Kansas State College AG STUDENT

OCTOBER 1957

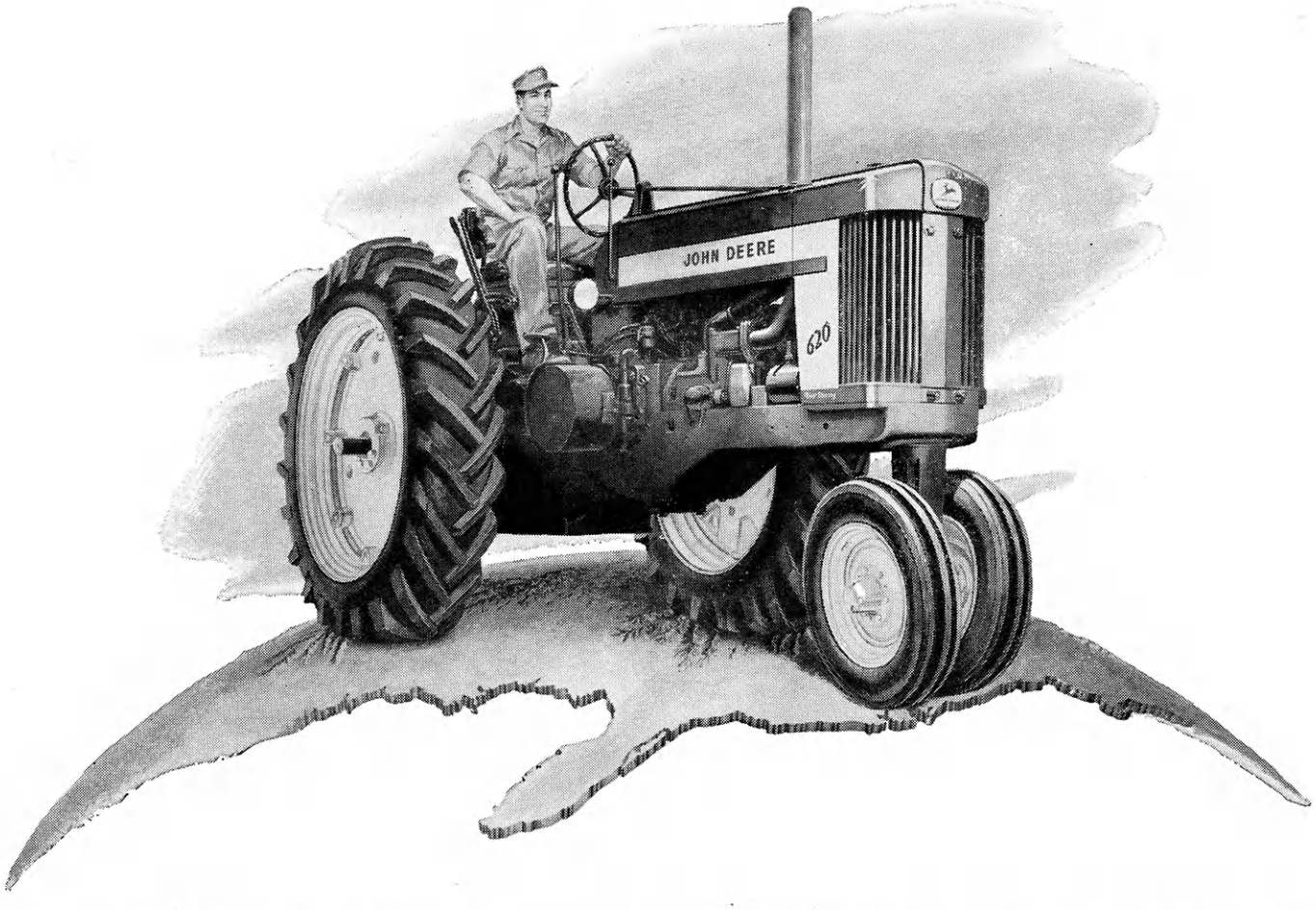
AG WEEK

NOVEMBER 11-16

Make Your Career in Modern Agriculture

. . . page 14

"Sitting on Top of the World"



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Whatever your acreage, whatever your farming operation, there's a John Deere Tractor in power, size, and type to fit it ideally, from the low-cost 1-2 Plow "320" Series to the powerful 6-Plow "820" Diesel.

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

Kansas State College
AG STUDENT

Vol. XXXIV October, 1957 No. 1

On the Cover

Choosing a career is a big choice to make. The young couple on the cover is looking over products or tools representing the various fields of agriculture. These products and tools are also symbols of the curriculums dealing with agriculture at K-State. Choosing a curriculum means choosing your life's career.

The couple on the cover, Nelson and Marilyn Galle, have chosen their careers. Marilyn Pence Galle graduated last fall in elementary education. Nelson is a senior in agricultural education. The Galles were married in June, and Marilyn is presently teaching in Manhattan while Nelson is in school.

Nelson is an active member in Ag School. He is a member of Alpha Zeta, agricultural honorary, and Blue Key, senior men's honorary. He has judged on the poultry and junior livestock juding teams, and has been active in ag organizations and functions. In the fall semester of 1956 Nelson stayed out of school in order to take a trip to Turkey as an IFYE (International Foreign Youth Exchange) delegate.

Marilyn, too, is well known in Ag School. In 1956 she judged on the poultry team and judged with the team at Chicago. In 1954 Marilyn was attendant to the Barnwarmer queen, corresponding to the Ag Week queen now.

The products and symbols the Galles are looking over are in many ways overlapping. The ham and beef Marilyn is interested in is raised by the livestock producer, with feed developed by nutritionists, and cut up and marketed by still other people. In this way the fields of agriculture overlap. This is the reason more and more ag graduates are needed.

The farmer is but the producer of a basic product. That product must be processed by specialists and technicians. The production of the basic product requires specialists too. Ag engineers design machinery, nutritionists develop feeds, ag journalists handle promotion, and ag economists submit market fluctuations. Farming offers jobs, but more important—it creates jobs.

—Gary Yeakley

PHOTO CREDITS: Courtesy department of plant pathology, 6; Robert Jones, 10, 11, 25; Alan Tilley, 17; Carl Rochat, 18, Extension, 19; Ag Student photographer.

In This Issue

Staff

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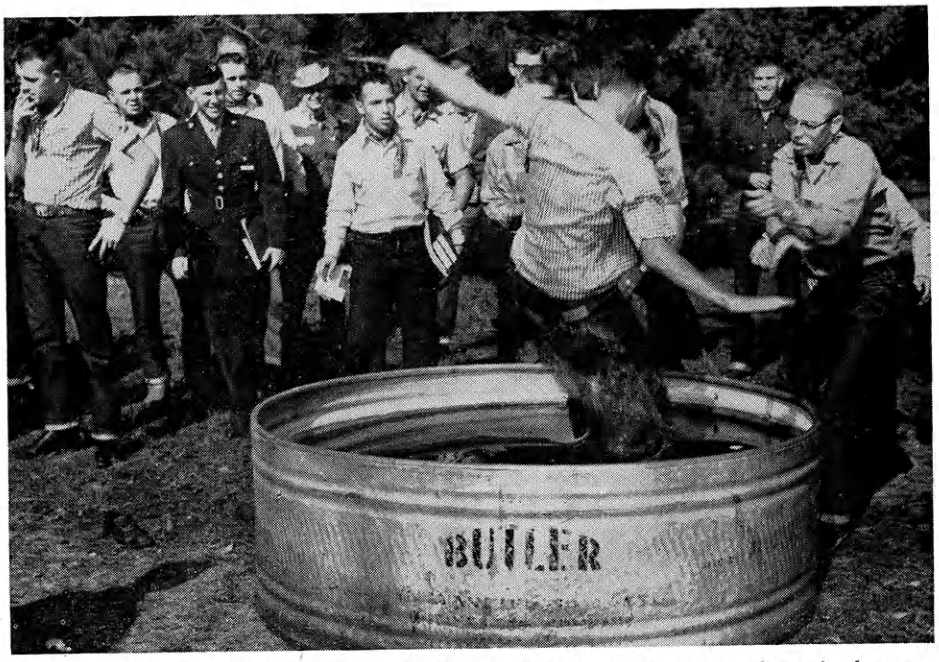
FROM THE EDITOR'S PEN

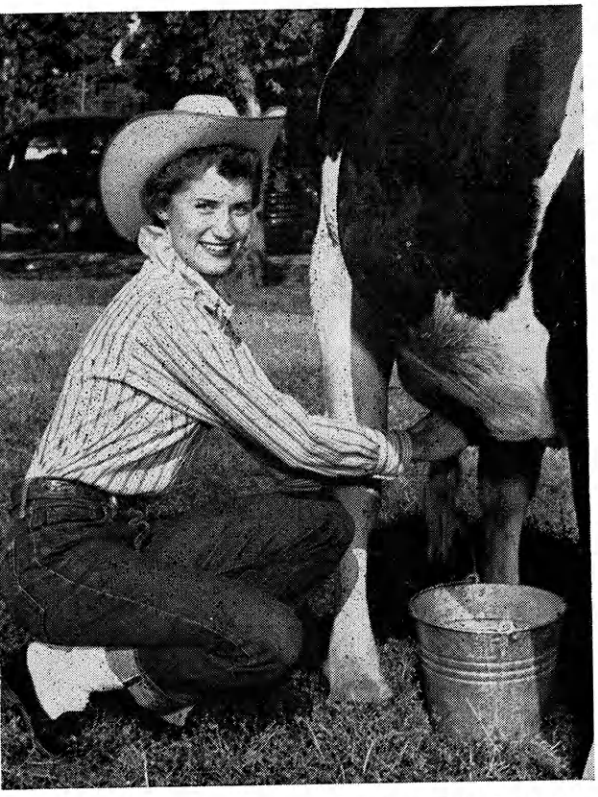
by Gary Yeakley

THIS year's Ag Week has the earmarks of being something new and incorporates several new features. Ag career day will be a major event directed at high school students.

Ag Week, November 11 to 16, has in its program constructive features. Formerly it has been more of a fun week for Aggies. The dress for the week will be as usual—bluejeans, plaid shirts, and red neckerchiefs. A dunking in a horsetank, the normal penalty for those who do not dress Aggie style, may be abandoned this year, according to Paul Faidley, Ag Week manager.



The Ag Week horsetank for "improperly dressed" Aggies has been a tradition in the past, but it is being replaced this year by Career day and other more constructive additions.



Connie Morgan, 1956 Ag Week Queen, smiles at her own effort to win the cow milking contest at Queen's chore day. Incidentally Connie's 5 pounds of milk won.

The program for Ag Week includes the prescribed dress all week. Thursday, November 14, departmental exhibits are to be completed and opened to the public at 6 p.m. An all-school assembly will be held Friday morning in conjunction with the week. Assembly speaker will be Dr. John Davis of Harvard university.

Friday evening will be Queen's chores evening. The annual event will be held in new animal industries building. The five Ag Queen finalists will carry out modified farm chores such as milking a cow, building a hog trough, roping a calf, driving a tractor, catching a chicken, and riding a horse.

Saturday morning will begin career day. High school 4-H and FFA members and any other students are being invited to this day. Tours will be conducted through the Ag School in an effort to show the work of different departments. The departmental displays will be out to help clarify the work of different fields in ag.

Alpha Mu, milling honorary, is offering a trophy for the best departmental exhibit. The trophy will be rotated among the winners in following years.

Career day is planned to help high school students see the opportunities in agriculture and to help them choose a field that is attractive as a career. All visitors during career day are invited to a beef bar-b-cue that

(Continued on page 22)

1957 Ag Week Queen Candidates

by Loren Henry

SEVENTEEN candidates will face the Ag school November 8 to be voted on for selection of five finalists for Ag Week queen who will be crowned at the Ag Barnwarmer November 16.

17 Candidates

The candidates are Judy Stark, Junction City, representing Alpha Xi Delta; Patsy Stevens, Junction City, Alpha Chi Omega's candidate; Alice Whitney, Manhattan, from Clovia; Dee Ann Baker, Haven, representing Delta Delta Delta; and Diane Grey, Lebanon, Kappa Delta's representative.

Continuing the candidates are Joan Peters, Edson, from Pi Beta Phi; Gwen Bourquin, Colby, representing Gamma Phi Beta; Barbara David, Winfield, Kappa Kappa Gamma's candidate; Bea Purcell, Wichita, Alpha Delta Pi's candidate; and Sherry Reed, Topeka, representing Chi Omega.

Representing the dormitories are Denise King, Hutchinson, from Waltheim hall; Barbara McCluskey, Junction City, and Carol Manka, Wichita, representing Northwest hall; Sandra Drown, Topeka, and Donna Baker, Peck, candidates from Van Zile hall; and Janice Gaddis, Wichita, and Wanda Swenson, Council Grove, Southeast hall's candidates.

Five Finalists

From the seventeen candidates five finalists will be selected by students in the Ag school by a popular vote. They will be selected at the "queens assembly" November 8 in the College auditorium.

The queen will be selected from the five finalists at the Ag Barnwarmer November 16 by a popular vote of the students attending. The queen will be crowned at intermission with the four attendants receiving recognition.

The finalists will show their ability of doing farm chores at the "chore day" November 15 at 7:30 p.m.

QUEEN CANDIDATES are (top picture, top row, from left) Barbara McCluskey, Alice Whitney, Denise King, (front row) Carol Manka, Judy Stark, Dee Baker, (center picture, top row) Janice Gaddis, Barbara David, Gwen Bourquin, Diane Grey, (front row) Joan Peters, Wanda Swenson, (bottom picture, top row) Bea Purcell, Sherry Reed, Patsy Stevens, (front row) Donna Baker, and Sandra Drown. Queen photos by Tedrow

ERGOT—

by Robert Jones

READER'S NOTE—*Recent outbreaks of a fungus infection in Kansas livestock have been traced to ergot.* THE AG STUDENT, *therefore, feels obligated to present an article on the fungus through cooperation of the K-State news bureau and the author, Robert R. Jones, college agricultural editor.*

ERGOT is a two-edged sword. It can kill and it can save life. In livestock it generally kills or contributes to death, but in the hands of a physician it can stop bleeding, stimulate a muscle, or help a mother in childbirth.

Ergot is caused by a fungus that infects the flowers of many grasses, including the cereal grains, and replaces the seed kernels with its sclerotia (fungus bodies). The sclerotia contain alkaloids which have a powerful action on the nervous system and can produce gangrene or convulsions, and, in severe cases, death.

Grass Family Disease

The disease is common and destructive on native grasses, rye, barley, durum wheat, and some varieties of hard spring wheat. Damage from ergot occurs in humid areas, normally north of Kansas in Nebraska, the Dakotas, and Montana.

In early stages of infection the fungus produces large quantities of spores in sugary drops, which have a foul and carrionlike odor that attracts flies. The flies feed on it and become contaminated with the spores, which they carry to healthy flowers.

Ergot of rye is the most common ergot and is recognized by the protruded sclerotia, spore - bearing body. Ergot, a disease, is found in many grass family members.

Recognize Ergot

The disease is recognized by this sticky fluid or honeydew, either by visual observation, or by the tacky feel when heads of plants are run through the hand. Later the purplish-black sclerotia can be seen in the ripening heads.

The sclerotia are shaped like a rye kernel, but usually are longer than a grain, and thus protrude from the chaff. They thresh out with the grain. Any grain containing more than 0.3 percent ergot sclerotia by weight is graded as ergoty and is discounted in the market. Ergot content of milled products is limited by law. Although most of the sclerotia can be removed with special equipment, the cost is generally prohibitive.

The spores of this fungus are wind-borne to the flowers of the

medicine poison

grain or grass where they invade the young kernel and replace it with a preliminary fungus growth. This first fungus bears millions of spores in the sticky honeydewlike mass. The microscopic spores are carried by insects or spattered by rain to infect numerous other kernels. The sclerotia develop following this spreading stage.

Bright, hard, ergot sclerotia, free from molds, command a high price for medicinal use. These are supplied commercially from several regions where the climate is favorable. In periods of ergot infection of epidemic proportions, a rye field may be more valuable as a source of ergot than for its grain. Only rye ergot is used for medicine. Principal sources for this "ergot of commerce" are Spain and Russia.

Ergot Poisoning

In a series of experiments in Montana it was found that brood sows fed grain containing not over one percent ergot during pregnancy gave birth to pigs so weak that they died soon after birth and the sows showed almost no udder development. Milk flow in livestock was greatly reduced by continuous feeding of small quantities of ergot sclerotia.

Relatively small quantities of ergot may cause serious losses among animals, especially through abortion.

In Europe, where rye bread is more common on the menu than it is in the United States and where grain restrictions may not be so tight, cases of chronic ergot poisoning in man are not unusual, especially in Russia and Italy. Symptoms of the infection are those resulting from contraction of the blood vessels, and generally are a gangrenous skin condition or nervousness.

In animals ergotism is frequently characterized by swellings below the knees or ankles with occasional symptoms of paralysis of the extremities. Any animal showing symptoms of injury from ergot should have its feed changed, should be warmly housed, and liberally supplied with nourishing food. Treatment for ergotism in man should be handled by a physician. External physical contact with ergot normally is not harmful to animal or man.

Controlling Ergot

Ergot control involves a number of actions. No varieties of barley, rye, or wheat are known to be resistant to ergot. The ergot spreads from grasses to cereal crops that are related to them botanically. Therefore efforts other than rotation or obtaining ergot-free seed are needed. However, planting ergot-free seed is desirable.

Sclerotia can be removed by cleaning seed with a specific gravity separator, but aging the seed for two years is preferable. Seed with ergot sclerotia can be planted deep enough that the spore-bearing organs of the sclerotia will not emerge. Of course, only the larger grass seeds lend themselves to this measure.

Deep plowing in an area known to be infected can also bury sclerotia.

Grass crops, fence rows, and waste areas can be mowed or clipped before seed heads bloom. Heavy grazing of grass pastures before heading reduces danger of poisoning to livestock.

Burning infected fields has been an effective ergot control in western Oregon rye-growing areas.

Although the early spring grasses start the ergot season, heaviest infestations often occur in the fall. Some grasses head several times in a growing season, each head adding to the total infestation until by fall the sclerotia incidence is at a peak.

Such a heavy concentration in late grass is especially dangerous to livestock, since leaf growth has virtually stopped, making the seed-head a major part of the grazing diet.

PHOSDRIN
New Insecticide

- Corn Earworm
- Spotted Alfalfa Aphid
- Corn Leaf Aphid
- Garden Webworm

by Lon Nelson

PHOSDRIN, a new insecticide for control of the corn earworm in grain sorghum, has been developed after three years of extensive study and experimentation by Chris C. Burkhardt, professor of entomology at K-State.

Phosdrin has also been used with very good results in control of the spotted alfalfa aphid, the garden webworm in alfalfa, and the corn leaf aphid in sorghum, according to tests conducted during the past year by Professor Burkhardt.

Systemic in Action

The insecticide is systemic in action. It is absorbed by the plant and is carried throughout the plant tissues, which causes destruction of insects feeding within the sorghum head. Corn earworms do not have to come into direct contact with the spray, but are killed when feeding upon any portion of the sorghum head. Phosdrin has been found to be 95 to 100 percent effective.

Although the insecticide is highly toxic to both animals and humans, it loses its poisonous characteristics several days after application. Sorghum that has been treated can be safely harvested and fed two weeks after the last application of phosdrin. This should not be a handicap, since the insecticide must be applied at least two weeks prior to harvest in order to prevent the earworm from causing damage.

Extreme caution should be exercised in handling phosdrin insecticides and they must be applied only by experienced operators, warns Herbert Knutson, head of the department of entomology at K-State. The toxicity of phosdrin is comparable to that of parathion, another insecticide commonly used for the control of various other farm insects.

Farmers not familiar with insecticide application should employ someone who is proficient in this work. One-third to one-half pound of phosdrin per acre should be sufficient to kill most corn earworms. Respirators are highly recommended for persons working in or near the area where the insecticide is being sprayed.

Corn Earworm Solution

Corn earworms are often found inside the sorghum head, which makes surface insecticides virtually ineffective. As many as 16 of the insects have been found on a single sorghum head. This year, in many fields, nearly three-fourths of the sorghum kernels have been damaged or destroyed.

Soon after the sorghum head emerges, the corn earworm moth deposits eggs from which the worm hatches in the head of the plant. The earworms feed on the young sorghum kernels and, until the development of phosdrin, caused heavy damage to the Kansas sorghum crop.

This is the same insect that attacks the ends of ears of corn.

Raising Children on the Farm

by Carol Ward

KIDS who grow up on a farm get a chance to learn about nature and life that a city child just doesn't have," said the middle-aged businessman nostalgically. "It seems to me that when I was growing up on the farm, we had more of an opportunity to work things out for ourselves and to rely on our own ability than my city-raised children have.

"I remember that when the buggy broke down, we didn't call an expert repairman or buy a new one. Instead, we just learned how to repair it by watching Dad, and the next time we knew how to do it ourselves. I guess that holds true today, too."

The self-reliance and independence that the businessman remembers in the farm children of his youth still exists in today's rural youth. It is difficult for a city child to develop them in a world of small crowded homes, tiny yards, and busy streets too dangerous to cross. The open spaces on a farm allow a child room to get out and run without having to be under his Mother's constant surveillance.

You hardly ever hear a farm child voice the everyday plaint of the city youngster, "Mother, what can I do today?" What can a city child do with his time, when there is hardly any yard to mow, or garden to rake, or room in which to ride his bicycle, or keep a pet? There really isn't anything for which his family depends on him, unless someone especially makes a job for him.

In contrast, the farm child soon learns that he is an important part of the family, who has important work to do. He can hardly feel that he is in the way or not needed when the work he does helps contribute to his family's living.

In helping with the chores, the farm child gets a chance to realize that it takes work to make money. He is less likely to take the necessities and comforts of life for granted when he helped make them possible.

Being with his Dad much of the day gives the farm child a chance to get to know and appreciate him. Dad is not merely a shadowy figure who goes away each morning, comes home each night, and somehow in-between makes money for the family.

Unlike the city child, who has little real idea what Dad does, the farm child knows what his work is like. He can also see that Dad has a real role in the home and that he knows how to do all kinds of jobs.

Mother is also an appreciated person to the farm children, although she doesn't spend all her time watching over them. While the boys of the family are busy helping Dad, sister is helping Mother with her work. When she is old enough to be married, she won't have to learn how to keep a

(Continued on page 21)

East Waters Fire

by Loren Henry

K-STATE Aggies are not climbing the three flights of stairs for crops and milling classes in East Waters for the first time since the building was built in 1913.

The structure burned August 25 by a fire of unknown origin. Costing $125,000, East Waters was used for agronomy, milling and animal husbandry departments. The animal husbandry department had already moved to the new animal husbandry building so didn't suffer from the fire.

The loss was estimated at $1,500,000. The structure itself was estimated at $1,110,000, with the balance of the loss going for equipment.

Forty-seven offices, five classrooms,

EDITOR'S NOTE—*The pictures used in this story are exclusive in the Ag Student. None of the pictures have been printed previously.*

This picture was taken facing east from the roof of West Waters during the fire, showing the gutted hull. The inside of the column of three windows at left was the flour mill.

eight instructional laboratories, twenty-seven research laboratories, two reading rooms and departmental libraries, and fifteen vaults and storage rooms were destroyed in the fire.

Personal Records Lost

Members of the teaching and research staff and some USDA employees lost research and records in the fire. Personal research of students studying for their master's and doctor's degrees was the largest loss of research suffered in the fire.

Emergency Fund

The Kansas finance council approved $184,619 emergency fund to furnish the old pavilion and to set up temporary classrooms in the halls leading into East Waters. A contract of $13,160, which came from the

(Continued on page 25)

Scaffolds were built by workmen to raze the teetering north, west and east walls. This picture was taken facing southwest showing workmen tearing the wall down rock by rock.

Broken plaster, hot pipes, and burned wood from the ceiling are characteristic in this picture taken facing north as a fireman is still squirting water into part of the still burning building.

The feed technology wing was undamaged because heavy fire doors separated it from East Waters. The heavy iron fire doors were hot enough to burn a person's hand when he touched them.

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LAST LONGER

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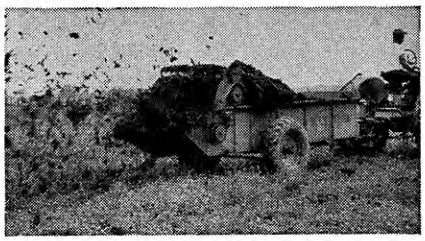
SPREAD WIDER because . . . they have strong, scientifically designed, replaceable paddles to slice manure and deliver a wider, more uniform pattern.

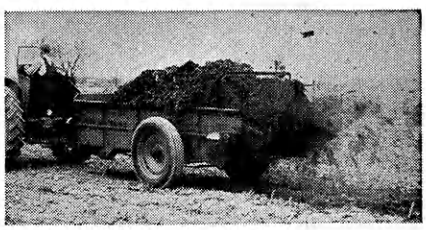
LAST LONGER because . . . they have been built to rigid standards after torture-track and on-farm testing.



The power spreader farmers asked for. NEW IDEA 95-bu. PTO model. Has clutch for easy cleanout. Exclusive features include slanted rear arch, dual purpose control lever, phenolic fiber bearings, and a full year guarantee.

Huskiest, biggest ground driven spreader. Popular 95-bu. NEW IDEA model has slanted rear arch, bigger upper cylinder for better spreading. Long life features include full length steel flares, steel front endgate, water repellent Penta-treated box. Full year guarantee.

Lowest cost, high quality spreader. Ground driven 70-bu. model. For long life, box strengthened with steel flares and steel endgate. Full year guarantee. Available with hubs or barefoot at extra low cost. 4-wheel, tractor or horse-drawn 75 bu. spreader also available.



Giant of the New Idea spreaders. 125-bu. PTO model has new clutch for easy cleanout. Triple-staggered U-teeth give extremely fine shredding. 18 new features for extra strength, longer life. Full year guarantee.

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SILOS

☐ Trench
☐ Bunker
☐ Elevated

by Don Schick and Loren Henry

TWO YEARS ago I sold 40 tons of feed because I didn't have any place to store it," F. G. Jones, a central Kansas farmer, said. "Last year I raised no crop and had to sell 75 head of my breeding stock."

Farmer Jones is one of many Kansas farmers who had to sell their breeding herds last fall because of the lack of feed. These herds were not built over-night, but the farmers sold them over-night.

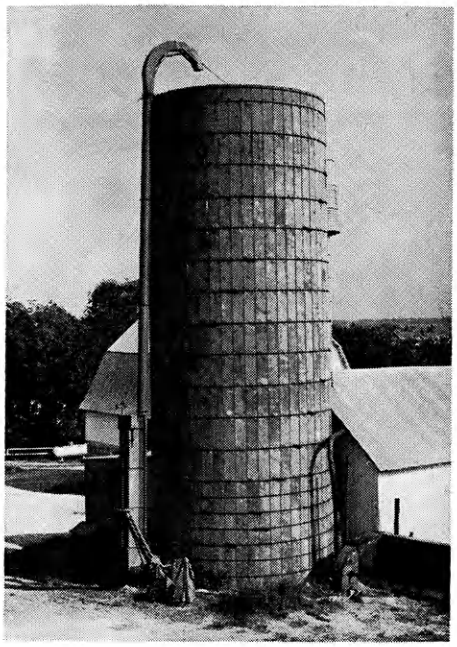
One way that farmers can store their excess feed is in silos. The trench silo is a solution for efficient economical feed storage.

There are three points to consider —construction, filling, and feeding— before building a trench silo, according to Leo T. Wendling, extension agricultural engineer. The silo should be constructed in soil that will not crumble readily. Its location needs to be handy to the field as well as the feedlot because it is expensive to haul silage long distances.

A trench silo can be quickly and easily constructed with farm equipment and labor for storage of large quantities of feed. It is adapted to economical harvesting, since self-dumping wagons and trucks can be unloaded directly into the silo.

The earth-walled trench silo lasts only three to twelve years, depending on the type of soil in which it is dug, but the cost of construction is less than the elevated silo.

Elevated silos are more expensive to fill and may have a higher construction cost.



Being well adapted for either grass or forage silage storage, silage can be removed with a minimum of expense with farm power, but snows, rains, and freezes can make it hard to remove.

There is room in a trench for a tractor so packing of the silage requires less labor. If storage space is not sufficient the silo can be lengthened easily with very little expense.

Trench silos have more loss of nutrients from leaching and top spoilage than the upright silo. Rains on an uncovered silo will carry nutrients out by leaching. To reduce top spoilage and leaching a farmer can cover the silage with dirt, old straw, or tar paper.

The earth-walled silo, which has to be reshaped frequently, is an ugly hole when it is empty.

Construction

The earth-walled trench silo lasting 3 to 12 years can be constructed for approximately 50 cents per ton for its capacity. To put a concrete floor in the silo would cost about another dollar per ton. A completely concrete lined trench costs about $5.00 per ton for its capacity and lasts 25 to 30 years, according to Wendling.

Another type of silo that has gained popularity in the last few years is the bunker or above ground trench. Self-feeding of livestock is more practical in the bunker than in the below-ground trench silo, because it can be located as part of the feedlot and still be convenient to fill.

The chief disadvantage of the bunker is that it costs so much more to construct than the unlined trench silo.

A student in landscape design locates the different varieties of shrubbery in Kansas.

Make Yo
In *Modern*

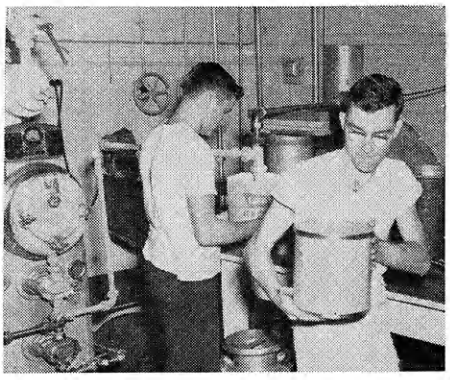
by Therean Towns

AGRICULTURE promises opportunity for college graduates. Technological advances in modern agriculture create a demand and a promising-looking future for future ag graduates.

It is a fact, however, that enrollment in the nation's agricultural schools is down. A popular reason given is that fewer ag graduates are needed, since there are fewer and larger farms and low farm prices. This belief is erroneous because farming is but a part of the field of agriculture. Agriculture industry is still making great strides of progress. A decreased agricultural enrollment would indicate, therefore, that more and better job opportunities will be offered future ag graduates.

Kansas State college, a land-grant college, prepares students for a variety of jobs in agriculture and related fields. A number of curriculums and options make possible the study of any part of the agricultural field.

Processing of ice cream, a dairy product, is taught to students in dairy manufacturing.



General Agriculture

A curriculum in general agriculture is provided for students who are not certain what phase of agriculture to take up. Students in this curriculum need not select their major field until the end of their sophomore year. The curriculum provides the basic courses of soils, crops, agricultural economics, animal husbandry, dairy husbandry, poultry husbandry, entomology and horticulture. Students may also branch out to botany, zoology, bacteriology, agricultural engineering, or other related fields.

Technical Agronomy

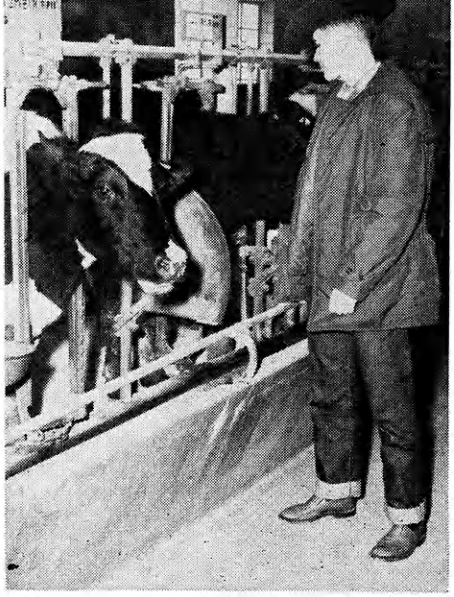
Technical agronomy is a curriculum with four options offering technical study. Option A deals with soil structure, analysis, and general soil science. Option B offers study of erosion control, contour farming, and soil conservation. Option C is offered for students interested in plant breeding and crop science. Option D deals with wildlife conservation.

Ag Journalism

A student who wants a broad knowledge of agriculture and enjoys writing can apply both in Agricultural Journalism. Graduates find good opportunities in government information and agricultural extension services, farm radio and TV departments, agricultural publications, advertising agencies, and a variety of other agencies. By selecting 12 additional hours in any department of the School of Agriculture a student may earn a degree in that department in addition to his ag journalism degree.

Is this your concep

ur Career
Agriculture



Proper feeding of dairy cattle is learned by students majoring in dairy husbandry.

Ag Economics

Training in the economic and sociological aspects of rural life is given in the agricultural economics curriculum. This is primarily a study of farm management, taxation, land utilization, and other rural economic problems and relationships.

Students wishing to specialize in one of the various phases of the dairy products industry can take the curriculum in dairy manufacturing. Electives may be selected for specialization in one of three fields: either dairy plant operation, dairy plant management, or as a dairy products technician.

Ag Education

Agricultural education is a curriculum for training students to be agricultural teachers in high schools. Graduates qualify for a state certificate for teaching vocational agriculture.

Professional landscape firms and various other agencies offer jobs to graduates in landscape design. The curriculum stresses plant materials, planting design, and rendering of landscape plans.

Training in the various phases of horticulture, either practical or professional, is given in the horticulture curriculum. Students interested in the field enroll in the curriculum of general agriculture for their first two years.

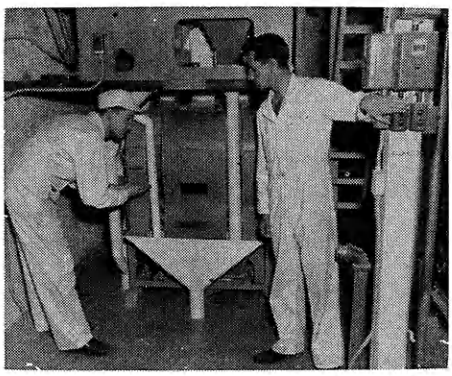
Several curriculums are offered in flour and feed milling industries. Milling technology offers options in operation, chemistry, and administration. Feed technology has options in operation, nutrition, and administration.

The latter, offered at K-State, is the only major of its kind offered in the United States. A fire in August in the mill destroyed much of the equipment, but the department states that training facilities have been provided so there will be no major detriment to the students.

This article does not try to list all of the many fields and opportunities in agriculture, but it should be evident that farming is but a small part of the agricultural picture. According to statistics agricultural industry demanded about 15,000 ag graduates last year, but the nation's land-grant colleges graduated only 8,500. Agriculture provides more jobs and careers in the city than on the farm. Forecasts predict better opportunities and higher paying jobs for future ag graduates. This is the purpose of Ag Week's campaign to "make your career in modern agriculture."

on of agriculture?

Experience in laboratories enables milling students to acquire practical knowledge.



Locating Farm Buildings

by
Fred
Clemence

MANY improvements are being planned and made by Kansas farm families. If your farmstead is to meet future needs, you will find it helpful to make a long-time plan which will provide for gradual changes that will fit into the overall picture.

Locating the Farmstead

Your family will enjoy planning a farmstead for efficiency in building arrangement, attractiveness, health, and enjoyment, as well as meeting the practical needs of a particular type of farming program.

Whether you make gradual changes on your present site or build the farmstead on a new site, plan the farmstead in the most desirable location with an efficient and attractive arrangement of buildings and working areas.

The building site should have adequate drainage. A slope of two to three percent is desirable. Too much slope may cause soil erosion in the yard, drive, and around foundations. If your farm buildings are located in poorly drained soil, improve the drainage by filling and grading. An ample supply of pure water is essential. The farmstead need not be located on the most productive land of the farm, but the soil should be good enough to produce vigorous growth for garden and lawn.

In general, the farmstead should be located near the middle of the side facing a public road. A farmstead located near the center of the frontage on the best improved public road will have the following advantages:

(1) It may be easily reached from the road without the expense of a private road or lane. Private drives are often muddy or blocked with snow.

(2) Electric and telephone lines may be provided with a minimum of expense.

(3) Services such as mail delivery, school bus, and milk and cream pick-up will be most convenient.

(4) An efficient field arrangement can usually be provided.

(5) The family will be in close contact with their neighbors and with off-the-farm activities.

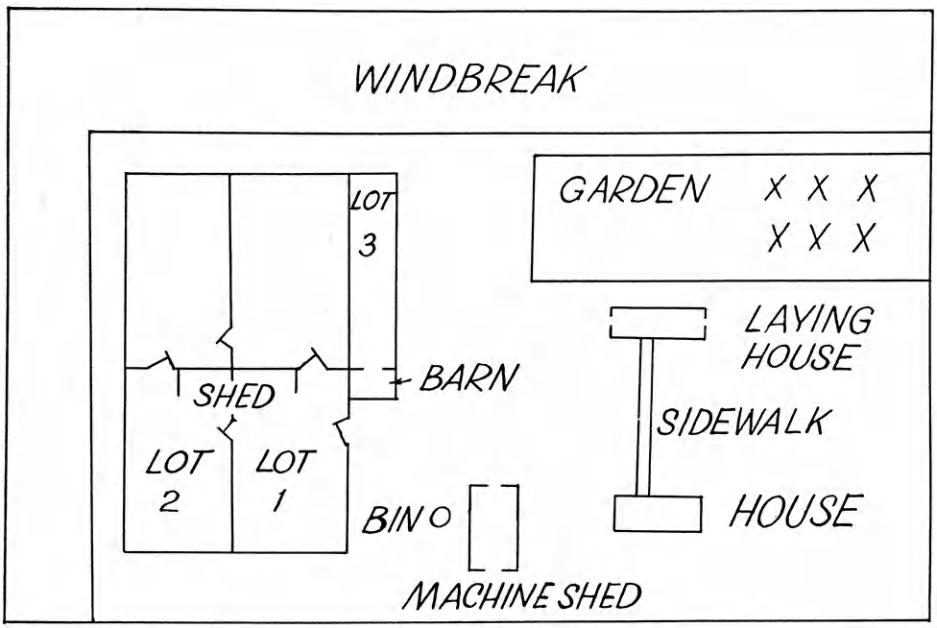
In some cases, you may consider a location near the center of the farm, since the farmstead will be removed from the dust, noise, and danger of the public road. Nearness of fields to the farmstead is not as important as it used to be due to development of rubber tired equipment.

Farmhouse Location

You should place the dwellings nearest of all the farm buildings to the public road, and not in the path of summer winds from the barn and hog lots. The dwelling may be 200 feet or more from the road, but seldom less than 100 feet.

The kitchen-utility area should face the drive and farm buildings. The main entrance to the house should be accessible to the drive and preferably face the drive.

You should build the driveway to enter the farmstead at the side of the



When planning farm building sites for future needs sketches like this help farm owners get their future farmstead in the most desirable, economical and attractive location.

lawn. Surface the drive 12 to 18 feet in width, but allow 30 feet between fences or plantings to permit movement of wide machines. Provide space for parking automobiles and for passing of trucks and machinery being driven from the highway to the center court.

The parking area should be near the sidewalk of the front entrance for convenience. Drives on the south side of the dwelling should be surfaced to prevent dust blowing toward the house. An outdoor household service area should be provided to include space for the clothes line, fuel storage and, if desired, a cave. Household service should be located near the rear entrance of the house. Put vegetable gardens, small fruit areas, poultry yards, or grass lots adjacent to the home grounds. The garage should be close to the house or may even be attached to it.

For a more attractive farmstead you may prefer to have no fence for the lawn along the drive. It is better to fence chickens and livestock in pens than to try to fence them out of the yard.

Building Location

Locate farm buildings on the edge of a central court and farther from the main road than the dwelling. Buildings should be accessible from the house without opening gates. Don't use the central court for livestock pens. A width of 80 feet is recommended as the minimum width of this court. The area in the open court provides for work space, trees for shade and beauty, and enables you to do chores with a minimum amount of walking.

Pave Drives

You will want to surface the much-traveled portions of the court with oil, gravel or concrete to provide suitable surface for moving trucks and machinery. Stock guards in fences between the court and fields will permit passage of tractors and other machines without opening gates. A gate to the side of the stock guard may be used for driving livestock from one area to another.

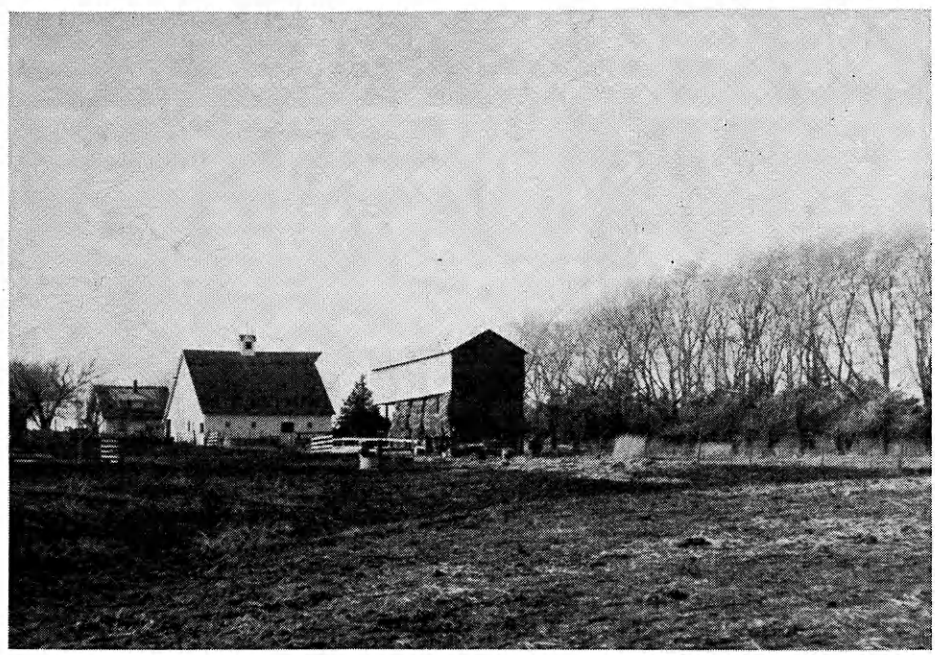
You should locate the well 50 feet or more from barn lots, outside toilets, or other sources of pollution. Place the well on a high area to avoid surface contamination and build a sanitary cap over the well to exclude surface water. You will want some type of supply system to force water into the dwelling and to the poultry and livestock areas. This may be an elevated tank, a hillside reservoir, or an automatic pressure system.

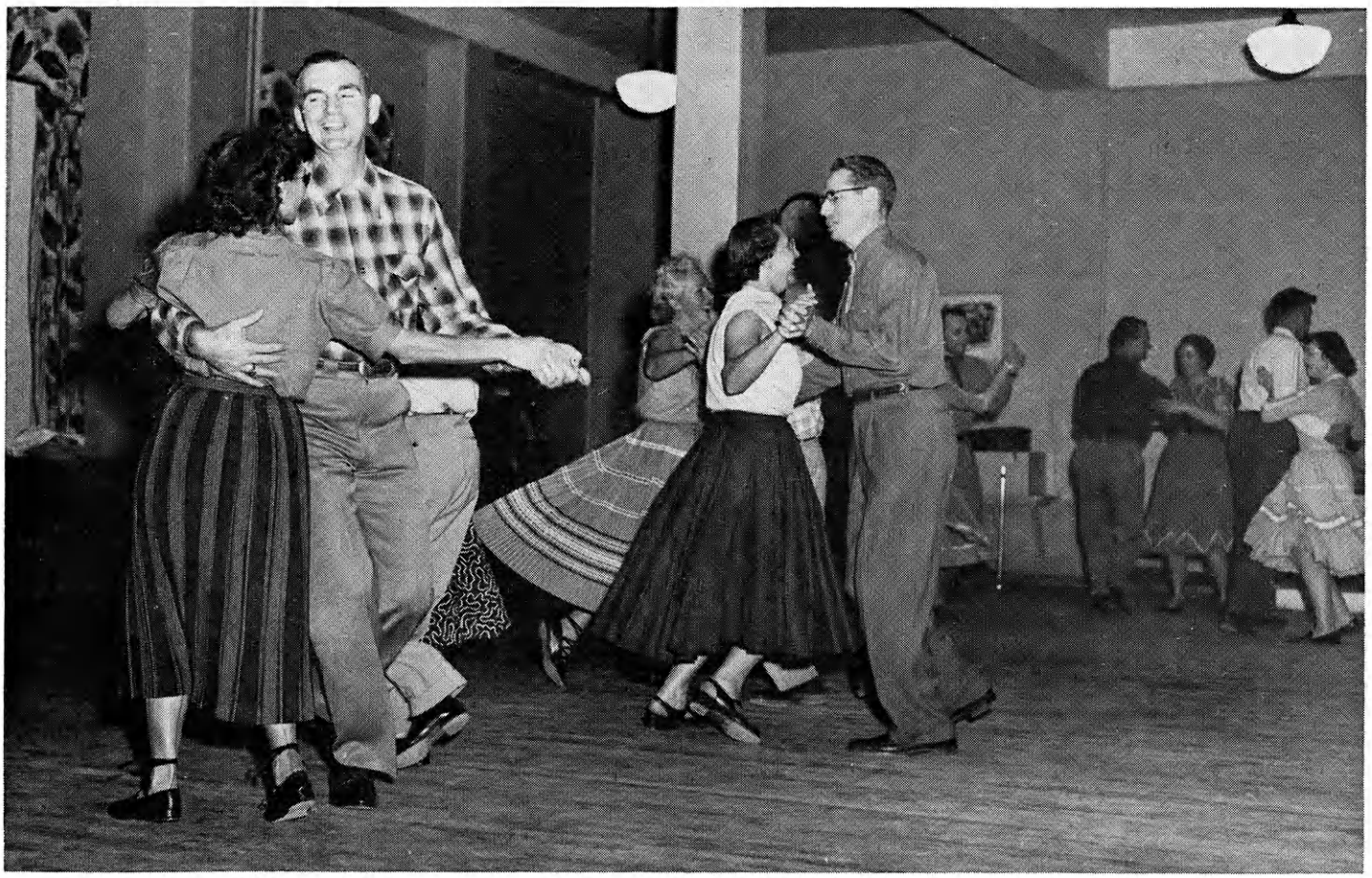
The septic tank may be located as close as 10 feet to the dwelling. You should build it at least 50 feet from the well and place the tile disposal field down grade from the well. Grass is the most satisfactory coverage over the drainage tile. Leave a 50-foot distance between the drainage field and trees to prevent the outlets from becoming clogged with roots.

Plan for the Future

Will your buildings meet future needs of your farm? Build economical units of a size that will fit your farm plan for the future. Make your farmstead attractive. Keep it clean and well arranged for convenience and service. Make it one to be proud of. It is your home.

Any combination of locating farm buildings is desirable as long as it meets the farmer's needs, but it is recommended that feedlots be located on the east side of the farmstead.





Square dancing with the neighbors is becoming an ever growing type of recreation for farm families as well as people living in urban areas. Members of the K-State faculty enjoy evenings of square dancing to get to know each other better personally.

Farm Family Fun

by Pat Clary

TODAY'S rural people actually have the edge on their city cousins when it comes to enjoying leisure time as a family unit. Studies have shown the farm child spends more time working and playing with his parents than does the city youngster.

According to Miss Ruth Hoeflin, head of the department of family and child development at Kansas State College, this closeness of parents and children can be the basis of a good family recreation plan. Miss Hoeflin believes it is the family's responsibility to prepare children for the social situations all young people are thrown into as they grow older. A well balanced family recreation program is probably the best way to fulfill this responsibility.

Though some of us may think of a city's playground activities when we hear about a recreation program, most of us now realize that recreation isn't a magic word. Recreation is just as it sounds—a re-creation of strength and spirit.

Recreation Has Trends

Family recreation is not new, for Colonial families probably had as much "fun" with all members taking part as does the modern family. The "fun" Colonial families had was

often pitching in on a household task or lending skill to build a neighborhood church. The first American families had other kinds of fun, too. They had square dances, taffy pulls, spelling bees, quilting parties, house warmings, and many evenings of telling stories and eating popcorn around the fireplace.

Then a great change took place. The family stopped being producers and became, instead, primarily consumers. Every phase of family life was adapted to time-saving equipment and methods. Family members had more time free from household chores than ever before. But they also had more obligations outside the home. More and more time was being spent away from the home and away from other family members.

Before long rural residents learned that the family must be drawn together. And the best way to do this was through a recreation program in which all family members could take part.

Vary Recreation

Today we take for granted that each family needs a recreation program that shifts between planned and spontaneous. Certain planned activities are needed to give family members, especially children, something they can look forward to. This may be a neighborhood Halloween party or a family trip to the north pasture to get the Christmas tree.

And spontaneous activities are needed to keep family members alert, refreshed, and interested in each other. The family may decide to get out a jig-saw puzzle, have a spelling contest, or read from the Bible after dinner.

Making fun of work projects, which stemmed from Colonial life, is doubtless one of the best ideas even in modern times. In many rural communities a family or group of families will undertake a long range plan which may take much time, energy, and money. But a croquet court, archery range, or rumpus room soon becomes a reality with everyone helping. Often recreation facilities made available this way are more appreciated than those which are not a work project of several people.

Many activities, however, require little, if any, expense. These are especially adaptable to persons who have limited time and resources. Here we find modern "parlor" games, singing, dancing, reading, and a great array to fit any particular needs and desires. Wise parents plan the use of time when children are home in ways that will be most helpful to the social, educational, and spiritual development of the children.

If Bobby has trouble in spelling class at school, Mom skillfully arranges after dinner spelling bees for the whole family. Everyone will have fun and learn to spell at the same time. Bobby rarely realizes the whole thing was planned especially for his benefit.

Although the television set has become one of the most important parts of today's home it needn't replace creative activities. Television is a good supplement for a family recreation plan. It is most valuable when adults are tired and will enjoy quiet relaxation. And nearly all parents will agree that when certain hours are set aside for televiewing the set becomes valuable in establishing rest periods for children.

Recreation Is Enjoyment

Recreation means different things to each of us. For some it may be mastering a difficult crossword puzzle. And for others it may be simply watching a beautiful Kansas sunset.

Whatever makes up the recreation in your life, make it real and worth while to you and your family. Remember that the farm family has a good start because children spend so much time tagging their parents while chores and everyday farm tasks are being done.

With this good start and with a little help as children grow older, the farm family will not find it hard to shape a successful recreation program.

Neighborhood picnics give families a chance to meet and have fun together even though Mom has trouble keeping the boys out of the fried chicken as she gets the food ready.

Raising Children

(Continued from page 9)

house. She'll already know from experience.

Farm children develop a sense of responsibility that will be a help to them all their lives through having specific important duties, not just little tasks designed to keep them busy. If Johnny's chores include milking the cows, he knows that the job is one that must be done and that everyone is depending on him to do it. Suzie knows that if she doesn't gather the eggs, no one else will.

Chores Develop Interest

Not that the chores are always a tiresome task, though. Usually the child gets such an interest in some of the chores that he develops them into a 4-H project. And no one can claim that chores such as riding the pony to bring in the cows is boring.

Room on the Farm

Farm life isn't all work for the child. In fact, living on a farm gives a child a lot more chance for fun than living in an urban area would.

There is room to have pets to romp with. In the summer, there may be swimming in the creek or pond. There is room to have school friends out for picnics, softball games, and horseback riding. Modern means of transportation have taken the sense of isolation out of farm living.

Farm Fun Facilities

In the fall, the facilities for hay rack rides, dances in the barn, and wiener roasts are right at hand. When winter comes, there is ice skating on the pond and sledding on the dirt roads, without fear of city traffic.

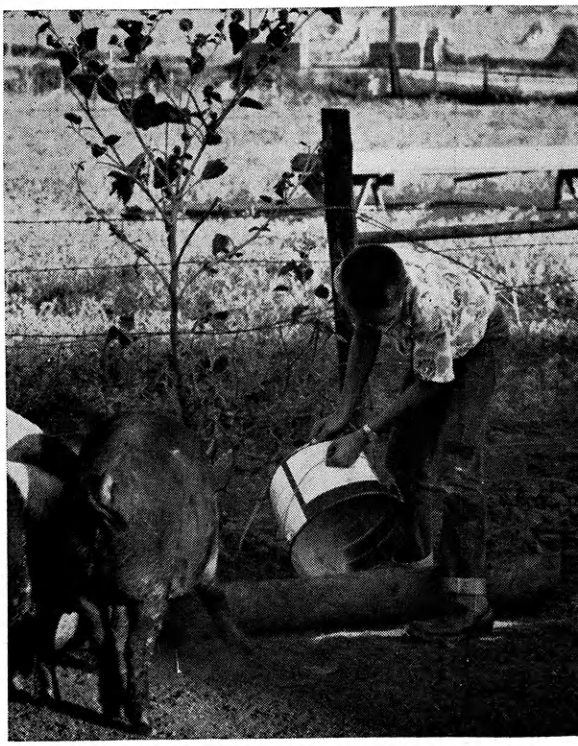
Fun, responsibility, initiative, and knowledge are all a part of the life a child raised on a farm develops naturally.

Two deaf men were on a country road. John had a fishing pole in his wagon. When he saw his friend Jim he stopped.

Jim (shouting)—Goin' fishing?

John—No, I'm goin' fishing.

Jim—Oh, I thought mabbee you was goin' fishing.



Johnny is helping his dad with the daily chores. By doing this he feels that he is sharing in a part of the family work.

Editor's Pen

(Continued from page 4)

evening in the animal industries building.

The Ag Barnwarmer will climax the week. The Barnwarmer will be held from 9 to 12 p.m. in the Student Union ballroom. During intermission the Ag Queen will be announced from the five finalists she will be selected from. The five finalists will be chosen from the 17 candidates pictured on the opposite page. Selection will be made by ballot of Aggies at an assembly held November 7.

Even with the addition of several serious aspects to Ag Week, it will retain its colorful gaiety and still be a week of fun. So get out your red neckerchief and put on your boots, jeans, and plaid shirt, and we'll see you on the K-State campus the week of November 11.

The five Ag Week Queen finalists call on their carpentry skill to complete hog troughs in an allotted time. The co-eds compete in Queen's chore day to display agricultural tendencies, but the main purpose is to introduce the girls to members of the Ag School.

In the Aggies' World

Ag Ed Changed

FRESHMEN, sophomores, and juniors who are pursuing the curriculum in agricultural education can look forward to a wide departure from the usual schedule when they come into their senior year.

Formerly seniors in agricultural education have spent approximately two weeks in the field in practice teaching.

Beginning with the fall and spring semesters of 1958-59, seniors will spend a full four weeks in selected practice teaching centers in certain Kansas high schools.

To compensate for the full four weeks, these seniors will be out of classes. The length of their class periods will be extended under a block-plan of scheduling, which will give them the same number of hours in classes, as though they had not taken out four weeks for practice teaching.

Seniors who come into their senior year as irregular students probably will have a more difficult time fitting their required courses into the plan for senior-year scheduling.

Ag students may get their mail from the dean at the mail box located on the first floor of Waters opposite the dairy department.

Only illness excuses are to be obtained at the Student Health service. All others are to be gotten in Dean Mullen's office in room 116 of Waters hall.

Dairy Teams Win

THE junior and senior dairy teams won the international collegiate dairy cattle judging contest and the national dairy cattle congress contest respectively.

The junior team participated at Chicago and the senior team participated at Waterloo, Iowa.

The members of the senior team were Gilmore Dahl, Charles Michaels, and Jack VanHorn, and the alternate was Darrell Westervelt.

In the individual honors Michaels placed fifth, Dahl sixth, and VanHorn nineteenth. Michaels placed first in the Ayrshire contest while VanHorn and Dahl tied for sixth and seventh in the Brown Swiss contest.

Competing with 33 other teams, the team placed first in Ayrshires, second in Jerseys, and fourth in Brown Swiss.

The members of the junior team were Chester Peterson, Dick Dunham, and Stanley Smith. The team won possession for a year of a rotating trophy donated by the Curtiss Candy Company, and worth about $7,000.

In individual honors Smith was fourth, Peterson fifth, and Dunham thirteenth. Dunham placed first in Guernseys; Peterson placed fourth in Milking Shorthorns, sixth in Holsteins and Brown Swiss, and ninth in Ayrshires; and Smith placed fifth in Milking Shorthorns, sixth in Ayrshires, eighth in Jerseys, and ninth in Guernseys in the individual breed classes.

Out of a total of sixteen teams, the team placed first in Guernsey and Milking Shorthorn judging.

Waters Fire

(Continued from page 11)

emergency fund, was awarded to raze the north, east, and west walls of the flour and feed mill.

The Board of Regents requested an emergency fund of $69,750 to put an incombustible roof on the building, to close the openings left from the burned-out windows, and to weatherproof the exposed north wall.

This action was taken on a recommendation of a committee appointed by the board. The committee was Arthur D. Weber, acting president, R. F. Gingrich, director of the physical plant, C. Peairs Wilson, acting dean of the School of Agriculture, John Brink, state architect, and two other architects.

The fire is nearly under control, but only after long hours of fighting by Manhattan, Fort Riley, and K-State fire departments.

A wrecking crane was used for razing the west wall of the mill, but razing of the north and east walls had to be done by hand.

The haughty senior girl sniffed disdainfully as the tiny freshman cut in. "And just why did you have to cut in when I was dancing?" she inquired nastily.

The freshman hung his head with shame. "I'm sorry, ma'am," he said, "but I'm working my way through college and your partner was waving a five-dollar bill at me."

A city coed, telling parents about aggie boy friend's farm, said: "It's one of those experimental farms where the cows have calves without any bulls around. They call it artificial inspiration."

The new farm hand was awakened at 4:00 a.m. by the farmer, who announced that they were going to cut oats.

"Are they wild oats?"

"No, why?"

"Then why do you have to sneak up on them in the dark?"

"Mother, are there any skyscrapers in Heaven?"

"No, son, engineers build skyscrapers."

In Holland, Ex-Lax is called "Old Dutch Cleanser."

Summer Visitor—"I do hope you keep your cows in a pasture."

Milkman—"Yes, madam, of course we keep them in a pasture."

Summer Visitor—"I'm so glad to hear that. I have been told that pasteurized milk is much safer."

Ralph: "I like mathematics when it's not over my head."

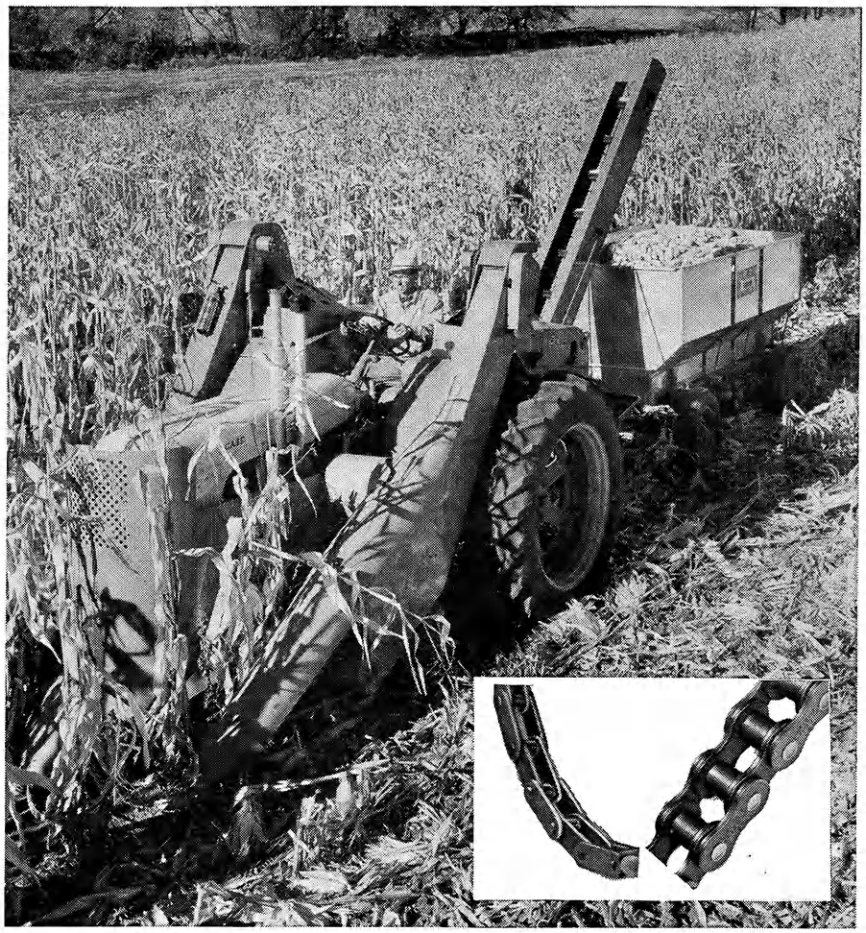
Jim: "That's the way I feel about seagulls."

Wife (to drunken husband at door): "Drunk again."

Husband: "Me too."

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

What every "ag" engineer should know about drives and conveyors:



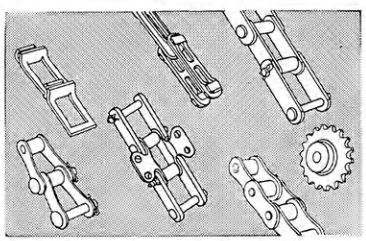
CHAIN does it better— and this TRADE MARK means the best in chain

SUBJECTED to ever-increasing work loads . . . exposed to dust and all kinds of weather—today's farm machines need drives and conveyors that perform positively, without slip, with minimum wear. Nothing else answers those demands with the efficiency of chain.

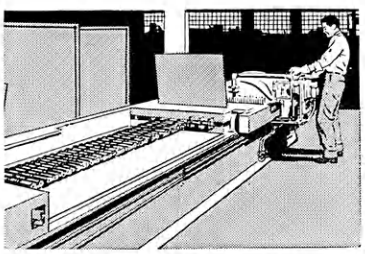
And on over 400 leading makes of farm equipment, Link-Belt is the chain specified. By giving designers the correct answer for any combination of requirements—strength, load, hp, speed—this complete line offers unmatched flexibility in applying chain to modern machines.

Since 1875 Link-Belt has worked with America's agricultural engineers to increase the efficiency of farm machinery. Then as now, the Link-Belt trade-mark identifies the best in chains and sprockets.

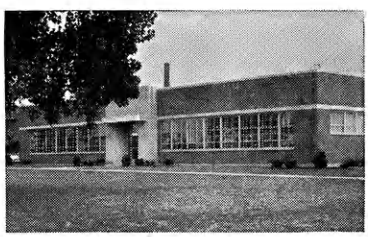
THIS J. I. CASE 420 CORN PICKER incorporates both Link-Belt precision steel roller chain and "AG" chain — each chosen for its ability to satisfy specific operating conditions.



COMPLETE LINE of Link-Belt agricultural chains, sprocket wheels and attachments permits cost-saving specialization—offers the right chain for all your conveyor and drive requirements.



ACCURATE MANUFACTURE and inspection with specialized machines allow mass-production economies. Extensive facilities are ample to meet your production schedules.



LABORATORY CONTROL assures you that each chain meets rigid uniformity specifications. Our modern laboratory continuously explores new refinements to increase chain life.

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THE SYMBOL OF QUALITY — LB — LINK-BELT

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Animal Industries Building