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**LITTLE  
AMERICAN ROYALTY  
1954**

**MARCH 1954**



## Spring is for...the Young in Heart

Spring is for turning the soil, for putting seeds into the ground. Spring is for setting to action the plans made when snow covered the fields.

Spring is for youth—and for all who are young in heart. Give them high purposes and good tools with which to work, and young and old alike will do a good job.

Such philosophy applies to farming, particularly soil conservation farming. Many an experienced, successful farmer has changed to soil-conserving methods—and been even more successful. The

Give a youngster high purposes and good tools to work with — and you've started him on the road to success.

young farmer—on the other hand—simply *begins* farming the conservation way, because he wants his land to be good while he's farming it—and good enough to be worth leaving for someone else when he's ready to quit farming.

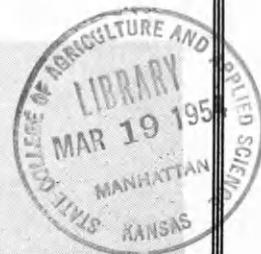
All of us, working together, can make a lot of soil conservation progress with young farmers—if we teach them young and teach them well.

J O H N D E E R E • M O L I N E • I L L .



# WITHOUT RESEARCH

## YOU MIGHT STILL BE SHOCKING WHEAT



*Tenmarq wheat on the K-State agronomy farm. The first field scale production of a variety made by artificial crossing.*

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is published by the Association twice each year for use by farmers and dealers when buying dependable seed.

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is produced by modern farmers in all sections of Kansas under strict regulations set by the Kansas Crop Improvement Association.

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Certified seed was grown by 1,729 Association members last year.

# THE KANSAS CROP IMPROVEMENT ASSOCIATION

Manhattan, Kansas

# Kansas State College AG STUDENT

## An Appeal To A Dean

Vol. XXX

March, 1954

No. 4

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### ON THE COVER

**A**GGIES SALUTE Home Ec this month with a special center section in the *Ag Mag* on the School of Home Economics and their Hospitality Days. This issue is being sent to all Kansas high schools with hopes that it will help convince more girls this is the school for them. (All for a better ratio, men.)

The cover plugs two big coming events as well as shows the feeling of friendship which naturally exists between the two K-State schools concerned. Harold Reed is chairman of the Little American Royal Association and Irlene Rawlings is general chairman of Hospitality Days exhibits.



I'm sure this editor hasn't been around nearly long enough to express any strong opinions on current issues, but I am also sure he can truthfully say every Aggie at this College is hoping that you, Dean Weber, have already or soon do decide to turn down that job with the good school to the north and stay right here with us.

Dean, you're famous all over the world for your judging ability and we at K-State are proud of you for that, but that's not the only reason we are proud of you; not at all. It's not every ag college that has so renowned an animal scientist among its staff, and it's not every school that has a dean the students can call "Dad" and really mean it in the sense that they feel he is there to help them as would a parent.

You had the opportunity a while back to judge Nebraska U. from the faculty angle of view and perhaps it impressed you, but we are sure K-State is at least a little better. Any time you have a spare moment we will be glad to show our gratitude for your leadership and also try convincing you the old alma mater is the best after all.

We (the Ag School) sincerely hope that by the time this magazine is printed, you have already made your decision to stick with the Wildcats and that you will find this letter amusing because you never really considered leaving in the first place.

≡ ≡ ≡

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Presenting the 1954  
**LITTLE  
AMERICAN ROYAL**  
Fitting and Showing Contest

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Cutting horse exhibitions with **POCO CHAMP**  
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7:30-10 p.m.

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4-H and FFA Groups \$.50

# Chit Chat

By Clyde W. Mullen, Assistant Dean



Dean Mullen

**T**HAT TYRANNICAL boss of ours, Editor Dan Henley, keeps walking by and looking into Room 116, and what he can say with a look is more effective than words. (*Interruption*) Dan is tougher than was our former editor on the Oklahoma Farmer-Stockman where we rattled a typewriter for 18 years. (*Interruption*)

On that farm paper, the deadline came twice a month. On the Ag Student, deadlines come only six times in nine months. (*Interruption*) But finding uninterrupted time to prepare one sheet of copy seems more difficult than it used to be to turn out 12 or 15 columns. (*Interruption*)

Of course, on the farm paper, turning out copy was our one job. (*Interruption*) In competition with Chit Chat are other things like reassign-

ments; changes of curriculum; excuses; please let me out of Plane Geometry; (*Interruption*) what do I lack for graduation; can I get more credit on my transcript; letters to mama; letters to papa; packages of bulletins to Tom, and Dick, and Harry; committee meeting; please notarize this form; etc.; and etc.

However, in Chit Chat, you can write of that sort of trivia and it makes copy—(Poor copy, D.H.), but it adds paragraphs. (*Interruption*)

## For Seniors, an Obligation

Approximately 125 graduating seniors in the School of Agriculture are going to have the opportunity this month of taking a special "general abilities" test being prepared by the

Civil Service Commission. This test will have nothing to do with possible future employment.

Purpose of the test, which will be administered in all 48 states at the same time, will be to determine the differences between graduates who return to the farm or accept other employment in the field of agriculture, and those who accept government positions.—Do the government employees turn out to have abilities above or below the general abilities and qualifications of the rest of us?—Do they represent a true cross-section of agricultural college graduates?

On our campus, the Student Counseling Center will administer the tests. They will get ample publicity and each ag senior will receive a personal letter telling him when and where the tests will be given.

The current class of seniors will never profit from the time and energy it will take for these tests, but their little brothers and following crops of students in the School of Agriculture should benefit from the contribution our seniors will make to this study.

The proposition of joining in the co-operative project and taking these tests was submitted to the Agricultural Council by Dean Weber. The Council (many of whom are seniors) voted unanimously to approve and support the testing project.

## A Hint to Us All

At the Ag Seminars, some of us former 4-H Club and FFA members are having a hard time remembering to remain seated until we are dismissed by the chairman, aren't we?

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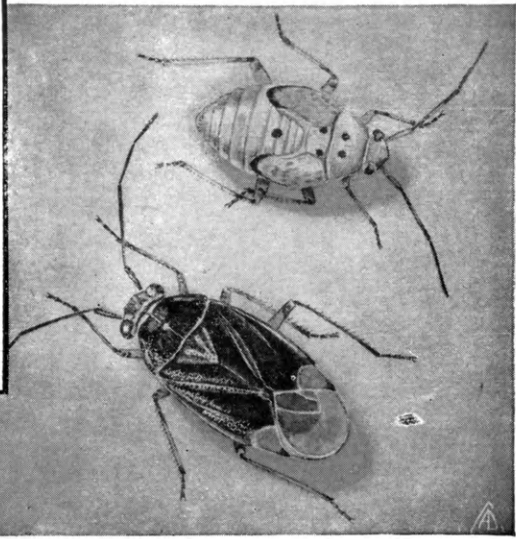
Salina, Kansas



# insects

## YOU SHOULD KNOW

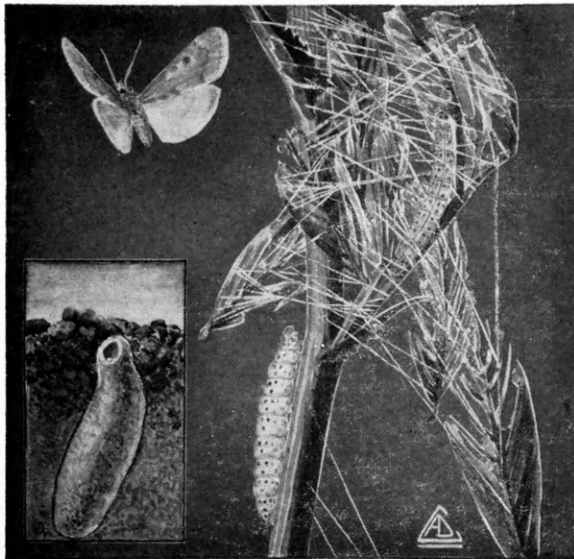
*How To Identify  
These Crop Destroyers*



### TARNISHED PLANT BUG

*Lygus oblineatus* (Say)

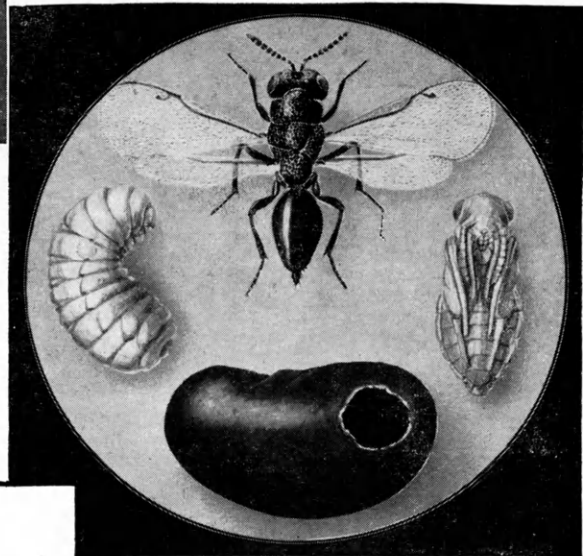
A destroyer of seed crops, these insects suck the sap of plants, retarding plant growth. The bug's eggs, laid in the tissues of plants, hatch into small, green, wingless insects. They develop rapidly and take on the mottled brown, black and red appearance of the winged adult. Adults are about  $\frac{1}{4}$  inch in length.



### WEBWORMS

*Loxostege similalis* (Guen.)  
and *Loxostege commixtalis* (Wlkr.)

Caterpillars of these moths web together the tops of plants, leaving only skeletons of leaves and stems. Masses of 40 to 50 overlapping eggs are deposited on the underside of leaves. The eggs hatch within four or five days into caterpillars which feed on the leaf. The insects overwinter as caterpillars, or pupae.



### CLOVER SEED CHALCID

*Bruchophagus gibbus* (Boh.)

This small, black, wasplike insect may infest as much as 85 per cent of an entire alfalfa crop, often causing losses of 50 pounds or more of seed per acre. The female lays a single egg in newly forming seed. The larva which hatches eats the seed contents within a few days, then pupates within the seed pod. Six generations may appear per season.

# toxaphene

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these and other insects write to Hercules*

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**THE FRASERS** of England visited Dean Weber and asked if any student would be interested in spending a year on their farm.

Dean Arthur D. Weber's recent visit to England was more recently returned by an English couple, Mr. and Mrs. Peter Fraser of Westhide, Hereford, England, who stopped by his office while inspecting the K-State campus.

The Frasers are Hereford breeders in England. They also grow com-

## English Cattleman Visits Dean Weber, Would Hire Aggie

mercial flowers and operate a dairy. As five of their Herefords were recently sold to a ranch in California, they plan to visit there during the three month tour of the U.S.

Mr. Fraser expressed a desire to know of any ag students who would be interested in spending a year, or even a summer, on his farm in England. He now has an Oklahoma A&M graduate working for him and is very pleased with the modern American farming methods and machinery he has introduced there.

Before arriving at K-State, they had visited Oklahoma A&M, Kansas City, Denver and several purebred Hereford herds in the Midwest.

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*has waited for-*  
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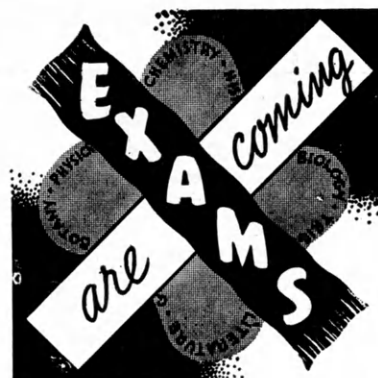
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YOUR  
FRIENDS  
AT THE

**COLLEGE  
DRUG  
IN AGGIEVILLE**



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**DEAN THOMAS** started with MoorMans as a salesman in June, 1949, immediately after graduation from College. In September, 1949, he was promoted to District Sales Manager. In October, 1950, he became a State Sales Manager in Michigan. In 1952, he was transferred to a larger territory in Indiana as a State Sales Manager and now has 58 men working with him. Dean is married—has three children, a boy 9 and two girls, 6 and 5 years old.

## HE'S DOING

# OK

**Only five years ago** Dean Thomas was a Senior at the University of Illinois. Today he's a MoorMan State Sales Manager with 58 men in his organization.

**Dean chose the selling field** because he figured it offered the best chance for rapid advancement. He took a job as Salesman in June, 1949. Within three months he had demonstrated his ability to sell and was promoted to a District Sales Manager. Just one year later, having proved he could manage men, he was promoted to State Sales Manager.

**Dean won his spurs by hard work.** He liked his work and became enthused about it. He liked the products he was selling because the need for them was basic. He liked the idea of the farmer's buying *only* the things he needs to help his livestock and poultry produce more meat, milk and eggs from grain and forage grown by farmers.

**The Moorman Mfg. Co. is proud of Dean;** it is interested in other young men like him. The Company does

everything it can to hustle them into responsible positions as quickly as they can qualify. If you would like to know more about Dean's Company, we'd be happy to send you a copy of a booklet entitled "Let's Get Acquainted."

Just drop a line to Moorman Mfg. Co., Dept. 04-3, Quincy, Ill.

A representative of MoorMan's will visit your campus soon to interview Seniors. Watch your Bulletin Board for the date.

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# Aggies Plan Gala Royal

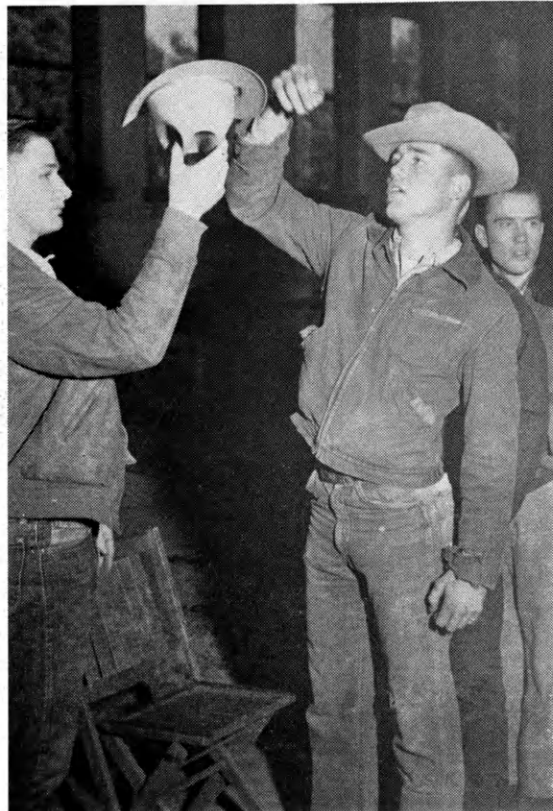
Largest Show Ever  
With 175 Students  
Showing Stock



**L**ITTLE AMERICAN ROYAL will be held Saturday evening, April 3, at 7:30 in the K-State field house. Showing stock in this year's Royal will be 170 students including nine girls.

This number is more than has ever shown in a Little Royal before, so plans are being made for the biggest show ever. A cutting horse exhibition by Z. C. (Slim) Smith of the nationally known Perry McGlone

**THE FIRST IN LINE** to draw the name of the animal he will show in the Little Royal was Jim Jackson. Larry Sankey held the hat.



quarter horse ranch at Dearborn, Missouri, and the Adams Dairy six-pony hitch both will be featured as intermission entertainment.

Slim will be riding Poco Champ, one of the nation's top cutting horses, and will work with and without a bridle. Poco Champ is a son of Poco Bueno, nationally famous quarter horse sire; and won grand champion in the Junior Cutting Horse Contest at Colorado Springs in 1953. Especially strong, high fences will be built in the arena to hold the cattle for this exhibition.

The Adams Dairy six-pony hitch was raised on the Carolanne Pony Farm, Norfolk, Virginia, where their unique color was developed after many years of selective breeding. The lead ponies are only 39 inches high and are one of the fastest lead teams to be seen in this country.

## This Year, the 26th Contest

This is the 26th anniversary of the fitting and showing contest, sponsored by the Block and Bridle Club and the Dairy Club, and will be the fourth year the Little Royal has been held in the field house. Now a show witnessed by over 5,000 people, the Little Royal attracts larger crowds than any other single event held in the field house except basketball games.

The Little Royal was first held in the judging pavilion as an exhibit for Farm and Home Week, and only about 250 people attended. Since it started, nearly 2,000 students includ-

**BESIDES BRUSHING** him, Clair Seglem must train the calf he will show in the Little American Royal to lead and stand properly.

ing many girls have shown livestock in the contest.

The Little American Royal Association this year is adopting a new policy for selecting the centerpiece design. They will alternately use a design of the head of an animal in the Block and Bridle division and the head of a Dairy division animal at each Royal. This policy is expected to continue for many years. A Hereford bull head will be formed for the centerpiece this year.

The Architecture Department made a colored drawing of the design and a projection slide was made from it. The slide will be projected on a 15 foot sheet of paper and a tracing made of it. The day before the Little Royal, the seven-man centerpiece committee will start forming the centerpiece.

First, the 15-foot pattern will be placed over a sawdust base. The colored sawdust then will be packed over the pattern to produce the image of the bull's head, and finally, the completed centerpiece will be sprinkled to prevent the sawdust from blowing and to deepen the colors.

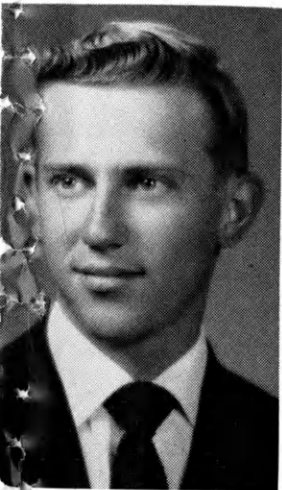
The committee expects to take about eight hours completing the design. About 125 cubic feet of white sawdust and 10 pounds of dye will be used. The sawdust is ground in a hammer mill, dyed in a steam heated boiler and dried many days before it is used.

To have a short, snappy show lasting only two hours, the animals will



# Cutting Horse and Six-Pony Hitch Special Features

By BILL BERGMAN



**RAY SIS, an Animal Husbandry graduate and Vet Medicine freshman, will stand behind the microphone as Little Royal master of ceremonies.**

be judged in four rings simultaneously, a different kind or breed in each ring.

There are 46 students planning to show dairy cattle in the Royal; 62 planning to show beef; 29 to show hogs; 26, sheep; and 7 students planning to show horses.

The judges of dairy animals will be Jack Graham, a Holstein breeder from Emporia, and G. Fred Williams, an Ayrshire breeder from Hutchinson. Graham will place the Holstein and Jersey classes and Williams the Ayrshires and Guernseys.

The Block and Bridle division judges will be Roy Freeland, secretary of the Kansas State Board of Agriculture, judging sheep; Herman Popp of Haven, judging hogs; Walter Lewis of Larned, beef animals; and Slim Smith of Dearborn, Missouri, horses.

Quality is not considered in placing the animals at the Little Royal.

Instead, each placing is made, one-half on how well the student has fitted his animal during the seven-week fitting period and one-half on the showmanship ability the student demonstrates in the show ring.

## Everyone Gets a Ribbon

The first five in each class will receive placing ribbons this year and all others will receive showman ribbons. Trophies will go to the champions of each of the eight divisions. These trophies will be furnished by the American Royal Livestock and Horse Show at Kansas City.

The grand champion trophy in the Block and Bridle division is to be furnished by the Kansas City Stock Yards Company and the grand champion trophy in the Dairy division by the Kansas City Chamber of Commerce. Prof. R. F. Cox, head of the Animal Husbandry Department, and Prof. F. W. Atkeson, head of the Dairy Department, will present the trophies to the division winners. A. G. Pickett, state livestock sanitation commissioner, will present the grand champion awards.

Ray Sis, VM Fr from Belleville, will be master of ceremonies. The Block and Bridle ringmasters will be Max Teeter, AH Sr from Marquette, and Larry Sankey, AH Jr from Sterling. Dairy ringmasters: Bill Long, DM Sr from Manhattan, and Donald Vell, DM Jr from Council Grove.

Harold Reed, AH Sr from Lyons, is executive chairman of the Little American Royal Association. Leonard Slyter, Paola, is vice-chairman; Dick Brown, Westmoreland, secretary; and Dick Pickett, Topeka, treasurer. The

**A NEW METHOD was adopted for selecting the arena center piece design. This year, a portrait of beef by Block and Bridle.**



**DAIRY HEIFERS, like any other animals, take lots of work to prepare them for show, Clyde Armstrong and George Atkeson find.**

faculty advisers are Dr. G. B. Marion, Dairy Department; and Prof. David L. Mackintosh, Animal Husbandry Department.

## It's Work for 10 Committees

There are 10 committees composed of 31 Aggies working on the Little Royal. These committees and members are:

Properties: Mark Drake, Rock, chairman; Albert Spencer, Emporia, and Jack Brink, Le Roy.

Program book: George Atkeson, Manhattan, chairman; Millicent Schultz, Pawnee Rock, and Scott Chandler, Kansas City, Mo.

Prizes and awards: Sherlund Prawl, Severance, chairman, and Ted Colson, Stilwell.

Decorations: John Oltjen, Robinson, chairman; Bob Cullins, Overland Park; Mike Murphy, Protection; Don Drake, Rock; Clinton Stalker, Topeka; Allan Heath, Coffeyville; and Edwin Cotner, Coffeyville.

Entertainment: Eldon B. Johnson, Assaria, chairman, and Einar Johnson, Smolan.

Circulation: Lloyd Christie, Rantoul, chairman; Bob Bozworth, Leavenworth, and Bob Hand, Mulvane.

Door prizes: Walt Schoen, Cawker City, chairman; Larry Sankey, Sterling, and Bill Root, Medicine Lodge.

Judges: Alan Phillips, Manhattan, chairman, and Max Teeter, Marquette.

Tickets and ushers: Harold Tuma, Narka.

Publicity: Bill Bergman, Paola, chairman; Wayne Walter, Lawrence; Glen Neis, Wellsville; and Don K. Peterson, Yates Center.

# Hay Fever and Wheat Rust

## Studies Made with

# Pady-Rittis Spore Catcher

By Hayes Walker III

**K**ANSAS WHEAT farmers and people suffering from hay fever and asthma may benefit from an odd looking contraption atop Willard hall that captures invisible particles from the air. The machine, a spore catcher, is being operated by Dr. Stuart M. Pady, Botany and Plant Pathology Department head.

When enough samples have been collected and results compiled, Pady says some valuable information concerning fungi in Kansas, especially that attacking wheat, may be discovered. Smuts of wheat will also be a particular item of study.

Pady hopes to determine the amount and kind of fungi and bacteria in the air and also obtain some facts on how heavily the air is infested with fungus spores. The load of pollen grains which makes life miserable for people suffering with hay fever, asthma and other allergies may also be determined by the spore catcher. The directions the particles are traveling and the time of year

**THE SPORE CATCHING machine atop Willard hall is shown by Dr. Stuart Pady, Botany head. Wheat rusts will be studied.**



each occurs will be two main answers sought.

Dr. Pady supervised the building of the spore catching sampler which was constructed here by Duane Rittis, Physics assistant. It is still in the testing stage. The "Pady-Rittis" sampler is of the slit type. It draws in air through a narrow slit at a known rate and deposits microscopic particles on the surface of adhesive coated slides or nutrient plates.

Since 1947 Dr. Pady has been collecting invisible fungi, bacteria and pollen grains from the air. His main interest has been the fungi which he first took samples of in the Arctic regions.

### Lindbergh Started Study

This type of scientific study dates back only to 1933 when Colonel and Mrs. Lindbergh made a flight from Labrador to England and exposed vaseline-coated slides to the air above Greenland. This was the first record of fungus spores taken in the Arctic air.

In 1947 Dr. Pady made his first flight over the Canadian Arctic regions, collecting spores and fungus on sticky slides by holding them in the air stream by hand. Despite this crude method the results proved very successful in trapping the bacteria and fungi.

Two gadgets were used in the first spore samplings in Canada, the General Electric electrostatic bacterial air sampler, and the Bourdillon slit sampler. Both draw in the air at a known rate and deposit the microscopic particles on the surface of nutrient plates. The "Pady-Rittis" sampler is a modification of the last named sampler combined with new ideas.

During the sampling in Canada, Pady specialized in the fungi and Dr. C. D. Kelly, bacteriologist at McGill University, studied the bacteria col-



**IN THE CLEAR air above a Canadian city, Dr. Pady and assistant collect microscopic particles, using a machine he designed.**

lected. Pady and Kelly have published several reports of their work and are nearing completion of their studies.

From 1947 until 1950 all their samples were taken from an airplane flying over the Canadian Arctic regions and North Atlantic Arctic regions. In 1950 the sampling equipment was set up on the roof of an RCAF hangar at Churchill, Manitoba. The data obtained there confirmed the findings taken during the flights and showed quite clearly that geographical location of the sampler was less important than the origin, direction and intensity of the wind. Numbers and types of organisms seem to be correlated with specific moving air masses rather than any particular geographical location, Dr. Pady says. Since location was not an important factor, the research project was moved to Montreal.

There the sampling equipment was set up atop the Sun Life Assurance Company building in September of 1950 and frequent, even daily, exposures were made throughout the year.

One of the things he hopes to find out in Kansas is when the large numbers of spores come into the state and where these spore showers originate. During the spring, Dr. Pady will search for the answers to these questions.



**D**RIVING 30 miles to and from classes at K-State each day may seem quite a task to the ordinary Kansas State College student, but Dick Brown, recently named top Dairy Manufacturing student in eight states, makes the round trip with little inconvenience. "It's merely a part of college routine," Dick, a senior in DM, says.

He's made the daily trip from his home in Westmoreland for two years now. Why Westmoreland? "Well," he explained, "my wife, the former Miss Joyce Harden, KS '52, teaches in the Westmoreland high school and we find it more convenient to make our home there."

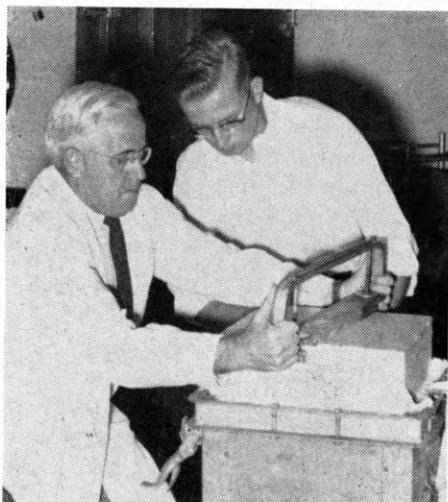
Although Dick laughingly admits that he is probably somewhat prejudiced, he says he certainly doesn't feel that having a wife is in any way detrimental to college work.

### His Wife Must Help

Evidently Joyce has applied her teaching abilities to helping her husband. Recently Dick won the Milk Industry Foundation's regional collegiate leadership award. This region includes colleges in Colorado, Kansas, Missouri, Arizona, Arkansas, Texas, Oklahoma, and New Mexico.

The foundation is an international trade organization for market milk dealers. Awards, including an expenses-paid trip to the foundation's annual convention in Boston, have been made for three years.

Selections are based on scholarship and extra-curricular activities indicating development of leadership qualities. Dick's record is loaded with both. He has a 2.7 grade average so far and is a member of Alpha Zeta,



By Bob Ecklund

honorary agricultural scholastic fraternity.

As for activities, Dick is president of the Ag Association, student body of the School of Agriculture. He was on the junior dairy judging team last spring and the senior team this fall. He has been a member of the Dairy club since he started to school and has held all offices except that of treasurer.

This year Brown is treasurer of Blue Key, men's honorary fraternity. He was publicity chairman of the Little American Royal in 1952, treasurer in 1953 and this year is secretary.

### No Indecision Here

Dick says he had Dairy Manufacturing in mind as his major long before he came to Kansas State. His interest perhaps was founded in the dairy plant in Salina, his home town.

Brown has worked in the College creamery each semester until last year. Except for six weeks in ROTC summer camp, he spent last summer

**PART-TIME WORK** in the Dairy Department has helped Dick in dairy classes; thus he has time for more activities.

**IN DAIRY** manufacturing class, Dr. F. E. Eldridge shows Dick Brown some of the techniques of processing cheese.

## "All a Part of College"

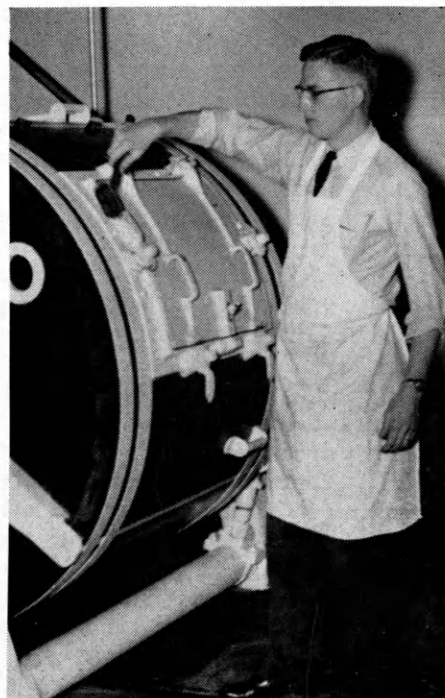
—Dick Brown



working for the Carnation Milk Company in Tulsa.

Plant management is Dick's first choice for a career and dairy research is second. He feels there are many opportunities offered in his chosen field, though it is becoming increasingly competitive. Dick says he believes his college training has been thorough, however, and should give him an excellent start.

"Dairy Manufacturing provides training in three major fields of specialization," he says, "as a dairy plant operator, dairy plant manager or dairy products technician."







Courtesy Agricultural Ammonia News

**RAPID INCREASE** in use of anhydrous ammonia fertilizer all over the U.S. may be explained by its resistance to leaching.

# Liquid Fertilizer

*"It's Here to Stay"*

By Arlan Frerking

**K**ANSAS FARMERS who want cheaper fertilizer are using anhydrous ammonia.

Though not yet used extensively, Dr. Floyd W. Smith, professor of agronomy at K-State, said he believes anhydrous ammonia fertilizer is here to stay as the reports he has received on its use are very favorable.

One of the major factors contributing to increased use of anhydrous ammonia is the scarcity of other nitrogen fertilizers, he said. Even though it is a liquid and requires special handling equipment, farmers like it because it takes less time and labor to apply and will remain in the soil until used by the crop.

Anhydrous ammonia fertilizer ( $\text{NH}_3$ ) contains 82 percent pure nitrogen. It is stored under pressure as a liquid but when released into the air or soil, becomes a gas.

Correct application is important. Unless the gas is released 4 to 8 inches under the surface, it will escape into the air and be wasted. A special

implement consisting of slim metal shovels that can be forced into the soil several inches shields tubes which carry the fertilizer from a pressure tank.

The ammonia gas is adsorbed mainly by the clay particles in the soil. Losses into the atmosphere are likely to be greatest from sandy soil. Soil moisture also affects adsorption of the gas. Losses are reduced considerably if the fertilizer is applied to fairly moist soil.

Use of an applicator must be considered a tillage operation since the shovels tear into the soil. Application therefore can be most economically combined with cultivation operations already required, or, on small grains, with seeding.

## Best Applied in Fall

Application of anhydrous ammonia to small grains in spring destroys quite a few plants and can lower yield, Smith said. Experimental wheat plots at K-State yielded about eight bushels

more when  $\text{NH}_3$  was applied in the fall at seeding time than when applied in the spring, and Smith attributed this difference to destruction of plants by the applicator shovels.

Ken Bennington, an Eastern Kansas farmer, has the equipment for applying anhydrous ammonia and he does custom work for his neighbors besides treating his own 160 acres of corn each year.

His applicator is tractor mounted (considered best for a small tractor, while a pull-type implement with larger tank is often used with a large tractor) and includes a 100 gallon tank. He also has a 1,000 gallon storage tank mounted on a truck.

Bennington charged \$2.25 an acre last year to apply the fertilizer, and says he can cover about 30 acres of row-crop a day.

Elemental nitrogen cost him 11 cents a pound in anhydrous ammonia form (82%). Dry fertilizer costs

(Continued on page 30)

# Management Associations

By Jerry Waters

**T**HE WORK of our fieldman is vitally important to me. The county agent and other extension specialists make recommendations and give me the findings of research but it remains to the fieldman to tell me how to put it on my farm."

This statement by a member of the Farm Management Association indicates the value placed on the work done by the Association and its fieldmen.

The principal tool of the Farm Management Association is the farm account book furnished to each member. Through the efforts of the Association, farmers see for themselves the advantages of keeping accurate and complete records of farm businesses.

Fieldmen give the farmers advice in keeping the account books. Through these books a farmer can watch his progress, year by year. Also he can compare his various individual farming enterprises in terms of dollars and cents.

At the end of the year the account

books are sent to K-State where they are analyzed by College economists. A summary of the analyses is published, with the results listed by type-of-farming area.

Through this Summary and Analysis Report the farmer can compare his farm with others in his farming area on such items as net and gross income, operating expenses, investment, labor and equipment and return for operator's labor and management.

## Record Books Created Need

Need for an analysis of farm account books was a major factor in the organization of the Farm Management Associations. During the 1920s county agents were distributing account books to many farmers. The Extension Division of the Land-grant colleges, realizing farmers could not see the real importance of records, especially when they had no personal advice on keeping them and could not compare their farms with others, set

about organizing the Farm Management Association.

The first Association in Kansas was started in 1931 with 100 members. At present there are six Associations with a total membership of 1,355. The Associations cover the entire state and are approximately equal in area.

Each Association has a fieldman and a board of directors. The fieldman pays an on-the-farm visit to each member at least 2 or 3 times during the year to give him advice on management problems and on keeping the account book. He also offers suggestions on how to improve the farm business and will do planning and budget work for those who want it. As the fieldman has access to the farmer's financial records he is well qualified to offer a type of professional counsel highly valued by the farmer.

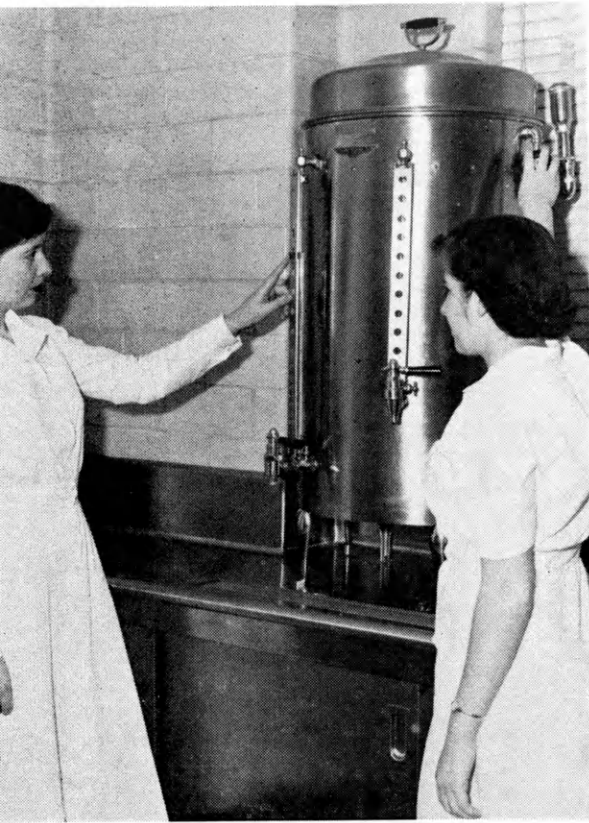
Many farmers feel the \$40 to \$60 yearly membership fee is justified

(Continued on page 34)

**FARM MANAGEMENT ASSOCIATION** fieldmen personally visit each member several times a year as well as send out weekly newsletters. Clarence E. Bartlett, Association I fieldman, posed with Bruce Wilson of Manhattan, a long-time member, to show two of the fieldman's typical activities; surveying and discussing the farmer's work and helping him with records and income tax.







**GRACE SMITH**, institutional management graduate student from New Zealand, shows Grace Schmidlein how to use a coffee urn.

*Home Economics:*

## *Opportunities*

# *Unlimited*

*Courses from weaving—nursing—  
to coffee-making  
offered....*

By *PATRICIA PTACEK*

**O**PPORTUNITIES in home economics are unlimited: budget adviser in some big store, nursery school teacher, dietician, buyer of women's ready-to-wear, consultant in some home-building or furnishing company. Girls can be trained for all these and a wide variety of other jobs at Kansas State College.

For home ec grads the fields for specializations and advancement offer fascinating positions. Letters come to K-State from all over the United States asking for girls trained in the different home economics fields.

Foods and nutrition, right now, probably has the widest variety of openings—working with doctors and nurses in a city or county office or in a state health department. A hard job, but one that would never be boring.

### **Tea Rooms to Test Kitchens**

Many girls like institutional management where they supervise a school lunch program along with teaching or as a full time job. Or they run tea rooms or restaurants, or manage test kitchens for women's magazines, advertising agencies or food manufacturers. In this field jobs are exceedingly varied.

Like to work on TV? The job of planning color schemes and props for the different shows falls to some



**"FINGER PAINTING** is lots of fun," for kids, at least. Marjorie Miniard gets plenty of practical training in care of children at the child welfare department nursery.



## *Home Management training, another important field.*



**RUTH ANN WALLER, Janis Anderson and Marjorie Bird gain experience in planning and presenting the Retailing Club style show. They might find jobs of this type with department stores.**

person with an art background. Another glamorous job would be serving as color consultant for a large department store. And after getting a background by working for others, the girl who starts her own interior decorating business may be quite successful.

If a girl has the ambition to see her thoughts in print, she should make journalism her home ec partner at K-State, and see her dreams come true. Variety certainly is offered here, with anything from small town newspapers to women's magazines; or coast-to-coast radio and TV work as other possibilities.

### **Home Economist Field Unlimited**

Perhaps the work of a business home economist is preferred—in an advertising agency or with manufacturers of foods and home equipment. There's really no limit to the chances with this training!

And if desires are not for the hustle and bustle job but rather for a quiet, steady one with summers for free lance work or travel, home economics teaching always has more openings than applicants. There is a choice of high school, college or adult education, too.

Home demonstration agents find interesting work helping homemakers with their special problems. They

also work with the 4-H members on cooking, clothing and interior decoration projects.

Some of the interesting jobs offered home ec majors are in the fashion world, with a photographer, dressing and posing the models, or writing on the latest fashions for a magazine or newspaper. If a young lady has talent and ambition, she might even do designing. Every fashion job is full of interest and variety.

How about nursery school work? With more and more mothers working, the need for many well-trained supervisors of pre-school children is clear. This job requires much responsibility, for the nursery school days are important in a child's development.

Then there's social work—helping families solve tough problems. Of course, there is always a demand for these workers.

### **Research Puts Imagination to Work**

Research is a necessity in every branch of home economics, just as in other fields. There is a constant need for research workers, since laboratories are usually understaffed. Just think! You might be the one to work out a combination of foods that would speed the recovery of invalids, a finish that would keep a certain fabric from fading or a design for a more efficient kitchen range. Research is one of the most serviceable jobs offered.

Of course what nearly every girl really wants not long after she finishes school is a career of managing her own home. Home economics is the only field to prepare her for this work. It teaches her how to manage her home in the most efficient and economical fashion. In class she will solve typical family problems, plan menus and have budgets at her finger tips. Nearly every girl will, sooner or later, enter this career; so each should be able to handle the job smoothly and happily.

Salaries vary for the jobs mentioned, but they're good in any home economics line. Many of these jobs can be continued after marriage by free lance work to bring in pin money for new clothes or for that new house.

**WARPING LOOM operation is part of the instruction girls get in the art department's weaving classes. Many unusual patterns are designed and students learn the basic technique of cloth making.**



# Hospitality Days—1954

## *Home Ec School Celebrates 20th Annual Open House*

By PEGGY HOWARD

**A** KICKOFF ASSEMBLY in February started every K-State student of home economics preparing for the 24th annual Hospitality Days, and an expected 2,000 high school visitors.

Preparations for home ec open house started early in the fall when a steering committee of students and their faculty advisers put their heads together to plan this big campus event. With the coming of spring, the final plans near completion.

Every high school and junior college in Kansas received an invitation for its girls to attend. Parents and

**THOMASINE GLEASON, Hospitality Days chairman, co-ordinates the work of 14 sub-committees planning all phases of open house.**



friends, home ec teachers and home demonstration agents also were specially invited.

Elaborate exhibits are to be put up by each of the home ec departments. The booths will be arranged in Calvin Hall (home ec headquarters), in Anderson Hall (where President McCain has his office) and in Kedzie (the journalism building).

### **Exhibits Will Illustrate Jobs**

There may still be some young high school women who think of home economics only in terms of cooking and sewing. If so, touring the exhibits will open their eyes. There will be displays of foods, of course, and they'll include many new dishes everyone will want to sample; but most will be for display only. Dietetics, institutional management, nutrition research, foods demonstration work, meats and foods research will be job opportunities illustrated.

Crafts displays, drawings and paintings, interior decorations and home furnishings made by students will illustrate work in the art department.

Clothing, nursing, child welfare, the extension serv-

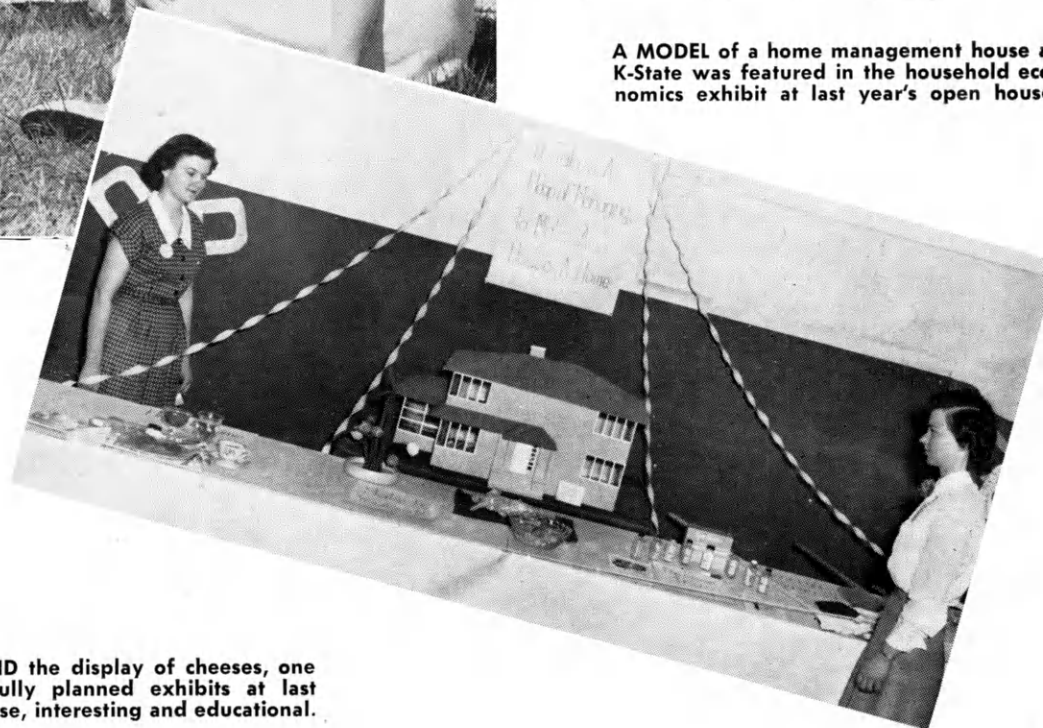




A FEW OF nearly 2,000 high school girls who attended last year's festivities rest in front of Calvin Hall, Home Ec headquarters, after touring the exhibits.



VISITORS FOUND the display of cheeses, one of many carefully planned exhibits at last year's open house, interesting and educational.



A MODEL of a home management house K-State was featured in the household economics exhibit at last year's open house.

*Girls at every Kansas high school are invited to attend.*

ice and journalism will all have demonstrations for you to see.

All guests and hostesses will assemble twice during the Hospitality Days. On Friday, the opening morning, they will hear an outstanding speaker in assembly.

Saturday afternoon they will see a fashion show built around the life of a college girl. Box lunches in the gymnasium will supply a delicious meal on Saturday. Other special entertainment is being arranged for all guests.

On both days, guided tours will take visitors to such places as the nursery school, the College radio station, the cafeteria, the museum, Memorial Chapel (used nearly

every week for a college-romance wedding), and the home management houses.

The tours will end Saturday afternoon after the guests take a swing through the Freshman girls' dorms, future home of many of the guests!! Tea and punch and other mouth-watering party refreshments will be served the guests and future K-Staters in the dorm dining rooms.


As Dr. Margaret M. Justin, dean of home economics, said in welcoming the Hospitality Day visitors last year, "We want you to come to see our exhibits and get acquainted with us. We want you all to know how very interesting and enjoyable and satisfying home economics work is."



# Home Ec Girls Participate In Many Activities

Clubs, honoraries offer many diversions from routine college studies.

By MARLIENE VON BOSE



**HOME EC CLUB** Christmas tea in Calvin Lounge. Enjoying it are Estelle Colbert, Lola Donaldson and Sue VanDeventer.

**W**HEN YOU think of a home economics girl, do you picture her sitting at a sewing machine making a dress of some sober color? Or do you see her as a homecoming queen of the College, receiving a huge bouquet of roses while thousands cheer?

You're quite wrong if you choose the first description for the typical home ec girl at K-State because she will rank high among the outstanding girls on the campus. In the first semester of this year, home ec girls took more than their share of college honors, both socially and scholastically.

Already this year two of K-State's queens and four of the queens' attendants have been home ec girls.

And a home economics senior, Margaret Griffith of Manhattan, is honorary cadet colonel for the Air Force ROTC wing.

Two girls in top positions on the College daily newspaper are taking home economics-journalism. Sally Doyle of Douglass was business manager of the Collegian last fall and Phyllis Ruthrauff of Overland Park has that job this semester.

Both represented the Home Ec club at the convention of the American Home Economics Association in Kansas City last summer. They authored reports of the sessions in the September issue of the Journal of Home Economics.

More than half the members of Mortar Board this year are home ec girls. That's the honorary senior organization every freshman girl dreams of some day being invited to join. Nine home ec majors are members of the junior honor society, Chimes.

The three top officers of the YWCA right now are home ec: Ruth Ann Waller, Atchison; Helen Beam, Ottawa; and Jane Compton, Manhattan.

## Some Study Abroad

This year four home ec girls were exchange students to foreign countries where they stayed for several months with rural families learning how the people live and work. They are Aldean Knoche, Stafford, who visited Austria; Barbara Buffington, Saffordville, who went to Japan; Patricia Draney, Fairview, to Germany; and Allison Saylor, Jetmore, to Sweden.

There are a number of good scholarships offered and won each year in the Home Economics School. Rosemary Gladhart of Highland recently received a \$300 scholarship for her public speaking ability in promoting 4-H club activities.

So, whatever the campus activity, you can be quite sure to find home ec girls there as leaders.



**MANY KANSAS STATE** beauty queens are home economics majors. Left to right are Margaret Griffith, Kathryn Reiger, Carol Tannahill, Rachel Schoneweis, Ruth Pickett.

# A Variety of Home Economics Courses Offered Non-Majors



**NEW DRESS DESIGNS** start this way, according to Mary Klee. Besides learning how it is done, she will have a new dress.

Several boys—many girls majoring in other fields attend classes in home-making that are both practical and interesting.

**H**OW would you like to learn to weave, or make pottery or plan your own home and its furnishings? One needn't be a home economics major or even a girl to take such courses at K-State.

Boys at K-State are interested in textiles, the proper way to prepare



**MARVIN HUNT** and **James Lowry**, Korean vets in institutional management, and **Wanda Stalcup**, home ec-journalism, learn the textiles to buy for business and home.

food, and the foods needed for health. Many fellows go into hotel and restaurant management, as it's a wide and promising field.

## "The Family" Is Popular

A Wildcat football star has studied applied nutrition. Another enrolled in the course on family finance. Boys also take classes on family relations or The Family, in which the problems of mate selection, courtship, marriage and parenthood get an airing.

These courses are planned so they will be both practical and interesting. For example, in the interior decora-

tion classes, each student draws a house plan and shows how he or she would furnish and decorate it.

In the beginning foods course students learn the hows and whys of food and its preparation; also the correct way to serve meals. Toward the end of the semester, each student prepares a breakfast, a lunch and a dinner. An upperclass home ec student attends each meal to judge it and suggest improvements.

Nearly every girl is interested in making some of her own clothes. The courses in clothing and textiles can fill just about any desire along that line. In one, a wardrobe is planned

to suit the personality, coloring and figure. The best clothing buys and what to avoid when buying are also studied.

For boys and girls who have wondered what material was in clothing, a textiles class teaches the various materials, their weaves and fibers. Notebooks kept in that class always are a helpful reference.

## Learn To Care for Kids

The child guidance course teaches characteristics of young children, why they act as they do and how to care for them. Students in it also learn a lot about themselves. Quite a bit of class time is spent at the K-State nursery school caring for and observing children. And some 90 percent of those who take the course later use what they learned in their own homes.

**PLANNING A WOMAN'S** page is interesting for Diane Vadnais, Kathleen Kelly, Phyllis Ruthrauff and Marliene Von Bose, taking home economics and journalism.





## The Campus Was Crowded

# with Home Folks

By Bob Ecklund



**CAFETERIA STYLE**, the Dairy Club served lunch to many Farm and Home Week visitors attending meetings in Waters Hall.

*Farm and Home Week drew visitors from all parts of Kansas to hear and view the many talks and demonstrations. A report on all the talks, alone, would fill the Ag Mag, so here are just a few.*

**POULTRY LAYING FLOCKS** must be larger if they are to operate as economical farm enterprises, Prof. Leo T. Wendling, extension ag engineer, told Farm and Home Week visitors.

Marketing of quality eggs will depend on having a large flock producing at a high rate. Wendling explained that in the good laying house needed by a large flock, the eggs will stay cleaner; and since a large flock probably gets more attention, they will be gathered more often.

To meet the needs of a large farm flock, a "pole type" laying house has been designed that is both economical and efficient. The basic unit of this house is 40 by 40 feet and will hold 500 hens (*three square feet of floor space for each hen*). It is designed to be easily expanded in 10 foot units, each housing an additional 150 hens.

### **Dirt Floor Thought Best**

This house needs no foundation—it sits on 5-inch treated poles—and a dirt floor with built-up litter is recommended. A 10-foot-square feed and egg room is built into one corner of the house, convenient and labor-saving; and sliding doors in each end of the building are wide enough to drive a tractor and spreader through. Droppings pits are used under the roosts to help keep the deep litter in a more sanitary condition.

The pole-type house, Wendling said, is designed for economy without sacrificing quality. If properly constructed, it is a sound, permanent building.

**MARKETING OF WHEAT** is a major problem to Kansans. "Apparently we have too much wheat—but how much is too much?" asked Prof. John McCoy, ag economics speaker during Farm and Home week.

The storage bins we now have and those planned for immediate construction will handle the wheat problem for another year, but after that—what solution? Continual building of bins is not a practical answer.

Wheat storage is an expensive operation, too, McCoy said. Storage costs on the surplus held by the Commodity Credit Corporation are about \$400,000 per day; quite a burden on the taxpayer.

### **There Must Be a Limit**

The U.S. should have a sizable quantity of wheat stored for an emergency, but there must be some limit. It has been suggested that 500 million bushels would be sufficient. This is only an opinion, McCoy observed; however, that much wheat would meet all the domestic requirements of the United States for one year, so it seems to be a reasonable amount.

Prospects for increasing the foreign market are somewhat uncertain. At one time all wheat surplus was meant to be exported, but protective tariffs have hindered agricultural exportation, he said. Even giving away our surplus abroad may not be a wise policy as it could interfere with the economies of other nations who might also have wheat to export. A free trade policy by all might be a practical solution to the problem.

It's quite clear that adjustments must be made in the wheat industry. It is a problem that will require much investigation and thought, and the wheat farmer will play a vital role in finding a solution.

**IF WORLD POPULATION** had increased one percent a year since the time of Adam and Eve (*estimated at 5,300 years*) and each person weighed only 100 pounds, the total population of the world now would weigh more than the earth itself, said Dr. Samuel Brody of the Dairy Department, University of Missouri. Dr. Brody was discussing world population trends and food supply before a joint meeting of Sigma Xi and Gamma Sigma Delta honor societies.

Forces controlling the ups and downs in growth of populations are difficult to detect, Brody said. What forces cause populations to grow rapidly one year and not at all another year? The question is not an easy one to answer, and it is dangerous to prophesy population trends.

The lower the living standards, the higher the birth and death rates, except in this country. The U.S. is unique in having a high birth rate and a low death rate with high living standards, but this is the only country that has large surpluses of food, too. And nowhere else in the world is the disease of overeating known.

### **No Fertilizer, Then What**

Though our present problem in the U.S. is disposing of food surpluses, there is a limit to food production and fertilizer might well be one of the limiting factors. Even though we have supplies of fertilizers that should last 200 years at present usage levels, the problem has unlimited time range and after the 200 years, then what?

The problem, as Dr. Brody expressed it, is to control the population to equal the food supply. It will be a difficult task and a challenging one, but a task that may some day have to be done.



# Collegiate 4-H



## *Where Everybody Feels Right at Home*



**THIS SEMESTER, Dick Reinhardt conducts the active business meetings of Collegiate 4-H. Keeping minutes is Doris Wierenga.**

**E**VERY first and third Thursday evening finds former 4-H'ers and many other K-Staters at rec center for the meeting of Collegiate 4-H. This club is the largest service organization on the campus.

Since a second sense with most students from the farm is square dancing, a recreation hour precedes the 8 o'clock business meeting. That hour is packed full of old-fashioned hoe-downs. Of course, there are occasional round dances and bunny hops to add variety.

At 8 the meeting is called to order. Many different business transactions are brought up; the most common pertaining to activities at Rock Springs Ranch, the state 4-H camp; publishing of the Who's Whoot; and service to the College and 4-H clubs over the state.

After the business meeting a varied program is presented which may include musical numbers, films, guest speakers or talks by International Farm Youth Exchange students—often members of Collegiate 4-H who have traveled abroad to live and work with people of foreign countries.

Membership now stands at about 400 and reached an all-time high of 600 soon after the war. This is one

club where the boy-girl ratio is about even.

Collegiate 4-H was organized 27 years ago with 60 charter members. New officers are elected each semester. Harold Reed, Lyons, was president last fall and Richard Reinhardt, Erie, calls the meetings to order this semester. J. Harold Johnson, state 4-H club leader, is sponsor of the group.

The club renders many services to the College and to state 4-H clubs. The largest project of the club is publishing Who's Whoot, the yearbook of Kansas 4-H members. Almost every county in Kansas is represented in the book which includes snapshots of 4-H members in action at home, county spring festivals, county and state fairs and national events. All members of the Who's Whoot staff are Collegiate 4-H members. Warren Prawl of Severance is the editor this year. He and his staff plan to distribute the yearbook during the Kansas 4-H Round-up here this spring.

Collegiate 4-H'ers serve as volunteer judges at county spring festivals where model meetings, demonstrations and promotional talks are presented. They also help with arrangements for the 4-H Round-up in June.

However, the club is not all work and no play. The social function of the fall is a formal dinner dance. The banquet at a local hotel last fall was complete with guest speaker, Prof. F. W. Atkeson, Dairy Department head. A dance followed at the Manhattan country club. The spring event is a formal dance where recognition is given to the outstanding seniors of Collegiate 4-H.

This 4-H club away from home is not only a place for recreation and fun; it is a place where many K-State freshmen feel right at home because 4-H has come to college with them by way of the Collegiate 4-H.

**TO THE CALLS of a club member, Collegiate 4-H'ers start each meeting in Rec Center with an hour of snappy square dances.**



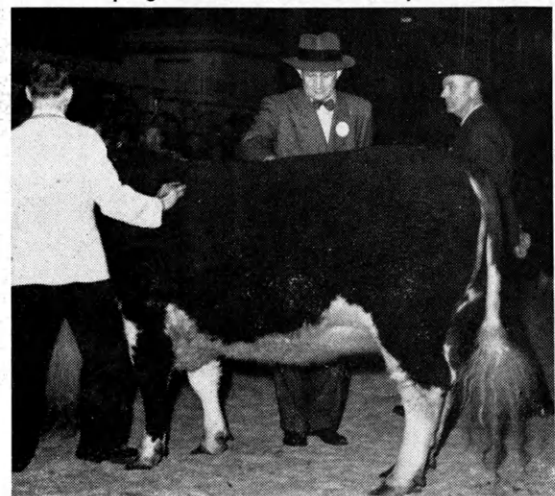


THE JUNIOR LIVESTOCK judging team took the winning trophy at the Denver contest. Other team placings: carloads, 1st; hogs, 1st; sheep, 2nd; cattle, 3rd; horses, 5th. Individual wins: Harold Tuma, 1st on hogs; Eldon Johnson, 1st on sheep; Larry Sankey, 1st on horses; Tuma and Leonard Slyter, tie for 2nd in contest; Sankey, 5th in contest. Pictured: coach Val Brungardt (left), Tuma, Slyter, Ernest Heitschmidt, Johnson, Sankey and John Brethour.



AT FORT WORTH, the junior judging team took 10th in the contest; 5th in cattle. Norval Deschner took 5th on cattle and Calvin Drake, 3rd on sheep. (Left) Jim Drolte, Calvin Drake, Dick Reinhardt, Norval Deschner, George Gammell, Daymon Slyter, Charles Imthurn and Val Brungardt.

A PICTURE received late of Dean Weber judging at the Smithfield livestock show in England. He was the first American to judge at the more than 150 year old show.



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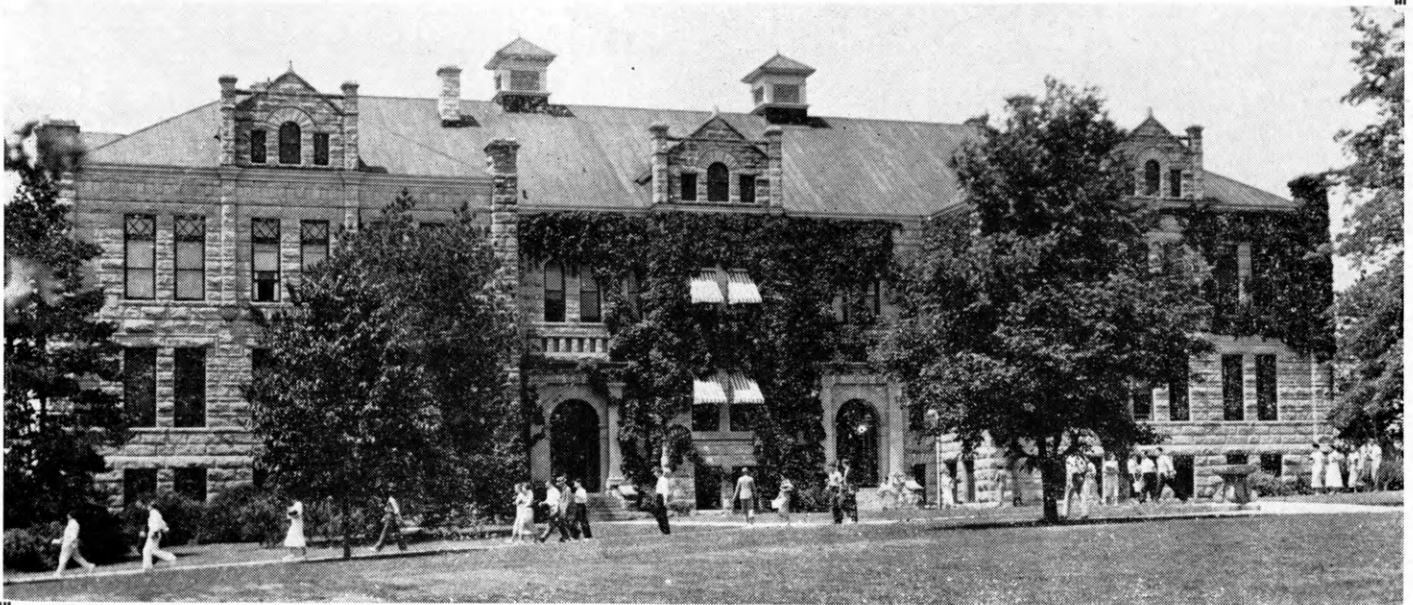
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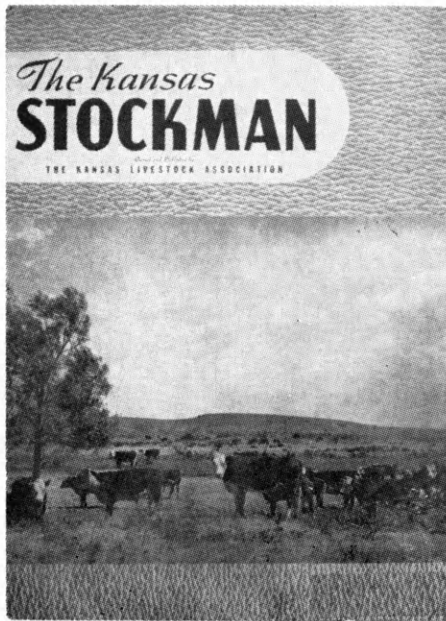
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The Kansas Livestock Association owns and publishes THE KANSAS STOCKMAN, a monthly livestock journal which will keep you informed on livestock production and management practices in Kansas. It also keeps you up to date on legislation, market trends, new developments, and other things which affect the livestock industry in Kansas.

## Invest In Your Future by JOINING the Kansas Livestock Ass'n

Officers, directors and members of the Kansas Livestock Association keep in contact with all legislation concerning health regulations, the movement of livestock into and out of the state, branding, freight rates, ad valorem taxes, and other regulations pertaining to the livestock industry. The Association works full time for more research funds and more livestock research at Kansas State College.

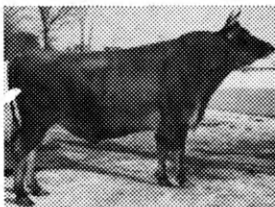
Plan to attend the Kansas Livestock Association's 41st annual convention in Wichita, March 11, 12, and 13.

Mail the coupon below along with \$5.00 for your membership in the Kansas Livestock Association, 909 Harrison, Topeka, which includes subscription to The Kansas Stockman.

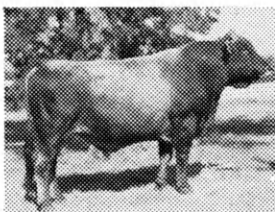
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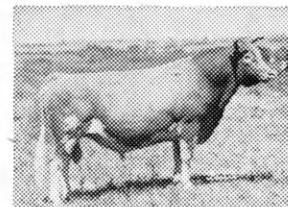
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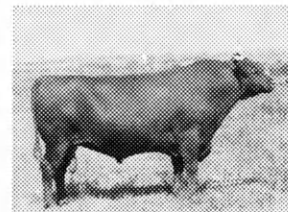
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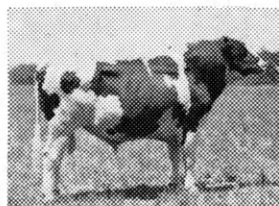


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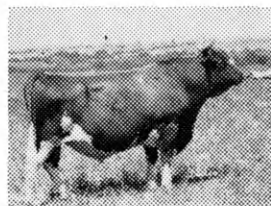
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# Kansas Has Lost a Friend

Perhaps L. L. Compton's greatest attribute was his ability to make friends. In a job that required his knowing many people and constantly meeting others, he never missed a chance to make a new friend, and everyone who knew him surely remembers him most for his sincerity.

One of Mr. Compton's many close friends spoke of him as a "great believer in fairness," and in his work with the Kansas Crop Improvement Association, a job of many problems



MR. COMPTON, third from left, stands before a display with KCIA officers F. J. Raleigh, C. C. Cunningham, Walter Peirce.

and tough decisions, he was "un-biased" as any man could be.

Mr. Compton was a K-Stater. He received his BS degree here in 1930 and after working as county agent in Butler County joined the staff of the Extension Division as a specialist in agronomy. In 1940 he received a Master's degree in agronomy, and in 1947 became a professor in that department.

He collected quite a list of honors as he progressed through school and work: Alpha Zeta, Sigma Xi, Epsilon Sigma Delta, American Society of Agronomy, American Association for the Advancement of Science. He was an active member of Farm House fraternity.

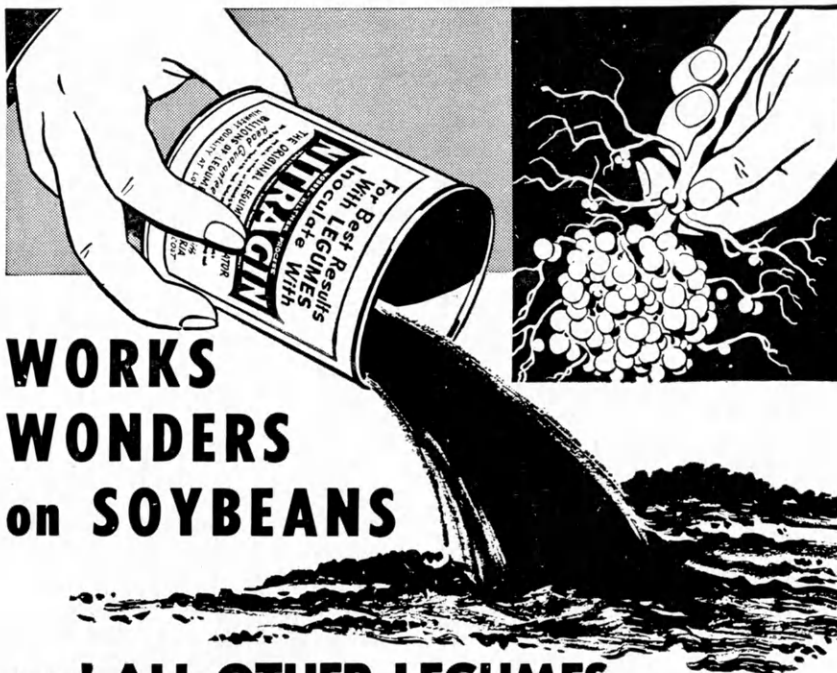
While Extension Agronomist for Western Kansas, Mr. Compton, with the help of the county agents, made a careful study of moisture and yield relationships. His Master's thesis on this study was published as an exten-

sion circular, "Relationship of Moisture to Wheat Yields on Western Kansas Farms," and included a table from which accurate predictions of yield can be made.

In 1947 Mr. Compton joined the Crop Improvement Association as secretary. From that position he built the association into an able organiza-

tion capable of handling the large amount of work that has developed in the past 15 years. Through his work in publicizing the association, nearly every farmer in Kansas now knows the value of seed certification.

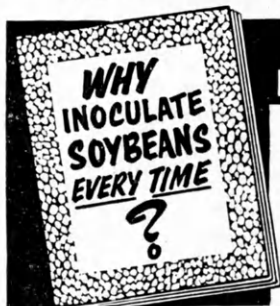
Mr. Compton was born April 21, 1905, at Mankato. He died at Manhattan on January 28, 1954.



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## Royal Gilt Contest For 4-H and FFA

Four registered gilts will be given away at the Little American Royal this year. Two will go to 4-H club members and two to FFA chapters. The gilt contest was started last year to increase 4-H and FFA interest in the Little American Royal and in livestock exhibitions throughout the state.

Gilts will be purchased this year from Fred Germann, Manhattan; C. Balthrop, Wichita; Dale Galle, Moundridge; and the College Animal Husbandry Department.

Members of the 4-H who receive gilts get a good start in setting up worthwhile projects and FFA chapters can start gilt rings with the gilts given to them.

In setting up a gilt ring, the FFA chapter gives a gilt to one of the members for a project. He must return to the chapter one gilt from his first pig crop. It is then passed on to another boy who needs a project, thus perpetuating the gilt ring.

Last year's 4-H winners were Carol Marmon of the Jolly Jayhawkers Club in Ford County and Darrell Lesovsky of the Merry Meadowlark Club in Republic County.

Carol was awarded a registered Duroc gilt which now weighs about 350 pounds and will farrow soon. Last summer she showed the gilt in the county 4-H fair and won first place.

Darrell received a registered Poland China gilt. At the Republic County Fair, his gilt took first place in the open Poland China class.

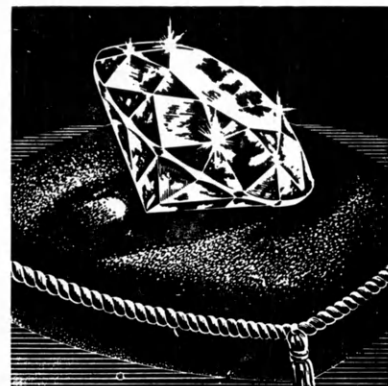
FFA chapters who received gilts were Ford, a registered Duroc; and Frankfort, a registered Hampshire.

The gilts last year were from spring litters and were only about three weeks old at the time of the Royal; too young to be taken from the litters. They were presented to the winners about five weeks later at the state FFA convention and the Riley County 4-H gilt sale.

The four winners of registered gilts will be chosen in the same manner this year as last, and the pigs will be delivered as soon as they are weaned.

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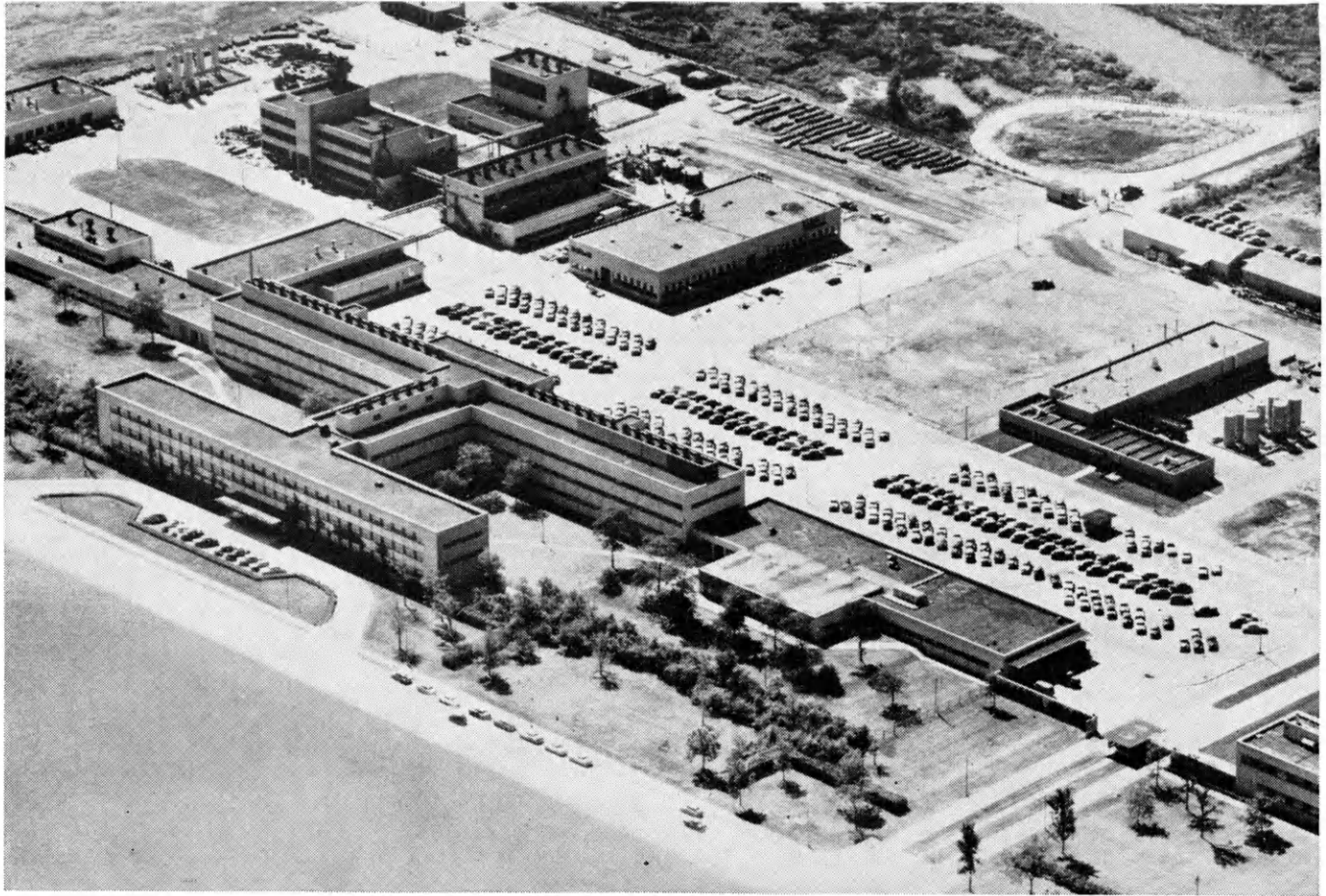
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**MOST OF THE RESEARCH WORK** that led to the development of Ultraforming—a more efficient and economical refining process—took place in the Whiting research laboratories of Standard Oil, above. Extensive studies in seventeen research-scale units demonstrated the merits of cyclic regeneration.

## Standard Oil scientists develop **Ultraforming**— the latest in catalytic reforming

After several years of research, Standard Oil scientists have developed a new and important refining process—Ultraforming.

The process is a better way of improving the low-octane straight-run gasoline found in crude oil. To make such gasoline suitable for present day cars, refiners must change it into an entirely different material, which gives good anti-knock performance. The change is known as reforming.

Ultraforming is the last word in catalytic reforming. It gives greater yields of higher octane gasoline than were previously possible and gets good results even with poor feed stocks. In addition, it raises the yield of hydrogen, an increasingly valuable by-product of catalytic reforming.

Ultraforming units do not have to be shut down when the catalyst begins to lose activity through use. By a new technique, an improved platinum catalyst is regenerated to maintain peak performance.

The advantages of Ultraforming over previous methods are so great that Standard Oil and its subsidiary companies are building units at four refineries. They will start operating this year. The new process, of course, is available to the petroleum industry through licensing arrangements.

At Standard Oil, young engineers and chemists work with the stimulating knowledge that they are participating in important and lasting contributions to the oil industry and to their country.



# Standard Oil Company

910 South Michigan Avenue, Chicago 80, Illinois



## Fertilizer

(Continued from page 14)

about 14 cents a pound of pure nitrogen. He applies 100 pounds of nitrogen to the acre on old corn ground; 50 pounds to land where clover or other legume has been turned under.

The Kansas State College Agronomy Department recommends 30 to 50 pounds of nitrogen per acre for small grains; 40 to 60 pounds for corn; and 30 to 40 pounds for grain sorghums. The actual amount of anhydrous ammonia needed to meet

these nitrogen requirements would be about one-fifth more.

Dr. Smith said custom applicators like Bennington's are busiest in areas of small farms where the individual farmer has little need for the expensive equipment. There is a trend for farmers on more than 200 acres of crop land to purchase their own applicators, however.

### Convenient Equipment Soon

Farm machinery companies are expected to start manufacture of machinery attachments for applying liquid fertilizers soon. Since anhydrous ammonia does not leach from the soil extensively, it can be applied any time and plows, grain drills, corn planters, cultivators and other tools may soon come out with  $NH_3$  attachments. Then the only additional time required to apply fertilizer will be to fill the pressure tank occasionally.

Farmers may think it wasteful that  $NH_3$  resists leaching to the extent that it may remain in the soil after the growth period of the crop is over, Smith observed. However, this leftover nitrogen goes to build up the nitrogen fertility level of the soil and helps increase organic matter.

Another method of applying anhydrous ammonia is by mixing it with irrigation water, thus another reason for its increased use in a few sections of the state, especially by vegetable growers, nurserymen and orchardists.

As the supply of anhydrous ammonia increases and equipment is improved, farmers will realize they can use this cheap fertilizer liberally to increase yields and profits, and at the same time build up the soil for future generations.

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## What happens when your fields defrost?

Watch what happens when your fields defrost. Does melting snow disappear *vertically*, downwards into your soil? If so, you have good water storage . . . good protection against next summer's dry spells. Or does it disappear *laterally*, into gullies, creeks, or river? Then something is wrong underneath. Next summer's dry spells will hurt you. Your soil lacks storage capacity.

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## On Reading Room Walls

Portraits of four K-State deans have been hung in the reading room of Waters Hall. These portraits, each valued at from \$800 to \$1,000, were placed on display as a visible record and reminder of outstanding work in education.

The pictures of Dean Weber and his most recent predecessors, Throckmorton and Call, are to remain on the reading room walls while that of Dean Harry Umberger, director of the College Extension Service from 1919 to 1947, will be hung in the proposed new extension building to be named after him.

L. E. Call, ag dean from 1925 to 1946, gave his portrait to the College when he retired, and R. I. Throckmorton's portrait was made after his retirement in 1952. The painting of Arthur D. Weber was presented to him and the School of Agriculture at the 1953 annual Feeders' Day by the American Society of Animal Production.

# Plenteous is the PROMISE to Farm Youth...

No lurking savage or ox-drawn plow, no spinning wheel or flail and scythe. The covered wagon's gone, gone the Texas Longhorn cattle, too. The log house Grandfather built has long since gone, and in its place stands Father's kind. Yet there was promise for Grandfather in this land he loved. Your Father followed in his footsteps, finding promise in this self-same soil. For you, there's still greater promise, only just begun—of finer, faster tractors, better tools to till the soil, machines to make work easy, pleasant, in the farming of tomorrow. New grains and hay and corn, bred stronger, more productive; better livestock to thrive upon those crops, to get greater, faster gains. Of all this there's special promise, for you and your part in the farming of tomorrow.



**It's a long, far step** from early days to modern times. Crude cultivation with sharp sticks and stones; the wooden plow, pulled by man and then by oxen; and on to steel for shares and moldboard of the plow, horse-drawn for years until the tractor came. Diesel-powered tractors are far from new, yet the new Case Diesel "500" is a mighty step toward your promise of easier, better methods of farming to come. Case-built six-cylinder engine starts on Diesel at touch of a button. With Power Steering and five-plow pull, you turn extra furrows with little fatigue. It's another among many Case contributions throughout a century and more of building fine farming equipment—another part in the promise of future farming. J. I. Case Co., Racine, Wis.



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Management

(Continued from page 15)

when the fieldmen help them fill out income tax returns. All Association members are provided home economics and market news and services from the Extension Division at Kansas State College.

The benefits of the Association are not limited strictly to those farmers who pay fees, however. Account books are distributed each year to approximately 3,000 farmers who do not belong to the Association. Non-members can get copies of the Summary and Analysis Report to compare their farms with those of Association members. And information and advice from the fieldmen often are passed on to other farmers by members.

If you find mistakes in this magazine, please consider they were put there for a purpose. We try to publish something in the Ag Mag to interest everyone, and some folks are always looking for mistakes.

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