

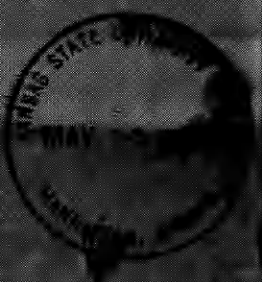
k3
35/6

KANSAS STATE UNIVERSITY

Ag Student

MAY 1959

SPS 67



**COLLEGE—
KEY TO THE FUTURE**

see page 8...

Quo Vadis?



THE final echo of the old school bell signals far more than just the end of four years of diligent study. It is a fanfare, heralding an altogether new life in a competitive and demanding adult world.

The school has done a big job conditioning young minds for this moment. And, properly, these minds are eagerly receptive to the challenge. But there's more required than a mental reservoir of facts and figures and a willingness to apply them in a practical way.

There is another item that is every bit as im-

portant or perhaps more so. It is the human heart. For, it must still be acknowledged that it is the heart that can direct these other attributes in such a way as to add to mere material success the quality of satisfaction—a quality that comes from using knowledge and wisdom and skill not only to improve oneself but to make a better world for all who dwell in it.

Rightfully, then, it's proper to pause here and ask oneself, "Whither goest thou?" And then to choose the way that invites this unbeatable partnership of mind and heart.



JOHN DEERE
MOLINE, ILLINOIS

Quality Farm Equipment Since 1837

Kansas State University AG STUDENT

Vol. XXXV

May 1959

No. 6

In This Issue

Over the Director's Desk	C. Peairs Wilson	5
It Pays to Increase Your Ag Power	John Carlin and Chester Peterson Jr.	7
College—Key to the Future	Ben Brent	8
Screwworms Are Robbing You	Fred Beeler	10
"Automatic" Laying House	Arnold Good	12
Shoot with a Camera	Chester Peterson Jr.	14
Frozen Semen Travels	Eugene Harter	16
Ag Week a Success		17
Spot Profit Leaks	Laurice Margheim	18
Cook with Casseroles	Janet Dawdy	21
Farm Communications Improved	Ken Hylton	23
Aggies' World	Fred Clemence	24

—+— Staff

EDITORIAL

Chester Peterson Jr.Editor
Ben BrentAssistant
Richard VanderlipAssistant
Norman WernerAssistant

STAFF REPORTERS

Ken Hylton Jim Swiercinsky
Laurice Margheim Arnold Good
Don Sumner Richard Rees
John Carlin John Thomas
Neil Dowlin

HOME EC STAFF

Karen PetersonEditor
Ruth O'Hara Mary Jo Mauler
Janet Dawdy

BUSINESS

Fred BeelerManager
Fred ClemenceAssistant

SALESMEN

David Newton Don Coonrod
Joe Lichtenauer Jr.

CIRCULATION

Eugene HarterManager

PHOTOGRAPHER

Joe Mink

FACULTY

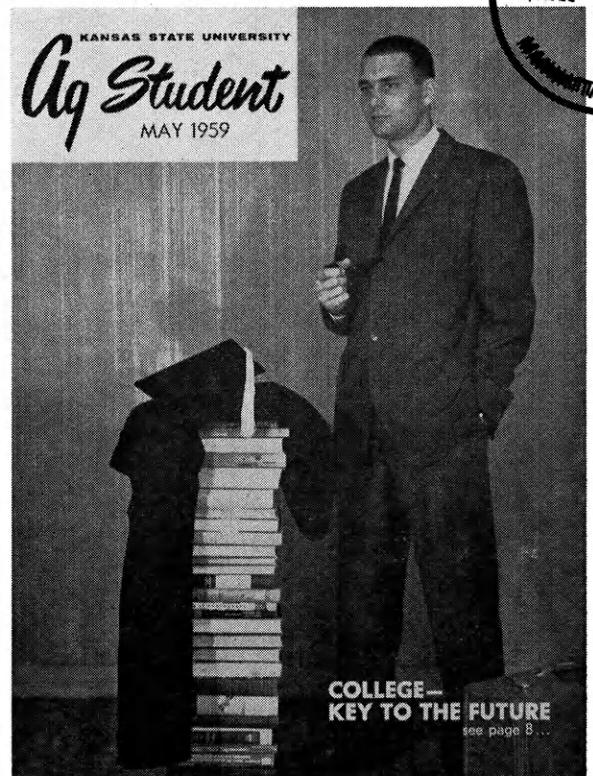
Lowell Brandner

—+—

Published by the Agricultural Association of Kansas State University 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.

MAY 1959



On the Cover

In case you're wondering, the student pictured on our cover is Bill Schultz, an agricultural economics senior from Chanute.

The far-away look in Bill's eyes is rather typical of the expressions worn by the graduating seniors of '59. He and his classmates have been suffering from that common campus disease, *Senioritis*.

Although many claim to have had the affliction during the whole four years of their college stay, most students first recognize the symptoms sometime during their eighth semester. *Senioritis*, not to be confused with plain old spring fever, is characterized by a lack of co-ordination between books and brain. As one senior says, "It's darned hard to study with commencement less than a month away."

But don't be too critical of a senior's study habits. He has more important things to do, such as reminiscing and thinking of the future. It takes a lot of books, in fact a whole stack of them, to get through, but as any senior will tell you, books alone don't make the education.

After Bill dons that cap and gown and receives his diploma, he'll carry the suitcase full of ivy league suits off to his life's career. No doubt he'll remember college not only for the training it gave him, but also for the friends, activities, and happiness that surrounded him.

—Chester Peterson Jr.

PHOTO CREDITS: Bob Rees, 12; National Brown Swiss Assn., 14; Dairy department, 15; Ben Brent and Ag Student Photographer, 17; Larry Dunham, 23; and Ag Student Photographer.

SENIORS

A PERFECT
REMEMBRANCE

Your
Cap and Gown
Portrait

by

Studio Royal

1200 Moro

Dial 83434

**it can wipe out
an investment in**

As a businessman with a large investment in your stock and buildings, it isn't logical to "take a chance" with elements over which you have no control.

See your local Farm Bureau Insurance agent today... let him show you the moderate cost of complete

investment protection

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

KANSAS FARM BUREAU INSURANCE
COMPANIES Manhattan, Kansas

Gentlemen:

Please send me complete information concerning lightning protection through Farm Bureau Fire Insurance.

Name _____

Address _____

Location of Farm _____

Seconds



Kansas State University Agricultural Student

*A magazine serving the
future agricultural leaders
of Kansas exclusively.*

Kansas State
Ag Student

6 TIMES PER YEAR

Subscribe Now!

1 Year \$1.50

2 Years 2.00

Single Copies .30

—Ag Students at
KSU

—Vocational Ag
Chapters

—County Agents

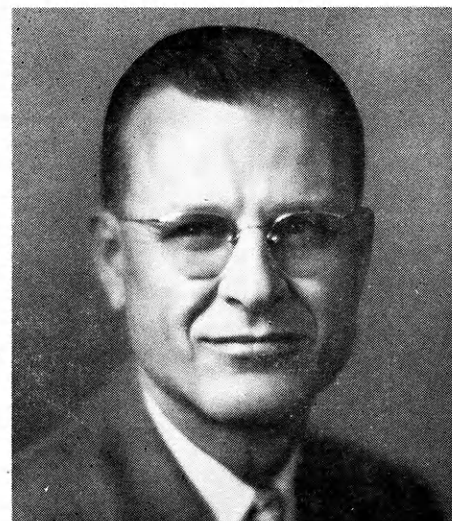
—Subscribers

ADVERTISING RATES MAILED UPON REQUEST

Over the Director's Desk

By C. Peairs Wilson

Director of the School of Agriculture



Director Wilson

"Do you have an inferiority complex about agriculture? You needn't have. The agricultural industry is the biggest buyer, seller, and borrower in the country—and it has the biggest investment.

"It uses more steel, rubber, petroleum, trucks, tractors, and electricity than any other industry."

This statement was made by J. K. Stern, President of the American Institute of Co-operation, Washington, D.C. It's typical of many statements being made these days which support President McCain's optimistic letter in last month's *Ag Student* about careers for farm youth in off-the-farm jobs in agriculture. Let me cite two others.

Farm Boys Possess Valuable Talent

Recently a 45-page booklet came over my desk entitled, "There's a Future in Your Farm Background," published by National Sales Executives, Inc. Let me quote a few lines from it.

"You have something valuable. Do you know that this something gives you a big headstart for a fine future? Right now, you're way out ahead of

those who lack what you have. You've put your lifetime into building this valuable something. What is it? It's your priceless farm background, your specialized experience, skills, education and training. . . .

"This booklet discusses career opportunities in one important area—agricultural selling. Agricultural salesmanship has two-way powers: It moves produce and livestock from farms—it brings new materials, methods, and equipment to farms. . . .

"Now here's what professional salesmanship is: Helping someone decide on something he'll be glad he bought. In other words, you're building customer satisfaction. . . . To be a professional, he (the salesman) must become a counselor, with plenty of product knowledge and the ability to use it. . . .

"You already have a farm background, which is an important qualification. You understand farmers. You are one of them—not above them or beneath them—but like them. You know their viewpoints and feelings. Their interests are your interests. . . .

"Go on to college if you can possibly do so. Courses like the follow-

ing will help prepare you for a career in agricultural selling: business administration, marketing, sales courses, public speaking, psychology, English, agricultural engineering, animal husbandry, agronomy, plant nutrition, horticulture, and agricultural economics. . . ."

An article in the April 4 issue of *Feedstuffs* magazine discusses opportunities in agricultural science, salesmanship, agricultural finance, government service, agricultural education, and agricultural journalism. Some of the comments on the latter were particularly interesting:

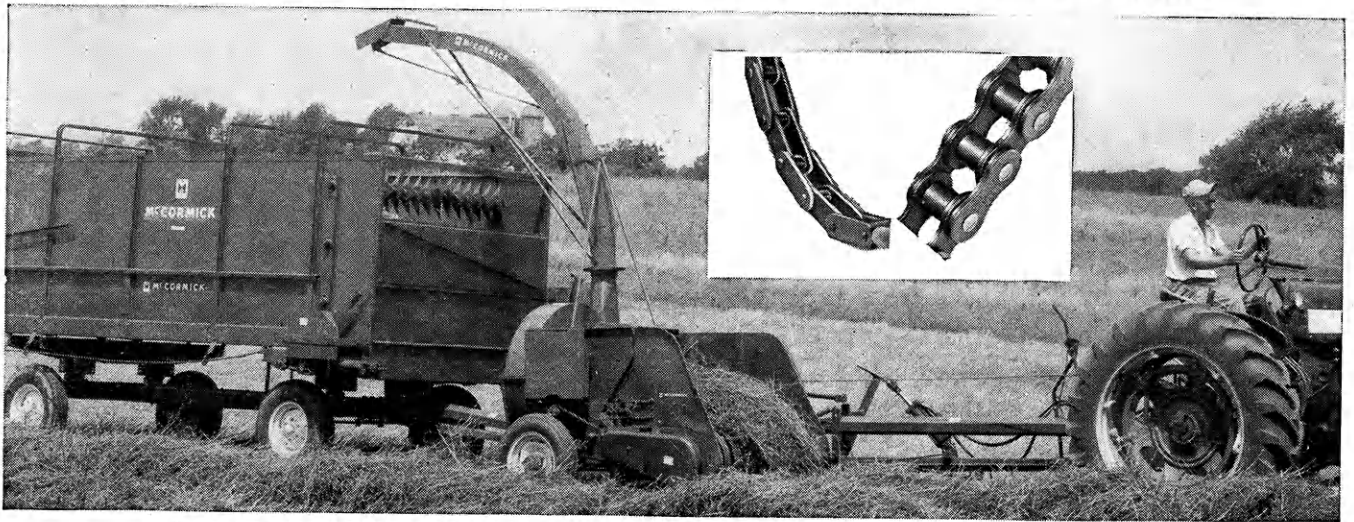
Ag Writing Presents Opportunities

"Agricultural journalism is a fascinating field. Most journalists will tell you that young men and women are needed in their field. Few people possess professional training in both agriculture and journalism. Yet many opportunities are available in all facets of communications—radio, television, magazines, newspapers, and advertising. . . .

"The man or woman with an agricultural heritage, trained in his profession, has a strong competitive advantage in his field. . . .

"Such an advantage was underlined by the survey among farm journalists. Their heritage gave them something—a sense of agriculture—lacking in other reporters. This competitive advantage paid off. This same applies to many other fields."

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




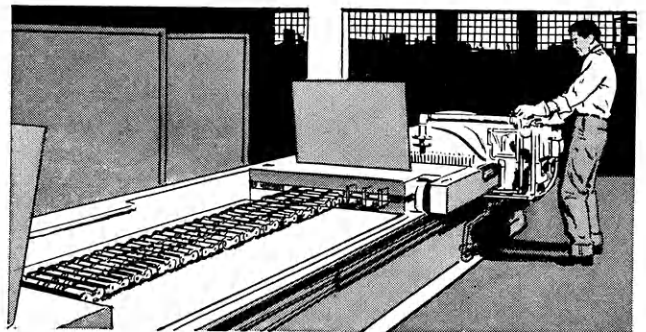
INTERNATIONAL HARVESTER'S No. 36 field harvester and hay pick-up attachment are equipped with Link-Belt precision steel roller chain for drives . . . Link-Belt double pitch "AG" roller chain for conveying.

LINK-BELT chains offer farm machine manufacturers the quality good design deserves

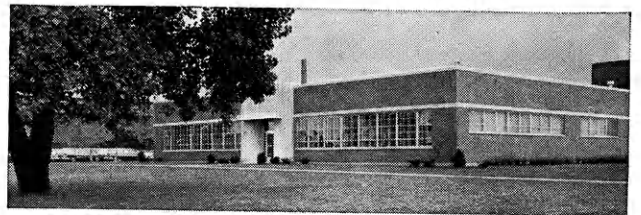
Top farm equipment standards are constantly maintained by field and laboratory tests


LINK-BELT'S recommendation of the best drive or conveying chain for farm machines is based on experience gained in field tests under actual working conditions. And Link-Belt is in the best position to make unbiased proposals because our line of chain, sprockets and attachments is *complete*. Horsepower, loading, speed, impact—every requirement can be met to enable a piece of farm equipment to maintain rated performance and efficiency throughout its life.

Yes, for every drive or conveyor application, there's a chain that bears the Link-Belt double arrow  trademark. In fact, it's used today on more than 400 makes of farm equipment.



ACCURATE MANUFACTURE — Modern specialized machines allow the economies of large-scale production. Continuous inspections safeguard tolerance and finish of every link of chain. With these extensive facilities, Link-Belt has ample capacity to meet production schedules.



LABORATORY CONTROL — Every chain carrying the Link-Belt trade  mark meets rigid uniformity specifications. Our modern laboratory continuously explores new refinements to increase chain life. It is located at the world's largest plant manufacturing drive and conveying chain.

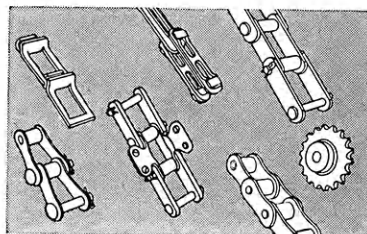
LINK-BELT



CHAINS AND SPROCKETS

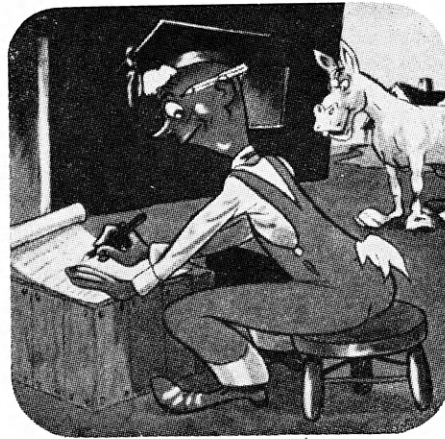
14,953

LINK-BELT COMPANY: Executive Offices, Prudential Plaza, Chicago 1. To Serve Industry There Are Link-Belt Plants, Sales Offices, Stock Carrying Factory Branch Stores and Distributors in All Principal Cities. Export Office, New York 7; Australia, Marrickville (Sydney); Brazil, Sao Paulo; Canada, Scarboro (Toronto 13); South Africa, Springs. Representatives Throughout the World.



COMPLETE LINE of agricultural chains, sprockets and attachments permits cost-saving specialization — offers the right chain for all conveyor and drive needs.

It
Pays to
Increase
Your
AG POWER



by John Carlin
and Chester Peterson Jr.

Each right answer is worth 10 points. A score of 100 is an A, 90 earns a B, 80 rates a C, 70 narrowly squeaks by on a D, and a score of 60 or less would earn no grade points.

Correct answers are on page 26.

1. Milk fever in cows is caused by a low level of blood: *a.* Phosphorus. *b.* Vitamin A. *c.* Calcium.
2. Which of the following wheat varieties usually is used for pastry, cake, and biscuit flour? *a.* Hard red winter. *b.* Hard red spring. *c.* Soft red winter.
3. Top-dressing soil with manure will have the following effect on the percentage of water runoff and soil loss: *a.* Lower the percentage. *b.* Raise the percentage. *c.* Have no effect.
4. The term "shorn" is used most commonly in: *a.* Sheep production. *b.* Livestock slaughtering. *c.* Horticulture crops.
5. When feeding a boar in preparation for breeding season you should: *a.* Decrease the amount of feed. *b.* Feed him the same as usual. *c.* Feed so he is in a gaining condition.
6. If baled hay is to be safely stored in a barn the water content should be less than: *a.* 22 percent. *b.* 18 percent. *c.* 16 percent.
7. In the rumen, cattle, sheep, and goats are able to make their own: *a.* Vitamins A and D. *b.* B complex vitamins and vitamin K. *c.* Vitamin E and trace minerals.
8. Most common field crops grow well in: *a.* Slightly acid soils. *b.* Neutral soils. *c.* Slightly alkaline soils. *d.* All three.
9. When feeding roughage, 10 pounds of silage have the same nutrient value as *a.* 5 pounds of alfalfa hay. *b.* 3 1/3 pounds of alfalfa hay. *c.* 1 pound of alfalfa hay.
10. At this time of year farmers should be on the lookout for tornados. A point to remember is that tornados: *a.* Usually travel from southwest to northeast. *b.* Usually travel in a westerly direction. *c.* Never hit the same place twice.

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

**SALES
SERVICE
RENTALS**

**All Types
Office Machines
and Equipment**

Complete
Office
Outfitters

CITY TYPEWRITER
and
OFFICE SUPPLY

Corner Fourth and Houston

COLLEGE— KEY TO THE

We were well under way in our college education, but we went home that spring knowing full well many would never return to K-State.

dropped out, many due to grades, and some due to a lack of finances.

A lot of us began finding out there was more to college than classrooms and textbooks. We became interested in departmental clubs and found that through these clubs, we could assume leadership in committee work and offices.

We also were finding out that the college man is expected to be a leader. Some of us pledged fraternities and formed friendships that will never be forgotten.

"Don't Give Up the Ship"

Our sophomore year came and we returned to the K-State campus to start studying again. We were impressed by the way the school was growing, both in numbers and facilities. New buildings were going up and there was some talk of changing our name to Kansas State University.

The sophomore's gripe: basic ROTC. Two years are required at land grant schools.

by Ben Brent

FOUR years ago the class of 1959 entered Kansas State College. When we attended the President's Convocation we were told only one freshman in three would graduate. Now, we realize we are among the few he was speaking of.

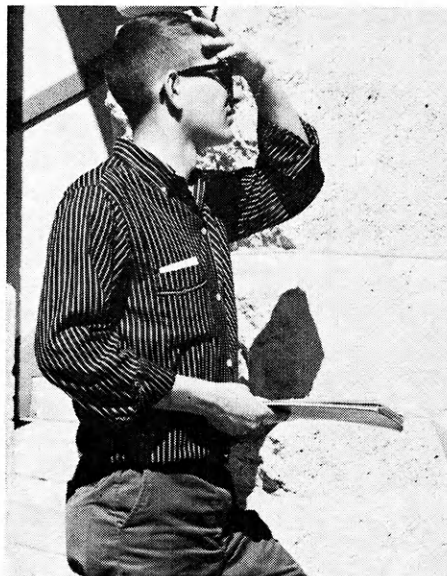
That first year of college was a big change for all of us. We learned what it was to apply ourselves to serious study, which was something some of us had never had to do before. We made the break from home and parents and learned to depend more on ourselves.

We were college students!

"If at First You Don't Succeed . . ."

The first year wasn't easy, especially for those of us coming from small schools and those with a poor background in chemistry, physics, mathematics, and English. During that year many of our classmates

A stranger in a big school, this confused freshman wonders, 'Is this the right place?'



FUTURE

Many of us were still in the general agriculture curriculum, but we were beginning to make up our minds about a major field. Some of us were still undecided though. During our sophomore year we began to see how a college education could open up many new fields to us. Some of us who had been planning a return to the farm were discovering opportunities in "agribusiness," a term that was becoming familiar.

We were studying courses in botany and zoology and we became increasingly amazed at the complexity of the world we take for granted. This is the world we, as agriculturists,

must feed by applying the laws of nature.

We returned home that second spring with the realization we were half way to a BS degree.

"Higher We Rise—Better the View"

Our junior year rolled around and we again returned to college. Again familiar faces were missing. Finances and grade points were still taking their sad toll from the Class of '59.

Now we were in more outside activities than ever and some of us were even elected to offices in clubs. We worked out for judging teams, set up displays for Ag Week, and showed in the Little American Royal.

We had covered most of our basic courses and now we were settling down to the business of learning more about our majors. We found more and more of our evenings were spent in club and committee meetings. Our

study habits had to become more efficient to make up for this loss in study time.

Through judging teams and outside activities, we made many contacts that will be important to us later on. And then came that night during the first semester when we had our first try at English proficiency.

"Three Down and Goal to Go"

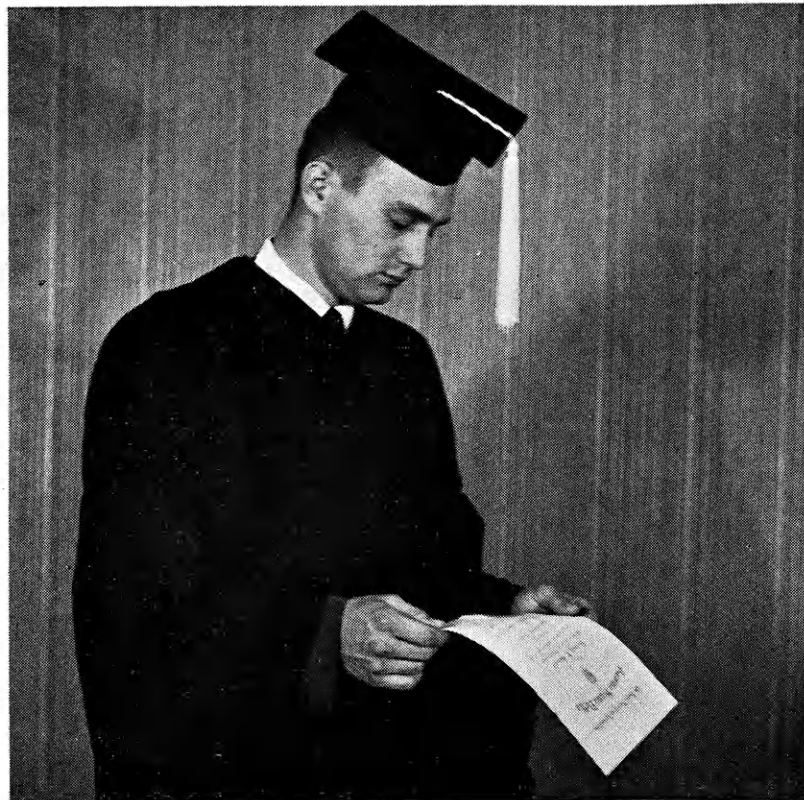
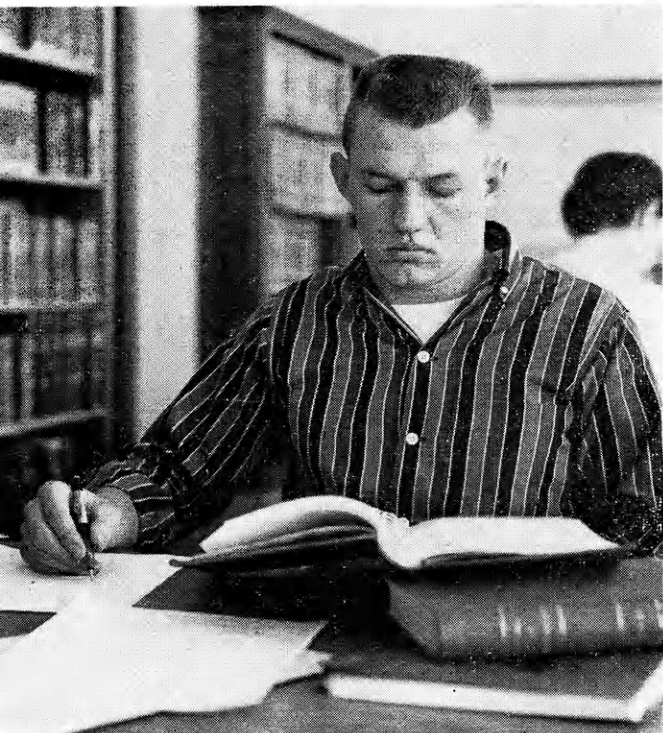
Now we're seniors and the end of our four years is in sight. The enrollment is increasing, the campus is growing, and we sincerely hope we have grown with it.

As we near the end of college, we wonder what's ahead for us. Military service is the next step for some and a few will return to the farm. Jobs in agriculture are waiting and for some graduate school will be the next stop.

After four years, we realize we've just touched on the surface of many fields, and the rest of our education must come from experience and self-guided study. We graduate in June with a diploma that says "Kansas State University," and we wonder, "Where do we go from here?"

Four years from start to finish, and the senior looks over his hard earned diploma, hoping that his technical knowledge will be the key to the future.

This junior has found the library holds great stores of information. It gives him a quiet place to study.





WANTED

Cochliomyia americana alias Screwworm Fly

For Yearly Theft of \$20 Million
Does Dirty Work as a Maggot
Last Seen in an Open Wound

by Fred Beeler

SCREWWORMS cost American farmers over \$20 million a year as a result of livestock deaths, permanent injuries, and poor weight gains.

An eradication program is now under way in Southeastern United States. It's based on the fact that the female screwworm fly mates only once and if mated with a sterile male, can produce only infertile eggs.

Gamma Rays Sterilize Flies

Radioactive gamma rays, in a specially constructed laboratory at Sebring, Florida, are used for the sterilization process. These flies are then released by airplane over the place where they spend the winter.

The flies can carry no radioactivity with them.

Proof that a continued release of sterile flies will eventually result in screwworm eradication was obtained in 1954, when this procedure was used to eliminate screwworms from the Caribbean island of Curacao.

To a great extent this program was based on the work of Dr. R. C. Bushland, who received his PhD in entomology from K-State in 1953.

The screwworm fly is about twice the size of an ordinary housefly and is blue to bluish-green. It lays eggs, about 200 shiny white ones, on all kinds of livestock wounds.

Unlike other blowflies that lay their eggs at random, screwworm fly eggs are laid in two straight rows and hatch in 12 to 24 hours. Screwworm-

infested wounds smell bad and drain a brownish-red fluid.

Screwworms, according to Dr. Herbert Knutson, head of the entomology department, are parasites of warm-blooded animals and feed only on living flesh, while other maggots found in wounds eat dead flesh.

Early "Screwworms" Are Impostors

Stuart Ratcliff, K-State graduate student, found that cases of "screwworms" reported early in the spring were caused by other flies not feeding on living flesh.

The screwworm fly's northward migration doesn't reach Kansas until June or July. Almost without exception, outbreaks in northern states have been traced to shipments of infested animals into the area.

(Continued on page 22)

When warm weather comes to the range, it's time to be especially careful of any open wounds. Check newborn calves for screwworm infection of the navel and treat them if they're infected. Wire cuts are common sources of screwworm infestations.



The story of Standard Oil's contributions to oil progress through research
is told to the public in advertisements like this during the year.



When a boy asks
"WHY?"
...anything can happen!

This scene can be duplicated thousands of times throughout the country. And as long as it goes on, America can be sure of continued progress. Here Bob Hansen (left) and two friends explore the mechanical wonders of an engine (1933 model). The two other boys are Tony Riccardi (center) and Bill Hess. They are all students at Niles Township High School, Skokie, Illinois.

Ever since Bob Hansen was old enough to hold a wrench, he has been tinkering with machines. Next year his repair shop on his driveway at home will disappear because Bob, an honor student, is going to college to study engineering.

Bob is one of thousands of American boys with a restless curiosity about things mechanical. What makes a clock tick? What makes a bicycle brake hold? What makes a car run? From such curiosity comes the mechanical progress that has helped to make America great.

In Standard Oil's big automotive laboratory in the research center at Whiting, Indiana, engineers are going through a similar process every day—asking questions and finding answers. How do fuel additives affect combustion? How do they affect engine deposits? How do burning rates differ?

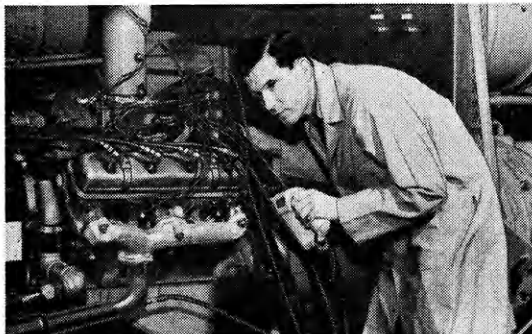
And the questions continue outdoors, too. In all kinds of weather—hot, cold, wet, dry, low barometer, high barometer—different blends of

gasoline are tried to see what happens under what conditions. Fuels are designed in the laboratories for experimental engines that won't appear in an automobile for five years. Standard Oil products are under constant improvement to give the finest performance possible. You get years-ahead quality with Standard Oil products—and at a reasonable cost.

Where does progress start? Does it start on the private driveway of a boy's home or in a huge research laboratory? Progress starts whenever someone asks "Why?" and sets out to find an answer.

What makes a company a good citizen?

Perhaps even more than an individual, a company must have a healthy respect for the future. Many companies, like Standard Oil, have large families—tens of thousands of people who depend on Standard for their livelihood. Progress through research is one way of protecting the future of both employees and investors and of helping to assure economic stability for the communities in which they live and work.



The efficiency of gasoline and lubricants is improved constantly in Standard Oil's huge automotive laboratory in Whiting, Indiana. Here fuels are designed, too, for automobiles that will not be on the street until five years from now. Robert W. Boydston, above, is working on a "fuels of the future" experiment.

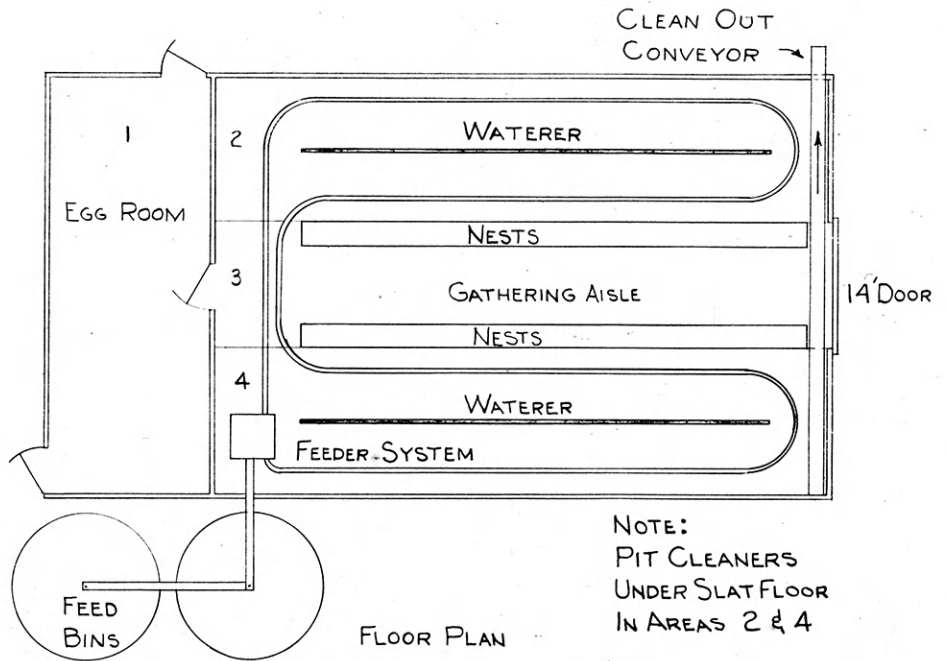
STANDARD OIL COMPANY



THE SIGN OF PROGRESS
THROUGH RESEARCH



Invest
Your
Nest Egg
In an



Modern poultry houses combine convenience with efficiency. Mechanical cleaning cuts the labor bill. Eggs are gathered from a central alley, feed storage is near the building.

Automatic Laying House

by

Arnold

Good

FOR MANY of us the term, "laying house," brings to mind the chicken house back on the farm, or maybe one of the cage layer buildings that we've seen.

If we add "automatic" to the term laying house, we have a new concept that has developed in Kansas only

during the last year or so. Already there are a sizeable number of them in operation. They aren't limited to Kansas, of course; in fact, they originally were developed back East.

Let's take a look at an automatic laying house.

No Cages in This House

The first thing you'll notice is that the chickens are on the floor instead of in cages. You'll also notice that part of the floor is slatted and that automatic feeders, waterers, and roosts (if there are any) are all arranged over this slatted portion. Under this slatted section of the floor are pit cleaners that can be controlled by a push button.

The nests are roll-away nests, so when a hen lays an egg on the slanted wire mesh nest floor, it rolls into a trough where it's either gathered by

WAREHAM HOTEL

COFFEE SHOP AND DINING ROOM

ALSO

*Catering to Banquets and
Private Parties*

Smorgasbord on Sundays, 12 noon 'til 2 p.m.

O.K. Your shop can be converted into the egg room and you can move those two steel wheat bins over and use them for bulk feed.

In the actual laying house we'll put slatted floors 14 feet wide along each side. Pit cleaners under them will empty into a cross conveyor just inside the end with the large door. This leaves a 12-foot center aisle over which we'll put the nests.

For the feeding system we'll use one hopper and about 370 feet of trough for a double run of feeders over both pit areas. Watering equipment will consist of two waterers 40 feet long. All this equipment will be hung from the ceiling to provide maximum floor space.

Triple-decker Nests Are Handy

The nests will be roll-aways, three tiers high, arranged over the center aisle with a row of nests facing each feeding area and an aisle in the middle to gather eggs from.

There will be litter on the solid-floored section, but with that 14-foot door you can build a bracket for your tractor loader, unhook the nests, and

clean it out once or twice a year with a tractor scraper.

You'll still need some forced-ventilation machinery and the equipment for your egg room, but otherwise the building is pretty well equipped.

Equipment Costs Vary

The cost of equipping this building and others in a similar manner will differ with the buying habits of the individual and the amount of home-built equipment used.

This hypothetical example shows one advantage of laying house automation. Possibly it can be adapted to fit a present building. Of course there are efficiency limits and these should be noted, since the efficiency of such equipment drops rapidly under poor conditions.

Poultry specialists at K-State plan to build a floor layer house this summer in which they'll check such things as effects of crowding on temperature and humidity; egg production; mortality, feed consumption for each dozen eggs, blood spots, percentage of cracked eggs, and the cost of producing a dozen eggs.

hand or carried into the egg room by a conveyor.

The house has a forced ventilation system and to get the most efficient use of the building and equipment there is one hen for each square foot of floor space.

The advantage to such a system is that you can care for more birds with less labor and time.

Automatic System More Efficient

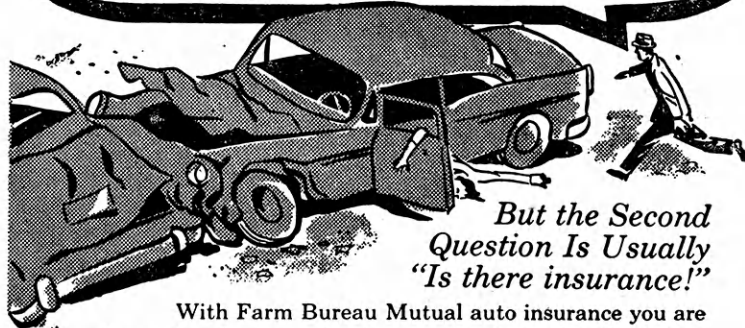
The biggest problem about an automatic laying house is the cost of equipping it. In the floor layer house you get more efficient building use than in a cage layer setup, and so the building is cheaper.

Now that we've seen the laying house and a few pros and cons of it, let's build one on paper. Let's imagine you lost that wheat ground you were renting, so we'll convert your machine shed into an automatic laying house.

It's a 40 by 60 steel truss building with a 6-inch waterproof concrete floor. One end is closed and houses a farm shop, while the other end has a 14-foot machinery door in it. This is a good-sized building with 2,400 feet of floor space and great possibilities as a laying house.

Do you want to shoot the works?

The First Question always is... "ANYONE HURT?"



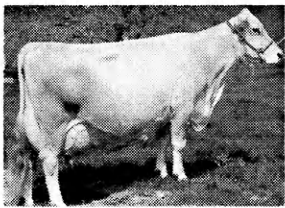
But the Second Question Is Usually "Is there insurance!"

With Farm Bureau Mutual auto insurance you are insured and you need not worry about whether the "other fellow" has insurance. Your Farm Bureau Mutual auto policy protects you from the uninsured motorist, gives you extended medical payments and is good wherever you go. See your local Farm Bureau Mutual agent today. Let him explain all the advantages.

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



Ready—Aim—Fire



Shoot Your Liv (with a

by Chester Peterson Jr.

MOVE that front leg up a couple of inches more—now the hind leg back to show her udder—let's see—hmmm—hold her head up a bit higher—darn, she moved—wait, that looks good—steady now—Got it!

You've probably guessed by now that a photogenic, but shy, cow or heifer has just had her picture snapped. Although she visibly showed disapproval of all the fuss of picture-taking, her owners are glad they've captured her image on film.

People usually photograph livestock with one or more basic ideas in mind.

First, let's consider who's holding the cow and setting her up for the camera. If he or she is a youngster enrolled in a 4-H dairy project, the reason for taking a picture is apparent. Smart 4-Hers know that a picture or two of "Old Bossy" should accompany their project records to the county office.

Many club members have found a picture record of their project was the final clincher needed to nail down a county achievement pin or even a state championship. This visual proof of the growth in size or numbers of projects also throws a spotlight on the club member's permanent record.

Frequent use of a camera will assist boys participating in FFA work, too.

Probably for each picture that gets into the record book, a twin to it winds up in the family album. A majority of all photographs are taken just to keep them around for future reminiscing.

In addition to keeping pictures of cows for sentimental reasons, a pure-

bred breeder can use his camera in a businesslike way. Most farmers raising registered stock periodically advertise in their breed magazine. One good photograph will furnish more conclusive proof of a bull or cow's appearance than a hundred glowing words could ever do.

Several Kansas dairymen use the following plan to keep a hot sales prospect nibbling. Whenever they receive an inquiry in the mail, they quickly send back information on production records and type.

Included with this statement is a picture, usually showing the cow in her "work clothes," but still attractively posed. If the buyer faces a 200-mile drive, this photograph may provide enough evidence of quality to persuade him to make the trip. And once on the place he's a good prospect for additional sales, too.

Send Picture to Former Buyers

When they have a particularly good animal for sale, a few large farms go to the expense of having enough pictures made so they can send one to each old customer. This is advertising directly to the persons most likely to buy. Another purpose it serves is letting former buyers know they weren't forgotten once the original sale was made.

The best time you can photograph a dairy cow is immediately before she has her calf or a month or so after freshening. Pictures taken several days after calving will show her to be gaunt and lacking in bloom. If you photograph her when nearly dry she may appear slightly "run down," and pictures taken during the dry period will show her to be fleshy and out of condition.

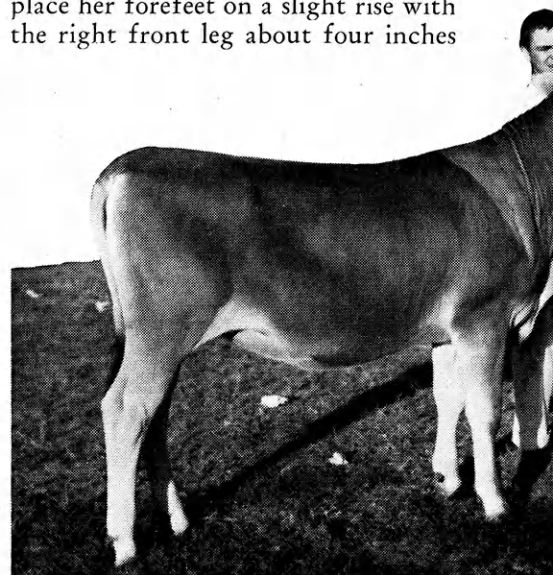
The thing that sets a dairy cow apart from the other barnyard species is the emphasis on her udder. For this reason the udder is usually played up by proper leg placement and the use of a suitable camera angle. One good way you can do this is to use a three-quarter rear view.

This camera angle is somewhere between a broadside and a rear view. The cow's front legs are placed evenly, but the hind leg nearest the camera is about half a step in front of the other hind leg. This allows your camera a good view of both the fore and rear udder attachments.

A disadvantage of this shot is that it sometimes distorts the cow's true proportions.

A photograph taken from the side is usually free from any unwanted distortions that might possibly make the cow appear unbalanced. This is the pose most often seen in breed magazine advertisements.

To set your cow up in this pose, place her forefeet on a slight rise with the right front leg about four inches



estock (Camera)

ahead of the left, if it's to be a picture of her right side. Then the right hind leg should be positioned so it's about six inches behind the left one. This pose will show all four of the cow's legs and place her in the natural, balanced position that will best exhibit her conformation and udder.

Rear View Seldom Used

A simple rear view shot, while easier for you to set up and take, is hardly ever used because all it shows is the rear udder attachment, straightness of leg as viewed from behind, and spring of rib. However, when used to supplement a side view it has great value.

You can set up bulls and heifers in much the same way as cows. Always try to emphasize an animal's good points and minimize any bad conformation features. In a way, photographing animals is much like showing them, with your camera being a very impartial and critical judge.

A dairy or beef animal will appear more natural if the ears are perked up and the eyes are alert. This effect can be attained if you station a helper about 50 to 75 feet ahead of the animal and have him "beller" like a



Dairy cattle photograph to their best advantage from a three-quarter rear angle. All four feet should be in sight, and they should be posed to show straightness of leg and angularity of body. Eyes and ears should be alert. In dairy cows, be sure to emphasize the udder attachments. A cluttered background may ruin an otherwise good photo.

bull or moo like a cow, depending on the sex of the animal being photographed.

Or, if your helper is in poor voice, he can rattle an old tin can with a couple of nails in it or clap his hands.

The ideal beef animal is photographed differently than a dairy cow, because thickness and blockiness are desired instead of sharpness and angularity. Because this squareness and beef type are necessary in any picture of a beef cow, bull, or steer, any pictures you snap are best taken only from the side.

The legs play an important part in giving this illusion of blockiness because they must be placed so all four are in view, yet they must each hold up a "corner" of the animal. It's easy to imagine the beef animal as an ordinary cardboard box with a leg at each corner holding the box up.

Most beef cattle breeders like to see an animal's head, too, so the person showing the animal must turn its head slightly toward the camera.

Illusion Created by Straw

There are two schools of thought as to whether or not a beef animal should be standing belly deep in straw. Some breeders always use straw because it adds to the animal's blockiness and squareness.

But some people tend to play it cautious when looking at a picture like this, because they know most leg faults are hidden and an untrue illusion of squareness is presented. They argue that cattle out on the range never have the opportunity to stand up to their briskets in straw.

If anything's more stubborn than a frustrated photographer, it's a headstrong hog. Although usually thought of as lazy, hogs become uncommonly active when asked to "smile at the birdie."

The only sure way you can get a



Don't do this! Her right legs are hidden, her head is down, the holder is on wrong side, and a windmill spoils background.

hog into a good pose is to bribe it with feed. Place the feed in a small, flat pan on a level piece of ground that's straw-free.

Because hogs look better, at least to people, with their heads down, this will keep the hog in an attractive position and in one place long enough for you to take the picture. All four legs should be in plain sight.

Sheep are much easier to photograph than hogs, or for that matter, any other class of livestock, because they're gentle and easily controlled.

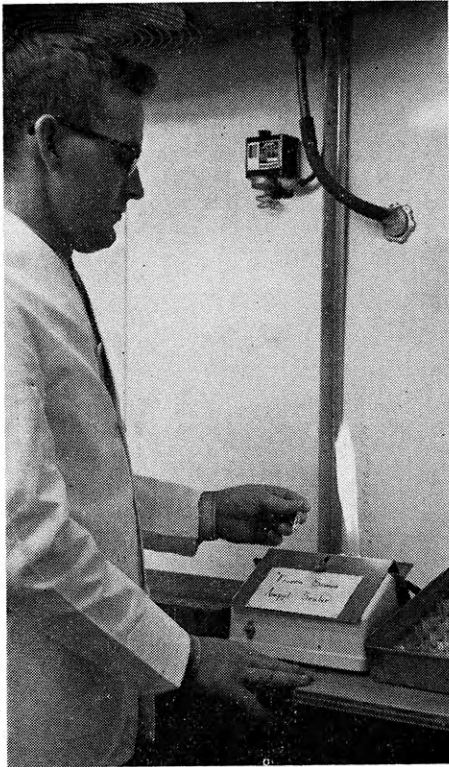
They'll stand reasonably still for a cameraman if the handler holds them by the jaw with one hand and moves the sheep's legs with his other hand. Although a three-quarter rear view is sometimes used, the three-quarter front view will usually give you better results. Keep the sheep's head fairly low and the legs spread apart, but with each leg in view of the camera.

The side view is recommended for taking pictures of horses. If an appearance of draftiness is desired, you can climb a small ladder or balance on a box about two feet above ground level to snap the shot.

It depends somewhat on the type of horse as to how the legs should be placed, but in most cases they're best positioned straight under the horse.

It's especially important, when you photograph a horse, to capture a look of alertness. This can be done by having someone wave a piece of cloth, a newspaper, or a hat about 50 feet in front of him.

Although much of a picture's success is determined by your posing and shooting technique, it won't be really good unless your animal is carefully groomed. The cow or hog doesn't always have to be in perfect showing condition, but all dirt and manure should be rubbed off and the hair coat brushed.



A laboratory technician is sealing semen in individual ampoules to be frozen, stored.

Around the World At 110° Below

by Eugene Harter

ONE of the most recent developments in artificial insemination is the use of frozen semen. Frozen semen is usually stored at 110 degrees below zero and can be shipped anywhere, to Alaska or Florida, or even around the world.

In 1949, workers at the University of Cambridge, England, found that glycerine, the by-product of soap production, would preserve the fertility of sperm that were rapidly frozen. Glycerine prevents damage to the sperm by acting as an "anti-freeze."

The first live calf in America resulting from the insemination of a cow with frozen semen was born in May, 1953, on the John and Medford Hill farm at Janesville, Wisconsin.

The Kansas Artificial Breeding Service Unit, commonly known as K.A.B.S.U., ran a field trial in 1954 by breeding 1,100 cows with frozen semen. Results showed the conception rate to be as good as that of liquid semen.

Before starting the freezing process, one cc of extended semen (semen diluted in egg yolk-citrate plus glycerine or heated milk with gly-

erine) is placed into a glass ampoule and heat sealed. Then the semen's temperature is lowered to minus 110°F. during a 15- to 20-minute cooling period. This temperature is obtained by the use of dry ice or mechanical refrigeration.

Liquid nitrogen is sometimes used if an alternate method of freezing to minus 320°F. is employed instead.

More Calves from Proven Sires

A big advantage of frozen semen is that it results in a wider use of proven bulls. Frozen semen can be kept for long periods of time while liquid semen has to be disposed of after a few days of storage.

Another advantage is that it pro-

vides for a better selection of bulls. Frozen semen also makes possible the breeding of cows to a deceased bull. Calves have been born as long as four years after the death of their sires.

Some disadvantages are a more complex processing, a critical storage temperature, and the cost of maintaining storage temperatures at -110°F. or -320°F.

In 1957, approximately two million, or one third of the cows bred artificially, were bred with frozen semen. This does not mean frozen semen is a cure-all and can't be improved. It does, however, indicate that frozen semen occupies a big step on the ladder of success and progress of artificial insemination.

MAR CAFE

The Most Talked About Restaurant
in Manhattan

DELICIOUS CHINESE AND AMERICAN FOOD

708 N. MANHATTAN

Aggie Spirit + Competition = Successful Ag Week

AGRICULTURE in Modern Living" was the theme of Ag Science Day, held April 11 on the K-State campus. Winning the rotating trophy for the best display, for the second year in a row, was the Horticulture Club. Their exhibit included three phases, research, education, and beauty and pleasure in modern living. Jim Nighswonger was chairman of the Horticulture exhibit committee.

Displays of rumen digestion, pelleted feeds, and dairy manufacturing equipment won Dairy Club second place in the competition. Klod and Kernel Klub used live plants to show the effects of various substances on them, plus a fertilizer-manufacturing display, to cop third place.

Larson and Houck Win in LAR to Climax Ag Week

Climaxing Ag Week, a record crowd of approximately 4,000 spectators watched 110 K-State students show in the Little American Royal. Selected as the grand champion showmen of the 31st annual Little Royal were Larry Larson, Dairy division, and Jim Houck, Block and Bridle division.

Larson, the top dairy showman, won with a Jersey cow. Eugene Harter was reserve champion Dairy division showman with an Ayrshire cow.

Placings in the Dairy division were: Jersey cows—1. Larry Larson, 2. Chester Peterson Jr., 3. Harold Grubb, 4. Rosalie Ward, 5. Linda Ahlstedt. Ayrshire cows—1. Eugene Harter, 2. Jim Lewis, 3. Don Gronau, 4. Herbert Annis, 5. Richard Rosenhagen.

Guernsey cows—1. John Carlin, 2. Stan Smith, 3. Ronald Ibbetson, 4. Albert Buckbee, 5. Leland Parker. Holstein cows—1. Jim Swiercinsky, 2. Larry Bengtson,

3. Wes Sheets, 4. Terry Silvius, 5. Leland Swenson.

Houck won the Block and Bridle championship with a Duroc hog. Lionel Chambers, showing a sheep, was reserve champion showman.

Placings in the Block and Bridle division were: Mixed heifers—1. Thurston Thiel, 2. Deloran Allen, 3. Howard Griffin, 4. Jack Flick, 5. Judy Fisher. Bulls—1. Richard Janssen, 2. J. D. Fowler, 3. Stanley Steere, 4. Bill New, 5. Fred Frey.

Mixed steers—1. Brenda Miller, 2. Karen Simpson, 3. Jim Dicken, 4. Kay Rudolph, 5. John Forrest. Richard Janssen showed his way to the championship of the Beef division, while Thurston Thiel was reserve champion.

Horses—1. Harry Todd, 2. Owen Sutter, 3. Norval Ralstin, 4. David Slyter, 5. Anne Scully. Sheep—1. Lionel Chambers, 2. Douglas Bolt, 3. Ralph Gilmore, 4. Larry Norris, 5. Douglas Gillet.

Duroc hogs—1. Jim Houck, 2. Wayne Grover, 3. Bernie Owen, 4. John Ross, 5. Larry Cundiff. Yorkshire and mixed hogs—1. John Cerny, 2. Gary Peterson, 3. Larry Wasson, 4. Chuck Hammon, 5. Norman Alley.

Judging the Dairy division classes were Otis R. Griggs and Donald Hopkins. Block and Bridle division judges were George Schlickau, Howard Vernon, Ralph Schulte, and Dick Warren.

Donald Edson, as master of ceremonies, announced the classes and winners. He was assisted by Don Schick and Dwight Glenn. Prof. F. W. Bell, the dean of college judging team coaches, was the honored guest of the Little American Royal. He recently retired from the K-State animal husbandry department.

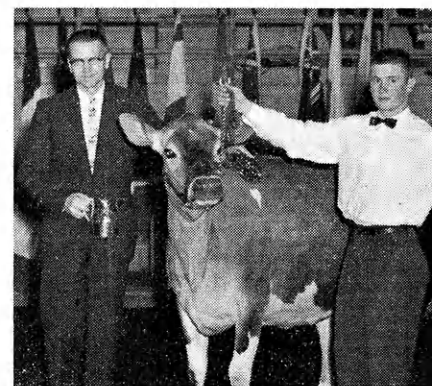
Brenda Morgan, Queen of the Ag School, presented ribbons and trophies to class winners.

Block & Bridle division winner, Jim Houck, sophomore in animal husbandry from Bushong.



The Horticulture Club had the top Ag Week display for the second consecutive year. The winning organization receives a traveling trophy donated by Alpha Mu, national honorary milling fraternity.

Winner of Dairy division was Larry Larson, a sophomore in ag education from Effingham.



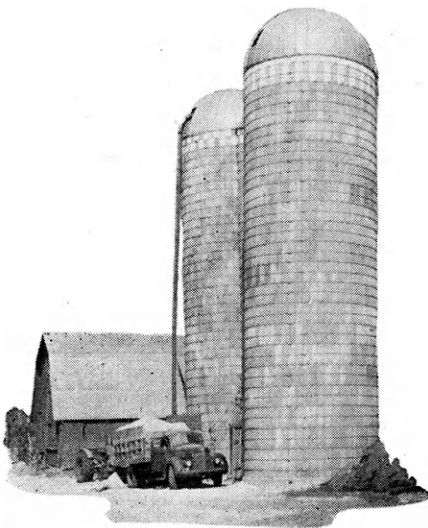


Spot Profit Leaks

With Farm Records

by
**Laurice
Margheim**

FARMING is much more complex today than it was when our forefathers settled the country. This makes it essential for a successful farm manager to keep records.



A record of storage structure capacities gives a basis for estimating crop yields.

In grandfather's day, instead of buying tractors, farmers raised horses for power. Their fuel came from the oat bin and only a few items were purchased off the farm. Much of what was produced was used right on the farm.

Today, nearly everything the farmer and his family use is bought off the farm with cash received from sales of crops and livestock. This change in agriculture has greatly increased the number of financial transactions you, as a farmer, must make each year.

Few business firms outside of agriculture operate without keeping some sort of accounts. Many business men, with investments as large as that of most farmers, have a full time accountant to help them analyze their businesses. They do this to increase profits by strengthening weak departments.

The successful farmers in any community not only keep records, but look upon them as a means of increasing operating efficiency. There are many reasons for keeping farm records.

Furnish Valuable Information

A good set of farm records will furnish information for credit statements and government programs, aid in settlements between landlords and tenants, help in renting a better farm, furnish necessary information to compute income tax, and in analyzing and improving management practices.

The yield on a given field may depend on how well you remember the crops grown or the treatments applied on this same field for several previous years. In the complex business of farming, the chance is great that costly management errors will be made if the operator tries to keep a record of all transactions and decisions in his head.

The value of your farm records is determined by how complete and accurate they are. Throwing all your sales slips into a shoe box and at the year's end adding these up and subtracting the total from your gross income, isn't a good way to arrive at a net farm income figure.

Record Small Purchases

It's easy to remember when you sold those 35 black steers or that truckload of milo, but it's impossible to remember many small purchases such as a sack of nails, a fan belt for the truck, or a bolt to repair the combine.

All these small expenses add up and when income tax time rolls around, it'll pay you in dollars and cents to have a complete record of them.

What you intend to use your records for will determine how detailed they should be. The more detailed they are, the more valuable they can be to you.

A complete record of all financial transactions for the year, plus beginning and ending inventories is all that is necessary for filing an income



Next year's crop yield depends a lot on how you treat your soil. A quick glance at your farm record book will show you exactly how much of what fertilizer it took to get that big crop a year ago.

tax report. A good set of records, however, should include production information to make them more useful in making management decisions.

Production records show the costs of producing various farm commodities. How many pounds of feed does it take to produce a pound of pork? A dozen eggs? A pound of butterfat? You can readily answer these questions and also compare your farming operations to neighboring farmers' through your production records.

Records of yields in different fields over a period of years may give you valuable clues as to soil treatments or possible cropping system changes.

No matter what basic records you have kept, the most important step in the whole process is analysis. Analysis should help you locate any weak spots in organization and management. It may also point out enterprises that have special advantages in your situation.

Follow Progress of Business

Record books should be set up so progress of the business can be followed throughout the year. If certain enterprises aren't showing a profit you can change your plans then. Each aspect of the business should be studied and compared to other parts of the business. Receipts and expenses should be expressed per acre of land or for each head of livestock.

One thing that shouldn't be expected from most farm record systems is the cost of any individual enterprise. This isn't practical on a

farm because of the complex inter-relationships between different enterprises.

Should the cost of hauling a load of manure from dairy barn to corn field be charged to the corn or the dairy enterprise? How should machinery depreciation be distributed between different enterprises?

The cost of keeping detailed records necessary to answer such questions would far exceed the value of any results you could obtain.

Accuracy is important in keeping

any sort of records. Normal capacity of grain bins, hay barns, truck boxes, and feed buckets should be measured. This should then be recorded for future use.

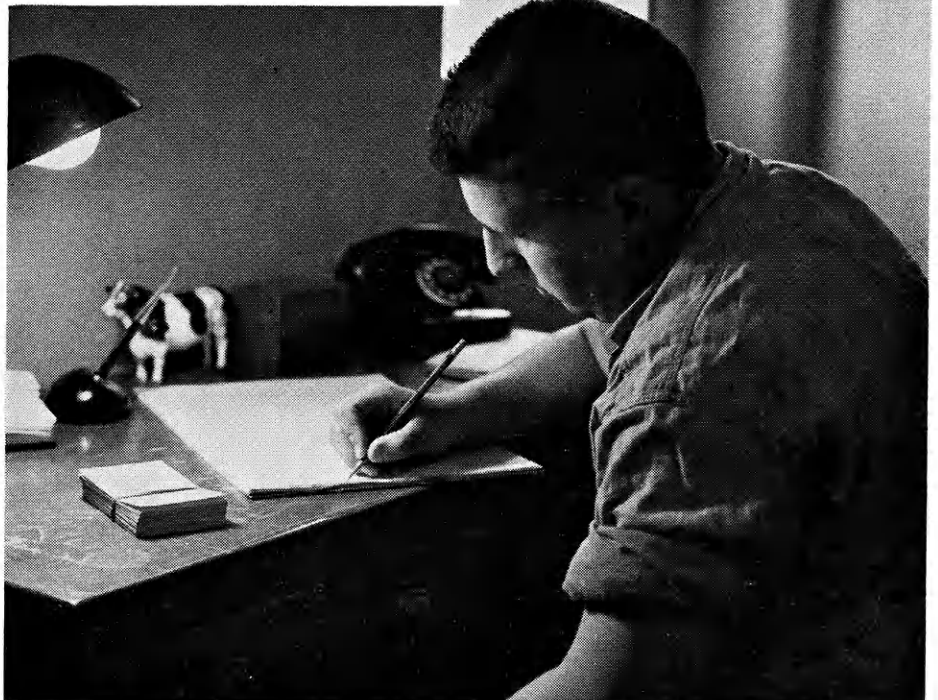
Even Small Errors Cause Trouble

Even a slight error in estimating the weight of livestock can be misleading. An error of only 10 per cent on a 500-pound calf is 50 pounds. If the weight of a group of hogs receiving one ration is overestimated and for another pen is underestimated, a comparison between the two rations would be entirely misleading.

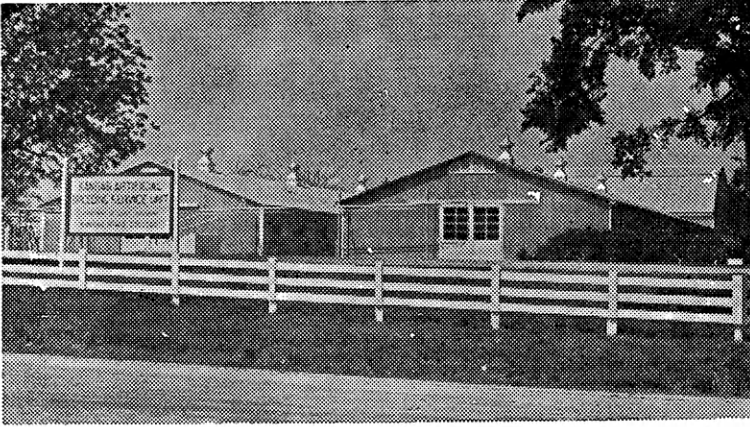
To insure accuracy, expenses and receipts should be recorded often and preferably every day. You should keep farm account books and other records close at hand, but separated from magazines, school books, and other family personal possessions. If it isn't possible for you to set a whole room aside for the farm business records, at least a desk and part of a room should be reserved.

A fireproof filing cabinet is invaluable when used to store records such as car titles, machinery and tire guarantees, livestock registration certificates, and other important papers. If you use a file system properly, it can save you the trouble and cost of having duplicate papers made to replace those that are misplaced.

A neat desk, good light, and a telephone go together to make record keeping easy.



HEADQUARTERS



Kansas Dairy Improvement Program

Kansas **A**rtificial **B**reeding **S**ervice **U**nit

"Nine Years of Dependable Service"

Serving 73 Kansas Associations

2—Beef Breeds—2

6—Dairy Breeds—6

360,000 Cows Bred

Department of Dairy Husbandry

Kansas State University

VISITORS ALWAYS WELCOME

Attebery's CANTEEN

*Serving 3 Meals
Daily*

**FOUNTAIN & GRILL
SERVICE**

•
**Open Through
Summer Session**

Air Conditioned

1423 Anderson

GILLETT HOTEL

and

GILLETT DINING ROOM

400 HOUSTON ST.

MANHATTAN, KANSAS

Phone Pr. 8-4473

(Write or phone for reservations.)

Union National Bank

Your Canceled Check Is Your Receipt

J. E. Arnold, President Evan Griffith, Chairman of the Board

W. B. Glenn, Vice-President



MEMBER OF THE FEDERAL DEPOSIT
INSURANCE CORPORATION

Look for the Big Clock on the Corner of 4th and Poyntz

For Quick Summer Meals— CASSEROLES

by Janet Dawdy

HOT summer days are on the way and you, the homemaker, will face the same old problem of what to serve next. Have you considered using casseroles in your summer meal planning? Not only do they give you many necessary nutrients in one main dish, but offer several other advantages, too.

When you don't feel like slaving away at the stove all morning, wouldn't a one-dish meal be nice to feed that hungry family? Another advantage is economy. A little bit of left-over meat or vegetables can always find a spot in a casserole.

You can make several casseroles at once and freeze them for quick-and-easy meals when unexpected company drops in or when you're especially hurried or tired.

Columbus Casserole Can Be Frozen

A good casserole for freezing is the Columbus Casserole. This dish may rate your special attention if your family, like many, doesn't care for liver. Liver is an important source of vitamin A, iron, and riboflavin, so why not try using it in a casserole for a brand new taste? You'll be surprised at the results!

COLUMBUS CASSEROLE

- 1 cup elbow macaroni ($\frac{1}{4}$ pound)
- 4 slices bacon
- 2 tablespoons bacon drippings
- $\frac{1}{2}$ pound uncooked beef liver, cubed
- 2 tablespoons flour
- 1 teaspoon salt
- $\frac{1}{2}$ cup sliced onions
- 1 can condensed cream-of-mushroom soup, undiluted
- $\frac{3}{4}$ cup milk
- $1\frac{1}{2}$ tablespoons bottled meat sauce
- 1 cup canned whole-kernel corn
- Chopped parsley (optional)

Early in the day cook the macaroni

as the package directs, and drain it. Meanwhile, sauté the bacon until lightly browned, and drain. Pour off all but 2 tablespoons of drippings. Sprinkle the liver with flour and salt, and sauté quickly in drippings until well browned. Add onion and cook until just tender.

Pour the undiluted mushroom soup into a $1\frac{1}{2}$ -quart casserole. Slowly stir in the milk and meat sauce and fold

in the macaroni, liver, onions, and corn. Top with bacon strips and chill.

About one hour before serving, place the casserole in an oven preheated to 350° . Bake for 50 minutes or until the mixture is bubbly. Before serving, generously sprinkle parsley around the bacon for garnish.

If you use this recipe for freezing, make as the recipe directs for "Early

(Continued on page 25)



Mrs. William Johnson, K-State graduate student wife, garnishes casserole with paprika. The finished product, shown in inset, is easy to prepare, nutritious, and appetizing.

Screwworms

(Continued from page 10)

Unfortunately, we can't expect complete screwworm eradication for quite a while. For the present we can only control and treat screwworm outbreaks. Control of screwworms consists of good farm practices and the use of an approved remedy if an outbreak should occur.

Open Wounds Invite Screwworms

Take care that fences, holding pen fences in particular, don't have snags that may leave open wounds. Surgery, branding, and earmarking should be scheduled for the cooler months when screwworm activity is at its lowest. Most important, livestock shouldn't carry unattended wounds during fly season.

Two approved remedies, Smear 62 and EQ-335, may be used to treat screwworm cases. EQ-335 doesn't stain, isn't highly volatile, is more effective against fleeceworms and other blowflies, and is more toxic to the screwworm fly than Smear 62.

When you treat screwworm cases, remember the main idea is to get

plenty of treatment material into the wound and a good dressing around its outer edges. In sheep and goats, the area below the infested wound is usually covered with discharged matter and should be given a light application as a preventative against a fleeceworm attack.

A new "systemic" insecticide, or one that is applied to one area and spreads throughout the system to all parts of the body, is being used for screwworm control as well as for control of several other insect pests.

It's called Co-ral and is sprayed on the animal's skin. Korlan is an-

other insecticide recently approved by the USDA for use on screwworms. It's not systemic, but is sprayed on the wound.

When either of the two insecticides is used, all directions and precautions on the container's label should be followed closely. Systemic insecticides like these can't be used on milk-producing animals.

You can get more information on screwworm control by writing to:

Extension Entomologist
Kansas State University
Manhattan, Kansas

KITE'S

CLEMENCE-MORRISON LIVESTOCK COMMISSION COMPANY

BONDED FOR YOUR PROTECTION

Barn Phone TA-7-1137 or TA-7-0362

SALINA, KANSAS

On Highway 40, East

AUCTION EVERY MONDAY & FRIDAY

Laurence Clemence
Abilene
Phone 1333

E. R. McCullick
Salina
Phone TA-3-2963

Edward Tolle
Roxbury
Phone 1613

Joe Clemence
Abilene
Phone Acme 3405

Irvyn Christiansen
Durham
Phone 1204

For Improved Communications

Vote YES

Extension Telephone

Short-wave Radio

Radio Telephone

Intercom System

by Ken Hylton

SCIENTISTS are helping the farmer keep pace with a faster moving world by dreaming up gadgets that will do almost anything for him, except keep his wife from buying new hats.

Some of the latest gadgets being applied to agricultural use are various forms of electrical communications devices.

The telephone is a familiar piece of equipment in most Midwestern farm homes. Telephone service has improved in most areas until the phone ranks number one on the dependability list. However, the idea of having several extension phones in the farm home and outbuildings is relatively new.

The cost of an extension phone varies. From 50 cents to a dollar a month is the usual rate. Many farmers who have tried extension phones feel they nearly pay for themselves in saved shoe leather.

Radio Telephones Eliminate Wires

Many farm families who haven't been able to get phones installed because it isn't practical for phone companies to string wires to their remote areas, may soon be served by radio telephones. These new phones don't need telephone lines to operate. The message is carried by radio waves to a transmitter connected with the conventional telephone lines. The message is then relayed over the line to its destination.

In some areas radio phones are also becoming popular for use in trucks

and other vehicles. The radio phone shouldn't be confused with a private two-way radio which is privately owned and operated.

The radio phone is an extension of the telephone company's services and units are rented from the company. Rental fees range from \$30 to \$50 a month.

Short-wave Units Popular

The number of privately owned short-wave radio systems is on the increase. Businesses with several trucks or service units needing to be kept in close contact pioneered their use. Probably the first person connected with agriculture to have a short-wave system in your area was your veterinarian. Many farmers are

now buying the units for use between different farm vehicles and the house.

The price of short-wave units varies a great deal, depending on size and equipment quality. Some of the shorter range units are relatively inexpensive, but it isn't unusual to get three or four thousand dollars tied up in a long-range unit.

Short-wave units for trucks and tractors work well on the receiving end but aren't too practical for transmitting. Little electricity is required to receive a message, but transmitting requires about as much current as an electric starter. This limits the length of conversations involving remote units.

Intercom Uses Any 110v Outlet

About the most practical kind of farm intercom system is the type that plugs into any 110-volt socket and needs no additional wiring to carry messages. There are less expensive units, but the cheaper sets require wires.

Portable 110-volt wireless units sell for about \$50 each, and will work at distances up to six miles as long as both the sending and receiving units are inside the highline transformer. In other words, both units must be on the same side of the transformer. Some farmers are using this type of system to keep an audio or listening check on livestock.

Most of these systems are still a little too expensive for the average farm, but a few progressive farmers feel they are worth it and then some.



IT USED TO BE PEACEFUL
OUT HERE!

In the

Aggies' World

by Fred Clemence

Alpha Zeta Names New Members

New members of Alpha Zeta are Fremont A. Regier, Benny E. Brent, Donald P. Adee, Jon F. Isch, Earl D. Beck, Billy R. Fuller, Stanley T. Smith, Frederick G. Clary, Robert A. Baruth, Dean V. Armbrust, Eugene H. Harter,

Samuel G. Unger, Lloyd W. Rooney, Lawrence E. Stoskopf, Hall H. Moxley, Ronald E. Janasek, Douglas G. Bolt, Wade T. Smith, Robert W. Lewis, Larry L. Larson, Howard V. Sieler, Charles E. Eck, Warren A. Godfrey, Richard E. Bowen, Joe Kashner, and Benny I. Osburn.

Aggies Voted into State Offices

Newly elected president of the Kansas Junior Livestock Association is Lionel Chambers, junior from Wichita.

Vice-president for next year will be John C. Floyd. John graduated from K-State last year in agricultural economics.

Ben Brent, senior from Alton, was elected to the office of secretary.

Hall Moxley, sophomore from Council Grove, was elected treasurer.

Reporter for the coming year is Sandra Brookover from Garden City. Sandra is a junior at K-State.

The first, third, fifth, and sixth districts each elected new directors. First district, Walt Rudolph, junior from Manhattan; third district, Tom Appleby, senior from Cedar Vale;

fifth district, Gary Cummings, Kingsdown junior; and sixth district, Don Mach, junior from Narka.

Gamma Sigma Delta Initiates

Gamma Sigma Delta, national honor society for agriculture, initiated new members into the K-State chapter at a banquet April 9.

New agriculture student members are Bryan B. Barr, Frank A. Bossi, Frank G. Bell, Benny E. Brent, Lee Eldean Curtis, Harlan Forslund, Allen Fort, Dwight Glenn, Mahmoud Hamad, Veryl James, Herman Knoche, John Koburger.

Donald Nelson, Chester Peterson Jr., Randall Pope, Fremont Regier, Thomas Rogler, Gary Rumsey, Donald Schick, Steven Smalley, Norman Staats, Donald Stuteville, Harold Suelter, Donald Sumner, Ronald Sweat, Marthane Thiel, Thurston Thiel, and John Weseloh.

R. I. Throckmorton and L. E. Call, both of whom have served as Dean of Agriculture, were honored for distinguished faculty service.

Main speaker at the banquet was Louis M. Thompson, associate dean of agriculture at Iowa State.

Ag Association Elects Officers

Gary Cromwell, junior in Ag Education from Salina, recently was elected president of the K-State Agricultural Association.

Darrell Weber, Ag Economics junior from Winfield, was elected as vice-president.

Larry Laverentz, Ag Economics junior from Bendena, is the new secretary.

Robert Lewis, Ag sophomore from Larned, is treasurer.

Ronald McCune, Feed Technology junior from Beloit, will be Ag Week manager. Larry Larson, sophomore from Effingham in Ag Education, will help as assistant Ag Week manager.

Eight Selected by Phi Kappa Phi

New members of Phi Kappa Phi from the School of Agriculture are Benny Earl Brent, Gary Rumsey, Thurston Thiel, Earl Beck, Loren Dale Becker, Bob Franklin Jones, Harold Dean Knewton, and Ronald William McCune.

Friendly Service That Satisfies—

JERRY NOLL'S
TEXACO SERVICE
Clafin and Denison Roads
(At NW Corner of Campus)
Call 8-2347

Lubrication
Gas—Oil
Ice

Battery Charging
Car Washing
Car Accessories



Casseroles

(Continued from page 21)

in day," omitting bacon and substituting salad oil for bacon drippings. Cool, then freeze in freezer containers. Thaw it in the food compartment of your refrigerator, then put it into a casserole. Top with partially cooked bacon and bake as you would the other recipe.

Serve this dish with a tossed salad and enriched bread for a well-balanced, tasty, and attractive meal.

Macaroni Also Provides Nutrients

Macaroni and spaghetti are always favorite casserole ingredients. Contrary to what some people think, macaroni products aren't just starchy fillers. They provide supplementary proteins and when enriched, as most brands are today, they add B vitamins and iron. As for calories, 1/2 cup of macaroni furnishes a little over 100 calories, and noodles contain even less.

Tuna-Tomato Bake, based on mac-

aroni, is another quick, easy-to-prepare main dish. An extra time saver in this particular recipe is the use of uncooked macaroni.

TUNA-TOMATO BAKE

1 can undiluted condensed cream-of-mushroom soup
1 soup can of water
1 1/2 cups milk
1 package macaroni-and-cheese dinner
1 can chunk-style tuna
2 sliced tomatoes
Seasoned salt
1 cup grated process American cheese
Paprika

In a saucepan, combine the soup, water, milk. Bring the mixture to a boil; then lower the heat. Stir in grated cheese from macaroni dinner until the cheese melts. Mix in the uncooked macaroni. Let stand five minutes. Pour the macaroni mixture into a 10" x 6" x 2" baking dish.

Cover with aluminum foil and bake 20 minutes in a 375° oven or until macaroni is done. Then stir in the tuna, mixing well. Cover with tomato slices sprinkled with seasoned salt. Top with grated cheese, sprinkle with paprika, and bake uncovered for five more minutes until cheese is melted and golden.

This dish will come in handy as a Friday night special. Serve it with brown-and-serve rolls and a big glass of milk, and you'll have your meal completed without a lot of effort.

Cucumbers Fixed Differently

Vegetables from your garden sometimes lose their appeal if served the same way time after time. Here's a different way to fix cucumbers that your family is sure to enjoy.

ESCALLOPED CUCUMBERS

4 medium size cucumbers
2 2/3 cups medium white sauce
1 1/2 cups grated cheese

Cut the cucumbers into 1/4-inch slices and cook in boiling salt water until tender. Drain, blend in the cheese with the white sauce and add the cucumber. Place in a baking dish and cover with buttered crumbs. Bake at 350°-375° until the crumbs are brown. Serve this dish hot.

This recipe will fit into your menu as a vegetable casserole, rather than a main dish. Your family'll like the flavor and appreciate the sight of a new vegetable, in place of the usual peas, corn, and beans.

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

Smoky View Swiss Farm
Chester Peterson & Son
Falun, Kansas

Patronize
the advertisers
in the
AG
STUDENT

They help make
your magazine
possible



Brief and Breezy

by Little Joe

Said one farmer to another: "My best cow died of Bangs' disease. Some hunter shot her."

"To hell with expense!" cried the miser. "Give the canary another seed."

The scribbling on prescription blanks by doctors simply says: "I've got my \$5. Now he's all yours."

She: "I saw a cowboy carrying two rifles."

He: "That's nothing, I saw a cow-girl packing a pair of 38's."

New Union Cashier: "What do you do when a customer forgets his change?"

Veteran Cashier: "Tap on the counter with a dollar bill."

Senior: "I suppose you come from one of those towns where they pull in the pavement every night."

Freshman: "What pavement?"

A girl doesn't have to watch the speedometer to know what her boy friend is driving at.

Bill: "Ever been pinched for going too fast in your car?"

Fred: "No, but I've been slapped."

If ignorance is bliss, why aren't there more happy engineers?

Country Constable: "Pardon me, miss, but swimming is not allowed in the lake."

Pretty Young Thing: "Why didn't you tell me before I undressed?"

Constable: "Well, there ain't no law against undressing."

Some lectures are like steer horns—a point here, a point there, and a lot of useless bull in between.

An old Kansas farmer was asked if he had any trouble with insects getting in his corn. "Sure have," he replied, "but I fish 'em out and drink it anyhow."

Customer: "May I try on that suit in the window?"

Clerk: "We'd rather you'd use the dressing room."

A city slicker driving in the country one day saw a farmer out raking some hay and decided to rib him a bit. "Hey, Rube," he called to the farmer, "did you see a wagonload of monkeys go by here awhile ago?"

"No," the farmer called back, "did you fall off?"

Joe: "Do you know why elephants are grey?"

Moe: "No."

Joe: "So they can be distinguished from bluebirds."

The city boy picked up a cockle burr. "Look," he shouted, "I've found a porcupine egg!"

Prof: "Why don't you scrape the mud off your shoes when you come in?"

Aggie: "What shoes?"

In the midst of an extraction the dentist said, "Sorry, Miss, but I ran out of gas."

Pretty young thing: "Oh, do you dentists use that line, too?"

Blind date: "Kiss me once more like that and I'm yours for life!"

Agronomy Jr.: "Thanks for the warning."

"Tell me the story about the police raiding your fraternity."

"Oh, that's a closed chapter now."

Foreman to engineer on the job: "Why are you only carrying four bricks, when all the other men are carrying eight?"

Engineer: "I guess it's because they're too lazy to make two trips like I do."

"Well son," asked the father, "how are your grades?"

"Under water," was the reply.

"And what do you mean by that?" his father asked.

"Well," said the son reluctantly, "they're all below '0' level."

Joe: "Where can I get hold of your sister?"

Moe: "I don't know. She's ticklish."

The excited voice of a Northwest dorm girl came over the phone: "Two Dairy majors are trying to break into my room through the window!"

"Listen, lady, this ain't the police department, it's the fire station."

"I know," she replied, "but my room is on the second floor and they need a ladder."

A hug is energy that has gone to waist.

Wife: "You think more of that old radio than you do of me."

Married Aggie: "Well, I get less interference from it."

"You should see my girl, beautiful as a mirage."

"That's the wrong simile, a mirage is something you can see but can't put your hands on."

"That's my girl!"

The first and most respectable of all the arts is agriculture.—Rousseau.

INCREASE YOUR AG POWER

Answers

1. c.—Calcium.
2. c.—Soft red winter.
3. a.—Lower the percentage.
4. a.—Sheep production.
5. c.—Feed so he is in a gaining condition.
6. a.—22 percent.
7. b.—B complex vitamins and vitamin K.
8. d.—All three.
9. b.—3 1/3 pounds of alfalfa hay.
10. a.—Usually travel from southwest to northeast.



If the smell of freshly-turned earth tells you that you're meant to be a farmer...

It's a part of you. Like new fallen snow waiting to register your footprints on a winter morning. Or the reassuring bark of the old watch dog. Or the newborn calf, still warm and moist from its mother's tongue.

Would you trade it for squirting slush, for the squawk of traffic? Would you trade it for sweltering nights on the fire escape? Would

you trade it for the city?

Where but on the farm can a boy look forward to a free, full life and an independent future? Where else is a man's working room measured in acres instead of square feet? A mother's backyard bounded by the hedgerow across the hill instead of the nearest alley?

Here a man counts his worth, not by fleeting figures on a pay

check, but by his solid investment in land and in the machines that bring it to yield.

Through his skill in employing modern farm machinery, the American farmer has multiplied himself. Today he creates more agricultural wealth with fewer man hours per acre than any other nation on earth. His hand is on the throttle of the "biggest business in America."

Farming is America's Biggest Business



NEW IDEA FARM EQUIPMENT COMPANY, COLDWATER, OHIO

Division AVCO Distributing Corp.

SPECIALIZED FARM EQUIPMENT SINCE 1899



NEW **MCCORMICK® NO. 15**
FIELD HARVESTER
Here's big chopping capacity at a price that matches the lowest on the market! Fill the new No. 61 Power-Unloading Box in only 10 minutes!

Chops with the biggest... priced with the lowest!



Here's the leading flywheel-type field harvester—the big McCormick No. 36! It chops over 45 tons of corn silage per hour. Pto or engine drive.

Man, this new McCormick No. 15 really chops fast! It fills a 5-ton forage box in less than 10 minutes. Chops as fast as many field harvesters selling for twice the price of the No. 15. Its price tag matches today's lowest . . . and there's a 60% bonus in chopping capacity in the bargain!

Chop up to 30 tons of grass silage per hour! Dairymen and feeders can green-chop for up to 50 drylot cattle in less than 5 minutes. Big 40 ton capacity of corn silage per hour.

Three brand-new, quick-change harvesting units—60-inch cutter bar, row-crop unit, and 54-inch hay pickup are perfectly matched with the new 6-knife lawnmower-type cutter head for top capacity in any crop.

See it . . . price it . . . you can pay twice as much, but you can't buy higher quality than the durable No. 15 Field Harvester!

See the 1959 forage line at your IH dealer's store. Let him show you how you can buy now . . . pay later . . . and put forage into feedlot or storage at lower cost!



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.