologist. A healthy wheat plant is on the table. K-State is operating under a \$100,000 mosaic research program. In 1949 15,000,000 bushels of wheat were destroyed.

*Photo by Dick Steffens*







## Big Yields Burn More Humus

**Above left:** The new New Idea shredder has three shredding heads with adjustable hammers. Outside shafts rotate in opposite directions. Cleans two rows and center.

**Above right:** New Idea-Horn loader has fast lift, high reach. Handles loads up to 2,500 lbs. Low profile permits working in cramped quarters. 10 easy-on attachments do 101 other jobs. Fits more than 80 tractor models.

**Below:** Four New Idea spreader models, including a 120 bu. PTO job, give you a wide choice of capacities to fit your requirements. Wide range of spreading rates controlled from tractor seat.

**NEW IDEA**  
FARM EQUIPMENT CO.

Division **AVCO**  
Distributing Corporation

Coldwater, Ohio

It's no crime to burn more humus with higher yields. It *is* a crime if you don't put it back, full measure, into your soils.

Agronomists say that each rotation requires 8,000 to 12,000 pounds of organic matter per acre. If you do your part in this turnover of organic material, you can expect to maintain the tilth and fertility of your soil. Keep in mind, too, that organic matter holds *five times* as much moisture (pound for pound) as other soil material.

With the three NEW IDEA tools featured here you can do your part quickly and easily. The shredder pulverizes coarse surface material, which then decomposes rapidly into true humus — especially when worked immediately into your soil. A NEW IDEA-HORN loader speeds up manure handling — eliminates fatigue. The famous NEW IDEA Spreader is unsurpassed for fine shredding and controlled spreading.

You need these machines for humus-hungry crops and soils.

Service with a Smile—

## JERRY NOLL'S TEXACO SERVICE

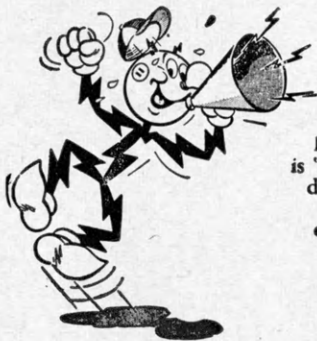
Claflin and Denison Roads

(At NW Corner of Campus)

Call 2347

Lubrication  
Gas  
Oil

Battery Charging  
Car Washing  
Car Accessories



### *Reddy's* **Rooting for You**

Reddy Kilowatt, your electric servant, is 'rooting' for you 24 hours a day, every day, with dependable electric service. He's always busy serving all of your electrical needs, and for just a few pennies a day.

**THE KANSAS POWER  
and LIGHT COMPANY**

## C-K PACKING CO.

Producers of

**RANCHOUSE MEAT PRODUCTS**

We Buy

**CATTLE and HOGS**

Buyers

L. R. Northern — Phone 6354

Ed Briggs — Phone 6355

Salina, Kansas

## Chit Chat

(Continued from page 6)

of Purdue University in a very fine and appropriate manner.

When President Hovde stepped before the microphone, his first remarks were, "After so fine an introduction, I can hardly wait to hear what I shall have to say."

Another apt remark, following a splendid introduction, was used by Dr. Willard (after whom Willard hall is named) some years ago.

The good doctor was being banqueted and toasted in honor of his many years of outstanding service to Kansas State. When he was finally permitted to take the floor, he opened his remarks by saying, "I now know how a well-browned pancake must feel when its top is flooded with a deluge of maple syrup."

The co-ed giggled and wriggled. "Oh, stop it!" she cried, "you're tickling me."

"Aw, I can't help it," he said, holding her a little closer, "I'm merely groping for words to tell you how much I love you."

## Style Headquarters

Where



**Are Sold!**

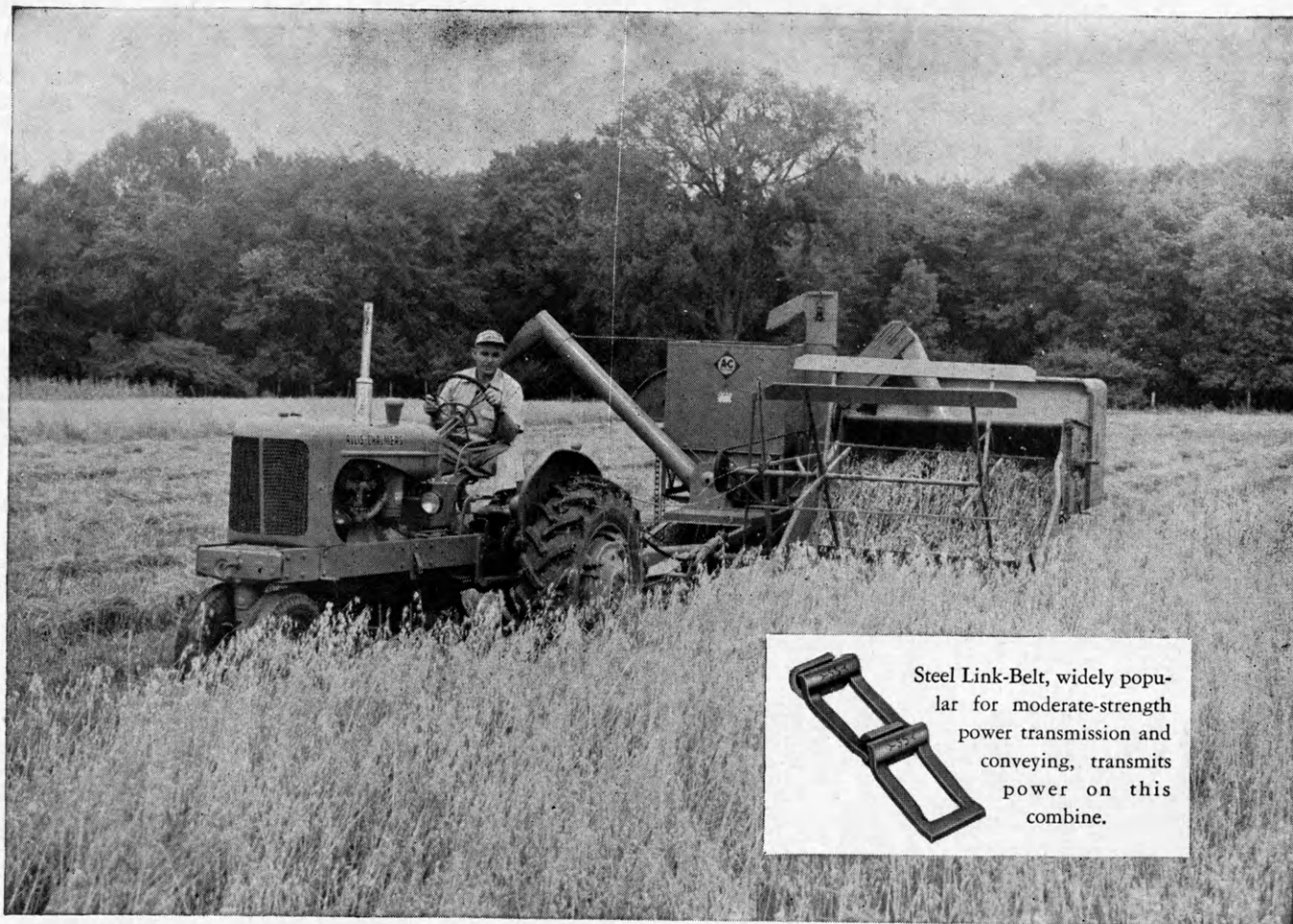
Styled to fit you  
and priced to fit  
your budget.

**Don & Jerry**  
CLOTHIERS  
309 Poyntz



RESEARCH AND ENGINEERING BY LINK-BELT MAKE FARMING EASIER, MORE PROFITABLE


# Why chain is best for agricultural drives and conveyors



Steel Link-Belt, widely popular for moderate-strength power transmission and conveying, transmits power on this combine.

## LINK-BELT builds a complete chain line . . . engineered for today's higher speeds and heavier loads

**W**HETHER it's a high-hp, heavy-impact cylinder drive or relatively slow-speed conveying service—America's top agricultural machinery designers know they can depend on Link-Belt chain. For Link-Belt builds a size and type of chain for every purpose. Each is engineered to meet specific operating conditions. And each will provide smooth, positive, all-weather service . . . with sustained high efficiency for the long life of the chain.

Whenever you see a chain bearing the Link-Belt double arrow , you can be sure of com-

plete uniformity. Continuous field and laboratory research, exact control of materials, careful testing are your assurance of no weak members.

You'll find the products of Link-Belt research and engineering on the farm machines of more than 300 leading manufacturers. Conclusive evidence of Link-Belt's vital role in making modern farming easier, more profitable.

# LINK BELT

**CHAINS AND SPROCKETS**

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

LINK-BELT COMPANY: Plants—Chicago, Indianapolis, Philadelphia, Colmar, Pa., Atlanta, Houston, Minneapolis, San Francisco, Los Angeles, Seattle, Toronto, Springs (South Africa), Sydney (Australia). Sales Offices in Principal Cities.

13,231



## HEREFORDS, THE BEEF BREED SUPREME

You can read about the 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 43 years. Published on the first and fifteenth of each month.

500 Graphic Arts Bldg.  
Kansas City 6, Mo.

Dealers in All Grass,  
Field and Garden Seed  
  
Wholesale  
and  
Retail

Submit samples of  
anything you have  
to offer

### Standard Seed Co.

Office and Retail Store

15 East 5th St.

Kansas City 6, Mo.

Phone Vltor 0420

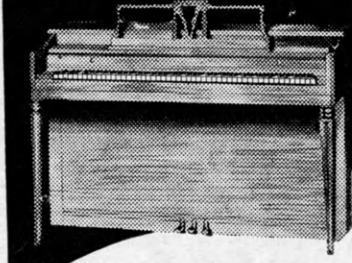
Warehouse

Phone 931-937

Vltor 8368 W. 8th St.

*A Happy Future*  
FOR YOUR CHILD

WITH A *New*  
**GULBRANSEN**  
Diacron Console



**SALISBURY'S**  
MUSIC  
HOME APPLIANCES

### MORE FEEDING ECONOMY

when you feed

### SHELLABARGER

### Fortified Feeds

Get More for Less

See your Shellabarger Feed  
dealer in your area

### SHELLABARGER

*Feed Mills, Inc.*

Salina, Kansas

Ph. 3171

## Advertisers' Index

Aggie Hdw. & Elec. Co. ....	5
Campus Book Store .....	5
C-K Packing Co. ....	24
Darby Corporation .....	5
Deere & Co. ....	Inside Front Cover
Don and Jerry .....	24
H. C. Davis Mfg. Co. ....	3
Hereford Journal .....	26
International Harv. Co. ....	Back Cover
Jerry Noll's Texaco Serv. ....	24
Kansas Power and Light Company .....	24
Link Belt .....	25
Minneapolis-Moline Co. ....	Inside Back Cover
Moor Man's .....	7
New Holland Machine Co .....	21
New Idea Farm Equip. Co. ....	23
Paul Dooley, Jeweler .....	6
Preferred Fire Ins. Co. ....	6
Reed & Elliott .....	5
Salisbury's .....	26
Sears .....	8
Shellabarger Feed Mills .....	26
Standard Oil Co. ....	9
Standard Seed Co. ....	26
Stevensons .....	6
Wyatt Mfg. Co., Inc. ....	5

The new hired man grasped the plow handles and when the horses started to move protested in pained indignation:

"How can I hold this thing when those two horses are pulling it away from me?"