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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JANUARY 6, 1958

## Be Ready for Fire

If fire should strike your farm, are you ready and is your fire department prepared to attack the fire most effectively and quickly?

Of course, the best way to fight a fire on your farm, says O. L. Hogsett, extension safety specialist at the University of Illinois, is to prevent it from ever starting. There is much you can and should do before a fire actually starts that will save lives and property.

Make sure your fire department has a diagram of your farm-- the buildings and their interiors and location of water supplies, both primary and alternate.

Make sure everyone on your farm knows how to telephone an alarm to the correct exchange.

Make sure everyone knows how to operate the right extinguisher for the different kinds of farm fires. Remember, too, that extinguishers need regular checking and rechecking.

Another good practice is to invite the fire marshal to inspect your buildings and premises regularly for possible fire hazards that you may not recognize.

Now during spring clean-up-time is a good time to ask for such an inspection.





Report Costs and Incomes for Soil Bank Bids

Guides for Illinois farmers who want to bid on the new experimental soil bank program were given today by University of Illinois agricultural economists R. A. Hinton and D. F. Wilken.

These estimates are based on incomes received over and above direct costs from 1951 to 1957 and allow for use of the farmer's labor in other employment. Central and northern Illinois farmers will find bids of \$26 to \$40 needed to cover interest on their investment, taxes and general farm expenses, whether the land is farmed or not.

In southern Illinois, incomes over direct costs will run from \$15 to \$30 after deduction for labor that would be employed elsewhere.

The economists emphasize that rotations and yields will greatly affect the amount of income over costs. In central and northern Illinois, where corn averages 90 bushels, soybeans 30 bushels, oats 50 bushels and wheat 30 bushels, differences range from about \$35 to \$49. On Cisne silt loam, a soil typical in southern Illinois, income over costs under different cropping systems range from about \$18 to \$26.

But these incomes also include payments to the farmer for his labor, part of which could be used elsewhere if the whole farm were in the soil bank. This will run from \$6 to \$8 an acre on most Illinois farms.

To get a fair return for land put into the soil bank, the economists emphasize that a farmer should get a reasonable return on his investment in land and buildings. In addition, he should be able to



pay his taxes and have enough to cover general farm expenses, such as building and fence maintenance and weed control.

A farmer would need a payment of \$16 an acre to get a 4 percent return on land worth \$400 an acre. Taxes may be as high as \$4 an acre on some farms. General farm expenses may run \$2 to \$3 on many farms. County farm advisers can supply more detailed information on the income and costs from different crops and rotations.

Avoiding risks is one problem that can be solved by putting land into the soil bank for five years. A guaranteed income may be worth several dollars an acre to some farmers. This is something all those bidding on the soil bank program will want to keep in mind, the economists conclude.



Announce Program for Crop Performance Day, January 22

Speakers for the University of Illinois Crop Performance Day on Wednesday, January 22, were announced this week by Chairman W. O. Scott.

The program begins at 10:00 a.m. in the new Law Building auditorium on the campus.

Commercial hybrid corn tests in 1957 will be reported by J. R. Ross, assistant in agronomy. More than 400 hybrids from about 60 companies were tested at 10 different fields around the state. R. W. Jugenheimer, UI corn breeder, will report performance of experimental corn hybrids. Ben Koehler, plant pathologist, will describe corn disease problems encountered in 1957.

Soybean performance reports will complete the morning session. J. L. Cartter, head of the U.S. Regional Soybean Laboratory will discuss soybean oil production. D. W. Chamberlin will tell about soybean diseases and threat of the soybean cyst nematode.

During the afternoon session, F. W. Slife, UI weed specialist, will report latest findings in controlling weeds in corn and soybeans. C. N. Hittle will show how grain sorghums performed in Illinois during 1957. R. O. Weibel will tell about spring barley and wheat variety performance. W. O. Scott will cite differences between certified and non-certified alfalfas.

S. R. Aldrich and J. W. Pendleton will report 1957 results with minimum-tillage research on corn. Aldrich will also describe the use of chlorides and water-soluble phosphates in corn production.

This program is designed to give Illinois farmers the latest information on 1957 crop performance research in time for use in 1958. On Wednesday evening, the Illinois Crop Improvement Association will hold its annual banquet in the Urbana-Lincoln Hotel. All those attending Crop Performance Day are welcome to attend.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and expansion. It begins with the first settlers who came to the shores of the Atlantic coast in the early 17th century. These settlers established colonies that would eventually become the thirteen original states.

The early years of the colonies were marked by a struggle for independence from British rule. The American Revolution, which began in 1775, led to the signing of the Declaration of Independence in 1776. This document declared the colonies as free and independent states.

Following the Revolution, the new nation faced the challenge of creating a stable government. The Articles of Confederation, the first constitution, proved to be weak and ineffective. This led to the drafting of the current Constitution in 1787.

The Constitution established a system of three branches of government: the executive, the legislative, and the judicial. This system of checks and balances has been a cornerstone of American democracy ever since.

The United States has since grown into a world superpower. It has played a leading role in the development of the modern world, from the industrial revolution to the space age. Its influence is felt across the globe.

Today, the United States continues to face new challenges, such as global climate change and international terrorism. However, the values of freedom, democracy, and justice that have guided the nation since its founding remain its guiding principles.

The history of the United States is a testament to the power of the American dream. It is a story of a nation that has overcome adversity and built a great and powerful country.

As we look to the future, we must continue to uphold the values that have made the United States a great nation. We must strive for a better world for all people, both here and abroad.

Nutrition Conference at Urbana January 30

More than 300 agricultural scientists and members of the feed industry are expected at the sixth annual Feed and Nutrition Conference at the University of Illinois on Thursday, January 30.

Program topics for the morning session include chemical analysis of feeds and their implications, a chick assay for evaluating protein supplements, the amino acid story for swine and phosphorus supplements and their availability.

Guests at the afternoon session will hear about the nutritional aspects of feeding high-moisture corn, improvement of dairy cattle feeding, a panel discussion of pelleting feeds for livestock and poultry, recent developments in ruminant nutrition and the use of tranquilizers in the livestock industry.

Registration for the conference begins at 8:00 a.m. in the Illini Union ballroom. T. S. Hamilton, associate director of the Illinois Agricultural Experiment Station, Urbana, is scheduled to welcome the conference visitors. Alvin Lovekamp, New Berlin feed manufacturer, who is president of the Illinois Feed Association, also will help to open the program.

Guest speakers on the program include S. W. Hinnners, Southern Illinois University; M. B. Gillis, International Minerals and Chemical Corporation; W. M. Beeson, Purdue University; and O. G. Bentley, Ohio Agricultural Experiment Station.

University of Illinois staff members on the program will be Joseph Kastelic, D. E. Becker, K. E. Harshbarger, A. H. Jensen, R. J. Webb, K. E. Gardner, F. C. Hinds and A. B. Hoerlein.





Move Junior Chicken Contest Deadline to March 1

Illinois 4-H and vocational agriculture members with poultry projects will observe a deadline date of March 1 for entries in the 1958 Junior Chicken-of-Tomorrow contest.

O. F. Gaebe, state leader of agricultural 4-H Clubs at the University of Illinois, reminds the junior growers that hatching dates this year will be March 24, 25, 26 and 27 for contest entries.

An entry shall consist of 50 cockerel chicks of one breed, strain or cross, Gaebe says. Contestants may submit more than one entry so long as each is of a different breed, strain or cross. Contestants are urged to grow larger broods, but entries for final judging must come from the 50 banded chicks in each entry.

Local hatcherymen from whom the contestants buy the chicks will get the necessary wingbands and hatching certificates from Clarence Ems, poultry division of the State Department of Agriculture, Springfield. Birds must be banded as day-old chicks.

Contestants will deliver 10 live cockerels from the banded birds to Armour Creameries, Lincoln, between 8:00 a.m. and 2:00 p.m. CDT on May 21. The best eight cockerels will be considered in making the final placings.

Judging will start at 9:00 a.m. on May 23 at the Armour Creameries. The processing plant will pay prevailing broiler market price for all entries. A premium will be paid on the basis of one cent a pound for the total number of Grade A birds of each entry.

Cash prizes and ribbons furnished by the Illinois Poultry Improvement Association will be awarded to winners in three sections, with trophies to the first five state winners. Ask your county farm adviser or your vocational agriculture teacher for full information and official entry blanks.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and change. It begins with the first settlers who came to the shores of North America. These early explorers and settlers faced many hardships, but they persevered and built a new society. Over time, the United States grew from a small colony to a powerful nation. It fought wars, both with other nations and with itself. It has made great contributions to science, art, and industry. Today, the United States is a land of freedom and opportunity, where people from all over the world come to live and work. The history of the United States is a story of hope and achievement.

Sneezing IS First Sign of Cat Flu

Sneezing, increased temperature and depression are the first signs of cat flu, says Dr. Dragutin Maksic of the University of Illinois College of Veterinary Medicine.

The veterinary medical term for this disease is infectious feline pneumonitis, which means a contagious pneumonia of cats.

After two days, an infected cat will show a discharge at the eyes and nose in addition to coughing and sneezing. Because of the discharge, the eyelids may become closed and the nostrils plugged.

Most cases, if properly cared for, will recover after 10 to 14 days. But a small percentage of infected cats develop complications. Their breathing is labored, they sneeze, cough, shake their heads, and show effects of blindness. Their movements are not coordinated and appetites are impaired. Cats with complications may die from pneumonia, or they may not recover for many months.

Dr. Maksic warns that cat flu is caused by an air-borne virus that spreads very fast among the cat population.

Cats infected with flu should be isolated from healthy animals. Stray and loose cats are the main source of infection. If a stray cat is adopted, keep it separated from other cats for about 10 days.

Vaccination of single animals is not economical because immunity is short. It can be useful, however, in controlling an outbreak in catteries. The vaccine is not yet commercially available.

CHAPTER I

The first part of the history of the United States is the history of the colonies. The colonies were first settled by the English in 1607, and they grew in number and importance until the Revolution of 1776.

The second part of the history of the United States is the history of the Union. The Union was formed in 1787, and it has since that time been the center of the nation's life.

The third part of the history of the United States is the history of the present. The present is the result of the past, and it is the result of the efforts of the people of the United States.

The fourth part of the history of the United States is the history of the future. The future is the result of the present, and it is the result of the efforts of the people of the United States.

The fifth part of the history of the United States is the history of the world. The world is the result of the past, and it is the result of the efforts of the people of the United States.

The sixth part of the history of the United States is the history of the nation. The nation is the result of the past, and it is the result of the efforts of the people of the United States.

The seventh part of the history of the United States is the history of the people. The people are the result of the past, and they are the result of the efforts of the people of the United States.

The eighth part of the history of the United States is the history of the world. The world is the result of the past, and it is the result of the efforts of the people of the United States.

Add Cat Flu - 2

Sulfa drugs and antibiotics are of some benefit, but nursing sick animals is most important. Keep infected cats in a warm, dry place. Carefully wash the eyes and clean the nostrils. Consult a veterinarian at the earliest signs of illness.

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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JANUARY 13, 1958

## Announce Plans for Farm and Home Festival

The University of Illinois College of Agriculture today re-leased preliminary plans for the first Farm and Home Festival ever staged by the College for the people of the state.

The Festival will be held March 27, 28, and 29 with dramatic exhibits, displays and demonstrations built around the theme, "The Wonder Worlds of Farm and Home Progress."

According to Dean Louis B. Howard, the Festival will feature six major exhibit areas on the south campus of the University, where students and staff members of the College will show "science in action to serve the farm and the home." The exhibits and displays will show both the exciting results of research and the painstaking methods used by scientists in producing these results.

In addition to the six major exhibit areas, the Festival will feature an outstanding speaking program, the Town and Country Art Show and the Town and Country Talent Show. A square dancing party is planned for Thursday evening, March 27, and students of the College of Agriculture are sponsoring their annual "Plowboy Prom" as the Festival finale on Saturday night, March 29.





Dean Howard said today that plans were being made for as many as 25,000 visitors to attend the Festival during the three days.

Exhibit Area 1 of the Festival will feature scientific progress in the world of plants. Here visitors will see a panoramic exhibit portraying the history and development of the soybean in Illinois. They will learn how research has been used to improve breeding techniques, growing practices and harvesting methods. Another exhibit will show, through an ingenious mechanism, what happens to soil water during the full 12 months of the year. By examining the internal structure of a plant, visitors will be able to see how the plant turns water, air and nutrients into growth. Other exhibits will feature scientists' everlasting fight against insect pests and diseases, the step-by-step process in the discovery of a new antibiotic and the search for new fungicides.

The world of animals is featured in Exhibit Area 2. Here the famous dairy cow with the "window" in her side will be on display, and visitors will learn how this animal helps research men learn more about the digestive process of dairy animals. In another exhibit the stomach from a cow will be kept "alive" and go on digesting feed with the aid of artificial heart and lungs. Visitors will also see the use that's made of rats, mice, chicks, guinea pigs and rabbits in the scientific investigation of nutrition. There will be other exhibits on automation in the swine industry, crossbreeding of dairy cattle and livestock pest control.



Modern progress in engineering the corn crop establishes the theme for Exhibit Area 3. Here visitors will see man's perfection of machines from tillage implements to push-button systems for loading and unloading silos.

Water will "boil" until it "freezes" in a dramatic demonstration of freeze-drying in Exhibit Area 4, which is devoted to the world of processing and distribution. Visitors will also see how atomic rays are being used in the preservation and storage of foods, while other exhibits will show the latest methods of preserving food through heat processing.

Bevier Hall, the beautiful new home of the department of home economics, furnishes the setting for the displays, exhibits and demonstrations that make up Exhibit Area 5 on home and family living. Here visitors will learn how scientists use laboratory animals to determine the nutritional needs of people. There will be demonstrations on quantity cookery, flower arrangement, food preparation and choice of household equipment.

The final exhibit area, devoted to the world of services, will show how the University's College of Agriculture serves not only the people of Illinois, but the people of the world.



Cattle May Have Vitamin Deficiencies in Winter

Winter weather and confinement may cause vitamin A and D deficiencies in cattle, says Dr. D. I. Newton of the University of Illinois College of Veterinary Medicine.

Vitamin D comes from sunshine and vitamin A is supplied chiefly by green grass. Yellow corn also supplies vitamin A. Feeding plenty of well-cured, green, leafy hay should eliminate any vitamin D deficiency.

Cows get less vitamin D in the winter because there are fewer sunny days and the sun's rays are weaker. And, because pastures are dormant, the main source of vitamin A is missing.

Slower gains and susceptibility to cold-like infections may be a major sign of vitamin A shortage in calves. Feedlot cattle may gain slower than usual and show signs of swelling in legs and brisket.

The breeding herd is also susceptible to vitamin A deficiency. It may cause reproductive failures or birth of weak or dead calves. But because other things may cause the same troubles, an accurate diagnosis is important.

Rickets are most commonly associated with vitamin D deficiency. Lack of calcium and phosphorus causes the bones to be crooked, odd-shaped and soft. Even if phosphorus and calcium are plentiful in the ration, the animal cannot use them unless plenty of vitamin D is present.



Dr. Newton says that a farmer should know what may cause vitamin deficiencies and become familiar with the ways and means of preventing them. If such difficulty should occur, he should call his veterinarian for an accurate diagnosis and then follow the corrective treatment recommended by the veterinarian.

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Grind Sorghum for Beef Cattle

Grain sorghum should be ground medium-fine when fed to beef cattle, reports H. G. Russell, extension livestock specialist at the University of Illinois.

Hogs can handle grain sorghum fed as whole grain in a self-feeder, but it should be ground when hand-fed. Otherwise the hogs won't chew it properly if they "wolf" their feed.

Sorghum grain has 90 to 95 percent of the feeding value of corn, Russell says. But it is deficient in carotene or vitamin A. For beef cattle, it's a good idea to supplement the sorghum grain with leafy green hay or alfalfa meal or pellets. For hogs, alfalfa meal or vitamin A supplement added to the ration will overcome the deficiency.

PHYSICS DEPARTMENT

PHYSICS 435: QUANTUM MECHANICS  
LECTURE 10: ANGULAR MOMENTUM

1. Introduction to Angular Momentum  
2. Commutation Relations

3. Eigenvalues and Eigenfunctions  
4. Addition of Angular Momenta

5. Applications and Examples  
6. Summary and Conclusions

for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JANUARY 20, 1958

## Native Timber Less Expensive for Farm Use

It's 30 to 50 percent cheaper for farmers to harvest their own trees for building purposes than to buy lumber.

And L. B. Culver, extension forester at the University of Illinois, adds that hardwood trees that are native to Illinois are stronger than imported softwoods. Therefore, less hardwood timber is needed for construction.

Farmers planning to harvest trees should do so in cold weather, because the timber will dry slower and check less. There's also more time to do the job, and the frozen ground permits easier hauling.

Culver suggests that farmers first determine how much lumber they need for building. Then they should select trees that will best fulfill their building purposes. Finally, they should arrange for a custom saw operator to do the job.

Farmers who need help in selecting trees and determining how much lumber they need should contact a farm forester through the county farm adviser.



Like Rabbits, Lice Multiply Rapidly

Like rabbits, lice multiply rapidly.

When lice once get on an animal, they usually stay there until they die or are killed. Unless disturbed, they lay their eggs on the animal, and the young hatch there. One pair of lice can produce more than 100,000 offspring in two months.

Dr. T. N. Phillips of the University of Illinois College of Veterinary Medicine says that lice are not likely to infest all members of a herd equally. For unknown reasons they seem to thrive and multiply more on some animals than on others.

This strange affinity of lice for certain animals in a herd is verified by observations of veterinarians that some animals given special attention and treatment for heavy infestations will often be just as heavily infested a few weeks or months later.

Spraying is the best way to break the reproductive cycle of the louse and free the animal from infestation. Dusting with powder is also helpful and is preferable during cold weather.

Cattle infested with lice usually rub against fence posts, buildings or anything that is available. They may rub off big patches of hair. Rubbing against posts, trees or other handy objects may also be a sign of mange or scabies. For that reason the farmer should call the veterinarian whenever he spots his cattle rubbing or sees signs of skin irritation.

The veterinarian can make microscopic examinations of skin scrapings from the animals to determine the cause or causes and prescribe the correct treatment and perhaps prevent a more serious condition from developing.



Winter Driving Is Hazardous

Skidding and poor vision cause most winter highway accidents.

O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture, says that the two major causes of skidding and poor vision are inadequate traction and reduced visibility.

Combining these two enemies with the normal hazards of everyday driving can easily lead the unwary driver directly to an accident.

Studies made by the National Safety Council's Committee on Winter Driving Hazards point up these two major causes of winter traffic accidents.

Reduced visibility is brought about by longer hours of darkness, bad driving conditions caused by snow or sleet and obstructions to the driver's vision from frost, ice, snow-covered windshields and snowbanks along streets and highways.

Snow, sleet and ice are the chief causes of inadequate traction. According to studies made by the National Safety Council, the driver's vision was obscured in one out of eight fatal accidents in 1955. Wet, muddy, snowy or icy roads were reported in one out of five fatal accidents.

The answer is: Slow down. Be sure you can see, and use tire chains on your car when snow and ice coat the highway.





for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JANUARY 27, 1958

## Feed Protein Supplement to Steers on Pasture

Yearling steers on pasture can make good use of protein supplement.

G. R. Carlisle, extension livestock specialist at the University of Illinois College of Agriculture, reports that steers on test at Urbana put on fast, cheap gains when they were fed soybean meal all summer.

Thirty yearling steers gained 2.70 pounds a day on pasture with a full feed of a ration of 12.5 parts of ground ear corn and one part of soybean meal. Similar steers fed protein supplement only during the last 28 days of the 112-day pasture test gained 2.31 pounds a day, Carlisle reports.

Costs of the gains were \$14.87 a hundred pounds for the steers getting soybean meal all 112 days compared with \$15.59 for the other steers.

Adding protein to the ground ear corn ration caused the steers to eat more grain and probably less pasture. Forage was plentiful in both pastures during the feeding test, but the pasture of the unsupplemented lot of cattle seemed to be grazed a little closer.

The steers getting the protein all summer carried more finish at the end of the test and would probably have brought a higher market price if they had been sold then.



Consider Remodeling Before Building on the Farm

A good remodeling job might make some unused space usable on many Illinois farms.

Don Jedele, extension agricultural engineer at the University of Illinois College of Agriculture, suggests that farmers look over their old barns carefully to determine the possibilities for remodeling before deciding to build new ones.

If you are wondering whether to remodel a barn, Jedele suggests that you ask yourself these questions: Is the location satisfactory? Will all the space be usable? Will the barn be large enough to handle the enterprise? Can it be adapted to mechanical methods? Are the foundation, roof and framework in good condition?

You can afford to repair or replace either the roof or the foundation, but probably not both. The framework must be in good condition or easily repairable. A rotten beam in an old post-and-beam barn is not easily repaired, but broken floor joists are.

Compare new construction with remodeling costs. Estimate the remaining life of the old building after remodeling, and then decide which is the "best buy."

For more information on remodeling barns, ask your county farm adviser for a copy of "Farm Buildings Fact Sheet No. 6," or write directly to the Department of Agricultural Engineering, Urbana.



Use Evergreens for Farm Windbreaks

Evergreens are the only trees to consider when planning a windbreak.

W. F. Bulkley, extension forester at the University of Illinois College of Agriculture, says that both Norway spruce and Douglas fir make good windbreak trees.

Balled-and-burlapped stock is preferred by most windbreak planters, Bulkley says. In more than 400 windbreak plantings, the most successful have been made with balled-and-burlapped stock.

Bare-root stock is also available and is cheaper, but it is smaller and far less reliable than balled-and-burlapped trees. The main problem is finding bare-root stock with enough roots to overcome the summer hazards of lack of moisture, high temperature and competition with other plants.

Spacing the trees in the windbreak is an important thing to consider. In Illinois, windbreaks are generally planted in three rows. The trees should be 14 feet apart in the rows and between the rows. Too often the trees are planted too close together.

Tight tamping of the ground around the ball of earth is also an important step in correct windbreak planting.

A mulch of two bushels of ground corncobs per tree is recommended for balled-and-burlapped trees from 18 inches to three feet high.

And you must fence the area to protect the trees from grazing animals.

Faint, illegible text, possibly bleed-through from the reverse side of the page. The text is arranged in several paragraphs, but the characters are too light and blurry to be transcribed accurately.

Balanced Rations and Exercise Important for Bred Ewes

Balanced rations and plenty of exercise will help to reduce trouble from pregnancy disease in bred ewes.

Dr. E. F. Reber, University of Illinois College of Veterinary Medicine, says pregnancy disease is a highly fatal metabolic disorder. Ewes between three and six years of age are most frequently affected. The disease seldom strikes animals that are not carrying twins or triplets.

Most cases develop in sheep that are in poor condition. Bred ewes should be encouraged to exercise. One way to do that is to put the feed bunks some distance from the flock's sleeping area.

Feeding a ration that is not in balance, however, reduces the value of exercise. Plenty of good-quality alfalfa or legume hay is essential. Bred ewes should get all the hay they want in addition to one-fourth pound of grain per day.

Ewes that are affected with pregnancy disease become less active than usual and walk slowly. They often remain away from the rest of the flock. As the disease progresses, they act sleepy or stupid, become weaker, show stiffness and have difficulty in getting up and down. They may seem blind, grind their teeth or push against an object. In the last stages of the disease, the animal may lie unconscious for several days before dying.

Unless preventive steps are taken, as many as one-fourth of the ewe flock may develop pregnancy disease. Nine out of 10 may die unless treatment is started promptly.





Add Pregnancy Disease - 2

Veterinarians often save both ewes and lambs by removing the lambs by Caesarian section. By far the most effective method, however, says Dr. Reber, is to prevent pregnancy disease by proper feeding and management.

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THE UNIVERSITY OF CHICAGO  
DEPARTMENT OF CHEMISTRY  
5700 SOUTH CAMPUS DRIVE  
CHICAGO, ILLINOIS 60637

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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF FEBRUARY 3, 1958

## Treat Fence Posts for Longer Life

Treated fence posts can last seven times as long as untreated posts. That's being proved by a fence post experiment now under way in the University of Illinois Department of Forestry.

Kenneth R. Peterson, research associate, reports that the department has about 1,500 fence posts on test under actual service conditions. Results are not final, since the tests are not finished. But after 11 years of service, 64 percent of the treated posts are still sound. Thirty-one percent show partial decay and 5 percent have failed.

But only 9 percent of the untreated posts are still sound. Thirty-seven percent are partially decayed and 54 percent have failed after less than five years of service.

Well-built wire fences can last 20 to 25 years, but fence posts need replacing every three to seven years according to Peterson. The purpose of the current tests is to develop a treatment that will make posts last as long as the wire. Successful treatment will save farmers a lot of time and money.

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Add Fence Posts - 2

The treated posts in the experiment were cold-soaked in two concentrations of pentachlorophenol at four different soaking times. Peterson says that farmers can also use this method. It isn't difficult and the cost is moderate.

For more information about the preservative treatment of fence posts, write to the Department of Forestry, College of Agriculture, Urbana, Illinois.

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Add Hatching Eggs - 2

Bray advises poultrymen not to wash eggs unless proper sanitation and water temperature procedures are followed. Sometimes improperly adjusted egg washers crack the eggs--and cracked eggs hatch poorly.

Although handling methods are important, breeding, feeding and incubation practices can also affect hatchability of eggs, Bray concludes.

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What Makes an Adequate Farm Business Unit

A University of Illinois farm economist this week listed what it takes to make an adequate size of farm business.

F. J. Reiss says a farm should be large enough to provide full employment for the farm family. It should produce enough to spread out fixed costs. And it should yield enough income to provide acceptable living standards and other financial needs.

Reiss reports that to keep one man fully employed and earning a reasonable income requires about 216 acres, operated under a crop-share lease, and some livestock. To keep two men fully employed would take about 360 acres.

On farms operated under livestock-share leases, one man will need to handle about 200 acres, 36 litters of pigs and 36 breeding cows. To keep two men fully employed will require about 320 acres, 50 litters of pigs and 72 mature cattle.

Reiss points out, however, that farms can get too big. He recommends that the farm business unit be kept small enough to give the farm family a desirable amount of independence in the ownership and management of the farm. Most of the labor should be supplied by the farm operator and his family.

To meet average farm family living costs requires about 200 acres of good tillable land and an average amount of livestock. Reiss reports that the average farm family in the United States spends close to \$3,000 for family living. Any interest, debt payments, income tax



Add Farms - 2

and social security payments come on top of this amount. The total could easily add up to \$1,000 and leave only a small amount of annual savings.

The average crop-share tenant in the Illinois Farm Bureau Farm Management Service has had net earnings of only \$17.62 per tillable acre on good central Illinois land in recent years. At this rate it would take about 227 acres of such land, or about a 240-acre farm, to yield the desired income for the tenant family.

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Editors: Attached are copies of the top twenty students in the sophomore, junior and senior classes of the College of Agriculture, 1957-58.

FOR RELEASE WEEK OF FEBRUARY 3, 1958

Announce Top Students in College of Agriculture

Students with high scholastic averages in the University of Illinois College of Agriculture have been announced by C. D. Smith, assistant dean.

Top students from this area include: \_\_\_\_\_.

Allen Barker, McLeansboro, is the top senior student at the College this year. He has earned a 4.930 grade-point average for his freshman, sophomore and junior courses. A 5.000 is equal to an "A." Paul Watters, Alpha, ranks second to Barker with a 4.847; and Morris Gluck, Nashville, has earned a 4.759 for his three years of college work.

The top three junior students are Robert Cassens, Dixon, who has earned a 4.818; Don Pinney, Roseville, a 4.686; and Glen Gullakson, Serena, a 4.681. Their averages are cumulative for their freshman and sophomore years.

Paul Malven, Kingston, has the highest average, a 4.857, in the current sophomore class. Gene Potter, Woosung, is second high with a 4.812, and Arlo Bane, LeRoy, ranks third with a 4.794. They earned these averages in their freshman year.

From these and other top students will come the future leaders in such agricultural fields as extension and education, research and communications, conservation, business, industry and farming.

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## TOP 20 JUNIORS, COLLEGE OF AGRICULTURE, 1957-58--NOW SENIORS

<u>NAME</u>	<u>GRADE POINT</u>	<u>ADDRESS</u>
Allison, Roy Leland	4.383	R. 4, Fairfield, Ill.
Barker, Allen Vaughan	4.930	R. 2, McLeansboro, Ill.
Beyer, Edgar Herman	4.595	409 N. 7th Ave., Maywood, Ill.
Brown, Richard George	4.353	R. 1, Enfield, Ill.
Carmichael, Raymond Merle	4.453	Heyworth, Ill.
Craig, William Ray	4.362	R. 2, Chrisman, Ill.
Damron, Marvin Arthur	4.405	1050 Main Street, Hamilton, Ill.
Davis, Clarence Oliver	4.615	Elkhart, Ill.
Frey, Thomas Lee	4.595	R. 1, Carthage, Ill.
Fruin, Jeremiah Edward	4.666	Gilman, Ill.
Gillespie, Edward Eugene	4.515	Congerville, Ill.
Gitter, Almut	4.410	(23) Bookholzberg, O, Germany
Huck, Morris Glen	4.759	R. 1, Nashville, Ill.
Lane, Charles Edward	4.480	R. 1, Shelbyville, Ill.
Ourth, Lyonel Lee	4.526	Nauvoo, Ill.
Rabideau, Arlyn Wayne	4.716	R. 1, Bonfield, Ill.
Schleder, Delmar Wayne	4.418	Hartsburg, Ill.
Watters, Paul Stanley	4.847	R.F.D., Alpha, Ill.
Weber, Kenneth Frederic	4.373	333 W. Union, Edwardsville, Ill.
Wernsman, Earl Allen	4.376	Vernon, Ill.





## TOP 20 SOPHOMORES, COLLEGE OF AGRICULTURE, 1957-58--NOW JUNIORS

<u>NAME</u>	<u>GRADE POINT</u>	<u>ADDRESS</u>
Barnett, Ritchie G.	4.506	Ritchie Heights, Decatur, Ill.
Casey, Larry Lee	4.188	Bingham, Ill.
Cassens, Robert Gene	4.818	Dixon, Ill.
Chisholm, Roger Kent	4.625	Park Forest, Ill.
Fairgrieves, Richard L.	4.523	Belvidere, Ill.
Funkhouser, Lyle Elbert	4.114	Carmi, Ill.
Geschwind, Richard Dale	4.223	Ransome, Ill.
Gullakson, Glen Edwin	4.681	Serena, Ill.
Hall, George Fredrick	4.609	Altona, Ill.
Hawkinson, Edwin Andrew	4.454	R. 1, Galesburg, Ill.
Moffitt, Raymond Vern	4.651	Milan, Ill.
Muck, George Arthur	4.030	R. 1, Galesburg, Ill.
Norris, John Lee	4.261	R. 1, Taylorville, Ill.
Pinney, Don Ovid	4.686	Roseville, Ill.
Rigney, Harlan Halladay	4.152	1453 Demeyer Drive, Freeport, Ill.
Rippy, Lester Gene	4.171	R. 5, Carmi, Ill.
Ruckman, Dale Eugene	4.202	R. 1, Xenia, Ill.
Sims, Ferman Wayne	4.135	108 Avenue "D", Danville, Ill.
Wells, Gary Lynn	4.536	Port Byron, Ill.
Woods, John LaRue	4.250	R. 1, Taylorville, Ill.



## TOP 20 FRESHMEN, COLLEGE OF AGRICULTURE, 1957-58---NOW SOPHOMORES

<u>NAME</u>	<u>GRADE POINT</u>	<u>ADDRESS</u>	<u>PARENT'S NAME</u>
Bane, Arlo Gregory	4.794	106 Park Avenue, LeRoy, Ill.	Arlo E.
Brazle, Vernon Lee	4.514	Brownstown, Ill.	Milas
Burton, Dale Forrest	4.515	Wellington, Ill.	Forrest
Cannon, James Calvin	4.242	Maquon, Ill.	Carl C.
Cline, Tilford Robert	4.352	R. 3, Virginia, Ill.	Ray
Ehlers, Norman Fredric	4.393	R. 2, LaMoille, Ill.	Walter S.
Gallup, Roger Howard	4.514	R. 2, Chillicothe, Ill.	Dwight J.
Gay, James Clark	4.352	Rockport, Ill.	Joseph T.
Klieber, Joseph Michael	4.176	R. 3, Streator, Ill.	Robert
Malven, Paul Vernon	4.857	R.F.D., Kingston, Ill.	H. D.
Perkinson, Leaton Dee	4.531	520 W. Lawndale, Peoria, Ill.	Ben P.
Potter, Gene Ellsworth	4.812	Woosung, Ill.	Paul
Reiners, Robert Harold	4.250	R. 2, Gibson City, Ill.	George
Remmers, Harry Ernest	4.190	Weldon, Ill.	Ernest J.
Smith, John Thomas	4.351	Elkhart, Ill.	Ray
Snodgrass, Dick Pryce	4.714	R. 3, Geneseo, Ill.	J. Clinton
Vatthauer, Richard James	4.406	Green Valley, Ill.	Ernest W.
Wesson, Heston Kent	4.406	LeLand, Ill.	Heston
Will, Raymond Lawrence	4.735	R. 1, Sigel, Ill.	Martin
Wilson, John Robert	4.382	R. 2, Fithian, Ill.	Woodrow



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF FEBRUARY 10, 1958

## Expect Brisk Demand at Calf Club Sale

A good demand for top-quality dairy heifers is expected at the 10th annual 4-H and Future Farmers of America Purebred Dairy Calf Club Sale on Saturday, February 22, at the University of Illinois.

J. G. Cash, Illinois extension dairyman, says that about 100 head of select heifers, all born after July 1, 1957, will be offered for sale. Holstein, Brown Swiss, Jersey, Guernsey and Ayrshire breeds will be included in the offering.

Early demand for catalogs for the sale indicates widespread interest and a large attendance. Catalogs may be obtained by writing J. G. Cash, Dairy Science Department, University of Illinois, Urbana.

This annual sale was organized and is sponsored by the Illinois Purebred Dairy Cattle Association to give 4-H Club and F.F.A. members an opportunity to buy top-quality project heifers.

The sale has gained steadily in popularity with members. It will start promptly at 11:00 a.m. at the Stock Pavilion on the College of Agriculture campus in Urbana.



Show Exhibits in "Building of the Future"

Farm and Home Festival visitors will see the exhibit of animal production in the year 2008 housed in a "building of the future."

Part of the "The World of Animals" exhibit area at the Festival will show predictions of the animal scientists at the University of Illinois College of Agriculture on possible ways livestock will be produced on farms 50 years from now. And the exhibit will be shown in one of the new-type inflated plastic houses.

Some of these methods will show all-automatic feeding systems, egg-implants as well as advanced artificial insemination, carcass evaluation by X-ray, predicted feeding standards for 2008 and tenderizing meat by injection.

"Eggs on Order" will be another feature of the exhibit. This demonstration will show how hormones can shorten by five hours the time a hen takes to lay an egg.

And you'll also be able to see some of the most intensive inbreeding work ever done with farm animals as part of the dairy exhibit in "The World of Animals." A herd of goats has been inbred for more than 10 years in the experiment. One goat's father is also his great-great-grandfather.

Other dairy exhibits will show how the artificial heart works in rumen studies; "Gertie," the cow with a hole in her side; and crossbreeding work with dairy animals.

Still another exhibit in the Livestock Pavilion on the south campus in Urbana will compare swine and chick rations of 1908 with the best practical rations used on farms today. Everyone is welcome to come to the Festival at the University of Illinois on March 27, 28 and 29.





Check Now For Winter Dysentery

Winter dysentery generally strikes cattle from November through March and frequently spreads rapidly through an entire herd, says Dr. G. T. Woods, extension veterinarian at the University of Illinois.

The disease is a threat to both beef and dairy cattle that are confined to barns during the winter. Dr. Woods points out that it may spread widely through an area. Although the death rate may be low, economic losses to the farmer can be high because of lower milk and beef production.

Sudden scouring is the main sign. A quick drop in milk production is also noticeable. Since the disease can spread rapidly if proper steps are not taken, have a veterinarian examine suspected cases and start treatment at first signs of an outbreak. To help prevent exposure, keep unnecessary visitors out of the barn.

At one time winter dysentery was thought to be confined to the midwest and east, but now it is also recognized as a problem in other areas of the United States.



Most Trains Hit Autos at Rural Crossings

Railroad crossings present a special traffic hazard to farm residents.

Rural cross-overs are usually unguarded. Of the approximately 1,400 persons killed annually in auto collisions with trains, about 900 die at rural crossings.

The old warning--Stop, Look and Listen--is still the best cure for these accidents, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. In the winter it is especially important to do all three, because rolled-up windows silence the whistle blast and even slightly steamed car windows cut visibility. For safety, stop your car, roll down the window, look and listen.

Farm residents are often killed because railroad crossings near their farms or homes become too familiar to them--they forgot to stop, look, and listen. Others are killed because they think they know and can depend on the train schedule because of long years of observation. But a special train or one that is late can, and often does, wipe them out.

Don't try to be a "train beater." Racing trains to rail crossings is dangerous business. All too often the motorist loses. Play it safe. Isn't losing a few minutes better than losing a lifetime--possibly several lifetimes?



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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF FEBRUARY 17, 1958

## Keep Safe Around Farm by Knowing Hazards

The first step in farm safety is to be able to recognize hazards.

The next step is to do something about removing those you see, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

Rundown condition of equipment and buildings is the most common cause of farm safety hazards. Help to prevent accidents by keeping both buildings and equipment in good repair.

Rubbish in basement or attic, ashes kept in wood or paper containers, clothes dried too near a stove, a tractor stored in a hay barn and gasoline in a glass jug are all danger spots where a serious and costly fire might start.

Such machines and tools as axes, circular saws, disc harrows, mowers, cornpickers and tractors are hazardous either because of their design or because of the way in which they are used. A good way to cause an accident is to start a fire with kerosene, refuel your tractor while it is hot, adjust or clean machines without stopping the power unit or let children ride on machines.

Another hazard for animals as well as for people is equipment left scattered around the farm. For safety, provide a safe place for everything, and then keep everything in its place.



Open Housing Best for Dairy Calves

Calves wintered in "open housing" are usually healthier than calves in conventional closed-type housing.

Dr. E. I. Pilchard, Jr., University of Illinois College of Veterinary Medicine, says that open housing is a new trend in winter housing for dairy calves. Calves can get plenty of fresh air while humidity is kept low and strong winds and drafts are eliminated.

Calves of about the same age can be kept in groups of 10 or fewer. Dr. Pilchard says this allows the farmer to keep a closer watch on individual animals and to spot signs of disease in an early stage. Fewer calves in each pen also mean that fewer will be exposed to disease if one of the animals becomes infected.

The housing unit should be well cleaned before being used. Remove old bedding and boards, and scrape and scrub the floor, walls and equipment with a good disinfectant.

Dr. Pilchard recommends that a veterinarian be called in case any signs of disease are seen in dairy calves. If he is called early, he can prescribe treatment before the disease gets a good start.





Hens Can Be Layers, Liars or Loafers

Most people think that hens are just hens. But hens can be layers, liars or loafers.

When the egg-making mechanism of a hen works right, she is a layer. If part of the mechanism fails, she becomes a liar. If it fails completely, she is a loafer. A liar may sit on a nest for a while and then leave as though she had laid an egg, even though she hasn't.

Don Bray, poultry specialist at the University of Illinois College of Agriculture, says loafers are easy to spot by their small, faded combs. A closer look shows a small, dry vent that cannot pass an egg. Usually layers can be separated from loafers by using trap nests.

Liars can be classified as masculine type, shell-less egg type or internal layer type. Masculine hens develop large, coarse combs and spurs typical of those on a rooster. They may also have small, dry vents. This condition often goes with a diseased or tumorous condition of the ovary.

Shell-less eggs are most numerous when the egg-laying mechanism of young pullets is still forming. They are also numerous following a respiratory outbreak. Losses from shell-less eggs can be minimized by proper feeding, careful pullet management and control of respiratory diseases.

Internal layers may form and ovulate normal yolks. But a white or shell is not formed around the yolk. Internal layers will usually reabsorb the yolks and continue to lose pigment from their skin the same as a normal layer. However, the yolk material may accumulate, causing enlargement of the abdomen and eventual death.

According to Bray, there is no known treatment or cure for either internal layers or masculine-type hens.



Oats Slow Gains of Fattening Hogs

It's a good question whether Illinois farmers can afford to feed oats to fattening hogs when oat prices are as high as corn prices.

G. R. Carlisle, extension livestock specialist at the University of Illinois College of Agriculture, reports recent research at the University's Agricultural Experiment Station in Urbana that helps to answer this question.

Hogs weighing about 100 pounds were fed to 200 pounds on rations that contained 1/3 oats, 2/3 oats and all oats and no corn. Carlisle reports. These rations were compared with the same ration that contained all corn and no oats. Enough protein supplement was added to give the same protein content in all rations.

Average daily gains were 1.75 pounds on the all-corn ration with no oats at a cost of \$9.10 a hundred pounds of gain. When the diet contained 1/3 oats, gains and costs were 1.56 pounds and \$10.50; 2/3 oats, 1.45 pounds and \$10.80; and all oats, 1.31 pounds and \$11.65.

Feed prices were figured at \$1.35 a bushel for corn and 80 cents a bushel for oats.



Farm and Home Festival to Feature Wonder World of Engineering

The magnificent advances in farming made possible through new machinery and equipment will be graphically displayed during Farm and Home Festival at the University of Illinois March 27-29. This whole wonder world of farm engineering will center around corn, Illinois' number one crop.

Few farmers today realize that in 1910 it took 18 man hours and 46 horse hours to produce an acre of corn. Today farmers get the job done in 6 man hours and 5.4 tractor hours. And the farmers of 1910 averaged only 50 bushels an acre, while today many Illinois farmers average 75 bushels or more. So, for every hour spent, today's farmers produce four times as much corn as their grandfathers did in 1910.

But these marvelous achievements are possible because machinery has more than paid its own way. The festival exhibit will show when machinery will pay for itself and how to borrow money at lowest cost. The amount of interest that a farmer may pay will vary widely, depending on how he finances his machinery. Even though his contract interest rate may be 7 percent, a farmer may pay as much as 15 percent, depending on how the loan payments are set up.

With new methods of growing and harvesting corn, the leasing arrangements between tenant and landlord may also need some "engineering." The festival exhibit will explain how new corn-handling equipment may bring both benefits and problems to landlord and tenant. It will show how new leasing plans can be profitable for both owner and operator.



Modern machinery now offers Illinois farmers several choices in ways to harvest and store their corn crops. One engineering exhibit will show how investing in a field-sheller and drier costing over \$10,000 can be the most profitable method for farmers growing more than 200-240 acres of grain. Another will show the extra profits possible from having corn combines and drier equipment in a wet corn year like 1957.

How much a farmer can save by using minimum tillage for his corn crop will receive special attention. Whether he plants 100 or 500 acres, the exhibit will show production costs with 3-plow or 4-plow equipment or with minimum tillage.

And the festival engineering exhibit also answers the most important question of all--how the corn crop can be engineered to produce gracious living in a modern home for every farm family. This includes how to provide a college education for the children, to build savings for retirement and to pay for the farm. Actual records of incomes and expenses on Illinois farms will show just what kind of farm business will accomplish these most important goals of farm families.

All this will be shown at the Farm and Home Festival on the University of Illinois campus March 27, 28, 29. All farm and home advisers and vocational agriculture teachers can furnish further information about the festival program.





for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF FEBRUARY 24, 1958

## Take Inventory of Your Dairy Herd

Every dairy farmer in Illinois can learn how efficient his dairy enterprise was last year by finding the average production per cow in his herd.

To find the average, divide the total pounds of milk or butterfat sold by the average number of cows, suggests J. G. Cash, extension dairy specialist at the University of Illinois College of Agriculture.

Average break-even point for Guernsey and Jersey herds is about 5,000 pounds of milk or 250 pounds of butterfat per cow per year. For cows of the lower testing breeds, it is about 7,000 pounds of milk or 250 pounds of butterfat.

Even though the herd average may be above the break-even point, there is always the possibility that some individual cows are low producers. They should be found and culled. Each county farm adviser has complete information about the record-keeping systems that are available to dairymen in his county.



New Cattle, Swine Booklets Ready

"Your 1958 Hog Business" and "1958 Suggestions for Feeding Beef Cattle" are two new booklets that farmers can now get at their county farm adviser's office.

Prepared by extension livestock specialists at the University of Illinois College of Agriculture, these booklets have in them all the latest information based on research findings that will help Illinois farmers to do a better job of producing pork and beef.

In the hog booklet are sections on management, pasture feeding, confinement hog production, rations to use and selection of breeding stock. Several pages are used for answering the most common questions asked of the extension specialists by hog producers.

Some of the questions answered in the beef booklet include those on hormones, grass silage, high-moisture corn, urea, pelleting and "all-in-one" silage. Sections in that booklet are concerned with wintering rations, rations on pasture, drylot fattening rations, emergency rations, minerals and questions most often asked by cattle feeders.

Ask your county farm adviser for your copy of either or both of these 1958 suggestions. Or write directly to the College of Agriculture, Urbana.



Festival Exhibit Will Show Scientific Plant Breeding Successes

Successful plant breeding research has given us our most advanced fruits, vegetables, flowers and field crops. University of Illinois plant scientists will display some of the most spectacular examples during Farm and Home Festival on the College of Agriculture campus in Urbana March 27-29.

Small wild strawberry plants will be growing beside modern hardy, disease-resistant plants bearing plump, delicious fruit. Wild carrot and wild lettuce, ancestors of our present-day vegetables, will be growing beside the best new varieties. The newest high-pigment tomato that makes better catsup will be displayed with the small wild tomato, its oldest ancestor.

Dwarf fruit trees will be forced into early blossom for the Festival. They'll furnish a nectar supply for a bee colony in a large screen house. And there'll be a demonstration on how to handle bees and produce different types of honey for those who want to produce their own honey.

Some of the most unusual chrysanthemums from the 103 different varieties developed at the University will be shown. Illini-bred mums are now grown throughout the world. Besides these established types, Festival visitors will see the seedling strains that may be the new varieties of tomorrow. Another display will feature original wild chrysanthemums. From them our modern-day mums have evolved after years of plant breeding and selection. They are an inspiring tribute to plant breeder accomplishments.



Popcorn breeders will display some of the newest strains. Visitors will see how the researchers measure the amount of popping increase and select the best strains for use by popcorn growers. An old-fashioned corn popper will provide free samples for all visitors.

An exhibit will portray the magnificent story of how soybeans have become one of Illinois' leading crops. Soybean research workers will show how they make crosses to develop new high-yielding, disease-resistant varieties.

The everlasting struggle between plant breeders and plant diseases will be shown in the display of oats. Oat breeders have used plant strains from five different continents to develop Clintland oats. In this new variety they have combined the ability to resist disease, stand well and produce top yields.

Another exhibit will show the internal structure of a plant. It will demonstrate the intriguing process of how the plant takes in water, air and soil nutrients and combines them into products that we use as food.

Soils scientists have built an ingenious apparatus that will show what happens to water in the soil. Water use by plants, loss by drainage, evaporation and replacement by more rainfall are shown in four stages. And visitors will see a whole year's water cycle in just four minutes.

Research-proven ways to produce larger, healthier trees will be shown in the forestry exhibit. Ways to destroy unwanted weed trees will be demonstrated. An actual model windbreak will show how wind

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

In the second section, the author details the various methods used to collect and analyze the data. This includes both manual and automated processes. The manual process involves reviewing each entry individually, while the automated process uses software to identify patterns and anomalies.

The third section describes the results of the analysis. It shows that there are several areas where the data is inconsistent or incomplete. These areas need to be investigated further to determine the cause of the discrepancies.

Finally, the document concludes with a list of recommendations. These include implementing stricter controls over data entry, improving the accuracy of the automated processes, and conducting regular audits to ensure the integrity of the data.



velocity can be reduced around the farmstead. A special display will show the many phases of Dutch elm disease and ways to control this serious problem.

These are only a few of the many exhibits that can be seen in the "World of Plants" at the Farm and Home Festival. Other plant exhibits will include living insecticides, plant disease control, chemical weed control, antibiotics, fungicides, virus diseases and seed treatments.

Whether you come for one day, two days or all three, you'll find something interesting and exciting in the six major exhibit areas at the Festival.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF MARCH 3, 1958

## Spring Clean-Up Makes Farm Safer

Thorough clean-up before spring work starts is good insurance against loss of property and man hours on your farm this summer.

The few hours you spend now in cleaning out hazards and putting things in place may save you many days during the busy season, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

One rule to emphasize for farm safety is "a place for everything and everything in its place." A recent study of hospitalized home accident causes showed that the largest single cause of injuries, other than hurry and carelessness, was disorder. In fact, disorder was responsible for putting one out of every five accident victims in the hospital.

Remove such trash as paper, rags and rubbish, scattered boxes and boards that may have accumulated from basement to attic. Clearly label medicine, drugs and insecticides, and keep them out of children's reach.

Check the farm shop. Keep tools in their right places and hammer and ax handles tight and in good condition. Remove piles of barbed wire, glass, scrap metals, loose boards, weeds and grass.

Barns are the principal work center for daily farm chores. It is important to find a suitable location or storage place for sacks of feed, tools and other equipment in order to keep alleyways and work areas clear.



Saturday Is Youth Day at Farm and Home Festival

Special attractions for high school students highlight the Saturday, March 29, program at Farm and Home Festival. It will be "Youth Day" for students in agriculture, home economics and other high school courses who attend the University of Illinois College of Agriculture event in Urbana.

Two special afternoon sessions will stress planning for college training and job opportunities in agriculture, home economics and veterinary medicine.

In the morning girls can attend a presentation by the clothing and textiles division on choosing fashions and fibers. Boys can find out about getting started in farming and the future in farming.

When not participating in the special sessions, students can see fabulous exhibits in the "Wonder Worlds of Farm and Home Progress." In addition, research and teaching facilities in agriculture, veterinary medicine and home economics will be open throughout the day.

In the evening program visiting students are invited to attend the "Plowboy Prom"--the big dance sponsored by College of Agriculture students. They also can watch the morning semifinals and afternoon finals of the State Rural Youth Basketball Tournament in Huff Gymnasium.

The Youth Day program was set for Saturday in the hope that, since it would not interfere with classes, a large turnout of high school students could be expected.

Youth Day activities are only a small part of the Saturday show. Other phases of the program are for farmer, homemaker, businessman, teacher, urbanite and suburbanite alike.



Gives Labor Needed to Increase Farm Operations

A farmer can increase the size of his business in only two ways--by adding more land or by adding more livestock.

Earl Swanson, University of Illinois farm management specialist, points out that most Illinois farmers can't get more land to farm, so adding livestock is about their only choice.

But adding enough livestock to be worth while will add from 1,500 to 2,000 hours of labor a year. Swanson figures that on a 240-acre grain farm with a corn-soybean-oats rotation a farmer will work about 1,760 hours a year.

If this farmer added 150 feeder cattle to his farm business, he would need to work about 3,150 hours.

Or, if this farmer wanted to raise 40 litters of pigs on a two-litter system and feed only 50 cattle, he would work about 3,480 hours.

If he shifted to 80 litters of pigs on a two-litter system, he would need to work about 3,530 hours a year.

Heaviest labor requirement would come from a 20-cow dairy herd. This operation would take 4,350 hours a year.

The most time that one farmer will be able to put in during a year is about 24 10-hour days a month, or about 2,880 hours a year.

Swanson points out that how many total hours a farmer works may not be so important in planning labor needs as how they are distributed throughout the year. Livestock enterprises that require the most





Add Labor - 2

labor in late fall, winter and early spring and a light load in the summer are most desirable. That leaves more time to take care of crops during the growing season.

Complete month-by-month labor needs for different farm operations will be shown in a special exhibit at the Farm and Home Festival on the University of Illinois campus March 27-29. Swanson invites all farmers to attend.

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Farmers Help Develop New Ally to Control Grain Insects

Illinois farmers are taking an active part in agricultural research. Recently farmers in several southern counties helped develop malathion as a new ally in controlling stored grain insects.

These farmers worked closely with researchers from the University of Illinois College of Agriculture and Illinois Natural History Survey. They compared the effectiveness of malathion, a relatively new insecticide, with a standard fumigant and recommended pyrethrin protective materials.

The farmers allowed researchers to treat their wheat with these insecticides. The researchers wanted to know which one would best control stored grain insects. A total of 26 bins containing more than 15,000 bushels of wheat were used in the test.

Farmers obtained good control with fumigant materials only when they used two applications. The pyrethrin protective spray and dust gave practical field control of stored grain insects. But neither the fumigant nor the pyrethrin treatment prevented Indian meal moth infestations. A concentrated pyrethrin spray applied three to five times to the surface of the wheat was needed to control this pest. The Indian meal moth is an annual menace to practically all stored wheat in Illinois.

Of these three insecticides, malathion was the best. It not only controlled the various grain beetles, but was the only material that completely stopped the Indian meal moth with one application.



For several years malathion has been an effective killer of house flies and poultry parasites. But the Federal Food and Drug Administration did not approve it for use on stored grain until last fall.

Use of malathion as a bin spray and for direct application to grain will give improved control of insects at lower cost. However, unless good sanitation practices are used before the grain is treated, poor control often results. Insecticide treatment of grain should be a supplement to good sanitation--not a substitute.

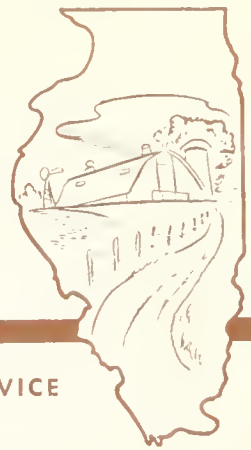
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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF MARCH 10, 1958

## Check Your Stepladder for Spring Use

Get your stepladder ready for spring cleaning, suggests O. L. Hogsett, extension safety specialist at the University of Illinois.

A rickety ladder could send you on a forced vacation. Then you'd have to let your house stay dirty or hire someone else to do the cleaning.

If you don't have a stepladder, Hogsett has two words of advice: Get one! Falls from boxes, chairs and other ladder substitutes are among the leading causes of home accidents.

Check these points to determine whether an old ladder is safe to use: See that the steps are in good repair, and fastened solidly to the side rails so that they won't rock. Check the brackets that keep the legs from spreading too far. Be sure they are fastened well to all four legs. See that the cross braces are nailed or screwed securely where they fasten to the legs.

Get the man of the house to repair any ladder that doesn't pass this test before outdoor work ties him up.





The World of Services--A Unique Exhibit

"The World of Services" will be a unique exhibit to show the many services of the University of Illinois College of Agriculture to the people of the state.

For example, young people interested in careers in agriculture or home economics can visit here with a College staff member. He'll tell about the many opportunities for young people with college educations.

The Agricultural Experiment Station will show how its research centers operate in many parts of Illinois. The Extension Service will show the activities of the farm and home advisers who serve every county in Illinois. The University Soil Testing Laboratory will show how it accurately tests thousands of samples of soil each year through more than 100 laboratories across the state.

The Farm Management Service will show how it examines the earning power of nearly 5,000 farmers, diagnoses their trouble spots, recommends changes and studies the results for the benefit of all Illinois farmers.

New and practical information about agriculture and home economics will be found in bulletins and circulars displayed by the Publications Office. This office distributed about one million copies of printed publications last year. More than 400 of them are available free of charge to Illinois residents. Some of these publications will be available at the Festival.



How the College trasmits newly gained knowledge from research to the people of the state through press, radio, television and visual services will also be explained.

Part of the exhibit will be devoted to the University's foreign aid program. More than 800 visitors from 63 countries visited the campus between 1951 and 1957. And 22 staff members of the College of Agriculture worked in 34 countries between 1950 and 1957. What they do there and why they go will all be explained.

In addition, other services of the College will be displayed at the Festival's World of Services exhibit. Festival dates are March 27, 28 and 29 on the Urbana campus.

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Build a Disease Prevention Fence

Simplest and most economical way to prevent and control infectious and parasitic diseases is to "fence them out," says Dr. C. A. Brandly, dean of the College of Veterinary Medicine at the University of Illinois.

Parts of the disease prevention fence include:

1. Sanitation. Provide clean, well-ventilated quarters.

Avoid crowding, which interferes with ventilation and reduces resistance while increasing the chance and concentration of infection.

2. Isolation. Isolate the herd as well as individual animals to increase the distance from sources of contagion.

3. Quarantine. It is most important to quarantine any breeding stock that is to be brought into the herd. Also, quarantine animals returning from fairs and shows.

4. Adequate nutrition. Good nutrition is basic to maximum resistance to disease.

5. Closed herds and flocks. Actively infected or carrier animals are the chief source of disease. Bring in only young, healthy males from clean herds, or rely on artificial insemination or Caesarean-section-delivered calves. With poultry, great care is necessary when bringing in chicks. "Started" chicks are always dangerous.

6. Disinfection. Promote natural disinfection by rotating pastures and alternately sowing crops requiring frequent tillage. Practice artificial disinfection by using an agent that is suitable and economical for the particular infection and circumstances.



Festival to Show Soybean Wonder Story

The American dream of the strange immigrant who becomes a famous and highly respected citizen can be told again. This time the immigrant is the strange and unknown soybean, which was first introduced from China just before 1900. This miraculous story will be told in a 40-foot-long exhibit at the University of Illinois Farm and Home Festival March 27-29.

Following the first introduction, plant breeders brought in about 10,000 types of soybeans between 1900 and 1930. From these they developed our modern high-yielding soybean varieties.

In just over 30 years, the soybean has developed into a major cash crop for American farmers and the second most important in Illinois. Since 1925, production has skyrocketed from 5 million bushels a year to nearly 480 million bushels. Illinois farmers have boosted their output from 1 1/2 million to 126 million bushels a year.

Americans imported 160 million pounds of soybean oil meal and cake in 1925. Thirty years later this country was growing enough soybeans to meet all the needs of a much larger population and to export almost one billion pounds.

This spectacular rise of the soybean in American agriculture was really not an accident. Henry Hadley, University of Illinois soybean breeder, points out that soybeans have filled a real need. Hundreds of products are made from this crop, including margarine, plastics and livestock feeds. Soybean oil, probably the most important product,

THE UNIVERSITY OF CHICAGO

The University of Chicago is a private research university in Chicago, Illinois. It was founded in 1837 and is one of the oldest and most prominent universities in the United States. The university is known for its commitment to academic excellence and its diverse student body. It has a long history of producing world-class scholars and leaders in various fields of study.

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Add soybeans - 2

makes up more than half of our total national vegetable fat and oil production.

But probably almost as important, soybeans have become a good crop for farmers. Back in 1925, Illinois farmers could produce average soybean yields of only 13 bushels an acre. But now they can average about 25 bushels. Research, some of it carried on at the University of Illinois, has developed new, higher yielding varieties and the cultural practices that have made these higher yields possible.

Visitors to the Farm and Home Festival will see how these new varieties are selected and developed. Plant breeders will demonstrate how the crosses are made to produce new strains that resist diseases, stand well and produce high yields.

Visitors will also see different types of soybean plants, including some of the wild and tropical ancestors of the soybean. All of this will be a part of the "World of Plants" at the Farm and Home Festival March 27-29 on the south campus of the University of Illinois at Urbana.

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Illinois Grain Dealers' Management Conference, April 2-3

Robert C. Liebenow, president of the Chicago Board of Trade, will be the main banquet speaker for the Illinois Grain Dealers' Management Conference at the University of Illinois April 2-3. He will speak on "Developments and Opportunities in the Grain Trade" at the banquet on Wednesday evening, April 2.

L. F. Stice, extension grain marketing specialist, reports that during the first day's session top authorities will discuss developments in field shelling, artificial drying, storage and processing of corn.

R. E. Greenfield, superintendent of manufacturing for the A. E. Staley Company will discuss processing of artificially dried corn. Leo Holman, USDA agricultural engineer, will report on aerating grain in commercial storage. Clyde Christensen, University of Minnesota plant pathologist, will show what causes grain to spoil. A. L. Neumann, head of the UI beef division, will discuss feeding artificially dried corn. A panel of country grain dealers will report their corn-drying experiences.

The second day's program will emphasize business management problems. Robert Seymour, assistant dean of the UI College of Commerce, will discuss what it means to manage. R. J. Mutti, UI agricultural marketing staff, will report on opportunities in the country grain business as shown by some of his recent field studies.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and expansion. From a small collection of colonies on the eastern coast, it grew into a vast nation that stretched across the continent. The early years were marked by struggle and conflict, but the spirit of independence and self-determination prevailed.

The American Revolution was a turning point in the nation's history. It was a struggle for freedom and self-governance that resulted in the birth of a new nation. The Constitution was drafted and signed, establishing a framework for the government that has endured to this day.

The 19th century was a period of rapid growth and change. The westward expansion of the United States was a defining feature of this era. The discovery of gold in California and the opening of the transcontinental railroads fueled a period of intense economic and social development.

The American Civil War was a defining moment in the nation's history. It was a struggle over the issue of slavery that resulted in the preservation of the Union and the abolition of slavery. The war led to a period of Reconstruction and the passage of the Civil Rights Act.

The 20th century has been a period of unprecedented change and progress. The United States has emerged as a global superpower, leading the world in science, technology, and culture. The challenges of the 20th century, including the world wars and the Cold War, have shaped the nation's identity and its role in the world.

Add Grain Dealers' Conference - 2

T. A. Hieronymus, also on the UI agricultural marketing staff, will give the latest grain price outlook. At the Thursday noon luncheon, Paul C. Johnson, editor of Prairie Farmer, will speak on "Serving Your Community and Yourself."

Reservations for the Wednesday evening banquet and the Thursday luncheon should be sent to Norman Johnson, Division of University Extension, University of Illinois, Urbana. All those interested in the grain business, including elevator operators, managers, directors, grain merchandisers and merchants, are invited.

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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF MARCH 17, 1958

## Farmer Opinions to Climax Irrigation Clinic on March 20

What farmers think about irrigation, by a panel of Illinois farmers experienced in irrigation, will high-light the second annual Illinois Irrigation Clinic. This program is planned for Thursday, March 20, in Room 135 Animal Sciences Laboratory at the University of Illinois. Discussion leader will be Velmar Davis, A.R.S., agricultural economist at the University.

Presiding at the morning program will be Ralph C. Hay, department of agricultural engineering. He will introduce speakers on water laws, plant-soil-water relationships and pumps for irrigation. At the afternoon session, D. O. Keairns, assistant state conservationist, Soil Conservation Service, will preside at a session that includes design for efficient operations, A.S.A.E. standards and the panel of farmers.

Those interested in attending are urged to register in advance by writing the Division of University Extension, Room 116d Illini Hall, Champaign, Illinois.

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## WILLIAM

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Veterinarians Seeking to Stop Miniature Beef Steaks

This is the age of miniatures--pocket radios, miniature golf courses and dwarf corn.

But University of Illinois veterinarians are putting their feet down when it comes to miniature beef steaks.

Dwarf cattle are easy to recognize, but the seemingly normal animals that carry this inherited characteristic are hard to identify. Much work is being done to find a way to spot these carriers so that they can be culled from breeding herds.

Dr. H. J. Hardenbrook says that taking X-rays of calves between one and 10 days old is one of the best ways to spot carriers. X-rays show vertebral abnormalities characteristic of many animals that carry dwarfism. X-rays of long bones and of certain head bones are also of value.

Examining the blood lines of breeding stock is another method. Dr. Hardenbrook says the best approach is to buy from breeders who are making special efforts to produce dwarf-free stock.

A recent round-up of test results shows how effective X-ray can be. The results also point to some of its limitations as a detection method. Of 186 known carriers at all the cooperating stations. X-rays showed that 167, or 90 percent, had abnormal vertebrae.

Of several thousand calves that were thought to be free of dwarf genes (not carriers), 80 percent had completely normal vertebrae.



Among the others, it has been impossible to distinguish between mild abnormalities unrelated to dwarfism and some thought to be due to the dwarf gene. Lengthy breeding tests are necessary to establish this difference. Breeding tests must also be used as a further screen for animals with seemingly normal vertebrae.

Insulin injection and pre- and post-treatment blood studies have been used with a reasonable degree of accuracy in several hundred test animals, points out Dr. Hardenbrook. Studies of this type may lead to better tests to help find dwarf carriers.

Meanwhile the search goes on for other methods that might prove more certain and more practical. An instrument called a profilometer, developed some years ago to find carriers among mature Hereford bulls, has not proved so accurate as was expected. It detected a slight forehead bulge thought to mark normal-looking animals as dwarf carriers. Outward physical appearance is still being carefully studied, however, for characteristics that might identify the carrier.



Plan Food Service and Parking for Festival Visitors

Final plans are now shaping up to handle the thousands of visitors expected at the University of Illinois Farm and Home Festival next week, March 27-29. Whether they come from north, south, east or west, visitors will find routes to the University south campus marked as they enter Champaign or Urbana.

Special parking areas will be set aside for parking, and special transportation will be provided from parking areas to the Festival area.

Visitors will have the opportunity to enjoy a pork-chop barbecue luncheon each day in the stock pavilion. Barbecued fish will also be served on Friday. Tickets can be obtained at any registration and information center upon arrival at the festival. The cafeteria in the new home economics building and in the Illini Union will also be open. In addition, restaurants will provide meals in the campus area and in Champaign and Urbana.

Those who want to stay overnight can get information from farm and home advisers about rooms that will be available in University housing and in local hotels and motels.

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Use Care in Handling Gasoline

There's a lot more to filling a tractor--and doing it safely--than just pouring in the fuel, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

Whenever gasoline comes into contact with air, highly explosive vapors are formed. A pint of gasoline mixed with air has the power of nearly 11 pounds of dynamite. Handling gasoline carelessly--overfilling the tank or spilling the fuel--increases the chances of a dangerous, costly explosion and fire.

Gasoline vapors are three times as heavy as air and are invisible. This makes it important to have your tanks outside of buildings so that fumes cannot collect in large quantities.

Always shut off the tractor engine before fueling, and take special care not to overfill the tank. If you do spill gasoline on the tractor, wait at least ten minutes before starting the engine so that the gasoline will have time to evaporate.

Why let things burn that you worked so hard to earn?





for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF MARCH 24, 1958

## Crowding May Provoke Coccidiosis in Lambs

Crowding too many lambs and ewes into the same lot may cause heavy losses from coccidiosis.

Dr. N. D. Levine, animal parasite specialist at the University of Illinois College of Veterinary Medicine, says that lambs under three months of age are most frequently and seriously affected. They get weak, lose weight, have diarrhea and may die if they get a heavy dose of the parasites that cause the disease.

Young lambs pick up the parasites from pastures, feed and water that have been contaminated by infected older sheep. If it's a light infection and the lambs are healthy, no great damage is done. But if too many lambs and ewes are crowded together, exposure is heavier and the lambs may become heavily infected.

Dr. Levine gives two simple steps to prevent trouble from coccidiosis:

1. Don't crowd too many ewes or lambs into a feedlot or pasture.
2. Use elevated feed and water containers.

Treatment by a veterinarian will be most effective if he is called at the first signs of coccidiosis.



UI Finds Ponderosa Pine Not Adaptable to Illinois

University of Illinois forestry researchers recently completed a study which showed that ponderosa pine is not adaptable to Illinois.

Purpose of this study was to find new timber species that can be grown in Illinois. New species are needed because Illinois has three million acres that are better suited to growing timber than agricultural crops.

Ponderosa pine was selected for the study because it is adaptable to a wide variety of growing conditions. It is also the most widely grown conifer in western North America. In total annual timber production, it ranks second only to Douglas fir.

Ralph Lorenz, UI forester, explains that seed for these studies was obtained from six western states at altitudes ranging from 2,000 to 7,000 feet.

At first no problems were encountered in planting the species. Germination was good and the seedlings were vigorous. When the seedlings were two years old, they were planted in several Illinois counties. Field survival was excellent. Researchers noted that seed sources from high altitudes grew slowly, while those from low altitudes grew faster.

Lorenz reports that the ponderosa pine looked good only for the first 10 years. The biggest problem was needle cast. This relatively unknown disease has already killed most of these experimental plantings of ponderosa pine in Illinois.

Because of this disease, the researchers conclude that ponderosa pine cannot be successfully grown in Illinois at the present time.



Students Complete UI Ag Short Course

Eighty-one students completed the recent University of Illinois Winter Short Course in Agriculture and Home Economics. The course began February 3 and ended March 14.

The short course is designed for men and women who cannot regularly attend college, reports H. L. Sharp, director. It gives farm people an opportunity for concentrated study in agriculture and home economics at a slack time of the year. Students can bring themselves up to date on new developments in modern agriculture and the modern farm home.

Twenty-six courses were offered this year. They included study in agricultural economics, agricultural engineering, agronomy, animal science, dairy science, horticulture, veterinary medicine and home economics. This was the first year home economics courses had been offered. Sharp reports that the agricultural engineering courses were the most popular ones.

Short course credits do not count toward a college degree, but a short course certificate is awarded at the end of the term. Short course students transferring to the regular four-year college program can, however, take "proficiency examinations" in areas they have studied. If they pass, they will receive credits acceptable toward a degree in agriculture.

Several of the short course students received \$100 scholarships from their local banks. These bankers were honored at the short course banquet March 7, which was sponsored by the Illinois Agricultural Association. Several FFA Foundation scholarships for \$50 were awarded also.



Clean Farm Shop Is Safer

Cut down accidents in your farm shop by keeping the place clean and storing tools and equipment systematically.

O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture, says that orderliness, along with good lighting and safe tools and equipment, will make work in your farm shop safer.

Have plenty of light over your work centers. Be sure to provide good ventilation to keep harmful fumes from accumulating while you are working.

Hogsett offers these five suggestions for controlling fire in your farm shop:

1. See that your shop's heating equipment is installed correctly and is operating right.
2. Be careful when you use or store inflammable liquids.
3. Repair any defective electric appliance or wiring.
4. Don't let oily rags accumulate.
5. Keep a fire extinguisher in the shop, and know how to use it.

When you're welding, wear protective gloves and face shield. Make sure there are no materials near welding equipment that might be ignited from sparks or welding flames.





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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF APRIL 7, 1958

## Rural Areas Suffer Most Lightning Damage

Lightning accounts for nearly 400 deaths and 1,000 injuries each year. And 90 percent of the damage done by lightning every year occurs in rural areas, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

This threat from the skies also accounts for about five percent of the nation's fires and an annual property loss of \$20,000,000, Hogsett says.

In most cases you can prevent lightning damage to your buildings and their contents with a system of air terminals and grounded conductors. Be sure that your system is properly installed and maintained.

During electrical storms seek protection in buildings protected with lightning rods whenever you can. Stay away from open windows or doors and fireplaces, stoves, pipes and other metal objects.

If you have to stay outdoors, keep away from small sheds or shelters in exposed locations, isolated trees, wire fences, farm machinery or hill tops in open areas.

Best protection in the open when you have no other alternative is to lie on the ground, away from objects that tend to attract lightning. Bolts of lightning always head for the highest point in the area, whether it is a barn, a tree or a man walking in a field.



for weeklies

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Four Illinois Counties Modified-Certified Bovine Brucellosis Free

Perry, Vermilion, Ford and Kankakee are the first counties in Illinois to qualify as modified-certified bovine brucellosis-free areas.

Certification was made by the chief, Animal Disease Eradication Division, Agricultural Research Service, Springfield, Illinois. Each county has been certified for three years from the date of certification. Perry county was certified on January 7, 1958, Vermilion on January 28, Kankakee on February 3 and Ford on February 20.

An area is certified when tests show that the infection rate has been reduced to not more than one percent of the cattle and five percent of the herds. Nine states, Puerto Rico and 464 counties in 27 other states are now certified.

Brucellosis (Bang's disease) presents a dual threat. It causes abortion, sterility and reduced milk production in cattle. It costs Illinois farmers an estimated \$3 million loss annually in milk and meat. It can also infect human beings, causing a long, incapacitating illness known as undulant fever. It attacks swine, too, causing abortion and bone damage.

Forty-nine Illinois counties are now enrolled in the compulsory testing or area program. Dr. G. T. Woods of the University of Illinois College of Veterinary Medicine says that attaining a modified brucellosis-free status is only the first phase in the over-all eradication program. As long as there is even a small percentage of infection, the danger of spread and increase of the disease remains.



Allen Kline Dinner Speaker at Bankers Agricultural Conference

Allen Kline, past president of American Farm Bureau Federation, will discuss "Farming Today and Tomorrow" during the 12th annual Illinois Bankers Agricultural Conference at the University of Illinois on Tuesday and Wednesday, April 15 and 16.

A. T. Anderson, University agricultural economist, who is a member of the program committee, says that the two-day conference is expected to attract about 200 bankers, bank directors, farm advisers and others. The program will emphasize the role that Illinois bankers play in financing today's highly capitalized agriculture in order to provide maximum farm earnings.

Sessions Tuesday morning and afternoon and Wednesday morning will be held in the Law Building auditorium. Tuesday luncheon and dinner sessions will be in the Illini Union ballroom.

Speakers will include College of Agriculture staff members from the departments of agricultural economics, animal science and agronomy.

M. B. Russell, head of the department of agronomy, will lead a question-discussion period Tuesday morning on the productive potential of Illinois soils and soil management systems.

Dean Louis B. Howard of the College of Agriculture and Otto Steffey, president of the Illinois Agricultural Association, headline the Tuesday luncheon session.





Financial, agricultural and land price outlooks and trends will keynote the Tuesday afternoon session. Other subjects will include credit needs of Illinois farmers and farm management facts for sound loan decisions. Harold G. Halcrow, head of the department of agricultural economics, will be question-discussion leader.

In addition to Mr. Kline's address, W. G. Kammlade, chairman of Illinois 4-H Foundation, will recognize the Illinois bankers' contributions to the 4-H Foundation during the dinner session. Music will be furnished by the University of Illinois Women's Glee Club.

Financial problems faced by cattle and hog feeder operators will be discussed Wednesday morning, followed by a question-discussion period led by H. M. Scott, acting head of the department of animal science. The final session will be concluded by a four-member panel of bankers, who will show how banks handle different types of farm loans.

The conference is conducted by the College of Agriculture in cooperation with the Illinois Bankers Association. Additional information may be obtained from the Conference Supervisor, 116c Illini Hall, Champaign.

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Plan Ag Student Guest Day at Urbana

The University of Illinois College of Agriculture is planning a guest day for high school students, their parents and friends on Saturday, April 19.

Purpose of the guest day, according to Associate Dean H. W. Hannah, is to encourage high school students to attend college and to tell them of the many opportunities open to College of Agriculture graduates.

Guest day will begin with registration and a tour of exhibits in the stock pavilion between 8:30 and 9:15 a.m. (CST). Then the program moves to 112 Gregory Hall, where Hannah will speak on "The Challenge in Agriculture." C.D. Smith, assistant dean of the college, will discuss housing, loans and scholarships.

Several agriculture students will discuss social life and campus activities and proper attire for campus life and will explain how students can work their way through college. H. L. Sharp, assistant to the dean, will close the morning session with an explanation of enrollment procedures, freshman week and registration.

A chicken barbecue will be served at noon in the stock pavilion. And Charlie Pond's Palaestrum Kids will give a gymnastic exhibition.

In the afternoon, Harlan Rigney, a junior in agriculture, from Freeport, will tell of his first year's experiences at the U. of I. W. D. Buddemeier, professor of farm management, will speak on the topic, "Fifteen Years From Now." And D. E. Alexander, professor of plant breeding, will discuss "Trail Blazing."

In addition, three special programs will be presented for students interested in dairy and food technology, agricultural journalism or forestry.

Students interested in attending guest day should send their names to the Associate Dean's Office, College of Agriculture, Urbana.



Phosdrin Best Insecticide for Grain Sorghum

Phosdrin appears to be the best insecticide for grain sorghums in 1958. This report is based on University of Illinois College of Agriculture and Illinois Natural History Survey tests made in 1956 and 1957.

According to W. H. Luckmann, UI and INHS entomologist, these tests were made to determine the abundance and distribution of insects known or suspected to damage grain sorghums. In addition, several insecticides were tested for effectiveness against grain sorghum insects.

The insects were collected and studied at four different areas--Urbana, Vandalia, Sesser and Ware. Those found included the corn earworm, sorghum webworm, European corn borer, corn leaf aphid, chinch bug, fall armyworm and sorghum midge. The distribution and abundance of these pests in sorghum-growing areas of Illinois indicates that during 1957 not all of them will cause damage all the time. Some may be damaging only in specific areas at certain times.

The sorghum webworm was the most common sorghum pest in Illinois during 1957, according to Luckmann. Yet it was seldom found in sufficient numbers to cause great damage. And the only damaging populations were in the extreme southern area of the state.

The corn earworm was found throughout the state, although large numbers were never found. However, past observations show that it can be a serious pest of grain sorghums.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF APRIL 14, 1958

## What To Do If a Tornado Comes

If you knew a tornado was coming 10 minutes from now what would you do?

Don't wait that long to decide, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. Wise families already have a plan worked out. The best plan includes these simple precautions.

Keep calm! It will not help to get excited. Tornadoes usually move in a northeasterly direction at about 25 to 40 m.p.h. If one is headed in your direction and you don't have time to escape, shut off the gas and electricity. This is your best protection against fire.

Open the windows and doors on the north and east sides of your house. This will help equalize air pressure and may save your house from destruction.

If you don't have a "cyclone cellar" the southwest corner of the basement usually offers the greatest safety. If you do not have a basement make arrangements now to take shelter in your neighbor's basement.

The purpose of a tornado warning system is to give you 10 minutes to take these precautions. They could be the most valuable minutes of your life.





Set Leisurecraft Camp for May 12-16

Dates for 1958 Leisurecraft and Counseling Camp have been set for May 12-16 at the State 4-H Memorial Camp near Monticello.

Miss Claret Walker, extension specialist in family living at the University of Illinois and camp chairman, says that leadership training emphasis in the program this year will be concerned with leisuretime activities.

Staff members will include Mrs. H. H. Maddox, Mt. Pulaski, leather work; Ray Olson, Moline, games, square and folk dancing; the Handicrafters, Waupun, Wisconsin, handicraft; and Mrs. Lillian Fishel, Tolono, and Edith Haight, Charleston, camp craft. Mrs. Lester Whiting, Mahomet; Howard Baker, Toulon; and Harvey Gaither, Lacon, will be on the staff to teach campers how to find and polish stones.

Attendance is limited to 120, Miss Walker points out. Adult leaders from churches, recreation staffs, 4-H Clubs, Boy and Girl Scouts, handicapped persons programs, the Illinois Youth Commission and the Cooperative Extension service are especially invited to attend. Anyone else interested in leadership training for leisuretime activities is also invited.

Costs include \$10 registration fee and \$17.50 for meals and lodging. Husbands and wives may attend by paying only one registration fee. Miss Walker is accepting advance registrations now. See your county farm adviser or home adviser for a registration card.



Calf Pneumonia Often Occurs With Scours

Calf pneumonia frequently occurs at the same time and in the same barns as scours, according to Dr. R. D. Hatch of the University of Illinois College of Veterinary Medicine.

Many times an animal recovers from scours and dies because he is run down when pneumonia strikes. Much calf pneumonia is also caused by improper housing.

One of the most perplexing problems of calf pneumonia is that of recurring attacks. Many cases appear to respond to treatment only to develop further symptoms in a few days. Mortality rates increase with the number of recurrences.

Signs of pneumonia include heaving flanks, excessive mucous around the nostrils, temperature rise, respiratory sounds (varying with the degree of severity in each case), and refusal to eat.

Most animals are reluctant to move, yet often show surprising vigor when being treated. Treatment should begin at the first sign of pneumonia.

Housing is far more important than medication in the control of calf pneumonia. Dry, well-bedded, and well-ventilated quarters are essential. Individual pens and adequate exhaust fans will easily repay their cost in this case.

Training and experience of the veterinarian can help prevent a large portion of unnecessary calf losses. Much of the success of control measures for calf pneumonia depends on strict compliance with proved practices.



"Careers in Agriculture" Booklet Just Completed

A booklet entitled "Careers in Agriculture" has been recently printed by the University of Illinois Press. Prepared by the College of Agriculture, the booklet is designed for high school students planning to attend the University and study some phase of agriculture.

The booklet explains and discusses the vast opportunities in the exciting field of agriculture. A sampling of these fields includes plant science, animal science, economics, veterinary medicine, farming, communications and education. Each year thousands of college graduates are needed to fill positions in these and other fields.

High school preparation necessary for a college education is also included in the booklet. And the more than 300 courses offered by the University of Illinois College of Agriculture are described.

The booklet contains descriptions of College of Agriculture buildings, equipment and farms. Opportunities for personal and social development at the University are covered as well as tuition, fees, scholarships and enrollment procedures.

You can get a copy of the booklet by writing to the Associate Deans' Office, Mumford Hall, Urbana.



Gives Guides for Figuring Needed Farm Income

Farmers should aim for a total gross income about double the net earnings they want to make. This is what D. F. Wilken, University of Illinois farm management specialist, told the Illinois Bankers Agricultural Conference this week.

Gross income is considered the total value of crops and livestock sold less the cost of any purchased feed and livestock. Net earnings are what a farmer has left to pay interest, debts, and income taxes, and to use for savings and family living.

Wilken explained his views this way. If an average farmer on a 200-acre farm needs \$6,000 to provide for his living, savings, income taxes, interest and debt payments, he should aim for a gross income of about \$12,000 or \$60 an acre.

He pointed out that a 200-acre farm with about half the crop land in corn and the rest in oats and hay will average about \$50 an acre.

If their farm doesn't seem likely to make the needed income, farmers have three choices. They can change their cropping plans, or add livestock to increase size of business, or improve their efficiency.

On rented farms, Wilken emphasized that income desired by the land owner must also be figured. In planning the size of business, income needs of both tenant and landlord must be added together.

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The farm management specialist pointed out that corn is the most profitable crop for Illinois farmers. From 1951-56, total income from corn averaged \$77 an acre. Soybeans averaged \$64 an acre, wheat \$54, mixed hay \$32, and oats \$23.

Therefore, farmers who want to increase their farm earnings must plan to put as much of their land in the higher profit crops as practical if they are to get the highest possible income, Wilken concluded.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data. The second part of the document provides a detailed breakdown of the financial data for the quarter. It includes a table showing the revenue generated from various sources, as well as the associated costs and expenses. The final part of the document concludes with a summary of the overall financial performance and provides recommendations for future actions.

Date: 10/26/2023  
Page 10 of 10

for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF APRIL 21, 1958

## Hitch Implements to Tractor Drawbar

Always hitch trailing implements to the drawbar to prevent your tractor from tipping backward.

The farmer who ignores this advice may not get a chance to correct his error, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. When a tractor tips backward, it often crushes the driver or pins him down. Spilled fuel catching on fire is an additional danger.

Modern tractors are designed so that they will stall or lose traction before they will tip backward if implements are hitched to the drawbar. But hitching to the axle, around the power lift or to any point above the drawbar destroys this safety feature.

Often improperly hitched machinery won't cause the tractor to tip backward until the operator gets into tough pulling or heads uphill. When a tractor tips, things happen so quickly that he seldom has a chance to reach the clutch.

THE UNIVERSITY OF CHICAGO

Chicago, Illinois, January 10, 1950

Dear Mr. [Name]:

I have your letter of January 7, 1950, regarding the [subject].

I am sorry that I cannot give you a more definite answer at this time.

1950

Rhinitis Can Take Heavy Toll of Young Pigs

Rhinitis may cause several more months of feeding to bring infected pigs to market weight--if they don't die first.

Dr. G. T. Woods, extension veterinarian of the University of Illinois College of Veterinary Medicine, warns that atrophic rhinitis in a pig crop may cause substantial loss.

Veterinarians are still not sure what causes rhinitis. However, their guidance can help to control the disease. Some infected pigs have a dished-in or curved snout. Rhinitis is apparently spread by older pigs that have recovered from the disease.

To cut down the danger from this disease, Dr. Woods recommends the following practices:

1. Isolate the sows at farrowing time.
2. Keep any known infected pigs away from baby pigs.
3. Sell any pigs with dished-in snouts. Slaughter the whole herd if most of the animals are affected. Then disinfect the buildings and equipment before starting a new herd on clean ground.
4. Add new pigs that you know are disease-free and come from farms that haven't had a rhinitis problem.
5. Follow the McLean county system of swine sanitation.
6. "Living" with the disease is often unprofitable, but some herd owners, rather than sell out, cull closely.
7. All of the causes of rhinitis are not known, but breeding animals should not be purchased from herds that are known to be infected.

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T.G.E. in Swine Spreads Rapidly

One of the highly contagious diseases of new-born pigs is transmissible gastroenteritis (TGE), says Dr. P. D. Beamer of the University of Illinois College of Veterinary Medicine.

TGE spreads rapidly among baby pigs, causing vomiting, diarrhea, dehydration and high death loss. The mortality rate among pigs decreases as their age increases, says Dr. Beamer. In pigs under 10 days of age, nearly 100 percent die. Pigs affected after they are three weeks old seldom die, and mature animals may not even show noticeable symptoms.

Early and about the only symptoms are scours and vomiting. Little pigs seem very thirsty. They drink water or nurse, vomit and then repeat the process. As a result, they become weakened and dehydrated and die quickly. Sows that have been affected can be kept for breeding.

Since there is no treatment for TGE, the best means of avoiding losses lies in prevention. Follow the McLean county swine sanitation system, veterinarians suggest. Isolate sows at farrowing time, and keep visitors away from the herd until the pigs have a chance to get started.

TGE has been found in many parts of Illinois since it first appeared in 1947. Although it hasn't caused serious losses to the swine industry in the state as a whole, a swine raiser's entire pig crop could be lost if TGE strikes.

PH.D. THESIS

CHAPTER I  
INTRODUCTION  
The first chapter of this thesis is devoted to a general survey of the history of the subject. It begins with a brief account of the early attempts to solve the problem, and then proceeds to a more detailed study of the work of the great mathematicians who have contributed to its solution. The chapter concludes with a summary of the results obtained up to the present time.

CHAPTER II  
THE FUNDAMENTAL THEOREMS  
In this chapter we shall prove the fundamental theorems of the theory. We begin with the theorem of the existence and uniqueness of solutions, and then proceed to the theorem of the continuation of solutions. The chapter concludes with a proof of the theorem of the boundedness of solutions.

CHAPTER III  
THE THEORY OF PERIODIC SOLUTIONS  
The theory of periodic solutions is one of the most important branches of the theory. In this chapter we shall study the existence and stability of periodic solutions. We begin with the case of a single degree of freedom, and then proceed to the case of a system of degrees of freedom. The chapter concludes with a study of the case of resonance.

CHAPTER IV  
CONCLUDING REMARKS  
In this chapter we shall discuss some of the open problems in the theory, and give some suggestions for further research. We shall also give a brief summary of the results obtained in the preceding chapters.



Provide First Aid Kits Around Farms

You may save your life or prevent serious infection by promptly and correctly treating injuries that may occur on your farm or in your farm home.

O. L. Hogsett, extension safety specialist at the University of Illinois, says you owe it to yourself and those who work with you to provide adequate and up-to-date first aid materials and equipment. Put these first aid kits at convenient places in your home, on your farm equipment and in your farm buildings.

Good first aid kits need not be expensive or difficult to provide. A homemade kit containing the essential medication, dressing and supplies will do just as well as a more costly kit. All you need to start is a tight metal box or tightly covered tin can. Clean it out thoroughly and label it "First Aid Kit."

For assembling a good first aid kit, Hogsett recommends rolls of adhesive tape of varying widths, sterile cotton, sterile cloth for large bandages and tourniquets, a tube of sterile white vaseline for minor burns, scissors, boric acid, tincture of benzoin, an accepted anti-septic and spirits of ammonia.

DECLARATION OF INTEREST

I, the undersigned, being a candidate for the office of \_\_\_\_\_, do hereby declare that I am not a member of any political party, and that I am not connected with any political party, and that I am not connected with any political party, and that I am not connected with any political party.

I further declare that I am not a member of any political party, and that I am not connected with any political party, and that I am not connected with any political party, and that I am not connected with any political party, and that I am not connected with any political party.

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Date

Lawns Need Fertilizer for Spring Growth

It's still not too late to fertilize lawns this spring. And lawns need fertilizer before they begin their normal period of rapid spring growth.

Grasses are heavy nitrogen feeders, according to H. R. Kemmerer, University of Illinois landscape gardening specialist. Therefore the recommended amount of fertilizer is usually figured in terms of nitrogen per 1,000 square feet of lawn. Kentucky bluegrass and red fescues require two pounds of actual nitrogen per 1,000 square feet. Merion bluegrass requires about three pounds.

A complete fertilizer, based on a 10-6-4 formula, is 10 percent nitrogen, 6 percent phosphorus and 4 percent potash. A 100-pound sack of this fertilizer would contain 10 pounds of actual nitrogen--enough for about 5,000 square feet of lawn each year.

Many types of fertilizer are available. Organic fertilizers are derived from living things, such as animal and vegetable tankage. Inorganic fertilizers are purely chemical in nature. Both types are effective plant foods. Commercial fertilizers are sometimes a mixture of both.

In general, the organic fertilizers, which cost more per unit of actual nitrogen, release their nutrients more slowly than the inorganic. The result is more uniform stimulation of the grass over a longer period.

CHAPTER I

The first part of the history of the United States is the history of the colonies. The colonies were first settled by Englishmen in 1607, and they remained loyal to the British crown until the American Revolution in 1776.

The second part of the history of the United States is the history of the nation. The nation was founded in 1776, and it has since then been a free and independent country. The Constitution of the United States was adopted in 1787, and it has since then been the supreme law of the land.

The third part of the history of the United States is the history of the people. The people of the United States have made many great contributions to the world. They have discovered new lands, they have invented new machines, and they have fought for freedom and justice.

The fourth part of the history of the United States is the history of the future. The future of the United States is bright and full of promise. We have the resources and the talent to make the world a better place for everyone.

Paint Protects Galvanized Roofs

Galvanized roofs will eventually start to rust.

When rust starts to appear is the time to paint, says Don Jedele, agricultural engineer at the University of Illinois College of Agriculture.

Galvanized roofing should be painted when the original color starts to fade and dark spots appear, Jedele points out. If rusting has already started, use a stiff brush to remove loose particles and scale before you start to paint.

Roofs paint best in warm, dry weather. The paint then will stick better and give better coverage. Sheets should be dry and free from dust and dirt. If the roof is corroded, spot-paint all rusted areas after removing loose particles and scale, and let them dry before painting the entire roof.

According to Jedele, for a one-coat application metallic zinc paint gives the best service. Its color is battleship gray, and one coat will protect roofs for five to eight years. A second coat applied within four years of the first will double the protection time.

Iron oxide paint, the common red barn paint, is often used as metal paint, but it will not give as long service as metallic zinc. However, it works well as the base coat in a two-coat application.

Red and blue lead paints are excellent as primers on metal roofs, but not as finishing coats. Asphalt paints are least expensive to use, but they have the lowest coverage and service life of any of the commonly used paints.



Add Galvanized Roofs - 2

Aluminum paint is widely used on metal roofs for its reflective value. It should be used only as a finishing coat over a primer, because it has a short service life when applied directly to rusty metal. White house paint does the best job of reflecting sunlight and it can be applied without a primer if there is no rust.

Metal paints can be applied with a brush or spray gun.

A word of caution: Don't use lead paints where rain water is collected for animals or people because of danger of lead poisoning.

For full information on metal roofs, ask your county farm adviser for a copy of Circular 759, "Galvanized Roofing for Farm Buildings." Or write directly to the College of Agriculture, Urbana.

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4/23/58





for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF MAY 5, 1958

## Grain in Grass-Legume Silage Has High Feeding Value

Tests at the University of Illinois indicate that corn does not lose any of its feeding value when added to grass-legume silage at ensiling time.

G. R. Carlisle, extension livestock specialist at the University of Illinois College of Agriculture, reports almost the same daily gains in two lots of steers in a 1957 feeding trial. Both lots gained about 1.8 pounds a day on a wintering ration of alfalfa silage.

Enough corn was added to one of the silos at filling time to give each calf in the test about 4.5 pounds of corn a day on a full feed of silage with no additional corn. No corn was added to the other silo, but 4.5 pounds of corn were fed daily to each steer on the test in addition to a full feed of silage.

Feed costs were slightly lower for the steers getting the silage to which the corn had been added at ensiling time, Carlisle says.



Rabies Vaccination for Dogs Due June 1

Under the Illinois Rabies Law, dogs must be vaccinated by June 1. After this date all stray dogs not wearing a current vaccination tag will be picked up, confined for at least seven days and then disposed of if not claimed.

The Rabies Law was passed in 1953, and a control program was begun in 1954. There was no significant decrease in the number of rabies cases reported until 1955, when a drastic drop occurred among dogs. There was also substantial decrease in the total number of cases for all species, points out Dr. R. B. Barr of the University of Illinois College of Veterinary Medicine.

Before 1955, about 250 cases of rabies were reported annually. Over 50 percent of these cases were in dogs. In 1955, only 21 of the reported 86 cases of rabies occurred in dogs. In 1956, dogs accounted for 59 of 112 cases.

Ninety positive cases of rabies were reported from 45 counties in 1957, according to figures released by the Illinois Department of Public Health. Positive cases of rabies were found in 31 skunks, 21 dogs, 12 cats, 14 cattle, 4 squirrels, 2 raccoons, 2 foxes, 1 swine, 1 rat and 1 opossum.

With this changing pattern in view, says Dr. Barr, investigations are being undertaken in the hope of finding some wild animals that may act as reservoirs for the disease. At the University of Illinois, Drs. Barr and P. D. Beamer of the College of Veterinary Medicine are working with Dr. C O. Mohr of the Illinois Natural History Survey in research on rabies.



Fertilize Trees for Growth and Vigor

When, how often or how much should I fertilize shade and ornamental trees? These questions are frequently asked by Illinois home owners.

The answers depend on the tree and the conditions under which it is growing, according to H. R. Kemmerer, University of Illinois landscape gardening specialist. But there are a few general rules that can serve as a guide.

Fertilizer can push the growth of a young tree where quick development and shade are desired. When a young tree is transplanted, fertilizer should be used sparingly and should never come into direct contact with the roots. But once the tree has established itself, fertilizer will help it grow vigorously to mature size.

If a tree seems to have matured and is growing healthily, it does not need fertilizer. On the other hand, when a tree has been injured or attacked by insects or disease, fertilizer can help it recover. A loss of vigor also may indicate that a tree needs fertilizing.

When you apply fertilizer, two pounds of a complete chemical fertilizer for each inch of trunk thickness (diameter) is a good general rule to use. With the newer type concentrated nutrients, follow directions of the manufacturer, advises Kemmerer.



## Add Fertilize Trees - 2

The best method of application is to put the fertilizer in holes drilled under the tree. The holes should be a foot or more deep, a foot apart and about halfway between the trunk and the farthest branch spread. Or you can spread the fertilizer over the ground beneath the branch spread and soak it into the soil with water.

For most trees, spring is a good season to fertilize.

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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF MAY 12, 1958

## 4-H'ers Can Sell Lambs at Marketing Days

Two special lamb marketing days offer Illinois 4-H lamb project members a good chance to benefit from a favorable market when they sell their project lambs this spring.

4-H Lamb Marketing Day at the National Stockyards, East St. Louis, Illinois, will be Thursday, June 5. The Tri-State Lamb Marketing Day will be Saturday, June 7, at the Evansville, Indiana, stockyards.

Both of these days are planned as practical marketing days when 4-H project lambs offered for sale will be given special attention and often bring top prices. However, 4-H'ers who do not take lambs for sale can also benefit from the educational part of the day's program.

E. S. Matteson, extension livestock specialist from the University of Missouri, and M. F. Ruston, head of the sheep department of the Producers Livestock Marketing Association, National Stockyards, will grade all the lambs during the morning at East St. Louis.

The specialists will demonstrate handling and mouthing sheep, inspecting udders, grading market lambs and preparing ewes for lambing to the 4-H'ers, leaders and parents who attend. Matteson will also show the group how to select ewes for 1958 projects.



Haying Marks the Start of Many Farm Accidents

Check haying equipment carefully before starting to cut this year's hay crop. Make sure it's in good condition so that you won't lose time from costly accidents.

Haying marks the start of a season when farm accidents run high, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. Keep those accidents as few as possible.

Watch especially for defective hitches, ropes, pulleys, lifts, hayracks and ladders. Check your mowing equipment to be sure that all safety guards are in place.

The Illinois Rural Safety Council recommends that you take special precautions to prevent falling from hayracks and haystacks. Make sure that loft floors are repaired and hay chutes are guarded. Take special care in making starts and stops while loading, especially on rough ground. Never get off a tractor mower while it is in operation.

Carry a pitchfork over your shoulder, and stick it securely into the ground when you are not using it. Don't lay it on the ground-- and never throw it. When your day's haying is finished, hang up the fork or put it in a rack in the barn.

Make sure the hay is well cured before you store it in the mow. Damp hay will heat and may start a fire. This is the principal cause of barn fires. Check freshly stored hay regularly for several weeks to make sure there is no sign of heating.

THE HISTORY OF THE UNITED STATES

The first part of the book is devoted to the early history of the United States, from the discovery of the continent by Christopher Columbus in 1492 to the establishment of the first permanent English colonies in 1607.

The second part of the book deals with the colonial period, from 1607 to 1776. It covers the growth of the colonies, the struggle for independence, and the American Revolution.

The third part of the book is devoted to the early years of the United States, from 1776 to 1800. It covers the establishment of the Constitution, the early years of the Republic, and the War of 1812.

The fourth part of the book deals with the middle years of the United States, from 1800 to 1860. It covers the expansion of the United States, the struggle over slavery, and the Civil War.

The fifth part of the book is devoted to the late years of the United States, from 1860 to 1900. It covers the Reconstruction period, the Gilded Age, and the Progressive Era.

The sixth part of the book deals with the early years of the 20th century, from 1900 to 1930. It covers the Progressive Era, the First World War, and the Great Depression.

The seventh part of the book is devoted to the middle years of the 20th century, from 1930 to 1960. It covers the Second World War, the Cold War, and the Civil Rights Movement.

The eighth part of the book deals with the late years of the 20th century, from 1960 to 1990. It covers the Vietnam War, the Watergate scandal, and the end of the Cold War.

Research Shows Food Can Be Sterilized by Radiation

Radiation sterilization (cold sterilization) of food may become an alternative to conventional preservation procedures, such as cooking and canning, freezing, salting and drying, according to University of Illinois scientists.

After six months of research at the College of Veterinary Medicine, Drs. J. P. Kreier, E. F. Reber, O. P. Malhotra and P. D. Beamer have found that beef preserved by irradiation is wholesome.

The sterilizing dose may be applied after the food has been placed in a sealed container. The dose level which kills or inactivates food spoilage organisms does not cause great changes in the physical character of the irradiated food, nor does it induce residual radiation.

Sources of radiation for sterilization at a reasonable cost are provided by radioactive wastes from nuclear reactors and nuclear power stations.

There are some chemical changes induced in irradiation sterilized food, say the veterinarians. Before this process can be released for commercial use it is necessary to prove that none of the changed food constituents are toxic.

Twelve dogs are used in the two-year experiment designed to test irradiated ground beef for wholesomeness. Beef is sealed into No. 10 cans and sterilized by irradiation.

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## Irradiated Beef

Ground beef makes up 35 percent of the total solids of a complete balanced ration. Dogs are fed rations containing non-irradiated beef or irradiation sterilized beef. Data are recorded on weekly body weights, daily food consumption and monthly blood analysis.

Body-weight differences between the groups were not significantly different after the feeding experiment had been in progress 24 weeks. Food consumed by the dogs receiving irradiated beef was significantly less than for those receiving non-irradiated beef. Blood analysis of the animals in the different groups revealed no differences.

No unusual sickness or disease has occurred in the dogs receiving irradiated beef, according to the veterinarians.





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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF MAY 19, 1958

## National 4-H Sunday on May 25

National 4-H Club Sunday is being observed this year in connection with Rural Life Sunday on May 26.

Miss Anna Searl and O. F. Gaebe, state leaders of home economics and agricultural 4-H Clubs in Illinois respectively, point out that 4-H Sunday is observed by church organizations throughout the nation to emphasize the meaning of Christianity in rural life.

It occurs the fifth Sunday after Easter and is closely linked with Rogation days, celebrated for centuries in the Christian Church during the three days preceding Ascension Day. Originally these days had several emphases, but gradually that of prayer for God's blessing upon the fruits of the earth predominated.

When 4-H members assemble to worship God on 4-H Club Sunday, they join a long succession out of the dim past of history. They join, as have many generations, in seeking the blessing of God upon the land, the seed, the cultivation of the earth and enrichment of home and community life.

4-H Club Sunday is an outgrowth of Rural Life Sunday, which was first observed in 1929 at the suggestion of the International Association of Agricultural Missions.

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Irradiation May Revolutionize Grain Storage

Radiation of grains can control insect infestation.

Dr. E. F. Reber, University of Illinois College of Veterinary Medicine, says that this appears to be a promising field for the peaceful application of atomic energy products.

Tremendous amounts of grain are lost throughout the world because of insect infestation, says Dr. Reber. Preventing this loss would mean better nutrition for people in many nations as well as a saving of millions of dollars.

Adult granary weevil and flour beetles can be exterminated by irradiation. Surprisingly low doses of radiation will sterilize the eggs of these insects and prevent further reproduction by the adult.

Drs. Reber, O. P. Malhotra, J. P. Kreier, H. W. Norton and P. D. Beamer, after six months of research at the College of Veterinary Medicine, report that changes in wheat or flour due to such irradiation treatments are small.

Twelve dogs are being used in a two-year experiment designed to test the nutritive value and wholesomeness of irradiated flour. This flour makes up 35 percent of the total solids of a complete balanced ration fed to the dogs. Some dogs are also being fed rations containing non-irradiated flour as a check.

Data are recorded weekly on body weights, daily on food consumption and monthly on blood analysis. There have been no significant differences in initial weight, average weight gained and amount of food



eaten by the dogs fed irradiated and those fed non-irradiated flour. Blood analysis of the groups also did not show any differences.

No unusual sickness or disease has occurred in the dogs receiving irradiated flour, according to the research workers.

Wheat irradiated to exterminate granary weevils and flour beetles was wholesome under the conditions of this short-term experiment, says Dr. Reber.

Radiation processing may be used for commercial sterilization of food after enough research has shown that such foods are wholesome. Sources of radiation for sterilization at reasonable cost are provided by radioactive wastes from nuclear reactors and nuclear power stations.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF MAY 26, 1958

## Set Dates for Safety Field Days

Safety demonstrations will be featured at the 4th Annual Safety Field Day for the northern half of Illinois on June 13 at Knoxville.

Safety Field Day for the southern half of the state will be on August 27 at Olney, according to O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. These one-day events are open to the public, and everybody who is interested in farm and home safety is urged to attend.

These safety field days are co-sponsored by the Illinois Rural Safety Council and the Home Economics and Agriculture Extension Councils of the host counties.

Again this year the two field days will be held in different areas of the state so that everyone will have an opportunity to attend without having to drive too far.

Main objectives of the safety field days are to give those who are responsible for local safety programs a chance to become familiar with demonstrations, exhibits and other safety material that may be adapted to their areas.

Also, it is hoped that people in general may get a better understanding of the safety problem that we face in today's modern living and farming.





Guard Against Undulant Fever

Unless tests have proved the dairy or swine herd to be free from brucellosis, there's good reason for farmers to guard against undulant fever at calving or farrowing time.

Dr. G. T. Woods of the University of Illinois College of Veterinary Medicine says that each time a brucellosis-infected cow or sow gives birth to young she expels millions of brucellosis germs at the same time. Handling the new-born animals or the afterbirth can lead to a painful, disabling undulant fever infection.

Best way to prevent undulant fever is to eradicate brucellosis from the farm. But until that can be done, follow these precautionary measures:

1. Wear rubber gloves when handling new-born pigs or calves.
2. Use a fork or shovel to remove afterbirth and dead pigs.
3. Wash and disinfect your hands after removing the rubber gloves.

Dr. Woods advises that it's much safer to have a veterinarian treat a cow that has not cleaned herself properly than for the farmer to do it himself. Cows with brucellosis and other diseases may fail to clean themselves. In this case it's better to let someone do the job who has had experience in protecting himself against the disease.



University Sets Up New Four-Year Forestry Curricula

URBANA--Interested students will now be able to take a full four-year course in forestry at the University of Illinois.

Two new four-year curricula leading to the degree of Bachelor of Science in Forestry go into effect on June 1, according to Dr. J. N. Spaeth, head of the University's Department of Forestry.

A two-year preforestry curriculum has been offered at the University of Illinois in Urbana for the past 20 years, Spaeth points out. However, students in that curriculum who wanted to get a degree in forestry had to transfer to some other school for their last two years. That will not now be necessary.

The new curriculum in forest production prepares students for all phases of the management of forest properties, private or public, large or small. It prepares them for the production of valuable wood products or for watershed protection, wildlife habitat, recreational enjoyment or other benefits.

The new curriculum in wood technology and utilization prepares students to work with wood as a raw material and to enter into positions that deal with the conditioning, manufacturing, use and sale of wood products.

First work offered in the new curricula will be the eight-week summer forestry camp beginning on July 14, 1958. The first week will be spent at the Dixon Springs Experiment Station at Robbs in Pope county, Illinois. Field, classroom and laboratory work there will be



concerned with the fundamentals of watershed protection, forest soils and woodland and plantation management.

The remaining seven weeks will be spent at Camp Rabideau in northern Minnesota. Field and classroom work there will stress both the theory and practice of silvics and silviculture, forest measurements and timber cruising and the harvesting and manufacture of forest products. This camp is located in the Chippewa National Forest, where all of the many activities of a national forest in timber management protection, sales and recreational use and wildlife management are under way. Also near by are many government forest research and demonstration areas.

Junior courses in the curricula will be offered starting in the fall semester, September 1958. Senior courses will be offered in 1959-60 for the first time. The first degrees will be awarded in June 1960. Students from other institutions who have the essential equivalent of the preforestry curriculum offered at the University of Illinois will be accepted for the summer camp this year. Applications should be made by June 15.

Graduates of both curricula may be employed by industry, by Federal, state or local government, or by colleges or universities, or may operate their own business or consulting service.

Although registration is in the College of Agriculture, many of the courses of instruction are in the Colleges of Liberal Arts and Sciences and Engineering. The forestry curricula use the laboratory, drafting, demonstration and classroom facilities of several departments in each of these colleges as well as those of the College of Agriculture.



In addition to Spaeth, the teaching staff includes 8 of the 16 faculty members who make up the teaching, research and extension staff of the department.

Equipment of the Department of Forestry includes maps, charts, colored slides and a working library of more than 10,000 books and pamphlets on forestry. It also includes forestry tools and instruments and wood-working and test machines.

A new Plant Sciences Laboratory building is now under way with 156,000 square feet of floor space for the Departments of Agronomy, Forestry, Horticulture and Plant Pathology of the College of Agriculture. This building will contain such facilities for advanced instruction as an electron microscope, radioisotope chemical laboratory, spectographic laboratory, controlled environment growth chambers, statistical laboratory, photo studio and darkroom, micro-technique laboratory and machine shop.

Other facilities are 40 acres of forest and Christmas tree plantations on the Urbana campus, several natural woodlands near the campus and at other locations throughout the state and the summer camp in northern Minnesota.

The 17 large buildings at Camp Rabideau are on high ground between two small lakes and are 1/2 mile from Lake Rabideau, which is 2 1/2 miles long. Facilities will take care of feeding and housing 150 students and 15 faculty members. Also available are drafting rooms, a classroom, library, recreation room, small infirmary and several service buildings.





Forestry students and faculty share these accommodations with the faculty and students in civil engineering, who attend a surveying camp there between their sophomore and junior years. Nearby lakes offer excellent swimming, canoeing and fishing. The surrounding forest area interests hikers, and there are several playing fields for outdoor games.

For full information, write to the College of Agriculture, University of Illinois, Urbana.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JUNE 2, 1958

## Friday the 13th is Safety Field Day

A full-sized tractor will be tipped over at the Knoxville High School, during the 4th annual Safety Field Day on Friday, June 13. The day is sponsored by the Illinois Rural Safety Council, Home Economic and Agriculture Extension Councils of Knox county.

O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture, says starting time of the program will be 9:00 a.m. C.S.T.

Featured on the program will be a fire control demonstration by the Knoxville Fire District, and a "hot line" demonstration by John Castle, Illinois Power Company, Springfield. Ed Langin of Country Mutual Casualty Company, Chicago, will demonstrate the I.A.A. Safety Car. State Police will cooperate with their radar equipment.

Main speaker for the program will be Maynard Coe, director of the farm division, National Safety Council, Chicago, who will give an inspirational talk on farm and home safety.

Safety Field Day is open to the public, and everyone who is interested in farm and home safety is urged to attend.



Warns Against Sale of Treated Seed

Farmers with a few treated seed oats left over from spring seeding should not sell it as market grain or feed it to livestock, emphasizes Benjamin Koehler, University of Illinois plant pathologist.

Koehler points out that Illinois law requires that all treated seed must be sold in bags and tagged with a poison label.

According to the plant pathologist, Ceresan and Panogen, the two compounds recommended for treating oats, wheat and barley in Illinois, contain mercury. This makes the grain treated with them dangerous for livestock feed and for human use. Recently two carloads of grain at Chicago were rejected because samples showed it had been treated with mercury compounds.

These mercury compounds have proved valuable for preventing seedling blight, Koehler points out. They help farmers get a good stand. Stronger wheat plants survive better through the winter.

Treating seed oats also helps to control smut. Even though many oat varieties are now smut resistant, seed treatment is recommended anyway since no oat variety is immune to smut entirely.

If farmers have a small amount of treated seed left over, Koehler suggests that they spread it thinly on a bin floor and hold it for seeding next year. If large amounts of treated seed are kept in a tight bin or bags, the mercury vapors may cause lower germination.

Treated seed corn must also be labelled as such when sold, Koehler points out. But compounds used in treating corn do not contain mercury. So they do not cause lower germination.



Veterinarians Give Checklist for Summer Cattle Health

University of Illinois veterinarians are recommending a seven-point checklist designed to help cattle thrive during the pasture season.

Livestock owners are urged to follow these points under the cattle health program:

1. Examine pastures frequently for poisonous plants. White snakeroot, horsetail milkweed, horse nettle, jack-in-the-pulpit, buttercup and bracken are only a few of the poisonous plants in summer and fall pastures.

2. Keep all gates and fences in good repair to prevent cattle from getting into a cornfield and overeating.

3. Livestock owners living in a blackleg area should have calves vaccinated at four to six months of age.

4. Spray the herd to get rid of flies. Use only recommended products. Consult your veterinarian and county farm adviser.

5. Provide plenty of shade for white-skinned animals that are pastured on clover, Sudan grass, buckwheat or weedy pastures. Otherwise they may become sensitive to sunlight, which may lead to sloughing skin, blindness and death.

6. Watch for signs of pinkeye or lumpy jaw. If any signs of disease occur, get help from the veterinarian immediately.

7. Be sure all new herd additions or replacements are free from disease before turning them in with the herd.





for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JUNE 9, 1958

## Tips On Buying A Baseball Bat

Have you ever slammed a home run and called yourself one of baseball's all-time greats?

Maybe you just had an ideal piece of wood in your hands, suggests a University of Illinois forestry specialist.

Ninety percent of all good bats are made of strong and durable ash, says C. S. Walters. But no two bats are alike. One thing to look for when you buy a bat is the grain, which should run the length of the bat. Also, count the number of annual rings across the small end of the bat. The specialist recommends four to 10 rings per inch. The fewer the growth rings, the stronger the bat.

Color differences are not important, since the occasional dark streaks of heartwood are just as strong as the normal light-colored sapwood.

If you want to keep your bat for a long time, don't leave it out in the rain, Walters adds. Treat it the same way as you would your glove.



Keep Children Off Tractors

Who's to blame when a child is hurt or killed while riding with Dad on the tractor?

Actually it's Dad's fault, and maybe Mother should share a little of the blame, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. Unfortunately, placing the blame doesn't repair a broken body or bring a child back to life.

Children get such a thrill from riding on the tractor that Dad may think he's being good to the youngsters when he lets them tag along. Maybe he's done it dozens of time before with no serious consequences.

But look at the score in Illinois last year. Records show that more than 100 persons were injured by falling off or being run over by tractors, and more than 50 were killed. If you read the newspapers, you know that many of these persons were small children.

So, before you decide to be good to your youngsters by taking them on the tractor, ask yourself this question: "If my child wanted to play with a loaded gun, would I be good to him if I let him have his way?"

The answer, of course, is "no." The only way you can be good to your children when they plead, "Let me ride, Daddy," is to say "no."



Red Spider Mites Not Fussy Eaters

Several species of mites, commonly called red spider mites, are not too fussy about their menu. They enjoy foliage of trees, shrubs and flowers, as well as vegetables.

Red spider mites are small but active insects about the size of pin heads. In spite of their tiny size, they are easily seen when the infestation becomes heavy.

Mites are likely to attack such plants as juniper, roses, arborvitae and spruce, according to L. L. English, entomologist with the Illinois Natural History Survey. These plants should be inspected frequently throughout the summer to detect and control the infestation before damage occurs. A convenient way to detect an infestation is to strike a few branches sharply with one hand. Use the other hand to hold a dish or piece of paper under the branches. If mites are present, they can be seen running about on the paper or dish when it's held in bright light.

These tiny insects vary in color from almost colorless to pale yellow. Black spots may or may not be present. They can also be orange, green or almost black, depending on their size, stage of development and host plant.

Mites damage plants by rasping and piercing the foliage to withdraw the plant juices and chlorophyll. This causes the leaves of deciduous plants to fall prematurely, while the foliage or branches of evergreens die.

Mites can be controlled by frequent syringing of the plants with a strong stream of water. The water pressure must be strong enough to dislodge both mites and eggs. More dependable control is obtained by spraying, though, and several excellent miticides are available.

Among those that English recommends are Aramite 15-W and chlorobenzilate 25-W. These materials are efficient, and the spray residues are effective against mites for several weeks. None are hazardous to use. Directions of the respective manufacturers should be followed.



Figure Costs Carefully Before Investing in Irrigation

URBANA--Illinois farmers were urged this week to figure costs and returns carefully before investing in irrigation.

Velmar Davis, USDA agricultural economist working at the University of Illinois, pointed out that farmers are often impressed with the high yields obtained by irrigating during dry years. But they fail to consider the costs of getting that extra yield.

Irrigation is costly, Davis stated. Success with irrigation requires high-level management and know-how in all practices that affect crop production and operation costs.

Davis pointed out that farmers must consider three types of costs. These are the original investment, such as drilling a well or building a reservoir and the pumping and distributing equipment; the annual overhead costs, such as depreciation, interest and taxes, which are about the same no matter how much the system is used; and the annual operating costs, such as fuel, labor and repairs, that vary with the amount of use.

Farmers are urged to get an estimate from their dealers on the cost of an irrigation system on their farms. Then they should figure the annual costs of owning and operating it. For a system that costs about \$150 an acre to start with, Davis estimates that the annual overhead costs will be about \$15.60, or about 10.4 percent of the investment. Operating costs will be about \$10.50 to make three 2-inch applications of water. So in this case a farmer would need an extra crop income of \$26.10 an acre to recover his irrigation costs.





Davis figures that, if corn is worth \$1.20 a bushel, it will take 27 more bushels of corn an acre to break even with this irrigation system. Besides the cost of irrigation, a farmer would have additional costs for fertilizer, seed, harvesting and hauling the extra corn. If corn is worth only \$1.00 a bushel, the corn would have to yield 35 bushels more.

When a farmer with irrigation changes his water application rate, he also changes the number of bushels needed to break even. For each additional two inches of water applied, farmers will need about 5 more bushels of corn to cover irrigation operating costs and the increased costs of fertilizer, harvesting and hauling when corn is \$1.00 a bushel, 4 bushels more when corn is \$1.20 and 3 bushels more when corn is \$1.40.

More detailed information about irrigation costs, returns and experiences of farmers can be obtained from the Department of Agricultural Economics, University of Illinois, Urbana. Ask for Farm Management Facts and Opinions Nos. 162 and 163.



Livestock May Be Poisoned Accidentally

Livestock can be poisoned accidentally in a surprising number of ways, according to Dr. R. P. Link of the University of Illinois College of Veterinary Medicine.

Treated seed and certain insecticides, rat poisons, paints and even various medicines may cause accidental poisoning.

One source of chemical poisoning is lead paint that the animals lick from painted surfaces or from discarded paint buckets. Many of the rat baits may also poison farm animals.

Arsenate of lead, used in orchard sprays, may poison livestock if the spray drifts into the pasture or onto a pond. If the water level of the pond goes down, the chemical in the water may become concentrated enough to become highly poisonous.

Even such livestock medicines as sodium fluoride, nicotine sulfate and carbon disulfide are deadly when given in the wrong amounts. For this reason they should be used only on the advice of a veterinarian.

Dr. Link says the safe way to handle dangerous chemicals is to follow the directions on the container and to keep them out of the reach of livestock.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JUNE 16, 1958

## Farm Population Growing Older; Smaller Part of Country Dwellers

Not only are farmers becoming a minority in our total population, but they are also a minority in the total rural population. According to C. L. Folsie, University of Illinois rural sociologist, more nonfarmers than farmers now live in the open country.

And the farm population is growing older, Folsie points out. More than 55 percent of all farmers are 45 years old. Almost one-half of the families have no children under 18 years.

With these changes in farm population, the rural school is passing out of the picture. Schools are moving to larger centers. The basic property tax on farm land to support schools has become a burden on farmers, who are paying a rather large part of their taxes to support a smaller proportion of children. And churches and small business in the small community are finding a shrinking patronage.

With the changing character of the farm family, an increasing number of women on farms are finding jobs away from the farm, Folsie points out. In recent years the proportion of farm wives working outside the home has been increasing more rapidly than in any other group. This trend insures a higher level of living and a constant income for the farm family.

All of these changes decrease the political influence of farm people in local communities. But they also tend to make rural living more and more like that of city people, Folsie concludes.

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Cottony Maple Scales Easily Seen

Perhaps you've recently noticed some cottonlike masses on maple trees and have wondered what they are. An entomologist with the Illinois Natural History Survey reports that they contain eggs of the cottony maple scale.

According to L. L. English, the cottony maple scale damages host plants by sucking the sap. He points out that the overwintering females do not become active until the sap begins flowing in the spring.

When the flow starts, the female begins laying eggs. Each female can lay between 1,500 and 3,000 eggs. And each mass of eggs, which forms a cotton-like appearance, is laid by one female.

The eggs hatch in late June or July. The first stage, or crawler stage, is the most active. Crawlers protect themselves by secreting a soft, waxy material that forms a scale. By fall the crawlers are mature and they overwinter as small, brown, flattened scales.

Cottony maple scales can be controlled with a malathion spray. Best results are obtained by timing the spray application for the crawler stage. Crawlers are easily seen moving away from the mother scale in early summer. Use malathion at the rate of 1 1/2 to 2 pints of 50 percent emulsion per 100 gallons of water. Or, for a smaller quantity, use 1 1/2 to 2 teaspoons per gallon. Foliage infested with these scales must be sprayed thoroughly for adequate control.

Other scale insects, such as the oyster shell scale and pine needle scale, are also active during the spring and summer. Oyster scales feast on deciduous trees and shrubs, while pine needle scales prefer evergreens. Malathion will also control these insects. Use the application rates given above for cottony maple scale.





Livestock Management Errors Are Costly

Farmers make mistakes in livestock management each year that cost them thousands of dollars in reduced productivity. A University of Illinois veterinarian, Dr. G. T. Woods, points out a few of them.

According to Dr. Woods, raising pigs in old lots and pastures is one major mistake. Such areas have three to five million worm eggs per square foot. And worms are a major cause of reduced gains. Dr. Woods suggests raising pigs on rotated pastures or concrete feeding floors.

Keeping old hens on the farm is another mistake. They may have tuberculosis, which easily spreads to young birds and swine. Because tuberculosis develops slowly, it may not be evident in young stock.

A few farmers market all livestock suspected of disease. They think that "what the buyer doesn't know won't hurt him." That's why it's good advice to buy from a reliable farmer whose herd is known to be healthy.

Turning hungry cows into lush legume pasture is often another mistake farmers make. This is a major cause of bloat. A simple, safe precaution is to feed cattle hay before turning them onto pasture. In brief, never turn hungry cattle onto lush legumes.

Hoping that a sick animal will recover without veterinary treatment is also a costly practice. Dr. Woods points out that too often the sickness is a hard-hitting contagious disease that causes serious losses in the entire herd.



Accidents Take a Staggering Toll

Accidents force farm people to pay more than a billion dollars a year for something they don't want--misery and suffering.

Accidents will cause the death of more than 15,000 farm people and injure 1 1/4 million more in the coming year unless people are more careful than they have been in the past, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

More farm workers are killed than workers in any other occupation. The death rate from farm accidents per person is exceeded only by the mining and construction industries.

Accidents to farm people occur ruthlessly and usually at the most inopportune time. Yet most accidents are preventable, whether they are associated with the tractor, the mad bull, the broiling sun or a spreading infection from a neglected wound. The truth is that thousands of farm people die every year in accidents that can and should be avoided. Most of these tragedies occur because someone does not know, does not think, does not see and does not do the right thing.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JUNE 23, 1958

## Purebred Sheep Sale at Urbana July 19

The annual summer Illinois Purebred Sheep Breeders' Association show and sale will be held in the Stock Pavilion at Urbana on Saturday, July 19.

The show will start at 9:30 a.m. DST and the sale at 1:00 p.m. DST, reports U. S. Garrigus, head of the sheep division at the University of Illinois College of Agriculture.

The catalog lists 94 head of Cheviot, Corriedale, Hampshire, Rambouillet, Shropshire, Southdown and Suffolk rams and ewes. Judges are Don Pullin and Ernie Rotter, from Iowa. Vance J. Van Tassell, Champaign, a University of Illinois animal science graduate, will be the auctioneer.

Some of the Middle West's top-ranking veteran sheep breeders will compete with newcomers for recognition and top honors in the exhibition and sale.

Lunch will be served at noon in the Stock Pavilion.

# W. H. RAY

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Illinois Farm Land Values Increasing More Than Buildings

Illinois farm land values have increased more than farm building values.

In the past 28 years Illinois farm land values have increased 248 percent, or nearly twice the 128 percent increase in farm building values, according to C. L. Stewart, University of Illinois land economist.

Even so, some parts of Illinois saw decreases in both farm land and building values per acre last year, and the state average showed little gain. Stewart attributes the sectional relapse and small state-wide gain to last year's bad weather.

In the midwest, Illinois ranks low in farm building value.

On March 1, Illinois' farm building value of \$46 per acre surpassed that of many western and southern states. But the averages of most states located farther north and east were higher, and no state east of the Mississippi River had a lower ratio of buildings to total farm value.

Farm building values in the New England and North Atlantic groups averaged 30 percent higher than the \$7,900 figure given for Illinois. In Ohio the per farm average was 20 percent higher than in Illinois, and in Indiana about 12 percent higher.

Stewart credits the smaller increase in Illinois farm building values to recent enlargement of farms, which has cut not only building costs, but machinery, other equipment and farm labor as well.

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Add Farm Land and Building Values - 2

Illinois was also found to be low in number of farms per 1,000 sold in 1957-1958. Only 39 Illinois farms in 1,000 were sold during this period compared with 68 in the Pacific states, 54 in the Rocky Mountain states and 43 to 58 in sister states in the corn belt.

Fewer than one farm in 1,000 in Illinois was reported to have been sold for taxes compared with 1.7 in the entire corn belt, 2.5 in the lake states, 2.9 in the northeast and 3.7 in the Rocky Mountain and Southern Plains states.

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Elm Leaf Beetles Especially Injurious to Chinese Elms

Although elm leaf beetles feed on elms everywhere, they are particularly fond of Chinese elms in southern Illinois.

L. L. English, Illinois Natural History Survey entomologist, reports that the reason for this preference is not known. However, he adds that the climatic conditions in southern Illinois may be responsible.

Both the adults and larvae feed on the foliage. But the larvae are more destructive. They skeletonize the leaves, causing them to dry, curl and drop prematurely.

English describes the adult beetle as being about 1/4 inch long with a yellow or greenish body and black eyes. The beetles like to overwinter in barns, sheds and other buildings. In the spring, they fly or crawl into the elms and chew small holes in the young leaves.

About the first week in June, the females lay yellow eggs in clusters on the undersides of leaves. The eggs hatch in about a week, producing yellow and black larvae. The larvae feed on the undersides of leaves until the whole leaf is almost demolished. After feeding for three weeks, they pupate in the cracks and crevices of bark, emerging as adults by midsummer.

To control the elm leaf beetle, English suggests spraying foliage thoroughly in early summer. He recommends using four pounds of lead arsenate to 100 gallons of water, or one heaping tablespoon per gallon. One properly timed application should give protection all summer. However, a second spray may be needed after the adults emerge.



Proper Disposal of Dead Animals Prevents Disease Outbreaks

Properly disposing of dead animals is an excellent way to help prevent a disease from spreading and to prevent new outbreaks of disease. That's the advice of Dr. J. R. Pickard, supervisor of the State Diagnostic Laboratory, located at the University of Illinois College of Veterinary Medicine.

Illinois state law requires that dead animals be burned, buried or hauled away by a licensed rendering company. Livestock owners should take the extra precaution of bringing the dead animal to the main road for pickup by the rendering company, says Dr. Pickard. This prevents the truck from driving over the farm and spreading more disease.

When burying an animal, dig a hole six feet deep as close to the carcass as possible. Roll the carcass into the hole and cover it with a layer of quick lime. Then add the dirt from the area where the animal was lying. This dirt often contains disease germs that other animals will pick up. Finally, fill the hole with clean soil.

The easiest way to burn dead carcasses is to cover them with oil. Then add a layer of straw and cover with a layer of heavy, fairly dry manure.

Always wear rubber gloves and boots when handling dead animals--they may have had an infectious disease. To prevent the spread of germs, move the carcass as little as possible, Dr. Pickard advises. Wash and boil clothing before wearing it again.

RECORDS OF THE DEPARTMENT OF THE INTERIOR

GENERAL INVESTIGATION OF THE LANDS OF THE UNITED STATES  
REPORT OF THE COMMISSIONERS OF THE GENERAL LAND OFFICE  
FOR THE YEAR 1874

THE NATIONAL ARCHIVES  
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FOR THE YEAR 1874

Exceptionally Heavy Elm and Maple Seed Crop Reported

The brown color in maples and elms this spring, which led many landowners to think the trees were dying, was caused by an exceptionally heavy seed crop.

Large numbers of seeds delayed leaf development in some trees for as long as two weeks, explains C. E. Olson, University of Illinois extension forester. After the large seed production, the trees had to have a "rest period" before they began to form leaves.

Excellent growing conditions last fall and a favorable winter were responsible for the large numbers of seeds.

The heavy seed crop was not limited to the spring of 1958. Wild black cherry had an unusually heavy seed crop last fall. Consequently, woodlands containing large black cherry trees will have an abnormal number of seedlings this spring. This will make woodland grazing particularly hazardous for livestock this summer.





for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JUNE 30, 1958

## Watch for Tractors on Highway

This is the season when vacationing motorists and farmers take to the nation's highways. Often farmers must cross a main highway to get from one field to another.

Tractors move slowly; they are made to do heavy field work and not to travel on highways. When a farm tractor and an automobile collide, it is usually the tractor driver who is killed.

A little consideration for the other fellow can help to prevent many of these accidents, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. Motorists must keep on the lookout for farm equipment on the highway. Farmers, on the other hand, can help by carrying warning lights at night.

Hogsett gives these suggestions to farmers: Plan ahead so that you can avoid unnecessary movement of farm equipment on heavily traveled roads. It's much safer to leave the tractor in the field at night than to go out on the highway if you don't have lights.

Always keep your tractor under control. Slow down for turns, and leave the tractor in gear when going down hills. Only the most experienced operators should take farm machinery onto public roads. Better entrances to driveways and fields, plus courtesy on the part of both motorist and farmer, will save lives.



Milk Fever Attacks the Best Cows

Burglars often pass up silver plate to get sterling silver. And milk fever acts the same way, according to a University of Illinois veterinarian.

Milk fever commonly shuns the poorer cows and picks on the high producers, says Dr. T. E. Fritz of the College of Veterinary Medicine. Cows are most susceptible at the age when their production is highest--about five to nine years of age.

Prompt treatment by a veterinarian is important. Unless milk fever is treated promptly, it usually kills affected cows within 48 hours after it strikes.

Most cases of milk fever occur between the 12th hour and the 3rd day after calving. An affected cow staggers and cannot stand steady. Then she goes down and turns her head to one side, in a position characteristic of milk fever. Weakness of the digestive tract together with the paralyzed posture may prevent normal evacuation of gases from the rumen and cause the cow to die of bloat.

Fortunately, points out Dr. Fritz, prompt treatment is highly effective. Calcium gluconate or some other calcium salt is added to the blood stream to replace the calcium drained from the blood by the sudden starting of milk production. Cows sometimes respond so quickly that they're on their feet before treatment is finished.

After the cow is treated, don't milk her out completely for a few days. Milk her just enough to relieve the pressure. She's a not so likely to deplete her supply of calcium in the blood if her production of milk is slowed down, according to Dr. Fritz.



Favor School Reorganization on Community Basis

School reorganization should be based on natural community boundaries or natural high school attendance areas.

This opinion is expressed by D. E. Lindstrom, University of Illinois rural sociologist, in a newly published bulletin, Development of Rural Community Schools in Illinois.

Lindstrom believes that areas in the state which are not yet organized into community unit districts should be divided into natural neighborhoods and communities as a basis for school district reorganization.

Elementary schools could then be located in natural neighborhoods, while the community would become the administrative unit for the high school and elementary schools in that district.

Lindstrom believes the financial support of schools must be organized on a much broader basis than a purely community one if equal educational opportunities are to be provided to all people in the state.

He suggests that intermediate districts be established to provide the specialized services that small schools cannot provide.

State population and valuation requirement laws should be somewhat flexible so that natural communities that are not able to meet these requirements can still organize on the basis of a special case appeal.

Lindstrom says that school reorganization, to be most effective, must have the active support of the people most concerned. It may be looked upon as a social process in which people become aware of the faults of their existing system and work together to correct them.

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## Care Can Help Reduce Egg Breakage

Many egg producers lose from 10 to 12 percent or more of their eggs through breakage, according to S. F. Ridlen, University of Illinois extension poultry specialist. Attention to supposedly small details in producing and marketing can add much to producers' incomes through reduced egg breakage.

Ridlen says this problem can be largely overcome if producers will follow a few simple rules.

Crowded nesting conditions, infrequent gathering and improper handling are the most common causes of egg breakage. These problems can be largely overcome by providing an average of 25 nests for every 100 hens and by gathering the eggs at least three times a day. Each nest should contain at least two inches of nesting material.

Never overload baskets, and distribute the eggs evenly in the basket to prevent rolling and cracking.

Pack Jumbo and Extra Large eggs separately rather than in the corners of fillers. Strong cases, flats and fillers will help to prevent breakage.

Egg shells become thinner in hot weather. Efforts to keep temperatures below 70 degrees F. and to encourage hens to drink more cool water should pay off in fewer cracked eggs.

Ridlen says that breeding and feed rations also have a direct effect on egg breakage. Since the ability to produce strong shells is inherited, selective breeding is effective in improving shell strength.





Shell strength can also be improved by feeding properly balanced laying rations. Calcium, phosphorus, vitamin D and manganese are all known to have a direct relation to shell quality. Oyster shell should be provided in the mash as well as in hoppers.

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6/25/58  
FPP



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JULY 7, 1958

## Keep Newly Purchased Livestock Healthy

University of Illinois veterinarians are warning livestock raisers not to overlook the possibility of disease when adding newly purchased livestock to their herds.

Insist on proof that hogs have been vaccinated for cholera and that hogs and cattle have been blood-tested for brucellosis. Don't buy hogs from rhinitis-infected herds. Infected animals may pass disease to other animals.

Isolate new breeding stock from the rest of the herd for a minimum of 30 days, and have a veterinarian retest them. If no disease breaks out during this time, it will be reasonably safe to add the animals to the herd.

Illinois veterinarians give this additional note on feeder cattle. When the cattle arrive, give them plenty of water and medium-quality hay. Start feeding them gradually after a few days. Don't turn them out on legume pastures when they first arrive, or bloat may take a heavy toll.



Prevent Grain Field Fires

Your small-grain crop plus a season's work can disappear in a few minutes if fire gets started in a field.

Exhaust sparks, fuel leaking or spilling on heated engines, careless handling of matches and lighted cigarettes are the major causes of field fires, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

Before starting to combine, check for holes in the muffler and tail pipe on your tractor, combine and truck. If a muffler is located where straw will touch it, put a smooth metal shield under it. Check the fuel lines and carburetors for leaks.

As another safety tip, Hogsett suggests that you avoid backing your truck in a grain field. Whenever you back a truck, you run the risk that the muffler and tail pipe may pick up straw. If possible, always pull forward to the combine.

Refueling calls for care too. Shut off the engine and let it cool a few minutes. While the engine cools, you can grease and check the machine for needed adjustments or repairs. Make sure the radiator or screen isn't clogged, since clogging will cause the engine to heat.

If possible, carry a good fire extinguisher with you, and know how to use it.



List Emergency Crops for July Plantings

Even though crops have been flooded out, emergency crops can be planted even up to the end of July, points out W. O. Scott, University of Illinois crops extension specialist.

Corn can still be planted in July for silage, Scott says. Livestock farmers will probably find that they can get more feed from corn silage than from any other crop at this time. Farmers who can feed soft corn may want to go ahead and plant corn. Soft corn can be fed at whatever stage the frost catches it.

But planting corn for use as grain is very risky now, Scott emphasizes. There's less than a 50-50 chance that Illinois farmers can plant corn and get a crop except in extreme southern Illinois.

Farmers who plant corn should hill-drop a fertilizer that is high in phosphate to help hasten maturity, says soils specialist A. L. Lang. He recommends 100 pounds of 0-45-0 or equivalent.

The best crop to plant now would be early-maturing soybeans, such as Chippewa, Blackhawk or Harosoy. There's better than a 50-50 chance that they will mature if planted up to July 15.

Grain sorghums like Reliance and Norghum might also be planted. They will mature in 75 to 90 days. But Scott says sorghum presents a drying problem in the fall, and it may also be hard to find a market.

Buckwheat and Proso millet will usually mature if planted up to the end of July. These crops may also be difficult to sell, but they can be fed.





Further information about emergency crops can be obtained from University of Illinois Circular 726, Crops for Emergency Plantings. Get it from your county farm adviser or directly from the College of Agriculture at Urbana.

If planting should be delayed beyond July 20 and buckwheat or millet is not planted. Then Scott suggests that about the best thing would be to prepare the land to have it ready for a fall seeding of alfalfa or a winter grain crop.

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6/30/58



National Farm Safety Week July 20-26

Constant efforts are being made to get farm folk to work and live safely.

In the week of July 20-26, another major nationwide cooperative drive will focus attention on the lurking dangers that surround farm residents. As usual it is spearheaded by the Farm Division of the National Safety Council and the U. S. Department of Agriculture, along with state safety councils and thousands of local workers on this vital project.

Laws and regulations help to some extent, but the main responsibility for preventing serious farm accidents must be placed on the individual, says O. L. Hogsett, extension safety specialist of the College of Agriculture at the University of Illinois.

Farmers now work with equipment that approaches Aladdin's lamp in efficiency. It involves use of machines, electricity and chemicals, Hogsett says. Don't get so familiar with these modern helpers that you grow careless about operating and using them safely.

It's important to take the fear out of farming by practicing safety throughout the year rather than splurging in July and then ignoring the dangers the rest of the year, the specialist concludes.



Five-Point Control Program for Stored Wheat Insects

Stored grain insects are in for a rough time this summer. That is, they will be if farmers follow the suggestions of Steve Moore, entomologist with the University of Illinois and Illinois Natural History Survey.

Moore has outlined a five-point program to control these pests. If applied properly, this program can tremendously reduce insect damage to stored grain.

Moore explains that grain insects are present throughout the year. But during the winter they are relatively inactive. When warm weather arrives, their numbers increase by leaps and bounds. By summer they have mobilized forces to invade wheat and other small grains. If they go unchecked, they can greatly reduce a farmer's grain profits. On the average, farmers lose 10 percent of their stored grain to insects.

To prevent this loss in your wheat, follow this program suggested by Moore:

1. Clean up storage bins and all equipment used for handling grain. Also remove accumulations of old grain near bins. Studies show that 70 to 80 percent of the infestations arise in wheat because insects are already in the bin when the new wheat is stored.

2. Spray bins to kill insects that escape during the clean-up. Some insects, such as the cadelle, bore into bin walls. Only sprays will successfully eliminate them.

THE HISTORY OF THE UNITED STATES

CHAPTER I. THE DISCOVERY OF AMERICA.

It is generally supposed that the first discovery of America was made by Christopher Columbus in 1492. But it is now generally admitted that the first discovery was made by Leif Ericson in 985.

Leif Ericson was a Norseman who sailed from Greenland to North America in 985. He discovered the coast of Newfoundland and named it Vinland.

Columbus discovered America in 1492. He sailed from Spain to the West Indies and discovered the island of San Salvador.

Columbus's discovery of America led to the European conquest of the continent. The first European settlement in America was founded by John Cabot in 1497.

The first permanent European settlement in America was founded by the Pilgrims in 1620. They sailed from England to the Massachusetts coast and founded the town of Plymouth.

The Pilgrims were the first of many European settlers who came to America. They were followed by the Puritans, the Quakers, and the Catholics.

The European settlers in America were the first to introduce the ideas of democracy and self-government. They established the first representative governments in America.

The European settlers in America were the first to introduce the ideas of freedom of speech and freedom of religion. They established the first free press and the first free churches in America.

Use malathion at 1 percent concentration, methoxychlor at 2.5 percent concentration or pyrethrins at 0.5 percent concentration. For maximum control, apply 7 to 10 days before storing the wheat. DDT is not cleared for use as a bin spray material.

3. Store only clean, dry grain. The moisture content of stored wheat should never exceed 13 percent. High moisture creates certain odors that attract insects and hasten their development. Clean grain is important because it seems to discourage insects from breeding.

4. Treat the grain itself as further insurance. Use either a protective material or a fumigant.

Protective materials do not kill insects that are already in grain. Instead, they protect the grain from later infestation. Apply them to grain immediately after harvest. Both liquid and dust forms are available.

Apply dusts to grain in the combine hopper. But apply liquids to the grain stream as it is elevated or augered into the grain bin. Liquid applications are by far the least expensive to use and the least objectionable to elevator operators. And their control is equal to that of dusts.

Both malathion and pyrethrins are effective as protective materials. But malathion is superior in controlling Indian meal moth infestations.

Fumigants can be applied either as a single treatment in mid-August or as a double treatment the last week in July and again in mid-September.

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Indian meal moth infestations may develop by July in wheat treated with a fumigant. If this happens, apply a surface application of either malathion or pyrethrins. Presence of this damaging moth is indicated by webbed kernels.

5. Reinspect grain at regular intervals. Moore suggests at least twice a month during the summer and once a month during the winter. Inserting metal rods in the grain mass is a good practical way to detect "hot" spots. These spots are created by high moisture or insects.

Moore explains that this five-point program is designed to control stored wheat insects. But it will also help to control insects that attack shelled corn and other small grains in storage.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JULY 14, 1958

## Winners at Fair May Be Losers on Farm

Livestock showmen are being warned that winners in the show ring may be losers from disease on the farm.

Dr. G. T. Woods, University of Illinois College of Veterinary Medicine, emphasizes that blue-ribbon winners are also subject to disease. That's why it's important to take every possible precaution to protect livestock taken to the fair.

After the fair, isolate show stock from the home animals for 30 days. If the show animals are healthy at the end of this period, they usually can be put back into the herd with reasonable safety.

If livestock are to be shown, have the veterinarian examine them in plenty of time before the fair. Owners will be issued a health certificate for healthy livestock by the veterinarian. Sometimes a slight infection of an animal may be cleared before fair time through prompt treatment by the veterinarian, says Dr. Woods.

THE UNITED STATES OF AMERICA

DEPARTMENT OF THE INTERIOR

LAND OFFICE

WASHINGTON, D. C.

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All-Industry Poultry Day July 28 at Urbana

Members of the Illinois poultry industry and their guests will meet at their 11th annual All-Industry Poultry Day at the University of Illinois on Monday, July 28.

O. B. Ross, newly-appointed head of the Department of Animal Science at the UI College of Agriculture, extends a special invitation to all poultrymen and persons connected with the industry to attend.

Integration, what it is and where it is leading will be one of the featured topics for discussion on the program, Ross says. Moderated by H. G. Halcrow, head of the UI Department of Agricultural Economics, this panel will also include Harry Bedient, Tolono producer; Wilbur Kalb, manager, Armour Creameries, Lincoln; Fred Munroe, Joliet hatcheryman; and J. R. Roush, extension poultry economist at the University of Illinois.

Other topics include poultry performance tests and how you can use them to choose a strain, a look at power choring and a panel discussion on farm handling of feed. Dean C. A. Brandly of the UI College of Veterinary Medicine will discuss disease prevention.

Progress reports on experimental work at the UI Poultry Farm will be presented by H. M. Scott, head of the poultry division. Studies in poultry nutrition to be reported include those in zinc requirements, fat utilization, the yolk factor, protein evaluation and amino acid balances.

The Illinois Poultry Improvement Association is sponsoring a chicken barbecue at noon in the Stock Pavilion. Registration starts at 9:00 a.m. DST in the Law Building auditorium with the first session starting at 9:30.



Taking a Break May Mean Fewer Accidents

A break in morning and afternoon work hours is as important to farmers as it is to city workers. In fact, these breaks in work routine can prove especially important because they reduce the possibility of accidental death and injuries and they improve your work efficiency, says O. L. Hogsett, extension safety specialist, University of Illinois College of Agriculture.

Recent accident studies show that the highest percentage of farm work accidents occur during the late morning and mid-afternoon hours. When working with a tractor or other machinery, stop long enough to get off and walk around the machine. Relax for a few minutes, the life you save may be your own.

Farm wives can help, too. By packing a mid-morning and mid-afternoon snack and taking it to the field, they serve as a reminder to their husbands that the time has come for a few minutes off from the routine of field work.

There is another angle to the work break idea, too. This time provides mothers with an excellent opportunity to take children to the field to watch their fathers operate the machines they find so fascinating. This is the safe way of satisfying the children's curiosity and makes a much anticipated event in the daily life of the youngsters.

Work breaks pay off in safety and pleasure. Why not make them a regular part of your schedule?





Remodel Crib for Shelled Corn Storage With Hardware Cloth

Hardware cloth may be used to form grain-tight walls in remodeling an ear corn crib to store shelled corn.

Illinois farmers report that shelled corn stored in cribs remodeled with hardware cloth has kept well from harvest until the middle of the following summer, says J. O. Curtis, University of Illinois agricultural engineer.

Considering both labor and materials, hardware cloth is one of the most economical materials for making a crib wall grain tight. It is an effective way to rodent-proof the crib and has the advantage of keeping it available for further ear corn storage.

Curtis says hardware cloth will form a grain-tight wall if it is fitted between studs and pressed against the inside face of the cribbing. The strips should be one and a half to two inches wider than the space between studs so that each edge can be turned in and nailed. Curtis warns crib owners against fumigating grain stored in cribs lined with hardware cloth without first covering the walls with canvas or plastic sheets.

Forming grain-tight walls is only one phase of remodeling an ear corn crib for shelled corn storage. Most cribs will also have to be strengthened to hold heavier loads.

For more information on crib remodeling, request Illinois Circular 775, "Remodeling Cribs for Shelled-Corn Storage," from your county farm adviser or the University of Illinois College of Agriculture at Urbana.



Egg Washing Is Profitable if Accepted Washing Rules Are Followed

Washing eggs is two and a half times faster than dry cleaning them, according to S. F. Ridlen, University of Illinois extension poultry specialist. But immersion can be costly if the producer fails to follow accepted washing rules.

Ridlen says eggs should be washed in an accepted detergent-sanitizer as soon as possible after gathering. Water alone or water with detergent is not recommended. A good detergent-sanitizer should be odorless, colorless and tasteless.

Eggs should be immersed from 3 to 5 minutes. The most desirable washing temperature is 110° to 120° F., or slightly higher than egg temperature. Colder water causes egg contents to shrink and draw bacteria into the shell. Immersion time should be controlled with a timing device.

The washing solution must be changed after every 6 or 7 baskets since microorganism concentration builds up with each washing. Start each day with a fresh solution. Detergent-sanitizer solutions lose power if held several hours after use.

Ridlen says eggs should not be rinsed after immersion. Allowing the sanitizer to dry on the eggs helps seal shell pores and protects eggs against possible later contamination from handling, sweating, storage and exposure to molds.

If a scum or foam is left on eggs when they are removed from the washer, they can be dipped in a second container with the same strength of cleaning solution. A fan directed on the eggs will dry and cool them quickly.



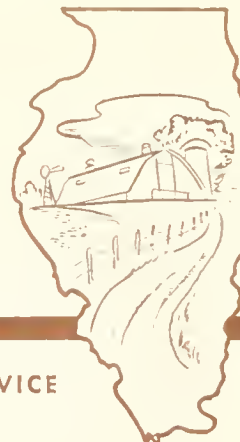
A fresh, clean detergent-sanitizer solution will not compensate for dirty equipment. The washer and other handling equipment should be scrubbed with a fresh sanitizer solution daily or after each use.

Ridlen says producers who cannot follow these washing rules should not attempt to wash eggs. Improper washing hurts the producer and the poultry industry.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JULY 21, 1958

## State Fair Milking Derby Goes Mechanical

Junior dairy exhibitors entering the Milking Derby at the 1958 Illinois State Fair can use milking machines, according to G. W. Harpestad, University of Illinois dairy extension specialist, who will also serve as judge for the event. Previously all cows were milked by hand.

All contestants must bring their own milking pails, pulsators and teat cups. A vacuum pump large enough to operate most milking machines will be available in the show ring.

The Milking Derby is an annual event of the State Fair sponsored by the Junior Department. It is designed to show the importance and value of accurate dairy production records.

Cows are milked under careful supervision for five consecutive days. Winning cows are selected on the basis of the highest butterfat yield during the five days, corrected for age and stage of lactation. All milk will be carefully weighed and tested for butterfat.

Harpestad points out that the new rules were adopted to make milking conditions at the fair more nearly like those found on Illinois dairy farms.





Veterinarian Gives Livestock Shipping Advice

A little extra care will help to prevent losses from heat, disease and injuries when you ship livestock this summer and fall, says Dr. G. T. Woods, extension veterinarian of the University of Illinois.

Heat is responsible for heavy losses in shipped livestock during the summer. To make sure animals reach the market or fair in good condition, give them plenty of ventilation. Put a canvas shade on open-top trucks, and don't crowd the animals.

Some farmers feel that it's a good idea to ship during the night, when it's cooler. In any case, be sure the animals have had plenty of water before they are loaded in the truck. When shipping hogs, wet down the bottom of the truck bed. Some truckers install a water-sprinkling system on their trailers to help keep the hogs cool.

It's also important to prevent injuries. Remove any projecting nails from the truck bed, and replace broken boards or parts. Partition loads of mixed stock, and try to avoid sudden stops and starts while on the road.

Thoroughly clean and properly disinfect the truck to kill any disease germs before loading stock, advises Dr. Woods. When returning animals from exhibition, isolate them from the rest of the farm stock for 30 days as a herd health protection measure. During isolation, be sure to blood-test breeding cattle and swine for brucellosis.



Proper Planning Necessary in Building Farm Pond

Landowners who plan to build farm ponds this fall can save both time and money by completing preliminary chores before the earth-mover comes on the job, says R. C. Hay, University of Illinois agricultural engineer.

Preliminary jobs include digging a core trench at the building site of the dam, backfilling it with clay, laying a stock watering pipe and placing concrete and pipe or tile for the spillway.

With these jobs completed, says Hay, the earth dam can be built with little delay and at minimum cost.

In evaluating a possible pond site, the owner should look for an area that will supply a relatively large reservoir with a minimum of earth-moving. The subsoil should be relatively water-tight, and the watershed free of erosion.

The watershed area should be large enough to produce sufficient runoff to fill the reservoir, but not so large that it will require a costly mechanical spillway and make land use and erosion control difficult.

Hay says an ideal watershed is planted in grass or trees with very little cultivation. A good ratio of watershed to pond is 3 to 5 acres per acre-foot of storage capacity.

It is essential that livestock be kept away from the pond. Water can be piped by gravity to a stock tank below the dam.

A properly located and correctly built farm pond can be a permanent source of water as well as an attractive recreation spot, but a poorly built one can become a shallow, muddy pool or a worthless washed-out dam. Proper planning and construction can make the difference.

Assistance in planning a farm pond may be obtained from the county farm adviser or the soil conservation district office.



Sprays and Fences Effective in Windbreak Care

Spraying with malathion will kill bagworms and adult red spiders that have hatched on evergreen windbreaks.

Such miticides as Aramite or Dimite have the advantage of killing red spider eggs as well as spiders that have hatched, according to L. B. Culver, University of Illinois extension forester.

Red spider in spruce and bagworm in Douglas fir cause loss of foliage which, in turn, causes death or gives the trees an unthrifty appearance.

Culver maintains that domestic animals and poultry might be considered pests from the viewpoint of good windbreak care. They should be kept away from windbreaks no matter how great the temptation to pasture the grass or provide shade.

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7/15/58  
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THE HISTORY OF THE UNITED STATES

CHAPTER I

THE EARLY HISTORY OF THE UNITED STATES

THE DISCOVERY OF AMERICA

THE EARLY SETTLEMENTS

THE GROWTH OF THE COLONIES

THE STRUGGLE FOR INDEPENDENCE

THE CONSTITUTION

1776

THE UNION OF 1800

THE WESTERN EXPANSION

THE CIVIL WAR

THE RECONSTRUCTION

for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF JULY 28, 1958

## Plan Agronomy Day on September 11

The latest results of research in crops and soils will be displayed at the second annual Agronomy Day on the University of Illinois Agronomy Farm on September 11. UI agronomists R. W. Jugenheimer and J. W. Pendleton, chairman of the event, extended an open invitation this week to all farmers and others who are interested. Tours will begin at 9:30 a.m. central daylight time.

Featured in this year's field day are new developments in hybrid corn breeding, including high-oil and high-protein types, dwarf corn and a special type called tetraploid. For soybean growers, research workers will show the newest varieties, row spacing and plant population tests, water use research and experiments with gibberellic acid on soybeans. Other tour stops will include tests with different types of nitrogen fertilizers, corn root growth studies, rotations and soil treatments, alfalfa varieties, minimum tillage, grain sorghums and broomcorn.

The University Agronomy Farm is located on the south edge of the University of Illinois campus at Champaign-Urbana. Visitors can also visit the world-famous Morrow Plots--America's oldest soil experiment field--located near the center of the campus.

More than 1,200 persons attended the first Agronomy Day, held in June 1957. This year the date has been changed to September so that visitors can get a better view of corn and soybean research at this time of year.





Plants Have Galls Too

Plants, just like some people, have galls too.

These plant galls are warts, bumps or abnormal knots commonly seen on the leaves, twigs or branches of trees and shrubs. The more common galls are cork-like outgrowths. They are the result of abnormal cell growth stimulated by various kinds of insects and mites. But fungi, bacteria and nematodes also cause plant galls.

Galls do not indicate that the plant is "diseased" and likely to die, points out L. L. English, Illinois Natural History Survey entomologist. Gall damage is localized and generally does not cause enough injury to trees and shrubs to justify spraying.

A small family of wasps known as the Cynipidae cause galls on oaks. Eggs deposited on developing buds or shoots hatch into legless grubs that cause the galls to develop. The galls serve as food and living quarters where the grubs grow and pupate. The wasps desert the galls when they become adults.

Each kind of insect and mite has a different life cycle and produces a different kind of gall. Small mites stimulate formation of the maple bladder gall. These mites overwinter under the bud scales and migrate to the leaves when they develop in the spring.



Small Dairy Herd Owners Might Profit From Artificial Breeding

An artificial breeding program might be the answer for small dairy herd owners who are not able to keep bulls long enough to make sure of their production transmitting ability.

Although a good transmitting bull can make rapid increases in the production level of a dairy herd, a poor bull may decrease production just as rapidly, reports L. R. Fryman, University of Illinois dairy specialist.

Fryman says two good transmitting bulls were largely responsible for a jump of 111 pounds of butterfat per cow per year in a Lake county dairy herd.

Daughters of one of the bulls produced 64 pounds more butterfat than their dams, and those of the other bull produced 90 pounds more than their dams.

Unfortunately both bulls were butchered before their true value was known, since this producer, like many other small herd owners, was not able to keep the bulls long enough to learn their true value.

It is also possible for poor bulls to lower herd averages just as quickly as these two bulls increased it.

Consequently, says Fryman, small herd owners could probably greatly reduce their risks if they would use several bulls through an artificial breeding unit.



Sunglasses Set 1958 Style for Cattle

Fitting cattle with sunglasses might be one way to reduce damage from pinkeye, says Dr. J. R. Pickard of the University of Illinois College of Veterinary Medicine.

Since this suggestion is impractical, Dr. Pickard continues, the best plan is to provide darkened shelter during the day.

Total blindness can be prevented by starting treatment as soon as the first signs of pinkeye are noticed. First sign is a weeping discharge, followed by a grayish discoloration of the eyeball. Affected cattle show evidence of pain, especially when in strong sunlight, and lose weight rapidly.

Young calves with pinkeye may not be able to follow their mothers around the pasture. Animals that are temporarily blinded may injure themselves. Also, cattle with advanced pinkeye cannot graze efficiently.

There are no specific vaccines, bacterins or serums to prevent pinkeye. Veterinarians treat the disease medically. Permanent damage to eyes of the cattle can be avoided by daily treatment in the early stages, says Dr. Pickard.



Watch Out for Heat Illness in Summer

Be careful on hot summer days not to overdo on some of your farm jobs.

O. L. Hogsett, extension safety specialist, College of Agriculture, University of Illinois, says high temperatures and the rush of summer farm work make it easy to be overcome by heat.

Sunstroke follows prolonged exposure to the sun. Heat stroke results from excessive heat with or without exposure to the sun. The effects are the same, and either may be fatal.

Symptoms of sunstroke are a hot, dry skin, red face, shooting headache, delirium and, in severe cases, possible unconsciousness.

To treat for sunstroke, move the victim to the shade, undress him to his underwear, place him in a semiupright position, apply an ice pack or cold wet cloths to his head, gently spray cool water over his body and give him cold (not ice) water to drink. Get him to a doctor or hospital as soon as possible.

With heat exhaustion, the victim's skin is cold and clammy, his face pale, he has a dull headache, is dizzy and may vomit.

To treat, move him to circulating air, place him flat on his back with head low, loosen his clothing, keep him warm with blankets and give him hot coffee or one teaspoon of salt to a glass of water. Get him to a doctor or hospital as soon as possible.

Prevention is by far the best cure for sunstroke or heat exhaustion, but you should know what to do if it does hit you.





Wet Weather Makes Crops Look Sick

Many fields of corn and soybeans in Illinois are showing nutrient deficiency symptoms because of the unusually cool, wet weather in June and July, according to S. W. Melsted, University of Illinois agronomist.

Soybeans growing on alkaline soils have been showing the manganese deficiency symptoms of general yellowing of the plant leaves. This deficiency does not usually happen in seasons of normal temperature and rainfall, Melsted points out.

Other soybeans are yellowing because of poor root nodulation. When root nodulation is inadequate, soybeans cannot furnish their own nitrogen supply as they ordinarily do. The result is signs of nitrogen deficiency, including yellowing of the lower leaves. Root nodulation is also hampered by cool, wet weather.

Nitrogen deficiencies are also showing up in cornfields because of both waterlogging and lack of nitrogen in the soil. In either case, the tips of the lower leaves turn yellow. As the condition gets worse, the yellowing spreads back to the stalk and then on to the higher leaves. Melsted points out that corn can stand a waterlogged soil only a few days before showing these symptoms.

Small corn may also show brown discoloration or "bronzing" due to potassium deficiency, or stunting and delicate appearance due to phosphorus deficiency. These deficiencies are more difficult to spot and are not necessarily due to the weather, according to Melsted.



Plant tissue tests and soil tests are effective in pointing out nutrient shortages in the soil, the agronomist adds. But much of the trouble this year is due to unfavorable weather that makes the nutrients unavailable to plants.

Once a plant clearly shows deficiency symptoms, it is too late to do much to correct them until the next growing season. But soil tests are reliable guides for correcting the nutrient shortages if the weatherman cooperates.

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7/23/58



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF AUGUST 4, 1958

## Set Southern Illinois Safety Field Day for August 27

Safety demonstrations will be featured at the 4th Annual Safety Field Day for the south half of Illinois on August 27 at Olney.

Safety Field Day is co-sponsored by the Illinois Rural Safety Council and the Home Economics and Agriculture Extension Councils of the host county. A one-day event, it is open to the public, and everybody who is interested in farm and home safety is urged to attend, says D. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

The main objective of Safety Field Day is to give those who are responsible for local safety programs a chance to become familiar with demonstrations, exhibits and other safety material that may be adapted to their areas.

Also, it is hoped that people in general may get a better understanding of the safety problem that we face in today's modern living and farming.



Veterinarian Gives Tips on Buying Breeding Stock

Freedom from disease! That's the one important quality swine raisers can't see when they buy breeding stock, says a University of Illinois veterinarian.

Dr. G. T. Woods points out that it's especially important to insist on a brucellosis-free boar. An infected boar can cause sows to abort, become sterile and farrow weak pigs. Also, many cases of undulant fever in people originate from brucellosis-infected swine.

The best way to be sure of getting stock that doesn't have brucellosis is to buy from an accredited herd. The second-best plan is to buy a boar that comes from a herd that shows a negative blood test. There are many Illinois swine producers who have clean herds but who have not qualified for accreditation by the Division of Livestock Industry.

A list of owners of swine brucellosis accredited herds may be obtained from the Division of Livestock Industry, Springfield, Illinois. For a list of owners of swine herds health certified by the Illinois Swine Herd Improvement Association and the Illinois Veterinary Medical Association, write to the Illinois Swine Herd Improvement Association at Lincoln.





Neglected Heifers May Develop Into Low-Producing Cows

A heifer requires little care from weaning to one year, but don't neglect her completely, warns G. W. Harpestad, University of Illinois dairy specialist.

Such neglect may result in an undersized, low-producing cow and smaller profits for the dairyman.

Dairy calves should have access to high-quality roughage at all times. They should get 1/2 pound of a simple grain mixture for every 100 pounds of liveweight to supplement the roughage, because heifers are not fully developed ruminants until they reach the yearling stage.

Yearling heifers can maintain rapid growth on high-quality roughage or pasture alone, but those on poor pasture may begin to show poor flesh. If this happens, one pound of grain per 100 pounds of liveweight should keep them growing satisfactorily.

Heifers of any age should have free access to salt and mineral at all times.

THE HISTORY OF THE UNITED STATES

The history of the United States is a story of growth and expansion. It begins with the first settlers who came to the eastern coast of North America in the early 17th century. These settlers established small colonies and gradually expanded their territory westward.

As the colonies grew, they began to develop their own institutions and customs. The American Revolution broke out in 1775, and the colonies declared their independence from Great Britain. The new nation was founded on the principles of liberty and democracy.

In the years following the Revolution, the United States expanded its territory through a series of wars and treaties. The Louisiana Purchase of 1803 doubled the size of the nation. The Mexican-American War of 1846-1848 resulted in the acquisition of the southwestern United States.

The Civil War of 1861-1865 was a turning point in the nation's history. It was fought over the issue of slavery and resulted in the preservation of the Union. The war led to the passage of the Reconstruction Amendments, which guaranteed the rights of all citizens.

In the late 19th century, the United States began to expand its influence abroad. The Spanish-American War of 1898 resulted in the acquisition of the Philippines and Puerto Rico. The United States emerged as a major world power.

The 20th century has been a period of rapid change and progress for the United States. The nation has led the world in the development of science and technology, and has played a leading role in the promotion of democracy and human rights.

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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF AUGUST 11, 1958

## Identify Your Tractor if It Goes on the Highway

Death is a silent rider on many of our farm tractors. Whether the "Grim Reaper" strikes depends on many things, but most of them are in your control.

Failure to identify a farm tractor when it is on the highway is the chief cause of automobile-tractor wrecks, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

Rear-end collisions account for 36 percent of the tractor accidents and 14 tractor driver fatalities occur for each auto fatality from highway tractor-auto accidents.

Be sure you can see ahead, to the side and rear of the vehicle you are operating. Be sure that others can see your tractor. Use flags during the day and proper lights at night to identify it. Be sure you can stop. Keep brakes equalized and adjusted for quick stops. Be familiar with the tractor you are operating and don't carry passengers.

# ALMA MATER

THE UNIVERSITY OF CHICAGO

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ALMA MATER SOCIETY

How New Shelby Soybean at Agronomy Day

Visitors to Agronomy Day at the University of Illinois Agronomy Farm on September 11 will have a chance to see the newest soybean variety developed for Illinois growing conditions. This variety, Shelby, will do best in central and southern Illinois and in other states of this same latitude.

Shelby is higher yielding than Lincoln and 5 to 6 days earlier than Clark. J. L. Cartter, director of the U. S. Regional Soybean Laboratory at Urbana, believes it will replace most of the Lincoln and some of the Adams beans now grown. Seed will be released to Illinois, Indiana, and Missouri farmers for seed increase in 1959.

The Regional Soybean Laboratory, located at the University of Illinois, works cooperatively with the Illinois Agricultural Experiment Station at Urbana and experiment stations in 23 other central and southern states in developing soybean varieties. Since 1936, plant breeders have released 19 new improved varieties adapted to all ranges of climate from north to south.

On Agronomy Day, Cartter will show visitors the new Shelby and other soybean breeding projects underway. The University Agronomy Farm is located immediately south of the main campus at Urbana-Champaign.



Dairymen Reduce Feed Costs by Feeding More Roughage

Dairy herd owners can reduce feed costs by feeding more high quality roughage and less grain, according to records submitted by Holstein herd owners in Illinois dairy herd improvement associations.

Production records from 990 Holstein herds were divided into high and low grain feeding groups. The groups showed nearly the same level of production regardless of the amount of grain fed, says L. R. Fryman, University of Illinois dairy specialist.

The average return over feed cost was \$220 per cow for herds on a high grain-feeding program and \$265 for those fed less grain.

Dairymen on low grain feeding programs reduced feed costs by letting good quality roughage supply many necessary nutrients.

Low grain fed cows were stuffed with high-quality roughage both summer and winter. Most dairymen fed either hay or silage on pasture and a few used either Sudan grass or rye to supplement legume-grass pastures.

They cut legume hay in the very early bloom stage to save the highly nutritious leaves. Legume-grass mixtures were used for summer pastures which were alternately grazed and then clipped after cows had been moved to new pasture.

CHAPTER I. THE EARLY HISTORY OF THE UNITED STATES

The first European settlers in North America were the Spanish, who discovered the continent in 1492. They were followed by the French, the Dutch, and the English. The English colonies were established in the eastern part of the continent, and they were the first to develop a system of self-government. The colonies were at first dependent on the mother country, but they gradually became more independent. The struggle for independence began in 1775, and it ended in 1783 with the signing of the Treaty of Paris. The new nation was then established as the United States of America.

The early history of the United States is a story of exploration, settlement, and struggle. The first European settlers were the Spanish, who discovered the continent in 1492. They were followed by the French, the Dutch, and the English. The English colonies were established in the eastern part of the continent, and they were the first to develop a system of self-government. The colonies were at first dependent on the mother country, but they gradually became more independent. The struggle for independence began in 1775, and it ended in 1783 with the signing of the Treaty of Paris. The new nation was then established as the United States of America.

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THE HISTORY OF THE UNITED STATES



Warn Against Using Sprouted Wheat for Seed

Illinois farmers were urged this week to check their seed wheat carefully and to obtain unsprouted wheat for seeding this fall.

University of Illinois extension agronomist W. O. Scott and plant pathologist M. P. Britton report that a lot of farmers are holding sprouted wheat for seed. Wet weather during harvest caused a lot of wheat to sprout before it could be combined.

Scott urged all farmers to obtain sound unsprouted wheat for seed if at all possible. Earlier combined wheat is more likely to be safe than seed harvested later. Farmers can check their seed by examining the cover over the germ carefully with a magnifying glass. Kernels with only a cracked seed coat are considered to be slightly damaged. If small root sprouts or root and stem sprouts are coming out, the damage is more serious.

If a farmer cannot obtain unsprouted wheat for seed, Scott suggested a thorough machine cleaning that will remove some of the damaged kernels. Then he recommends a germination test.

A wheat grower can get a test by sending a sample to the State Seed Laboratory at the Division of Plant Industry, State Department of Agriculture in Springfield. Or he can run his own test.

Tests have shown that sprouted wheat can be dried and grown. But the seed will not germinate as well and the plants may not be as vigorous.

Before seeding wheat, Britton recommends treating against seedling diseases and bunt with a fungicide, either Panogen or Ceresan M.

THE HISTORY OF THE COUNTY OF ...

The first part of the history of the county of ... is devoted to a description of the natural features of the county, and to a history of the various towns and villages which have been built upon the banks of the river ...

The second part of the history of the county of ... is devoted to a description of the various towns and villages which have been built upon the banks of the river ...

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The fourth part of the history of the county of ... is devoted to a description of the various towns and villages which have been built upon the banks of the river ...

## Add Warning Against Using Sprouted Wheat for Seed - 2

Normal seed wheat with less than 16 percent moisture should receive 3/4 ounce per bushel of Panogen. But if some grain is sprouted or moisture is over 16 percent, then this treatment should be reduced to 1/2 ounce per bushel.

Farmers who treat with Ceresan M should use 1/2 ounce per bushel for normal wheat containing less than 14 percent moisture. But for higher moisture content or sprouted wheat, they should reduce treatment to 1/4 ounce per bushel.

Britton also recommends holding off seed treatment until a week or less before planting if the seed wheat has a high moisture content or has some sprout damaged kernels. Otherwise the mercury vapors produced by the fungicide treatment will reduce the germination in storage.

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CONFIDENTIAL

Treatment Alone Will Not Control Mastitis

Don't let claims for mastitis treatment fool you into thinking that mastitis in dairy cows can be handled by treatment alone.

Dr. G. T. Woods, extension veterinarian at the University of Illinois, says some advertising might lead dairymen to believe that all they need to do to control mastitis is to inject something into the teat canal of cows giving abnormal milk. But it's not that easy!

It is necessary to treat infected quarters with the right drug to clear up mastitis. Dr. Woods points out that the local veterinarian can recommend the treatment most effective against the organism causing the trouble and recommend other measures for preventing recurrence. A permanent cure if possible, will depend upon combining the right treatment with proper steps to remove the cause.

Dr. Woods suggests the following measures to prevent and control mastitis.

1. Keep the barn in sanitary condition and the lots free from mud and trash or equipment that might cause injury to the udder.
2. Make sure the milking machine is operating at the proper speed and vacuum and that the teat inflations are in good condition.
3. Be sure the stall platform is long enough and cows are well bedded.
4. Get cows ready for milking by washing udders and teats with a warm disinfectant solution. Between cows, dip the teat cups into a chlorine, or other approved disinfectant solution. Check each cow daily with a strip cup.



5. Have the milk from each cow checked periodically in the laboratory.

At the first sign of inflammation in a cow's udder or flakiness in the milk, a veterinarian should be consulted. After a study of conditions he can recommend that treatment most effective against the organism causing the flare-up and recommend other measures for preventing recurrence, Dr. Woods says.

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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF AUGUST 18, 1958

## Hold University of Illinois Dairy Day on September 4

The seventh annual University of Illinois Dairy Day program will be held on Thursday, September 4 at the South Lincoln Avenue Barns in Urbana.

University of Illinois dairy specialist L. R. Fryman, says registration will begin at 9:00 a.m. DST.

Twelve exhibits in six major dairy production areas will be discussed from 10:00 a.m. to noon. These exhibits will feature the latest information in milking and milk handling, forage and forage handling, sterility in dairy cows, and dairy cattle health, housing and feeding.

The afternoon program will feature a panel discussion on trends in the dairy industry. There will be plenty of opportunity to ask questions and to enter into the discussion.

Visitors may eat lunch at the Illini Union Cafeteria or other near-by eating places, or may bring their own picnic lunches and eat in Illini Grove at the south edge of the campus.



Agronomy Day to Feature Corn for High Population Planting

Some new hybrid corn bred especially for high rate planting will be on display at Agronomy Day at the University of Illinois Agronomy Farm on September 11.

D. E. Alexander, University corn breeder, reports these experimental high rate hybrids perform considerably better than normal hybrids when planted at the high rate of 24,000 plants per acre.

These new hybrids perform just as well as normal types when planted at the rate of 16,000 per acre. Alexander explains that the Illinois farmers usually grow 12,000 to 16,000 plants per acre.

When weather conditions are ideal, farmers are most likely to get the highest yields with high planting rates, Alexander points out. These new hybrids can be planted at high rates without fear that adverse weather will penalize yields. In years when weather is unfavorable, farmers can expect the high rate hybrids to yield as well as the conventional types planted at more normal rates.

However, the corn breeder cautions that with present harvesting methods, lower standability will probably discourage high rate planting. But if corn is combined or harvested with picker shellers early in the season and dried artificially, standing ability will be less important than it is now. Then we can expect that hybrids similar to the high rate hybrids now being tested will come into general use.



Shell Mottling No Indication of Egg Quality

There is little or no reason for down-grading eggs with mottled shells.

S. F. Ridlen, University of Illinois extension poultry specialist, says that darkish shell mottled spots are not an indication of either shell thickness, shell porosity or interior egg quality. Preliminary research indicates no relationship between these dark spots and egg hatchability.

Shell mottling has been described as darkish, greasy or yellowish spots caused by uneven distribution of water in the shell. The mottled areas, which vary in size from pinpoint specks to large patches, usually appear the same day eggs are laid. The condition may increase with holding time but shell mottling is not necessarily an indication of age.

Ridlen says egg mottling research with 20 strains of white egg layers showed significant differences among strains. Egg shells from some strains showed very little mottling, while those of others became severely mottled under the same holding conditions.

Selection might reduce egg shell mottling. But, since breeding programs are already complex, this would seem feasible only where an extreme problem exists with an individual strain.

THE HISTORY OF THE UNITED STATES

CHAPTER I

1776

The first of July 1776 was a day of great importance in the history of the United States. It was on this day that the thirteen colonies declared their independence from Great Britain. The Declaration of Independence was signed by the Continental Congress in Philadelphia. The document declared that the colonies were no longer bound to the British crown and that they were now free and independent states.

The second of July 1776 was a day of great importance in the history of the United States. It was on this day that the Continental Congress moved from Philadelphia to Lancaster and then to York. The move was made because the British were closing in on Philadelphia.

The third of July 1776 was a day of great importance in the history of the United States. It was on this day that the British evacuated Philadelphia and moved back to Lancaster and then to York. The British were forced to leave because the Continental Army, led by General George Washington, had defeated them at the Battle of the Clouds. The British then evacuated Philadelphia and moved back to Lancaster and then to York.

1776

The fourth of July 1776 was a day of great importance in the history of the United States. It was on this day that the Continental Congress moved from York to Lancaster and then to Philadelphia. The move was made because the British were closing in on Philadelphia. The Continental Congress moved from York to Lancaster and then to Philadelphia.

The fifth of July 1776 was a day of great importance in the history of the United States. It was on this day that the Continental Congress moved from Philadelphia to Lancaster and then to York. The move was made because the British were closing in on Philadelphia. The Continental Congress moved from Philadelphia to Lancaster and then to York.

1776

Blue Comb Disease Is Summer Poultry Hazard

Illinois poultrymen are urged to provide plenty of shade and fresh water for their pullet flocks this summer. These are protective measures against losses from blue comb disease.

Hot humid days should remind poultrymen to watch their birds for signs of blue comb disease, says Dr. J. O. Alberts of the University of Illinois College of Veterinary Medicine.

Blue comb is primarily a disease of five- to seven-month-old birds, although it has been found in younger and older birds. Turkeys as well as chickens may get the disease. Losses average about 5 percent, but they run as high as 50 percent.

In acute outbreaks, most of the flock gets sick. The birds are feverish, the comb and wattles turn blue-purple, diarrhea usually develops and skin on the legs appears shriveled. Chronic blue comb may affect birds for several weeks. Some flocks stop laying for a few weeks. A severe attack may cause a complete moult, says Dr. Alberts.

Supply the affected flock with shade, ventilation and fresh water, Dr. Alberts advises. Slow down on feeding grain for three to four days, but keep mash before the birds. A specific treatment is not known, but the use of certain antibiotics in the feed or drinking water has been reported of value.





Implement Shields Protect Operator

The best shield that can be made gives no protection if it is not used, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

When clothing merely flops against a revolving shaft or coupling, an operator may be mangled instantly. In spite of repeated warnings, many farmers still fail to keep shields in place.

Recently, manufacturers have been equipping power driven implements with non-removable power-take-off shields. This helps protect operators against their own carelessness.

Farmers who don't have standard power-take-off hitches or shields should see their local implement dealer. Hitches and adapter packages for power driven implements may be obtained from dealers representing the manufacturer of the implement.

Shielding home-made equipment for safety is a special problem that each user must solve individually. No piece of farm machinery is complete until adequate shielding of all exposed revolving parts is provided.



UI Home Economics Scholarships Available

Four scholarships of \$200 to \$250 are available to freshmen entering home economics this fall in the University of Illinois College of Agriculture.

Preference for these scholarships will be given to farm girls or other girls who have been active in 4-H or F.H.A. In addition to leadership in these and other activities, awards will be made on the basis of high school grades and financial need.

If you ranked in the upper one-third of your graduating high school class and need financial assistance to enter college this fall, write immediately to C. D. Smith, Assistant Dean, College of Agriculture, Urbana, for a scholarship application form.

These scholarships will provide as much as one-fifth of the total costs for one year of college.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF AUGUST 25, 1958

## Nitrate Poisoning May Be Due to Dry Weather

Nitrate poisoning is caused when animals eat plants that have taken up too much nitrate from the soil. Plants can over-absorb nitrates because of heavy nitrate application or dry weather that causes the soil solution to become very high in nitrate.

Dr. D. E. Dees of the University of Illinois College of Veterinary Medicine, says that cattle and sheep are more susceptible to nitrate poisoning than horses and swine.

Symptoms of nitrate poisoning include a staggering gait, muscular tremors, blue coloration of mucous membranes, rapid breathing, dilation of pupils and coma. Death is caused by asphyxiation. Veterinarians can inject a solution of methylene blue intravenously which causes the toxic material to become harmless.

Prompt treatment of affected animals by the veterinarian is usually effective. But the best way to prevent losses is to keep livestock out of pastures containing plants that are likely to contain nitrate poisoning.



To Discuss Milking and Milk Handling at Dairy Day

Visitors at the seventh annual University of Illinois Dairy Day on Thursday, September 4, will see an exhibit and hear a discussion on the number of cows a man can milk per hour and the economy of the dairy operation.

This discussion will enable a dairyman who milks cows for a living to decide with a fair degree of accuracy what kind of milking program he should plan, says G. W. Salisbury, head of the University's Department of Dairy Science. This will include a discussion of the type of parlor to use and the number of milker units recommended to give the greatest efficiency of operation.

In this same exhibit area, the Dairy Day visitor will see devices using low-cost plastic tubing to deliver milk from the milking barn to the milk house. He will hear a discussion of the results of studies made at the University of Illinois comparing the plastic tubing with stainless steel in-place pipelines.

Three general types of bulk milk tanks will also be on display in this exhibit. A direct expansion vat-type tank, a direct expansion vacuum-type and a water cooler vat-type will all be in operation. Problems concerning the economy of operation and successful methods of cleaning these tanks will be discussed.

This is but one of the 12 exhibit areas which will be on display at this year's big Dairy Day event. Other exhibits will feature forage and forage handling for dairy cattle, dairy cattle health problems, dairy cattle housing, feeding dairy cattle, and sterility problems in dairy cattle.





Plan Open House at Morrow Plots on September 11

Visitors to Agronomy Day at the University of Illinois on September 11 will have the opportunity to visit the famous Morrow Plots. They were established in 1876 and are the oldest continuous soil experiment field in America.

On the north one-third of the area, visitors will see the plots where corn has been planted continuously for 83 years. They will see corn growing that has received no treatment in all this time. For the last 12 years, this plot has averaged only 24 bushels to the acre.

Visitors will also see the plot that received no treatment until 1955. That year the agronomists added a balanced treatment of lime, nitrogen, phosphorus and potash. Yields on this plot were 106 bushels to the acre in 1957.

On the center of the plots, the research workers have planted a corn-oats rotation. With no treatment, corn has averaged only 36 bushels there for the last 12 years. On that part where they have applied a manure-lime-phosphate treatment since 1904, the corn averaged 133 bushels in 1957.

On the south one-third of the Morrow Plots, visitors can see where corn, oats and clover have been planted in rotation for 83 years. Even without other soil treatment, corn yields have averaged 68 bushels on this area in recent years.

The Morrow Plots are located in the center of the University campus at the northwest corner of Gregory Drive and Mathews Street in Urbana. Agronomy Day visitors may stop between 9:00 and 10:00 a.m. before joining the main agronomy farm tour or in the afternoon after leaving the agronomy farm. Special visitor parking will be provided.

On the main agronomy farm, visitors will find a 17-stop tour showing the latest research developments in crops and soils. All interested persons are cordially invited.



Cheap Feed Grains Continue Plentiful for Livestock Use

A record carryover and possible record 1958 feed grain production will add up to an all-time high supply of feed grains for the coming livestock feeding season.

L. F. Stice, University of Illinois grain marketing specialist, reports that the tonnage of corn, oats, barley and sorghum grains this year is expected to be about one and one-half times the annual market needs.

Percentage-wise, this year's crops of corn, oats and barley all promise to better last year's supplies by 2 1/2 to 4 percent. Official USDA estimates of feed grain production as of August 1 totaled 144 million tons, two million tons over last year's production and far above the 1948-52 average of 122 million tons.

Added to the 61 million tons of feed grains in storage at the start of the 1958-59 marketing season, also far above the 1948-52 average carryover of 23.5 million tons, this year's bumper crops should mean a continued supply of cheap feed grains for Illinois livestock feeders during the 1958-59 feeding season.

Besides plentiful supplies, other factors will tend to hold down feed grain prices, according to Stice. Exports are expected to be smaller, pouring more of the supply on the market in this country. Larger sales of CCC corn will help keep prices in check. Finally, an increase in numbers of hogs and broilers may point to lower prices for meat animals, which could also tend to lessen the demand for high-priced feed grains.



Illinois feeders can expect corn prices at harvest this fall to be about the same as they were last year, providing the crop matures in good shape and adequate storage is available.

The rise in corn prices this spring and summer is not likely to occur again next year, however, as farmers may remember this year's price hike and hold back more corn at harvest. If this occurs, larger sales by farmers and possibly the CCC next spring will tend to prevent a similar rise in corn prices next year.

Corn under allotment will be supported at a national average figure of \$1.36 a bushel in 1958. Local support prices will vary somewhat from this figure. The 1958 support price is 77 percent of the \$1.74 parity price of corn when the supports were announced.

Total national corn acreage is nearly a half-million acres greater than the 1957 figure, in spite of the 1.4 million acre increase in the Acreage Reserve Program noted in 1958. Farmers are expected to harvest 3,487 million bushels of corn this fall. This production is second only to the 1948 bumper harvest of 3,605 million bushels.

Supplies of oats and sorghum grains are also larger than in 1957. Even though oat acreage is down about 8 percent and grain sorghum acreage is down 20 percent, good prospects for high yields in 1958 plus large carryover stocks are expected to mean larger total supplies this year.



Build Noises Out of Your House

Power machinery in the barnlot and modern electrical appliances in the home make noise control an important part of building or remodeling farm houses.

University of Illinois extension housing specialist Keith Hinchcliff, says there are two methods of controlling noise in the house--using wall surfaces that will absorb noises made in the room, and building walls between rooms that will keep outside noises from entering.

Ceilings and walls covered with acoustical tile or acoustical plaster will absorb such household noises as dish washing or conversation that originate in the room. The surface of acoustical tile is covered with tiny holes that trap and absorb noises. Homeowners who desire a plain-surfaced wall can use acoustical plaster.

Acoustical tiles and plasters will not keep external noises from entering the room. Impact sound from the floor above or from machinery outside is transmitted through the wall material.

Masonry, stone, brick or concrete are effective sound reducers for outside walls, but Hinchcliff warns that even the smallest crack in these materials greatly reduces their effectiveness. For this reason, all openings should be closed tightly.

Noisy kitchen and bathroom plumbing account for much of the sound passing between rooms. It is often practical to build a double wall near these pipes. Most of the sound will be trapped between the two walls and will not travel through the studs into the rooms.

Hinchcliff says a "floating" floor will reduce impact noises from the floor above. In this type of floor, furring strips are placed over a layer of insulating board after it is laid on the sub-floor. Then the finish flooring is nailed to the strips.

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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF SEPTEMBER 1, 1958

## Give Bossy a Rest Between Lactations

To keep milk production high, all cows need a six- to eight-week dry period before they are due to freshen.

Sometimes it is difficult to get certain cows dry, says Leo R. Ryman, extension dairy specialist at the University of Illinois College of Agriculture. Such cows can be dried off successfully by using a method that has been thoroughly tested in the Dairy Science Department at the University of Illinois.

This method consists of washing the udder thoroughly with a chlorine disinfectant or with soap and water. The udder is then milked completely dry. After milking, the end of each teat is thoroughly disinfected with a tincture of iodine solution of 10 percent strength.

After the iodine is dried, collodion is put over the end of the teat to seal the opening. This seal prevents leaking and helps to keep germs from entering the udder through the streak canal. It doesn't take long for pressure to build up inside the udder to cause the materials that come into the udder from the bloodstream to be reabsorbed. This starts the drying-up process.

Cows with normal udders that are free from mastitis can be dried off by this method without harming their udders.

# STATE OF TEXAS

County of \_\_\_\_\_

Know all men by these presents, that \_\_\_\_\_

of the County of \_\_\_\_\_ State of Texas, do hereby certify that \_\_\_\_\_

is the true and correct copy of the \_\_\_\_\_

as the same appears from the \_\_\_\_\_

Witness my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_.

Dwarf Hybrid Corn Testing Continues

Seed production in four of the most promising dwarf hybrids developed by the University of Illinois has been stepped up this year, according to corn breeder Earl Leng. If this program is successful, we should have enough seed to plant 10,000 to 15,000 acres in 1959, he reports.

Dwarf hybrids that showed the most promise in small tests during 1956 and 1957 are undergoing extensive tests this summer. If they perform well, some of them may also be released for seed increase.

These dwarf hybrids are looked upon with great anticipation because their short, stiff stalk and low ear placements make them resistant to stalk breaking and root lodging. The plants stand about five feet tall, and the ears hang only 18 to 24 inches above the ground.

Illidwarf 513, the dwarf version of the popular U. S. 13 normal hybrid, has consistently had less than 10 percent of its stalks break in the Illinois tests. Under some of the same conditions, 50 to 60 percent of the stalks of normal hybrids have broken over.

So far dwarf hybrid yields have fallen about 10 percent under those of comparable normal hybrids when hand harvested. But limited machine harvest tests suggest that dwarfs should show much less harvest loss.

Visitors to Agronomy Day at the University Agronomy South Farm on September 11 will see some of the dwarf hybrids now being developed by Illinois corn breeders and also by several seed companies. All interested persons are cordially invited to attend.



Watch Out for Silage Gas Poisoning

Farmers have long known that it is dangerous to enter a newly filled silo, but few realize the full extent of the danger, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

Breathing the gases of fermenting silage can cause a serious and potentially fatal respiratory disorder, "silo-filler's disease." This newly identified disease is described as "any bronchial or pulmonary condition produced by breathing nitrogen oxide derived from fresh silage."

Because it resembles other lung conditions, such as broncho-pneumonia, the doctor must know whether the patient has been exposed to silage fumes before he can make the proper diagnosis.

Prevention of the disease is simple. Allow no one to enter a silo for any reason from the time filling begins until seven to 10 days after it is finished. Provide good ventilation around the base of the silo during the dangerous period so that gases will be carried away. Fence the area to keep children and animals from straying into the gases. Run a blower fan for 10 to 15 minutes in the silo before anyone enters it.

Simple safety measures in and around the silo will prevent inhaling the gases and therefore prevent the disease.



Check Pastures for Poisonous Plants

Short pastures brought on by hot, dry weather and maturing of pasture grasses will cause livestock to sample plants they would not ordinarily eat. Some of these plants may be poisonous, according to Dr. P. D. Beamer of the University of Illinois College of Veterinary Medicine.

Dr. Beamer points out that poor pastures often develop in August and early September. Many poisonous plants reach the deadly stage about this time. These plants include bracken, horse nettle, tall buttercup, white snakeroot, horsetail and many others.

The veterinarian urges farmers to become familiar with poisonous plants and to learn their dangerous stages. Fencerows and swampy places in the pasture are likely places for poisonous plants to grow.

Dr. Beamer suggests taking plants suspected of being poisonous to the veterinarian or farm adviser for identification. The College of Veterinary Medicine at the University of Illinois or the Illinois Natural History Survey at Urbana will also help farmers identify plants suspected of causing poisoning.





(Note to Editors: Attached is a complete list of students who have received Sears Roebuck scholarships to the University of Illinois College of Agriculture.)

FOR RELEASE WEEK OF SEPTEMBER 1, 1958

Area Student Wins Scholarship to UI

\_\_\_\_\_, of \_\_\_\_\_, is one of 22 freshmen entering the University of Illinois College of Agriculture this fall who has received a Sears Roebuck scholarship.

In announcing the awards, C. D. Smith, assistant dean of the college, noted that this marks the 23rd consecutive year in which the Sears Roebuck Foundation has sponsored scholarships for worthy students entering the UI. These scholarships range in value from \$100 to \$275.

Gilbert M. Knap, of Illiopolis, is receiving a special Sears sophomore award of \$250 this year. He was one of the freshman award winners last year.

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3/26/58



SEARS ROEBUCK SCHOLARSHIP WINNERS

<u>Name</u>	<u>Home Town</u>
Ralph Eugene Davis	R. R. 1, Monmouth, Illinois
Dickie Joe Blakemore	Olive Branch, Illinois
Robert Arthur Senior	R. R. 2, Momence, Illinois
Delbert T. Dahl	LaHarpe, Illinois
Larry Dean Duies	R. R. 3, Hoopeston, Illinois
Larry Wayne Ebersohl	Grand Tower, Illinois
Duane E. Haning	Minier, Illinois
Kenneth Dean Hohlbaugh	Mt. Erie, Illinois
Nolan E. McKitrick	Box 187, Kinmundy, Illinois
George Harl Rankin, Jr.	Waynesville, Illinois
James Howard Schoonaert	507 Jackson, Washington, Illinois
Robert Earl Sipp	Dunlap, Illinois
Arthur Dale Twietmeyer	R. R. 1, Frankfort, Illinois
Charles William Washburn	Brownstown, Illinois
Walter Clarence Crackel	Box 25, R. R. 3, Albion, Illinois
Norman David Houser	R. R. 1, Freeport, Illinois
Jay Paul Mitchell	R. R. 1, Mahomet, Illinois
James A. Burns	R. R. 1, Bourbonnais, Illinois
Carol Ann Ostrom	Williamsfield, Illinois
Mary Jane Geheber	Ransom, Illinois
Judith Kay McClane	Box 292, Cornell, Illinois



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF SEPTEMBER 8, 1958

## Keep Safety Shields in Place

In this busy farm work season, it's smart to play safe by having all safety shields in place on power-take-offs and other moving farm machinery parts.

The stakes are too high to gamble against having an accident by working around machinery without guards, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. If you lose, it's too late to be sorry.

Get standard power-take-off hitches and shields from your machinery dealer. But even the best shield will not protect you if you don't put it on.

Some manufacturers are putting on non-removable power-take-off shields to help protect operators against negligence. You can open these shields for service and inspection.

Just remember that accidents don't respect either age or experience.

# DECLASSIFICATION

Page 1 of 1

DECLASSIFIED BY: [REDACTED]

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE

DATE: [REDACTED]

EXEMPTION CODE: [REDACTED]

REASON FOR EXEMPTION: [REDACTED]

APPROVED BY: [REDACTED]

DATE OF REVIEW: [REDACTED]

REVIEWED BY: [REDACTED]

REVISIONS: [REDACTED]

White Snakeroot Can Poison Livestock

Livestock are most likely to be affected by white snakeroot poisoning in late summer and fall, according to Dr. R. P. Link, University of Illinois College of Veterinary Medicine.

Poor pasture is usually the reason animals eat white snakeroot. When they have good pasture, they rarely eat the plant. Poisoning usually results from eating the weed every day for several days, although some poisonings occur after only one feeding.

All animals are susceptible to the poison found in white snakeroot. Milk of lactating animals that eat the plant contains the poisonous agent. This has given rise to the term "milk sickness" for the poisoning that results when people drink milk from a cow that has eaten the weed. Nursing animals may also be poisoned in this way. This may occur without the cow's showing signs of poisoning.

Poisoned animals become listless and inactive, although the first signs of the poisoning may be loss of weight and the animal may tremble after exercise. Trembling is especially noticed in the muzzle and legs. As poisoning progresses, the animals lose appetite completely and become weaker until they are not able to stand. Cattle usually grind their teeth, have a pungent breath odor and suffer fast, hard breathing.

Dr. Link says there is no specific treatment for this poisoning. Lactating animals should be milked to help eliminate the toxic agent. Treatment in overcoming white snakeroot poisoning is to keep the animal alive until the toxic agent is eliminated. Consult your local veterinarian to administer supportive treatment.





(Note to Editors: Attached is a list of Illinois counties with the recommended average date of seeding wheat in each county to get highest yields and help reduce Hessian fly populations.)

Hessian Flies Not So Numerous This Year

Hessian fly population is lower throughout the wheat-growing sections of Illinois this year than it has been since 1954.

This fact was shown by results of the annual Hessian fly population survey taken by entomologists of the Illinois Natural History Survey and the University of Illinois agricultural extension service.

The entomologists, H. B. Petty and Steve Moore, report that in 1957 the state average was 6.3 puparia per 100 tillers. This year it's only 2.9 puparia. The reduction is probably due to the frequent heavy rains that occurred during the egg-laying period this year.

Wheat growers can help to prevent the Hessian fly population from increasing by observing suggested seeding dates. These dates depend on the latitude of the county because flies emerge first in the northern counties.

In \_\_\_\_\_ county, the best time to seed wheat is from \_\_\_\_\_ to \_\_\_\_\_, according to the entomologists.

Although wheat sown before the suggested seeding dates might escape serious damage this fall, early fall seeding may still result in a population build-up. And the spring brood in 1959 may then cause serious losses to all fields regardless of their seeding dates.

Two varieties of wheat, Dual and Ponca, have shown a considerable degree of resistance to Hessian fly populations. Planting either of these varieties may help to reduce a build-up of this pest. Destroying volunteer wheat will also help.



AVERAGE DATE OF SEEDING WHEAT FOR HIGHEST YIELD

County	Average date of seeding wheat for highest yield	County	Average date of seeding wheat for highest yield
Adams	Sept. 30 - Oct. 3	Lee	Sept. 19-21
Alexander	Oct. 12	Livingston	Sept. 23-25
Bond	Oct. 7-9	Logan	Sept. 29 - Oct. 3
Boone	Sept. 17-19	Macon	Oct. 1-3
Brown	Sept. 30 - Oct. 2	Macoupin	Oct. 4-7
Bureau	Sept. 21-24	Madison	Oct. 7-9
Calhoun	Oct. 4-8	Marion	Oct. 8-10
Carroll	Sept. 19-21	Marshall-Putnam	Sept. 23-26
Cass	Sept. 30 - Oct. 2	Mason	Sept. 29 - Oct. 1
Champaign	Sept. 29 - Oct. 2	Massac	Oct. 11-12
Christian	Oct. 2-4	McDonough	Sept. 29 - Oct. 1
Clark	Oct. 4-6	McHenry	Sept. 17-20
Clay	Oct. 7-10	McLean	Sept. 27 - Oct. 1
Clinton	Oct. 8-10	Menard	Sept. 30 - Oct. 2
Coles	Oct. 3-5	Mercer	Sept. 22-25
Cook	Sept. 19-22	Monroe	Oct. 9-11
Crawford	Oct. 6-8	Montgomery	Oct. 4-7
Cumberland	Oct. 4-5	Morgan	Oct. 2-4
DeKalb	Sept. 19-21	Moultrie	Oct. 2-4
DeWitt	Sept. 29 - Oct. 1	Ogle	Sept. 19-21
Douglas	Oct. 2-3	Peoria	Sept. 23-28
DuPage	Sept. 19-21	Perry	Oct. 10-11
Edgar	Oct. 2-4	Piatt	Sept. 29 - Oct. 2
Edwards	Oct. 9-10	Pike	Oct. 2-4
Effingham	Oct. 5-8	Pope	Oct. 11-12
Fayette	Oct. 4-8	Pulaski	Oct. 11-12
Ford	Sept. 23-29	Randolph	Oct. 9-11
Franklin	Oct. 10-12	Richland	Oct. 8-10
Fulton	Sept. 27-30	Rock Island	Sept. 20-22
Gallatin	Oct. 11-12	St. Clair	Oct. 9-11
Greene	Oct. 4-7	Saline	Oct. 11-12
Grundy	Sept. 22-24	Sangamon	Oct. 1-5
Hamilton	Oct. 10-11	Schuyler	Sept. 29 - Oct. 1
Hancock	Sept. 27-30	Scott	Oct. 2-4
Hardin	Oct. 11-12	Shelby	Oct. 3-5
Henderson	Sept. 23-28	Stark	Sept. 23-25
Henry	Sept. 21-23	Stephenson	Sept. 17-20
Iroquois	Sept. 24-29	Tazewell	Sept. 27 - Oct. 1
Jackson	Oct. 11-12	Union	Oct. 11-12
Jasper	Oct. 6-8	Vermilion	Sept. 28 - Oct. 2
Jefferson	Oct. 9-11	Wabash	Oct. 9-11
Jersey	Oct. 6-8	Warren	Sept. 23-27
Jo Daviess	Sept. 17-20	Washington	Oct. 9-11
Johnson	Oct. 10-12	Wayne	Oct. 9-11
Kane	Sept. 19-21	White	Oct. 9-11
Kankakee	Sept. 22-25	Whiteside	Sept. 20-22
Kendall	Sept. 20-22	Will	Sept. 21-24
Knox	Sept. 23-27	Williamson	Oct. 11-12
Lake	Sept. 17-20	Winnebago	Sept. 17-20
LaSalle	Sept. 19-24	Woodford	Sept. 26-28
Lawrence	Oct. 8-10		



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF SEPTEMBER 15, 1958

## Too Many Dry Days May Be Costly

Dairymen who let their cows stay dry for three or four months out of each year can expect to get 800 to 1,000 less pounds of milk because of this fact alone.

Leo Fryman, extension dairy specialist at the University of Illinois College of Agriculture, says a dry period is important to a cow. It gives her time to rest, replenish her body reserves and grow the calf she is carrying. But six weeks to two months is plenty of time for all of these things.

Shy breeders and cows with short lactation periods are the ones that usually stay dry too long, Fryman says. If possible, such cows should be taken out of the herd. Certainly heifers from these cows should not be kept for herd replacements, because such tendencies are in many cases inherited.

Dairymen will be well repaid for the time they spend in studying their records to find cows that stay dry too long. Locating such cows is easy for farmers who keep WADAM, OS or DHIA records. See your county farm adviser for more information on these record-keeping programs.



Selecting House Paint Is a Complex Job

Choosing the best buy in a house paint is becoming ever more difficult.

K. H. Hinchcliff, extension farm housing specialist at the University of Illinois College of Agriculture, says that there are more than 2000 U. S. paint manufacturers who make thousands of different kinds of house and barn paints.

Looking at the label on the can may not help the average buyer much, Hinchcliff says. The kind of opaque pigment that is used is now more important than the relative proportion of pigment to vehicle.

Many house paint pigments include titanium, lead and zinc. The relative proportion of each will vary greatly, however. Sometimes extenders are also included. Each has one or more effects on the paint.

Titanium contributes a brilliant white color that has high hiding power. Lead, being softest, gives a self-cleaning characteristic by gradually washing away, but is discolored by sulfide gases. It resists rust stains very well, and water doesn't cause it to swell. However, lead has low hiding power and is not so white as other paints. It also should not be used within reach of livestock.

Zinc gives hardness to paint and also helps it resist mildew. But, in the presence of moisture, it may swell, increasing the tendency to blister or flake.

Extenders are transparent pigments that are used in "breather-type" paints. They dry without gloss.

Titanium pigment is sometimes used alone with alkyd or other vehicles. Such paints are often sold as "blister and stain resistant" and have relatively little gloss.

U.S.D.A. Home and Garden Bulletin No. 52, "Wood Siding, How to Install It, Paint It, and Care for It," is an illustrated guide to paint buying. It is available for 10 cents from the U. S. Government Printing Office, Washington 25, D.C.

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Veterinarian Warns of Prussic Acid Poisoning

Cattle and sheep are more likely to be lost from prussic acid (cyanide) poisoning than horses and swine.

Dr. Denzil E. Dees of the University of Illinois College of Veterinary Medicine, says that prussic acid poisoning occurs chiefly in livestock that eat Sudan grass, sorghums and Johnson grass. Animals may also be poisoned from eating wild chokecherry, wild blackcherry, flax, arrow grass, velvet grass and Christmasberry.

Anything that causes an interruption in the growth of a plant, such as drought, mowing or trampling, followed by rapid growth may produce a brief level of prussic acid that will poison livestock eating these plants. Frost itself does not cause formation of the poison, but the new growth after frost often contains large amounts of prussic acid, Dr. Dees says.

Prussic acid poisons very quickly. Symptoms may be seen within 10 to 15 minutes after the animal has eaten the poisonous forage, and death may occur within a few minutes.

At first the animal finds breathing difficult and becomes giddy or staggers and falls. The heart action becomes weak, and the breath may have an almond-like odor. Muscular spasms may occur at intervals until the animal dies. Frequently the animal bloats before death or soon thereafter.

Any animal that is suspected of being poisoned by any of the prussic acid bearing plants should be treated immediately by a veterinarian, says Dr. Dees.



Be Safe With Livestock

Although Illinois farmers keep fewer dairy bulls and horses than they formerly did, livestock continue to cause many farm accidents, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

A good livestock man is one who is kind and firm with animals. Anyone who handles livestock otherwise may find himself involved in an accident.

Milk cows are involved in more accidents than any other kind of livestock, Hogsett points out. The reason is probably that they are handled twice a day and often under crowded conditions. Many farm residents have been trampled by cows that became frightened. All too often the cause of the excitement can be traced directly to the injured person.

Some farmers make excuses for handling dairy bulls carelessly by saying, "We've raised our bull as a pet and he wouldn't hurt anyone." Others declare, "As soon as our bull shows any signs of being mean, we are going to sell him." Too many farmers have been killed or injured because they believed these practices were safe.

Other things to remember, according to Hogsett, are to keep small children away from livestock with new-born young; to shorten a boar's tusks and remove horns from cattle; and to speak to animals when approaching them. Even the most gentle animal will kick or crowd when surprised.



Winter Barley Can Help Round Out Feed Grain Supplies

Winter barley is an excellent feed grain crop for southern Illinois, but the risk of winterkilling runs high in the central and northern parts of the state, according to J. W. Pendleton, University of Illinois crops extension specialist.

Farmers can reduce the winterkilling threat by seeding barley about two weeks ahead of winter wheat to give the barley a head start this fall. Pendleton points out that winter barley matures about mid-June, ahead of the wheat and oat harvest rush. It is also a cheap grain to grow--20 to 30 percent cheaper than corn.

As a feed grain, barley is equal to or better than corn for growing animals, but not quite so good as corn in fattening rations. In both protein and total digestible nutrient content, barley compares favorably with both corn and oats. And it is harvested in time for use about the time the supply of other feed grains, especially corn, is running short.

Success in feeding barley depends on the feeding method, Illinois researchers warn. Whole barley is hard for animals to digest, and finely ground barley is unpalatable. Cracked barley is best.

Recent efforts by plant breeders have combined much-needed winter-hardiness and stiff straw in new barley varieties. These features add up to high yields--barley yields often compare favorably with corn and oat yields in southern Illinois.

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IN SENATE,

January 11, 1907.

REPORT OF THE COMMISSIONERS OF THE GENERAL LAND OFFICE, CONCERNING THE LANDS BELONGING TO THE STATE OF TEXAS, AND THE PROCEEDINGS OF THE COMMISSIONERS SINCE THE LAST REPORT.

THE COMMISSIONERS OF THE GENERAL LAND OFFICE, IN ACCORDANCE WITH THE PROVISIONS OF THE ACT OF MARCH 19, 1897, AND THE ACT OF MARCH 1, 1901, HAVE THE HONOR TO SUBMIT TO YOU THIS REPORT, CONTAINING A SUMMARY OF THE PROCEEDINGS OF THE COMMISSIONERS SINCE THE LAST REPORT.

THE LANDS BELONGING TO THE STATE OF TEXAS, AND THE PROCEEDINGS OF THE COMMISSIONERS SINCE THE LAST REPORT, ARE SET FORTH IN THIS REPORT, AND THE COMMISSIONERS HAVE THE HONOR TO SUBMIT TO YOU THIS REPORT, CONTAINING A SUMMARY OF THE PROCEEDINGS OF THE COMMISSIONERS SINCE THE LAST REPORT.

THE COMMISSIONERS OF THE GENERAL LAND OFFICE, IN ACCORDANCE WITH THE PROVISIONS OF THE ACT OF MARCH 19, 1897, AND THE ACT OF MARCH 1, 1901, HAVE THE HONOR TO SUBMIT TO YOU THIS REPORT, CONTAINING A SUMMARY OF THE PROCEEDINGS OF THE COMMISSIONERS SINCE THE LAST REPORT.

THE LANDS BELONGING TO THE STATE OF TEXAS, AND THE PROCEEDINGS OF THE COMMISSIONERS SINCE THE LAST REPORT, ARE SET FORTH IN THIS REPORT, AND THE COMMISSIONERS HAVE THE HONOR TO SUBMIT TO YOU THIS REPORT, CONTAINING A SUMMARY OF THE PROCEEDINGS OF THE COMMISSIONERS SINCE THE LAST REPORT.

Recommended varieties include Kenbar for extreme southern Illinois, and Hudson, Missouri B-475 and Dayton for planting as far north as Urbana. Dayton is a new variety, never before recommended for Illinois.

All of these varieties mature early, favoring an oncoming clover crop. They can also be followed the same year by a second crop of soybeans or sudan grass for pasture. But when such a double-crop arrangement is used, it is important to watch fertility practices.

Farmers are also urged to use certified seed to insure high germination and vigorous plant growth. The seed should be drilled at the rate of two bushels an acre on a well-drained, fertile soil--barley cannot stand "wet feet."

Insect enemies of barley include armyworms and chinch bugs. Barley is especially tasty to both. In spite of the recommended mid-to late-September seeding dates, heavy attacks by Hessian fly do not usually occur.

Illinois Circular 782, "Winter Barley, a Feed Insurance Crop for Southern Illinois," gives more information on this useful grain crop. This circular is available from your county farm adviser or from the College of Agriculture, Urbana.

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for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF SEPTEMBER 22, 1958

## Plant Cover Crops in Gardens This Fall

Planting cover crops in vegetable gardens this fall will help to insure a good garden next summer.

That's the report from N. F. Oebker, University of Illinois extension specialist in vegetable crops. He explains that a cover crop adds organic matter to the soil and helps to improve its physical condition. The result is better vegetables.

Either rye or rye grass makes a good cover crop for Illinois vegetable gardens. It's too late this year to plant rye grass, but rye can be planted any time in September.

Use three pounds of rye for every 1,000 square feet of garden. If peppers, sweet corn or other row crops are still growing in the garden, sprinkle the seed between the rows. Then rake it into the soil.

Water the rye frequently if this fall is particularly dry. Plow or disc it under next spring when it's about six inches tall.

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Rhinitis Can Take Heavy Toll of Young Pigs

Pigs infected with atrophic rhinitis may need several more months of feeding to bring them to market weight--if they don't die first.

Veterinarians at the University of Illinois warn that atrophic rhinitis in a pig crop may cause a substantial loss. They are still not sure what causes rhinitis; however, their guidance can help to control the disease.

Rhinitis is apparently spread by older pigs that have recovered from the disease. Some of the infected pigs have dished-in or curved snouts.

To cut down danger from this disease, the veterinarians recommend the following practices:

1. Isolate sows at farrowing time.
2. Keep any known infected pigs away from baby pigs.
3. Destroy runts. Slaughter the whole herd if most of the animals are infected. Then disinfect the buildings and equipment before starting a new herd on clean ground.
4. Add new stock that is known to be disease-free and that comes from farms that haven't had a rhinitis problem.
5. Follow the McLean county system of swine sanitation.
6. Living with the disease is often unprofitable. However, some herd owners cull closely rather than sell out.
7. Do not buy breeding animals from herds that are known to be infected.



Wire Guards Protect Young Trees From Mice and Rabbits

Wire guards will protect young fruit trees from trunk-girdling by meadow mice and rabbits this fall and winter.

Frank Owen, University of Illinois extension fruit crops specialist, points out that mice and rabbits will be an increasing problem in orchards as their other food sources dwindle. He adds that mice in orchards are as hard to control as most common insects and diseases.

To build a wire guard, Owen recommends cutting six- or eight-mesh hardware cloth into cylinders 18 inches high and 6 inches in diameter. Push the bottom of the cylinder firmly into the soil around the crown of the young trees. As a further precaution, keep the base cleared of grass and weeds.

Owen says, however, that baiting is the best way to really control mice. The Fish and Wildlife Service considers apples treated with zinc phosphide the best bait. If the mice will not eat apples dropped on the ground, try oats that are especially treated with zinc phosphide or strychnine. To find where to get these bait compounds, check with Ira L. Banks, U. S. Fish and Wildlife Service, 327 Federal Building, Peoria.

A one-ounce can of zinc phosphide treats 20 quarts of cut apples, enough for about 1,000 trees. Ten pounds of strychnine-treated oats will treat about 500 trees.

To prepare the bait, use ripe but firm apples that do not bruise easily. Cut a two-inch apple into about 16 cubes. For each quart of apple cubes, use one level teaspoon of zinc phosphide.

CHAPTER I. THE EARLY HISTORY OF THE UNITED STATES.

The first discovery of the continent was made by Christopher Columbus in 1492.

He sailed from Spain on the 3rd of September, and after a long and hazardous voyage, he discovered the continent of America on the 12th of October.

At that time, the continent was inhabited by a numerous and civilized people, who were called Indians.

They were discovered by Columbus, and he gave them the name of Indians, because he thought they were from the island of India.

But it is now known that they were a distinct people, who had never been discovered by any other nation.

The first settlement made by the Europeans in America was at St. Augustine, in Florida, in 1565.

It was founded by Pedro Menéndez, a Spanish officer.

The first English settlement was made at Jamestown, in Virginia, in 1607.

It was founded by a company of Englishmen, who were sent to America by the Virginia Company.

The first settlement made by the French in America was at Quebec, in 1608.

It was founded by Samuel de Champlain, a French officer, who was sent to America by the French king.

It was the first settlement made by the French in North America.

The first settlement made by the Dutch in America was at New Amsterdam, in 1614.

It was founded by Henry Hudson, a Dutch officer, who was sent to America by the Dutch East India Company.

The first settlement made by the Swedes in America was at Fort Christina, in 1638.

It was founded by Peter Minuit, a Swedish officer, who was sent to America by the Swedish king.

The first settlement made by the Quakers in America was at Philadelphia, in 1681.

It was founded by William Penn, a Quaker, who was sent to America by the British king.

It was the first settlement made by the Quakers in America.

The first settlement made by the Germans in America was at Lancaster, in 1709.

It was founded by a company of German immigrants, who were sent to America by the British king.

It was the first settlement made by the Germans in America.

The first settlement made by the Irish in America was at New York, in 1709.

It was founded by a company of Irish immigrants, who were sent to America by the British king.

The first settlement made by the Scots in America was at Glasgow, in 1773.

Add Wire Guards - 2

Measure correctly because too much will discourage the mice from taking the bait and too little will give a poor kill. Sprinkle the bait over the apples, and shake until all cubes are covered. Prepare fresh bait each day.

For most efficient control, place the bait along the mouse runways. Three or four pieces of bait around each tree are enough. Since mice feed best under cover, pull the grass back over the bait. Drop bait into the holes of pine mice if you can find them. Baiting is most effective when the bait is placed between 9 a.m. and 2 p.m.

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PAC:cm  
9/16/58  
FPP

The first part of the document is a letter from the  
 author to the editor of the journal. The letter  
 discusses the author's interest in the subject  
 and the reasons for writing the paper. The author  
 mentions that the paper is based on a study  
 conducted in the laboratory. The author also  
 mentions that the paper is intended for the  
 journal and that the author is confident that  
 the paper will be of interest to the readers  
 of the journal. The author concludes the letter  
 by expressing the author's hope that the  
 editor will accept the paper for publication.

Received  
 10/10/10  
 10/10/10



Illinois Farmers Can Grow More Wood

Illinois farmers can start immediately to improve the management of their timber stands to increase the supply of high-quality, marketable wood.

More than 90 percent of the wood used by Illinois industry for its own use and in consumer goods comes from other states. About 25 percent of that wood is hardwood, and most of the hardwoods can be grown in this state, says L. B. Culver, extension forester at the University of Illinois College of Agriculture.

This ready market creates a good situation for the Illinois timber grower, Culver points out. But at present it is bad for consumers because of the added cost of bringing in materials from outside.

Illinois has nearly four million acres of woodland now, Culver says. About 90 percent of it is privately owned, mostly on farms.

Recent surveys show that the state is growing wood faster than it is using it. But farmers are cutting the high-quality material--the kind that is most profitable and in greatest demand--about a third faster than they are growing it.

With better woodland management, however, farmers could increase the timber growth rate on their present acreage about 2 to 2 1/2 times. That would mean that Illinois' present forest resource, with good management, would be capable of producing the state's total hardwood needs.



Caution--Dangerous Machine at Work

If you haven't had much experience in operating farm machinery, don't start with a corn picker! It is one of the most dangerous of all farm machines to operate, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

Most corn picker accidents happen when the operator leaves the tractor seat when the picker is running. The golden rule for picker safety is: NEVER TRY TO CLEAN, GREASE OR ADJUST YOUR CORN PICKER WHEN IT IS RUNNING.

Have the picker in good condition, and adjust it properly before starting to pick corn. A well-adjusted picker in good condition, operated at slow speed, is less likely to clog. Less clogging means less need to get off the seat to clean the rolls.

Study the instruction manual for your picker until you are completely familiar with all the adjustments needed for good operation. Keep all safety shields and guards in the right place at all times. Do not wear loose or torn clothing when you pick corn. Extra-thumb gloves are especially dangerous when you are working around machinery.



Honor 43 Farmers for Help With Farm Cost Research

URBANA--Forty-three farmers from east-central Illinois will receive special recognition at the University of Illinois on September 27. A. G. Mueller, in charge of farm cost research, reports that these farmers have cooperated with the department of agricultural economics in keeping detailed cost records of all their farm business operations during 1957 and 1958.

These records help the farmers who keep them by showing detailed costs of producing every product on their farms in comparison with similar farms, Mueller points out. But the records are also of great value to the College of Agriculture for classroom teaching, agricultural extension programs, farm planning work and farm management research. They are also used widely in similar farming areas in Indiana and Iowa, he reports. Only two other states have detailed farm cost records similar to those at Illinois.

Detailed cost research is conducted by the department of agricultural economics in different parts of the state. Every two years a new area is selected, and certain farmers are asked to cooperate in keeping detailed farm cost records.

During the recognition program H. G. Halcrow, head of the department of agricultural economics, and J. E. Wills, professor of farm management, will show how these farmers contribute to the farm management research program at the University. A. G. Mueller and Boyd Henry will report the preliminary 1957 cost results from these farms. All participating farmers will then have a chance to ask questions and discuss the findings.

Among those to be honored from this area are: (Get names from attached list.)



COOPERATING FARMERS IN COST RESEARCH PROJECT  
University of Illinois College of Agriculture  
Department of Agricultural Economics

Champaign county:

Godfrey Guynn, Rantoul

Walter Oyer, Fisher

Ford county

Don Anderson, Gibson City

Robert Becker, Sibley

William C. Beecher, Gibson City

Burl Branz, Sibley

Lyle Branz, Sibley

Wayne Brucker, Sibley

Howard Cook, Paxton

James Fawver, Gibson City

William Lohmeyer, Sibley

Wayne Niewold, Loda

Stanley Nelson, Paxton

Marlo Noland, Paxton

Gordon Palmberg, Ludlow

Wilbur Vial, Cabery

Iroquois county

Joe E. Bauer, Cissna Park

Oliver Rasmussen, Clifton

Peter Vanderkloot, Onarga

Livingston county

Fred Adam, Strawn

Emmett Baumann, Chenoa

Walter Burger, Dwight

Merle Corban, Saunemin

Charles Elliott, Chatsworth

Robert Leman, Forrest

Robert Monroe, Fairbury

Lloyd Shafer, Chatsworth

Frank Stahler, Odell

Lyle Stahler, Odell

Glenn Taylor, Cullom

Glen Thomas, Dwight

McLean county

George Brady, Chenoa

Glenn Claudon, Lexington

Arthur Huston, Cropsey

Vernon Miller, Lexington

Chris Poppe, Lexington

Russell Streid, Meadows

Vermilion county

Luther Bicker, Potomac

J. Ansel Dewey, Armstrong

Robert Hamilton, Collison

Charles Hawkins, Rankin

Dwight Leigh, Rankin

Lawrence Leigh, East Lynn





for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF SEPTEMBER 29, 1958

## Illinois Sheep Growers Meet on October 31

Illinois sheep producers will meet at the University of Illinois on Friday, October 31, for their annual Sheep Day sessions.

U. S. Garrigus, head of the sheep division at the UI College of Agriculture, says that the theme of the meeting will be centered around "Profits for the Sheep Grower." Emphasis will be given in the program to different ideas on how Illinois sheep and lamb producers can increase their profits.

Sheep Day visitors will hear latest research reports on results of feeding new types of high-oil high-protein corn varieties, substitution of non-protein nitrogen, urea and biuret for other protein and a comparison of 1908 and 1958 feeding systems. Also, a top feeder and an outstanding flock owner will appear on the program to show how their systems operate.

Opening session of the day's program will be at the Sheep Farm at 9:00 a.m., where visitors will be able to see research in progress in the college's flocks. Lunch will be served by members of the Hoof and Horn Club at noon in the Livestock Pavilion.



Cornstalk Pasture Won't Keep Milk Production Up

Farmers who turn their milking herds onto stalk fields should not expect to keep production at a very high level, says a dairy extension specialist at the University of Illinois.

G. W. Harpestad points out that even though plenty of corn may be left in the field, dairy cows cannot get enough feed there to keep their milk production up.

Many of the corn kernels eaten out of a stalk field pass through a cow's digestive tract without being used. Leaves and stalks are low in both palatability and digestibility. Cornstalks have about the same feed value as oat straw.

On the other hand, stalk fields are all right for pasturing dry cows and heifers, Harpestad says. For a short time they will be able to find enough feed for maintenance. But even dry cows and heifers should be able to get hay or silage during the time they are on cornstalk pasture.



Take Your Time Picking Corn--and Live

A preharvest checkup of your corn picker can save time and money. A machine in top shape will clog less and will not invite accidents through hurry and taking chances.

O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture, says most corn-picker accidents can be traced directly to taking a chance. Just because you've taken a chance before and escaped unharmed, you may think you can beat the odds indefinitely. But, if you keep on taking chances, some day you'll pay the price.

That's what happened to about 200 Illinois farmers during the 1957 picking season.

Taking a chance so that you'll be able to pick another load or finish a field before dark can be costly. To make it even more dangerous, you usually take the most chances when you're dog tired and your reaction time is slow.

When you're thinking about doing something to the picker without stopping it, ask yourself this question: "Will the minute or so I save pay for the finger or hand I may lose?" Take it easy and you'll live longer as well as being a lot happier.



Fall An Ideal Time for Planting Trees

Home owners who have been thinking about planting trees can swing into action now, because fall is an ideal time for this project.

"Why is this so?" is a question often asked of Harleigh Kemmerer, University of Illinois extension landscape specialist. For two reasons, replies Kemmerer. First, the soil is drier during the fall than during the spring and is easier to work. Then, trees planted in the fall can get their roots well established by the time hot weather arrives next summer.

Nearly any ornamental or shade tree can be planted in the fall. Exceptions are red bud, magnolia and dogwood.

Best time for planting is after trees become dormant but before the ground freezes. In Illinois this is usually sometime after October 15. Trees are dormant when their leaves drop.

Although it's still too early for actual planting, home owners can select their trees now, Kemmerer points out. Four types to choose from are those with spreading crowns, round crowns, pointed crowns and narrow, upright crowns.

Hackberry is an excellent example of a tree with a spreading crown. Although it is not attractive when it's small, it soon loses its "gangliness." Honey locust is another good example. This type looks best near tall buildings. The same is true of trees having pointed crowns, such as pin oak.

On the other hand, trees with round crowns look better near low buildings. The sugar maple is a good example of this type.

Kemmerer suggests planting trees about 25 feet from the house and about 40 feet apart, in staggered positions.

The first part of the report deals with the general situation of the country. It is found that the population is increasing rapidly, and that the agricultural resources are being exhausted. The government is urged to take prompt measures to protect the interests of the people, and to encourage the development of the country.

The second part of the report deals with the financial situation of the country. It is found that the government is in a state of financial distress, and that the public debt is increasing rapidly. The government is urged to take prompt measures to reduce the public debt, and to improve the financial situation of the country.

The third part of the report deals with the educational situation of the country. It is found that the educational system is in a state of decay, and that the quality of education is declining. The government is urged to take prompt measures to improve the educational system, and to raise the quality of education.

The fourth part of the report deals with the social situation of the country. It is found that the social conditions are deplorable, and that the people are suffering from poverty and disease. The government is urged to take prompt measures to improve the social conditions, and to provide relief for the poor.

The fifth part of the report deals with the political situation of the country. It is found that the political system is in a state of confusion, and that the government is inefficient. The government is urged to take prompt measures to reform the political system, and to improve the efficiency of the government.

The sixth part of the report deals with the military situation of the country. It is found that the military is in a state of disarray, and that the country is vulnerable to foreign attack. The government is urged to take prompt measures to reform the military, and to strengthen the country's defenses.

The seventh part of the report deals with the foreign relations of the country. It is found that the country is in a state of isolation, and that its interests are being neglected by the great powers. The government is urged to take prompt measures to improve the country's foreign relations, and to assert its independence.

The eighth part of the report deals with the conclusion of the report. It is found that the country is in a state of crisis, and that the government must take prompt and decisive action to meet the challenges of the future.



Recommend Insecticides for Flea Control

DDT and lindane are two of the best insecticides for controlling fleas on dogs.

Although DDT is usually effective by itself, lindane is sometimes needed in addition, explains Steve Moore, entomologist with the University of Illinois and the Illinois Natural History Survey.

For fleas on cats, Moore suggests using rotenone. This chemical is the only one that is safe for "Tabby."

Put these chemicals on the animals either as a dust or a dip. Dipping is more thorough. Sometimes treating areas in the yard or home where pets sleep will adequately control fleas.

Moore explains that fleas are usually most numerous on pets that have been running free all summer. But pets that have been flea-powdered regularly should not be too heavily infested.

The approaching cold weather will kill many adult fleas living outdoors. Those inside will remain alive all winter though, feeding on dogs, cats or even people. Eggs laid out of doors in sheltered places usually survive the winter.

Moore suggests treating pets in the morning. Then keep them outdoors until all of the fleas have dropped off.



College of Veterinary Medicine Releases New Circular

"Fence Out Animal Diseases," a new circular released by the University of Illinois College of Veterinary Medicine, describes six main parts of a "disease-exclusion" fence.

Main parts of such a "fence" are sanitation, isolation, closed herds and flocks, quarantine, disinfection and a balanced diet.

The circular adds, "Preventive vaccination and preventive treatment furnish supports or braces for the fence. The use of supports, however, is an admission that our fence is basically weak.

"If they are used to help 'fence out' diseases, we must be sure that they are properly applied. Don't guess about when or how much or how often. Ask your local veterinarian. His business is to make and keep livestock healthy."

The circular was prepared by Dr. G. T. Woods, assistant professor of veterinary extension, and Dr. C. A. Brandly, dean of the College of Veterinary Medicine and professor of veterinary microbiology.

Get a copy of "Fence Out Animal Diseases," Circular 798, by writing to the Information Office, College of Agriculture, University of Illinois, Urbana.



Illinois Farm Real Estate Taxes Hit All-Time High

Illinois farm landowners paid a record-sized tax bill of \$106 million this year, according to N. G. P. Krausz, University of Illinois professor of agricultural law.

This tax, based on 1957 assessments, jumped 11 percent over the year before and is 348 percent more than in 1940. Real estate taxes absorbed almost 11 percent of total Illinois net farm income in 1957, Krausz figures.

Among corn-belt states, Illinois tax levies were the highest. Illinois land carried an average tax levy of \$3.50 an acre, while remaining corn-belt states averaged only \$1.77. The average tax per acre for all states was \$.97. Only four northeastern states carried higher tax levies than Illinois.

Some might think that the high value of farm land in Illinois compared with other states may explain the higher taxes. But when taxes are computed on the basis of \$100 full value, the Illinois tax levies jumped nearly five percent this past year, while the U. S. average went up only 1.1 percent and other corn-belt states increased less than .3 percent. So, even figuring this way, Illinois remains among the leaders in percent of tax increase.

The lion's share of real estate taxes is used for public schools, Krausz points out. School enrollment rose 33 percent from 1946 to 1956, and another 40 percent jump is expected by 1965. This rapid climb in school population creates unprecedented needs for new schools, more teachers and more operating revenue.

So, as long as the tax structure remains basically the same in Illinois, the result will be more increases in real property taxes, Krausz concludes.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF OCTOBER 6, 1958

## Keep Hands Where They Belong While Running Corn Picker

Keep your hands where they belong during this dangerous corn-picking season, and you'll come through safely.

That's the urgent message from O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

The surest way to avoid corn-picker accidents is never to touch a picker while it is running. Always shut it off first.

Forgetting this safety rule meant death to at least eight men last year, permanent injury to 118 more and temporary disability to 56 others, according to the Illinois Rural Safety Council.

Don't get that "safe" feeling until all of your corn is harvested. An accident can happen to you unless you keep your hands where they belong. Leave the picker alone when it is running. Work on it only when it is stopped. The corn picker is the most dangerous piece of machinery you work with.

For the sake of your family, read the "caution" and "safety rules" in your corn-picker operator's manual. If you are not concerned with your own well being, your family is.

# CONFIDENTIAL

CONFIDENTIAL - SECURITY INFORMATION

CONFIDENTIAL - SECURITY INFORMATION

[The following text is extremely faint and illegible due to low contrast and blurring. It appears to be a multi-paragraph document.]



Tetanus Menaces Livestock Health

Tetanus, or lockjaw, is as dangerous to farm livestock as it is to humans, reports Dr. J. R. Pickard, University of Illinois extension veterinarian. The poison produced in animals and humans by the tetanus is 100 times more deadly than strychnine.

A wound infection disease, tetanus occurs most often on Illinois farms during the hot summer. But the disease can occur any time.

Sterilizing instruments before docking or castrating and disinfecting all wounds will help to prevent tetanus, according to Dr. Pickard.

Tetanus germs live in the soil and in manure. If they get into a deep wound where the air cannot reach them, they multiply and produce poison. The poison will cause paralysis if it reaches the animal's spinal cord.

Tetanus first appears as a stiffness in the section of the animal's body where the poisons are working. Spasms of the muscles may be noticeable. Infected animals become excited easily. A bad tetanus infection may cause death in 2 to 10 days; however, animals with light attacks sometimes recover.

Veterinary treatment soon after the animal is injured will help to prevent losses, says Dr. Pickard.



Social Security Changes Mean More Security, More Deductions

Social security benefits and rates are both due for a hike in 1959, according to Norm Krausz, professor of farm law at the University of Illinois College of Agriculture.

People now drawing benefits will automatically get 7 percent larger payments starting next January. These people do not need to reapply for the new larger payments.

Rate increases, also starting January 1, will raise the present 2 1/4 percent social security tax rates for both farm employers and employees to 2 1/2 percent each. At the same time, the social security tax base will go up from \$4,200 to \$4,800.

Under the new rules, a farm worker earning \$4,800 will have \$120 withheld from his salary. His employer will pay another \$120, bringing the total social security tax for the employee to \$240.

In addition, farm operators will have to pay more on their own social security tax. Self-employment rates will go up from the present 3 3/8 to 3 3/4 percent, meaning a payment of \$180 on earnings of \$4,800.

Percentage-wise the rates will go up more than the benefits--rates increase 11 percent, while benefits increase only 7 percent. But other changes help to offset this difference.

One reason for the higher rates is new benefits, Krausz explains. Qualifications for disability benefits have eased, making it possible for more people to get payments. The new system also contains improvements in benefits for disabled and adopted children.



Add Social Security Changes - 2

Another reason for the rate hikes is simply to help the social security system break even. Some administrators had forecast a social security deficit in the future unless the higher rates were put into effect.

For farmers with a seasonal work load, there are more changes. Starting in 1959, some farmers with yearly incomes over \$1,200 can get payments for months in which the farm work load is slack if they do not earn more than \$100 a month off the farm. This year, payments would not be made in any month that off-the-farm earnings were more than \$80.

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Use Caution When Fertilizing Newly Planted Trees

Fertilize newly planted trees carefully to avoid burning the roots.

That's the advice of Harleigh Kemmerer, University of Illinois landscape specialist. He explains that fertilizer will burn tree roots unless it is mixed with soil in the bottom of the hole. In addition to fertilizer, place in the bottom of the hole a layer of topsoil, or a mixture of peat moss and subsoil or a mixture of manure and subsoil.

Here are some more suggestions from Kemmerer for planting trees:

Selection: In selecting trees, remember that those with balled-and-burlapped roots have a greater chance of surviving than those with bare roots.

Depth of hole: Dig the hole several inches deeper than the length of the balled-and-burlapped roots. If the soil is a hard clay, make the hole extra deep to provide adequate drainage. If the tree roots are wrapped, make the hole one foot wider than the wrapping.

Setting the tree: Place the base of the tree one inch lower than the surrounding ground level. Place it with its good side facing out. Put in a little soil at a time, tamping it carefully to eliminate air pockets. When the hole is two-thirds full of soil fill it with water. After the water soaks in, fill it again with water. Then put in the rest of the soil. Water the tree during the fall to insure good root growth.





Pruning: To compensate for loss of roots during transplanting, cut the side branches so that the tree is one-third of its original width. Never cut the top!

Staking: Staking prevents movement of the tree that loosens the soil around the roots and creates air pockets. Staking also keeps the tree erect.

Wrapping: Wrap the tree trunk to prevent sunscald. Use a commercially prepared material available at most nurseries.

Mulching: To help conserve moisture, place a mulch of ground corncobs two or three inches deep around the base of the tree.

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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF OCTOBER 13, 1958

## Dairy Cows Need Plenty of Warm Water

The average dairy cow will drink 12 to 15 gallons of water a day.

A high producer may need as much as 40 gallons, says Leo Fryman, extension dairy specialist at the University of Illinois College of Agriculture. The amount will vary with the temperature and the amount of succulent feed in the ration.

Dairy cows like their water often, too. They will take an average of 10 drinks a day if they have free access to water in tanks or in pressure bowls. Experiments have shown that cows will produce 3 to 4 percent more milk when given free access to water than when watered twice daily, and 6 to 11 percent more than when watered once daily.

They will also drink more when they get warm water in a protected place than when they have to drink through a hole in the ice in an outside unprotected tank. In addition, it costs less to heat water with coal, oil or gas before the cow drinks it than afterward with high-priced grain or roughage.

Before cold weather hits is the time to make sure pressure bowls and tank heaters are working properly so that the herd will be assured of plenty of warm water at all times. Your cows will thank you with larger milk checks.



Get Advice Before Making First Timber Sales

A University of Illinois extension forester suggests that Illinois farmers get some advice before making their first timber sales from their farm woodlands.

T. W. Curtin points out that too often the first sale comes about when a buyer stops in with an offer. Even though the farmer may think he's found an unexpected bit of good fortune, the price he is offered may actually be ridiculously low.

Curtin suggests that farmers who have not had prior experience in marketing timber consult their neighbors or farm foresters to get help in finding the right price for their timber. A good place to start for help would be the county extension farm adviser, who could direct you to the nearest source of help.

One point to watch would be to sell only measured volumes of timber, Curtin says. Be leery of any lump sum offer on unmarked timber. Timber should be sold only by the thousands of board feet. Pulpwood is sold both by the cord and by the ton.

It also may pay to shop around for bids on marketable timber. When the highest bid is received, the buyer and seller should enter into a written agreement. This agreement should include such things as price, boundaries of the timbered tract involved in the sale, penalty for cutting unmarked trees, repair of damaged fences, location of logging roads, time limit and other pertinent items.

A farmer may choose to do his own cutting and market the logs. The difference between the price of stumpage and the harvested logs will be his wages for the additional work.



Veterinarians to Attend Conference

Some 250 veterinarians will find out what's newest in their field on Thursday and Friday, October 23 and 24. That's the date of the 39th annual Illinois Conference and Extension Short Course for veterinarians at the University of Illinois College of Veterinary Medicine.

Veterinarians will view closed circuit television demonstrations on the laboratory diagnosis of mastitis, bird practice tips and aids to an accurate diagnosis of toxicology and hematology, according to Dr. L. E. Boley, chairman of the conference committee.

New information about fighting livestock and animal diseases, trends in diagnostic procedures and discussions ranging from the shipping fever complex to canine skin problems are part of the program. Visiting speakers, practicing veterinarians and staff members of the College of Veterinary Medicine will discuss many of the new techniques in combating livestock and poultry diseases.

The meeting will also include a chicken barbecue, class reunions, a ladies' program and a banquet.





Set Cattle Feeders Day for November 7

Annual Illinois Cattle Feeders Day has been scheduled for Friday, November 7, on the Urbana campus of the University of Illinois.

A. L. Neumann, head of the beef division at the UI College of Agriculture, reports that much of the program will be about harvesting, storing and feeding high-moisture corn. Visitors will also hear results of the most recent trials with a complete silage ration.

Results of bloat studies using emulsified soybean oil in drinking water should interest cattle feeders, Neumann says. Also of interest will be the cooperative study with the College of Veterinary Medicine on controlling shipping fever in feeder calves.

Other discussion will cover the effects of Synovex reimplantation of long-fed steers and comparison of such feed additives as Tapazole, Dynafac and the tranquilizers.

Cattle Feeders Day starts with tours of the beef farm experiments at 9:30 a.m. The main program starts at 11:00 a.m. in the Livestock Pavilion. Parking and lunch will both be available.



New Tax Law Offers Farmers Chance to Reduce Income Tax

Farmers with high incomes this year can reduce their income taxes by taking advantage of a new tax law, reports N. G. P. Krausz, University of Illinois professor of agricultural law.

The new law, passed by Congress this year to aid small businesses, will allow a farmer to take an additional 20 percent depreciation on tangible personal property in the year he buys it. The law applies to tools, equipment and mature breeding stock. But it does not include buildings.

To qualify, the property must have a useful life of at least six years, Krausz points out. But it can be either new or used when a farmer buys it. The maximum allowance on a joint return is \$20,000.

Since the law provides for an additional 20 percent depreciation, it also means that the farmer can take his regular depreciation. Here's how it works:

Suppose a farmer buys a tractor and combine for \$10,000. The useful life is figured to be 10 years, so the additional depreciation allowance under the new law is \$2,000 (20 percent of \$10,000). If the farmer figures that the final salvage value is \$1,000, then he would figure his regular depreciation on \$7,000 (\$10,000 less \$2,000 additional depreciation less \$1,000 salvage value). Divided over 10 years, this amount would be \$700 a year.

If he buys the equipment after October 1, he should take only one-fourth year's depreciation. In the example above this would be



\$175. However, if he has established the practice of taking half a year's depreciation for all purchases he makes after July 1, he may continue to do so. But no matter what time of the year he purchases the equipment, he would take the full 20 percent additional depreciation.

A farmer who has taken his regular depreciation by one of the step methods, like declining balance, can save an even greater amount of tax this year.

Krausz urges farmers who have had a good year not to delay buying personal property that can be depreciated. Depreciation offsets income and brings down income taxes, he concludes.



Electrocution Danger From Moving Elevator

Nearly every fall some Illinois farmer is electrocuted when a corn elevator he is moving contacts overhead electric wires.

O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture, says such accidents are easy to prevent. He offers these tips:

If the move is in your farmyard, pull the fuse at the main service box while moving the elevator so that overhead wires which may touch the elevator are not charged.

If this is impossible, have one person watch the operation from a short distance away and warn you of close overhead wires.

The final precaution, Hogsett says, may help to avoid doubling the toll if a man is electrocuted. Only after turning off the current or breaking contact with the charged wires is it safe to touch the victim. If the current cannot be turned off, use a dry rope to pull the body free. Failure to observe this rule can mean death or serious injury to anyone touching the victim.





for weekly

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF OCTOBER 20, 1958

## "Playing the Picker" Can be Costly

When you "play the horses" and lose, it's money down the drain. But when you "play the picker" and lose, you may lose not only money, but a finger, hand or arm, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

When you try to clean or adjust a picker while it's running, you're betting your hand, your arm, or maybe even your life, to save a couple of minutes.

You're doing the same thing when you don't put the power take-off shield on the picker. The few minutes it takes to attach shields can save many dollars and months of time if it prevents an accident.

The smart farmer won't put up something so valuable as a hand or arm when the most he can gain is a minute or two.

Your picker was designed and built with safety in mind--keep it there!



Report New Tax Rule on Condemned Land

When the government takes over private property for new highways or other public uses, special tax laws come into effect, according to N. G. P. Krausz, University of Illinois professor of agricultural law.

This law gives the landowner a chance to replace his property without tax penalty.

The rule on replacing property has been changed so that a landowner can reinvest in "like" property. This means that city real estate now qualifies as a substitute. For example, a farmer who is paid \$15,000 for land taken for a highway could buy home sites in town or a filling station. But the property must be bought as an investment for profit.

The new law postpones the tax on any profit from the farm land until the city property is sold. If the city property is never sold, no income tax is paid.

The new rule brings the tax law in line with the rule that applies to exchanges of property. For many years property owners could exchange "like" property and postpone tax payments.

If the farm owner does not purchase other investment property and places money from the condemned land in the bank, he must pay capital gains tax on his profit. Before 1958 he had to pay a tax on the profit even when he bought replacement property, unless the replacement was other farm land.

New highways and lakes have been taking 6,000 to 10,000 acres of farmland a year in Illinois. This figure may be stepped up as the new highway program expands, Krausz concludes.



Hatching Dates Affect Maturity and Egg Size

A University of Illinois poultry specialist reports that chicks hatched during the winter mature earlier but produce smaller eggs than spring-hatched chicks.

S. F. Ridlen points out that winter-hatched chicks mature earlier because of the stimulating influence of longer days and warm weather as they mature. On the other hand, spring and summer-hatched chicks take longer to mature because of cold weather and short days as they mature.

The practice of brooding chicks in the winter has increased in recent years, according to Ridlen. Farmers use this practice to get the most large eggs when they command a high premium over smaller ones. They also use it to level out egg production and to make better use of brooding facilities and labor.

But winter brooding also has some disadvantages. Winter-hatched chicks require more attention and better management. And if housing space is limited, winter brooding increases the problem.

Experimental data indicate that winter-hatched pullets lag far behind spring pullets in reaching reasonable egg size. A more recent report shows that winter pullets have a slightly lower rate of production. But Ridlen says that by the time large eggs are commanding premium prices in the fall, pullets hatched the previous spring are producing large eggs. Even though spring pullets are producing an adequate supply of eggs at that time, the eggs have not reached maximum size.

Ridlen says the decision to practice winter brooding depends on the individual poultryman and his management and marketing problems.



Mulching Protects Strawberries From Winter Injury

Intermittent freezing and thawing in winter causes the soil to heave. This will kill strawberry plants unless they are properly mulched.

Mulching also protects the crowns from injury when temperatures fall much below freezing, according to Frank Owen, University of Illinois extension fruit crops specialist.

Here are some pointers from Owen on mulching materials:

Clean straw is the best choice. It is usually available, gives good protection, is easy to spread and is usually free of weed seeds.

Shavings are satisfactory but are usually hard to get, and it takes a lot to cover the plants.

Leaves make a good mulch but often blow too much.

Ground corncobs can be used, but they are uncomfortable for pickers kneeling on the ground.

Hay is also all right, but it often carries weed seed. If it has been outside for a year and all weed seeds have sprouted, then it's O.K.

Sawdust is not recommended because it packs too much and takes up moisture. When packed sawdust freezes, it may cause winter injury to the plants.

Some home gardeners use paper. But paper is not recommended because it doesn't give good protection.

Whatever mulch you use, put it on after several heavy frosts but before the temperature drops below 20 degrees. Leave it on until the new spring growth tends to show a yellow instead of green color. Then thin it with a rake just enough to let the plants come through. Rake the remainder into the middle of the rows. It will help to keep the berries clean.





Inspect Farm Tile Lines This Fall

Farm tile drain lines have had a good workout so far in 1958. And hard use means more chance for troubles to develop, says Ben Jones, agricultural engineer at the University of Illinois College of Agriculture.

Underground tile lines are not so easy to inspect and maintain as other farm equipment, Jones points out. But farmers can still make regular inspections to see whether or not they are working all right.

No tile line is better than its outlet. Run-off water must run freely away from the outlet and not be allowed to pond there. The outlet pipe should be set solidly in the ground. If surface water enters the ditch at the outlet, a headwall may be needed to prevent bank erosion.

Walk along the tile lines and look for sink holes. They are a sign of broken tile or too wide a joint that is letting dirt into the line. Lines under a sink should be repaired as quickly as possible.

If an old tile line is breaking up badly, you may need to abandon the whole line and replace it with another new one.

Best way to locate tile lines is to have a map of them for the whole farm. Sometimes an aerial photo will show tile line locations where a map is not available. Tile lines can often be located by light-colored streaks in the soil over them or by probing.

For full information on how to locate tile drains, ask your county farm adviser for a copy of Soil and Water Conservation Fact Sheet No. 2, "How to Locate Tile Drains." Or write directly to the Department of Agricultural Engineering, Urbana, for a copy.



Modify 3-Bedroom Modular Farmhouse Plan

One of the more popular farmhouse plans designed by the University of Illinois has been modified to provide more family living space.

Keith H. Hinchcliff, extension farm housing specialist at the UI College of Agriculture, reports that the workroom in the original plan has been enlarged to provide a family area.

Size of the front porch has also been reduced to allow a longer living room. The whole house has been laid out on a 4 x 4 foot module to simplify the use of regular panel materials, Hinchcliff says.

One of the features of this farmhouse design is an L-shaped living-dining area that has some south or east exposure regardless of house orientation. This room also has access to a rear terrace for outdoor living.

Space for food preparation, family dining and living, business, wash-up and laundry activities is all integrated into one open area. More than 100 square feet of floor area is storage distributed throughout the house in 16 detailed closet units.

The plan also provides a corner view of the farm entrance and driveway from the kitchen and work area. A protected front door faces the driveway and is close to the kitchen and work area.

Over-all living space provides 1,600 square feet plus a porch and carport. A full basement included in the plan may be omitted if desired.

This farmhouse design has been adapted from Plan C-10 of Illinois Agricultural Experiment Station Bulletin 600, "Contemporary Farmhouses." Working drawings are available. For more information, write to the College of Agriculture, Urbana, Illinois, and ask for a copy of Farm Buildings Fact Sheet No. 12, "A 3-Bedroom Family-Zoned Modular Farmhouse."



Caution Livestock Owners to Prevent "Blackleg" of Cattle

Livestock owners living in blackleg areas are being cautioned by practicing veterinarians to prevent this soil-borne disease.

Dr. J. R. Pickard, extension veterinarian of the University of Illinois, says the important step is to have animals vaccinated before outbreaks occur. Blackleg can live in a grazing area for years, ready to strike cattle that have not been vaccinated against it.

Native calves in blackleg areas should be vaccinated at weaning time. Dr. Pickard advises vaccinating feeder calves before they are brought onto the farm.

Blackleg is caused by a spore-forming germ that can live in the soil for years. It may enter an animal's body through small cuts and punctures in the skin or may be picked up through grazing.

First signs of blackleg include high fever, loss of appetite, lameness, arched back and rapid breathing. Once the disease strikes, it is generally so far advanced that little can be done to save the animals.

When blackleg is suspected, an immediate diagnosis is imperative. If the trouble proves to be blackleg, the rest of the herd can then be protected by vaccination. Carcasses of animals that die from blackleg should be burned or buried deeply under lime to prevent the infection from spreading or persisting on the farm.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF OCTOBER 27, 1958

## Prevent Corn Elevator Accidents

Corn elevators have taken the backache out of cribbing corn. But at least half a dozen Illinois farmers are injured in elevator accidents each year, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

Two of the most dangerous points, says Hogsett, are the tumbling rods from the jack to the elevator and from the elevator to the hoist. Without a shield, they're ready to grab loose clothing or gloves. Once they take hold, they don't let loose.

Because there are many gears, sprockets and chains that can't be shielded, it's wise to keep children away from the elevator. And, for your own safety, wear close-fitting clothes that won't catch on moving parts.

Hogsett also adds this word of caution: When moving an elevator, watch that it doesn't touch overhead electric wires.

On the basis of hours of annual use, the portable farm elevator is one of the most dangerous of major farm machines.





Frost Starts Danger of Woodland Fires

When the frost is on the pumpkins is the time to be wary of fire in the farm woodland.

Woodland fires are damaging and may be very expensive if they are not controlled, says L. B. Culver, extension forester at the University of Illinois College of Agriculture. Merchantable trees are damaged, and losses take place through reduction of market value, scarring of butts, which makes them susceptible to rot, and decreased growth rate.

Small, young trees may be totally destroyed by fire and their replacement value lost.

Another loss can come in the destruction of food and cover for wildlife. And the soil erosion control influence of a woodland stand is usually lost for a time.

Be careful of fire in the woodland yourself. If a fire starts, corral it as soon as possible and put it out. Get the help of local fire wardens or neighbors if you need it, Culver suggests.

In 1957, 465 woodland fires occurred on protected land in Illinois. More than 75 percent of these fires started in burning debris. Other causes included smoking, 7 percent; incendiary, 3 percent; railroad, 4 percent; and lumbering and miscellaneous causes. Fire, like accidents, is caused; it does not just happen, Culver said.



Fungi Can Be Both Good and Bad

Like many other things produced by Mother Nature, fungi can be both good and bad so far as men and animals are concerned, says Harry Rhoades, assistant professor in the University of Illinois College of Veterinary Medicine.

For example, one kind of fungi, a form of plant life just one step higher than bacteria, produces penicillin. Other kinds produce diseases called fungus infections. Of these, ringworm, a skin disease, is common in man and animals.

Ten to 30 percent of ringworm in urban people is contracted directly or indirectly from pet cats and dogs. In rural areas, 70 to 80 percent of this skin disease in people comes from cattle and horses.

In cats and dogs, scaliness of the skin and irregular bald patches may indicate ringworm. However, mange and certain physiological conditions may also cause a similar skin reaction.

In cattle, lesions (coin-sized sores) with thick grayish-white crusts are usually found on the head but may be scattered over the body. Old lesions lose the crusts and show scaliness and broken-off hair stumps.

A veterinarian may diagnose ringworm in animals by observing infected hair and skin, and then having the fungus that causes it isolated and identified by a diagnostic laboratory.



Spiders More Numerous In Winter

Mr. and Mrs. Homeowner may notice that spiders are becoming more numerous as winter approaches, points out Steve Moore, entomologist with the University of Illinois and Illinois Natural History Survey.

The reason is that spiders forage outdoors during the summer, but move inside for shelter when cool weather arrives.

Moore explains that spiders, unlike most household insects, are beneficial because they kill many destructive insects. However, they are annoying to most people merely because of their presence.

Spiders are easily recognized. They differ from true insects by having eight legs and only two body sections. The poisonous black widow spider can be identified by its rounded blackbody with an orange or red hour-glass marking on the underside.

Moore recommends any of the following materials to control spiders: DDT in a 5 percent spray or 10 percent dust; chlorodane, a 2 percent spray or 5 percent dust; dieldrin, a 0.5 percent spray or 1 percent dust; or malathion, a 2 percent spray or 5 percent dust.

In the house, use only oil-base sprays or dust forms of the insecticide. Use water-diluted sprays outdoors or in buildings where residue stains are not objectionable. Dust forms are convenient for treating hard-to-get-at places.

Moore urges all homeowners to keep insecticides away from children and to carefully read directions on container labels.



for weeklies

# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF NOVEMBER 3, 1958

## Wear Right Clothes for Picking Corn

You've heard the saying, "Clothes make the man." But the records show that clothes--the wrong kind, that is--can hurt him, too, if they are responsible for an accident around corn-harvesting machinery.

O. L. Hogsett, University of Illinois safety specialist, says that a man running a corn picker should wear comfortable, snug-fitting clothes that won't catch on moving gears, shafts or other moving parts.

Even a fairly smooth shaft can grab a torn pants leg, beginning with one little thread and then gobbling up the rest of the pants--with the victim in them.

And watch out what kind of gloves your husband wears, too. It's safest to wear none at all. But, if the weather makes them necessary, they should be cloth ones without floppy gauntlets. Especially steer away from double-thumb gloves. Leather gloves are not so safe as cloth gloves because they won't pull off so easily if they become caught.

If you've been putting off mending some of your husband's clothes, do it now before the corn-picking season gets into full swing. It may prevent an injury or perhaps save his life.





Protect Brood Sows, Gilts Against Mineral Deficiencies

Brood sows and gilts need plenty of the right minerals to farrow healthy pigs and get them off to a good start, according to a University of Illinois veterinarian.

Dr. J. R. Pickard of the College of Veterinary Medicine says sows' rations are most commonly deficient in calcium, phosphorus, salt and iodine.

Grains are a good source of phosphorus. A good way to provide the other minerals is to feed a commercial mineral mixture or one consisting of 1 or 2 parts of steamed bone meal, 2 parts of finely ground limestone and 1 part of iodized salt. Some swine growers make certain that sows eat the minerals by mixing them with the grain.

Calcium-deficient rations often lead to "downer" sows with broken bones and paralysis when the calcium in the sow's body becomes severely reduced, Dr. Pickard points out. This is most likely to occur during the latter part of the nursing period.

Abortions and stillborn or hairless pigs may result when the ration is deficient in iodine. The soil in most parts of the state contains enough iodine, but it's cheap insurance to supply extra iodine in the form of iodized salt.



Farm Supply Grants Funds for Tractor Study

Another check for \$15,000 has been given to the Department of Agricultural Engineering at the University of Illinois to support the tractor maintenance research project for three more years.

This is the second three-year grant for that amount made by the Illinois Farm Supply Company to the University to support a study of farm tractors in the state, according to F. B. Lanham, head of the department. The first grant covered the period from 1955 to 1958.

During that time, study of more than 60 tractors in operation on farms showed researchers where farmers were failing to make routine maintenance checks suggested in their operators' manuals. Heading the study group of staff members and graduate students was J. A. Weber, associate professor of agricultural engineering.

As a result of the study, Weber and his associates have put together suggestions to tractor manufacturers for standardizing maintenance recommendations and for designing their tractors for easier, simpler maintenance procedures.

In addition, the agricultural engineers at the University have put together and are promoting suggestions to farmers for keeping their tractors in better operating condition. Better maintenance on the part of the farmers would result in fewer service calls and more efficient operation and longer life for farm tractors, Weber says.



Longer life for tractor parts and operation at peak performance would mean more profit for farmers. The result for the companies would be satisfied customers who are better able and more willing to pay for the new machines yet to be designed and made.

Farmers often tend to blame implement or petroleum companies, dealers and their mechanics for tractor troubles that are the direct result of poor maintenance, Weber says. The tractor studies are designed to find out exactly what these troubles are and what to do about them.

The 60 farm tractors used in the initial study during the past three years were inspected by a trained mechanic for poor maintenance. Operators of these tractors were questioned about their knowledge of manual recommendations and their maintenance practices. The tractors were chosen at random in counties immediately surrounding Urbana.

Inspection of each tractor took half a day and included 78 different items. These points of inspections included only the ones listed in the operator's manual as being the responsibility of the operator himself.

The mechanic found maintenance deficiencies on all 60 tractors. Some were more common than others and were classified as those that should be getting better care. They included battery water below the plates, dirty and restricted crankcase breather pipes and air cleaners, low tire pressures, poorly adjusted brakes, improper valve clearances, pitted ignition points, excessive engine speeds and need for crankcase oil changes.



Current research is being directed to specific items on the tractor. Results of laboratory and field tests of dry-type air cleaners were recently reported to tractor engineers at a national meeting of the Society of Automotive Engineers.

Other tests now in progress under terms of the project are designed to study ways to improve ignition point and intake valve life. Final goal of the work is to make the tractor easier for farmers to maintain and also to get longer, more dependable performance from the machines.

Further study during the next three years under the new grant will include design changes to eliminate some maintenance chores and make others easier to do, Weber says. Farmers actually need to spend about 60 hours a year to follow all of the present manual recommendations. In practice they are spending about half that time.

Agricultural Engineering fact sheets prepared from results of this study include:

No. 4, Extra Service From Farm Tractor Tires.

No. 8, Use of the PTO Shop Dynamometer.

No. 9, Importance of Air Cleaner Service.

No. 11, How to Add Life to Batteries.

No. 12, Dry-Type Air Cleaners on Farm Tractors.

Anyone who wishes more information about farm tractor maintenance may ask his county farm adviser for a copy of these fact sheets. Or he may write directly to the Department of Agricultural Engineering, Urbana, Illinois.





Use Grain for Highest Milk Production

Only the highest producing dairy cows will need extra grain if your herd has all the high-quality hay it wants to eat.

But, if the quality of your roughage is only average or poor your cows will need more grain in a high-protein mixture, says Leo Fryman, extension dairy specialist at the University of Illinois College of Agriculture.

You can't do a good job of feeding grain without weighing or carefully measuring both milk produced and grain fed, says Fryman. To feed cows more than they need is waste; but to feed a high-producing cow less than she can make good use of is just as unprofitable.

The best way to make sure that each cow gets the right amount of grain is to make a chart showing the number of pounds or measures of grain mixture each cow should receive, and then consult the chart at each feeding. Change the chart at least once each month, or more often if the cows change appreciably in milk production. If you are on DHIA, your tester will make a chart for you.

If you are feeding all the roughage your cows will eat, feed the grain mixture balanced according to the kind and quality of the roughage. Then feed this mixture according to the milk yield of each cow. Give Holsteins, Brown Swiss and Ayrshires about one pound of grain for every four pounds of milk produced. Feed high-testing breeds 1 pound for every 3 to 3 1/2 pounds of milk produced.



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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF NOVEMBER 10, 1958

## Stop the Picker to Avoid Danger

With corn picking still in progress in many parts of the state, O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture, urges picker operators to stay alert to danger and get through the season safely.

"Stop the picker." You farmers have heard this advice many times before. But it must be repeated again and again until it becomes second nature to every operator. Observe this simple rule even when you leave the tractor to get a drink of water.

You can't lose your arm or finger or hand in a corn picker if you always stop the machine. We haven't found a corn picker yet that can tell the difference between an ear of corn and a hand.

Other safety measures to follow include not working when over-tired and not wearing loose or floppy clothing that may become entangled in moving machinery. Every tractor needs a fire extinguisher. And a metal sediment bowl is safer than a glass one.

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Veterinarian Lists Six Steps For Saving Pigs

Illinois farmers who suffered major losses of baby pigs last spring can take six precautionary measures to assure a healthy pig crop this fall.

Dr. J. R. Pickard, extension veterinarian of the University of Illinois, lists the following steps:

1. Feed sows a liberal, well-balanced ration during pregnancy, and give them free access to water.
2. Allow the sows to take a moderate amount of exercise daily during pregnancy.
3. Provide clean, dry, warm quarters, preferably an individual house for each sow at farrowing time.
4. Keep the sows comfortable, clean and free from lice and internal parasites through good management.
5. Consult a veterinarian for the proper time to vaccinate pigs against hog cholera and erysipelas.
6. Prevent pneumonia losses by avoiding overcrowding and dusty floors and providing proper ventilation without drafts.



Plan Custom Spray Operators' Training School

Attention, all custom spray operators! Do you want to hear what's new in sprays and chemicals, learn new methods of controlling weeds and insects and learn how to improve the effectiveness of your spraying?

If so, plan now to attend the Illinois Custom Spray Operators' Training School. This 11th annual event will be held on the University of Illinois campus January 28-29, 1959.

H. B. Petty, extension entomologist in charge of the event, says the formal program is not yet complete, but it will be of interest to anyone who is concerned with the agricultural chemical industry.

For more information, write to H. B. Petty at 280 Natural Resources Building, University of Illinois, Urbana.





Records Show Corn Most Profitable Central Illinois Crop

Corn is the most profitable crop for central Illinois farmers. That's what is shown by the 1957 cost records of 36 farmers cooperating with University of Illinois agricultural economics research workers.

A. G. Mueller, in charge of detailed cost research, reported this week that in 1957 corn raised on medium-grade land in central Illinois returned \$24.86 an acre for management and profits. This amount was left after these farmers paid all production costs. These costs included land charge and taxes, labor, power and machinery, fertilizers, seed and crop expenses, buildings, farm overhead expenses, interest on stored crop and charge for manure. Corn yielded about 79 bushels an acre and was valued at \$1.10 a bushel.

Soybeans, running a close second, returned \$23.78 an acre. The beans averaged 33 bushels an acre and were valued at \$2.15 a bushel.

Oats showed a loss of \$20.87 an acre. Yields averaged only 25 bushels in 1957 and were valued at 61 cents a bushel. To break even, oats would have needed to yield 59 bushels an acre.

Hay and pasture lost \$10.79 an acre. The forage used included 89 days of pasture and .9 ton of hay. No allowance was made for unused forage, fertility benefits or other possible values of meadow in the rotation.

Mueller emphasizes that these figures are averages, and returns of individual farmers will vary above or below. But these figures clearly point out the importance of using high-profit crops like corn and soybeans in the rotation, he concludes.



(Note to Editors: This is the first of three stories on the November 25 corn referendum.)

FOR RELEASE WEEK OF NOVEMBER 10, 1958

Urge All Farmers to Vote in November 25 Corn Referendum

University of Illinois agricultural economists this week urged all Illinois corn growers to be sure to vote in the November 25 corn referendum.

H. G. Halcrow, head of the department of agricultural economics, stated that, if Illinois farmers do not express their opinions strongly by voting, they may have to accept a decision voted by farmers in other states. This decision may not be what Illinois farmers really want, he pointed out.

Halcrow reported that his staff had just prepared a special reference publication, "Corn Facts for the Corn Referendum," and copies have been sent to all Illinois farm advisers. With the aid of this information, he hoped that all members of the county agricultural extension staff would be better able to answer the farmer's questions.

Corn growers will vote on November 25 to determine which corn program they want in 1959 and in future years. If a majority approve the new program, acreage allotments will be dropped and farmers can plant all the corn they want to. Price support will be 90 percent of the average farm price for the last three years, but not less than 65 percent of parity.

If the majority of farmers do not approve the new program, the present program of acreage allotments and price supports at a minimum of 75 percent of parity will continue in effect. But, with the large stocks of corn, both acreage allotments and price supports will be cut in 1959.



FOR RELEASE WEEK OF NOVEMBER 17, 1958

Corn Referendum Scheduled: Surplus Built Up With Present Program

University of Illinois agricultural economists stated this week that Congress has scheduled a corn referendum on November 25 because the present acreage allotment and price support program has brought on excessive accumulation of corn stocks.

The corn carryover has climbed from 487 million bushels in the fall of 1952 to an estimated 1,467 million bushels in the fall of 1958. The economists pointed out that, as the corn carryover has climbed, the law has required a cut in the size of allotments and lower price support rates at the same time. Both of these changes have caused many farmers to stop complying with allotments.

The November 25 referendum gives farmers the choice of two programs:

Program No. 1 would eliminate acreage allotments. All corn growers would be eligible for price support at 90 percent of the average price received for the last three years, but not less than 65 percent of parity. For the 1959 crop, the price support would be about 1.12 to \$1.15 a bushel, national average.

Program No. 2 would continue the present program with acreage allotments in the commercial corn area. Prices would be supported at 75 to 90 percent of parity. But with the present large corn supplies, the 1959 support rates would be at the bottom of this range, or about \$1.24 to \$1.27. Because of the large corn stocks, the national corn allotment next year would be about 15 percent below this year, but individual farm allotments might be reduced less or more.



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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF NOVEMBER 17, 1958

## Sheep Breeders Hold Annual Sale December 13

The annual Bred Ewe Consignment Sale of the Illinois Purebred Sheep Breeders Association has been scheduled for Saturday, December 13, in the Stock Pavilion at the University of Illinois, Urbana. Inspection of the consignment will begin at 9 a.m., and the sale starts at 1 p.m.

Sales manager U. S. Garrigus, head of the sheep division at the Illinois College of Agriculture, reports that 75 ewes representing the 8 major breeds of sheep have been consigned to the sale.

As usual, 10 percent discount will be allowed on all ewes purchased by Illinois 4-H and FFA members, Garrigus points out. This is a fine opportunity for future sheep breeders in the state to get good foundation ewes for their flocks.

All entries will be ready for inspection at 9 o'clock on the morning of December 13. Dewey Jontz, Iowa State Department of Agriculture, will inspect the offering.

Each consignor to the sale guarantees that the ewes he consigns will be breeders if they are properly handled. If any animal purchased at the sale is not a breeder, the consignor agrees to replace it with another of equal value or to refund the purchase price.

Anyone wanting to bid on the ewes who cannot be present at the sale may mail bids to H. G. Russell, G. R. Carlisle, D. E. Walker or Terry Greathouse, 110 Stock Pavilion, Urbana. Vance J. Van Tassel, Champaign, Illinois, will be the auctioneer.





(Note to Editor: If you have not yet used the story sent last week on Use Grain for Highest Milk Production, please use this story in its place.)

FOR RELEASE WEEK OF NOVEMBER 17, 1958

### Use Grain for Highest Milk Production

If you stuff your cows with all the high-quality roughage they will eat, you won't need to feed too much grain except to the best producers.

But, if the quality of your roughage is only average or poor your cows will need more grain in a high-protein mixture, says Leo Fryman, extension dairy specialist at the University of Illinois College of Agriculture.

You can't do a good job of feeding grain without weighing or carefully measuring both milk produced and grain fed, says Fryman. To feed cows more than they need is waste; but to feed a high-producing cow less than she can make good use of is just as unprofitable.

The best way to make sure that each cow gets the right amount of grain is to make a chart showing the number of pounds or measures of grain mixture each cow should receive, and then consult the chart at each feeding. Change the chart at least once each month, or more often if the cows change appreciably in milk production. If you are on DHIA, your tester will make a chart for you.

If you are feeding all the good roughage your cows will eat, feed the grain mixture balanced according to the kind and quality of the roughage. Then feed this mixture according to the milk yield of each cow. Give Holsteins, Brown Swiss and Ayrshires about one pound of grain for every four pounds of milk produced. Feed high-testing breeds 1 pound for every 3 to 3 1/2 pounds of milk produced.



Get Approved Electric Fence Controller

Electric fencing is definitely here to stay. But are you?

The fence controller you now have or are about to buy may answer that question, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. Homemade or unapproved fence controllers cause the death of many persons each year. In addition, livestock are often injured or electrocuted.

A controller that gives too great a shock or that doesn't have an interrupter can injure or kill both livestock and humans. A combination of these two faults is particularly dangerous because, once a person grasps the charged wire, his muscles may become paralyzed and he can't let go.

There's one sure way to get a safe controller, and that is to buy a unit that has the seal of the Underwriters' Laboratories or the Industrial Commission, State of Wisconsin, on it. Any fence controller bearing one or both of these seals has met certain safety standards.

Don't let anyone sell you a fence controller that is "just as safe" but for some reason doesn't bear the approval seal. Any manufacturer building a safe controller knows it's good business to have his product approved. Above all, don't use any kind of homemade fence controller.



Treat Cattle Now If They Have Worms

As a general rule, cattle should be treated for roundworms in the fall. But a University of Illinois parasitologist says not to waste money on treatment if cattle don't need it.

Dr. Norman D. Levine of the College of Veterinary Medicine recommends consulting a veterinarian if animals are suspected of having worms.

Phenothiazine will control many of the roundworms of cattle. It can be given either periodically in remedial doses or continuously at low levels in feed as a preventive measure.

A practicing veterinarian or veterinary diagnostic laboratory can examine the feces of animals for parasite eggs to determine whether the cattle are heavily enough infested to warrant either form of treatment.

Because phenothiazine turns milk pink upon exposure to air, milk from treated dairy cows should not be sold. But it can be safely fed to calves.

A good time to treat for worms--if treatment is needed--is in the fall when the cattle go from pasture to the feedlot or stables.



Select Illinois Delegates to National 4-H Club Congress

Thirty-one outstanding Illinois 4-H'ers were named this week to represent the state's 68,000 members at National 4-H Club Congress in Chicago November 30 to December 4.

The Club Congress trip is one of the top Illinois 4-H honors, says O. F. Gaebe, in charge of agricultural 4-H Club work at the University of Illinois.

The Club Congress delegates are Max Allison, Charleston; Neal Anderson, Monmouth; Myra Jo Arntzen, Macomb; Mary Jane Bahler, Mt. Morris; Ralph Busekros, Freeport; Delrose Carlson, Batavia; Judith Cross, Belle Rive; Marlene Ann Douglas, Karnak; Darlene Dresch, Alhambra.

James Florreich, Belleville; Norma Nadine Gamm, Marshall; Audry Gronert, Arlington Heights; Curtis Grothoff, Jr., Opdyke; Barbara Sue Hagler, Murphysboro; Harold W. Hawkinson, Galesburg; Nancy Sue Hitchings, Cissna Park; Leslie Howard, Dundee; David Lyford, Rockford.

Carol McQuilkin, Hennepin; Billye Obst, Hardin; James Parochetti, Spring Valley; Eleanor Peterson, Virginia; Leslie Reel, Congerville; Jerry Reusch, Scales Mound; Clifford Scherer, Claremont.

Nancy Turner, Champaign; Carol Ann Ufkes, Carthage; Allen Dale Walter, Metropolis; Glen Werkheiser, Prophetstown; David Winkleman, Ashland; and Don Wood, Champaign.

During their week in Chicago, these young people will take part in group sessions about their part in community leadership and national and world affairs.





Tours of Chicago and entertainment at various banquets by sponsors of the national 4-H awards program will be high points of the week's program

During the week, national and sectional scholarship winners will be announced. National 4-H scholarships will be given in the amount of \$400 to top-ranking Club Congress delegates.

To earn the Club Congress trip, these 31 Illinois delegates have had outstanding all-around 4-H records in both projects and other activities for several years.

Their project record books are 100 percent complete, and they have shown high qualities of leadership in their home communities.



Sophomore Recognition Set for Top U. of I. Students

Twenty outstanding University of Illinois College of Agriculture students will be honored Tuesday evening, November 18, at the annual Gamma Sigma Delta Sophomore Recognition..

Among the 20 receiving honors from this area is (Editors: see attached list of names and home towns.)

D. M. Hall, Gamma Sigma Delta secretary, reports that each student attending the event will receive an engraved certificate in recognition of outstanding work for the first two years at the University of Illinois.

All of the honored students, now in their third year of college, have grade-point averages above 4.0 for their first two years. The highest possible average is 5.0.

The recognition speaker is Professor I. Johansson of Sweden. Johansson is a George A. Miller visiting professor in animal genetics in the department of dairy science at the University of Illinois. His topic will be "Agricultural Education and Research in Sweden."

Gamma Sigma Delta, the honor society of agriculture, is an organization of advanced undergraduates and college graduates. Its purpose in recognizing sophomore achievement is to promote higher scholarship throughout the College of Agriculture.



<u>NAME</u>	<u>HOME TOWN</u>
Balzer, James Philip	Liberty, Illinois
Brazle, Vernon Lee	Brownstown, Illinois
Buhrmester, Ray Loren	Nashville, Illinois
Cline, Tilford Robert	Virginia, Illinois
Duewer, Lawrence Alvin	Auburn, Illinois
Ehlers, Norman Fredric	La Moille, Illinois
Fassler, John Arden	Dixon, Illinois
Heavner, Robert Leeroy	Pearl, Illinois
Heberer, Wayne Joel	Belleville, Illinois
Malven, Paul Vernon	Kingston, Illinois
Perkinson, Leaton Dee	Peoria, Illinois
Potter, Gene Ellsworth	Woosung, Illinois
Reiners, Robert Harold	Gibson City, Illinois
Smallwood, Donald Lee	Fairbury, Illinois
Smith, John Thomas	Elkhart, Illinois
Snodgrass, Dick Pryce	Geneseo, Illinois
Vatthauer, Richard James	Green Valley, Illinois
Wesson, Heston Kent	Leland, Illinois
Wilson, John Robert	Fithian, Illinois
Zieserl, John Francis, Jr.	Chicago 31, Illinois



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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF NOVEMBER 24, 1958

## Prevent Hunting Accidents With Good Sense

If you are one of the thousands who will join the ranks of game hunters during this hunting season, it will pay you to remember that sportsmanship and courtesy may save a life--and that life may be your own. Most hunting accidents can be prevented if you'll take a generous measure of common sense along on your hunting trip, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

According to Illinois Rural Safety Council reports, there are three causes that account for almost two thirds of the accidents reported during the hunting season. These three are humans getting in the line of fire, mistaking humans for game and hunting with the safety catch off on your gun.

For safer hunting, Hogsett lists the following ten commandments:

1. Treat every gun with the respect due a loaded gun.
2. Before taking a gun into your car, camp or home, make sure the magazine is empty and the action is open.

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Add Hunting Accidents - 2

3. Always be sure the barrel and action are free of obstructions.
4. Always carry a gun so that you can control the direction of the muzzle.
5. Be sure of the target before you pull the trigger.
6. Don't point a gun at anything you don't want to shoot.
7. Never leave your gun unattended without unloading it.
8. Don't climb a tree or fence with a loaded gun.
9. Don't shoot at a flat, hard surface or the surface of water.
10. Never try to mix alcohol and gunpowder.

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Get to Know Every Member of Your Herd

Dairymen who want to do the best job of managing their herds will know every cow by sight, name or number.

In large herds, knowing every cow by her color markings or other physical features becomes a problem, says G. W. Harpestad extension dairy specialist at the University of Illinois College of Agriculture.

In such herds, owners may put neck chains with plastic or metal number tags on the cows. Or, if they leave horns on the cows they can put the chains and numbered tags around the horns.

Besides knowing each animal on sight, good dairymen find it necessary to have information on the age and ancestry of each cow readily available, as well as her breeding and calving records, Harpestad says. Production and health records are also necessary on each cow to properly manage a dairy herd.

Although some dairymen carry many of these records around in their heads, this is not always the best place to keep them. Each animal in the herd should have a record sheet or card on which this information is recorded. This record should be started as soon after birth as possible.

Some means of identifying this record to the corresponding calf is essential. Photographs or sketches of broken-color animals and tattoo marks or eartags for solid-color animals are the most common methods used. Herd record books and other forms for keeping records are available from breed associations as well as livestock supply houses.

Permanent records eliminate memory errors. And written records also enable others to take over in case of death or serious illness of a herd owner.



Young Pigs May Suffer From Anemia

Young, rapidly growing pigs may become anemic and even die if they don't get enough iron and copper to make hemoglobin and red blood cells.

Red blood cells, which contain hemoglobin, carry oxygen to all parts of the body. Pigs must build new cells to replace those that have worn out or they will die from anemia. If their diet is deficient in necessary minerals to make the new cells, they are in "trouble," says Dr. P. D. Beamer of the University of Illinois College of Veterinary Medicine.

Pigs are born with enough blood cells and hemoglobin, but sow's milk is low in iron and copper, which are needed to build hemoglobin. Unless another source of iron and copper is supplied, nursing pigs may become anemic.

Pigs that can root in the soil, which is a good source of iron and copper, seldom are affected. But pigs raised on concrete or wood floors are more susceptible to anemia, Dr. Beamer warns.

A good step to prevent losses from pig anemia, Dr. Beamer advises, is to paint a solution of copperas (iron sulphate) on the sow's udder or to dose the baby pigs with it according to directions by a veterinarian. Swine growers can also put a couple shovelfuls of dirt in the pen. To avoid bringing worms and disease into the herd, be sure the dirt comes from an area where there have been no pigs before.



Add Anemia - 2

Injectible iron-dextran has been used widely by livestock owners, according to Dr. Beamer. This product seems to be effective and is applied by many veterinarians.

Neglect of these precautions can result in the development of weak, unthrifty pigs, and frequently is either the direct cause or at least a contributing cause of deaths.

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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF DECEMBER 1, 1958

## Illinois Farmers Favor Social Security

Slightly more than half of a sample of farmers surveyed recently by University of Illinois agricultural economists favored the social security program. These farmers in a township in east-central Illinois also expressed some other opinions about the program.

Among the 207 farm owners and operators surveyed, about three out of five believed that social security would result in earlier retirement. Operators were more confident about this point than owners.

But even though a majority believed that farmers would retire earlier, slightly less than half thought that young men would have a chance to make an earlier start in farming. This feeling can be explained by the fact that farms are getting bigger and some of the land made available through retirement may go to enlarging farms rather than being rented or sold to new operators.

More moves to town by retired farmers may not result from social security. Slightly less than half believed that retiring farmers would move to town because they now have social security.

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Social security will also affect farmer spending. Slightly more than half of those surveyed believed that the program would make it harder for young farmers to save money and retire their debts. Many operators, in expressing this view, are probably anticipating the higher tax rate in the next few years. A small majority expect that farmers will carry less life insurance and depend more on the insurance features of the social security program. Most of those interviewed believed that landlords would not use their benefit payments to improve their farms. Less than half believed the program would make it harder for farmers to buy land.

Hardships resulting from social security seem to be slight. Only very young farmers and small-scale operators have considered the tax payment a heavy burden. Lease changes have been infrequent. Little land has been made unavailable to younger operators because an older man has continued farming to acquire social security coverage.

Farmers cooperating in this survey either owned or operated land in Blue Ridge township in Piatt county. This area has flat to gently rolling land with rich soil. Recent sales have ranged from \$500 to 700 an acre. Most farms are cash-grain operations, but the area also has some cattle feeding. About 63 percent of the land is tenant-operated. More than 8 out of 10 owners and operators cooperated with Luther C. McKinney, Franklin J. Reiss and Charles L. Stewart, who conducted the survey.



Immunize Puppy Against Distemper

Dog owners should have their puppies vaccinated against distemper when they are two months old, says a University of Illinois veterinarian.

Dr. L. C. Helper points out that distemper is one of the most common diseases of young dogs. Unless puppies are vaccinated, they are likely to have distemper before reaching one year of age. And once a puppy gets the disease, it seldom has more than a 50-50 chance of complete recovery.

Dogs may become infected with the distemper virus while in good health. However, injuries, poor food, too little food or parasites will make the animal less resistant to the disease. Natural infection results from coming into contact, directly or indirectly, with a dog that has distemper or that is a carrier of the disease.

Dr. Helper says several reliable means of vaccinating dogs have been discovered in the past 20 years. He suggests that dog owners have their local veterinarians vaccinate their puppies against distemper. The veterinarian will know which method is best suited for the puppy. After vaccination immunity, the veterinarian will furnish a certificate upon request.



Heating System May Be Fire Hazard

A roaring furnace fire to keep your house warm can put you out in the cold unless your chimney and heating system are in good condition.

The Illinois Rural Safety Council lists eight main preventable causes of farm fires.

Four concern heating systems. In the first place, many fires are started and people injured when they use petroleum products to start or hasten a fire. The safe way is to use crumpled paper and dry kindling.

Once the fire is going, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture, faulty smokepipes and chimneys can do their share in starting fires. Here are some tips on preventing fires from these causes:

1. Check your chimney, especially in the attic and at the roofline, for loose mortar and bricks. Make sure you have a spark arrester on top of the chimney, especially if your roof isn't fireproof.
2. Make sure the stove or furnace smokepipe leading into the chimney is in good shape and is well supported. If it passes close to wood or other flammable materials, wrap it with asbestos.
3. Installing an automatic draft control will keep the wind from drawing fire up the smokepipe. This control will also save fuel and lower smokepipe temperatures.





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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF DECEMBER 8, 1958

## Make Barn Chores Easy

First step in farm safety is to go over the farm with a critical eye to locate accident hazards, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. The second step is to correct them.

Falls and falling objects cause a large portion of farm accidents, so check your barns for loose objects or things that cause falls. Do some housecleaning, and set things in order if alleyways or work areas are cluttered with feed, tools, feed carts or other obstacles.

Don't work in the dark. See that dangerous corners and work centers are well lighted. Place light switches in convenient locations. If you use lanterns, find a safe place to hang them. Keep forks, shovels, scrapers and other farm equipment in safe, convenient places.

Each farm usually presents different safety problems. Many older farms were not built for their present uses. Safety or convenience requirements were not considered in their original design.

Once you become safety conscious, you will uncover numerous hazards that need correcting. Eliminating lost time and suffering by preventing accidents can become a worthwhile family goal for better farm living.



Careful Management Will Help Control Necrotic Enteritis

Careful management will help to keep necrotic enteritis out of the swine herd.

Dr. P. D. Beamer, University of Illinois College of Veterinary Medicine, says that cases of necrotic enteritis frequently accompany unsanitary conditions, poor feed, overcrowding or hog cholera, which lowers the animals' natural resistance to the disease.

Necrotic enteritis occurs mainly in young, growing pigs. It may be acute and kill infected pigs quickly without showing many characteristic signs. Most cases, however, are chronic. The pigs have severe diarrhea, dull hair coats and tucked-up flanks. Necrotic tissue and blood may be passed in the droppings. Although some animals recover, they usually make slow gains.

Dr. Beamer lists the following practices to help prevent the disease:

1. Use an adequate sanitation system, such as the McLean county system.
2. Feed complete and balanced rations.
3. Control hog cholera by routine immunization.
4. Prevent swine erysipelas.
5. Do not buy diseased feeder pigs and breeding stock.
6. Provide adequate space and equipment; don't overstock.
7. Isolate newly purchased animals for three weeks.



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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF DECEMBER 15, 1958

## Fuses Protect Your Electrical Circuits

Overloaded circuits are dangerous in the farm electrical system.

Be sure to have the correct size of fuse in your electrical circuit, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture. A circuit can safely handle only a certain amount of power, and overloading can easily cause a fire.

When a fuse blows, look for the cause. If defective wiring is the reason for the short circuit, replace the entire wiring immediately.

If the overload was caused by plugging too many lamps and appliances into the circuit, put some of them on another circuit. Never insert a larger fuse or use a penny in the fuse box, because the larger load will cause dangerous heating of the wiring.

Ordinarily a circuit can stand a considerable overload for a few seconds without dangerous overheating. If you have an electric motor on a circuit that overloads the line when it starts but is within the safety limits when it runs, you can use a time-lag fuse that will permit the motor to start safely instead of blowing the fuse.



Worms Cost Cattlemen Money

Cattlemen are just beginning to recognize the widespread importance of worms in cattle. Worms are costing them an average of \$3 an animal each year, according to Dr. N. D. Levine of the University of Illinois College of Veterinary Medicine.

That's just the average, Dr. Levine says. In many cases it's much more than that.

Worms seldom cause an animal to die. However, they feed on the animal's blood and tissues and cause reduced gains. While one worm takes only a little blood, a thousand worms take a great deal. It is when these large numbers of worms build up that they cause the most trouble.

Many animals don't have enough worms to affect them seriously, and there is no need to treat animals for worms they don't have, Dr. Levine warns. To be sure that cattle need treatment, have a veterinarian examine the herd for worms to determine how badly they are infected.

Most stomach and intestinal worms in cattle can be treated with phenothiazine. Dr. Levine recommends two doses 21 days apart. In addition, a low level of phenothiazine can be added to the feed. This does not kill the worms, but prevents most of them from laying eggs.





Report Costs of Raising and Buying Pullets

Raising a pullet to six months of age costs, on the average, about \$1.62, according to detailed cost records kept by nine Illinois farmers in 1957. University of Illinois agricultural economist R. A. Hinton reports that total costs varied from \$1.14 to \$1.99. Death losses caused this wide difference.

Cash costs to raise the pullets averaged about \$1.37. These costs were made up of feed, baby chicks, power and equipment and other items. Hinton estimates that it took about 14 minutes of labor worth about 24 cents to raise a chick to this age.

Most farmers in this cost study used buildings and equipment they had paid for in earlier years, so their equipment costs were only about 14 cents a chick. If farmers had been using new equipment, these costs would have added about 15 cents to the cost of raising each chick.

These cost figures can help a farmer decide whether he should raise his own pullets or buy started pullets now being offered in many areas. These 16-week-old birds are selling for about \$1.75 to \$1.85 a bird. University poultry extension specialist Sam Ridlen estimated that about 400,000 started pullets were available to Illinois farmers in 1958.

To compare costs of buying started pullets with raising them, a poultryman must be sure he is comparing birds of the same age, Hinton emphasizes. For example, if a farmer buys a 16-week-old bird, he must add another 30 cents for feed alone to grow it to 24 weeks, or 6 months, of age.



If started pullets cost about \$1.75 each, Hinton believes that in general farmers who can produce their birds for the costs shown in the study would be ahead to raise their own replacements. These farmers have buildings and equipment that would give them very little return if not used for this purpose. But farmers who must buy new chick-brooding equipment may be as well off to buy started pullets if they are not sure about remaining in the poultry business for the next 10 years, Hinton concludes.

One of the many exhibits at the 1959 University of Illinois Farm and Home Festival on April 2, 3 and 4 will feature a display of baby chicks and started pullets, along with the facts about producing pullets under each system.

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Plan UI Agricultural Short Course

The eighth annual winter agricultural short course at the University of Illinois College of Agriculture is planned for February 2 to March 13, 1959.

Warren Wessels, short course director, explains that the short course is designed for young men and women who cannot attend college on a regular basis. It brings them up to date on new developments in agriculture and in the modern farm home. Students enrolled in the short course can also enjoy the cultural, social and athletic events on the campus and in the community.

Anyone who is 18 years of age or older may enroll. In the past, ages have ranged from 18 to 65 years, but most participants are between 18 and 23 years.

Here's a complete listing of courses to be offered this year:

Agricultural Economics: Agricultural marketing and prices; farm management; and farmer organizations and community developments.

Agricultural Engineering: Gas engines and tractors; farm electrification; farm buildings; surveying and drainage; farm welding; and farm machinery.

Agronomy: Grain crops; soil management; forage crops; and crop hazards and their control (insects, diseases and weeds).

Animal Science: Beef cattle feeding and management; swine feeding and management; and sheep feeding and management.



Dairy Science: Breeding, feeding and management of dairy cattle.

Home Economics: You and your money (consumer buying, clothing, appliances, etc.).

Veterinary Medicine: Animal hygiene.

Others: Farm arithmetic; home floriculture.

Some students will have a chance to get \$100 scholarships that will help to pay part of their expenses to attend the short course. The Illinois Bankers Association encourages its member banks to award these scholarships to selected students in their areas. The Illinois FFA Foundation has authorized five \$100 scholarships, one to each district of the state. These awards are made to active FFA members who can meet short course requirements.

You can get more information on scholarships from your banker, county farm adviser or vocational agriculture teacher.

Wessels estimates that average expenses for the six-week short course range between \$190 and \$230. This amount doesn't include costs for travel, clothing or recreation. Housing and meals are available for most students in university residence halls.

For more information, write to Short Course Supervisor, 104 Mumford Hall, College of Agriculture, Urbana, Illinois.





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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF DECEMBER 22, 1958

## Learn Facts Before Vaccinating for Fowl Pox

Weigh the facts before deciding to vaccinate poultry against fowl pox, warns a University of Illinois veterinarian.

Dr. J. O. Alberts says present-day fowl pox vaccination involves introduction of a mild form of the disease. It prevents the possible serious reactions and losses that might happen if the birds were exposed to natural infection.

Vaccination produces some undesirable reactions, and the flock owner should understand these limitations. Dr. Alberts gives these suggestions:

1. Don't vaccinate unless the disease has caused trouble on your farm in recent years or unless it seems ready to strike in your neighborhood.
2. Be sure your flock is in good health.
3. Vaccinate sometime after the birds are 8 to 12 weeks old and at least one month before they start to lay.
4. If the disease threatens and your laying flock is unvaccinated, use pigeon pox vaccine. Protection doesn't last so long as when fowl pox vaccine is used, but the reaction is less severe.
5. Don't vaccinate with live virus vaccines against two diseases at the same time. For example, wait at least two weeks between vaccinations for Newcastle disease and fowl pox.



Recommend 2,4,5-T Winter Treatment for Brush Control

Proper use of 2,4,5-T between now and next spring will control almost all kinds of brush at relatively low cost and without much of the back-breaking labor of hand cutting.

But it may take two or more applications to give 100 percent kill, warns R. L. Gantz, University of Illinois extension agronomist.

For winter use, Gantz recommends spraying or painting the lower part of the trunk with a mixture of four pounds of 2,4,5-T acid, the active ingredient in concentrates, in 25 gallons of kerosene, diesel oil or fuel oil. Apply the mixture all the way around the trunk from the ground up to a height of about 15 inches. Use enough spray to make the fluid run down the bark onto the soil.

For trees larger than eight inches in diameter or especially hard-to-kill varieties, Gantz recommends cutting through the bark in several places and applying the chemical to the cuts.

An ordinary two- or three-gallon knapsack sprayer is a good tool for brush spraying. For small jobs, 2,4,5-T can be painted on with a paint brush.

Treated brush is less likely to sprout again if it is left standing for at least a year after the chemical is applied. If freshly cut stumps have not previously been treated, spraying or painting the top and sides with the same mixture will prevent regrowth.

Gantz points out that 2,4,5-T tends to damage susceptible crops and orchards less during the dormant season than during the summer. Even so, avoid direct contact of useful plants with the spray.



Farm Fires Can Cost Years of Profit

Through fire you can lose overnight the profit of years of labor.

In an hour you can find yourself financially ruined by a farm fire, says O. L. Hogsett, extension safety specialist at the University of Illinois College of Agriculture.

Today fire is one of the greatest farm hazards. It is estimated that farm fire loss in 1958 will exceed 140 million dollars. More shocking than the economic losses are the thousands of needless deaths or permanent disabilities caused to farm residents by fires each year.

Most farm fires are due to one or more of the following preventable causes: (1) careless smoking and use of matches, (2) misuse of electricity and appliances, (3) defective or overheated heating and cooking equipment, (4) inadequate lightning protection, (5) spontaneous combustion, (6) careless handling and storage of gasoline, kerosene and other flammable liquids, (7) improper disposal of rubbish and (8) children playing with matches.

One important step in preventing farm fires is to develop a fire safety consciousness and determination to work and live safely the year round.



Illinois Makes Progress In Rural Development Program

Rural development program activities in Pulaski and Alexander counties in southern Illinois appear in the recent report of the Secretary of Agriculture to President Eisenhower.

According to the report, the rural development program has brought an increase in vegetable production among small farmers in this area that should increase incomes and improve farm operations generally. One participating farmer realized \$1,000 from the sale of green beans in 1957, the first time he had ever produced this crop commercially.

Pulaski and Alexander counties were selected for rural development early in 1957. A committee of farm, business and other interests with the help of an assistant farm adviser directs the program in the two counties.

Counseling and farm planning among families on small farms have been stepped up since the program began. In the past 18 months, 40 farmers have developed basic farm plans covering 2,700 acres.

Vegetable marketing agreements were made with several firms in the area and a pickle manufacturing company in Chicago. The program centers around educational meetings to help small farmers do a better production and marketing job.

According to findings of the rural development committee, vocational training for both adults and young people is one of the principal educational needs. Present studies are looking for ways to modify local educational programs in order to provide more job training.





W. G. Kammlade, associate director of agricultural extension at the University of Illinois, coordinates the program in the state. Stanley Ceglinski, assistant farm adviser in Pulaski and Alexander counties, works directly on the rural development program, representing the University of Illinois and the Illinois Agricultural Extension Service.

Southern Illinois University has assisted with certain resource studies. The local farm bureau has provided office space. The Soil Conservation Service, Agricultural Stabilization and Conservation area committee, Farmers Home Administration and State Employment Security Agency are also taking active part in the program.

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# Farm News



UNIVERSITY OF ILLINOIS · COLLEGE OF AGRICULTURE · EXTENSION SERVICE

FOR RELEASE WEEK OF DECEMBER 29, 1958

## Larger Ewes Have Larger Lambs

Size of a yearling ewe before first breeding is a good indication of how large her lambs will be, both at birth and at weaning time.

Don Walker, extension livestock specialist at the University of Illinois College of Agriculture, reports tests of this idea at the USDA's Southwestern Range and Sheep Breeding Laboratory at Ft. Wingate, New Mexico.

These tests show that heavier ewes, regardless of breed, produce heavier, faster growing lambs than light-weight ewes, Walker says.

Sheep growers can take advantage of this finding by culling their ewes before breeding rather than waiting until each ewe has produced a lamb. Larger ewes also produce more wool because of their larger skin area.

Ewes in the four-year USDA tests were grouped by weight. The lightest group averaged 65.4 pounds as yearlings, and the heaviest group, 92.7 pounds. Lambs from the heaviest group averaged 1.29 pounds heavier at birth and 10.5 pounds heavier at weaning time than lambs from the lightest group.

Walker points out that while the average weights of these range-bred ewes were lighter than those of midwest-bred ewes, the principles apply as well to corn-belt flocks.

# THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 309

LECTURE 10: QUANTUM MECHANICS

1. Introduction to Quantum Mechanics

2. The Schrödinger Equation

3. Stationary States and Energy Eigenvalues

4. The Harmonic Oscillator

5. The Particle in a Box

6. Tunneling and Barrier Penetration

7. Angular Momentum and Spin

8. The Addition of Angular Momenta

9. The Hydrogen Atom

New Fireplaces Are for Looks, Not Heat

Only about one out of every five fireplaces in modern homes is designed to be of any real use as a heater, K. H. Hinchcliff, University of Illinois farm housing specialist, reports.

The other 80 percent of the fireplaces are designed more for eye appeal than for heating the room. Hinchcliff points out that fireplace design recently has undergone some striking changes.

One trend is raising the hearth to bring the fire up from the floor for easier viewing. Another modern design trend is to open the fire area on at least two sides so that the fire is visible from several locations.

The most modern styles have eliminated all four fireplace walls, leaving only an open fire with a hood and chimney suspended above. With such a fireplace, the family can enjoy the fire from every angle.

Hinchcliff points out that the basic principles of design which insure that a fireplace will not smoke remain the same for the modern styles as for the old. Special attention must be paid to flue area in proportion to fireplace opening and smoke chamber. There is a tendency to use flues that are too small for the modern fireplaces, causing them to smoke.

For those who admire their neighbor's fireplace and think they want one of their own before next winter, Hinchcliff estimates that the cost can run anywhere from \$150 for a prefabricated unit to over \$1,000. This cost may be as much as for an extra bedroom or an attached garage. But on a drab winter day the cheery glow of the fire may seem worth the cost.



Drugs Are No Substitute For Sanitation

No drug can take the place of good sanitation in the control of livestock parasites, says Dr. J. R. Pickard, University of Illinois extension veterinarian.

Drugs cannot correct the damage already done by worms. And the only way to prevent damage is to keep the animals from being parasitized in the first place. Dr. Pickard says this can only be accomplished by proper sanitation and good management.

Here are some general rules to help prevent parasite infestation in livestock:

1. Do not feed directly on the ground in contaminated areas. Feed an ample, well-balanced ration and provide an adequate supply of minerals.

2. Avoid crowding; because of greater concentration of parasites and other infections, crowding promotes contamination and easier spread of infection.

3. Provide plenty of clean drinking water; avoid poorly drained pastures; rotate pastures and don't overstock them.

4. Provide clean, disinfected quarters or clean non-infested pastures for the birth of young animals. Separate the young animals from the adults as soon as possible.

5. Prevent feed contamination. Remove manure from the barn often, but don't spread it on ground where animals graze, cautions Dr. Pickard.

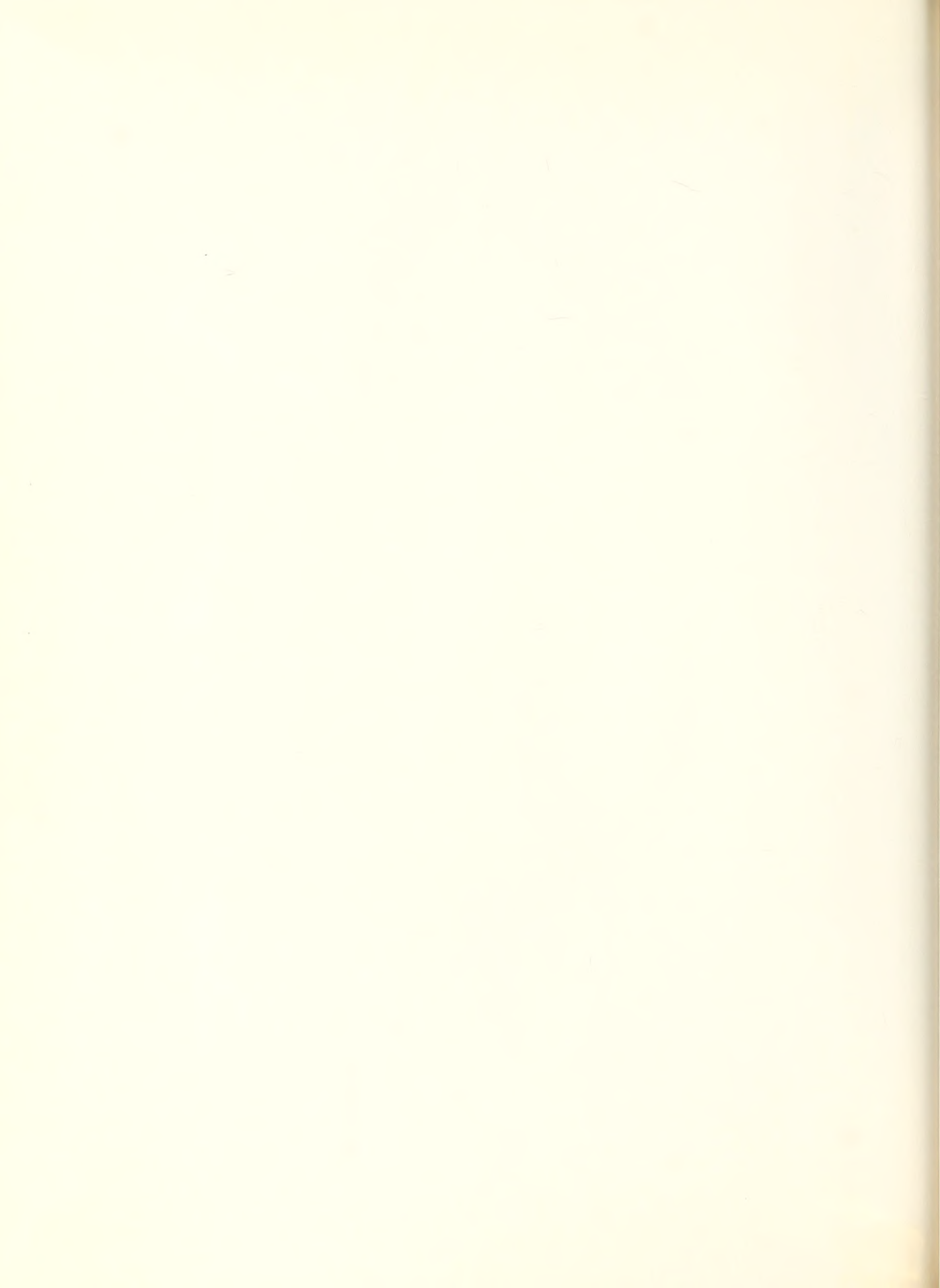






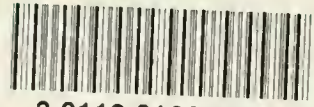








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