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Future Farmer

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October-November, 1969

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Acampo, California

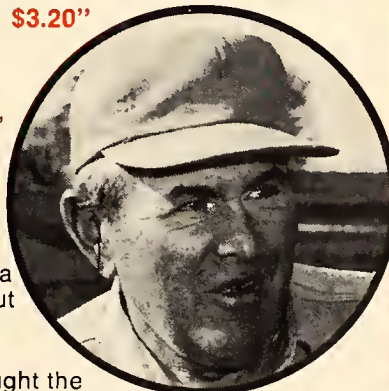
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The National Future Farmer



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Features

Stars of Agriculture 16 & 22

Now that the excitement of walking on the moon has partially subsided, we return to the stars...in this case, the stars of agriculture. This year there are eight. Four are Regional Star Farmers, and four are Regional Star Agri-Businessmen, but all eight have used vocational agriculture and FFA to provide a start in agriculture. You can read about the Star Farmers on pages 16-17, and the Star Agri-Businessmen on pages 22-23.



Tight Money 18

Getting the money to expand your enterprises and become established in farming is not always easy. But, if you understand the money situation you greatly improve the chances of finding just the loan you need. This article and the other "Money Market" emphasis feature, "Farm Credit Boom", on page 20, will provide you with facts about today's farm money situation.



Crow Hunting 30

Crow hunting is a year-round sport. The bird is widespread and abundant and unprotected. The crow is hated by farmers who have seen flocks ruin their grain fields and, despite man's best efforts to eradicate it, the crow has survived and multiplied. Hunting this bird requires skill. Sportsman Russell Tinsley tells you how.



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Our Cover

Dennis Dugan is an up-and-coming dairy farmer. In 1968 he was named top FFA dairyman in his state. At last year's National FFA Convention, Dennis was named Star Dairy Farmer for the Pacific Region.

This Chandler, Arizona, FFA member certainly knows the strong relationship between a top quality herd of cows, a good grade of feed, and high milk production. He also recognizes the importance of "getting right out there" with the livestock, so you know how they are doing.

Photo by Guy Price

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Whaley-Simpson Company
 6725 Sunset Boulevard
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580 Washington Street
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CHANGE OF ADDRESS: Send both old and new addresses to Circulation Dept., *The National FUTURE FARMER*, P. O. Box 15130, Alexandria, Va. 22309.

ADDRESS ALL CORRESPONDENCE TO: *The National FUTURE FARMER*, P. O. Box 15130, Alexandria, Virginia 22309. Offices are located at the National FFA Center on U.S. Route One, eight miles south of Alexandria.

The National FUTURE FARMER is published bimonthly by the Future Farmers of America at Alexandria, Virginia 22309. Second class postage paid at Alexandria, Virginia, and at additional mailing offices. Copyright 1969 by the Future Farmers of America.

Single subscription is 75c per year in U.S. and possessions. Foreign subscriptions, \$1.00 per year. Single copies, 20c.

The National FUTURE FARMER



It's air. The only lubricant needed for Airstar—the new air bearing developed by General Motors to allow parts to move smoothly in places where conventional bearings aren't practical.

For example, the textile industry. Airstar bearings don't need oil, so there's no chance for the fabric to get soiled from dripping lubricants.

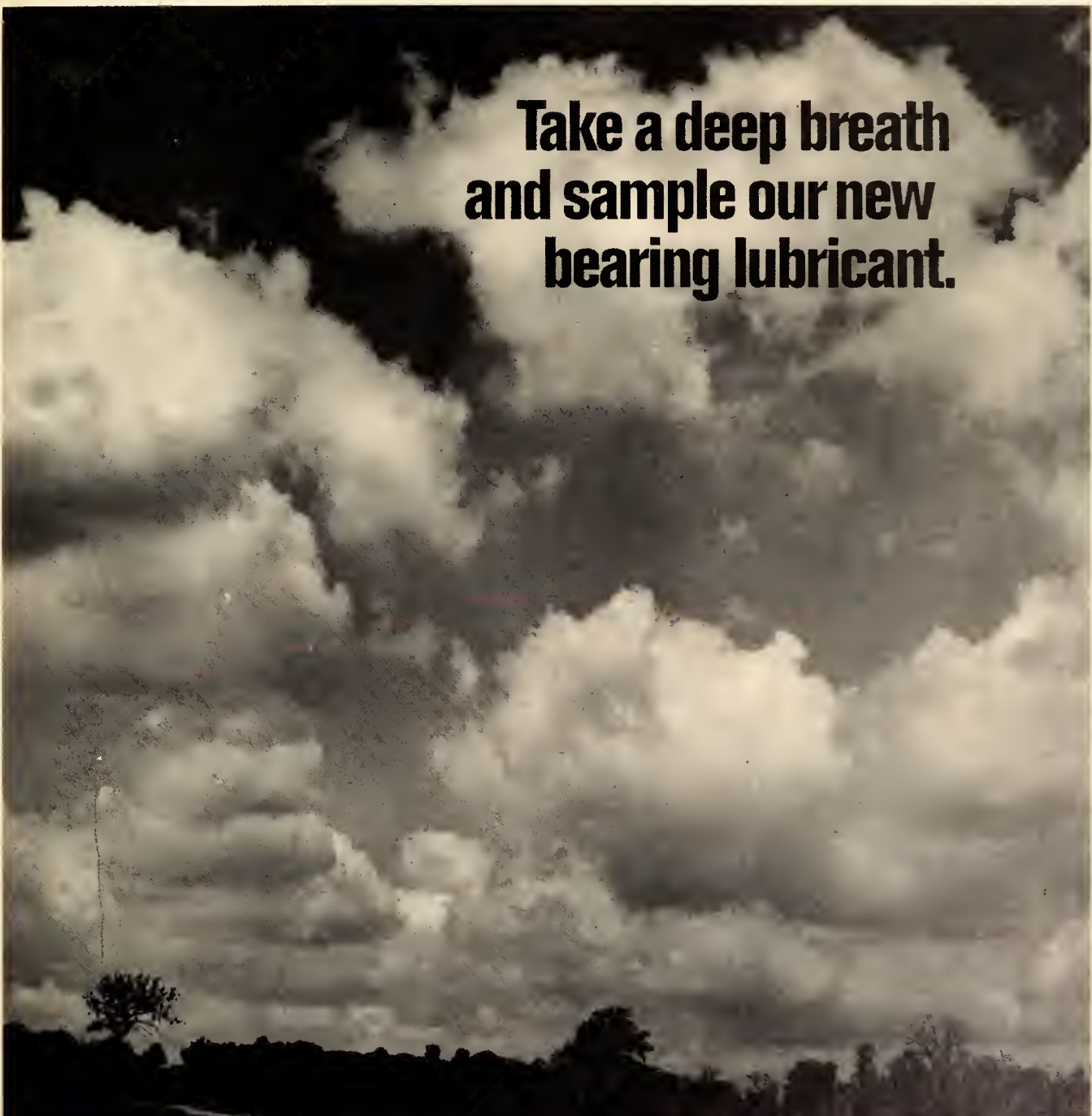
Air bearings work even when temperatures rise as high as 2000°F, making them ideal for ovens, furnaces, and hot metal pumps.



And since they can rotate at very high speeds, they're perfect for centrifuges, machine tool spindles, and dental drills.

Airstar bearings even work under water. The idea for air bearings has been around for a while, but it took the people at General Motors Research Laboratories and GM's New Departure-Hyatt Bearings Division to make the idea practical.

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A Word with the Editor

THE business sessions at this year's National FFA Convention should bring about some lively discussions. Your official delegates will be considering and voting on several proposed amendments to the FFA constitution and one amendment to the bylaws. State Associations have already been informed of the proposed changes through official channels. They are reported here for those members who have not had an opportunity to learn what they are.

One amendment to the constitution would change the name of the organization from "Future Farmers of America" to just the letters, "FFA." With this change, Article I, Section A, would read: "The name of the organization shall be FFA. The letters 'FFA' shall be used to designate the organization, its units or members, thereof." This is perhaps an acceptable compromise on the name change but may be in conflict with Public Law 740 which gives FFA its charter. This point will be clarified by convention time.

Another proposed amendment would change Article IV, Section A, B, and C, so that Associate membership becomes Alumni membership and the word "male" is dropped from the requirements for membership. Obviously, the most controversial item here is dropping the word "male" so that any student of vocational agriculture may be a member of FFA. Regardless of how members feel personally about this change, it would seem that the time has come when such a change is in the best interest of the organization.

Another amendment would make provisions for an agribusiness degree above the Greenhand level. The proposal would change Article V, Section A, to read: "There shall be four degrees of active membership: (1) Greenhand; (2) Chapter Degree; (3) State Degree; and (4) American Degree. All degrees above the Greenhand level may be subdivided as follows: Chapter Farmer or Chapter Agri-Businessman; State Farmer or State Agri-Businessman; and, American Farmer or American Agri-Businessman. A member shall not be eligible to receive the 'Farmer Degree' and the 'Agri-Businessman Degree' the same year year."

Also dealing with degrees is a proposed amendment to delete the section of Article V, Section D, which reads: "Where State membership exceeds 500, not more than 2% of the total State membership may be elected (fractions counted to the nearest whole number)." The section referring to State Farmer Degrees would then read, "Each State Association shall be entitled to elect at least ten qualified individuals annually."

The other proposed constitutional amendment would increase the number of national vice presidents from four to five in Article VIII, Section A. Section D would be changed to place an immediate past national officer as chairman of the nominating committee. This proposal may also be in conflict with P.L. 740.

An amendment to the bylaws would change Article III, Section B to read: "The National FFA Board of Directors may adjust States in each Region to insure more equal representation of membership. The Board shall establish five regions."

How would you vote on these issues if you were representing your state? Why not place your vote in the margin of this issue and compare it with the actions of the Official Delegates at the convention, which will be reported in the next issue.

Wilson Carnes
Editor

NOW—an even wider choice for hog raisers:

To fit feeding to their breeding



. . . and their management.

All three—breeding, management, feeding—work together. And differences in management and breeding usually call for differences in feeding, too.

That's why there's no *one* MoorMan Hog Feeding Program. It's why we talk *programs*—a whole wide range of them to provide the feeding flexibility hog raisers need to take full advantage of their own breeding and management.

Now from MoorMan Research comes two more proven programs—feeding choices in addition to the results-producing programs we've had for many years:

- We know that 1969-model hogs—leaner, longer, meatier—need 1969-model fuel to generate their full genetic grow-power. So our practical-minded research people have designed special MoorMan Feeding Programs for modern meat-type hogs.

- We know that gilts fed for market often respond better to higher-power fuel than barrows do. So there's a special new MoorMan Feeding Program for hog raisers who want to get the extra returns possible from separate feeding of sexes.

Just two more examples of how our research people work to develop feeding *programs* as well as products. And of how they stay alert to new trends and ideas in breeding, management and nutrition—to give livestock raisers wide-choice flexibility in feeding programs.

In the "feed store" they bring to hog raisers, MoorMan Men carry samples of each high-quality, research-proven Mintrate®, Premix-trate® and other products that can help add efficiency to pork production.

But they also carry something even more important—the know-how and recommendations of MoorMan Research scientists and MoorMan's Nutrition Counselors.

By calling direct on livestock producers, MoorMan Men can talk *personalized* feeding to fit individual needs and preferences. And more effectively present up-to-date feeding ideas—such as MoorMan's new programs for meat-type hogs and market gilts.



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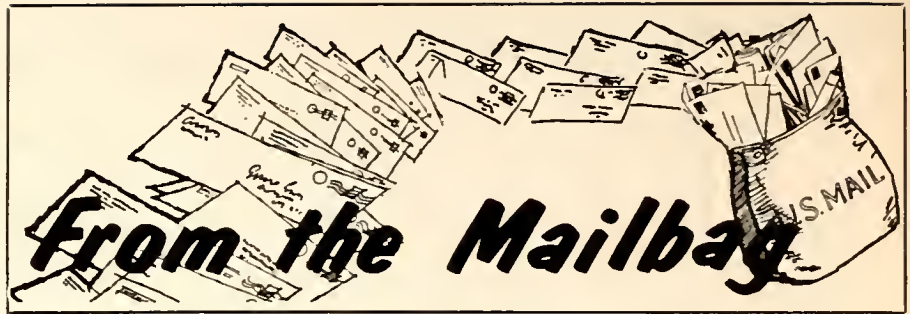


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Eau Claire, Michigan

I am referring to the article "The Duck Who Came to Stay" in the last issue.

It says in the article that the workers at the Montana mill pond don't know what kind of duck it is. Their duck looks like it is part Mallard and part Muscovy. I have some ducks just like it.

I have been raising ducks for four years and crossing Mallards with Muscovy ducks to get a better sized bird.

Daniel Kunst

Dade City, Florida

I am a high school student and have been an FFA member for two years. I am not a student of vocational agriculture this year.

I have been in many FFA activities and am proud to have been a member of this organization.

Is there any way I could continue to be a member without being enrolled in vo-ag?

Frank McKinney

Unless the local chapter rules prohibit such a situation, you could belong to the FFA after you are no longer enrolled in vocational agriculture. Discuss this with the local chapter advisor. Of course, you would need to meet other requirements such as paying dues. Ed.

East Peoria, Illinois

Evidently our subscription has expired. Please renew it for a period of four years. A check is enclosed.

We still have our film library at 113 North Madison in Peoria, but since the magazine is read at home, it might as well be mailed there.

And tell us, please, the dates of the 1969 National FFA Convention in Kansas City.

Mrs. C. L. Venard

Venard Film Distribution Service

The National Convention will be held in Kansas City's Municipal Auditorium October 14-17, 1969. For many years Mr. and Mrs. Venard made the Four Star Farmer movie. They have since retired from that phase of the operation, but still are interested in FFA members. Ed.

Argyle, Texas

As I read the article "A Problem and a Solution" in the August-September issue of the magazine, I realized that, as president of my local chapter, it is my responsibility to help the chapter get a start in this program.

Therefore, I am requesting all the facts and information about the Official FFA Calendar program for 1970.

James Hawk

A free kit of information is available to all local chapters on request. Ed.

Kimball, Nebraska

The members of my chapter have urged me to congratulate the magazine staff for a job well done in publishing our national magazine.

Don Hagstrom
Secretary

Atlantic City, New Jersey

I have been an FFA member for four years (1964-1968). During that time I served as chaplain and president of the Essex Chapter in Massachusetts. I always enjoyed reading the magazine, and would like to continue to subscribe.

Enclose are my old and new addresses.

Daniel A. Parent

Tunkhannock, Pennsylvania

As president of my chapter, I am trying to stimulate an increased participation by our members and chapter in community service and public relations. In the August-September issue, there was an article about the Livingston FFA Chapter in California who sponsored a tractor rodeo at their implement show. (FFA In Action, page 36.)

I would like to correspond with this chapter and find out more about the activities at their implement show.

Rodney Decker

Wadena, Minnesota

I receive the FFA magazine and like it.

I was wondering if you can help FFA members get loans so they can start farming. I am interested in truck farming and feeding beef cattle.

Tom Hostad

The FFA organization does not have a program for members to borrow money. You might discuss this with your vo-ag instructor and perhaps he will have some suggestions for you. Other sources of information would be the local bank, the PCA in your area, or some individuals in the area. Also you will probably need someone to countersign the note if you are under 21 years of age. Ed.

Dennison, Iowa

I have an idea that the FFA could operate a student exchange program between chapters. It would be like the international exchange programs. Every chapter would receive a member from another chapter somewhere in the United States. And they would send one of their members to that chapter. The members would stay with the families of the participating exchanges. This would let a member stay in another state and share his experiences with the rest of his chapter. For example, an Iowa FFA member would stay with a member in Maine.

David Grill

The National FUTURE FARMER



Prepotent — Production Tested

No wonder it pays to use Angus Bulls

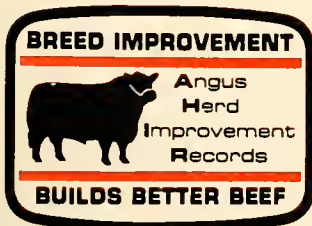
Now you can buy good Angus bulls backed by good production records . . . yes, bulls that are proven to sire *heavier, faster-gaining* calves with more red meat.

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Of course, Angus bulls, more than any other breed, are prepotent. They breed the horns off your calves and breed your herd Black. But more important, they produce heavily muscled calves with deep, full hind quarters and wide, full loins . . . calves with *less wasteful bone, belly and brisket*.

So, for increased efficiency and more profits, next time buy prepotent Angus bulls with good production records. Look for the AHIR "symbol of progress" in Angus breeder ads. It tells you he's using the best records program in the country to help him breed higher quality, more efficient cattle.



Look for this symbol

This symbol of progress can only be used by Angus breeders in the proven AHIR program. It tells you that these breeders can show you production records on their Angus cattle.

They're worth more if they're Black

**American
Angus
Association**
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Looking Ahead

Livestock

PNEUMATIC CONVEYORS—In the near future, farmers can feed their cattle silage that is blown to the feeder on a stream of air. As described by R. R. Wolfe, agricultural engineer at the University of Wisconsin, a pneumatic conveyor will transport corn silage and haylage at capacities of up to 30 tons per hour. An air velocity of 5,000 feet per minute accelerates silage to this speed within 14 feet of the point where it is fed into the tube. The tubes used have 4-inch, 6-inch, or 9-inch diameters.

NEW DISEASES—Two new diseases with jaw-breaking names which affect cattle are now spreading from major cattle feeding areas. And with increasing interstate shipments, veterinarian Keith G. Libke of Virginia Tech says cattlemen should be on the lookout. The diseases, both of which affect the brain, are bovine polyoencephalomalacia and infectious embolic meningoencephalitis. The symptoms of both diseases are similar—blindness, convulsions, and coma—however, the first is often associated with feeding moldy corn and the second is caused by a bacterial organism.

FEEDER PRICES—Pasture conditions, grain supplies and prices, and forage supplies will, as usual, influence feeder cattle prices this fall. But, the general economic situation will be a more important factor on feeder prices than usual, says Glen A. Grimes, agricultural economist at the University of Missouri. Considering that the general economy stays strong, the demand for beef should rise considerably. Thus, feeder prices probably will be above last year's level. Depending on weather and other conditions, cattle prices could be \$4.00 to \$6.00 more per hundred than in 1968.

FINNISH LANDRACE—A breed of sheep called the Finnish Landrace has been imported by the University of Minnesota for the purpose of crossing with U.S. breeds. The value of the breed lies in its reproductive rate, with many flocks averaging three, four, and five lambs born per ewe. Other outstanding characteristics of the Landrace breed are: both sexes are hornless, have white faces free of wool, and a naturally short, wool-free tail.

Crops

COMPUTER RETRIEVAL—Using a computer to retrieve genetic information makes it possible to learn in a few minutes which wheats from Turkey have disease resistance, or where African farmers grew yellow seeded sorghum varieties, or what variety of wheat should be planted in Central Iowa. Using the climate, soil type, disease, and insect problems data, a computer, like the one at Washington State University, can tell a farmer what kind of bean is best to raise in his location. The system can also process other

questions for special crop breeding and production problems.

COTTON MARKET—An expected surplus of cotton throughout the U.S.—from nearly 12 million acres—will cause cotton growers more problems when it comes to marketing, says the Clemson University Cotton Committee. Along with lower prices, buyers will hold back on purchasing until needed and buy cotton on a 12-month basis instead of over three or four months. This means that more growers will probably participate in the loan program in the coming months to make a profit.

RECIRCULATING IRRIGATION—Irrigation systems that recirculate runoff water promise to reduce total water requirements on farms in many areas. Such systems are composed of a runoff collection system, a storage unit, a pumping station, and a return pipe. These systems involved no extra labor and provided a means for altering management practices to reduce percolation losses. Recirculating irrigation water can save money and also reduce sediment contamination of streams.

Capital

FARM TENURE—The USDA reports that an expanding proportion of farm operators own some land, but rent additional land to provide a stronger financial base. Since World War II the number of farm owners renting land has doubled while the percentage operating just their own land has remained the same. The reason for this continuing trend seems to be caused in part by technological advances and specialized farming. Hence, full ownership of land is not always compatible with the ability of earning a satisfactory income.

TRACTOR SALES—A total of 157,942 tractors were sold in the U.S. last year, according to the data released by the Farm and Industrial Institute. States ranking first through third in sales were Texas, Illinois, and Iowa, respectively. The data also indicates that the number of larger size—over 60 horsepower—tractors being bought was increasing while sales of smaller ones is decreasing.

FARMER'S SHARE—Out of every dollar spent for U.S. farm foods in retail stores in 1968, an average of 39 cents went to farmers. The cost of performing processing, packaging, and transportation amounted to about three-fifths of the consumer's food dollar. Since 1957, the farmer's share of the consumer's dairy dollar and fruit and vegetable dollar went up while the farmer's share of other major food groups declined. Overall, however, the farmer's share of the dollar now spent on food averages about the same as it did in 1957.

Put your farm on Firestones, and save yourself some precious time.

Farming is a race against time. Every minute counts.

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Firestone

42nd National Convention Highlights

HERE are the program highlights for the 42nd National FFA Convention in Kansas City.

The first session begins at 8:15 p.m. on Tuesday, October 14, to seat official delegates. (A larger delegate body will be on hand because recent constitutional changes reapportioned the official delegate body.) This session follows a Vespers service conducted by the national FFA officer team.

As usual, the Board of Directors and the officers will meet just prior to the convention for the last minute planning. The National FFA Band and Chorus will arrive in Kansas City early to begin their rehearsals. Mr. Roger Heath, from Purdue University, will direct the band and Mr. Marvin Myers will direct the chorus.

Attendance at the convention is limited to six members per chapter or 10 percent of the membership. Advance

registration will begin on Tuesday morning. Registration will be by chapter and state groups with no registration for individual members. Chapters must get an official registration card from their state association and have it properly completed. This includes signatures of members attending, local FFA advisor, and principal or superintendent of the school. Registration will be located in the lower Exhibition Hall of Municipal Auditorium.

Special tours to points of interest will again be available for members both before and during the convention.

A special memorium for the late John J. Farrar, FFA Director of Public Relations, 1947-1969, will be conducted on Wednesday morning.

Presentation of the Honorary American Farmer degrees, recognition of the Kansas City Advisory Council and American Royal Queen, and announce-

ment of the National Gold Emblem Chapter awards are scheduled on Wednesday.

Convention organizer will be Gerry Diers, of Howard Lake, Minnesota, FFA. A Career Show presenting representative career opportunities in agriculture—and someone to tell you about them—will be conducted throughout the week.

On Thursday, National Foundation Award winners will be announced, and American Farmers degrees will be presented to 480 members. Highlights of the evening session will be ceremonies to announce the Star Agri-Businessman and the Star Farmer (see pages 16 and 22 of this issue), and introduction of the FFA Foundation Sponsors.

Friday's schedule includes a business session, FFA Day at the American Royal Livestock and Horse Show, and installation of the newly elected national officers.

Speakers already committed for the convention include Arthur Godfrey; Don Greve, Chairman of the Board, Sequoyah Industries, Inc., and Secretary of Agriculture Clifford Hardin. National president, Jeff Hanlon, has entitled his retiring address "In the Year 2525."

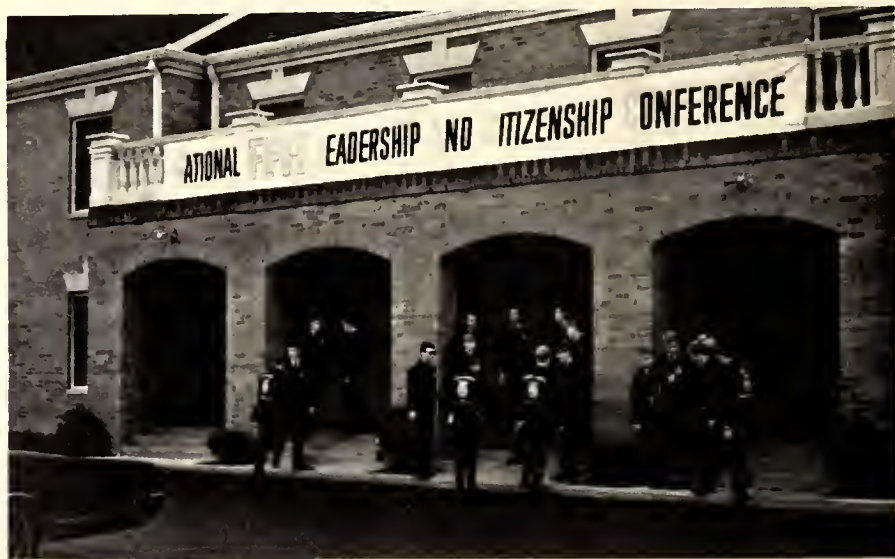
These are some of the highlights. Why not ask your Chapter's delegate about them when he gets back from Kansas City?

Report:

SUMMER CONFERENCES

A FULL summer of National Leadership and Citizenship Conferences is over. The reports from many sides are good. Members wrote in telling how much they got out of the conferences and how much they learned. Advisors remarked that they could already tell how much of an effect the conferences would have on their chapter enthusiasm next year. State officers were kept plenty busy exchanging ideas and learning more about what it takes to keep a good organization running smoothly. The national officers got a good workout too. There were national officers helping with each of the three conferences held for chapter presidents in Alexandria, Virginia.

State officers—mostly presidents of state associations—and other outstanding members from some states attended



Hundreds of FFA'ers attended National Leadership and Citizenship Conferences.

a conference July 20-26, which included a visit with Vice President of the United States, Spiro Agnew.

After the reports were tallied, they revealed these interesting facts and figures: 294 local chapter presidents attended one of the three conferences held especially for them; 47 states had participants as did the Virgin Islands; 47 states and Puerto Rico sent representatives to the special conference for state officers; and 57 local chapter advisors

attended with their chapter presidents.

Perhaps the most interesting breakdown of attendees at the local chapter president conferences was the total attendance per FFA region. From the North Atlantic Region there were 62 chapter presidents. There were 165 from the Central Region, 65 from the Southern Region, and 69 from the Pacific Region.

Be on the look out for plans for next year's conferences.



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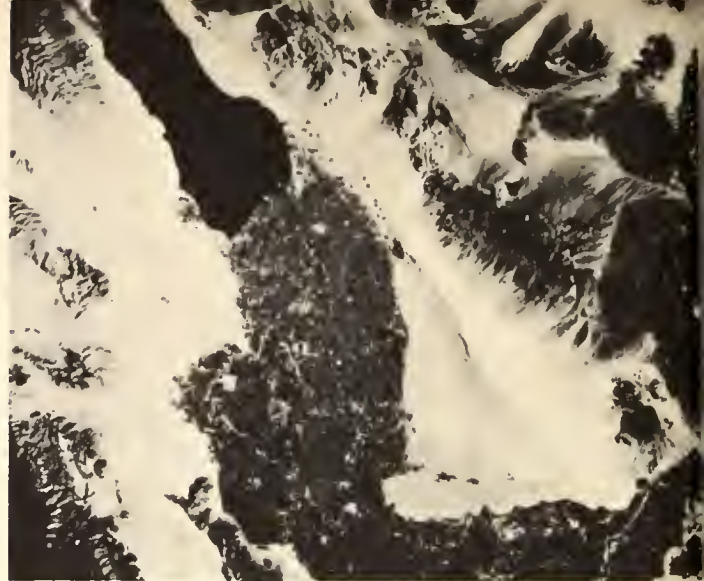
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This view of the California Imperial Valley, taken by Apollo 9 at 131 nauticle miles altitude, shows crops as light patches. In an infrared photo they appear bright red.

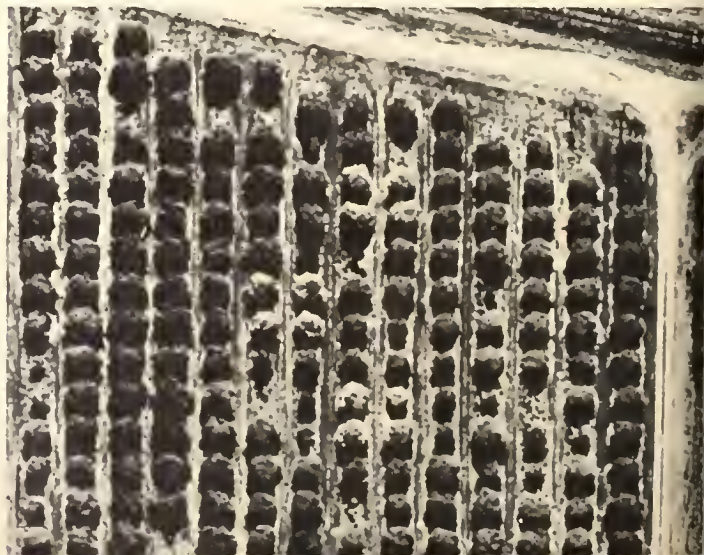
MAN has the urge to discover things. Perhaps the reason he is always striving to learn about his environment—land, sea, and space—is caused by his desire to survive. Basically, so he can eat. And this demands an Earthward look at agriculture.

Therefore, the National Aeronautics and Space Administration (NASA) included agricultural research as a major part of the space program. Main objectives of the agriculture program are: to reduce crop losses by identifying diseases, drought, insects, and fire affecting vegetation; to assess the vigor of crops and stands of timber; and to identify soil and crop types with aerial film—visible infrared.

Remote Sensing

When the Apollo 11 crew arrived safely with moon "soil," "rocks," and many valuable photographs, the implications to agriculture were unknown. However, previous flights brought back infrared images of the earth obtained at heights of 120 miles covering 100 square miles of area. Photos taken from conventional aircraft at altitudes of 1,000-1,500 feet and 18,000-20,000 feet also increased agricultural knowledge. For every \$1.00 spent on remote sensing or infrared photography, both United States Department of Agriculture (USDA) officials and NASA scientists expect an ultimate return of \$5.00 in benefits to agriculture.

Airplane photos, taken like Apollo 9's show light areas on citrus trees — pink when in color — as indicating chlorosis from soil deficiency. The healthy trees appear red.



AGRICULTURE VIA SPACE

Agriculture will take some giant steps forward because of space exploration. Here are some exciting discoveries that are happening now!

The use of remote sensing involves getting information about things from a distance. That is, receiving information from things you can't touch. The physician's X-ray machine, the uranium prospector's Geiger counter, and the aircraft pilot's radar all provide this kind of data.

Every object in the universe generates radiation by atomic and molecular activity. Whereas the eye and conventional cameras can detect only a narrow band of radiation—red through violet visible light—remote sensing gathers data from other regions of the electromagnetic spectrum. Infrared and microwave picks up wave lengths too long to be visible and ultraviolet energy travels in wave-lengths too short for man to see.

Remote sensing, with some oversimplification, requires three techniques. First, differences within vegetation, soil, and water need detection. For example, plants under stress of mineral deficiency, insects, or salinity generate more heat than healthy ones. By determining the part of the spectrum where heat differences lie, infrared images can show these temperature variations.

Secondly, contrasting objects or conditions can be identified with "spectral signatures." Signatures indicate how characteristics relate to physical or chemical properties of radiating characteristics. Data taken by sensors from satellites are compared to the "ground" signatures taken from aircraft.

Thirdly, computer techniques constantly need to be devised for interpreting and processing the data supplied by remote sensors. This information is in the form of easy to use photographs, computer printouts, and statistical tables.

In addition to using single sensors, scientists are employing combinations in multispectral techniques. The devices measure the surface geometry, reflectance, and emittance of radiation by plants, soils, and water.

Agricultural Uses

Only man's imagination limits the capabilities of remote sensing and automatic processing of data for agriculture.

Already in use, remote sensing regularly permits the mapping of firelanes, day or night, through dense smoke. Aircraft carrying thermal infrared scanning systems can "see" right through the smoke to pin point fires. Foresters also use airborne sensors to detect insect festations and to distinguish hardwoods from conifers in timber inventories.

New ways of classifying land by major use becomes possible. With multispectral techniques and automatically processed data, bare soil, green vegetation, forests, and water

area can be classified. Changes in crop development or acreage also can be determined by taking photos at different times. Thus, the feasibility of predicting yields with more speed and accuracy exists.

High altitude, infrared color photography penetrates the atmosphere to bring out more details than shown on ordinary black and white or color photos. Besides detecting stress on plants, the specific radiation qualities of each crop makes possible the identification of crops over thousands of square miles in one image.

Sensing can help in mapping unknown regions and correcting ground survey maps. Studying land forms and predicting agricultural land use by utilizing radar imagery, as well as measuring radiant soil temperatures, also can be done by remote sensing.

Detecting and outlining the boundaries of water on agricultural land, acres of 500 square miles each by spectrum matching and pattern recognition soon will be reality. Remote sensing eventually will be used in detecting water pollution, in mapping bottoms of lakes, streams, or oceans.

Still other techniques utilizing sensing and computers will improve range management, plant fertility, and weed detection. Data already tested will help farmers to either stop overgrazing or undergrazing by helping them decide how many cattle to run per acre. Plant fertility knowledge will ultimately help the pocketbook by increasing stands. With weed "sensing"—thistle have already been "sensed" in soybeans—and no-till practices, the time spent in the field will be even less.

Researchers are even now thinking up new ways of using remote sensing in agriculture. However, they must also accumulate a library on radiation characteristics of vegetation, soil, and water. Scientists, therefore, are building a data "bank" by matching spectral signatures to get more agricultural management information.

Agricultural Satellite

In the fall of 1971, NASA plans to launch the first satellite strictly for capturing agricultural data. This satellite will orbit the Earth for about a year and will transmit roughly 10,000 decisions per second. To handle this volume—perhaps 5 million square miles of photography per day—computer systems capable of interpreting data are being designed. The work otherwise would take 7,000 photo interpreters to keep pace with the multiband scanners.

Agricultural advisors at NASA and the USDA believe that someday accurate assessments of world wheat, rice, corn, livestock, and other commodities can be made. This would enable other parts of the world to alter production plans to reduce food shortages in troubled areas.

Thus, space exploration will help Earth agriculture as well as furthering the knowledge of the universe.

Data obtained via lift, called "ground truth," is compared to infrared photos taken simultaneously from airplanes.



STAR FARMERS



North Atlantic Star Farmer Oscar Manbeck will use these heifers he purchased to expand his dairy herd and fill the new free-stall housing barn under construction.

ALL of the Regional Star Farmers of America selected this year have one thing in common. They look at farming as a business. And being selected as the four top farmers out of 450,000 FFA members proves they are successful at their business of farming.

These young farmers, chosen from the 480 members recommended for the American Farmer degree by their respective state associations, represents some of the highest quality leadership and achievements in agriculture today. One of these four will be named Star Farmer of America at the National FFA Convention in Kansas City, Missouri. Here are their stories.



Terrell Hudson, left, Southern Region Star Farmer, is operator, repairman, and mechanic for his livestock and cropping operation.

Below, Gary Wollweber, Star Farmer of the Pacific Region, with "Neichi," the horse he uses whenever moving and roping his cattle.

The Star Farmer of the Central Region, John Prah, built a successful farming operation around an efficient farrow-to-finish swine enterprise.



North Atlantic Region

Oscar Manbeck, North Atlantic Region's Star Farmer, established a large operation in an age when farming is big business. Oscar's business is farming 495 acres with a dairy herd of over 125 head including the young stock.

Presently, the young dairyman milks 95 Holstein cows, and is raising 44 newly purchased heifers and all newborn heifers for expansion. Oscar and his wife, Sandra, also raised on a dairy farm, are now constructing a new free-stall dairy barn for housing 121 cows.

Always fond of raising hogs, Oscar switched from breeding purebred Durocs to feeding market hogs—about 80 each year.

Oscar owns his home farm of 365 acres near Bethel, Pennsylvania, and some of the machinery needed for the operation. He also exchanges some field work with his father. He uses this farm to house the milk cows and crops 260 acres of it with corn, hay, wheat, and barley. Another 25 acres is meadow.

The 20-year-old farmer also rents a nearby 130-acre farm where he crops 115 acres of land and raises dairy heifers on the rest. This farm also has a set of buildings which he uses.

All totaled, Oscar harvests 125 acres of corn as grain and silage, puts up 180 acres of hay, and combines 50 acres of wheat and 10 acres of barley. Oscar's corn silage yields have been as high as 15 ton to the acre and his wheat has bushel out at 45 per acre.

The young dairyman served as president and secretary for the Conrad Weiser FFA, as district president, and state chaplain. On top of that, he received the Star Greenhand and Star Chapter Farmer awards. His advisor is Mr. Lavern Barrett.

Oscar and Sandra, parents of a little girl, are active in church and community sports. In addition, Oscar is a member of several livestock breed associations and farm cooperatives.

Southern Region

Star Farmer of the Southern Region, Terrell Hudson, is a winner of Star Farmer awards at all four degree levels. And, he is on his way to farming success as his livestock and cropping operation will verify.

Terrell farrows 25 head of hogs year-round and manages a 50 unit cow-calf operation. He markets about 200 hogs at a time and started in the hog business by developing his own crossbred strain. The 21-year old farmer plans to increase his crossbred cattle herd by saving heifers and selling the steers. He presently uses a Charolais bull on his Shorthorn-Hereford brood cows.

Terrell owns and manages a 100-acre farm near Unadilla, Georgia, and, in

addition, rents another 160 with his father. Combining his father's home farm with these two farms, Terrell and his father formed a 50-50 partnership to make both operations more efficient. Their combined operation totals approximately 750 acres.

Terrell raises 100 acres of corn for feed, about 30 acres of peanuts—his big money crop—20 acres of cotton, and 15 acres of soybeans which is followed later in the season by small grains. The rest of the land he uses as permanent pasture.

Making use of slack time, Terrell and his father built a meat processing and freezing facility. Doing custom butchering on days when not in the field, they handle 50-75 cattle and 150-200 hogs in the plant within a year.

In the Unadilla Chapter, where Mr. Otis Beard is vo-ag teacher, Terrell served as president, sentinel, and placed high in judging contests.

Terrell, along with his wife, Alice, work in their church as youth counselors and choir members. They both attend Georgia Southwestern College nearby where Terrell is majoring in business administration. The active leader now serves as chairman of his local vo-ag advisory board.

Central Region

John Prah, Star Farmer of the Central Region, is no "future" farmer. He already has a farrow-to-finish hog operation. This year the 21-year old farmer plans to feed out over 1,000 hogs.

John started raising hogs by buying feeder pigs and reinvesting the profits. He now farrows close to 80 crossbred sows per year—averaging nine pigs weaned per litter—in a 30-sow controlled environment farrowing house. To complete the farrow-to-finish setup, he uses a 5,640 square-foot finishing floor to feed around 300 at a time. John developed his strain of sows through several Yorkshire and Hampshire crosses.

Besides hogs, this farm operator markets about 40 to 50 head of beef cattle annually.

John owns a 10-acre farmstead near Neoga, Illinois, but rents some 480 acres—share cropping 380 rented from his father who retired, and cash renting the rest. He grows 380 acres of corn—which averaged over 100 bushels last year despite bad weather—100 acres of soybeans, and some wheat.

Since he owns his own machinery, John does some custom work on the side.

John further expanded his operation recently when he took on a seed corn dealership. He has also taken advantage of a new lake near his farm where John and his father have begun developing a camping and recreational area.

In the Neoga FFA, advised first by

Mr. Louis Wagner and now by Mr. Brad Lacey, John served as reporter, participated in judging contests, designed exhibits, and organized tours. He later worked as sectional reporter and president, area reporter, and finally state vice president.

John and his wife, Cheri, parents of two daughters, are active in civic affairs, especially church and choir. John also holds membership in an electric co-op and other farm organizations.

Pacific Region

A 21-year old rancher, Gary Wollweber, the Pacific Region's Star Farmer, applied for and purchased his own "G lazy W" brand at the age of 12. Today his cow herd numbers over 175 head, and he manages a large wheat operation besides. Still, he thinks of expanding.

The young rancher's cow herd consists of about 50 Shorthorn-Hereford crossbreds and 125 Herefords. Last year's calf crop reached an average of 450 pounds in 180 days and the heifers weighed about 420 a piece.

To save money, Gary winters his cows by pasturing them on beet tops, corn, and milo in late fall, and feeding wheat chaff, caught in a chaff dump behind the combine, and alfalfa-grass hay for two months.

Gary also operates a pig feeding set up with little labor. About 40 hogs, purchased at weaning, are raised in confinement with self-feeders and waterers. He also feeds and markets about 50 dairy beef annually.

Gary and his father own a 330-acre farm just outside of Edwall, Washington, and rent another 845 acres in partnership. Over 250 acres is used as pasture, 70 for hay, and 825 to produce wheat. In addition, Gary rents 3,800 acres on his own. Of this land, he pastures over 3,000 acres, raises hay on 180, and crops 600 acres, mostly in wheat.

Each year Gary summer fallows about 650 acres of the cropland. He uses a large pull-type combine and a crawler tractor to harvest his wheat, which last season averaged 54 bushel per acre.

As an active FFA member, Gary received the Chapter Crop and Star Farmer awards and the State Star Livestock and Star Farmer awards. He participated in numerous judging and speaking contests and served as president and secretary of the Reardan FFA Chapter under the guidance of Mr. John Elliot, his vo-ag teacher during high school and later, Mr. Wallace Vog and Mr. Fred Springer.

Gary commutes to Eastern Washington College to work on a business administration major and serves in the National Guard.

Money Market



TIGHT



MONEY

What can you do to counteract it?

A TIGHT money market and high interest rates mean young farmers may have considerable difficulty getting money to finance some enterprises and even more difficulty getting the "high priced" money to pay off. But there's no need to fear of a drying up of capital for worthy operating expenditures, expansion plans and long term investments at this time.

According to agricultural economist R. N. Weigle of the University of Wisconsin, a number of things have caused the money shortage and high interest rates. A government concerned with inflation has increased the amount of money a bank must hold in reserve in relation to its loans. The interest rate on money that banks borrow from Federal Reserve Banks has also been raised. Both moves tend to make loanable funds scarce and hike interest.

The tighter money market is not all due to higher interest rates. A booming economy also puts demands on available money supplies. Farmers must compete for loans with all other types of loans in the money market. In addition, production items—seed, feed, machinery, and pesticides—cost more each year. Also, today's farmers have fewer doubts about seeking loans for such items.

Although money is as tight as it's been in the last 10 years, good farm managers who can demonstrate to bankers and other loan institutions their ability to repay a loan can still get capital. Those with little farming experience or with marginal operations may not receive what they consider adequate loans.

- **What to do.** The shortage of money and the big demand for it allows the lender to be quite selective in the type of loans he makes. He's not likely to loan money for high risk investments when there are more secure loans that he can make.

Because of the scarcity of money and high interest rates, you should figure returns on investments carefully before applying for a loan. You'll also have to have farm records in proper order to demonstrate to the lender your ability to secure and repay the loan.

One thing the lender is almost certain to ask for is a financial statement of your net worth. This simply lists assets and liabilities that you have. Assets minus liabilities give you net worth, or the amount of equity you have in the farm business. A net worth statement tells the banker how secure the loan will be.

Another statement the lender will want to see is the profit and loss, or yearly operating statement. This will tell him how your business did in the last year or two. If you've been keeping good farm records of receipts, expenditures, and inventories, your yearly operating statement will already be in order.

And finally, the lender will be in a better position to determine your ability to repay the loan and interest if you

can show him some projected earnings from the proposed investment. No one can predict exactly what hogs will bring or labor will cost a few years from now. But you can come fairly close to these variable costs by using published reports from government and other sources.

- **What to expect.** What can the farmer expect in the near future? Adequate loan funds for production use—except in localized areas.

However, the demand for farm loans will probably continue strong. Many farmers are likely to buy larger items they postponed earlier while hoping that interest rates would go down.

Thus, there is little likelihood that interest rates on farm loans will ease off. In fact, due to recent activities in the money markets, interest rates could increase even further before declining.

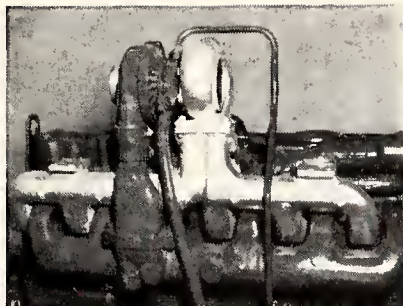
But the interest rates alone should not determine whether a farmer borrows money at this time. While high interest rates demand more profitable investments, the margin of profit above the interest rate on the loan is most important. An investment that returns 10 to 12 percent above the interest rate on the loan is still good.

Being able to provide complete financial records to potential lenders will help you compete for tight money.



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STAR AGRI-

THIS year, for the first time, four FFA members have each been named a Regional Star Agri-Businessman. At the 42nd National FFA Convention in Kansas City, October 14-17, one will be named Star Agri-Businessman of America. The four were selected from the 480 FFA members recommended to receive the American Farmer degree with special consideration being given to their achievements in the area of agribusiness.

Turf Specialist

The Star Agri-Businessman of the Central Region is Roger Lee Phelps, 20, of Marysville, Ohio, a part-time student at the Marion Branch of Ohio State University, and a full-time laboratory technician for a lawn products company.

A field trip to a number of agribusiness firms during his junior year in vocational agriculture sparked Roger's interest in pursuing a career in agribusiness. In 1966, he joined the agribusiness program at O. M. Scott and Sons. He started as a part-time trainee, working a half day and going to school a half day.

A very important phase of this program was an organized related agribusiness class. As a result of this training, Roger has been able to attend Scott's technical institution and advance to his present position as a full-time laboratory technician. His vo-ag instructors are Mr. Fred Bisehoff and Mr. Odell C. Miller, and his agribusiness coordinator is Mr. E. W. Mayer.

While attending Marysville High School, Roger served his FFA chapter as president and sentinel. In 1968, he won the National Agri-Business Proficiency award.

Roger plans to continue working for Scott and attending night college until his junior or senior year. Then, he plans to go to college full-time and graduate with a Bachelor of Science degree in turfgrass management from Ohio State University.

Truck-Farmer

Charles S. Postles, Jr., of Milford, Delaware, is getting off-farm experience working for a trucking business, owned by his father and uncle, that hauls only agricultural products. His farm experience comes from working on three farms also owned by his father and uncle.

This 20-year-old FFA member has followed a planned work experience program to gain knowledge and skills in both the production and business side of agriculture. His accomplishments resulted in his being named Star Agri-Businessman of the North Atlantic Region.

After college and military service, he will enter the family-owned business.

The first work Charles did in the trucking business was lubricating, repairing, and unloading trucks. Later, he became a driver and now drives semi-tractors and trailers regularly when not in college.

On the farm, he worked with the tenant who operates all three farms. Charles was in charge of a specific

farming activity each year, but also did other farm work.

In FFA, Charles served as vice-president of both the Misipillon Chapter and the State Association. He also was chairman of several committees, and participated in judging contests. Last summer he represented the Delaware FFA in Panama, where he spent six



Roger Phelps taking field notes on randomized turfgrass variety performance for the lawn products company where he is working in Ohio.

Operating a green pea combine is one of many skills learned by Charles Postles, Jr., working for a Delaware trucking-farming firm.



BUSINESSMEN

weeks working with the agricultural program in six schools. His local advisor is Mr. A. C. Davidson.

Custom Operator

The Pacific Region Star Agri-Businessman, Ken Dunagan, operates a custom harvesting and spraying business in partnership with his father at Wilcox,

Arizona. While the business is owned jointly, the actual operation falls to Ken because Mr. Dunagan is employed as a farm manager.

Ken was unable to have an extensive farming program while in high school, so after graduation in 1966, he went to work for a neighbor. Later that summer, he found a good buy on a used spray



The mechanical know-how of Ken Dunagan makes his custom business in Arizona more profitable. He keeps all his equipment in top condition.

The meat packing industry is the career choice of Charlie Seidel, Jr., of Texas, who is learning the trade working for a meat packing company.



rig and, after checking with some farmers, decided a need existed for this type of service. He financed the spray rig with a PCA loan. Then, another company moved its ground spraying equipment out of the area, leaving Ken and his dad the only ones in the Wilcox area licensed and bonded to do custom ground spraying.

Custom harvesting was added when the Dunagans purchased a combine from a friend. They already had one truck, and bought another to haul grain. The combine was financed through a bank, and the trucks, including those purchased later, were paid for out of the operating receipts.

A feeding operation was started when a neighbor sold some feed to a cattle dealer and the Dunagans arranged to feed the cattle in their lot.

Ken is a good mechanic, even though he was born with only one hand. He has reconditioned all equipment and loses little time due to breakdowns.

The 20-year-old agribusinessman has won the FFA Foundation's State Farm Mechanics award, and has served as reporter and sentinel of his local chapter. His vocational agriculture instructor is Mr. Page Bakarich.

Meat Processor

A part-time job at a local packing company during his first year in vocational agriculture led to a career choice and the title of Star Agri-Businessman of the Southern Region for Charlie Seidel, Jr., of New Braunfels, Texas.

The part-time job became Charlie's supervised occupational experience program. Working with vo-ag instructor, Mr. Leroy Goodson, and through the cooperation of the Rahe Packing Company, where he was employed, Charlie has developed the skills and competences needed to become proficient in butchering, cutting and wrapping, boning and processing, making sausage, preparing meats for display, and selling. He is planning to enter college at Southwest Texas State University and study agriculture.

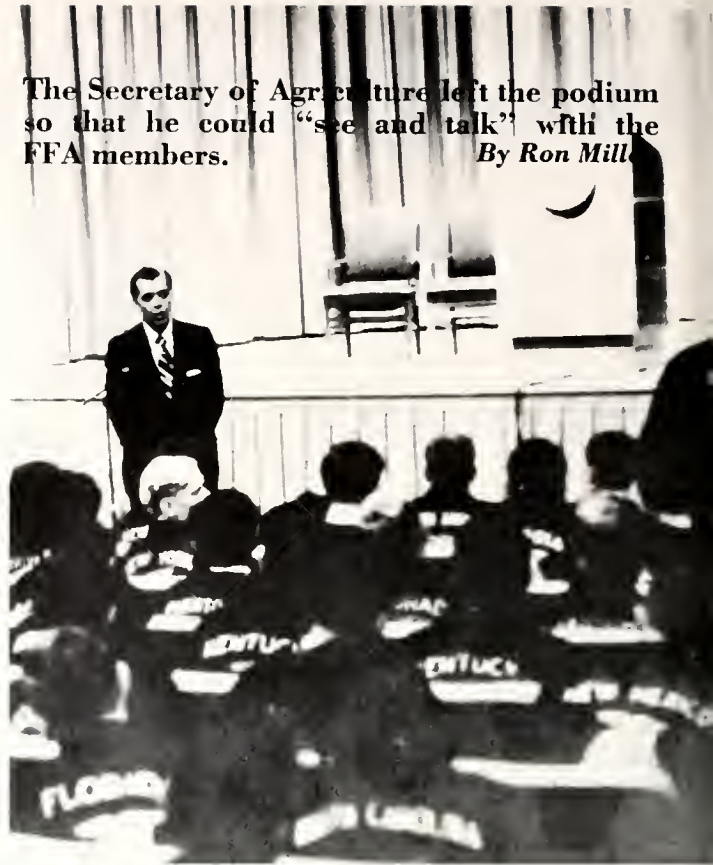
Since the 19-year-old FFA member must pay his own way to college, he accepted a job as a warehouse foreman in San Antonio to increase his earnings. He still works part-time for the packing company and will continue to work there while in college.

In addition to his job, Charlie has carried on a supervised farming program which includes beef, swine, goats, and sheep. He has won numerous prizes at fairs and shows with his livestock, and also won awards in livestock judging contests.

Charlie has served his FFA chapter as treasurer and reporter, and has been chairman of many programs and activities.

They met the Secretary of Agriculture

The Secretary of Agriculture left the podium so that he could "see and talk" with the FFA members.
By Ron Miller



WHAT'S going to happen in agriculture in the coming years? No one really knows, but 47 state FFA presidents and a few other outstanding FFA officers have a better idea after putting some serious questions to Secretary of Agriculture Clifford Hardin.

The question and answer discussion, held during the National Leadership and Citizenship Conference in Washington, D.C., began with Secretary Hardin outlining the programs conducted by the Department of Agriculture. He also pointed out to the state FFA association leaders the major things the Department of Agriculture is attempting to do, and described the toughest agricultural problems that it faces.

"Our first responsibility and biggest problem is simply—how to improve farm income. Talk in terms of prices, production, or any other way—it all comes down to income," stated the Secretary. He further pointed out that with a million or two million farmers making separate individual decisions, and with production per man increasing at an average of 5.3 percent a year in the past 15, our biggest job is to help agricultural producers share more equally in the rising level of living in our country.

In answering a question from an FFA president, the Secretary mentioned that at the present time the Department of

Agriculture plans to continue long term diversion of land while gradually decreasing some price support programs. He added that more ways of expanding exports are being sought and tried.

Secretary Hardin also told the FFA officers how and why the Department of Agriculture works with the distribution of food—in rural and urban areas. He elaborated on the distribution of food through food stamps, school lunch programs, emergency feeding programs, and other direct distribution of food.

"With such an abundance of production in our nation, we can't put up with malnutrition any longer. So, with June 30 of next year to push against, we expect to have a program for the poor that will reach every single county and independent city in this nation," explained the Secretary. (The program was announced to the nation by President Nixon just a few days following the FFA officers visit with Secretary Hardin.)

Many FFA members asked about the Department of Agriculture's role in the field of chemicals. In response, the Secretary of Agriculture informed the FFA group that, as a result of much misinformation and incomplete information, the Department must bring reason back into this area. He said that they are trying to get everyone to re-examine the use of chemicals and al-

ternative methods of controlling weeds and pests.

In addition, the FFA members learned more about the particular duties and operation of the research program in universities, the Forest Service, soil conservation programs, Rural Electrification, special programs for cooperatives, credit programs, and meat and poultry inspection.

The secretary also cited many of his individual duties to the FFA officers. As a Cabinet member, he works on the Council of Urban Affairs. He reported, "Because many of these programs have impact on your rural community, my job is to see that rural America is not overlooked." He noted that feeding the poor comes under this committee's jurisdiction.

Secretary Hardin told the FFA officers why he serves on the President's Council on Economic Development Committee. In this capacity, the Secretary noted that he tries to initiate ways that will turn back a reasonable price in the market place to the agricultural producer.

At the close of the informative discussion, National FFA President Jeff Hanlon presented Secretary Hardin with a special National Leadership and Citizenship Conference participation plaque. And the FFA officers returned to their states better prepared to lead in agriculture.

Learning by Doing

These FFA members use a school farm to get worthwhile experience and to gain community support.

By Ruth M. Waddell

PRAIRIE Heights Community School in Eastern LaGrange County, Indiana, has something special in its curriculum—193 acres of outdoor classrooms. FFA members are tillers of this school farmland which benefits both the agricultural community and the general public. In addition to the farming enterprises, a community park is being constructed by the students along U.S. 20 and nature trails have been blazed from the park site.

The entire project has the support and the cooperation of the Soil Conservation Service, the school advisory committee, the board of education, School Superintendent Brice Diehl, and the school administration.

Vocational agriculture teachers Ned Stump and Richard Grubaugh, and their students, conduct contour stripping on the gently rolling slopes and get involved with rotations, wildlife, recreation, and conservation activities.

Through combined community and school efforts, this has become one of the most outstanding vocational agriculture programs in the tri-state area. It is one of the vo-ag departments visited each summer by the "Seminar on Wheels" from Michigan State University. This is a group of graduate students who make a five-day tour of outstanding vo-ag programs and agricultural businesses to get ideas to improve and extend their own programs.

Most production on the farm includes demonstrations with sprays, insecticides, and various tillage methods. Chief crops of the school farm are corn, soybeans, alfalfa, sorghum, and popcorn. The raw

sorghum is processed in Fort Jennings, Ohio, and the finished product, sorghum molasses, is sold at the school. A portable slatted floor swine feeding research unit is being used by students for livestock feeding comparisons.

Five acres of Scotch pine, planted by the members in 1964, will be harvested for Christmas trees about 1970. Two acres of white pine planted in 1965 will become permanent stand for conservation and erosion control.

In cooperation with LaGrange Soil Conservation District, the vo-ag students have planned, built, and stocked with bass and sunfish a half-acre irrigation, recreation, and wildlife pond. The pond cost \$1250, of which \$600 was paid through the cooperation of the Agricultural Soil Conservation program. The balance was paid by the school and the FFA members, who used money received from sale of farm produce to pay their share. In addition, two swamp areas have been dynamited to provide for wildlife watering facilities.

The two nature trails lead through a natural wetland wilderness where elementary and high school students alike frequently journey in search of nature's story and inspiration. On the upper trail one may observe such things as wildlife food plantings, soil judging areas, a hornet's nest, a deer lick, sod waterways, fungus growths, beehives, and many geological specimens.

Prairie Heights School is the only school in the state having an official U.S. Weather Bureau Observation Station. Weather readings are taken daily by students or instructors and are

phoned to Purdue University. The weather station is one of 26 such stations in Indiana, and Indiana is one of three midwestern states covered by agricultural weather services. The service gives farmers more accurate agriculture crop predictions. Also, Prairie Heights is one of the locations used by the agronomy department of Purdue University to check the progress of crops in relationship to the growing season.

An outstanding FFA event each year is the achievement camping trip. FFA members earn points throughout the year with their class work, farm work, judging, and other projects. Mr. Stump, Mr. Grubaugh, and other interested adults accompany the members on the camping trip. Group expenses are paid from chapter funds. The campers live in the chapter-owned tent, and each assists with assigned duties of camp operation.

The daily schedule includes fishing, swimming, cooking, vespers, educational visits, and recreation. The trips are made in an old school bus, which was purchased by the chapter, overhauled, and remodelled to suit the needs of the members.



Students can learn practical methods, observe applied agricultural theory.

Vocational agriculture students and their instructor check for disease damage to oats on the school farm.



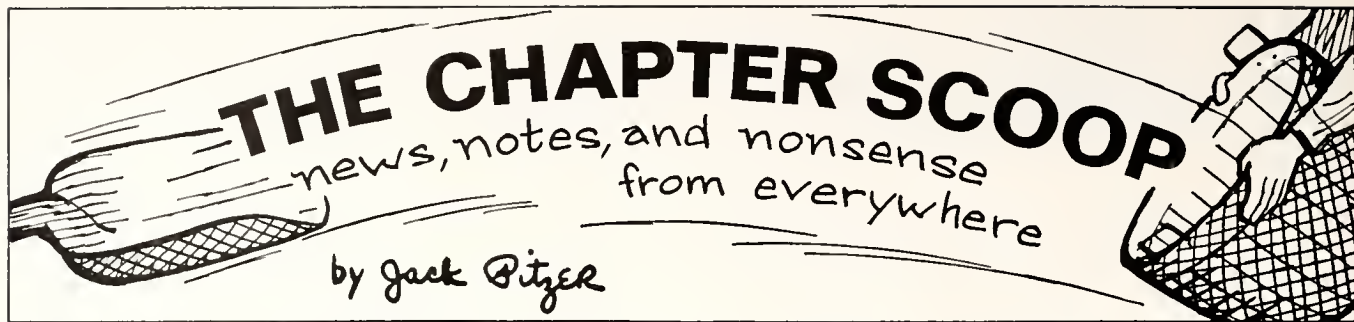
The nature trails have many points of interest. This student and visitors discuss ecology with instructor.



THE CHAPTER SCOOP

news, notes, and nonsense
from everywhere

by Jack Pitzer



Phil Liggett, Allen Leising, Jim Wicker, and Frank Marlatt all received the State Farmer degree and all are Rushville, Indiana, members.

Dade City, Florida, FFA reports they won state judging contests in meats, poultry, livestock and citrus. All in one year.

A slave auction idea: Osmond, Nebraska, FFA held theirs on Main Street.

Princeton and Malden, Illinois, Chapters played baseball—members from both chapters on each team.

Miss Karen Pekar, Chapter Sweetheart of Granger, Texas, is also District Sweetheart.

The largest fish caught on Douglas, Wyoming, FFA trip in Canada was a 21-pounder.

James Harney was named Star Greenhand of the Charitho, Rhode Island, Chapter.

Garry Oakley, reporter of Wills Point, Texas, FFA, says their chapter is sure glad to have a new vo-ag building.

Jim Sorlie, Osakis, Minnesota, Chapter president, escorted Miss Osakis at first annual "Miss Osakis Festival."

Kimball, Nebraska, FFA held a greased pig contest on Fourth of July. Charged 50c entry fee and gave \$10.00 prize. Big success.

Gaithersburg, Maryland worked out a deal to sell toy farm implements for local dealer in his exhibit at county fair.

Mazon, Illinois, Chapter had five different FFA calendar sponsors.



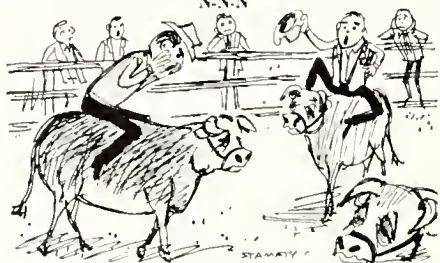
Wow! They have a rough parliamentarian. When president of Duncan Smith Chapter in Alabama rapped for order, the end of the gavel came off and hit advisor Wilder.

A pickup full of trash was gathered up along country roads by Columbus, Indiana, FFA members.

Tunkhannock, Pennsylvania, FFA Chapter demonstrated chain saw safety and care at an area fair.

How did your chapter plan its program of work?

Plevna and Baker, Montana, Chapters participated in a flying classroom. Each member spent an hour in the air. Covered county conservation features.



There were 81 bull riders in the FFA rodeo sponsored by Duncan, Oklahoma, FFA. Bet they wore those bulls down!

The 96 member Tempe, Arizona, Chapter won state farm safety award. Conducted farm safety surveys. Marked hazards with red flags.

Concordia, Kansas, advisor and president visited FFA chapters during their drive to attend the National Leadership and Citizenship Conference for chapter presidents.

Pomeroy, Washington, members held annual picnic and camp-out at Spirit Lake, Idaho. Had fun water skiing, swimming, fishing and hunting squirrels.

Linden, California, Chapter sponsors a Community Day Fair. Invites other clubs or groups to participate.

Ron Gibson, Kuna, Idaho, member was named winner of a Union Pacific Railroad Scholarship.

The Moundridge, Kansas, FFA organized and conducted the local cystic fibrosis campaign. Collected \$155.

Robert Stuart of the Daviess County, Kentucky, Chapter won the state hay crop award.

Time now for chapters to get in orders for participation in the Official FFA Calendar program.

Community service project of Centralia, Missouri, FFA—painted bleachers at local fairgrounds.

There were 213 parents, members, and guests at the Richfield, Utah, FFA Parent-Son Banquet. Past state president was speaker.

Cheyenne, Wyoming, FFA built a play house for kids at Cheyenne Opportunity School.

Larry Watson was named Livestock Farmer of the Panama, Oklahoma, FFA.

Ivanhoe, Minnesota, FFA released 450 pheasants in their community.

North Hunterdon Regional FFA Chapter in New Jersey was honored for their work in community safety education.

Redfield, South Dakota, FFA had a talk about the military draft system at a meeting.

Many chapters give complimentary subscriptions of *The National FUTURE FARMER* to businessmen supporters in their community.

Alvirne Chapter in New Hampshire received recognition and \$50.00 for their work in improving one of the school's farm ponds.

Simmesport, Louisiana, FFA made a scale map of school campus. Gave it to principal.



Marlin, Texas, FFA presented a "womanless wedding" for entertainment at a recent meeting.

Jim Sustacha, past state president, and member of Ruby Mountain FFA, was named "Outstanding Teenager of the Year" in Nevada.

News, notes, or nonsense in Chapter Scoop can be a good place to swap ideas that work for local chapters.

Free For You

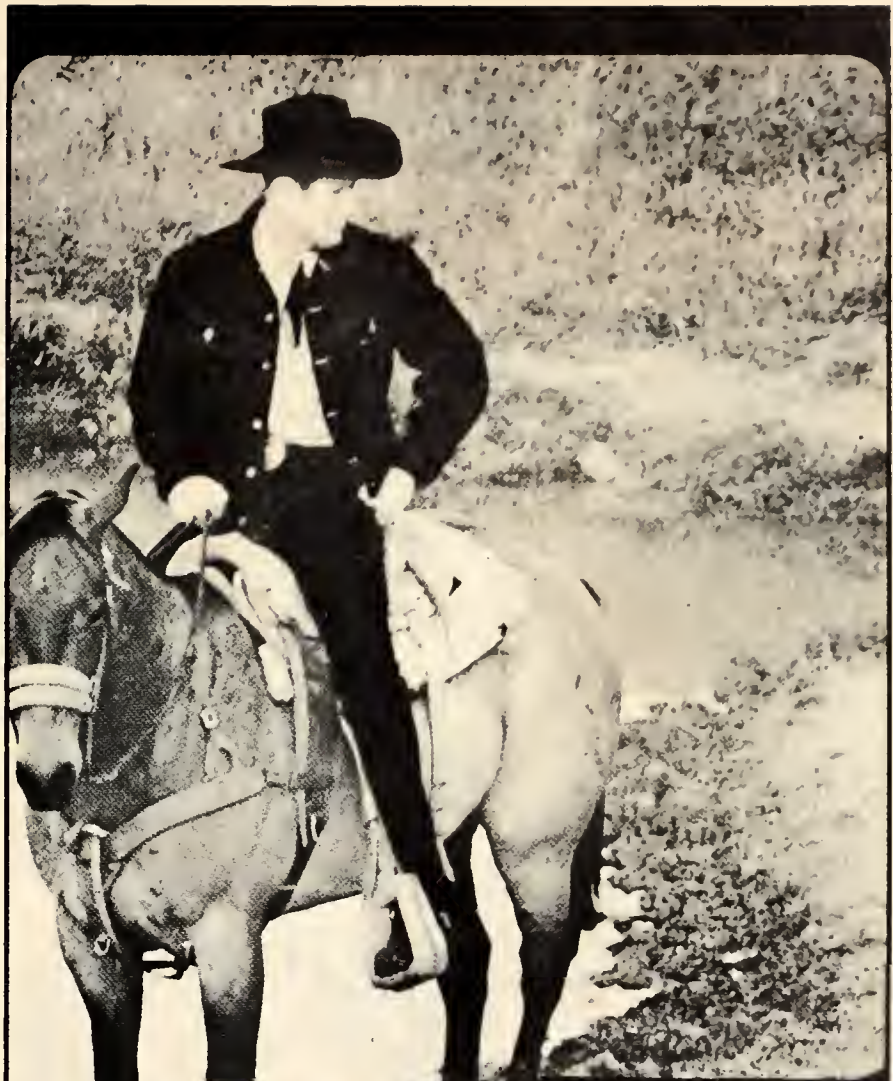
THESE materials are free! You can get a *single* copy of any or all of them by mailing the coupon below. Just circle the items you want and send your *complete* address.

89—Be A Genetic Engineer—There will always be a need for A. I. technicians, but an increasing amount of semen will be sold directly to larger beef and dairy operators by genetic engineers. To learn more about this expanding career, send for this well-documented 10-page booklet. The booklet tells how you will be trained, what kind of responsibilities you can expect, and many more advantages about this exciting field. (American Breeders Service)

90—Transportable Fertilizer Bin—To take advantage of fall fertilizer discounts you need an on-the-farm storage facility. This complete building plan shows you how to construct a transportable bin consisting of three bays—each with a capacity of 5 tons. The bin is well within highway measurements and can also be built with a permanent foundation. The bin measures 8 feet wide, 12 feet long—variable by 4-foot multiples—and 10 feet high. (American Plywood Association)

91—New Horizons—For a comprehensive look at the expanding area of farm marketing by motor truck, you will want to get this 12-page booklet. The booklet describes the role of twin trailers, containers, piggybacks, and computers in the trucking of agricultural products. In addition, facts about trucking of small grains, fruits, vegetables, and hauling of other bulk products are presented. (American Trucking Association, Inc.)

92—On The Move—This brochure shows, with photographs, almost all of the possible applications for air-cooled engines in agriculture, construction, and industry. Other features include statistics, power ranges, and a general description for specific engines. (Wisconsin Motor Corporation)



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SPORTTRAIT

By Stan Allen

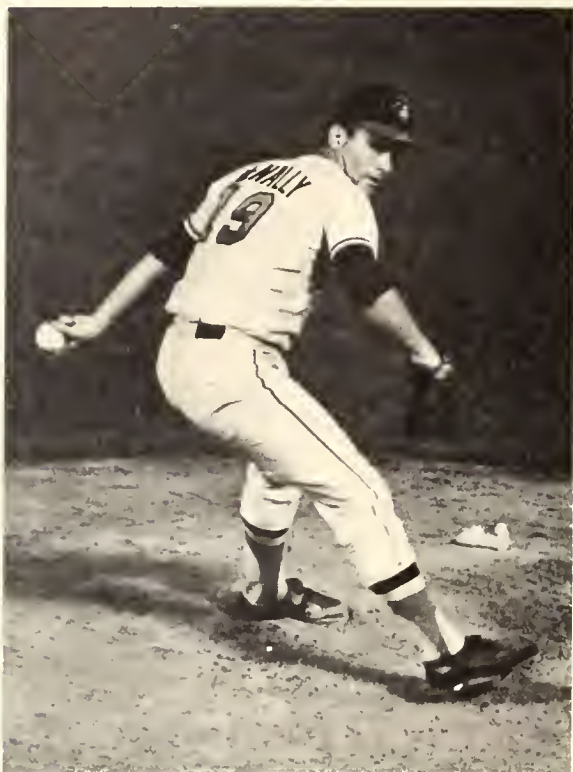


Photo by Tadder, Baltimore

Dave McNally, pitcher for the Baltimore Orioles.

THE amazing Baltimore Orioles have won 87 of 127 games and lead the American League's Eastern Division by 14 games going into the last month of the current baseball season. Dave McNally, their veteran fireballing southpaw, owns 17 of those wins.

Dave was a fine all-around athlete as a youngster, winning all-state honors in football and basketball for Central Catholic High School in his home town of Billings, Montana. But, his favorite sport was baseball and he played American Legion ball since his high school did not field a team. Dave hurled a phenomenal three year record in Legion ball of 40 wins against only six losses. He fanned 256 batters in 110 innings of pitching. It didn't take major league scouts long to find Billings and Dave received quite a few offers before he signed for a bonus with the Orioles in 1960.

McNally's first stops in pro ball were with Ardmore and Appleton in the Texas League. He got off to a shaky start with eight wins against 13 losses, but he did strike out 174 batters. His pitching improved at Elmira in 1962 where he won 15 games and lost 11. He struck out 195 hitters and four of his wins were shut outs. The Orioles called him to Baltimore late in September and he made his major league debut with a two hit win over the Athletics. He has been a permanent member of the Orioles mound staff since then.

Dave pitched a total of 285 innings in 59 games during

the 1963 and 1964 seasons, both as a starter and in relief. He posted 16 wins against 19 losses and had 166 strikeouts. He recorded his first shut outs with three in 1964. An 11-6 record made him a winning pitcher in 1965 and he fanned 116 batters along the way to finish with a good 2.85 earned run average. He upped his wins to 13 in 1966 with six losses again and helped the Orioles win the American League pennant. Dave pitched 213 innings in 34 games, fanned 158 batters while walking only 64. He was named starting pitcher in the 1966 World Series, but had control problems and was not the pitcher of record. Dave came back to win the fourth and last game with a four hit 1-0 shut out.

McNally had a disappointing season in 1967 after hurting his pitching arm in spring training. He worked in only 24 games and broke even with a 7-7 record. He worked hard during the off season and slowly worked the soreness out of his elbow and reported to the 1968 spring training camp in top shape. He also re-taught himself to throw the slider pitch which he had stopped throwing for some unknown reason. Dave has always been known for his control, and adding the slider to his blazing fast ball and curve set the stage for 1968, when he rewrote the Oriole's record book.

Things did not look too good at the half way point of the 1968 season when his record was eight wins and eight losses, but he won 14 of the 16 games he pitched during the last of the season. From the middle of July to the first of September, he won 12 straight games. Dave pitched 273 innings in 35 games, completing 18 of his starts with a record of 22 wins against 10 losses and five of his wins were shut outs. He had struck out 202 hitters while issuing only 55 walks and finished with a fine 1.95 earned run average. He allowed more than three earned runs in only two of the 35 games he started. In five of those he didn't walk a batter and he only issued one walk a game in 15 others. Dave could have easily been a 30-game winner last year as the Birds were shut out in four of his losses and scored only one run in five others. He became a hitter during the last half of the season when he hit a homer off 30-game winner Denny McLain after going hitless in 41 tries. He went on to knock two more out of the park including a grand slam homer. The Sporting News named him to their American League All-Star team, he won the Most Valuable Oriole Player award, and finished fifth in the balloting for the American League's Most Valuable Player award.

Dave McNally is considered one of the best southpaw hurlers in the major leagues today. National League hitters surely will not like to see him on the hill when the 1969 World Series begins.



"... and now, subbing for Mac, here are the markets: Yearling heifers bombed' the market with a 15 to 18 lead; calves and cutters 'batter'..."

Jobs or Occupations?

AS an average American youth, you can expect to put over 100,000 hours, or 40 years, of your life into your chosen occupation. This is a long time, especially if it's the wrong job.

You cannot afford to make a mistake, for your happiness and prosperity will largely depend on the step-by-step decisions you will make in the next few years. Choosing a career doesn't simply mean deciding where you can get the best job—it means finding a lifetime occupation that's best for you.

Surveys indicate that more than 36 million Americans are not happy with the jobs they hold. These people regret now that they didn't look further before taking their first job. The more career possibilities one investigates, the better prepared he'll be to make a wise choice.

Look for a career that fits in with your goals in life. To a great degree, it will determine where you'll be living, who your friends will be, and how much money you'll be making.

A University of Arkansas human relations specialist offers the following tips to aid in career selection.

First, analyze yourself. What are your abilities, interests, and goals? Your abilities give a clue to your chances for success in a particular kind of work. High school or college guidance counselors have aptitude tests which you can take to help measure these abilities. Interest tests will group your various interests into significant patterns.

Consider what you like to do in relationship with what you can do. Success in a career depends a great deal on how well your interests and abilities coincide.

Personal goals represent what you expect to "get out of life." It's extremely important to set your goals high enough so that they will continue to challenge you throughout life. A career must be able to satisfy these goals.

Second, analyze careers which relate to your interests, abilities, and goals. Find out as much about them as possible by reading books and magazine articles; by visiting the office, plant, factory, farm, or other place where the work is actually done; and by talking to people in those careers and to employers who hire them.

Third, match the two analyses as well as possible. Consider the answers to these questions as you make your decision:

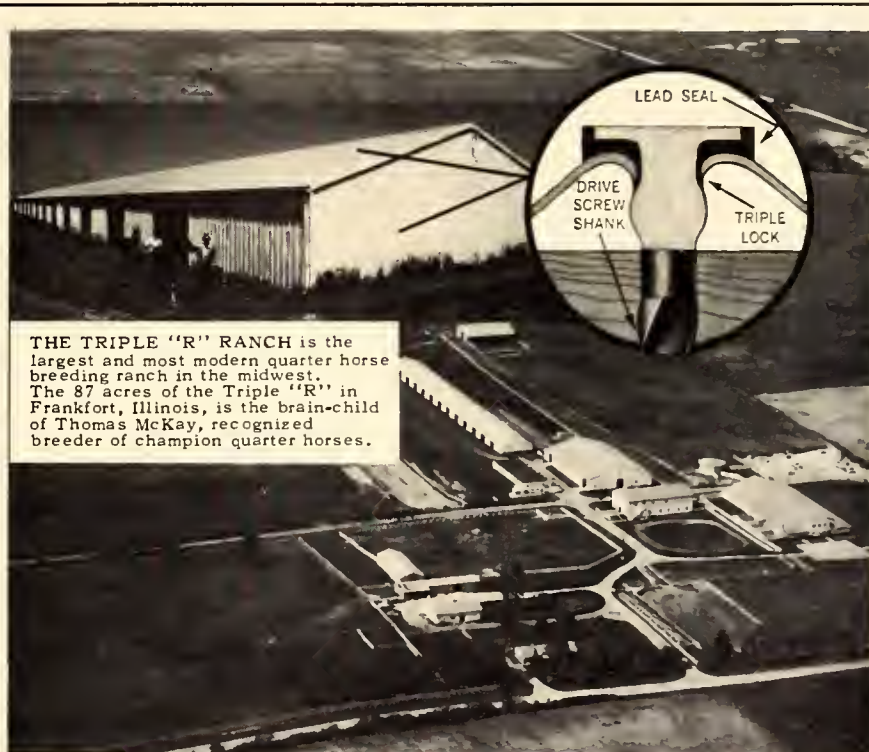
Will I like the work?

Does the work fit my qualifications?
Does the job afford the security I desire?

Will I have opportunities for advancement?

Will my earnings be better-than-average wages?

Above all, be realistic! Your choice must be in keeping with your capabilities and interests, with the opportunities for placement after college or other training, and with the job availability in the community or places you might like to live.



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Crow Hunting Fun

By Russell Tinsley



FROM where I was hidden, underneath the bough of a low-slung pine tree, I scanned the sky for crows. To my right a companion was blowing a call, a raving and hysterical sound. Shortly, another hunter, concealed in some trees across the small clearing from us, joined in. The mixture of calls sounded as if a flock of crows was getting with it.

The promise of a gangland fight on some adversary is a lure the crow can't resist. It wasn't long before a lone bird came flying over the treetops, looking to see what all the excitement was about. This was the sentinel. It was important that he be silenced.

A hunter jumped up and fired. The crow pitched head over end to plop in the grassy clearing.

The callers kept up the frantic chorus. When the sentinel failed to return, other crows would get bold, believing it to be safe to join the skirmish. They likely would respond to the call. We impatiently awaited their arrival.

Only a minute or two after the sentinel had fallen, the flock of crows suddenly descended on us. With a screech, one sighted our own decoy positioned

high in a leafless treetop and it wheeled and dived. Others started hollering excitedly. The birds were working themselves into a frenzy.

We let them draw close before someone yelled, "Now!" We leaped up and commenced shooting. The action was brief, but when it was all over we had nine of the critters down.

Crow hunting is like this. There may be only a few seconds of action, but the time is enough to drain an unplugged shotgun dry. Crows travel in flocks and a dozen or more may appear simultaneously. It is swing on one, fire, swing on another, fire, until the shotgun is empty. Crow hunting is wing shooting par excellence.

Earlier, after parking the automobile and walking along Pine Creek in northern Nebraska in search of a place to hide and call, we heard the familiar "caw, caw" of crows in the surrounding timber. While driving to the area from the town of Bassett, we'd seen numerous flocks of the black birds in fields. It was October and the crows were migrating through on their journey south.

Crow hunting, however, can be a year-round sport. The bird is wide-

spread and abundant and unprotected. Some areas have resident crows which are present throughout the year; in others shooting occurs only when migrating crows pass through.

The most widespread is the eastern crow. This is the bird which migrates through the heart of the United States in fall and spring. Banded crows have been traced from Saskatchewan through the Dakotas and plains states to Texas.

Other subspecies includes the southern, western, and Florida crows. The southern crow is found from southeast Texas across to North Carolina and as far north as the District of Columbia and southern Illinois. The western crow ranges from British Columbia, Saskatchewan and Montana south to lower California and Mexico.

But, basically all four subspecies are the same: a wily, crafty bird that has survived and multiplied despite man's best efforts to eradicate it. The crow is hated by farmers who have seen flocks ruin their grainfields. This is why it is not difficult to find places to

hunt crows; most farmers welcome those who will help to eliminate these pests.

Except during the nesting season, crows travel in large flocks and share communal roosts. Last winter, near Colorado City in western Texas, I saw crows descend into a five-acre stand of mesquite brush until it seemed there was not room for another one. There were thousands of the shrilling birds.

Any type of shotgun can be used in crow hunting. I personally favor the 20 gauge, improved cylinder or modified choke, loaded with low velocity No. 8 shotshells. A crow hunter is apt to be doing a lot of rapid firing, and after a few dozen rounds a 12 gauge can be punishing.

The problem with crow hunting, like most hunting, is finding the game. The hunter who has a roost pinpointed has it made. In early morning the birds scatter from the roost in flocks, heading in all directions to feed, and toward dusk they return along the same flight patterns. By observing these flyways the hunter can determine where to situate his stand to intercept the flying birds. But stifle any temptation to shoot near or in the roost. This only causes the birds to pack up and leave; to find more still surroundings.

There are a couple of effective methods for duping crows within shotgun range. The most rudimentary is to simply place a plastic owl decoy or a taxidermist-mounted owl in a conspicuous place, hide and wait for passing crows to sight the decoy and rush to it. The crow and owl are hated enemies. Bully crows never pass up the opportunity to harass an owl when numbers are in their favor.

The alternate method is use a call to bring the crows close, or perhaps a combination of calling and decoys, which is the best of all. Put the owl in a treetop and maybe add two or three plastic crow decoys for effect. Get hidden and blow the call to get the crows' attention. Then get prepared for action!

There is no mystery to crow calling. Either a mouth-blown call or an electronic device can be used. To learn the basic calls, get an instruction record and practice at home. Only three calls are necessary: locating or hail call, the sound a crow makes when it is flying and attempting to find other crows; the feeding call; and the fighting call, that hysterical and wild sound a crow makes when it sights an owl or some enemy.

Often it pays for two or three people to call together; providing the sound effects of a flock of crows. Perhaps one caller will start, giving the impression that a crow has sighted an owl. Then another chimes in, followed shortly by another, as if an entire flock was engaged in battle.

Battery-powered tape recorders and phonographs also can be used. Authentic tapes and records of crows fighting

an owl or feeding are available and are real effective. The advantage of an electronic apparatus is that the hunter can concentrate on remaining hidden and shooting.

The crow is alert to any danger signal, no matter how insignificant. This means the hunter must remain completely concealed until he is ready to shoot. Back under low-hanging limbs or perhaps hide under a light mesh camouflage sheet. Camouflage-colored clothing is a definite asset.

Rarely will a flock of crows dramatically and suddenly show on the scene. Usually a sentinel crow will be sent to investigate. If he doesn't return, the other crows will assume the coast is clear. It is important to kill this sentinel. Should he see something amiss and escape, you may as well move. The other alerted crows won't show or will stay at a distance, out of gunshot range.

During mid-day, when crows are in the fields, we often hunt them by prowling about in a pickup until we sight a flock. A sentinel will be on guard, so the vehicle can't be stopped without spooking the birds. What we do is drive behind some obstruction and two hunters gingerly slip from the pickup while the other drives on. The crows, seeing the vehicle leave, believe they are safe. They return to feeding.

One hunter goes to work on a call while his partner waits with shotgun ready. More times than not the crows will rush to the call, the whole bunch, not just one or two.

Then, my friend, the fun begins.

Along with a fight call, owl and crow decoys were helpful in attracting the sentinel crow on the opposite page.



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WEAVER SCOPES



Part-time Farming

By Ron Miller

Photo Chuck Cromer

MANY young men are finding that part-time farming is a good way to gain entry into agriculture. While earning most of their income from other sources, these men manage their own truck garden, strawberry patch, cattle herd, or grain field. Slowly, but surely, they are making their dreams of farming on a larger scale come true.

• **Small Farm Buyer.** Part-time farmers generally look for tracts of land smaller than 100 acres. Since many want rural residence, the tracts frequently include a dwelling and other buildings. Likewise, part-timers pay about as much per acre as do full-time farmers for add-on units of land. But, unlike the farm enlargement buyers, part-time farmers

stressed the land's location and beauty more than quality.

Of U.S. farmland sales of ten acres or more in 1967, 14 percent were operated as part-time farms after the sale. Nonfarm buyers purchased nearly half of these part-time farms; absentee owners about one-fourth; and farmers who were phasing out by selling full-time operations bought the rest.

In a study conducted from 1949 to 1962, a significant group of part-time farmers were men who worked predominantly in off-farm jobs, but also maintained a farm operation. Of these, many were young men taking their first gradual step toward full-time farming.

Some of the others planned to keep the size of their farm stable while work-

ing toward a higher position off the farm. In these cases, the farm served as a supplement income source and provided work for children while maintaining strong attachments to farming. Of jobs accepted by the part-timers, nearly one-third worked in agribusiness.

• **Full-time Farming.** Many part-time farmers, using their off-farm income to move gradually into full-time operations, make down payments with initial savings. They buy a small farm and enough stock and equipment to permit limited farming operations for the first few years. They continue non-farm work as a primary source of income long enough to gain experience and accumulate capital for a full-time operation.

At the same time the off-farm income makes many part-timers better credit risks for lenders than if their living were completely dependent on small farm earnings. This helps them to continue building up their farm business to where it is self-supporting and can pay off existing loans.

A gradual shift into full-time farming can usually be made with less sacrifice in living standards than a sudden change. A gradual switch also provides a better chance for eventual success than an abrupt change to full-time farming.

Slow changes on a small scale keep risk at a minimum. Therefore, even with little or no farming experience, a part-time manager will not lose his "shirt" when he makes a poor decision. With large operators just one bad management decision can cost a great deal in lost time and money.

Paying for a small farm with a limited income and later adding more acres makes larger down payments possible, thus reducing principle and interest payments. In addition, the loans can be staggered or stretched over a longer period of time so that large amounts of interest and principle do not come due when income is low. Hence, in the long run, your land will cost less per acre.

• Study Farm Value. When buying a farm on a part-time basis, the value of the land, machinery, and labor take on a different perspective than for large farms. To a large part, the size of a part-time farm is determined by the types of enterprises. Consequently, the price paid per acre should, therefore, take into account other motives than the production aspects of farming.

Most part-timers will find that they

can only carry a small investment in machinery and will most likely need to hire some custom work done. On the other hand, part-time farming necessitates that most of the labor be done by the operator. Therefore, to justify the sale price of a farm, charge something for your labor when determining what you should pay for a farm.

The location of the farm in relation to your off-farm work, as well as nearness to markets for delivery of farm products and the possibility of renting or buying more land, needs consideration. In addition, the value of the farm depends on the worth and suitability of the home as a place to live, and the possibility of selling property for subdivision in years to come.

It will also pay to know what other kinds of supplemental work are available in the area. Likewise, because some outstanding off-farm job may arise, you may change your mind and decide to increase your farm to a specific, limited size. By learning all about the community where you plan to start part-time farming, you can remain versatile and be better able to accept an exceptional off-farm agricultural career opportunity.

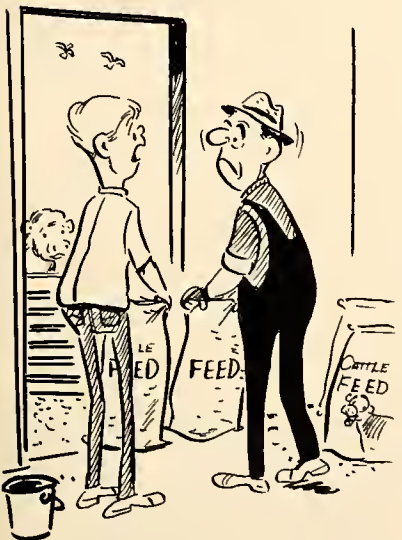
The price of a farm used as a part-time operation generally reflects the value of the house. However, instead of purchasing a place with buildings, it might be better to buy a piece of land

and build a new house. Because the land will probably cost less and financing a new house offers more security than an old one, loans will be easier to obtain.

Before you buy, estimate the possible earnings of the farm, set up a farm operational plan, list the average estimated production, figure the probable value of the products, and calculate gross income. When figuring expenses, take into account the difference between city and country taxes, insurance rates, cost of utilities, and car expenses to and from work, along with production and depreciation costs. Then estimate the net income.

Finally, focus your attention on the potential of each prospective part-time farm in terms of invested income. Divide the estimated net income by the percentage of earnings you can expect to make if you invested your money some other way. This figure tells you the value of a farm as an additional source of revenue. Compare the invested income figure to the dollars of interest you would receive by putting your farm investment to another use.

No matter what enterprise interests you, part-time farming should not be started without careful study of the alternatives. And then with slow, steady progress a part-time operation can become more than a dream. It can mean a future in agriculture.



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How to make a "talk"



The next time you are asked to speak before a group, try making a "talk" instead of giving a speech. It will be better accepted than a speech and more fun for you. Here is how!

By Charlie Scruggs

YOU can make a "talk." It's easy. Forget about making a "speech." Most speeches are formal and dull—and are dreaded by both the ones who make them and those who must listen. But almost everyone likes to listen to a "talk."

A talk is what you give when you tell your class about a trip you make; a project you finished. A talk will be understood and liked by the local Rotary Club or the district FFA meeting.

How do you make a talk? It's easy, if you understand—and practice a few simple things.

• **Do Not Worry.** Remember this: Everyone gets nervous when he speaks before a group, even the President of the United States. Everyone who listens to you knows that you are nervous and they understand. It's natural for anyone to be nervous.

So accept this—you and everyone else gets nervous. If you can understand this, you won't need to worry. Then you'll be less nervous!

• **Decide What You Want To Say.** Take a sheet of paper and write down the two or three main points that you want your audience to remember. Write them in logical order. Have a beginning, middle, and end.

Then under each of these points write out the two or three facts that will prove each of these points. Sum up your talk in the last sentence. You can make this as complete or as brief as you want.

That's all there is to it! You have your talk prepared.

• **Use Simple Words.** Many speakers

do a poor job because they think they have to use big words. They stumble and stutter because they aren't familiar with the words they use. And most times, the audience won't understand the unusual words, anyway.

Use the words you and your audience will understand. For example, do not say "in the vicinity of" when "near" is just as good.

The best rule is this: Use short, strong words and sentences. Here are some examples:

Long, weak. The project was completed in a satisfactory manner.

Short, strong. The project made \$30.00!

Long, weak. The chapter contemplates the purchase of a sprayer for general community use on a fee basis.

Short, strong. The chapter is going to buy a sprayer and let local people rent it.

Long, weak. One of the most critical problems in connection with the proper use of capital invested in equipment is to have the productive use of each piece of equipment great enough to justify its cost.

Short, strong. A four-row corn planter in a two-row cornfield is poor business.

Make words work for you. Here is what I mean: Take this sentence, "He moved to the show ring." Why not let your words describe the action. You could say:

He limped to the ring

He ran to the ring.

He shuffled to the ring.

He slipped up to the ring.

He stumbled to the ring.

Some people believe long, fancy words show how educated you are. It's the other way around. A truly educated person only uses words the people he talks to can understand.

• **Say It and Be Done!** Most people can tell everything they know in 20 minutes. If they talk longer than this on one subject, they begin to repeat themselves or waste a lot of words.

A talk doesn't have to be long. In fact, I'll bet the talks you remember most are the short ones.

Of course, some people can talk for hours and not say anything. Don't be like that. Have something to say, say it, and sit down. It's better not to cover every detail than to drown people in details.

• **Questions Often Asked About Talks.**

Q. Should I tell jokes?

A. Tell jokes only if they help make a point. And be sure they are good, new jokes.

Q. Should I write out my talk word for word and read it?

A. The best way for beginners is to write out a talk completely. This helps you remember what you want to say. Then make notes of key points on a sheet of paper or cards to help you remember.

Do not memorize it unless you are in a contest which requires word-for-word repetition or you'll go absolutely blank when you get up to talk. Memorize the opening paragraph and the ending.

Incidentally, do not try to hide your notes or speech where the audience can't see them. That just makes you more nervous. And you're likely to get the cards or sheets mixed up and you will be in a mess.

Most people are very poor readers in public. Don't read your talk unless you have to. Try to talk to an audience as you would talk to two or three friends.

Q. Don't you have to have a good voice to speak to an audience?

A. A good voice helps, but the main thing is to have something important to say. If you do, people will forget your voice. Watch yourself on this point: Do not talk in the same tone all the time. This puts people to sleep. Vary your voice. Use some short sentences and some long sentences. This helps you change voice levels.

The author, Charles G. Scruggs, vice president and editor of The Progressive Farmer, says, "I guess I average forty to fifty talks a year, and FFA training is what started it all—including my interest in writing. I was elected reporter of my local chapter at McGregor, Texas, and have been writing and speaking ever since." While in FFA Mr. Scruggs also served as president of the Texas Association.

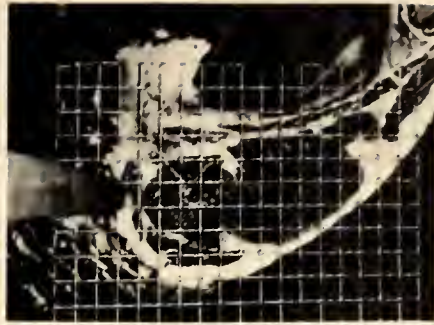
Raising Dairy Beef

UNDER today's market conditions, when a dairyman has extra housing and feed—roughage and grain—on hand, he can add to his income by raising dairy beef. Raising dairy steers rather than selling bulls as veal is becoming more popular every day. Especially since feed marketed in the form of livestock usually provides more net income than selling whole grain to an elevator.

Dairy steers are becoming popular these days because they carry less fat cover than beef breeds and are young enough to have good textures. Also, according to one feed manufacturer, dairy beef will normally convert feed at a rate of 5 to 7 percent better than beef breeds. Thus, dairy steers will gain about 10 to 15 percent faster than beef steers fed to the same weight.

Dairy beef, however, must be finished at lower weights than beef cattle for maximum efficiency, therefore, beef steers generally grade higher in quality. Hence, the big plus still lies in beef cattle as they will bring about \$2.00 to \$3.00 more per hundred weight on the market than dairy steers.

Raising dairy bulls for market instead of dairy steers will return about \$15.00 less per head. Despite the fact that bulls outgain steers by one-third more



The 10-inch loin pictured here came from an 850-pound Holstein steer.

per day and that loin eyes of bulls average 17 percent larger than dairy steers, the price difference favors feeding steers.

Also, if you are a dairy farmer and have only a few calves, you can purchase young dairy calves at less cost than buying quality feeder calves to make feeding dairy steers worth your while.

Typical methods of feeding beef steers work well on dairy beef. Since dairy calves stretch out at an early age, they utilize roughage quite well when young. During finishing, rations heavy in concentrates put on efficient gains and good finish, although not to the fancy beef grades.

Does your horse have these symptoms?

1. Stiff-gaited walk, or refusal to stand on all four legs are general symptoms of lameness. Check horse over carefully.

2. Swelling and heat on front of foreleg from knee to ankle. It's called "bucked shins."

3. Soft, painless swelling around the fetlock is called "windgall" or "windpuff."

4. Swollen tendons—swelling gives a "bowed" look from knee to ankle, so it's called "bowed tendon."

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"Timber!"

OHIO—The Northwestern Clark FFA Chapter hosted an invitational judging contest. They invited all Ohio chapters plus neighboring Indiana and Kentucky chapters.

There were 341 members from 35 chapters who participated. Contests were held for meat, milk, poultry, wool, agronomy, and horticulture. The plans for 1970 include adding a land judging contest.

Contests were conducted just like the state FFA contests with help from the Ohio State University. Trophies were awarded to the top three teams in each division and top individual in each contest. Sweepstakes winner was the River-view, Ohio, Chapter.

Dan Baker, of Northwestern Clark FFA was general chairman. Other contest chairmen were: Mark Jordan, agronomy; Don Boyd, meats; Jim Holman, horticulture; Dan Miller, milk; and Roger Snyder, poultry. Advisors are Mr. Dick Addison and Mr. Larry Lokai.

INDIANA—Each year over 400 little boys and girls from kindergartens are given a personalized tour of a farm by FFA members from Carroll and Woodlan Chapters.

The FFA'ers would be the first to admit that they enjoy the tour as much as the children. When the large tour group arrives at the farm, they are divided into small groups of five to ten. Then each group takes off with their personal FFA tour host for a tour of the farm. The FFA members tell some

of their personal pleasures they enjoy about farm life. (*Wayne Rothgeb*)

KANSAS—It is probably only natural that the first commercially grown hybrid wheat in the world be farmed by an FFA chapter in Kansas. The Kiowa FFA Chapter of South Central Kansas planted one acre of DeKalb 220 A Hybrid. The acreage was small, but it did rate as a first on a commercial basis.

The crop was planted September 27, 1968, on dry land at a rate of 50 pounds per acre. Later the crop was top dressed. Ground for the activity was furnished by Mr. Dale Tucker, a local farmer-businessman. All members of the chapter participated in the historic event.

The production was somewhat disappointing; but as researchers continue to develop hybrid wheat, it is expected that production and the quality of the grain will greatly improve. (*Earl Wineinger, Executive Secretary*)

CONNECTICUT—The Glastonbury High School Chapter conducted their 21st annual Farm Day in a Hartford, Connecticut, city park.

The purpose of the show was to give the city children a chance to see, touch, and even smell the farm animals on exhibit.

Over 10,000 children attended the 1969 Farm Day Show which is a cooperative effort with the City of Hartford and the Childrens Museum of Hartford.

The show ran from 9:00 A.M. to 4:00 P.M. on Saturday. Dairy cattle, beef cattle, sheep, swine, rabbits, horses, and poultry were on display. Baby chicks were exhibited in an open box for the children to handle. An observation bee hive also received a great deal of attention, since the children could observe the bees at work in their hive without being stung.

Special events such as horse jumping, sheep shearing, wood cutting, and cow milking took place during the day.

With only eighteen members in the chapter, help was a problem. However, the chapter found this liability an excellent opportunity to introduce future members to the organization.

The chapter received a great deal of help in publicizing the event. On the two Wednesdays prior to the show, six members of the chapter appeared on a children's TV program with a few of the Farm Day animals. A public service announcement was also filmed to be used on the children's programs in the morning. On the Saturday following Farm Day, a local television station ran a half hour special on the activities which took place.

Because of the efforts at Farm Day, the chapter was asked to help a Hartford bank celebrate its 150th anniversary by recreating the old Pratt farm which stood on the bank's office site 150 years ago. (*Gordon Bednarz, Reporter*)

VIRGINIA—Members of the East End

FFA IN ACTION

Kindergarten children get loads of fun out of a trip to a farm with Indiana FFA members from Carroll and Woodlan.



Glastonbury, Connecticut, FFA set up their farm animal exhibit to help a bank celebrate its 150th anniversary.





Members of the East End, Virginia, FFA got lots of practical experience at their beef cattle show.

High School FFA Chapter got first rate experience in grooming, fitting, and showing high quality cattle. They were participants in the chapter's seventh annual Registered Beef Cattle Show on the school campus.

There were ten exhibition classes showing mature cows, Hereford heifers, Angus heifers, mature bulls over two, bulls under two, young bulls under six months, grand champion male and females, and showmanship of males and females.

FFA and vocational agricultural supporters in the community contributed \$200 for prizes. (*E. L. Morse and J. A. Hudson, Advisors*)

IOWA—The Crestwood FFA Chapter, Cresco, Iowa, has established an award to perpetuate the memory of a man who served as their advisor for thirty-seven years.

The Harry Schroder Distinguished Iowa Vocational Agriculture Teacher Award is presented annually to an outstanding Iowa vo-ag teacher by the chapter in cooperation with the Iowa Vocational Agriculture Teachers Association.

Mr. Schroder taught vocational agriculture and served as advisor for the Cresco FFA from 1930 to 1968. He died in an unusual accident with four fellow teachers from the Cresco school.

Crestwood, Iowa, FFA initiated an award in honor of their former advisor.



Recipient of the 1969 Harry Schroder Award was R. E. Hauptman, FFA advisor at Mount Ayr, Iowa. Mr. Hauptman has a 28-year record of outstanding accomplishments with members of the chapter, young farmers, and adult farmers. (*John Scott*)

ARKANSAS—The Lincoln Federation of FFA chapters has joined forces with the Harrison, Arkansas, Jaycees to sponsor the Lincoln Junior Livestock Show. The 14 vocational agriculture instructors of the participating chapters helped organize the event.

Main purpose of the new show is to provide learning experiences for FFA members. Show divisions are dairy, beef, and swine. A horse show, barrow and steer show sale, and beauty review for Miss Lincoln Federation are extras. (*Ralph Robinson, Harrison Advisor; John Neal, Flippin Advisor.*)

GEORGIA—Future Farmers in Georgia practice forestry skills diligently each year in preparation for a series of FFA forestry field days.

This year fifteen area field days were held over the state and were climaxed with a state forestry field day at Indian Springs State Park near Jackson, Georgia. Participants in the state event were winners of the area field days.

The Greenville FFA Chapter captured the state championship and took home \$100 and a bronze plaque. Jackson County FFA was second and got \$50.00 and a plaque.

Chapters sending teams to the state field day were Treutlen County Training, Swainsboro, Louisville Academy, Lumpkin High and Industrial, Randolph County, Pelham, Berrien, Patterson, Hancock Central, Milton, Green County, Houston County Training, and West Fannin.

The forestry field day program, both area and state, included ten events—planting, selective marketing, estimating pulpwood volume from standing trees, estimating saw timber from standing trees, tree identification, ocular estimating tree heights and diameters, land measurement, log scaling, scaling stacked pulpwood, and forest disease and insect comprehension.

The new event that was very popular this year was a target shooting event which was designed to teach firearm safety. It did not count points for the team, but the teacher of the winning team in each area field day received a semi-automatic rifle.

The area forestry field days were sponsored by wood-using industries over the state. The Trust Company of Georgia and six affiliate banks sponsored the state event. (*Eleanor Gilmer*)

A popular new event at the area forestry field days held for Georgia FFA'ers was the target shooting event designed to teach the members firearm safety.



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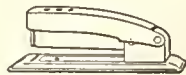
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Why Fall Fertilize?

BY fertilizing in the fall, you can get a head start on spring planting. And because early planting generally means bigger yields, fall fertilization can help put more money in your pocket. However, your decision to fall fertilize depends largely on your soil texture and climate.

As opposed to spring applications, fall fertilization lets you use available labor more efficiently. In the fall when more favorable weather conditions exist, there are double the number of work days—70—than there are in the spring. In addition, the losses from fall fertilization are very small when used with some simple precautions.

Climatic conditions are not as crucial to potash and phosphorous applications as they are with nitrogen. However, when applying nitrogen consider carefully your soil types and temperatures. Fall fertilizing of nitrogen on normal clay or silt is ideal. Clay soils containing some sand should receive less nitrogen, while spring applications are still a recommended practice on sandy soils because of leaching.

The time for putting nitrogen in the ground depends on the soil temperature. Applications are considered safe when clay or silty soils reach about 50 degrees F. and then cool to lower levels. In the South, where soils rarely reach freezing temperatures, spring fertilization is still generally accepted as the best practice.

Nitrogen stimulates breakdown and decay of trash, as does phosphorous, and soils high in decomposed organic matter hold more water. Phosphorous, however, is needed in lesser amounts than nitrogen. Potash does not aid decay, but heavy applications in the spring can harm germinating seed. Nutrients applied in the fall have more time to breakdown to available form for use by the crop.

In any event, avoid surface broadcasting of all nutrients in areas where run-off is a problem. If, however, fertilizers are broadcast, disking them in will decrease the risk of run-off. After applying fertilizer, a fall plowdown, where possible, will help destroy and control weeds, insects, and volunteer crops.

When planning your fertilizer needs for the coming season, first evaluate your farm's cropping history and yields. Then check and compare soil tests with all other management practices, tillage, planting rates, weed control, and fertilization. Finally, set cropping goals to make a maximum net profit. When determining the amount per acre, apply the amount of fertilizer—depending on your yield goals—that is needed for soil deficiencies.

Management-wise, fall fertilizer purchases give you a break when it comes to taxes and discounts, regardless of application season.

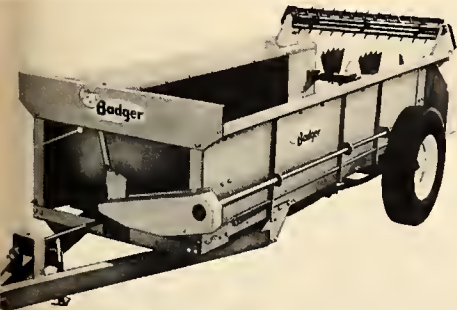


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Two new manure spreaders, Model BN-200 with a 200 bushel capacity and Model BN 240 with a 240 bushel capacity, introduced by Badger features an apron chain with an average tension strength of 20,000 pounds, extra-heavy, removable combs in rear beater, and an oil bath-bevel type gear box. In addition, the spreaders are shorter for more maneuverability.

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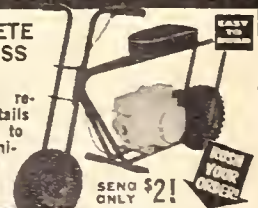


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Before Camille

Mississippi FFA Camp

HURRICANE Camille wiped out the Mississippi State FFA Camp at Long Beach on August 17, 1969. These before and after photos tell the story.

The main building of the camp faced the Gulf Coast. Camp Director and Mrs. C. E. Spraberry left the home only hours before the hurricane struck. They

were not injured, but lost everything. All of the 14 buildings at the camp were completely demolished. Just piles of rubbish and the steps of the main building are left. The FFA has owned the camp for 22 years.

A fund has been started for rebuilding the camp.

After Camille



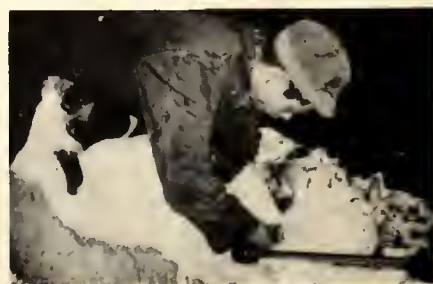
He Earns While He Learns

MYRON Hoffert, of Exira, Iowa, operates his own sheep shearing business. He got the idea while watching his own flock being sheared. He studied a

book, received pointers from an experienced shearer, and sheared 58 head his first year. Last year his business grew to 556 head, and 1000 this year.

Myron also buys wool for the North Central Wool Marketing Corporation in Minneapolis, Minnesota. Since a pickup was needed, he bought a 1950 model and repaired it using parts from another vehicle. He plans to attend college and continue his business when he is home in the spring. *(By Nadine Hoffert)*

Shearing became a business for Myron.



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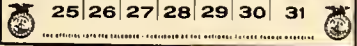
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SUN	MON	TUE	WED	THU	FRI	SAT
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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
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**What's
In It
For You?**

Each year thousands of FFA members get a chance to spend some time in the comradeship of fellow members at camps, conferences, or conventions. They always learn.

The old adage about "all work and no play" has some relevance here. Emphasis upon agriculture is typical in FFA get-togethers. Members of the FFA recognize their role as youth leaders and future leaders of American agriculture. They hold a vital interest in all of agriculture today and look forward to its exciting career opportunities.

Sure, there's bound to be fun and frolic when young people assemble. Excitements only youth can know. But, there will be learning, too. Experience itself is a good teacher.

The Official FFA Calendar for 1970 depicts the comradeship of FFA mem-

bers through its central illustration and through the monthly color pictures.

In the main scene, FFA members are playing softball at camp. The January scene shows two members of the Hibbing, Minnesota, FFA using snowmobiles. In the March scene, Albin and Lander, Wyoming, Chapters are pictured at a campsite during a Canadian fishing trip. Three Gilbert, Arizona, members teamed up to get a steer ready for the show ring in the October scene.

All chapters are encouraged to participate in the Official FFA Calendar program. It is an excellent way to tell the people in your community about FFA and vocational agriculture. These calendars are 12 month reminders that FFA members, like yourself, are at work in the community. You will be proud if your chapter is in the public eye.

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Start your own trap line with the instant-killing Victor Conibear No. 110 — the only trap to win the American Humane Society Award.



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HAVE YOU HEARD THIS ONE



The collector for charity thought she would approach the well-dressed young man in the shiny convertible.

"Pardon me, sir, but would you like to help the Poor Girls Home?" she inquired.

"And how," he exclaimed. "Where are they now?"

Joel Bowles
Summer Shade, Kentucky

A first grader was telling her teacher about her eight brothers and sisters. "My," said the teacher, a big family must be expensive."

"Oh no," replied the little girl. "We don't buy them—we raise them."

Phillip Micheal Lewis
Soperton, Georgia

Salesman: "It's a one-owner car."

Interpreter: "The Acme Finance Company."

Victor David, Jr.
Georgetown, Texas

"Are you the barber who cut my hair last time?" asked a boy with real long hair.

"It couldn't have been me," replied the barber. "I've only worked here two months."

Roger Morken
Granite Falls, Minnesota

Cowhand: "Aren't you putting your saddle on backwards, sir?"

Dude Rancher: "That's about all you know about it, smarty. You don't even know which way I'm going."

Ronnie Veale
Advance, Missouri

A boy was in a classroom one day, and he kissed the girl behind him. The teacher saw this and said to the boy, "I'll teach you to kiss a girl in this classroom."

"But," the boy said, "I've already learned how!"

Monty Fitch
Springville, Indiana

Mother: "Son, what do you want to be when you grow up?"

Son: "I want to be a preacher."

Mother: "Why?"

Son: "Because I have to go to church anyway, and I'd rather go and holler than go and sit still"

Larry Lee Wright
Graceville, Florida

A little tot in church for the first time watched the ushers pass the collection plates. When they neared his pew, the little fellow piped up so that all the congregation could hear, "Don't pay for me, Daddy, I'm under five."

Sandra Morgan
Camden, Arkansas

A stranger wandered into a church in the middle of the sermon. After about fifteen minutes, he got impatient and asked the man next to him, "How long has the minister been preaching?"

"About thirty years, I think," was the answer.

"I'll stay, then," the stranger decided. "He must be about through by now."

James Grayton III
Washington, Georgia

City fellow: "This looks like healthy country. What is the death rate?"

Fast thinking small townner: "One to a person."

Joe Falco
Round Rock, Texas

Two children visiting a museum saw a mummy wrapped in bandages with a sign on it that read "2400 B.C."

Boy: "What is that sign?"

Girl: "I guess that's the license number of the car that ran over him."

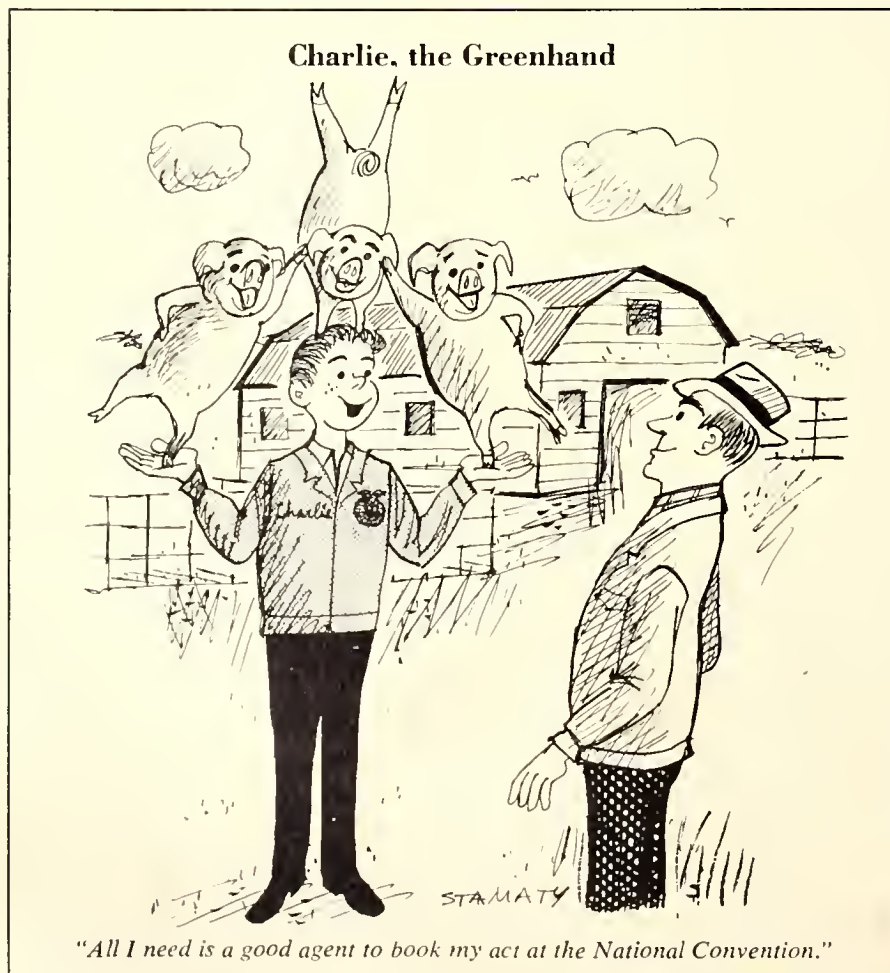
Ricky Haynes
Holyoke, Colorado

"Open wide," demanded the dentist as he began his examination of a new patient. "Good grief!" he said. "You've got the biggest cavity I've ever seen!—The biggest cavity I've ever seen!"

"You didn't have to repeat it," snapped the patient.

"I didn't," said the dentist. "That was the echo!"

Dale Waldrop
Cove, Arkansas



"All I need is a good agent to book my act at the National Convention."

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because you're missing this.

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This brand-new 14" x 18" Hayliner[®] baler practically eliminates field loss.

120 closely spaced teeth go over a field like a fine-tooth comb. (*Super-Sweep* is standard on wire-tie models, optional at extra cost on twine tie models.) Not much hay gets missed. Tons more get baled.

The fact is, the New Holland "273" gives you "more" in a lot of ways:

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- Consistent tying by the precision knoter, rated tops by experienced baler owners. Thousands of bales without a miss!

- Overall ruggedness—from the roller chain on the pickup drive to the reinforced bale chamber. A hard-working machine that gets by with minimum upkeep.

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