

S  
1  
K3  
35/3  
KANSAS  
12

cop. 12  
bind 575/e

KANSAS STATE COLLEGE

# Ag Student

FEBRUARY 1959

VI 3513



FARM SW<sup>1</sup>/<sub>4</sub>-12-18-4

Page 12



...Choose a **JOHN DEERE** *Planter and Tractor*

There's no greater feeling at planting season than knowing that you can take the greatest possible advantage of time and weather, soil and seed. And that is the kind of confident feeling you have when you team up a John Deere Planter and a John Deere Tractor, a combination designed and built to assure you of the kind of planting job that results in wholesome yields and profitable harvests.

Long tops in planter popularity, John Deere Corn Planters enable you to cut a wide swath through mounting labor and fuel costs and speed through the critical planting season. You can make a once-over job of planting, fertilizing, and applying weed- and insect-controlling chemicals—produce more corn and get bigger profits from every acre. Extra large capacity hoppers cut time and refilling stops to a minimum. Natural-drop seed plates, sloping hopper bottoms, and high-speed valves assure you of the right plant population for the fertility level of your land.

**Depend on John Deere Power**

John Deere "530," "630," and "730" Tractors provide the economical power to handle big planting jobs at low cost. In addition, these tractors contribute directly to better work—through *Advanced Power Steering* that enables the operator to accurately guide the tractor; through the high seat location that provides an unexcelled view in all directions;

through the six-speed transmission that provides the proper speed for accurate planting. *Custom Powr-Trol* raises openers high and clear for sharp turns at row ends, for faster transporting to and from the field.

Harvest more corn—higher-quality corn—make fewer trips through the field—by teaming up a 4-in-1 John Deere Corn Planter with John Deere Tractor power.

**"WHEREVER CROPS GROW, THERE'S A GROWING DEMAND FOR JOHN DEERE FARM EQUIPMENT"**



SEND FOR FREE Booklets

**JOHN DEERE • MOLINE, ILLINOIS • DEPT. CM-1**

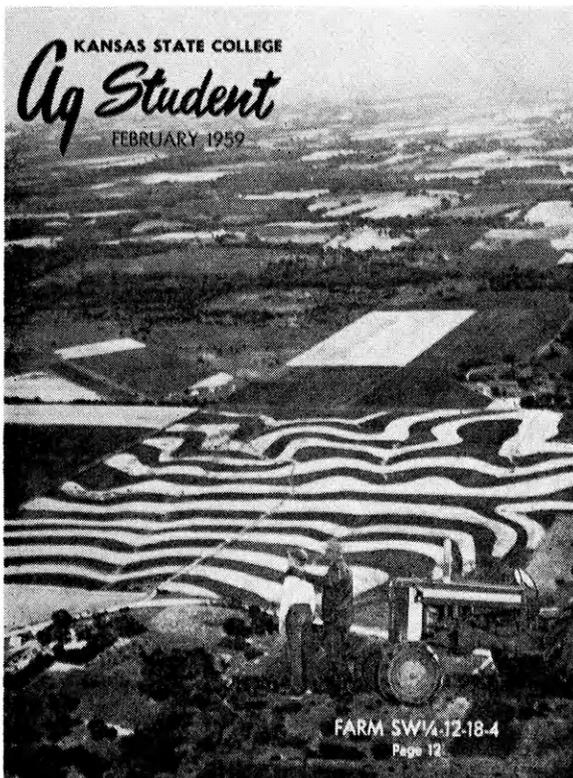
Please send me information on  John Deere Tractors  John Deere Corn Planters  John Deere Credit Plan.

I farm \_\_\_\_\_ acres.

Name \_\_\_\_\_  Student

Rural Route \_\_\_\_\_ Box \_\_\_\_\_

Town \_\_\_\_\_ State \_\_\_\_\_



# Kansas State College AG STUDENT

Vol. XXXV

February 1959

No. 3

## In This Issue

Over the Director's Desk .....	C. Peairs Wilson	4
It Pays to Increase Your Ag Power .....	John Carlin	6
Get 'em Before They Grow .....	Ken Hylton	7
Farm Landscaping .....	Norman Werner	8
Precooked Meats .....	Mary Jo Mauler	11
Farm SW 1/4-12-18-4 .....	Chester Peterson Jr.	12
Livestock Tranquilizers .....	Jim Swiercinsky	14
Grow Vegetables Five Ways ....	Larry Greene	15
Angus Show and Sale .....	Hal Ramsbottom	16
Beautiful Bouquets .....	Larry Greene	17
More Meat—Less Fat .....	Loren Henry	18
Aggies' World .....	Eugene Harter	19

### On the Cover

Who is this man? Is he a Kansas farmer, possibly even a neighbor and friend, or is he gazing at land located far from our state? And what about the boy, is he the son who will take over the farm's management duties a decade from now?

Look closely, for it may even be you who is pictured on our cover!

This cover is dedicated to all the many Soil Conservation workers, Extension Service men, and most important of all, the farmers of this fertile country who are waging a continual battle against the processes of nature. Like a certain undeclared war of several years ago, this is a "policing action" too, and also like then, people get hurt if precautions aren't taken.

Fighting erosion is comparable to balancing a pencil on your nose. After some effort it will finally balance, but it takes hard work to keep it up.—Chester Peterson Jr.

Are you an agricultural expert? If you think you know your beans and cows pretty well, then turn to page 6 and tackle "It Pays to Increase Your Ag Power." This feature is also perfect for Aggies who would rather read the Ag Student for their college knowledge than to attend class.

PHOTO CREDITS: U.S. Department of Agriculture and Ag Student Photographer, Cover; Agronomy Department, 7; Horticulture Department, 8, 9, and 15; Courtesy Waters Hardware Co., 11; Extension Service, 12 and 13; Hal Ramsbottom, 16; Martin McCartor, 18; and Ag Student Photographer.

—+—

## Staff

### EDITORIAL

Chester Peterson Jr. ....Editor  
Richard Vanderlip .....Associate  
Norman Werner .....Assistant

### STAFF REPORTERS

Ken Hylton            Jim Swiercinsky  
Ben Brent             Arnold Good  
Don Sumner           Richard Rees  
John Carlin            John Thomas  
                         Laurice Margheim

### HOME EC STAFF

Karen Peterson .....Editor  
Ruth O'Hara           Mary Jo Mauler  
                         Janet Dawdy

### BUSINESS

Fred Beeler .....Manager

### SALESMEN

Dick Foulke            David Newton  
Joe Lichtenauer       Duane Baird  
Don Coonrod           Larry Magette

### CIRCULATION

Eugene Harter .....Manager

### PHOTOGRAPHER

Joe Mink

### FACULTY

Lowell Brandner

—+—

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.

# Over the Director's Desk

By C. Peairs Wilson

Director of the School of Agriculture

CALLING ALL AGS! CALLING ALL AGS!

Traditionally, Ag Week, followed by the Barnwarmer, has been in the fall. This year, Ag Week, to be climaxed by the Little American Royal, will be held in the spring. This will be the principal Ag School event of the year.

Two years ago, an effort was made to make Ag Week more of an educational event than it had been in previous years. Educational exhibits and demonstrations were sponsored by departmental clubs. These exhibits and demonstrations illustrated contributions of modern agriculture to our American standard of living and the many opportunities to find a satisfying career in the broad field of agriculture.

One of the problems in staging Ag Week during the past two years has been that because the event came so early in the school year, it was difficult to effectively plan and develop it. The principal reason for changing Ag Week to a spring date is to make it possible for students to do a better job of planning and staging the event. To do a better job means that more man hours will have to go into preparation. This, then, is an appeal to all Ag students to pitch in and help with Ag Week. Help your departmental club plan and set up its exhibit or demonstration.

In addition, let's remember that the climax is the Little American Royal. If the show is to be a success, there must be a big turnout of students to fit and show livestock and dairy cattle. Let's make Ag Week an outstanding event on the K-State

campus. The Ag School will be on display during Ag Week.

In my judgment, there has been altogether too much pessimism about the future of agriculture in Kansas and the United States. An industry that provides food for 175 million Americans (with more millions added every year), and millions outside the United States, is neither a small nor a declining industry. An industry that provides nearly 40 percent of the national income and employs 40 percent of the working population offers ample opportunity for jobs.

Farming, which is one part of the agricultural industry, has a greater inventory of machinery than the steel industry and five times that of the automobile industry. The application of science and technology to farming during the past 20 years has doubled efficiency as measured by output per man hour. How many other industries can make this claim? Those who work in agricultural jobs need not be apologetic—in fact there is every reason for developing some enthusiasm which has been lacking in recent years.

So let's take pride in our profession and in our School. Let's build up some more enthusiasm for the Ag School at K-State and let's start with the 1959 Ag Week and Little American Royal!

Editor's Note: *Each spring the student-managed Little American Royal throws a spotlight upon the K-State Ag School. Although patterned after the American Royal, it differs by having the judging based on the exhibitor's fitting and showing skill rather than on type. The*

*show has gained for K-State considerable national recognition among land-grant colleges (or universities as the Collegian would have it).*

*Dairy Club and Block and Bridle Club supply the manpower to handle arrangements, but everyone is invited to draw for an animal. In fact, to make the show a success and a fitting climax to Ag Week, the Little Royal needs the wholehearted support of everyone. An agronomy or hort major has the same chance of carrying home a big silver trophy as the next man.*

*In case you're an engineer, remember that entries are open to everybody. Everyone makes mistakes, so don't let the one you made when enrolling hold you back from participating in the BIG spring campus activity. Girls are welcome, too; in fact, they occasionally win their class.*

*The new combination of Ag Week and the Little Royal should lend itself well to emphasizing the Ag School to Kansas people and especially to prospective freshmen. A large group of interested, hard-working Aggies will present the best possible picture of K-State.*

## Little American Royal

All

K-State Students  
Are Eligible

BE A PART OF YOUR  
AG SCHOOL

Registration in  
Waters Hall  
February 12, 13, 14

*Make this your year...*

# Trade up to **NEW IDEA** **POWER SPREADING!**



## **NEW IDEA** power spreading costs you less than automatic transmission for your car

Now, shift to power spreading with a NEW IDEA.

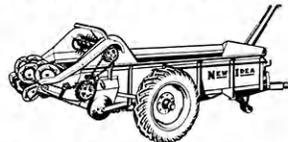
NEW IDEA PTO spreaders, with their big tires, let you spread in wet, icy weather . . . on soft, slippery fields . . . over hilly terrain. Built to spread efficiently every day of the year.

You handle bigger loads. You save yourself time and labor. With NEW IDEA you have five spreading rates for each forward tractor speed plus throw-out clutch for easy cleanout and pile unloading . . . all controlled from your tractor seat.

Which power spreader is best for you? NEW IDEA offers the big 95-bu. PTO spreader for average farms . . . the giant 125-bu. PTO spreader with forage box sides available, for large feeder and dairy operations. Famous NEW IDEA ground-driven spreaders available with 70-bu., 75-bu., or 95-bu. capacity. You can buy any NEW IDEA spreader

with new or used tires. Best and most complete line of spreaders on the market today. Full year guarantee on every one.

Remember, more farmers buy NEW IDEA spreaders than any other make. Let your NEW IDEA dealer show you why.



**NEW IDEA** SPREADERS  
**SHRED FINER • SPREAD WIDER**  
**LAST LONGER**

*Write for free literature!*

**NEW IDEA** FARM EQUIPMENT COMPANY Division **Arco** Distributing Corp., Dept. 886, Coldwater, Ohio

DIAMONDS  
WATCHES  
JEWELRY

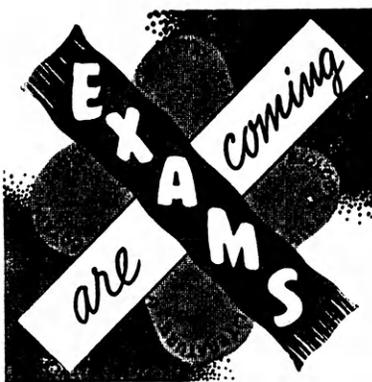
*Diamond Specialists*



REED & ELLIOTT  
*Jewelers*  
WAREHAM THEATER BLDG.



CERTIFIED GEMOLOGIST  
AMERICAN GEM SOCIETY



**But . . .**

There's an "A" in Your Future  
if you prepare now with  
**College Outline Series**  
for that semester  
exam

**CAMPUS  
BOOK STORE**

# It Pays to Increase Your AG POWER

by John Carlin

The purpose of this feature is to not only test your knowledge about all phases of agriculture, but to give you an opportunity to gain information concerning basic methods, problems, and ideas. Give yourself 10 points for each right answer. A score of 100 is an A, 90 earns a B, 80 rates a C, 70 squeaks by on a D, and 60 or less—better apply to the reinstatement board.

**Correct answers are on page 22.**

1. All branches of agriculture depend either directly or indirectly on plant life. What is the primary function of a plant's leaves? a. Absorb carbon dioxide and light. b. Manufacture food. c. Reduce rate of transpiration through the protective cells.
2. The primary difference between budding and grafting is: a. Grafting involves the union of two separate structures, while budding is propagated by grafting. b. Grafting is sexual propagation while budding is asexual. c. A single bud is used in budding and a group of buds in grafting.
3. If you remove the terminal portion of twigs, you are: a. Thinning out. b. Heading back. c. Neither a nor b.
4. Which one of these soluble salts is the most objectionable in water to be used for irrigation? a. Sodium salts. b. Magnesium salts. c. Calcium salts.
5. Fertilizers: a. Include all materials that are added to soils to increase growth, yield, or quality of crops. b. Are used primarily to increase the supply of available plant nutrients in the soil. c. Both a and b.
6. Lethals, as applied to livestock, may be defined as: a. Congenital abnormalities which result in the death of an animal only at birth. b. Abnormalities which result in the death of an animal due to injuries suffered at birth. c. Congenital abnormalities which result in the death of an animal at birth or later in life.
7. Normal pig litter size can be affected mainly by: a. The boar. b. Condition of sow at breeding time. c. Feeding of sow after breeding.
8. Which of the following characteristics of fleece is not of importance to the producer of wool? a. Chemical composition. b. Diameter of fiber. c. Grease.
9. If a dairy cow displayed signs of a Vitamin D deficiency, would you feed? a. Dehydrated alfalfa. b. Green-chopped alfalfa. c. Good-quality second-cutting baled alfalfa.
10. Breeding a heifer back to her own sire would be what form of breeding? a. Line breeding. b. Inbreeding. c. Outcrossing.



**FOR WINTER SERVICE  
AT ITS BEST**

**JERRY NOLL'S  
TEXACO SERVICE  
Clafin and Denison  
(At NW Corner of Campus)**

Anti-Freeze — Lub — Gas — Oil — Wash — Ice



# Get 'em

# Before They

# Grow!

**W**HEN pre-historic man first attempted to grow domestic crops rather than to hunt for wild fruits and berries, he soon found that he had a new enemy just as formidable as any wild animal. This newly acquired foe was the common weed.

The weed is not a new enemy to you and me but it's still very formidable and in addition, costly. Through the ages man has tried to control weeds by every possible method, including attempts to cast magic spells which would stop their growth.

The last 15 years have produced new methods in weed control which in some ways approach magic itself. One contribution to the age-old cause is the development of pre-emergence sprays.

## Amazing but Complex

These amazing but somewhat complicated chemicals are applied to the soil's surface at the time of planting or shortly thereafter. If moisture conditions are favorable, the herbicide will be carried a short distance into the soil by capillary water action. Weeds are killed shortly after germination.

Two important principles are involved in the spray's effectiveness. One is the fact that weed seeds which germinate are found very close to the surface of the soil. The crop seed is planted below the level to which the herbicide penetrates and therefore germinates in an herbicide-free area. The second point is that special herbicides are used for which the crop plant has a tolerance.

Problems involved in finding a chemical which will kill all weed species and not harm the crop plant are numerous. Take a spray for corn as an example. Corn is a member of the grass family, and so the problem of finding a chemical which will kill all corn field grasses without injuring the corn becomes a difficult one.

The length of time that the spray will be effective also presents a problem. The chemical should remain effective until the crop is mature, or

nearly so, but should not carry over into another growing season. You can see the effect a spray would have on a crop rotation program if it lasted for more than one growing season.

Pre-emergence herbicides are used mostly for corn and soybeans at the present time, according to Dr. L. E. Anderson, associate professor of agronomy at K-State. Farmers are especially anxious to have a dependable pre-emergence herbicide available for soybeans because there aren't any dependable post-emergence sprays presently available. Weeds have continually been an important factor in reducing soybean yields in the North-Central states.

Soybeans are a special problem because they are very sensitive. Many herbicides have failed because of excessive injury to the plant. Soybeans, being a broad-leaf plant, present much the same problem with respect to broad-leaf weeds as did corn to the grasses. It is difficult to find a chemical which will selectively kill weeds closely resembling the crop.

Right now no pre-emergence sprays are recommended for soybeans

by Ken Hylton

in this area, although two herbicides, 2,4-D butyric acid and Alanap, look promising. These herbicides are not recommended because necessary information relative to results under Kansas conditions is not yet available. Research is being done however and the results should be available in the near future, according to Dr. Anderson.

## Corn Pre-emergence Sprays Tested

Research on pre-emergence sprays for corn has included the screening and testing of herbicides and studies on the time of application as related to the date of planting, effects of soil type, soil moisture, and weather conditions as they affect crop tolerance and degree of weed control.

Control of annual grasses is a major problem in corn production. When  
(continued on page 20)



Test plots show how the different types of pre-emergent herbicides kill and do not kill weeds. Plots at left are loaded with weeds while at right weeds are not very numerous.

by Norman Werner

# Attractive

# Farmsteads

**S**TOP! That's it, now think for a minute. Just what does your farmstead look like?

Does the house have a barren, protruding appearance? That's right, that clothesline right out in the open sure doesn't improve the appearance much. Of course the farm does seem a little junky, but that deadwood piled up protects the cattle from cold winds.

Even though eyesores such as these are a necessity, why not hide or supply a substitute for them to improve the appearance of your farm?

No one, while leisurely driving and admiring the countryside, enjoys or even gives a second glance to either a city house or a farmstead that is cluttered with unsightly items and an unplanted lawn. Whether the farm is well established or a farmhouse is just being built, the farm home cannot be complete and attractive until the grounds are properly planned and planted.

## Neglected Farmstead Is Barren

Barren and unplanted farmsteads are no indication of poverty these days. Many a prosperous farmer simply has neglected to landscape his property. Of course the question of expense does enter in. Let's take, for example, that old still-standing woodpile which serves as a windbreak; instead, put in an adequate one. This is a basic part of farm landscaping.

Sure this will cost, but real estate

## • Clean Grounds

appraisers generally agree that an adequate windbreak will increase the value of a farmstead from \$500 to \$1,500. This figure will more than offset the cost.

Any family, farm or suburban, just building a house, may be reluctant to spend money on trees, shrubs, or bushes. Instead, they figure investment in indoor items will be more useful to them. Actually this shows lack of foresight and is poor business practice. When construction is completed, buildings begin to depreciate. However, properly planned and planted plants would increase in worth, therefore, increasing the real estate value of the property.

When confronted with the problem of landscaping, a typical reply by Farmer Jones might be, "Well I don't know, landscaping must be quite an art. You see I've done some planting myself and the results weren't any too good."

Chances are, Farmer Jones went to the neighboring woodlands and dug

## • Windbreaks

up native plants for his landscaping. All such native plants are not wholly undesirable, because a good many plants common to the nursery trade are native American trees and shrubs. To a large extent, however, such plants have improperly formed rooting systems and are usually poorly shaped specimens.

Farmer Jones might have made the mistake of using inappropriate plant materials and then spotted them sparsely around the grounds in a haphazard manner. On the other hand he may have done just the opposite and massed plantings too close to the dwelling. Chances are that actual beauty and usefulness were sacrificed in both plantings.

## See Expert for Advice

When a person does a job he wants to do it right. To do a bang-up landscaping job, an expert should be consulted. After all, it doesn't cost anything just to talk to him, and you may be not only surprised, but interested in some of his ideas.

The first requisite for proper rural landscape design, for old and new homesites alike, is to let a consultant lay out a master plan. This planning will allow you to do the actual work over a convenient period of time, depending on available time and finances. Plans will also be carried out for the functional as well as the attractive development of the farmstead.

While a person is in the process of beautifying his farmstead, he might just as well have his landscaping program set up to control climate conditions. Protection from prevailing winds and extremes of heat and cold must be provided for, if the plants,

**Farmsteads without adequate landscaping appear to be bare and unfinished. Harsh lines and unsightly items should be screened by shrubs, bushes, or trees to improve a farm.**



# Have...

## • Well Planted Lawns

animals, and human beings on the farmstead are to enjoy the fullest in comfortable living.

Cleaning up around the farm, installing the primary windbreak installations, and starting a suitable lawn around the house should all be under way before any actual plantings of ornamental plants are attempted.

A good lawn is a must. Trees and well-placed shrubs are set off by a properly-cared-for lawn. In other words, when planning a lawn, its size



Both real estate value and beauty of a farmstead are increased when landscaping methods are practiced. Added value more than offsets cost of planning, planting, and upkeep.

should be determined by how much the owner can properly maintain.

Simplicity rather than elaborateness is the trend in modern farm landscaping. In maintaining this simplicity and neatness, it's desirable to confine tree and shrub plantings to the outlying borders. Jamming lots of specimen plants into locations already in planned harmony clutters up the landscaping picture. There

should be a definite reason for using each and every plant.

Well-planted and neatly-maintained grounds add to the attractiveness of any farm, no matter how small the investment may be. Planned landscape plantings of an expert can give as much satisfaction for the same expenditure of time and money as any other type of farmstead improvement.

## COLLEGE

BOOK STORE

-:-

Headquarters

for

Agricultural

Books

and

Supplies

-:-

TED VARNEY'S

## COLLEGE

BOOK STORE

Nearest the College

# BREEDERS' INDEX



### GUERNSEY

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

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

### AYRSHIRE

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

### BROWN SWISS

Prairie View Swiss Farm  
Earl Webber, owner  
Arlington, Kansas

James Hess  
LaHarpe, Kansas

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

### POLLED SHORTHORN

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



READING  
TIME:  
**25**  
SECONDS

Your Farm Bureau has always had as one of its basic principles its interest in the family. Your local county Farm Bureau Insurance agent is anxious to show you that life insurance is a family affair and the many ways it can help you and your family.

Kansas Farm Life insurance provides systematic savings, a start in life for your children, education for your children, a ready reserve of cash, retirement for you and absolute security for your family.

*"Life Insurance Is a Family Affair"*



**PATRICK'S  
CAFE**

FINE FOOD

*You'll  
Be  
Glad  
You  
Waited*

716 North Manhattan

**PHOTO  
FINISHING**

*"Everything  
Photographic"*

**Cameras  
Movie Equipment  
Camera Supplies**

*Manhattan  
Camera Shop*

Pr 8-3312  
220 POYNTZ

**KANSAS  
JUNIOR  
LIVESTOCK  
ASSOCIATION**

Sponsoring:

*Midwest Inter-Collegiate  
Livestock Judging Contest*

*4-H and FFA District  
Meats Judging Schools*

*Junior Stockman of the Month*

**ANNUAL MEETING**

MARCH 14, 1959

9:00 A.M.

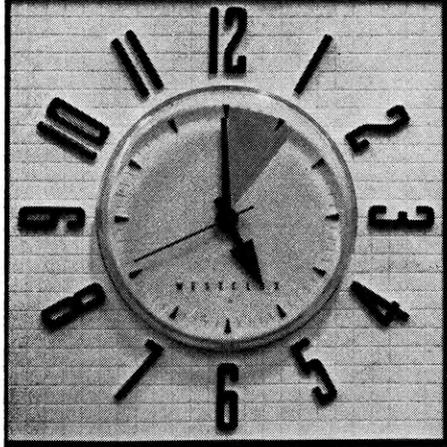
BROADVIEW HOTEL

WICHITA, KANSAS

**4-H, FFA, YOUNG STOCKMEN:**

Join KJLA—Age Limit 25 Years

Contact: Charles Andrews, Ellsworth, Kansas



Fried chicken can be on the table in just six minutes. Precooking makes it possible.

## *Less Time*

# Precooked Meats

## *Less Work*

by *Mary Jo Mauler*

**G**OLDEN fried chicken can now be yours in one-sixth of the usual time! In some cases, a precooked chicken can be ready for the table in just six minutes. What's the secret? The use of precooked meats. Besides cutting down on cooking time, all the cooking preparation has been done for you by the manufacturer.

Precooked meats are proving to be a very popular buy on today's market. Although their use in "TV dinners" has added greatly to their popularity, they are available in many other forms. Chicken, ham, sausage, and canned meats are examples of the wide area precooked meats cover.

Chicken may be purchased in packages containing a cut-up half fryer, individual chicken pieces of one kind, a split fryer, or a quartered fryer.

Each cut-up half fryer consists of a breast, a thigh, a drumstick, and a wing. Split or quartered fryers are perfectly cut to provide uniformity. Individual pieces are also uniform and pieces of the same kind are boxed together for your convenience.

Ham is another type of precooked meat that is in great demand. Some whole hams are completely cooked and ready to eat. This type still contains the bone. Boneless cooked ham, commonly referred to as boiled ham, is boned and shaped into a roll or rectangular shape. This type is sliced cold for sandwiches or cold plates, or it may be reheated before use.

Canned ham comes in varying sizes, from the 1½-pound oval can, containing a solid piece of boneless meat, to whole boneless hams weighing 6¾ or 10-12 pounds. All of these are fully cooked and ready to eat.

Sausage, which includes all kinds

of ground or chopped meat and not only ground pork, is often precooked. Much of our sausage today is sold as "cold cuts" or "luncheon meats." This type is usually sliced.

The best-known type of cooked sausage is the frankfurter, also called the wiener or "hotdog." These may be either heated before serving or eaten as purchased.

### **Canned Meats Popular**

Canned meats make up a large percentage of the meats that are precooked. When thinking of canned meats, one usually thinks of the jiffy meals that can be prepared by including them in the menu. They take on many different forms, including ham, chopped ham, dried beef, tamales, spaghetti with meat, and vienna sausage.

There seems to be a noticeable increase in the sale of precooked meats during the summer months. This indicates that homemakers like to use precooked meats because they can greatly cut down on long, hot hours in the kitchen.

Many improvements have been

made and are being made in the processing of the meat. In most cases, manufacturers are working to cut down on the processing time. A speeding up of the time needed in handling and cooking assures that the fresh flavor will be quickly sealed in.

The losses of weight and flavor in precooked poultry have been major problems facing that industry. The one-minute-fry bird has been offered as a solution to the marketing of precooked poultry that lost weight in processing. The bird is dredged in flour and fried in fat for one minute, just long enough to cause the dredge to become fixed. This gives a pale crust with little or no browning. Although not totally precooked, it can be finished quickly either by heating it in the oven or by frying it.

USDA researchers have found that precooked frozen fried chicken differs slightly in juiciness and tenderness from freshly-cooked fried chicken. Such minor texture changes were attributed to freezing. The cooked birds can be stored in the freezer for about six months at 0°F, before additional texture changes occur.

# LUMB'S HY-KLAS FOOD STORE

*In the Heart of K-State Housing*

**1407 Denison**

# This Is

# FARM SW<sup>1</sup>/<sub>4</sub>-12-18

by Chester Peterson Jr.

**Y**OU ARE a farmer. You inherited the land you now farm from your father, who, many years before, had received it from his father. It's a pretty good farm, containing some rich bottomland, but with most of its acreage in an upland sandy loam soil. It has supported and fed your family tree for three generations, never once letting anyone complain of hunger.

The old homestead has not only been kind to your family, but is a source of pride because it is well known for growing the best wheat and tallest corn in the county. "The best quarter in the state," your Dad used to boast to everyone within ear-shot.

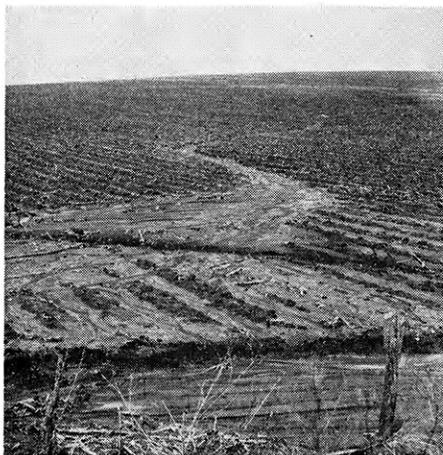
Maybe it *was* the best, but is it *now*?

Today, for the first time, you had your eyes opened to the possibility that farms, like heavyweight prize-fighters, may pass their prime. If yields keep going down as they have in past years, maybe—just maybe—your kids can't keep calling it "Old Faithful."

## "Old Faithful" Bleeding

But no, you must be wrong! Look at those gently rolling slopes of fertile soil that have raised bumper crops almost every year since your grandfather proved up on his homestead claim. Why they—well maybe red subsoil is showing through in spots, but still it's good land! Sure, it's definitely worth a more thorough study tomorrow, but why hurry? The quarter has lain here for years, hasn't it?

Tomorrow comes, bringing with it a rain that the "Oldest Man Around" calls a "toad strangler." Usually,



Besides being hard to farm around, gullies cause the value of the farm to decrease.

after every large downpour, you walk down to the pond to check its new depth. That pond sure is a good one; it's provided clean water for the family's small cowherd for 35 years.

With your first glance you're both shocked and distressed. Over the years soil washed down from the pond's drainage area has slowly, but oh so surely silted the basin full. Today's rain provided the final weapon of silt needed to wash out the spillway. Those many feeder gullies have finally done enough damage to really wake you up!

This is like a broadside of direct hits. You stagger and stumble a bit, then realize with a new awareness that your farm has literally gone down the river. Everywhere you look, you see gullies—some small, some big enough to swallow your shiny new tractor. Every year that bad one had been gaining on you and now you see how very deep and wide it really is. It was there before, but you hadn't admitted it to be that vicious a threat. This year, as in years past, you had planted your corn

in straight rows running up and down the hillside.

Why, look at that corn at the bottom almost covered by silt washed down from above! When you raise your gaze you see a few scrawny corn plants among the many gullies that have scoured the hilltop almost bare. Everywhere you look, you see red subsoil and not the fertile topsoil your grandfather once tilled.

To your eyes the farm appears to be a terribly desolate scene. What are you going to do?

After the initial shock has worn off, you immediately get down to business. After deliberating for an hour or so you decide that there are at the most four alternatives that could be applied to your crippled land.

## Four Tries to Cure All

First, you and your family could just quit the whole works and move away, but that would be a coward's easy way out. Or, you could ignore the destruction, but at best your family would end up on beans in the poorhouse. Some gully repair work could be made to slow down the erosive processes; however, even that probably would lead to defeat after several years of a waiting game.

So . . . that means only one of the four alternatives is left in the game. You hope your remaining card is an ace!

You decide that the best way to improve your situation is to make a visit to the local Soil Conservation Service office at the county seat. You have heard that it has experienced men able to help farmers. The last "toad strangler" vividly demonstrated that erosion's brutal scars

## Is It Yours?

must be erased from your land if you are to continue farming.

In the Soil Conservation office you introduce yourself to the boss, talk about the crops, and cuss that last rain. Then, after a brief discussion of your problem, you realize that these fellows have the training and knowledge to help you get out of your hole or in this case, your gully.

To become eligible for their help you must join the Soil Conservation District. This means that you must sign your name twice, which you don't want to do, but the S.C.S. man explains that this is not an obligation to the government, but a necessary formality so that they can help you.

You sign almost hurriedly when you remember that your neighbor once commented that nothing is more revolting than a pond full of topsoil. Come to think of it, he had joined almost two years ago.

You have just become the local district's newest member, so what happens now?

Several days later an S.C.S. survey crew drives out from the office to draw up a preliminary plan of the farm. By sighting through a transit and running many imaginary lines they are able to indicate on their map, among other details, where terraces and waterways should be located to slow down the runoff water that has chiseled out tons of soil. They are planning your farm to its best possible advantage, they explain. What they plan on paper today you don't even have to consider doing, but to keep your topsoil from washing away. . . .

That "toad strangler" had opened your eyes, so now you listen with both ears. Later a soil scientist appears, digs some reference holes, and

makes yet another map showing all the various soils on your farm. He classifies these soils by putting them into the proper one of eight different land use classes.

He calls that badly eroded hillside "Class VI land" and recommends that you reseed it to native grass in order to have a competently managed farm. That sounds like a pretty reasonable idea when you remember that for the last five years a churchmouse would have starved on that bald knob.

In about a month you receive an envelope containing a land capability map and a land use map. Both maps are coded for easier reading. Included with the maps is a short narrative—the story of your farm—written by one of the technicians. It advises what fields to terrace, where to build waterways, what crop rotations to use, and what acreage needs to be reseeded to grass.

### Waterways Come First

Because you can't build terraces without a suitable outlet to dump them into, you decide to construct the waterways immediately. After the S.C.S. fellows stake them out you hire a dirt contractor to shape them to government specifications. This means that Uncle Sam will provide part, not all, of the construction cost. The waterways look wide—they sure take a big whack out of the field—but anything is better than a young Grand Canyon cutting its way to maturity on your farm.

Things are rapidly taking shape and you must make plans to keep pace. As soon as the waterways are

supporting a substantial stand of mixed grasses, the terraces can be laid out and constructed by any of several good methods.

If you can spare the time, you may even build them yourself, using ordinary farm equipment such as the plow or one-way. You feel that, like the Super-Chief, you're on the right track now and clipping off the miles at a rapid rate.

So what if it all can't be done in the space of a year? A little work done at every opportunity will nurse and rebuild the old quarter back to its former high productivity someday. Any practice has its drawbacks, but the only negative point brought to light so far is that because of terraces and contour lines, your sons don't know how to plow a straight furrow!

\* \* \*

Time has sped by on the fleetest of wings. Almost as fast as water used to flow down your eroded hillsides the years in quick succession have zoomed by. Your oldest son, one of the trio of boys who would rather follow contour lines than to plow the straightest furrow up and down hill, is ready to take over the farm's operation and management.

You, with their assistance, have done everything possible to conserve and keep the land fertile for them, their children, and even the descendants of their children's children. Again they can lay claim to owning land that is capable of raising the best wheat and the tallest corn in the county.

All this, because you decided to farm your land the modern and conservation way—by proper land use.

**Terraces stop runoff, dust blowing, and snow from drifting into fences and shelterbelts. The Agricultural Stabilization Committee pays part of the cost of constructing terraces.**



by **Jim Swiercinsky**

**J**UST ABOUT everything has been tried to boost livestock gains and feedlot efficiency. Lately both hormones and antibiotics have been used with success, and now tranquilizers are being tested to determine their value to the beef cattle and sheep industry.

In 1956, 150 million dollars' worth of tranquilizers were sold for human consumption. Tranquilizers for human use are not new, but their use for livestock production has been a recent development, taking place within the last three years. Even old bossy suffers stresses and strains that, like those of her human owners, worry off weight.

There are two methods of tranquilizer application in this field, each producing a different result for a different purpose. They can be injected at a relatively high level in an attempt to sedate or calm an animal. Or the tranquilizer may be included

in its feed. The main object in this case is to increase rate of gain and feed conversion efficiency.

#### **Production Improved by Use**

Two tranquilizers now on the market are Tran Q. and Paxital. Both have been used in experimental work at K-State. Results at K-State and nine other experiment stations with these two tranquilizers show some promise. Cattle fed tranquilizers gained an average of 2.16 pounds a day while the control group gained 2.09 pounds daily.

If cattle are injected, it could be done before shipping to market and before young calves are weaned. The animals should be quieter and as a result would shrink less or be set back as in the case of calves. With the injection treatment, 100 milligrams to 400 milligrams are injected into each animal. There are 453,590 milligrams in a pound. One experiment using 26 animals that were shipped 100, 400, and 1200 miles resulted in 2.5 percent, 6 percent, and 11 percent less shrink, respectively, than the control cattle.

When a tranquilizer is administered to cattle in their feed, the recommended dosage ranges from 2.5 to 50 milligrams per head each day. However, at the level of 2.5 to 10 milligrams daily for every animal on feed, there was no observed calming effect.

It must be stated that no one knows just why a tranquilizer increases the rate of growth or if it really does at all. Although all cattle fed tranquilizers gained at a more rapid rate, the differences obtained were not statistically significant. The only station reporting any definite significant differences was Purdue where the cattle were fed 2.5 milligrams of tranquilizers and 36 milligrams of a stilbestrol and aureomycin combination. So, perhaps a cautious maybe is the best answer that may be given now.

#### **K-State Conducting Research**

At present there are two experiments under way at K-State. In one experiment, 24 animals are being individually fed in an effort to determine the effects of stilbestrol and also of stilbestrol plus tranquilizers. In the other experiment, 6 lots of 10 cattle each are being fed two different levels of a tranquilizer. The two amounts being added to their grain rations are 2.5 and 5 milligrams. Also the experiment is being conducted to determine the proper quantity to add to the concentrate. At this time, no results are available.

Of all the animals fed tranquilizers, fat lambs have shown the most impressive percentage increases in weight and feeding efficiency. Ac-

(continued on page 22)

### *Calming Effect*

# Livestock Tranquilizers

*Increased Rate of Gain*

*Improved Efficiency*



**Tranquilizers, relatively new to stockmen, retard weight loss in shipping livestock and tend to increase gain in the feedlot.**

Check Them ✓

# Grow Vegetables 5 Ways for Market

by Larry Greene

**V**EGETABLES constitute one of the most important items in our American diet. Recognition of their food value has increased greatly over the years, making the vegetable grower an important part of American agriculture.

Commercial production is found in all states, although six are outstanding in their production. Around larger cities the local market is always important.

The different methods of producing and marketing vegetable crops give us five general divisions of vegetable growing.

## Home Garden Provides Edibles

The most common kind is the home garden. Although this type is not commercial, the value of garden produce in this country is around 400 million dollars a year.

Market gardening is the production of vegetables for a local market. In past years this was an important phase; however, with the development of rapid storage transportation, and owing to regions especially suited to vegetable growing, this division is declining.

The distinction between market gardening and truck gardening is almost nil and both have a more specialized production. Truck gardening or growing may be defined as the production of special crops in large quantities for a distant market. Originally these farms started alongside the railroads, growing crops that did not spoil easily. Now airplanes and refrigeration have permitted the growing of perishable crops thousands of miles from the consumer's table.

Tomatoes, peas, and corn lead the field in the category of vegetables produced for processing. Freezing, canning, pickling, and drying have

turned this into one of the more important phases of vegetable production. Most of the crops are processed at the point of production or a short distance away. Many people prefer frozen or canned goods because their quality can be retained, whereas it would be lost if the vegetables were shipped as fresh produce.

Vegetable forcing is the growing of vegetables out of their normal season. This is done using artificial heat in either greenhouses or hotbeds. Caves, cellars, and specially built houses are used for mushroom, asparagus and rhubarb raising.

This type of production came about because people demanded fresh vegetables out of season. Again, due to transportation and the warmer climates, this method is too expensive for competition with outdoor grown vegetables.

## Good Seed + Care = Tasty Food

Growing seed is perhaps the most important phase of vegetable production. It takes clean, disease-free, high-germinating, and true-to-name and variety seed to produce the good vegetables we need. Although seed producers give the grower good seed, it still takes good growing management to produce edible products.

The soils most popular are the sandy loams or silt loams, well supplied with organic matter. Gumbo soil can be used for large acreages.

Irrigation is a major factor in vegetable production. With the large amounts of water used, soils can't be too heavy, because good drainage is very necessary.

Fertilization varies with the various soils, climates, vegetables grown, and the soil's fertility. The best and most common way to check the fertilizer need is to make a soils test.

Nitrogen is probably the element



Many home used foods are grown in home gardens, a common practice in our society.

most used. This is due to the fast, succulent, and dark green vegetable growth desired for most vegetable crops. Generally, fertilizers are applied at the time of planting or when the soil is preworked before planting.

Kansas has its share of commercial vegetable production. Last year, the value of five major commercial vegetable crops was \$2,671,000. This figure includes onions, cantaloupes, sweet corn, potatoes, and sweet potatoes. Various other crops, including home gardens, were also grown commercially, but not included in these figures.

For 36 Years  
Style Headquarters  
for  
Kansas State's Best Dressed  
Men and Women  
Featuring—

KUPPENHEIMER  
BOTANY 500  
CLOTHCRAFT  
Suits

ARROW  
Dress Shirts

ARROW, MCGREGOR,  
JANTZEN  
Sportswear

FLORSHEIM & FREEMAN  
Shoes

STETSON  
Hats

*Stevenson's*

317 Poyntz

*The Store for Men and Women*

## Here's Your \$64,000 QUESTION

It has 3 parts . . .

- 1 What's the value of your farm (minus land)?
- 2 When did you take out your present fire and extended coverage?
- 3 Is that coverage adequate today?

You may think coverage purchased a few years ago is affording you adequate protection, but remember, today's replacement costs for buildings and equipment are higher, meaning that under present economic conditions, **YOU'VE PROBABLY OUT-GROWN YOUR INSURANCE PROTECTION!**—and to a dangerous degree! Ask for your **FREE** coverage survey —and get the facts!



FARM BUREAU MUTUAL INS. CO.  
KANSAS FARM LIFE INS. CO.



Admiring Miss Bandolliemere K., Grand Champion female, 1958 Kansas Aberdeen Angus Futurity Show, from left: Judge J. B. McCorkel, Don Good, Rufus F. Cox, and Gail Long.

## Arena Hosts

# Angus

## Show and Sale

## 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 82993

by Hal Ramsbottom

**T**HERE may have been some speculation about the new animal industries arena's usefulness when the building was dedicated. However, the Kansas Aberdeen Angus breeders were greatly impressed with the facilities available at their state Futurity show and sale held there recently. They even voted to return next year. This is only one of many local, state, and national livestock events that will be held in the spacious arena. For example, during March, the American Angus association has scheduled its fifth annual national conference to be held in the arena.

On December 12 and 13 the fourth annual Kansas Aberdeen Angus Futurity Show and Sale was held in the new arena. Lloyd Miller, director of public relations for the American

Angus association, said, "The new animal industries building was an ideal place for the show."

Judge J. B. McCorkel placed over 160 entries shown by 40 exhibitors. The reserve grand champion bull, Kileenmere 48th, was shown by K-State. Miss Bandolliemere K., another K-State entry, was chosen grand champion female. She was also reserve grand champion Angus female at the American Royal last fall. As Gary Cummings' entry, she was shown to the championship of the Block and Bridle Division in the Little American Royal last April.

Professor Emeritus F. W. Bell of the animal husbandry department was honored with a lifetime membership in the association, "for outstanding service to the livestock industry."

Although K-State's champion female didn't sell, the sale of 63 head still averaged \$457.

*Who Can Do It?*

*You Can Do It*

# Beautiful Bouquets

by *Larry Greene*

**W**HETHER a home is simple, casual, or formal, flower arrangements will add a graceful and elegant touch, as well as an economical means of beautifying the home.

Do not fill your mind with doubts about your ability to arrange flowers. Anyone can do it with a little practice. Use others' ideas and arrangements, but do not completely deny yourself the pleasure of experimenting on your own. It is through this latter means that you get the most out of your work as well as a beautifying effect in your home. It is correct that an arranger who is displaying work at a public show or one in the business should strive for perfection. But in the home, the flower arrangement is but a part of the pattern for producing a warm, cheerful, and friendly atmosphere.

## Harmonize with Surroundings

Flower arrangements like anything else are based on harmony in color, in texture, and, most important, fitting in with the surroundings. Too many flowers in a room will look as though one was ready for a public reception in a downtown store. Heavy mass arrangements in the small, light, airy rooms of today's modern homes are just as out of place as a modern line arrangement in an old southern mansion, yet flower decoration is the most adaptable single item of any room, so harmonious relationship is not a difficult quality to produce.

Before starting to arrange flowers, consider where the finished product will be placed. Will it be on a dinner table, coffee table, in front of a tall mirror, a card table, fireplace mantel, or on a table in the hallway? Naturally a tall piece for the mirror would not be acceptable for a dinner table.

The next thing to consider is flower color, texture, and size. Pinks and reds are not as harmonious as reds and whites are. Use heavier textured flowers for your larger works, and the fine textures for the small arrangements. This also applies to size of flowers and is generally related to flower texture.

When you begin to arrange flowers, have an idea in mind of what is desired. Before starting the arrangement, it is a good idea to draw an outline on a piece of paper according to size and shape wanted. It also is possible to follow a picture as you draw.

Pick a container that is easy to work with. It should be large enough to have room to move flowers in and out without pulling out those already placed. Generally a square or rectangular one is best and most adaptable.

Put in a piece of chicken wire or pen-point holder as a means of supporting the flowers. Glass frogs are available, but do not give as good support as the other two unless the stems are exceptionally strong and thick. Be sure to fill the container with water. When you are starting it will take more time to get finished and flowers will wilt easily with handling. They will last longer if you work in a cool room. The flowers should be put in a large container where they can be easily handled and seen for size, shape, and color.

Before adding flowers, put in a filler such as evergreen sprigs, ferns, shredded plastic foam or anything that will give added support to your flower stems, and the flowers will stay put without lopping over.

Determine the height wanted for the arrangement. Then select the lightest-colored and smallest of the blossoms for the topmost flower. If a large, dark flower is put at the top, the arrangement will look top-heavy,



**Add beauty, charm, and elegance to your home with a home-arranged floral bouquet.**

like it is about to fall over. If the arrangement is of one color, select the smaller flower or bud accordingly. Next fill in with the rest of the flowers, with the large blooms at the bottom.

There are several general shapes you can use in arranging: triangles—right or equal, long-horizontal, tall-vertical; round; crescent; hogarth curve; and many others.

The keeping quality of flowers can be helped greatly. Always keep fresh water in the containers and keep the level near the top. Before arranging flowers, cut a small portion at the end of the stem at an angle, or crush the bottom of the stems, depending on the type of flower stems. In some cases it is wise to strip a few of the bottom leaves to keep the water from becoming stagnant.

This is only a small part of the wide field of flower arrangement. The main point is to remember to experiment and enjoy yourself while playing with flowers. There are many books on arranging. Magazines on the home and gardening are some of the best places to look for tips and ideas.

## Test Boars for

# MORE MEAT—LESS FAT

at Testing Station

**T**O GIVE you more lean meat and less fat on your pork, Kansas swine breeders have built a boar performance testing station at K-State.

The test consists of one barrow and two boar pigs sired by the same boar. When a breeder wants to test a boar he brings pigs to the station when they weigh about 60 pounds. The two boar pigs are put in a separate pen, but the barrow is put into a parlor with the other barrows that are on test.

There is room at the station for 40 barrows and 80 boars, which means that 40 tests can be run at the same time. These pigs are started on test at about 60 pounds and stay on test until they reach 200 pounds.

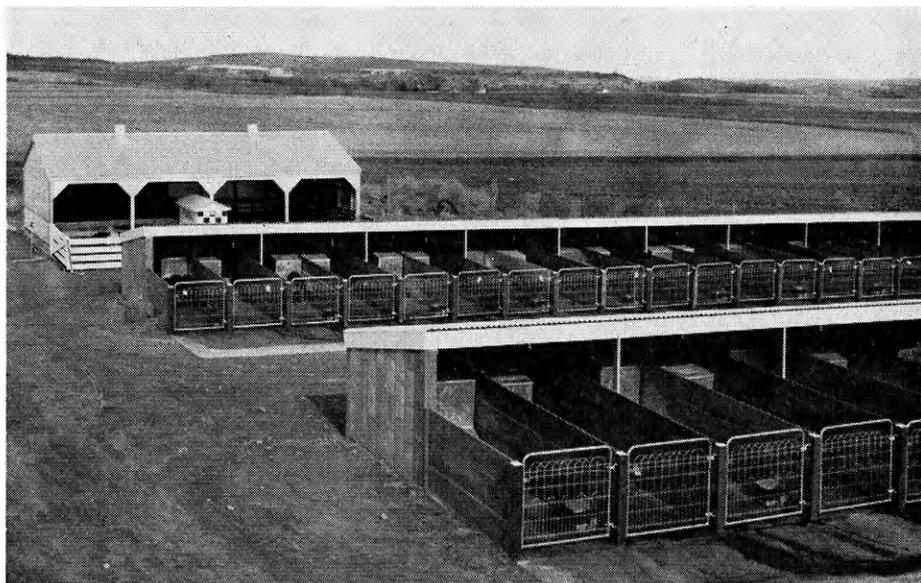
### Slaughtered to Check Meat-Type

When the barrows reach 200 pounds they are slaughtered in the K-State meats laboratory. Their fat-back thickness, length, and area of eye muscle are then measured. This data shows whether or not a boar is producing meat-type offspring.

Feed for the boars is weighed at the test's start and at the test's end the animals are weighed to calculate feed conversion efficiency. They are also weighed at regular intervals to figure rate of gain as the test progresses.

The station, located about four miles northwest of the campus, cost \$10,500, with \$4,500 being donated by feed, building, and hardware com-

by Loren Henry



Two boars and one barrow from one sire are tested. Pens, foreground, hold 80 boars, two per pen, while 40 barrows are tested in parlor, background, from 60 to 200 pounds.

panies, and many other firms and individuals. The Kansas Swine Improvement Association paid the remaining amount. The front of the buildings opens to the south to allow more sunlight in during winter months. All floors are of concrete, with a slope of about one inch to the foot to aid drainage.

Nine breeds of hogs are represented at the station. They are: Poland China, Hampshire, Duroc, Spotted Poland China, Yorkshire,

Tamworth, Landrace, and Berkshire.

Harold Salmon, student from Hiattville, feeds and cares for the pigs and also records entries as breeders bring pigs in to be tested.

Feed for the boar testing station is pelleted at the K-State mill and sacked in 50-pound bags for handling ease. "As far as I know this is the only station using grain sorghum instead of corn in the ration," Berl Koch, assistant professor of animal husbandry and technical adviser for the station, said.

"The main purpose of the station is to find out which boars in a certain breed and in all breeds produce the desired meat-type hog," Koch says.

Wendell Moyer, Extension Specialist and secretary of the Kansas Swine Improvement Association, keeps progress records on the swine and notifies breeders when there is an opening for more hogs to be tested.

Those on the committee of breeders in charge of the station are Willis Houston, Americus; Joe O'Bryan, Hiattville; C. Balthrop, Wichita; and Ralph Schulte, Little River.

## CAMPUS CLEANERS

Colors Brighter

Whites Whiter

No Odor

Dial 82323

1219 Moro

In the

# Aggies' World

by Eugene Harter

## Little Royal Workers Named

The 1959 Little American Royal committee appointments have been completed. The Little Royal will be held in the Animal Industries Pavilion April 11, 1959, at the conclusion of Ag Week.

Heading the show are: Chairman, Dick Dunham; Assistant Chairman, Walt Rudolf; Secretary, Norval Ralstin; Treasurer, Jim Swiercinsky; Chairman of General Publicity, Lawrence Odgers.

Committees are: Radio and TV, Ronald Schultz; Circulation, Judy Fisher; Local Publicity, Tom Appleby; Correspondence and Circulation, Dave Dettke; Centerpiece, Harold Roberts, Gene Allen and Ben Brent; Prizes and Awards, Janet Dawdy and Larry Waite; Program Book, Eugene Harter and Don Schick; Properties, Stan Smith and Wade Smith; Entertainment, Gary Albright and Loy Reinhardt; Judges, Max Mattson and Don Mach; Entries, John Carlin and Gary Cummings; Tickets and Ushers, Kenneth McCosh and Robert Lewis.

## Alumni Keep School Interest

Most K-State graduates have jobs in the field which is the same as or related to their major subject of study in college.

In a survey of 1947 and 1952 graduates, some 85 to 90 per cent of the grads reported that they are presently employed in a field the same as their college major, or closely related. Approximately 55 per cent of these graduates started work in the same field as their major and only

10 to 15 per cent are currently employed in non-related jobs.

Overall about 50 per cent of the Ag graduates were working in the same field as their major.

## Formula Feed Conference Held

The fourteenth annual Kansas Formula Feed Conference was held January 5 and 6, 1959, on the K-State campus.

Members of the K-State Dairy and Poultry Clubs served dinner to the feedmen on both days.

## Dean Weber on India Commission

Dr. Arthur D. Weber, dean of the School of Agriculture, has been granted leave without pay from January 25 to April 10 to serve as an appointee to the Food Survey Commission to India, which is sponsored by the Ford Foundation. This survey commission, requested by the Indian government, has the approval of the U.S. Department of State, the United Nations Food and Agriculture organization, and the World Bank.

## Holland and Cigars to New Mexico

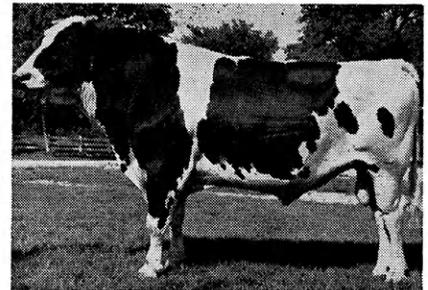
Prof. Lewis A. Holland has accepted an appointment as associate professor at New Mexico State University, effective February 1, 1959.

He will teach genetics and animal breeding and will also conduct animal breeding research with sheep and cattle. While at K-State he taught genetics and animal husbandry laboratory, and conducted research in genetics.

Dr. Holland received his B.S. degree from New Mexico State University, his M.S. degree from Colorado State University and his Ph.D. from Iowa State College.

## Visitors Always Welcome

### Kansas Artificial Breeding Service Unit



Meierkord Netherland Triune, 886182

Now in its ninth year with over 360,000 cows bred since March 1, 1950

Selected Sires *combining* Production  
and Type are available to you!

Milking Shorthorn  
Brown Swiss  
Holstein  
Ayrshire  
Jersey  
Guernsey  
Hereford  
Aberdeen Angus

For Further Information—  
See Your County Agent

Department of Dairy Husbandry  
Kansas State College  
Manhattan, Kansas

"73 Counties Cooperating"  
Barns located one mile west of campus



# Sprays

(continued from page 7)

weather conditions do not permit cultivation, all weeds become trouble causers. Chemicals such as Randox-T, Simazin, Neburon, and others are being used at the K-State experiment station. Dr. Anderson reports that Simazin looks very promising.

The 1958 North-Central Weed Control Conference reported that excellent results had been obtained with Simazin in 1956 and 1957 but erratic and less satisfactory weed control was obtained in 1958. Unfavorable moisture conditions were believed to be the cause of the failures, which demonstrates an important point in the use of pre-emergence herbicides. Regardless of the herbicide used, efficiency and reliability of the chemical depends to a large extent on the weather conditions at and immediately following application.

As you would expect, there are many problems involved in developing and perfecting these sprays, but who wouldn't like to see the hoe and cultivator wind up on the shelf as museum pieces?

# KITE'S

GOOD FOOD

GOOD BEER

Aggieville

## Farmers Union Co-operative Oil Association

AUTO, TRUCK AND TRACTOR NEEDS

PETROLEUM PRODUCTS

PAINTS

*Propane*

*Anhydrous Ammonia*

130 Pierre, Manhattan, Kansas

Phone 8-2423

# Certified Seed

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

### Alfalfa

Buffalo

### Barley (spring)

Beecher  
Custer  
Otis

### Corn—Hybrid

AES 806  
K1639  
K1784  
K1830  
K1859  
K2234  
U.S. 523W

### Corn—Open Pollinated

Pride of Saline

### Grasses

Achenbach Smooth Brome  
Blackwell Switchgrass  
Caddo Switchgrass  
El Reno Sideoats Grama  
Kaw Big Bluestem  
Woodward Sand Bluestem

### Oats

Andrew  
Cherokee  
Mo. 0-205  
Nemaha

### Sorghum—Forage

Atlas  
Early Sumac  
Ellis  
Kansas Orange

### Sorghum—Grain

Coes  
Martin  
Midland  
Plainsman  
Westland

### Sorghum—Hybrid

KS 602  
KS 603  
KS 701  
RS 590  
RS 610  
RS 650

### Soybeans

Clark

### Sudangrass

Greenleaf  
Wheeler

### Sweetclover

Madrid

For a free copy of a booklet listing the growers of the above crops contact:

## The Kansas Crop Improvement Association

MANHATTAN, KANSAS



Lubrication of enclosed parts can now be inspected without disassembly. Standard Oil scientists have developed the instrument system shown here which measures the presence or absence of the required lubricant on concealed parts by checking the ability of the entire assembly to cut down radiation passed through it.

## How to "see" without looking

At a final inspection station how would you make sure that enclosed parts were properly lubricated? Until recently, if you really wanted to know, you had to remove the housing, disassemble the mechanism—a costly, time-consuming process—and take a look.

But now Standard Oil research has solved the problem with a new instrument system that does away with disassembly. It passes radiation through the assembly and measures the amount that gets through. Inspectors can tell whether or not the proper level of lubricant is present without looking inside.

This remarkable device is just one of hundreds of ways in which Standard has helped industry solve problems connected with lubrication. It was developed by a team of Standard Oil scientists and engineers who saw the need for a new approach to an old problem.

Such creative thinking is the product of the atmosphere in which Standard Oil scientists work. They have the time, the equipment and the opportunity to contribute to the progress of their industry and their country. That is why so many young scientists have chosen to build satisfying careers with Standard Oil.

**STANDARD OIL COMPANY**

910 SOUTH MICHIGAN AVENUE, CHICAGO 80, ILLINOIS



THE SIGN OF PROGRESS...  
THROUGH RESEARCH

# Tranquilizers

(continued from page 14)

According to one manufacturer, there is a 21.2 percent average growth gain and an 8 percent feeding efficiency increase in favor of lambs fed tranquilizers.

The experiment stations have not yet been able to achieve as good test results. One experiment station reports that lambs fed a tranquilizer gained .48 pound daily while the control group gained only .41 pound per day. This is a 17 percent increase in daily weight gain. The rate of tranquilizer feeding varies from 1.5 to 2 grams for each ton of feed fed. Tranquilizers are on the market, but there is still much research yet to be done in order to determine whether or not it is actually profitable to use them.

Although tranquilizers are relatively new, it may not be long before the farmer, if he hasn't already, will take tranquilizers to keep from worrying about the farm situation, and his livestock will be fed tranquilizers to keep them from worrying about weaning or shipping.

Then there was the man, on a fishing trip with his wife, who said that small mouth bass were the males and the large mouth bass were the females.

The teacher was greatly surprised to see Tommy still outside the school door thirty minutes after school was dismissed.

"What's the trouble, Tommy?" she asked.

"I'm afraid to go home. We have a new baby at our house and I know my father will scold me, 'cause I always get blamed for everything."

A dean of women at a large co-educational college recently began an important announcement to the student body as follows: "The president and I have decided to stop necking on campus."

"Mother, are there any skyscrapers in heaven?"

"No, son. Engineers build skyscrapers."

I serve a purpose in this school  
On which no man can frown;  
I gently enter into class  
And keep the average down.

"Don't worry," said the city hunter who'd just shot one of the farmer's sows, "I'll replace your hog."

"You can't," shouted the farmer, "you ain't fat enough."

Agriculture gives strength to the body and hardihood to the soul, and teaches the freeman justice and solidarity.—Socrates.

## INCREASE YOUR AG POWER

### Answers

1. b—Manufacture food.
2. c—A single bud is used in budding and a group of buds in grafting.
3. b—Heading back.
4. a—Sodium salts.
5. c—Both a and b.
6. c—Congenital abnormalities which result in the death of an animal at birth or later in life.
7. b—Condition of sow at breeding time.
8. a—Chemical composition.
9. c—Good-quality second-cutting baled alfalfa.
10. b—Inbreeding.

# April 11

K-State's

## Ag Science Day

and

## Little American Royal

Entertainment and educational displays for everyone. Spend the entire Saturday on the Ag campus.

# CLEAN CLOTHES

*are a man's*

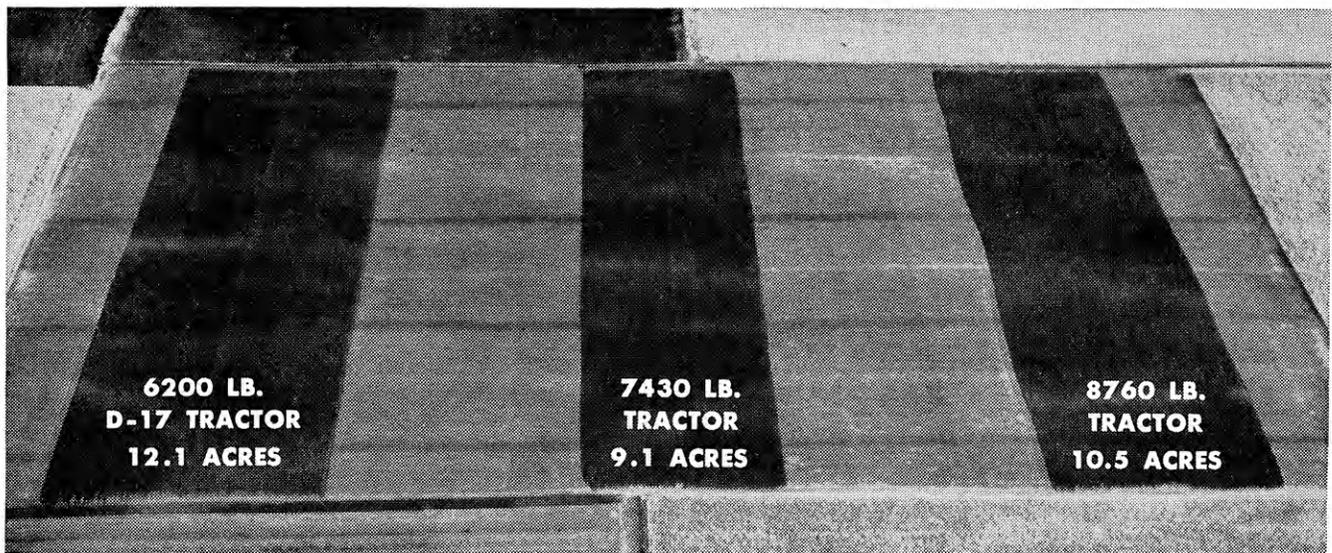
*Best Friend*

your friendly  
cash and carry cleaners

in  
Aggieville

# STICKEL CLEANERS

714-716 North 12th



Actual photo showing acres each tractor plowed on 20 gallons of fuel.

# DYNAMIC D-17

with the *BIG STICK*  
leads in 3-tractor test



Photo of D-17 Tractor in dry, hard-plowing, heavy soil of test field.

Which one of today's big tractors leads in cost-saving performance? Unmistakably, it's the Allis-Chalmers Dynamic D-17 with the **BIG STICK**.

Here in tough fall plowing, three new owner-driven tractors competed in a practical plowing test. Side by side, they matched power, traction, and economy in rugged going.

Each tractor started with exactly 20 gallons of regular gasoline from the same tank truck. Each pulled four 14-inch plow bottoms at the same average depth and speed—until its fuel was gone.

The airplane photo above clearly shows the outcome.

How can the Allis-Chalmers Dynamic D-17 more than match the heavier tractors?

The automatic **TRACTION BOOSTER** system teamed with the **BIG STICK**—the exclusive Allis-Chalmers Power Director—does it. On Allis-Chalmers tractors, weight for traction is provided hydraulically, not with hundreds of built-in extra pounds that waste fuel.



Listen! National Farm  
and Home Hour  
Every Saturday—NBC

**Make the BIG MOVE to More Profit!**

**ALLIS-CHALMERS**



ALLIS-CHALMERS, FARM EQUIPMENT DIVISION  
MILWAUKEE 1, WISCONSIN

TRACTION BOOSTER is an Allis-Chalmers trademark

**Step into this New World of Power**—Plow up to 30 acres a day with this great new Farmall 560 tractor and new McCormick No. 70, 5-furrow trailing plow.



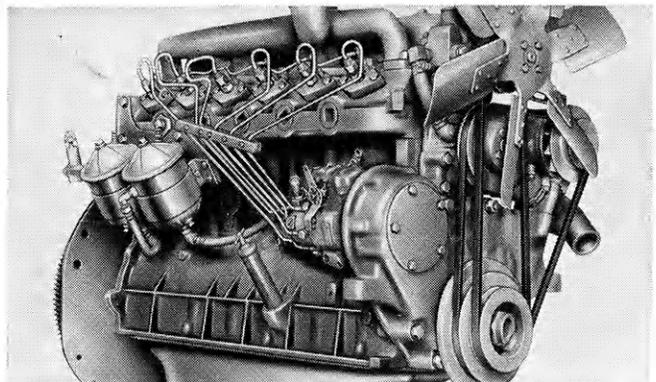
**Faster . . . sm-o-o-ther . . . so e-a-s-y to drive!**

# NEW IH PRECISION SIX!

“Even with a big 5-furrow plow, this new 6-cylinder Farmall® romps along like a frisky colt.” “I know it’s the most powerful row-crop tractor built, but it’s smoother . . . quieter . . . easier to run than my old 2-plow rig.” “You just shift up and throttle back on lighter jobs to save up to one-third on gas!”

These are your neighbors talking. They may not even know that this new IH Precision Six has the widest governed range of any big tractor. But they’ve discovered a throttle setting and one of the 10 speeds forward that give them *exactly* the right power-speed combination for each of their jobs.

Now, you can hold faster speeds to hurry heavy plowing. You can mow at 6 to 7½ mph, hoe at 11 mph, or pull wider hitches to do up to 1/3 more work daily. And you farm in greater comfort . . . with less effort than ever before!



**Get smooth, Precision-Six power** in 5-plow Farmall and International® 560 tractors, and 4-plow Farmall and International 460 tractors. You can order these powerful tractors with gasoline, direct-starting Diesel, or LP gas engines.

**Try the big difference in big tractors**—IH Precision-Six power. Just call your IH dealer for a demonstration. See how 6-cylinder power, Torque Amplifier, and other advantages make you a *bigger* man on a new IH tractor.



**MATCH YOUR PAYMENTS TO YOUR INCOME!**

SEE YOUR

**INTERNATIONAL HARVESTER DEALER**

International Harvester Products pay for themselves in use—Farm Tractors and Equipment . . . Twine . . . Commercial Wheel Tractors . . . Motor Trucks . . . Construction Equipment—General Office, Chicago 1, Illinois

