The National Future Farmer

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April-May, 1963

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OUR COVER (Photo by Ralph J. Woodin)—The proof of Paul Pence's dairy project success is recorded within his record book. It helped him earn the American Farmer Degree last fall, but not without help from his dad, right, and four years of vo-ag at Hilliards, Ohio, High School.

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Watch for Purina's new trophies

The rough, plaster models shown above are just hints of two bright, new Purina Championship trophies in the making. (You'll have a chance to win one in the future.)

Here's the story behind the trophies: Several years ago Purina asked a famous sculptor, Carl Mose, to produce a bronze statue depicting a typical farm boy rolling up his sleeves to tackle a man-sized job. This symbol was to be placed in the quadrangle of the Danforth Farm Youth Center near Gray Summit, Missouri. Mose made the statue, and each year thousands of visitors admire it when they come to the Center to see the beef steers, dairy heifers, lambs and pigs growing on experimental Purina Chows.

Later, Mose was again engaged, to carve a similar statue of a young farm girl. It now stands on the lawn at the National 4-H Club Foundation near Washington, D.C., where thousands of folks see it every year.

What better models than these two widely recognized statues for new Purina Championship trophies? Sculptor Carl Mose was called again and asked to make miniatures of the two statues.

His first efforts—the first rough, plaster miniatures—are above. They don't look the same today. Working with Gene Hoy, Purina artist who designed the trophies, sculptor Mose has refined the figures to look more nearly like the statues. The casting molds of the figures have been made. The final step—to pour the bronze trophies, polish them, and put them on a special base with room for your name to be inscribed.

Watch for a picture of the new trophies in a future issue of this magazine. (And ask your local Purina Dealer or Salesman how to win one.)

PURINA

Ralston Purina Company, Checkerboard Square, St. Louis 2, Mo.

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Box 291, Route 1
Ripon
Jose Julian Almeida
Route 5, Box 16C
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COLORADO
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Idaho Springs
William Sulser
Idledale
ILLINOIS
Perfecto Colunga
411 Judson
Bensenville
James T. Mullenix
R. R. 3
Decatur
Lestir Sempkowski
R. F. D. 3, Box 75
Edwardsville
INDIANA
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R. R. 4, Box 336
South Bend
KANSAS
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Your Editors Say . . .

It is state convention time again. They get under way this month in a few states and will continue until August. Some are held at the college of agriculture while others are staged at convenient cities within the state.

Wherever held, they offer Future Farmers a great opportunity to take an active part in their organization. Run by the members under adult guidance truly describes the FFA. And it is this participating experience that will give you the training in leadership, cooperation, and citizenship which will carry over to your adult years. It has often been said there are no losers in the FFA. Though you may not win an award, the experience you gain from taking part in these activities makes you a winner.

This is true at all levels of the organization—whether it be in your local chapter, state association, or the national organization.

To realize the size of the FFA, think for a moment about the 388,000 members in nearly 9,000 chapters in every state and Puerto Rico. Each chapter with its officers, public speakers, judging teams, and other activities—all are bound together with their common interest in agriculture.

Then remember that all of this would not be possible without you—the member—and your local advisor. Both of you are mighty important in the FFA. Think, too, of your responsibility to uphold the high standards of the FFA when you don the blue and gold jacket. You can take pride in knowing that it is known and respected all over the country.

Take an active part in your local chapter, but don't let your interest stop there. Know your state association and be informed about the national organization. The future of agriculture is in the hands of you and your fellow Future Farmers. The experience you gain in working with them today in the FFA will help you work with them in solving the problems of agriculture in the years ahead.

What does the FFA mean to you? This would make an interesting discussion with any group of Future Farmers. The answers would vary, I'm sure, but each would have a special meaning when related in terms of the experience the member has had with the FFA.

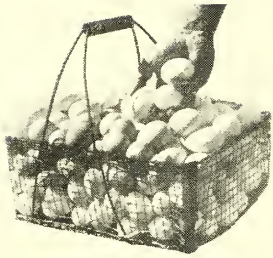
The editors would like to know just what does the FFA mean to you. To find out, we're offering a prize of $10 to the best answer, $7.50 second place, and $5.00 to third place. Entries can be written in longhand or typed, but must be postmarked not later than April 30. Mail your entry to *The National FUTURE FARMER*, Box 29, Alexandria, Virginia. We are quite anxious to read what you have to say, so get your entry in the mail right away.

Wilson Carnes, **Editor**

Texaco Marfak can cut out breakdowns!

Field breakdowns are no picnics. All that lost time can add up to a smaller crop and smaller profits for you. That's the kind of trouble you could avoid with Marfak, Texaco's hard-working lubricant. Marfak protects against breakdowns. Protects because it stays on the job. Stays in bearings. Seals out dust, dirt, and mud. Doesn't pound out, doesn't dry out, doesn't leak out. Resists rain and dampness. That's why you can depend on Marfak to keep your equipment working even when the going is rough. Call your Texaco man. Ask for Marfak, and all the other top-quality Texaco farm products you need. Get his advice, too—because, on the farm and on the highway, it pays to *trust the man who wears the star.*

TEXACO



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Thanks a million for the check for my joke. It will come in handy since I bought my first $25 savings bond last Saturday.

I sent the joke in and forgot all about it until last week when I came home from school to find your letter. Some instinct told me it was a check even before I opened it, but it was still a pleasant surprise. Thanks again.

I must close now, for the school bus is just around the corner.

Leon Perry White

Drakesville, Iowa

I have been reading *The National FUTURE FARMER* since 1956, and I must say I enjoy it. Since I wasn't able to go to college, I look forward to the information in your Magazine as well as the free booklets. I, too, would like to receive it monthly.

I am trying for the American Farmer Degree this year, and I feel your Magazine has inspired me to become a good farmer. The articles on the Star Farmers and National Officers have given me a goal at which to shoot.

Max Proctor

Best of luck, Max, with the American Farmer Degree. Hope to see you in Kansas City this fall.—Ed.

Rutherford, New Jersey

I just read the note in Reader Roundup by Jay Malumphy about not living on a farm. I think he should know that we live in the city, but our son graduated last June in the vo-ag course at Hackensack. He raised his chickens and lambs at the high school and some plants here at home in a greenhouse built out of storm windows.

He was awarded the State Farmer Degree even with these limited facilities and now plans to farm when he returns from active Reserve duty. I am mailing this issue to him after we read it. We owe a lot to his advisor, Mr. Geils, who helped him find his place in life.

Mrs. Lorrayne Genack

Seaford, Delaware

I would like to thank all the staff members of your Magazine for the most up-to-date coverage on all tips used on a farm. Your Magazine is the best one that I have read about boys who live on farms.

Eugene Byran

Los Banas, California

I am married now and the reason I am sending for your free booklets is to further my studies in agriculture.

Since I was in FFA in high school, I have been farming 106 acres, and I plan to farm more in the future. For this reason I would appreciate your sending me any kind of information relating to farming.

I understand it's only for FFA members, but I am still a member until the end of next year. Also, if you could direct me to where I could get more ways of studying agriculture, it would be appreciated.

Ted Meza

Subscriptions and the free booklets are not limited to FFA members, Ted. We're sending the free booklets and also referring you to sources of agricultural information in your state.—Ed.

Bellevue, Michigan

I think that your Magazine is a great help to all Future Farmers. I like almost all the stories on livestock and crops on the farm and your stories on sports. I'm proud to be a member of the Future Farmers of America.

Clyde David Lahr

Weleetka, Oklahoma

I greatly enjoyed the article "A Boy, A Goal, A Future" in your past issue! I shall try to set my sights as high as he did to succeed.

As to whether or not you should choose an occupation while still in high school, I think you should. I plan to try for State Farmer and go to college to major in animal husbandry. Then I would like to go into farming.

Jerry Shropshire

Archie, Missouri

My answer to your question on choosing an occupation is a definite yes. Most job opportunities in the future will require special training. Much of this training can be acquired while still in high school, and if the job requires a college degree, a person needs to major in courses in high school which will be beneficial for college enrollment.

If you can't decide on a particular career while still in high school, you should at least try to decide on what general field you would like so that training of that type can be followed.

Le Roy Davis

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The Challenge Of Agriculture

by
Dr. A. W. Tenney
National FFA Advisor
Washington, D. C.

"WE'RE at the Crossroads!" "Now is the Time for Decision!" "Now's the Time to Plan Your Future!" How often a Future Farmer hears those expressions! And yet, how true.

For in a young man's life there is a crossroad every day—a decision to be made, a direction to be chosen, and a need for planning.

So it is with choosing a career. To some extent, the Future Farmer chose a career when he enrolled in vocational agriculture. But vocational agriculture and the FFA can lead to a great variety of careers. This spring, the U. S. Department of Agriculture is planning a huge exhibit entitled "23 Million Jobs." The emphasis will be on the great number of employment opportunities that exist in the broad field of agriculture, but plenty will also be said about the *educational requirements* for those who would seek work in agriculture.

Take a look about you. What are the opportunities in agriculture?

Despite those statistics you've heard about the declining number of farmers, there still are something like 3.5 million farms in the United States. They provide work for about six million people. Farming is America's most basic industry, and its largest one. The investment in farming is more than 200 *billion* dollars or about three fifths of the market value of all corporation stocks listed on the New York Stock Exchange. Don't sell farming short as a career.

Vocational agriculture in high school is ideal preparation for farming, but it's just the beginning. If you plan to farm, and can't afford it, continue your agricultural education in college. If you can't afford college, join a young farmers' class; attend short courses at the college; keep up to date by reading farm magazines, bulletins, and other sources of agricultural information. The most successful farmer today would be hopelessly behind the times within a few years if he failed to continue seeking information.

Many Future Farmers cannot afford the initial investment for getting into full-time farming. There is, however, a good demand for skilled farm workers. The "hired hand" occupation has been one of low status in the past, but as farming has become more technical, the demand for skill in

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hired farm workers has increased and so have the salaries. The young man who applies himself may quickly move from hired hand to farm manager, and in many cases this can lead to full ownership or a partnership.

What about other occupations in the broad field of agriculture? The number of different kinds of jobs is almost endless. Some require a college education; for others the vocational agriculture graduate may need to qualify through special technical training after he leaves high school.

The best jobs, of course, are open for those who have their vocational agriculture and FFA training in high school, then go on to receive a college degree in agriculture. The vocational agriculture teacher, the county agent, and the soil conservation engineer are easy-to-spot examples of men holding jobs requiring agricultural education in college. Private industry employs many agriculturists and they'd like more. You'll find them in almost every industry and particularly in those industries closely allied to agriculture. They are agricultural salesmen, advertising men, public relations specialists, researchers, and engineers; they draw good salaries; some end up in top management positions.

When you tune in your favorite farm radio or TV program, you are listening to the voice of a man who has found a rewarding career in agriculture. The article that appealed to you in last month's farm magazine was written by a person trained in agriculture. Wherever your turn, you'll find the footprints of a man who has the kind of job in agriculture that you can have, if you'll plan and work for it.

Roughly, about half of vocational agriculture graduates will go to college or enter farming on a full-time basis. What about the other 50 percent? What are the opportunities for them?

Does your community have an artificial insemination ring? Ask the man who comes to your farm how he was trained for the job. Chances are, he was raised on the farm, studied vocational agriculture, then took technical training for his specific job. The agricultural technician is a relatively new occupation. We're just beginning to get specialized training programs set up for him. The demand for his service is strong.

Just think how many salesmen deal with farmers and need to know how the product they sell is used on the farm. Leadership abilities gained through participation in FFA activities, combined with farm experience and training in vocational agriculture, provide a good basis for agricultural salesmanship. There are many opportunities in agricultural sales, and good salesmen earn excellent incomes.

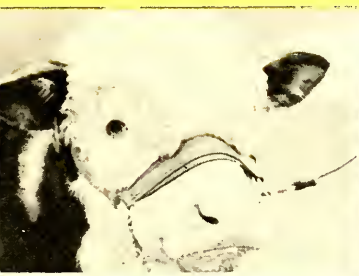
Planning a career in agriculture can be an exciting experience. We have mentioned just a few of the opportunities in this article. But in planning, you are studying the multitude of careers that are open to you—choosing one you like and one that will provide a good income. You can change your plan as the need arises. The better the planning, though, the less will be the need for adjustment.

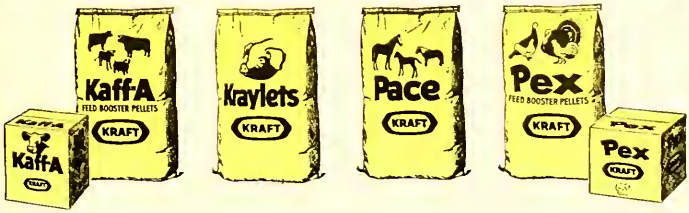
For most Future Farmers there will be little certainty about a chosen career until the day he completes his formal education and begins to work. But one thing is certain: Every day in school, every lesson well learned, is like money placed in a savings account.

The bank of knowledge returns both interest and principal. The more that is placed in it, the better will be the return. Repeated research shows conclusively that the level of earnings goes up with the level of learning. The work you do *today* will have a lifelong effect on your future career.

MILK-BANK BOOST

Milk by-product feed boosters by Kraft





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...where better nutrition starts with milk

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THAN EVER BEFORE TO FINANCE YOUR GROUP ACTIVITIES!

LEARN THE EXCITING PROFIT STORY OF THE ORIGINAL

Peanut Products Fund Raising Plan

The recognized leader in profitable fund raising through the sale of vacuum sealed roaster-fresh salted nut products.

For 14 years Peanut Products Company has been a profit partner in thousands of group fund raising projects.

Over the years it has been proved time and again—people prefer to buy roaster-fresh salted nut products. That's why they're easier to sell! That's why your profits are greater!

That's why this unique fund raising plan—*time-tested* and *profit-proved*—will be perfect for your group's next money-earning project, whatever your needs.

Mail the coupon now for complete information about the original Peanut Products Profit-Proved Fund Raising Plan.

PEANUT PRODUCTS COMPANY
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We would like to know more about the Original Peanut Products Fund Raising Plan. Please send complete information to:

YOUR NAME_____

ORGANIZATION_____

ADDRESS_____

CITY_____ZONE_____STATE_____

DEPARTMENT 45F

Bruce Lourie, right, turns over list of donors to FFA Foundation to new chairman, J. W. Keener.

Working for You

EARLIER this year, J. Ward Keener, president of the B. F. Goodrich Company, assumed full duties as chairman of the Sponsoring Committee of the Future Farmers of America Foundation, Inc. Retiring Chairman Bruce Lourie, vice president of Deere and Company, worked closely with Mr. Keener in transferring the chairmanship.

As chairman, Mr. Keener is now at work raising funds to support the Foundation's awards program for Future Farmers. These funds are provided by business and industrial companies and individuals who contribute annually to the Foundation. Some 80,000 medals are awarded to outstanding Future Farmers in local chapters with cash awards at the state and national levels.

Last year, under Mr. Lourie's chairmanship, 376 donors contributed $191,000 to the Foundation, making it one of the best years ever in terms of the number of donors and the amount contributed.

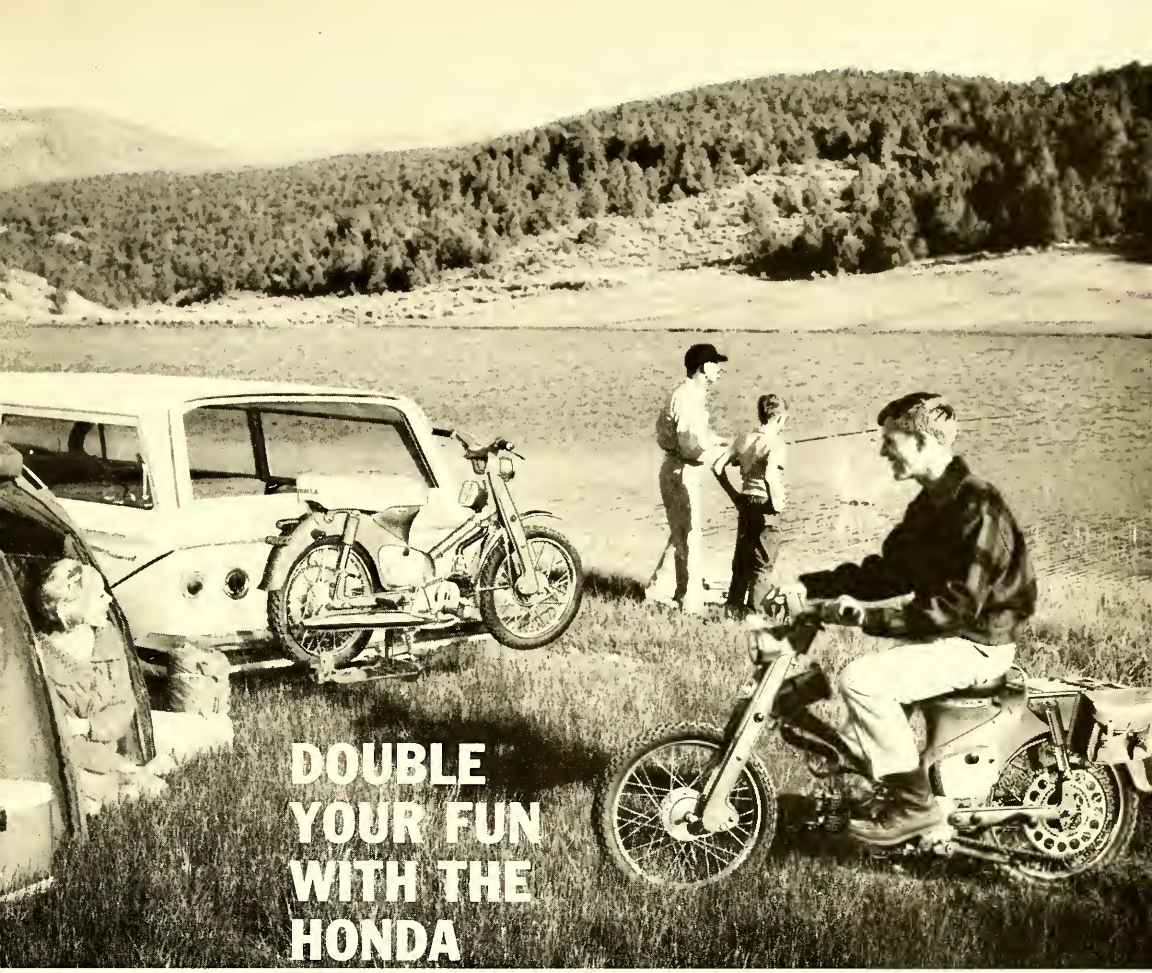
Is there an award for you? Your local advisor can tell you which awards are available and what you must do to qualify. The donors hope that these awards will stimulate you to further effort in your studies, your supervised farming program, and your organizational leadership activities.

23 Million Jobs in Agriculture

CONSIDERING a job in agriculture? The U. S. Department of Agriculture has developed an exhibit entitled "23 Million Jobs" to be shown from April 15 through May 15 in the patio of their Washington headquarters.

Designed especially for high school students who are considering a career in one of agriculture's related fields, the exhibit covers such areas as farming, research, agri-business, marketing, and forestry. Movies shown continuously in an adjoining theater will add to the information described by booths and displays in the main patio.

You can see this "first-of-its-kind" exhibit free of charge from 9:30 a.m. until 5:00 p.m., Monday through Friday, on the above dates. Students planning to be in the vicinity of the Nation's Capitol during this time are urged to spend the 30 minutes necessary to see this wealth of agricultural information.



TRAIL "55"!

only $275 plus destination and setup charge

If you want to double your pleasure in fishing, camping, hunting or exploring, add a HONDA (or two) to your equipment. With the all-new HONDA TRAIL "55" on your camper or station wagon, you'll find that the best fun—and the best fishing and hunting—begins where the road ends. You'll go places and see country you couldn't reach before, even in a jeep. No other trail machine can match the economy and superb performance of the amazing HONDA TRAIL "55." *Or the popularity.* HONDA outsells all other makes by a country mile.

The HONDA TRAIL "55" is a wonder of lightweight power, agility and ease of riding. Its 5 full horsepower, increased torque for greater climbing ability, and 70 to 1 low gear ratio will take you and 250 lbs. of payload up 45 degree slopes and across country that would discourage a mountain goat, yet the HONDA itself weighs just 121 lbs.

Before the outdoor season gets a day older, test ride a TRAIL "55" at one of the more than 800 HONDA dealers. For your nearest dealer, call Western Union by number and ask for Operator 25.

World's Largest Motorcycle Manufacturer

HONDA

AMERICAN HONDA MOTOR CO., INC., P.O. BOX 19-488, LOS ANGELES, CALIF.

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Spraying orchards protects against insects and disease resulting in higher quality fruit and greater farm profits.

The protection of top quality farm lubricants is similarly recognized by successful farmers in caring for their equipment. Small wonder so many of them use Kendall farm lubricants. All are refined from the choicest 100% Pennsylvania Crude Oil. All offer the Economy of Kendall Quality—important dollar savings because of better, longer lasting protection of vital farm machinery.

USE
KENDALL
FARM
LUBRICANTS

KENDALL
MOTOR OILS

KENDALL REFINING COMPANY • BRADFORD, PENNA.
Lubrication Specialists since 1881

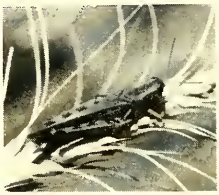
Insect Puzzlers

HOW well do you know your insect neighbors? Within a few weeks these common creatures will emerge to begin life anew among the farmers' crops. You'll find them in pastures, on crops and trees, and on livestock in the fields. See if you can identify them; then check your conclusions with the answers on page 67 . . .

A A needle-nosed insect common throughout the South. Farmers consider him an important enemy. Monument erected to him.

B You'll see this beetle in gardens and truck farms this spring.

C Compound eyes feature this barn and stock pest. Found almost anywhere in U. S.



D Grain, grass, most crops come under his long migration hops. A major pest.

E Often found inside stalks, he causes corn to break.

F His name is the same as a tree. You can look for his irritating sound and empty skin once each 17-year life cycle.

G This harmful pest came to this area several decades ago on shrubbery imported here from the Orient. Hibernates.

USDA Photos

DO PASTURES FIT MODERN FARMING?

Farm Managers say YES—cite low costs and flexibility in livestock feeding

Intensified livestock farming has raised many questions about the tried and proven ways of farming. What about the economies of good grass pastures and ranges? Is it better to let the cattle harvest the crop or do it with machinery, then feed it in mechanized feedlots?

Experienced farm managers see advantages on both sides, but caution about feeding systems that rely solely on force feeding at all of the later stages of livestock growth. Professional managers and practical feeders agree that good grass pastures, either rotational forage crops or permanent pasture, provide two important advantages that fit into profitable feeding, year after year. They are: (1) low cost feed, and (2) wide flexibility in the season and condition stock reaches the market.

Low Cost Gains

Arguments about the value of pasture forage fly high, wide and handsome, but the cost of meat and milk produced on pasture has been authenticated time and again in research. There's no question about the economy of feeding on good pasture.

In actual tests beef gains in Kentucky have been valued at as much as $85 an acre per year. Thirty midwestern hog farmers brought in an average of $48 an acre from pork, after paying market prices for supplemental grain. An acre of pasture for dairy cows at Wooster, Ohio, produced an income of more than $131 in a single season.

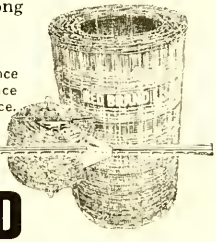
Marketing Flexibility

Agricultural economists see an equally important advantage in pasture feeding in the flexibility it provides in marketing, particularly when feeding cattle and sheep. Feeders can speed-up or delay the rate of market conditioning by the amount of supplemental feeding done. Thus feeders can schedule their marketings according to the projected movement of finished cattle and sheep. This is a practice that is much more difficult when feeding is done in highly mechanized, intensified feeding operations.

Pasture Booklet—FREE

The economics and practical management of pasture for high-profit returns is the subject of a booklet published by Keystone Steel & Wire Company, Peoria, Illinois. The title is *Pasture—How to Reduce Feed Costs.* It reports on the research findings of many agronomists and animal husbandry scientists. A copy will be mailed to you on request.

Good pasture incomes and Red Brand® Fence go hand in hand. Good fences permit alternate grazing, save time in handling livestock. In the long run, Red Brand Fences cost less, because every wire is Galvannealed® to fight off rust and corrosion. Red Top® steel posts complete the perfect fence combination—good looks, long lasting, dependable strength.



Keyline Poultry Netting. Red Brand® Fence and Barbed Wire. Red Top® Steel Fence Posts. Baler Wire. Non-Climbable Fence.

RED BRAND

KEYSTONE STEEL & WIRE COMPANY
Peoria, Illinois

KEYSTONE STEEL & WIRE COMPANY—Peoria, Illinois

Please send me the FREE booklet *Pasture—How to Reduce Feed Costs*

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On America's leading farms

Myers

PUMPS and POWER SPRAYERS

help the farmer produce more ... and live better

For over 90 years, Myers products have helped farmers increase productivity and reduce operating costs. This is a contribution of which The F. E. Myers & Bro. Co. is proud.

The company works regularly with county agents, Vo-Ag teachers and other persons interested in gaining new information about better farming methods. Myers' field representatives are available for technical assistance.

Myers' field representatives cooperate in educational training on farm spraying and water supplies.

For information or free literature on:
- Pumps and Water Systems
- Water Conditioning
- Farm Spraying

write to the Educational Services Department.

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The F. E. Myers & Bro. Co.
ASHLAND, OHIO KITCHENER, ONTARIO
SUBSIDIARY OF THE MCNEIL MACHINE & ENGINEERING CO.

Looking Ahead

MILK TO TREAT HUMAN AILMENTS

Drink milk to treat your arthritis or hay fever? It may be a common prescription if Minnesota researchers continue to receive good results. They have injected germs of human diseases into the cow's udder, the cow builds up an immunity in her milk, and persons drinking the milk receive the disease-fighting benefits. The udder manufactures protective germs the same way as it does when the cow has a calf. Researchers report 80 percent success with types of human arthritis.

NEW-FOUND PLANTS

A cherry tree that flowers in the dead of winter, small maples that produce colorful reddish purple seed pods, and orchids that bloom through several frosts have been brought into the United States from the kingdom of Nepal. Plant scientists from the U. S. Department of Agriculture recently returned with a record 250 plant collections in addition to the above finds. Most of the new plants were ornamentals. The cherry tree, to be planted in the South, is dormant in the fall, flowers in early winter, then produces fruit in early summer.

HOGS INCREASE INCOME

South Dakota livestock specialists lined up beef, sheep, and hogs to determine which enterprise returned the most farm income, and hogs came out on top. Using a $1,000 increase in gross farm income as a goal, the specialists found that 2.1 sows farrowing twice a year grossed the $1,000 with only $592 in capital and 166 hours of labor invested. This was in contrast to 11 beef cows requiring $2,664 invested and 220 hours of labor, and 46 ewes requiring $1,196 and 230 hours of labor.

BULLET-PROOF WOOD

Wood treated until it is virtually bullet-proof and unbreakable has been tested at Virginia Polytechnic Institute. Ordinary green pine soaked in a solution of water glass and baking soda took on iron-like properties when tested for hardness. The transparent water glass solution is readily available and not difficult to prepare, researchers report. Products such as gun stocks that are nearly as hard as the barrel may result.

BUILT-IN CHICKEN THERMOMETERS

At Clemson College there are some chickens running around with permanently installed thermometers. And to top it all off, the devices are plugged into recorders! Poultry scientists wanted to keep a record of the changes in the birds' temperatures, but found it hard to do the usual way. They made an opening in the chicken's body, inserted a tiny thermometer, then looped the wire around the body to keep it out of the way. The method doesn't harm the bird, incidentally.

PROLIFIC CORN

A goal of the University of Minnesota is to develop corn hybrids with two or three ears per stalk rather than one, with ears averaging one to four inches longer than current hybrids, and with kernels twice as long and more numerous than current varieties. Researchers say the germ plasm is now available from South America and Switzerland and is being evaluated. The yield per acre of the new hybrids is hard to predict, but doubling the present yielding capacity is entirely possible.

RESEARCHERS "BOMB" EGGS

New bombing machines, designed to crack eggs, have been put to work at the Hy-line Poultry Farms to test egg shell strength from various strains of birds. At the rate of 80 dozen a day, or 250,000 dozen each year, the machines crack shells to determine which parent birds transmit strong shell qualities to their chicks. The "bomber" drops small steel balls weighting two grams each at different heights until the shell cracks.

Power up with AC—the spark plug SPECIFICALLY DESIGNED for farm tractors!

1. **SPECIFICALLY DESIGNED** to reduce flashover, eliminate misfiring and in turn save fuel. AC's Buttress-Top Insulator is the reason. Larger, huskier, tougher, AC's new extra-strength insulator is also designed to prevent installation breakage, withstand the heaviest use.

2. **SPECIFICALLY DESIGNED** to effectively retard rust and corrosion. Water and moisture will not penetrate AC's New Nickel-Plated Heavy-Duty Shell.

3. **SPECIFICALLY DESIGNED** to deliver reliable ignition and power during critical work periods. That's because AC's New Self-Cleaning Hot Tip heats faster to burn away fouling deposits as they form, cools faster to discourage pre-ignition.

4. **SPECIFICALLY DESIGNED** to deliver greater sparking ability, maximum gas economy. AC's New Knurled Center Electrode ignites combustion gases more easily, eliminating possible wasted power, wasted fuel.

Be sure *you* get total power out of your modern farm equipment. Install AC Heavy-Duty Spark Plugs . . . the *only* spark plugs specifically designed for farm tractor and implement use. AC's heavy-duty line also features pressurized internal construction, fused center seals, and welded side electrodes—all designed to give you fast starts, top fuel economy, maximum engine power. So, for added hours of total power . . . get AC Farm Tractor Heavy-Duty Spark Plugs from your dealer today!

AC

FARM TRACTOR
HEAVY-DUTY
SPARK PLUG

AC SPARK PLUG THE ELECTRONICS DIVISION OF GENERAL MOTORS

National Officers Visit Washington, D. C.

A WEEK of meetings, tours, and political dignitaries greeted the national FFA officers as they visited Washington, D. C., earlier this year. It included a visit to the national FFA building, services at Christ Church in Alexandria where they sat in George Washington's pew, and a meeting of the FFA Board of Directors. The week's activities helped prepare the six national officers for the four-week Goodwill Tour that began when they left the Nation's Capital.

1. Kenny McMillan visits with Illinois Senator Paul H. Douglas in his office. Afterwards they lunched with lawmakers.

2. "My story's in there," Kenny tells Illinois Advisor Damisch and Congressmen Findley and Anchor Nelsen.

3. Florida Congressman Don Fuqua, left, former state FFA president, visits a meeting with Kenny and Dr. Tenney.

4. Duane Leach met Minnesota Senator Hubert Humphrey for the first time in his capitol office to air farm problems.

5. Two Tarheels enjoy some luncheon humor—National FFA Vice President Larry Whittington and his friend, North Carolina Senator, Samuel J. Ervin.

6. A welcome to National Grange headquarters by Master Hershel D. Newsom. A luncheon for the officers followed.

7. Dick Mottolo was surrounded by his Massachusetts political neighbors, Congressman Bradford Morse and Senators Ted Kennedy and Leverett Saltonstall.

A highlight of the Capitol Hill visits was the opportunity to meet HEW Secretary Anthony J. Celebreeze and Commissioner of Education Francis Keppel, right.

DO CROPS IN YOUR AREA NEED ZINC?

Discovering the need for ZINC is a rapidly changing part of farming. Zinc is one of the important trace elements. Very often it is deficient.

New research by state agricultural colleges indicates that zinc deficiencies are occurring in new areas, among a wide range of crops. This is especially true where lime, nitrogen, phosphorous and potash have been applied in optimum amounts for maximum yields.

Watch out for zinc deficiencies under these conditions:

1. Soils with a high pH.
2. Soils testing high in phosphorus.
3. Areas where the subsoil has been exposed by land leveling, tiling, erosion, and in dead furrows.
4. During cool or wet weather.

Soybeans, navy beans, corn, sorghum, cotton, tomatoes, and potatoes have a high requirement for zinc. Other crops may also require extra zinc.

If you suspect a zinc deficiency, use a SMITH-DOUGLASS fertilizer containing extra zinc.

To prevent a shortage of zinc, use Smith-Douglass fertilizer with TREL. TREL, Smith-Douglass' exclusive formula of trace elements, is added to prevent a shortage of zinc or any of the other trace elements. TREL, copyrighted by Smith-Douglass, contains all trace elements.

Don't risk a zinc deficiency. Choose SMITH-DOUGLASS fertilizer with TREL for every crop . . . every year.

NO. 2 OF A SERIES

SMITH-DOUGLASS

HOME OFFICE: NORFOLK, VIRGINIA

Smith-Douglass Co., Inc. manufactures and distributes fertilizers and chemicals for agricultural and industrial use, including sulphuric acid, anhydrous ammonia, phosphoric acid, nitrogenous tankage, phosphate rock, superphosphate, farm fertilizers, lawn and garden fertilizers, feed phosphorous supplements . . . dicalcium phosphate and defluorinated phosphate . . . potassium silicafluoride and potassium fluoborate.

SMITH-DOUGLASS FUTURE FARMER OF THE MONTH

William John Steinhauer
Mt. Horeb Chapter
Mt. Horeb, Wisconsin

William is attending the University of Wisconsin with the assistance of a Smith-Douglass scholarship. He was a member of the Mt. Horeb FFA chapter and plans to work in the field of Horticulture after graduation from college.

Illinois Grand Champions "given 'Clovite' almost from moment they were picked for showing"

LU ANN TUCKER, 11-year-old 4-H member, of Chrisman, Ill., and Herman, her Shorthorn steer, which was named Grand Champion–All Breeds, Open Steer Class, at the 1962 Illinois State Fair. At the left are her dad, Malcolm B. Tucker, and her brother Otho Bruce. Lu Ann also showed the Reserve Grand Champion Female, Open Class.

Lu Ann's father first started using CLOVITE on his breeding herd five years ago, to straighten out a vitamin A deficiency. He suggested that Lu Ann give CLOVITE a try on her show animals. Mr. Tucker reports that her two 1962 winners were given CLOVITE almost from the moment they were picked for showing.

"Inside of only two weeks we could see a remarkable change—new glossiness, sheen and deeper color in the coats, and increased appetites." He goes on, "Our show prospects get CLOVITE daily with every feeding. When we travel the show circuit, CLOVITE keeps a better fill on."

No product could receive a higher recommendation than this, from Mr. Tucker, and his daughter who owns, raises and exhibits Champion beeves.

• • •

CLOVITE is a concentrated vitamin source. Supplies essential quantities of *natural* vitamins A, D and B12, along with thiamine, riboflavin, niacin, choline and pantothenic acid. Its fish-oil meal base helps conserve the vitamin properties. Mixes with any feed. Adds palatability. Available in 25 lb. pails or 100 lb. drums, from your local veterinarian. See him soon—*he knows best, what's best.* Fort Dodge Laboratories, Fort Dodge, Iowa.

nothing so good as

Clovite®

FORT DODGE®

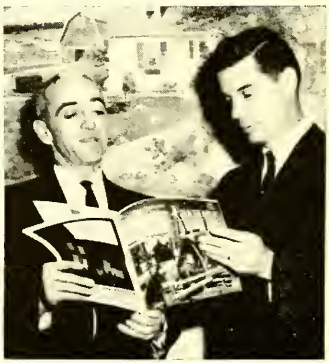
Display Your Awards

HERE is an attractive way to display the medals you have earned in the FFA. As you recall, the Official Manual states that not more than three medals should be worn on the FFA jacket at one time.

The parents of Eldon Cox, Future Farmer from Mooreland, Oklahoma, solved the problem this way: They had a wooden plaque made in the shape of a state award that Eldon had won while in high school. Onto the front of the plaque, they affixed a piece of blue corduroy with Eldon's name and FFA office stitched at the top.

All pins and medals were pinned to the corduroy material in a neat manner, starting with the Green Hand award. Best feature of the novel idea is that the awards can be taken off and worn at any time. When Eldon returned from his first year in college, he found the finished plaque neatly hanging in his room.

Do you have a different idea on how to display these awards? Send it to *The National FUTURE FARMER* now for others to see.



Wenroy Smith, left, president of the National Vocational Agricultural Teachers Association, discusses "The National FUTURE FARMER" with Editor Carnes. Mr. Smith met with the staff to discuss how the Magazine can better serve vocational agriculture and the FFA.

"It makes sort of a tic-tic-tic peep baa-room"

Imagine trying to diagnose an engine's ills from a description like that. And yet, good mechanics do it all the time.

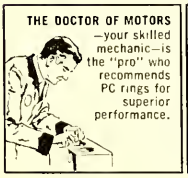
That's because most mechanics today are better trained than ever before. And part of that training comes from the makers of Perfect Circle piston rings.

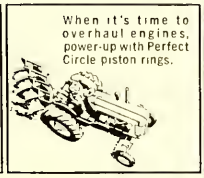
Many years ago we set up our Doctor of Motors clinics to provide garage repairmen and farm equipment mechanics with specialized training in engine maintenance. Over 800,000 men have attended throughout the world!

Your skilled Doctor of Motors is a good man to see when *your* car or your powered farm equipment "tic-tic-tic's." And if his diagnosis calls for a re-ring job, he'll most likely recommend rings made by Perfect Circle.

There's good reason for this. PC rings are specified as original equipment in 95 makes of engines and vehicles, including almost every American-built passenger car, tractor or truck.

No other rings outperform Perfect Circles. No other rings do a better job of restoring like-new oil economy and power.





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Piston Rings • Cylinder Liners • Precision Castings • Turbine Blades and Wheels Electronic Programing Equipment • Speed Controls • Hagerstown, Indiana

Plants and Subsidiaries: HAGERSTOWN, RICHMOND, NEW CASTLE, TIPTON AND RUSHVILLE, INDIANA THE PERFECT CIRCLE COMPANY, LTD., DON MILLS, ONTARIO, CANADA • SCHELLENS TRUE CORPORATION, IVORYTON, CONNECTICUT • PERFECT CIRCLE INTERNATIONAL, FT. WAYNE, INDIANA • PERFECT CIRCLE HOLLAND N.V., THE HAGUE, NETHERLANDS • Factories, Affiliates and Licensees in MEXICO, ARGENTINA, AUSTRALIA, BRAZIL AND FRANCE

Ancient bridges and thin Brahma-bred cattle are characteristic of West Pakistan.

An American volunteer inspects a sick calf for two East Pakistan villagers.

The Peace Corps puts on the BLUE and GOLD

American Bob Taylor instructs the local farmers in livestock management.

BEFORE the end of June, 200 members and former members of the FFA and NFA will be selected for a Peace Corps project in West Pakistan.

Co-sponsored by the Peace Corps, the FFA, and NFA (New Farmers of America), young farm-trained Americans will journey half-way around the world to the Rechna Doab region of West Pakistan. Here within a 1.2 million-acre plain the volunteers will work side by side with Pakistan agricultural workers to increase agricultural production through modern farming.

The unique program has been under consideration for many months while Peace Corps officials worked out details to have Future Farmers take responsibility for improving agriculture in this vast area. Perhaps no greater challenge or opportunity to serve world agriculture has been previously offered to FFA and NFA members.

Information and application blanks have been sent to vo-ag instructors across the country. Here's what Future Farmers can expect to find in the area they will serve:

The immediate area is a large, flat plain with little vegetation other than that growing in irrigated areas and near villages. This is due to a high water table which waterlogs the soil, and which has made this area one of the lowest producing ones in the world. U. S. research has shown that drilling tubewells to lower this water table is one solution, and officials have already installed over 1,800.

Future Farmers and former FFA members will be selected between now and mid-June. Applicants must be 18 years of age and over. After they are selected, volunteers will be assigned to a university in this country for training until September. After a 10-day leave, they will depart by plane for West Pakistan, where another month of on-the-job training awaits. Actual assignments will come in late October. Each of the 200 volunteers will be dispersed to a group of four or five villages, accessible by foot or bicycle. The volunteers will live singly or in pairs with two Pakistani specialists assigned to each volunteer.

Here they will find people speaking four dialects, who live in mud homes and face thick mud during the monsoons and dust the remainder of the year. Future Farmer volunteers will spend the majority of their time helping farmers with problems. Proper use of water, use of fertilizers, pest control, and better crop and livestock production are just a few areas where the Pakistani people will look to volunteers for help.

Volunteers will teach farmers improved agricultural methods through demonstration plots, meetings, and visual aids. They will develop mutual confidence and respect by living under the same conditions as the local population. Five highly qualified vo-ag instructors are needed to accompany the Future Farmers to Pakistan and act as field supervisors during the two-year tour of duty.

As with all Peace Corps planned projects, the FFA-NFA participants will have transportation, housing, and medical expenses paid while in Pakistan. They will receive a monthly allowance to allow them to live as the Pakistani co-workers and, in addition, be given $75 for each month they serve upon completion of the tour. Ten American nurses will be in the area to provide medical attention.

Already there are over 120 American Peace Corps volunteers spread among the 100 million people of Pakistan, giving services that may mean the difference between feast and famine. They await the arrival of Future Farmers this September to spread the benefits of the program. Its success is up to 200 energetic FFA and NFA members who apply now.

For more information or application forms, see your local ag teacher or write to: FFA-NFA Peace Corps Project, Agricultural Education Branch, U. S. Office of Education, Washington, D. C.

Engineer shows Peter Adams (left) how undesired sounds are engineered out of cars on GM's "indoor road."

This car is doing 70 mph!

It's running in a special sound-treated room where General Motors engineers study noises in test cars.

Since there's no way these engineers can actually get out under a car that's speeding along a road at 70 mph, they bring the car—and the road—inside for testing.

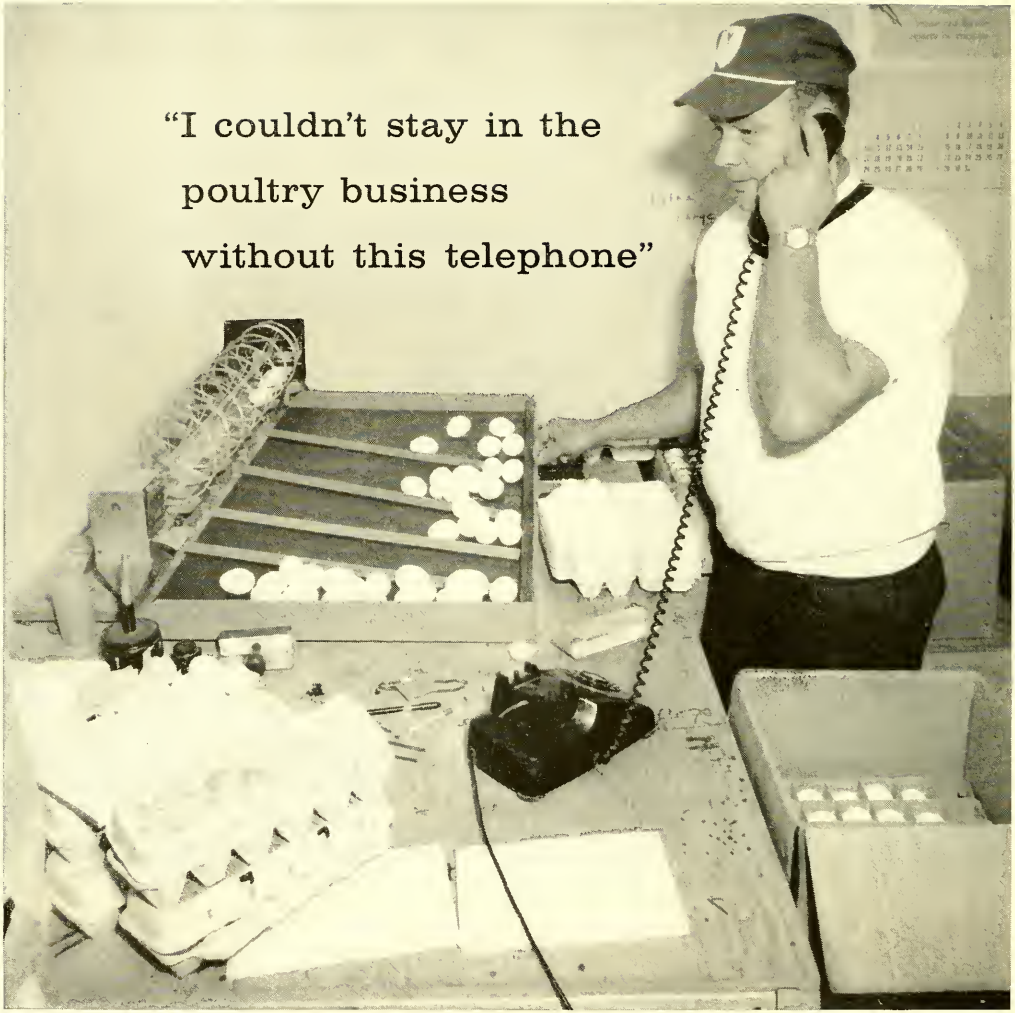
They do this by mounting cars on high-speed revolving drums located at floor level. Through electronic controls, the drums can be made to imitate the effects of driving up and down a hill——or even driving against a headwind! Unwanted exhaust sounds can be piped out of the room, so that running noises can be more carefully studied and eliminated.

More and more, General Motors engineers are bringing outdoor road conditions indoors. In this way, they have found they can best test and improve the cars of today—while making way for the better cars of tomorrow.

***General Motors** makes things better*

Chevrolet • Pontiac • Oldsmobile • Buick • Cadillac. *With Body by Fisher*
Frigidaire • GMC Truck & Coach • GM Diesel • Delco • AC Spark Plug

16-year-old Peter Adams is an honor roll junior at Detroit's Pershing High who recently visited the GM Proving Grounds near Milford, Mich. He is a member of his school's Field Science Club and is working toward a scholarship in science or engineering.



Jim Braley has 8000 Leghorn hens and 30,000 Bronze turkeys on his poultry farm in Douglas County, Colorado. Three full-time men help him handle the operation.

When he built a new home last year, Jim converted his old residence into an egg house and office. This is headquarters for day-to-day business. The extension phone in this building gets heavy use.

"This telephone keeps me close to my business," Jim told us. "There's always someone here to answer it—my wife or I, or one of the men. We'd just be lost if we didn't have a phone near our center of operations."

Each year more poultry farmers realize that having a telephone—when and where they need it—makes good business sense.

Why not sit down and estimate how much of your time an extension phone would save? Then call your Telephone Business Office and find out how little it would cost to add one.

• • •

If you want an all-around communication system, Farm Interphone is the answer. It gives you on-the-farm communications between strategically located Interphone stations. You can also make or take regular outside calls from any of these telephones.

Bell Telephone System

He's Renting his way into Farming

Refusing to go deeply in debt to get started in farming, Charles Lundy is renting even barn space for his herd.

By
Paul Weller

A FEW months back, a slim Future Farmer strode onto the stage at Pennsylvania's Midwinter FFA Convention and accepted his $100 award as Star Dairy Farmer among the state's 9,500 FFA members. His application had been selected from several hundred submitted to the state office this past fall.

Charles Lundy's dairy record was similar to scores of other Future Farmers' records reviewed by state offices each year except, that is, for one area. His total over-all investment, outside of his 45 cows, was amazingly small! He had little or no record of borrowed money with which to finance his award-winning program. In fact, he made it quite clear that he didn't plan to go into debt if he could help it! Yet he managed to amass a state-winning dairy program.

The facts behind the 18-year-old Future Farmer's low investment came to light in a unique rental plan—one in which he rents everything from crop and pasture land to machinery and even space in the family dairy barn where his cows are stabled. He has actually been renting his beginning in farming!

Birth of Charles's rental program came about some two years ago when his advisor at Towanda High School, Paul Hartman, along with the two elder Lundys, met at the family farm near the northern Pennsylvania village of Wysox. By this time, Charles had a total of 24 dairy animals. He needed barn space for the growing heifers and land and machinery to raise hay and grain. What money he had earned working on his mother's 214-acre farm nearby he had used to buy more cattle. He told Advisor Hartman that he didn't feel it would pay him to go into debt just then.

The only logical plan left was to devise a form of rental where Charles could have use of the farm's facilities with rates fair to both his parents and him. The group decided on a rate schedule as follows:

Cropland—$5.00 per acre
Pasture—$1.50 per acre
Barn Space—$10.00 per animal
Machinery—(Rented by the Job)

"I took over farming my mother's place," Charles explained to us. This was the adjoining 214-acre farm that he had helped farm in previous years. His father retained the 228-acre home farm, and the two began farming with separate operations. "We tailor our farming operations and help each other to avoid using the machinery at the same time," Charles clarified.

"I'm renting almost everything except my cows." He explained that he recently purchased the remainder of his mother's herd and is making monthly payments from the milk check. This will give him a total of 60 dairy animals.

Both father and son keep elaborate farm records, itemized as to the crops grown and the hours Charles uses the machinery on his farm. They have made it a habit to go over their records once a year around income tax time, compiling the total amount owed by the younger farmer. Rent settlement is made at that time.

With Charles's selection as State Star Dairy Farmer came a $100 check.

With 120 tillable acres on the rented farm, plus barn space and machinery costs, Charles has quite a sizable rent bill at the end of the year. But he feels strongly that getting started in farming without an excessive debt load will pay off in the long run. "I would like to buy a used tractor and more heavy producers this year," were his immediate plans.

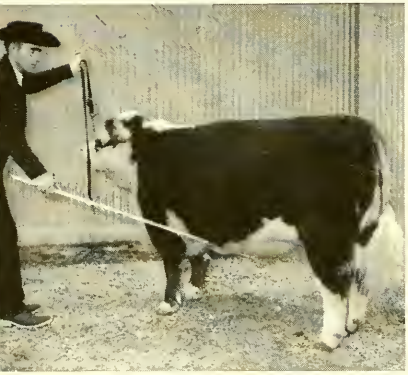
And so, Charles Lundy's story is one of a young farmer starting into his vocation with a cautious air. He prefers to feel out his markets and opportunities, then move when conditions seem best. ◆◆◆

The "How to" of SHOWmanship

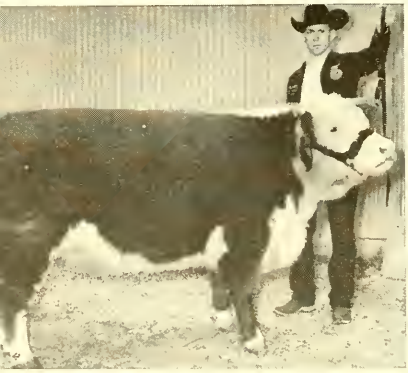
THE FIRST step in beef showmanship is breaking the calf to lead. It is important to use a rope halter that fits; an adjustable halter works best. Drive the animal into a pen or stall before trying to halter it to prevent running the calf. Halter the calf and tie it to the side of the pen. The calf will fight the halter at first but will soon give up.

Brushing the calf after he is tied helps accustom him to the feel of the halter. After about an hour of "gentling," it is a good idea to take the animal out for the first lesson on leading. It is best to have someone to drive the animal until he is broken to lead. Don't let him get loose; hang on at any cost. If a calf gets away, he is difficult to catch and will take longer to break.

Don't permit the calf to become overheated while breaking him to lead. Use good judgment. Handling for short periods regularly gets better results than once every two weeks or when you feel like working.



Correct showing with judge at rear. Showman watches judge, keeps animal in position with stick. Compare with dirty, unpositioned heifer at bottom.



Brush and groom often, every day if possible. Brushing does wonders to an animal's coat and cultivates friendship between you and the calf. This is important in showmanship.

The calf should be haltered and taken for a walk at least once a week in the early part of the fitting period and every day as the show approaches. Each time the calf is led, he should be shown and posed just as you will do it in the show. This practice is good for both you and the calf. Both must train together if success is to be achieved in showing.

Wash Regularly

During the fitting period it is important to wash the animal from time to time—about once every 10 days for two to three months before the show. Here is a good procedure to follow:

1. Secure the animal on wash rack or suitable place with a wash chain.
2. The chain should not be too tight on the neck.
3. Take halter off before washing.
4. Wet the animal down well, keeping the water out of his ears.
5. Soap all over, rub and brush the soap into the skin. Use enough soap, rubbing, and brushing to get the animal clean.
6. Thoroughly rinse the animal, making sure all soap is rinsed out.
7. Rinse with milk oil dip solution (two tablespoons to 2½ gallons of water). Use a bucket to pour this dip solution over the calf, covering all parts.
8. Scrape the animal dry with your hand, a scraper, or the back of a scotch comb.
9. Curl and brush the hair. Keep brushing and combing until the calf is dry. This helps to fluff and soften the coat and brings out the natural bloom in the hair.

Clipping and Blocking

Washing and grooming prepare the hair coat for the final tasks of clipping and blocking. Electric clippers are used to clip heads and tails of beef cattle and to block the hair over the top line to give that even, blocky appearance. It is important when clipping not to take off much hair or make nicks in the coat. The hair should be fluffy, soft, and even, making the animal appear straight and smooth in his lines.

The general practice for clipping heads and tails is as follows: All polled and dehorned steers should have both heads and tails clipped; horned steers should have only their tails clipped. Hereford and polled Hereford breeding cattle are clipped only on the tail; the same is true with Shorthorn cattle. Angus cattle have both heads and tails clipped.

Do not clip back of the halter neck strap when clipping the heads. And when clipping tails, don't clip too close to the switch. Start clipping on the tail about where the twist begins to divide. In most cases the hair should not be clipped from the ears. Calves should be clipped about a week before they are shown.

The feet should be trimmed to keep the calf square on his feet and walking properly. However, it is not wise to trim feet a few days before the show, as some calves get stiff and sore after being trimmed. This job should be done four to six weeks before the show. If the animal is horned, the horns should be polished and properly fitted for attractiveness.

On Show Day

When show day arrives, the calf should be clean with all straw brushed out of the hair and off the belly and legs. Apply enough coat bloom to make the coat glossy and fresh, and brush out the switch of the tail. The calf should have a properly fitted show halter, and you should have a show stick in hand. Be sure to dress neat and clean, relax, and look natural with your animal.

Upon entering the ring, locate the judge and the ring master and watch both for any instructions. When leading in the ring, the lead strap should be coiled in the right hand about 18 to 24 inches from the animal's head. Do not walk backward when leading. Usually the calves are led into line before the judge starts to judge the class.

Don't lead too close to other calves in the line-up; leave about three feet on each side of your animal to provide room to set your calf up. When standing in line, keep the lead strap in the left hand, the show stick in the right hand, and face your animal. Keep an eye on the judge and keep your calf in good position, standing correctly at all times.

A good showman shows the animal, not himself. Do not overshow, as this is not appreciated by most judges. Being calm helps keep your calf from being nervous, but if your calf acts badly for some reason, be cool and don't fight him.

Proper show position with judge in front. Note trimmed feet and horns.

If the judge should walk in front of your calf, it is proper to change the lead strap from the left to the right hand and the show stick from the right to the left hand and face the judge. When the judge leaves the front of the animal, shift back to the normal position.

If you are asked to move up in line, back or turn your calf behind the line of cattle and lead it to where the judge or ring master directs. It is important to show your animal to his best advantage from the time you enter the ring until you leave the ring. Don't give up and let your calf show poorly. "A winner never quits and a quitter never wins."

Good showmanship is also important outside the show ring. Proper signs above the animal and neat stalls are a very important part of the exhibit. The calf should be well groomed during the entire show, and someone should be present to answer questions and to keep the exhibit neat and clean.

As a judge, I like to see a job well done in showmanship, but my job is to place the best animal at the top of the class. The question is often asked, "Should the showman work his calf into a different position while the judge is observing his calf?" The answer is "Yes, move your calf into the best position possible." That is what the judge wants. The judge should see the calf the best possible way to properly evaluate him.

When placings are close, it is likely the animal with the best grooming and showing will receive a higher placing. "Trifles make perfection, but perfection is no trifle." Good livestock showmanship is the result of hard work, careful planning, and attention to detail. Excellence in showmanship does not come easily.

By Don L. Good, professor of Animal Husbandry, Kansas State University. American Hereford Association photos.

Operation Bean Patch

Gaithersburg Chapter's fund-raising bean crop became a community project.

WHEN WORD got around Gaithersburg High School this past spring that new bleachers were needed for the ball field, the Maryland school's FFA chapter became one of the first organizations to join in the bleacher fund drive.

It all started innocently enough as a normal fund-raising function. But as things developed, "Operation Bean Patch" was born, and the Gaithersburg Chapter became the largest donor to their school's fund. Advisor Jim Pope told us how it all developed.

Chapter members contacted a local real estate developer and got his permission to use a four-acre tract of land back in the summer of 1961. They planted sweet corn that summer and sold it at FFA-manned roadside stands. Then after the corn was harvested, rye was planted with the intention of plowing it under as a green manure crop.

But due to busy school activities, the rye wasn't plowed down and was left to grow to harvest instead. The Future Farmers counted a record crop of grain and straw from this enterprise. So with this experience behind them, Gaithersburg's FFA members decided to do the same with a green bean crop, only this time turning the proceeds over to the bleacher fund.

Seed beans were donated and planted by the local canning company, which also agreed to harvest and buy the entire crop. Future Farmers manned a tractor and plow to prepare the ground for planting. After this was done, frequent cultivations were undertaken. But drought hit Montgomery County hard last summer, and the canning company advised the FFA that due to slow maturation a much higher profit would be realized if the beans were picked by hand over an extended period of time. A call for volunteers was put out.

Mack Dorsey netted this $100 by taking 16 baskets to a local farm market.

Chapter members pitched in despite the heat to pick four acres of beans.

End result was this $750 check from Blair Stiles to Principal W. P. Hall.

The vo-ag students picked beans, and individuals from the student body and faculty members agreed to pick beans after school. This continued for about two weeks with "Operation Bean Patch" becoming an extracurricular activity in the community. The bushels of beans were sold to grocery stores, the FFA set up a sales stand at a home football game, and a senior Future Farmer took a pickup load of the beans to a local woman's farm market to sell at a booth.

The sales became almost phenomenal. Stores in the Gaithersburg area began to stock a new variety of beans, "Bleacher Beans." Local patrons began inquiring whether the menu offered the now-famous beans.

As Gaithersburg Chapter's treasurer totaled up the receipts, he found profits to total $750—all net, and all donated to the bleacher fund. The blue FFA jacket took on new meaning to the citizens of Gaithersburg, Maryland.

Merle's closely planned study schedule left him lots of time to work with his award-winning livestock program.

Budget Your Time For Studies

That's the sound advice of Merle Buss, National Livestock Award winner and a straight honor student both in high school and college in Oklahoma.

By Paul Weller

IN THE PAST six years the mild-mannered Future Farmer from Hunter, Oklahoma, has collected a roomful of ribbons and awards—among them the Junior Master Farmer and state livestock awards and a larger one labeled "National Livestock Farming Award."

But to teachers at Hunter High School and professors at Oklahoma State University, Merle Buss was more than a farmer's son with a lot of awards. From the very first day he entered Hunter High in 1957, he was an outstanding student, a credit to the blue jacket he wore.

Through four years of high school, the livestock farmer's son from south of town had carried a 3.89 grade average out of a possible 4.00. It was enough to earn him the coveted honor of salutatorian of his graduating class of 1961. And it was no surprise to those who knew him that he received an "A" average in his freshman year at college.

Merle's academic success lies not in any unusual tutoring program but in a simple plan of budgeting his time for studies—one that he worked out himself and follows almost exclusively. It is a plan that almost any Future Farmer could apply to improve his grades.

This plan has worked for 19-year-old Merle through six years of building his farming enterprise from $979.50 to over $21,300. His program of registered Angus, Yorkshire hogs, and 130 acres of crops is well known to all who read of his national award at Kansas City last fall. And the extensive work on the 1,100-acre home farm, which is helping to pay college expenses, is taken in stride.

As Merle talked, we learned of his study plan. "Study a lot in high school," he started out, "and if you go on to college, it'll pay off." This was the basis of his advice . . . develop good study habits the first year of high school!

"Take all the science you can get while in high school," he advised. "This includes chemistry and physics."

Merle's praise for the vo-ag program was high, but he made it clear that the student must take it upon himself to request all subject options possible. Even if college is out of the question, a good farmer will need lots of algebra, geometry, and English, he went on to explain.

"Study hard; then go to your teacher and ask questions you feel will clarify the material," Merle added. "Most Future Farmers will have to budget their time in the evenings after school. The chores are important but so are the studies. Set aside an hour or more each evening to review the day's studies. Do the very best you can."

The stocky livestock farmer told us how he spent an average of two hours each week night—10 hours per week—studying at home during high school. "Make use of those study halls in school," he was quick to emphasize. "And when you have to stay out of school for shows or trips, put some extra time on studies when you get back."

Sure, Merle had a check list of steps to follow for those good grades. Here's how we copied it:

1. Get a good start and don't fall behind.
2. Stay with the lessons each day as you get them.
3. Study and review as the work unit progresses.

Two hours of study each night after school is Merle's secret with grades.

4. Know the teacher and work with him.
5. Don't cram the material; it won't help.

What, you might ask, will I gain from improving my grades? Why not ask Merle Buss? His modesty may keep him from telling how being a good student improved his self-confidence, helped him get elected to president of his high school class, and later elected state FFA vice president; how he was one of only 11 students selected for membership in the honorary Intercollegiate Knights; how several college honorary organizations tapped him; and how he was named "Outstanding Freshman in the College of Agriculture."

Set your sights high . . . and follow Merle Buss.

News parley with Virginia Ag Commissioner Chumney, former FFA'er.

Traveling Ambassadors of Goodwill

Your National Officers visited 12 major U. S. cities recently on their four-week FFA Goodwill Tour.

"ONE OF THE best Goodwill Tours ever held." This is the way the 1963 Goodwill Tour made by the national FFA officers was summed up by Paul Gray, national FFA executive secretary.

The Tour was held from January 28 through February 21 and took the officers to 12 major cities and surrounding areas. Usually, the state FFA president in the state being visited joined the group as a member of the tour party. The main purpose of the tour was to meet leaders of business, industry, and other organizations who are donors to the FFA Foundation. The officers expressed the appreciation of the 388,000 FFA members to these men for their interest and support in providing incentive awards to students of vocational agriculture. They also told about the FFA and how the organization provides young men with opportunities for character building and self-improvement.

On the Goodwill Tour, the officers have their first opportunity to work together as a team. This teamwork enables them to develop their own self-confidence, inspire one another, and improve their abilities to represent the FFA.

While the national officers were telling business executives about the FFA and vocational agriculture, they also learned what business and industry are doing for agriculture. The officers described agriculture as being dynamic and changing but learned that business and industry are keeping pace with this modern trend in the development of new products to better serve the farmer.

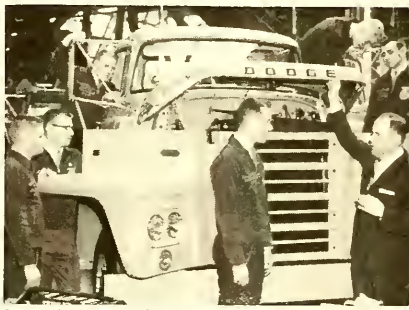
What was the highlight of the Tour? "The whole Tour was a highlight" is the opinion most frequently expressed by your officers. One thing that impressed them most, however, was the high esteem held for the boy in the blue and gold jacket by these business leaders, and their interest in the welfare of the FFA organization. A comment frequently heard from these business leaders was, "Vocational agriculture and FFA is in good hands if these officers are representatives of the membership."

Cities visited on the Tour included Richmond, Baltimore, Washington, Wilmington, Philadelphia, New York, Poughkeepsie, Albany, Akron, Detroit, Milwaukee, Racine, and Chicago.

The Goodwill Tour was started in 1947 and has been held annually since that time. The national officers who made the trip this year were Kenny McMillan, Macomb, Illinois, president; Vern France, Gooding, Idaho, student secretary; and the four vice presidents, Jerry Diefenderfer, San Luis Obispo, California; Richard Mottolo, Chelmsford, Massachusetts; Larry Whittington, Benson, North Carolina; and Duane Leach, Winnebago, Minnesota.

Goodyear executives, DeYoung and Thomas, brief officers on operation.

Virginia Governor Harrison welcomed the officers at beginning of the Tour.



Several major industrial groups hosted officers to acquaint them with industry.

Kenny briefly takes Raymond Firestone's chair as industrial executive.

Patrick, his father, and Advisor J. L. Talley examine the legume cover crop which was harvested on the newly fumigated sweet potato ground.

Increases sweet potato yield with

Nematode Control

By Wilbur McCartha

TWO years ago, Patrick Truesdale's sweet potatoes and watermelons weren't doing so well on his cropland in northcentral South Carolina. It wasn't because of the fertility level of the Norfolk sandy soil, for Patrick was a member of the Baron de Kalb FFA Chapter and knew the importance of fertility.

The summer of 1961, Patrick averaged only 50 bushels of sweet potatoes per acre on parts of the land, and his watermelons just withered and died almost to the vine. It was then that he, his father, and Advisor J. L. Talley checked to see if nematodes could be the reason. The tiny wormlike organisms were not uncommon in croplands in this section of Kershaw County.

Nematodes it was! Patrick immediately began to initiate a fumigation program. His first equipment, developed mostly himself, began smoking as he traveled across the field broadcasting the fumigants in a narrow row. Next logical step was to take the equipment back to the vo-ag shop and modify it. Special tubing was installed to convey the fumigants directly into the ground, and the problem was solved.

With the treatment, Patrick and his father estimated the average yield last season to be 200 bushels per acre on the 36 acres of sweet potatoes. One four-acre field had an even better yield with a total of 1,170 bushels!

Even so, the program was costly. The Truesdales estimate it cost them $30 per acre to fumigate. But with the increased yields and the second-place ribbon in the sweet potato division at the 1962 South Carolina State Fair, it was well worth it.

Discussing the application of soil fumigants, Patrick emphasized that "you must watch the weather." He explains that fumigants can be put down any time when the temperature is between 50 and 70 degrees and can be applied even in the fall if the ground is properly prepared. "All of the organic matter in the soil must be decomposed and gone before the fumigant is applied," he continued. "Soil preparation is important."

The potato crop includes Carogold, Puerto Rico, and some Arcadian. But they "like Carogold best because of livability, better cultivation, and a higher quality yield of potatoes."

The fumigation equipment developed in the vo-ag shop has saved Patrick a great deal of time and money with his crops. "Plan to use fumigation this year, too," we heard him say.

FFA

By Paul Weller

FUTURE Farmers with blue jackets and inquisitive minds have become a tradition at farm shows from coast to coast. One such giant affair is the Pennsylvania Farm Show, where under 14 covered acres nearly 700,000 people gather annually to inspect the 10,000 exhibits.

Earlier this year we journeyed to Harrisburg to follow a record 3,000 Future Farmers through the maze of people, animals, and displays. In nearly every activity from apiary products to window displays, we found FFA representatives. Most of Pennsylvania's 260 chapters loaded members for the bus trip, and out-of-state jackets were not uncommon.

Preparations began around the Keystone State months before the January show. Livestock projects were fitted, crops sorted for the best samples, and chapters planned their displays and demonstrations to be presented that week. And highlighting the show for the Future Farmers was the Midwinter State FFA Convention held on Farm Show Wednesday.

Blue jackets began filling the brick buildings two days before the Monday opening. In the dairy section, Ed Harnish of Quarryville Chapter was grooming his Ayrshires that would later win all three championships in their class. Out in the long lobby, Lancaster County's chapters readied their prize tobacco exhibits, and Upper Perkiomen Chap-

Walt Maule of Octorara Chapter busily grooms his heifer for dairy judging.

VISITS THE FARM SHOW

Participating in nearly all activities, Pennsylvania's Future Farmers leave a lasting impression each year at their farm show.

Future Farmers from the Chambersburg Chapter mix with the crowd entering the main entrance of the 14-acre show.

ter put the final touches on their window display entitled, "We Need Vo-Ag in our High Schools."

Not far away, nearly 90 Future Farmers from all parts of the state tuned up their instruments to weld into the Pennsylvania FFA Band for performances at the huge arena and convention. On Sunday evening we watched State President Eugene Gantz greet both Governor Lawrence and the 10 commodity queens who gathered nearby. Tomorrow his Future Farmers would begin competition for $2,175 in prize money in the vocational divisions.

Early Monday morning the endless rows of school buses began unloading the state's FFA population. Already FFA teams had gathered on the upper floor to give their detailed mechanical demonstrations before three state supervisor-judges. "The Electric Hotbed" by West Middlesex Chapter outlasted 23 others to win.

We counted 37 hogs, 25 fowl, and 27 dairy animals owned by Future Farmers. Each was a vo-ag project back home. FFA jackets were everywhere. Galen Boyd was being interviewed by a local radio station. Chambersburg Chapter was inspecting the poultry exhibits, and two FFA potato growers were being initiated into the 400-Bushel-Per-Acre Club. One of the members, Warren Henninger, had chalked up a record 610 bushels per acre.

Inside the exhibition area, nearly 10 million dollars' worth of the latest farm machinery, equipment, and agricultural commodities lined the aisles. Future Farmers tried out tractor seats, glanced through literature, or just stood and studied the shiny new models. A tractor driving contest was in progress in the arena.

As the Pennsylvania FFA Band played at Tuesday evening's square dance contest, Future Farmers among the contestants adjusted their costumes and dance routines. Tomorrow, Wednesday, would be a big day! The Midwinter Convention and the 1,500 blue jackets would be there to witness a program not unlike the National Convention in Kansas City.

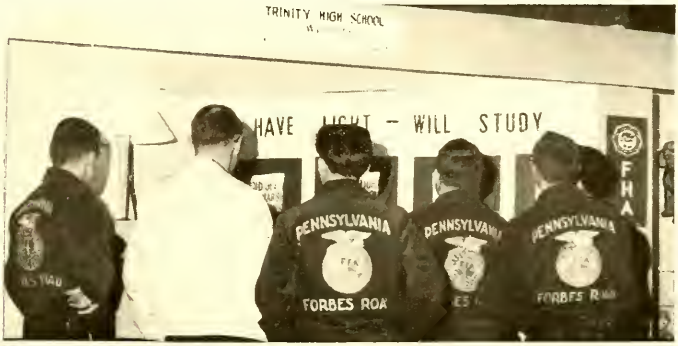
When Friday's closing time rolled around, Future Farmers would again have learned . . . and served. This farm show's activities would be duplicated again—somewhere else.

Radio Farm Editor "Doc" Webster interviews a South Lebanon member.

Engine maintenance was one of 23 FFA demonstrations given during the week.

State President Gantz bids Miss Milkmaid welcome from 9,500 members.

Window displays carefully constructed by a score of Pennsylvania chapters tell the public about the FFA. These Future Farmers study a nearby FHA exhibit.



(Editor's note: Helping you plan your investment in farm machinery is the subject for our "Here by the Owl" panel of advisors and a USDA specialist.)

"Here by the Owl"

Mr. Advisor:

"Should I buy all the machinery I can when I first go into farming or wait until I become better established?"

E. Grady Hendrix
FFA Advisor
Jasper, Alabama

THERE'S an old adage that says, "It takes money to make money." But there is another adage that states, "He who flies highest falls hardest."

Rarely, possibly never, would I recommend that a Future Farmer go into farming by purchasing all the machinery that he could. In many cases, debts are easier to make than pay.

I believe some kind of purchase-pay index must be considered before buying farm machinery. Analysis of the individual, such as farm background, vo-ag units, business training, and other areas, should be made. After this analysis, I think some criterion may be formulated as to the student's borrowing-pay back schedule. Many times I see young people buy machinery and then become unable to meet the payments.

I'm fully aware that these sales personnel are an important part of our distribution system, but nevertheless, a beginning farmer needs competent wise counsel for large investments such as machinery. It is my opinion that a young man going into farming must carry the philosophy "Learning by Doing" as he grows into greater capabilities of production and management.

With my experience, I'd recommend growing and expanding as you go into farming.

R. W. Guinther
FFA Advisor
St. Joe, Indiana

A YOUNG farmer who is not fully established in farming should buy only the machinery he needs to maintain his supervised farming program. If he is buying land, he should not buy a large amount of machinery that will tie up his working capital.

If the young farmer is renting land, he will be able to buy more machinery. This would put him in debt further; however, he would be able to use more of his money to pay for better machinery.

A beginning farmer should also understand that the rate of interest on the money borrowed to purchase machinery would jeopardize his working capital. Also, he must understand that the availability of money will play an important part in his interest rate.

I feel that if finances allow, the young farmer should purchase new machinery to cut down the costly expenses that are faced when he has to repair and replace used machinery parts. Going in debt is no great sin, as some feel.

If finances don't allow you to have ready cash for machinery, then borrow money and buy just the machinery you will need to continue the supervised farming program you had in vo-ag.

SO YOU'RE PLANNING TO FARM! Did you know that the average farmer's investment in farm equipment has increased 10 times in the past 20 years? It is now over $2,000 per worker. This is a nationwide average, but most Future Farmers know that it's not uncommon to have $10,000 invested in machinery and equipment on the family farm. How then can we reduce this investment to free capital for more profitable uses?

Most of this investment is in harvesting equipment since young farmers want timely crop harvests. Our research shows the most common method of keeping machinery investments to a minimum is through custom operations. This has proven quite effective in reducing the costs of owning harvesting equipment.

Another method of lowering equipment costs has been to share work and equipment with neighbors. A farmer who owns a corn picker, for example, can pick the corn on his own and the neighbor's farm. The neighbor, in turn, can use his combine to harvest the grain on both farms. In this way, each has only to invest in one large piece of harvesting equipment. Usually any differences in acreages are worked out by local custom rates.

A third method of reducing investment costs is through cooperative ownership of equipment. This generally takes two forms: (1) A group of farmers purchase a piece of equipment with each individual paying in proportion to the use he expects to get out of the machine; or (2) each farmer may agree to use a piece of equipment, which he owns, on another farm or permit other farmers in the group to use it themselves. However, this method has not always proven successful because several of the farmers may need the machine at the same time.

In these examples—hiring custom work, trading work with neighbors, or joint ownership—harvesting equipment is almost always involved because it usually requires the highest initial investment and operating cost per acre.

This also applies to the renting of equipment. That is, you would rent only equipment that you would need during the important harvesting season. Recently, both farmers and machinery dealers have shown increased inteerst in renting. And it is likely that this trend will continue to increase as the need for high-cost equipment increases. There are advantages for both the farmer and the machinery dealer in rental agreements.

If young farmers have the opportunity to rent a piece of equipment, they won't have to depend on a custom operator or share equipment when it is inconvenient. And the dealer has the advantage of earning additional money from an otherwise vacant machine on his lot. Before we go any further, let's examine what we need for a general farm. Suppose we have a dairy farm with some hogs on the side.

Your Machinery Investment

By Richard T. Dailey

To begin with, the Future Farmer will need a complete line of tillage equipment: tractor, plow, disc, and harrow. Next he will need planting equipment: planter, grain drill, grass seeder, and fertilizer spreader. In addition to these items, he will need a sprayer, cultivator, manure spreader, and a manure loader if he has a loose-housing setup. He must own or have access to a line of harvesting equipment consisting of a baler, combine, forage harvester, corn picker, wagons, elevators, and silo-filling equipment.

We specialists suggest that young farmers own as few items of harvesting equipment as possible. As pointed out earlier, these are items with high overhead and high annual costs. In other words, their initial costs are expensive, their depreciation rate is high, and repair costs on a per-hour or per-acre basis are generally quite high.

On the other hand, it's a good idea to purchase tillage, planting, and miscellaneous items such as a manure spreader, sprayer, and wagons. These items are used most often and have relatively low repair rates. They are generally considered as basic investments on a good farm. Future Farmers can use their vo-ag shop training to help them in selecting good used equipment to keep the initial investment even lower.

For a good illustration of the costs involved in renting versus owning equipment, let's consider a typical dairy farm situation. The farm has 30 milk cows, 40 feeder hogs, 13 acres of corn, 5 acres of corn silage, 18 acres of oats, 18 acres of wheat, 31 acres of rotation pasture, 23 acres of alfalfa-orchardgrass, and 15 acres of permanent pasture. A six-year rotation on the 108 acres of cropland is followed, and we can see that the cost of owning a complete line of harvesting equipment for this farm would be very high.

The two tables illustrate the differences in owning and renting harvesting equipment for this farm. We can assume that the Future Farmer already owns one tractor. Harvesting rates vary from one area to another, of course.

We can see from the tables that the annual savings in the farm situation discussed are about $750 in favor of renting. Furthermore, young farmers can insure better quality crops when they have the equipment on hand when needed. This may not always be the case when sharing it with other farmers.

At present, the practice of renting is not widespread due to farm machinery manufacturers' being opposed to the rental idea in the past. However, many dealers are settling with the manufacturer, then renting the equipment themselves. Many times the dealer will rent good used machinery taken on a trade-in. It is also becoming possible to lease your entire line of equipment from a commercial leasing organization as many manufacturers do.

If renting farm equipment seems like a good way for you to start out in farming, consider these factors first. (1) What is your labor situation? (2) How many acres will you use the equipment on? (3) Can you make satisfactory arrangements with a dealer to get the machine when you need it? From the information given in our example, you can budget your own farm situation after getting the rental charges from your dealer.

Advantages of renting are no insurance or depreciation, little time lost in maintenance, no servicing, and no housing required for the equipment. And the most important advantage in renting your machinery is the reduced capital investment. A farmer can use the money saved in some other phase of his operation which may have a greater return per dollar invested.

Rental Costs of Harvesting Equipment

Item	No. days needed	Rental cost per day	Total rental cost
Tractor	17	$34.00	$578.00
Baler	5	22.20	111.00
Combine	5	17.10	85.50
Forage harvester	4	21.00	84.00
Corn picker	3	16.30	48.90
Total			$907.40

Annual Costs of Equipment

	Owned	Rented
Depreciation	$1.104	...
Interest on investment	442	...
Repairs and maintenance	220	110
Rental charges		907
Totals	$1.766	$1.017
Difference		$ 749

A formula of rental rates as a guide to dealers who rent equipment has been worked out by The National Retail Farm Equipment Association. These rates are computed on the basis of the delivered price of a new machine.

(1) 1 percent of the new price for a 10-hour day.
(2) 5 percent of the new price for a week.
(3) 15 percent on the same basis for a month.
(4) 25 percent for a two-month period.
(5) 33⅓ percent for three months.

Under the terms of rental contracts, the customer is responsible for rental charges, delivery costs to and from the dealer, lubrication, fuel, and repairs to the machine. The dealer must provide liability insurance to cover anyone injured on the equipment and make sure the equipment is in good operating order.

Author Dailey is an ag economist with the USDA and has authored several booklets on planning investments.

Finding Facts about the Poultry Business

By Howard Carter

THERE'S gold in them thar' HENS! This is the way you could sum up the tenth Fact Finding Conference for junior poultrymen held recently in Kansas City, Missouri.

The gold was not only in the hens but also in the eggs, the broilers, the turkeys, and all the related career opportunities in the poultry industry. The junior delegates were exposed to the dramatic changes and challenges in the production, processing, and marketing of poultry and eggs.

The Junior Conference is a part of the regular Poultry and Egg Fact Finding Conference held each year by the Institute of American Poultry Industries. The Junior Conference is jointly sponsored by the Institute and the following co-sponsors: Vocational Agriculture Branch, U. S. Office of Education (FFA); The National 4-H Service Committee, Inc.; and the Cooperative Extension Service, USDA.

Representing 22 states, the 72 junior delegates were selected in many different ways. Most juniors were on expense-paid trips provided by firms or organizations in their home states. All of the delegates had demonstrated an interest in the poultry business.

For example, Delegate Rod Bruland, a Future Farmer from Everson, Washington, was the 1962 National FFA Foundation Award winner in poultry. Rod, along with a 4-H representative, was sponsored by the Washington Junior Poultry Exposition.

Future Farmers George Brown, Lyon Young and Larry Kemp, members of the poultry judging team from the Dardanelle, Arkansas, FFA Chapter, had their trip paid for by the Arkansas Poultry Federation and Arkansas Valley Industries, a poultry processing firm. Other Future Farmers were in attendance but greatly outnumbered by 4-H delegates.

"The FFA is missing a bet in not taking greater advantage of the opportunities provided by the junior conference," says Harold Duis, program specialist for Vocational Agriculture, U. S. Office of Education, and a member of the steering committee for the conference. Mr. Duis suggested that Future Farmers with an interest in poultry and their advisors should look into the possibilities of getting up a delegation to attend the conference. If your state already has a delegation, perhaps it can be enlarged.

In explaining the purposes of the Junior Fact Finding Conference, Rex Parsons, program director for the Institute of American Poultry Industries, emphasized the revolution in the poultry business and the many career opportunities for young people. He said the Institute hoped the Junior Conference would give the delegates a broader view of the poultry industry.

Of particular interest to the delegates were the educational and commercial exhibits. More than 150 companies had booths showing everything from A to Z in the poultry business. From A for automation through Z for zygotes (fertilized eggs), the exhibit hall was a popular place with the delegates.

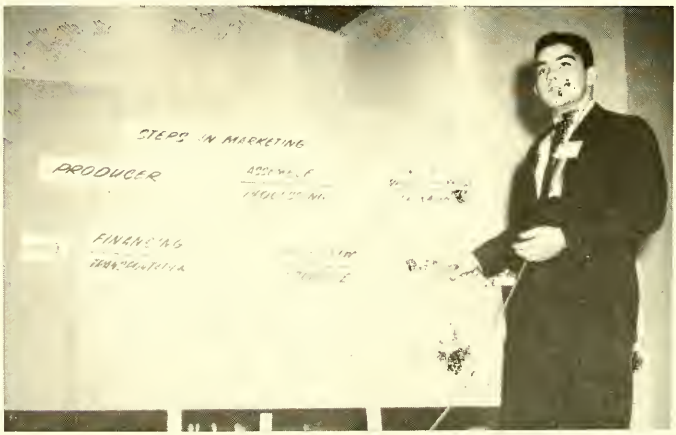
The Juniors joined the adult fact finders for one morning session to hear the Secretary of Agriculture, Orville Freeman. Secretary Freeman discussed some of the problems and challenges of the European Common Market.

In addition to the many other worthwhile experiences, the delegates also had a chance to apply for a $1,000 college scholarship sponsored by the Chicago Mercantile Exchange.

By participating in clinics and demonstrations, viewing the exhibits, and attending the conference, the Junior Fact Finders did just that . . . found facts. Facts that helped them realize there is a real future in agriculture. And for them, that future could be in the poultry and egg business.

Symbol of thinking big, Sec. Freeman and Poultry Institute Board Chairman John Hargreaves break giant wishbone.

Rod Bruland, FFA'er who operates a 28,000-layer enterprise, shows junior fact finders the marketing process on poultry. One of several demonstrations and panel discussions conducted by the delegates during the meeting.



More than 3 years of tests in over 20 states prove new Du Pont "Lorox" gives outstanding control of both broadleaves and grasses in field corn grown for grain and soybeans grown for seed. Used as a directed post-emergence spray, "Lorox" plus Surfactant WK can help you grow clean corn—without weeds—as shown here.

This photo was taken ten days after a directed post-emergence spraying with "Lorox" plus Surfactant WK. Weeds are killed on contact and residual action will continue to kill weeds that may germinate later. This unusual two-way control facilitates a minimum tillage program—helps cut corn-growing costs.

New for Corn and Soybean Growers:

Du Pont "LOROX" controls weeds and grasses without problems to succeeding crops

Charles Adams, Akron, Indiana, points to a clean row of corn resulting from a directed, post-emergence application of "Lorox" plus Surfactant WK. Note rampant growth of giant foxtail in his untreated corn at left.

"Lorox" can also be applied pre-emergence at planting time to give effective residual control of germinating annual weeds and grasses. This band treatment got corn off to a fast start, while untreated middles became choked with weeds.

In soybeans use "Lorox" only as a pre-emergence treatment to stop broadleaves and grasses as they germinate. Left, treated; right, untreated. Studies have shown no injury to crops planted three to four months after treatment.

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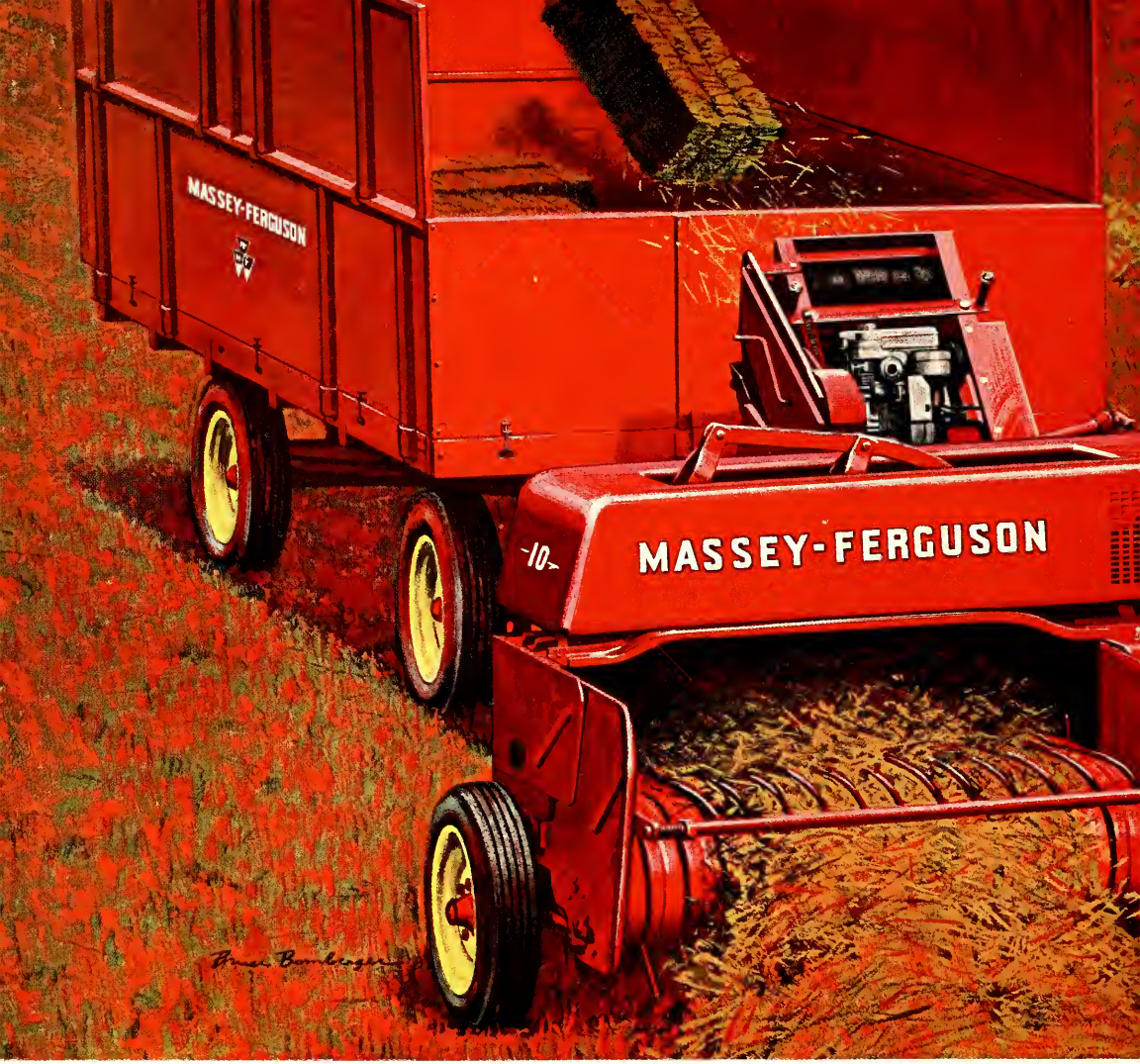

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This is the big-capacity baler that ends the messy, time-wasting daily greasing chore. Cuts your man-power needs in half with the new MF 21 Bale Thrower. Handles 10 to 12 tons of hay an hour, and handles it right. Keeps leaf shattering at the minimum for higher protein hay. Ties tight and secure every time with sure-tie knotter. Makes bales to the exact size and density you want. Folks who know their balers say the MF 10 is best of all. Your Massey-Ferguson dealer will be glad to show you why.

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No-miss thrower "babies" the bales. Rubber throwing rolls are grooved for sure but gentle grip and vigorous throw and to protect twine against breakage. Air-cooled engine with speed control at tractor seat that sets length of throw to wagon. Steering arm pivots thrower to aim directly at wagon—no misses on turns. The MF 21 Bale Thrower handles 60-lb. bales up to 31 in. long.

Jerry Litton farmer-orator

Jerry received much of his inspiration for success from his father, Charley.

A bright future is promised for this once-shy Future Farmer and his wife.

By
Paul Weller

AMID THE barrage of speakers at last fall's National FFA Convention, a slim six-footer took the rostrum to extend a welcome to Future Farmers in the audience. He was introduced as national student secretary in 1956-57, but what was not told was his almost unbelievable background.

Here was a former Future Farmer who has lunched with senators, replaced the Secretary of Agriculture as a convention speaker, conversed privately with such people as former President Truman and opera star Jean Maderia, and traveled in 43 states to give a modest estimate of 600 major speeches. So vast are the accomplishments of 25-year-old Jerry Litton of Chillicothe, Missouri, that every Future Farmer should read them as an inspiration to greater heights.

When Jerry entered Chillicothe High School as a freshman in vo-ag back in 1951, he was probably, by his own admission, one of the most backward boys ever to come from a farm. His powerful fear of strangers was openly apparent. Once when his parents wanted him to learn to play a musical instrument, he spent a week looking for the high school music room, then gave up rather than ask directions.

His inadequacy for meeting people resulted in a strong devotion to livestock, and by his sophomore year he was borrowing $2,000 a year to build a livestock program. The first big break for Jerry came when his parents prodded him into entering an FFA public speaking contest. "I knew I couldn't let them down," Jerry explained later. Remembering his father's courageous fight

Sherri, an important figure in Jerry's life, takes an active part with the Charolais herd.

From dungarees to tuxedo for the President's Inauguration.

This Missouri Future Farmer's determination to defeat shyness was so great that he became a national orator whose 600 speeches helped finance his way to farming.

to overcome a crippling accident, Jerry put his mind to developing confidence in front of people.

He entered FFA and American Legion oratory contests and began to win. "Most of my speeches were written while I sat on the tractor in the fields," the baritone-voiced Litton explained.

"He used to wear out the floor pacing the night before a speech," his mother recalled. "It was never easy for him."

In the next six years, Jerry Litton was elected president of the Missouri FFA Association, national student secretary, and was a runner-up in the National FFA Public Speaking Contest. He was named one of the top seven men students at the University of Missouri, where he graduated just two years ago. In 1957, as a national officer, he introduced his parents before the 10,000 assembled Future Farmers at the National Convention as he had vowed he would a short six years before.

As a high school senior, Jerry became farm editor for a local radio station, and a national recording company distributed one of his speeches to high school libraries across the nation. His growing speaking ability was gaining national attention, and a year later when Agriculture Secretary Benson was forced to cancel a speaking engagement before the Virginia Beef Convention, Jerry was called to handle the assignment. He was 19 then, and high schools were already calling on him to give their commencement speeches. A year later, he was appearing before scores of groups.

His political ambitions prompted him to enter the Livingston County Young Democrats, and in a short time he was Youth chairman for a local senatorial candidate. By the 1960 election primaries, this widely known farm boy was named national director for the Youth for Symington campaign and traveled throughout the country campaigning for Senator Symington. With Senator Kennedy's nomination, it was Jerry Litton who was appointed a member of the future President's national committee. A personal invitation brought Jerry and his new wife, Sherri, to the Inauguration Ball in Washington in the spring of 1961.

By this time, Jerry was traveling to nearly every state to appear before almost every type of audience. He averaged a speech a week and would fly off to New York or Chicago as his friends would go to a local movie. His ability to bring an audience into a speech through personal references and his authoritative talks on all phases of agriculture have made him a master behind the speaker's stand.

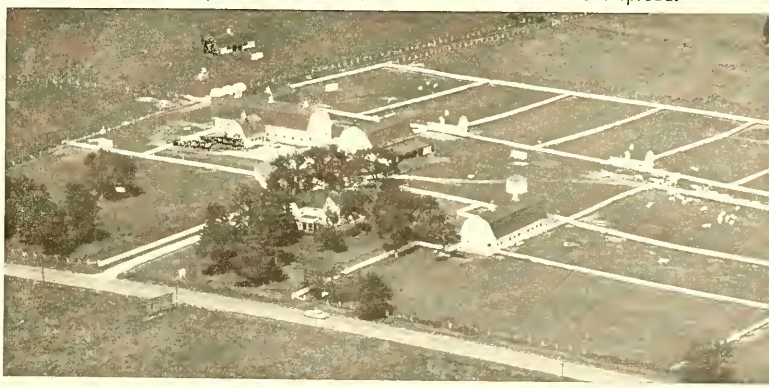
Personal appearances with former national Democratic chairman, Paul Butler, and former President Truman on national radio and TV have given this formerly backward farm boy a new insight on people. "Mr. Truman once told me a person can either start at the bottom and be elected in the county and on up or establish himself financially, work with the party, and be appointed to a position of responsibility," Jerry confided. "He recommended the second route."

Back home in Chillicothe, Jerry and Sherri live on their 300-acre ranch where they breed 150 registered Charolais beef cows. The grassland-type ranch was Jerry's goal when he finished college and is situated some 12 miles from his father's home farm. Here he has built one of the finest Charolais herds in the country and regularly sells breeding cattle as far away as Latin America. His show string is on the road an average of four months out of the year.

And so, the once backward Future Farmer who worked his way through college and helped buy a ranch from a start in FFA public speaking continues on the road to success. His humble start is an inspiring reminder to every Future Farmer that hard work and self-discipline are the secrets of success.

Did the FFA help? In Jerry's own words, "Any success I may have attained was encouraged mostly by the FFA. My farming program was started in the FFA. I learned to speak before audiences through FFA, and any work I have been able to put forth in the community was inspired through my activities as a state and national officer in the FFA." ◆◆◆

Jerry's 300-acre ranch, purchased in 1961, is 12 miles from his father's spread.



VISUALLY handicapped BUT STUDYING agriculture

Advisor Paul Day's special vo-ag course at Faribault, Minnesota, uses braille and dedication to help blind farm youths become Future Farmers.

A class discussion between the four visually handicapped vo-ag students and their advisor, Paul Day, is a daily procedure. From left, they are Frank Hron, Melvin Blowers, LeRoy Masche, and Maynard Kaczmarek. LeRoy is taking braille notes.

Reprinted Permission
The Farmer, Sept. 15, 1962

"LACK OF sight shouldn't stand in your way if you want to study agriculture. You should give it a try anyway."

Those are the words of a blind youth at Faribault, Minnesota, who, along with three other visually handicapped youths, didn't allow loss of sight to destroy his vision for agriculture and FFA membership.

Probably one of the few projects of its kind in the nation, the blind-member FFA program got started when Jerry Litton, a national student FFA secretary in 1956, gave a speech on FFA activities before a businessmen's luncheon in Faribault in 1958.

One of the listeners that day was John Lysen, superintendent of the Minnesota Braille and Sight Saving School at Faribault. He was so impressed by the FFA program that he asked if he couldn't get blind or otherwise visually handicapped farm boys into the organization.

After a conference with C. Willard Cross, then superintendent of Faribault High School, a plan was devised for enrolling the youths in agricultural classes, making them eligible for FFA membership. That was in 1958. Several students have gone through the course since then.

The four presently enrolled are LeRoy Masche, Fertile, the blind youth making the opening statement in this story; Maynard Kaczmarek, Silver Lake; Melvin Blowers, Ogilvie; and Frank Hron, Ball Club.

LeRoy has been blind since birth and only distinguishes between light and dark. The others have sight defects which make it impossible for them to attend regular school, unless special procedures are followed. LeRoy takes class notes using the braille system, and usually has tests read to him. He has also mastered typing.

All of the youths have made progress. Not only were they able to take the agricultural courses, but all met the qualifications needed to become FFA chapter farmers.

This unusual program could not become reality without the cooperation of a dedicated teacher who is willing to put in the extra time and effort necessary in teaching visually handicapped students. This teacher, who according to the students goes out of his way to give them every opportunity other students get, is Paul Day, one of two agriculture instructors at Faribault.

Mr. Day feels the extra effort he gives to the handicapped youths more than pays for itself in personal satisfaction from working with the boys and observing their determination and progress. "It's a challenge for me and I'm sure an enrichment for the students," he says.

"They're very interested, and they've got a lot to contribute. LeRoy even played the accordion at the FFA chapter banquet this year. They all have some sound ideas. We hope some of these boys will be able to get into agriculture or a related field."

The youths, despite their handicaps, seem intent on finding a niche with some kind of agricultural future.

LeRoy, a second year ag student, says: "I think agricultural study is very educational, and the field is open to everyone who makes use of the opportunity. This is a chance to further my education and I should take it. I can go home and tell my father some of the things I've learned, and he sometimes even takes my advice," he adds with a smile.

Although these youths get the same types of courses at the braille school as students at any other school, lack of a qualified instructor there, because of small demand, made it impossible to study agriculture.

Maynard, who can see enough to get around but needs 35-power glasses for reading and other study, says: "I think agriculture is the most challenging of occupations. It's the one that has to feed the world."

He would like to have a farm where he could experiment with animals and improve their strains.

Frank's sight is still good enough for most farm tasks, but not good enough for school study under average classroom conditions.

"I've thought of farming and raising beef, hogs or crops," he says. He comes from a Grade A dairy farm near Grand Rapids. Frank, like the others, is thankful for the opportunity to study agriculture and is especially fond of Mr. Day.

"He shows interests in the students and their projects," he declares. "He even makes trips to get us for special occasions. And puts forth the effort to see that we get the same opportunity as other students."

Melvin, a junior, also warmly praises the program. "I think it's helped us a lot. It gives us a great chance."

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NYLON TRACTOR TIRES

RED RASCAL

By
Murray T. Pringle

Few creatures more colorful than the quick-witted fox inhabit our farmlands. Here's his story as he lives it.

THE FOX HAS for centuries been the symbol of cunning and trickery, as evidenced by the number of times he appears as the leading character in Aesop's fables.

Many people believe that foxes use a den all year 'round; it isn't so. They are hardy creatures and really believe in "roughing it" by sleeping outdoors in all types of weather. The only time they use a den is when raising their young.

The vixen chooses the safest place she can find for this purpose. The den may be a burrow made by enlarging a woodchuck hole in a sheltered bank, beneath a brush pile, or in the roots of a tree blown down by the wind. On the other hand, many a fox has taken over an abandoned threshing machine or the body of a junked automobile and converted that into a fox nursery. It all depends on the individual vixen's preference.

There are few male animals that make more faithful and devoted husbands and fathers than the fox. He always shares with his mate and young a part of whatever prey he has caught. Though he is ever ready to fight to the death in defense of his home and family, he much prefers ruse and decoy to protect them.

When dogs or other enemies draw uncomfortably close to his den, the fox reveals a great talent for acting. He brings the spotlight on himself by cavorting, barking, and pretending to be injured. His purpose? To lure the invader after him until both are far from the den. If he succeeds in this, Br'er Fox gives a spiteful chuckle, skillfully shakes off pursuit, and heads back home again!

I once felt great pity for the fox being pursued by hunt clubs and having the hounds chase him all over creation. Now I don't know, for I'm half inclined to think he enjoys the chase as much as anyone! One thing is sure: He has, through the years, become adept at giving dogs the slip. The only ones that give him gray hairs are those keen-nosed hounds that are especially bred for speed and stamina. Even with them, he does better than all right.

When pressed hard by fast dogs, the red rascal breaks his "scent line" by running brooks, crossing small rivers diagonally, running stone walls and fallen trees, skirting thin ice, merging his scent with those of deer, sheep, and cattle, or disguising it by rolling in mint beds and manure. All these and many more are time-tested tricks which drive even the most skillful dogs half crazy.

That's not all. Being one of nature's most adaptable creatures, Reynard has learned to utilize the products of man to defeat both him and his dogs. The fox slows up large hounds by slipping under electrified fences and has learned that gasoline fumes on highways and the acrid locomotive odors on railroad tracks are simply great for covering up his scent.

Time was when foxes used to "spell" each other by changing places in a hollow log. The up-to-date fox, however, scorns the hollow log refuge for the steel and concrete pipes used in highway culverts.

No less ingenious are the fox's methods of hunting. Take the case of one I saw in action a couple of years ago. This fellow was crouched in a clump of brush, keen eyes trained hungrily on a group of ducks some distance away. After a moment, he edged forward cautiously. Tearing bits of weeds with his jaws, he set them adrift in the water. The current took the weeds down to the ducks.

The fowl were suspicious at first, but

(Continued on page 44)

Progressive Kentucky Cattleman grows 8 dollars worth of Silage Corn for every dollar spent on ARMOUR FERTILIZERS!

"This corn field pretty well tells why I'm sold on Armour fertilizers," says Howard Scharin of Fern Creek, Kentucky. "Seems like all of our crops have been exceptional this year. Of course, we have to give Armour a good deal of credit for making this possible. We used Vertagreen and Armour Ammonium Nitrate on everything, including our pastures and tobacco."

In planting his corn, Mr. Scharin plowed under 300 pounds of Armour Ammonium Nitrate and 300 pounds of 10-10-20 Vertagreen per acre using a special wheel-track planter. Silage value after fertilizer costs was over $22,000 from 125 acres! Every dollar spent on Armour fertilizers returned $8.00 in top-feeding silage . . . averaging 25 tons to the acre! Mr. Scharin also used Vertagreen on 50 acres of crib corn for a yield of 110 bushels per acre!

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RED RASCAL

(Continued from page 42)

after several more batches came floating down, duck curiosity overcame duck caution and they began playing with the weeds.

Encouraged, the fox released more and more "bait"—perhaps a dozen mouthfuls in all. The ducks now looked upon the arrival of each new batch as a sort of game. That was just what Reynard wanted: he was now ready for his master plan. Grabbing an extra large clump of weeds in his jaws, he slipped quietly into the river until only the tip of his nose, now hidden by the weeds, was above water.

When the foxy "submarine" drew closer, one of the ducks, impatient to be at the weeds, swam up to meet them. Unfortunately, he met more than just weeds! There was a quick lunge, a flurry of wings, followed by a great splashing of water. Moments later Reynard, a fat duck in his mouth, was swimming back to land. At least one fox family enjoyed duck dinner that day!

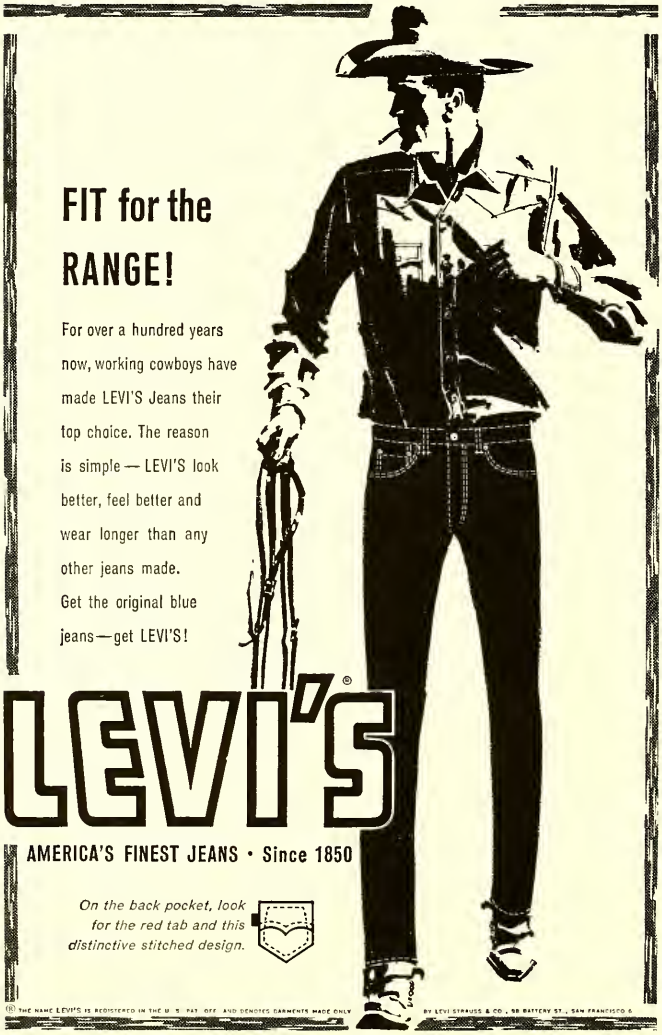
Fox "school" begins just as ours is ending—in June. Then the baby foxes, or "kits" as they are called, come above ground for their first wide-eyed look at the great outdoors. Mama Fox is kept busy teaching them all the things they will need to know to survive the risks and fierce competition that lie ahead.

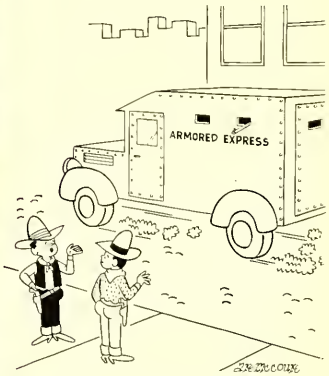
One of their first lessons concerns fresh meat. The mother fox brings back small birds and mice still alive, and the young ones learn what to do with them. Lesson No. 2 is hunting. For this, Madame Fox takes her brood to a nearby meadow, where the grass is long and field mice have runways. She instructs them in how to listen for the speaking of rodents and how to watch for the movements of the grass as the mice run in it. Then they learn how to pounce on the small victims.

Other lessons include how to hide: how to remain quiet when man is but inches away; how to hunt squirrels, rabbits, and birds; how to avoid men, dogs, and traps; what berries and other fruit are good to eat; and how to keep alive and thriving in a dangerous world. It's a mighty busy schedule the young ones have to keep up with.

Man may think he's great as a hunter. A dog stuffed on "vitamin-fortified" dog food may think he can catch anything that lives in the woods; but both of them are likely to come home feeling not quite as cocky after having run—and lost—a race with the red rascal!

◆◆◆





"Keep your gun in your holster 'til they pass. They're trigger-happy."

Planting Pruning Patience

adds up to PROFITS

Advisor Charles Hathaway briefs Tahlequah Chapter members on the layout of the 200-acre forest before entering it.

By
Dale Cotton

BLUE JACKETS mingle with green trees in a 200-acre forest southeast of Tahlequah, Oklahoma, and the results are chapter earnings with valuable forestry experience.

It all started back in 1941, when the Tahlequah Chapter bought a tract of underdeveloped timber and brush not far from their school in the hills of northeast Oklahoma. Few people put much value on the rank growths of timber then prevalent but change their tune today after seeing the results.

Advisor Charles Hathaway, a veteran of 16 years with the forest project, estimates his chapter members have planted 225,000 seedlings since it was first purchased. Mostly cedar and pine, he says, but he estimates about 4,500 black walnut and 500 catalpa trees are planted there too. And best of all, the forest has been yielding an income for the Tahlequah Chapter for several years now.

It takes long-term thinking on the part of chapter members. Advisor Hathaway supervises the planting of about 1,000 trees per acre; then he and the Future Farmers practice forest management until the trees are ready for harvest in a few years. They figure the trees yield a profit of $1.00 per tree on the average.

After initial clearing of the brush, Tahlequah Future Farmers have been using the forest for pasture. This makes the forestry picture a bit brighter, Advisor Hathaway assures his visitors. Then he goes into the mechanics of managing the 200 acres.

About 300 trees are cut each year and sold as Christmas trees. But even harvesting trees this way is not as simple as it may seem. Chapter members learn early not to cut the trees at ground level, but to cut them approximately three feet above the ground, leaving several good branches on the stump. A few months after the tops have been cut out, Future Farmers work their way through the area to select the best of the remaining branches. This one branch is left to develop on the stump and in another five years will be cut again for another Christmas tree.

Work in the chapter forest has rubbed off on many of Tahlequah's members. Last year they planted 40,000 trees on their home farms, with plantings varying from one to 15 acres. Most members plant locust trees for use as posts. And when not used on the farm, the posts net them from $400 to $800 per acre. One member, George McLeod, cut enough trees on his farm to build a house.

Joining hands to plant, space, prune, and clear trees in Tahlequah's forest has given the members a hatful of experience to take home and apply on the home farm. And the experience has proved that money doesn't grow on trees—it grows with trees. ◆◆◆

Using experience gained with the forestry project, Don Price planted these seedlings with Advisor Hathaway's help.

Jerry McDaniel shows how he learned to trim all the branches but one from a cedar stump. The remaining branch will develop into another Christmas tree.

photo roundup

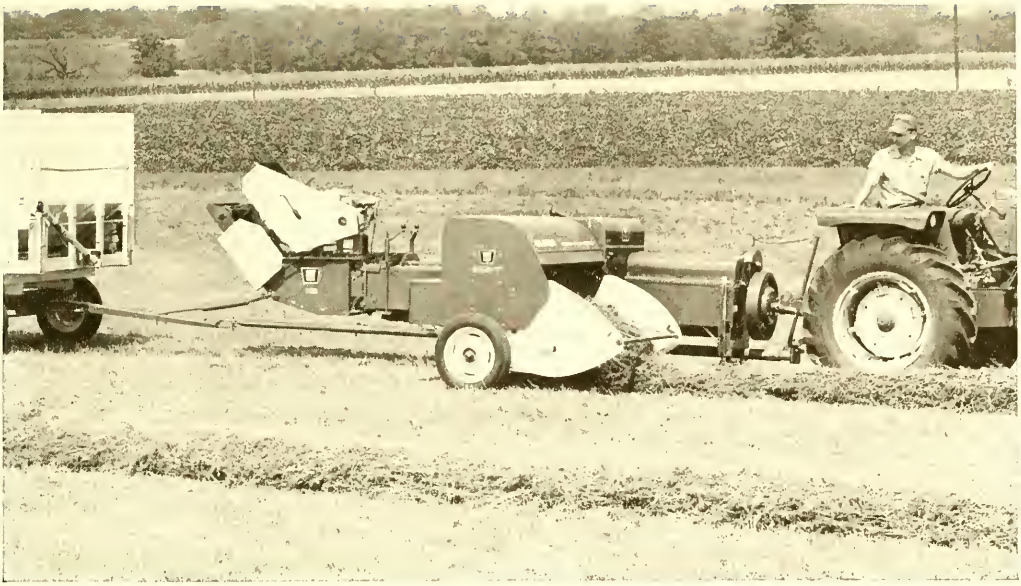
A career in the air is Steve Pankonin's choice. The Redding, California, Future Farmer flies with his dad, local crop duster, but expects to switch to the Forest Service.

Diversification was Joe Brannan's farming goal, and it won him the honor of Alabama Future Farmer of the Year. A member of Citronelle Chapter, he even raises tung nuts as shown in this photo. Most of his crops started in vo-ag.

Dan Walker's registered Holstein was the main attraction at the San Diego, California, Milk Council party. She was hoisted by crane to the hotel balcony where Thelma Walters and Howard Keddie saw her.

Holtville, California's, high school produced the state FFA president, state FHA president, and student president of Cal Poly College. They are Vic Dollente, Judi Lloyd, and Flint Freeman.

A bovine bulletin board helped publicize FFA Week in Minnesota when state officers asked the University for a cow. National Vice President Duane Leach, left, and Princess Kay of the Milky Way did the painting for State Reporter Dan Von Bank and President Ron Gernandt.



12 TONS AN HOUR EASY

with the short-coupled OLIVER 62

The Oliver 62 is the baler that gives you both *capacity* and *easy handling*. It's rated at 12 tons per hour but has actually been clocked at 13.4 tons per hour in field tests. Exclusive Roto-Flo feed features long steel tines that move heavy windrows rearward and inward with steady, gentle motion. You get high tonnage with square, uniform bales of even density.

Close-coupled Oliver 62 design gives you a PTO baler that follows right behind your tractor. It's easy to watch the pick-up, simple to keep it centered on the windrow, even around curves. You keep the tractor close to the windrow but out of the hay. "Pivot Balanced" PTO shaft rolls smoothly during turns and transmits power steadily. Clatter and vibration are cut to a new low. See the 62 hitched to a tractor and you'll see the difference.

ON-TARGET 15 BALE THROWER

saves men... and bales

Here's the high capacity bale thrower that does it right. It handles full-sized bales, up to 31 inches in length and 60 pounds in weight. It lets you hit the wagon anywhere on the load. Six continuously running rolls are grooved to handle bales without breaking ties or tearing up bales.

The 15 thrower pivots automatically to stay on target as the wagon trails to one side or the other around curves. Oliver Corporation, Chicago 6, Illinois.

It's a high-speed honey!

NEW COUNTERBALANCED 351 MOWER

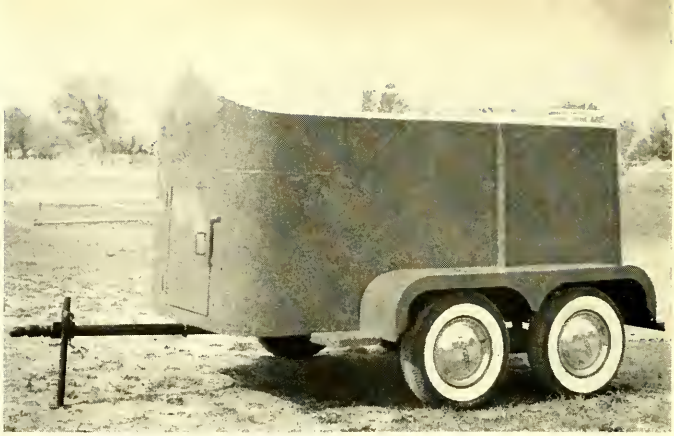
Here's the no-pitman machine that's fast and quiet, with easy three-point hitching. There's no tractor-shaking vibration even with a sickle speed of 2280 strokes per minute. You'll mow close and even at far higher field speeds, slice right through heavy crops. See and hear the Oliver answer to high speed mowing. Six, 7, or 8 ft. cutter bars.

OLIVER

Look for this sign, new symbol of prompt, dependable service and genuine Oliver parts.

Award Winning Trailer

These Wyoming Future Farmers set an example by building a winning trailer with only a small investment in materials.



The finished tandem-wheel trailer was made largely from scrap angle iron and sheet metal. It is built low for loading and can haul all sizes of livestock.

A PROBLEM gave way to an award-winning shop project this past year for Future Farmers Gottlieb Fink and Ray Sessions of Byron, Wyoming. Their problem: a good vo-ag shop project which would develop shop skills, yet cost next to nothing because of their limited funds.

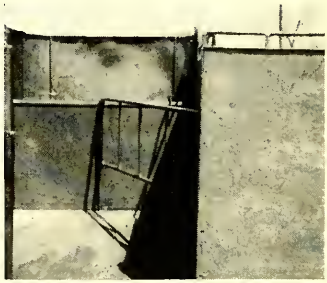
Consultation with Advisor Wayne Lynn produced the solution: The Byron Chapter sorely needed a livestock trailer; so if the two students would do the building, the chapter would cover the material costs. To give added incentive, the project would be entered in a welding award program sponsored by the Lincoln Arc Welding Foundation.

Both Gottlieb and Ray agreed that projects such as this take lots of advance planning, so off they went to the Wyoming State Fair to develop some ideas. With tape measure and notebook they measured and inspected nearly every livestock trailer around the barns. They settled on one with tandem wheels, and decided to add some of their own innovations.

When the newly painted trailer rolled out last spring, it was named national winner in the welding foundation's agricultural education division. First prize netted the students a tidy $738 in contrast to the $266 it cost to build the project. And the months spent planning and building it developed shop skills invaluable to beginning farmers.

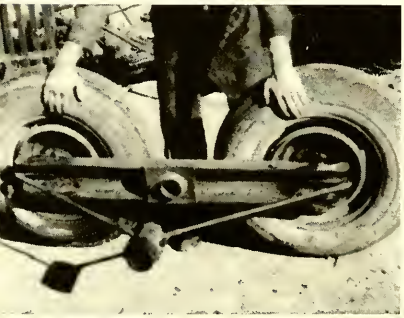
Costs of Materials

Spindles and Rims	$20.00
Tires	55.05
Porta-Walls	5.60
Hub Caps	6.00
Tubing	8.40
Channel Iron	4.00
Angle Iron	30.10
Pipe	3.84
Iron Plate	3.00
T-Iron	.80
Sheet Metal	2.00
Grease Zerks	.96
16-Gauge Sheet Metal	24.00
Flooring	13.44
Iron Rods	13.40
Plyboard	26.00
Bolts	3.25
Hitch	15.45
Hinges	4.20
Jack	7.50
Paint	18.00
Masking Tape	.20
Linseed Oil	1.25
TOTAL COSTS	$266.44



Wood plank floor, sheet metal-plywood sides, hinged loading door at front and rear. Pipe center divider is removable.

Two angle irons were bent for both top and bottom frames, connected with upright braces, and welded to wheels.



Wheels and spindles from the junk yard were welded to angle iron, braced with rods; then heavy tubing became an axle.

Gottlieb and Ray stop momentarily with hitch. Tongue was made from pipe. Screw-jack is from mobile home.

The Big Top's been topped for fun by Falcon!

The great new Falcon convertible really IS tops for fun . . . up or down. The Falcon offers snappy bucket seats . . . a handy personal console . . . a silky four-speed stick shift . . . and handsome good looks that draw crowds like a three-ring circus. More than ever, F-A-L-C-O-N is the preferred spelling for "fun" wherever it goes.

A PRODUCT OF Ford MOTOR COMPANY

America's liveliest, most care-free cars

FORD

Falcon Fairlane Ford Thunderbird

Project Teaches Conservation

IOWA

THE flat corn lands around Sumner, Iowa, have been taking on a new look during the past year because of the foresight of Future Farmers from the Sumner Chapter.

Members have organized a community service committee to plan and lay out contour strips for area farmers. "We don't mind the work," the members say. "Not only are we learning good soil conservation methods, but we might want to purchase the particular farm some day."

An average of five miles of strips were constructed last year, complete with grassed waterways. As students pitch in to work on more contour strips, they agree they're working on a project that will pay off when they begin farming in the Sumner community.

NEVADA

Future Farmers Sell Spuds

"SELLING Nevada Spuds" became the watchword of the Ruby Mountain Chapter in Elko as members pitched in on a citywide potato-selling campaign. After securing permission from the local city council and area grocery stores, Elko's Future Farmers spent three days in a huge potato pit out in Diamond Valley.

The "spuds" had to be graded, sorted and bagged for townspeople who had given orders. Members delivered over 900 sacks, learned a great deal about salesmanship . . . and best of all, netted over $1,000.

OREGON

Chapter Owns Its Owns Combine for Custom Harvest Work

IT WAS a happy day for Corvallis Chapter officers, Ron Jones, Don Jones, and Chet Becker, when they handed the final payment on their chapter-purchased combine to a representative of the local bank.

The machine, a self-propelled unit, was purchased by the Corvallis Chapter just five seasons ago for an investment. It provided full summer employment for four Future Farmers who used it on farms in the Corvallis area.

In spite of the $5,300 original cost and another $1,200 spent on gasoline, parts, and servicing, the chapter cleared the debt this past January. Now it's clear sailing when combining season comes around again.

The FFA

LOUISIANA

Farm Shop Project Saves Time and Labor

AFTER finishing his project in Hessmer Chapter's vo-ag shop, Carl Steve tried it out at home on the farm. It's a device to drive creosote posts and was made from scraps around the shop. A piece of four-inch drill stem pipe, 2½ feet long, slips over the post. One end is capped with a metal plate, and a half-inch pipe welded in a square serves as a handle when driving the post.

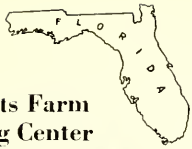
After the post is chopped to a point at one end, the device is slipped over the end. "Drives it down in a hurry in wet ground," Carl explains. And he added that it beats using a sledge or a mallet, too.

WYOMING

Champion Steer At Fair Earns Another Calf

BOB WHITE'S smile is genuine as he learns he won the Wyoming Hereford Trophy for having the champion FFA Hereford fat steer at the recent Wyoming State Fair. Advisor Gary Deveraux agreed with Bob that his vo-ag training at the Torrington High School had no small part in the achievement.

Best part of the affair, though, was the presentation of a Hereford calf free of charge to Bob from J. M. Christenson, a local breeder. Since the winning steer was a Christenson calf, the breeder took the occasion to give Bob another one with which to try next year.



Chapter Puts Farm In Shopping Center

WHEN a new shopping center opened up to the north of Pompano Beach, Florida, before Christmas, the 42 Future Farmers from the local chapter moved in a miniature farm.

They built a corral and stalls in a parking lot, and a total of 30 animals were bought to fill it.

For a total of 15 days during the shopping rush, city folks and children got a chance to see and pet animals they seldom were around. Future Farmers cared for everything from rabbits to deer and got in some good publicity for the FFA. "A matter of pride," Advisor Bill Humphrey called the participation.

Awards Make Wall Display

AS Future Farmers of the Montello Chapter made plans to celebrate their 25th anniversary this past winter, they found their chapter had won lots of awards—enough, in fact, to cover a major portion of the classroom wall.

Advisor Jack Whirry, vo-ag instructor at Montello for 20 of its 25 years, assembled his chapter officers as a public relations gesture for this photo.

Among the chapter's awards are nine national plaques, one national championship trophy, 10 certificates for winning the state poultry judging contest, and two plaques for winning the state livestock grading contest a total of six times.

To help the Montello Chapter celebrate, three former advisors, the first chapter president, and 31 former State Farmers were in attendance at the anniversary event.

In ACTION

Across the U. S. A., Future Farmers are "Learning to Do; Doing to Learn; Earning to Live; and Living to Serve."

Farm Safety Program Uses Bumper Stickers

THE candid camera caught Ray Sparks and John Hullinger of Carey, Idaho, Chapter's Farm Safety Committee in the line of duty. The chapter safety committee is conducting a widespread program to call attention to hazards within the Carey community.

The bumper sticker telling motorists to "Enjoy Tomorrow, Be Safe Today" is being placed on State Advisor Robert Day's car and will join cars from over 30 states that have the slogan.

In addition to the bumper sticker campaign, Carey Future Farmers are conducting a hazard hunt to find 1,000 hazards to safety. Their program will continue through the spring months.

Missourians Add New Twists to Old Activities

WHILE carrying out a well-rounded program of work and enjoying a great deal of community support, the Dearborn (North Platte) FFA Chapter decided they needed something unusual in the way of a fund-raising project. They hit on an "unusual" activity with a "Wild Game Supper."

Hunting the game and selling advance tickets made a novel, fun-filled activity. Thanks to a Mothers' Committee, the members got out of cooking the meal which included raccoon, deer, rabbit, turkey, squirrel, quail, and pheasant plus potatoes, corn, turnips, hot rolls, and pie.

According to chapter advisor, Jim Riley, publicity for the event went beyond the local community and it was profitable, too.

FFA Children's Barnyards are not particularly new, but getting paid for setting one up is a neat twist. This is what happened to the Liberty FFA Chapter.

The promotion manager for a merchants' association in a nearby shopping center heard about FFA Barnyards, and the Liberty Chapter was invited to set one up.

In addition to paying the Chapter a lump sum, the merchants treated the FFA members to lunch. The Barnyard is now an annual event. Chapter advisor, Roy Hill, says the merchants are pleased with the crowds, which are the largest they have had for any shopping center event except a Christmas promotion.

AS A part of their excellent farm shop program, Gower Future Farmers acquired a small tractor for student practice on repairs and maintenance.

Then the ideas started popping for putting the tractor to work to make money for the chapter, provide a community service, and for "doing to learn" experiences.

Advisor Charles Hannsz says plans for the tractor include the following: pushing snow off driveways in the winter, spring garden plowing, mowing grass on school grounds and other places around town, and custom work for farmers in the area.

A rate schedule for hiring the tractor includes a wage for chapter member operators. Hannsz says the activity provides labor income and experience for students who might not otherwise find part-time employment.

Luverne Mikkelson's loan paid off in these Angus. Agent Skorheim, left, and Instructors Howe and Iverson agree.

Bank agent, Ray Skorheim, checks Jim Fjeld's chapter-approved loan request. Advisor Norman Howe looks on.

Supervised Farming On Credit

A North Dakota vo-ag instructor and the local bank agent cooperated to develop a credit plan that has provided $52,000 to help Future Farmers get started.

By Maynard J. Iverson

FUTURE Farmers around Minot, North Dakota, have been finding it easier to become established in farming in the past few years. And most of the reason lies behind the credit plan Advisor Norman Howe and Bank Agent Ray Skorheim worked out for the Minot FFA Chapter.

Take the case of Luverne Mikkelson, for example. Four years ago as a freshman in high school, he took out a loan to buy four head of registered Angus heifers. By using subsequent loans, he now owns 28 head of quality cattle, a herd sire, and a baler. He sells bulls to local farmers, does custom baling, and is using the profits to develop a partnership with his father on the home farm south of town.

Or consider how Jim Fjeld got a loan to purchase cattle during his vo-ag training and made enough profit from his herd to pay most of his way through college.

These are only a few of the Minot Future Farmers who have borrowed and invested over $52,000 since the program was organized in 1958. Advisor Howe needed a way to help his students overcome the financial hurdle they faced when attempting to build a supervised farming program. A trip to the First National Bank in Minot and a talk with Ray Skorheim, agricultural representative, resulted in a loan program with three goals in mind.

(1) To help the vo-ag students establish themselves in farming.

(2) To give each student the opportunity to become familiar with bank procedures.

(3) To build the students' loan experiences for future needs.

"These have been accomplished with many side advantages," Advisor Howe explains today. "The members have taken a keener interest in agricultural finance and are more interested in classroom work. And now we're better able to assist students by grouping their purchases of livestock at the sales ring."

Howe's assistant, Maynard Iverson, explains how it works: "The members apply for loans to a chapter loan committee made up of Advisor Howe and several chapter members. A regular loan form is used, which is signed by the parents of the student applying.

"Approval or disapproval of the application is made by the committee, and if the request is approved, the member takes it to the local bank where a final decision is made. Bank officers discuss the loan with the member in a business-like manner."

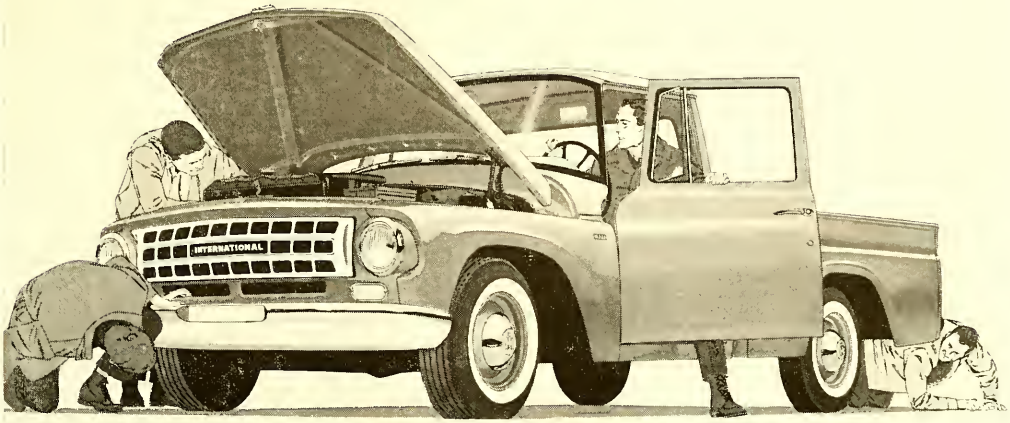
Most loans to Minot's members have been made for livestock with the stock making up the security for the loan. In fact, Ray Skorheim explains that 100 percent loans are common, especially with beginning Future Farmers. "And we haven't had a single loan go bad, either," he'll tell you.

As the Future Farmer expands his supervised farming program, all increases become a part of the mortgage. Some boys apply the increased collateral of their herds towards the purchase of farm machinery, while others reinvest in either livestock or college. Payments on the mortgage are made from the sale of part of the herd, and eventually the students pay off the loans and retain the nucleus of a dairy or beef herd.

Prior to establishing this bank loan program, the Minot Chapter had a loan fund. But as Advisor Howe explains, "This had limitations in that money generally did not meet the need. And more important, this method didn't help the members establish a credit rating with sound credit experience."

Advisor Howe's enthusiasm overflows when he goes into detail and he'll tell you: "Our new loan program has had the greatest impact on supervised farming programs of anything I've encountered. It's a great help!" ◆◆◆

How to find all the improvements in the newest INTERNATIONAL Light-Duty Trucks



First, take a good look at the outside of this nimble pick-up—one of the great new INTERNATIONAL 1000-1500 Series. It's clean and handsome, with new grille design and single headlights.

Then, get inside and beneath the surface where quality is built into every new feature of every model of the line. That's how to learn the true values of the newest INTERNATIONALS.

You owe it to yourself to go under the hood, check the power train, inspect the cab . . . and drive a new INTERNATIONAL. It's the best way to see why these trucks run better, last longer.

There's a brand-new 3-speed synchromesh transmission that's quieter and shifts more smoothly. Time-proven INTERNATIONAL engines—economy 6 and true-truck V-8's—perform better than ever! New 37 amp. alternator extends battery life. You get a positive crankcase ventilating system on the 241 cu. in. 6-cyl. engine, 266 and 304 cu. in. V-8's. New magnetic fan is available on V-8's.

Inside the cab, smart new nylon and vinyl seat coverings match eye appeal with durability. New panel has instruments easier to read—and they're real instruments, not passenger car warning lights. Fuse panel is behind the glove box door—easy to reach. In addition to your choice of two fresh-air heaters, there's a new low-cost recirculating heater.

Taken all together this new 1000-1500 Series . . . in all body styles, with GVW ratings up to 14,000 lbs.—proves to be today's "high-quality" light-duty line! Find out now at the nearest INTERNATIONAL Truck Dealer or Branch.

INTERNATIONAL® TRUCKS WORLD'S MOST COMPLETE LINE

International Harvester Company

THE STORY OF FARMING

No.3 The Middle Ages

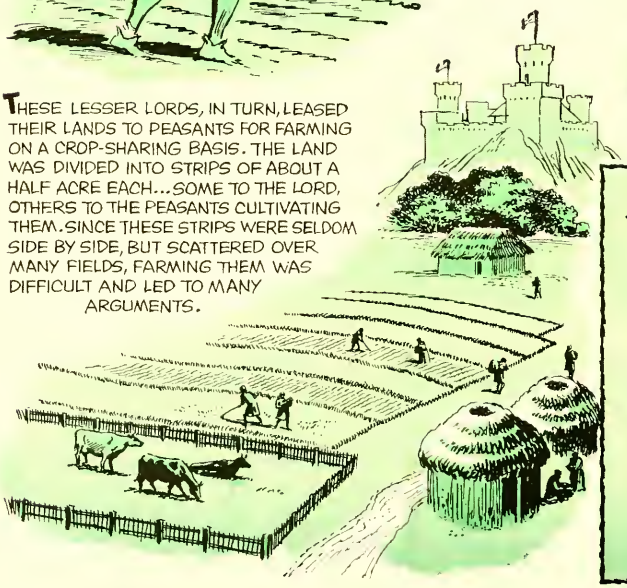
DURING THIS PERIOD, WHICH BEGAN ABOUT A.D. 800 AND LASTED UNTIL THE END OF THE 1400'S, FEUDALISM WAS THE WAY OF LIFE IN WESTERN EUROPE.

IT HAD DEVELOPED FROM TWO EARLIER INSTITUTIONS—THE ROMAN *PRECARIUM* WHICH WAS A TEMPORARY GRANT OF LAND TO A TENANT IN RETURN FOR SERVICE, AND THE GERMAN *COMITATUS*...A BAND OF WARRIORS WHO FREELY FOLLOWED A CHIEFTAIN IN RETURN FOR FOOD, ARMS, AND A SHARE OF ANY BOOTY THAT MIGHT BE WON.

ON THE DEATH OF CHARLEMAGNE (A.D. 814) THE FRANKISH EMPIRE BEGAN TO BREAK UP. LANDOWNERS NEEDED PROTECTION FROM FOREIGN INVADERS AND EACH OTHER. THE CENTRAL GOVERNMENT WAS NO LONGER ABLE TO GIVE THIS PROTECTION, SO POWERFUL FRANKISH NOBLES SEIZED THE OPPORTUNITY TO BUILD VAST LAND HOLDINGS OF THEIR OWN.

THESE GREAT OVERLORDS OR BARONS GAVE PARTS OF THEIR LAND, CALLED FIEFS, TO THEIR VASSALS IN RETURN FOR PLEDGES OF ARMED MEN IN TIME OF WAR AND FOR A SHARE OF THE HARVEST.

THESE LESSER LORDS, IN TURN, LEASED THEIR LANDS TO PEASANTS FOR FARMING ON A CROP-SHARING BASIS. THE LAND WAS DIVIDED INTO STRIPS OF ABOUT A HALF ACRE EACH...SOME TO THE LORD, OTHERS TO THE PEASANTS CULTIVATING THEM. SINCE THESE STRIPS WERE SELDOM SIDE BY SIDE, BUT SCATTERED OVER MANY FIELDS, FARMING THEM WAS DIFFICULT AND LED TO MANY ARGUMENTS.



FARMING WAS DONE ON A 2-FIELD OR 3-FIELD SYSTEM, ONE FIELD BEING LEFT FALLOW FOR A YEAR. THE PLOWING WAS DONE COOPERATIVELY, HARROWING AND SEEDING INDIVIDUALLY. BREAD GRAINS WERE THE CHIEF PRODUCTS, LIVESTOCK NEXT. COWS WERE RAISED FOR MILK, PIGS FOR FAT AND MEAT, OXEN FOR WORK, SHEEP FOR WOOL. THE ONLY MEAT PRODUCTION BESIDES PIGS WERE THE OVER-AGE ANIMALS.

FARM PRACTICES WERE WASTEFUL, LAND FERTILITY WAS QUICKLY DIMINISHED. YIELD DEPENDED ON THE SEASONS. LOCAL WARS WERE FREQUENT. GRAIN STORAGE WAS POOR, MEAT COULD BE KEPT ONLY FOR SHORT PERIODS EVEN WHEN SALTED. IT WAS A TIME OF HARD WORK AND FREQUENT FAMINES.

THE WATER CYCLE

CLOUDS

CONDENSATION

RAIN AND SNOW

SUN

VAPOR

EVAPORATION FROM OCEAN, RIVERS, LAKES, FORESTS, GROWING CROPS

OCEAN

GLACIERS

LANDLOCKED LAKES

SPRINGS

RIVER SYSTEMS

WATER SEEPS THROUGH SOIL

UNDERGROUND

WATER TABLE

SUBTERRANEAN DEPOSITS

GROUND WATER

WHEN TWO ATOMS OF **HYDROGEN** COLLIDE WITH ONE ATOM OF **OXYGEN** THE RESULTING EXPLOSION PRODUCES H_2O— **WATER!**

WATER CANNOT BE DESTROYED! THERE IS AS MUCH WATER IN THE WORLD TODAY AS THERE WAS WHEN IT WAS CREATED.

OVER **ONE HALF** YOUR WEIGHT IS WATER!

75% OF YOUR MUSCLES, 22% OF YOUR BONES AND 2% OF THE HARD ENAMEL ON YOUR TEETH ... ARE **WATER!**

IF ALL THE ICE AT THE ANTARCTIC MELTED IT WOULD RAISE THE LEVEL OF THE OCEANS ABOUT **185 FEET!**

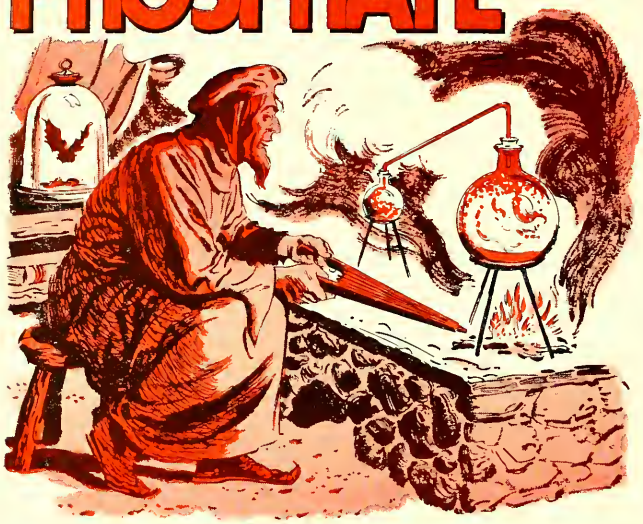
OVER 3/4 OF THE EARTH IS COVERED BY **WATER.**

A GROWING CORN PLANT USES FROM **5** TO **10** TIMES ITS OWN WEIGHT IN WATER **EACH DAY!**

YOU CAN LIVE ABOUT A MONTH WITHOUT FOOD IF NECESSARY, BUT ONLY A FEW DAYS WITHOUT WATER!

IT WOULD NEARLY COVER THE CAPITOL IN WASHINGTON, D.C.

PHOSPHATE FROM FOSSIL TO FERTILIZER



PHOSPHATES ARE CHEMICAL COMPOUNDS WHICH CONTAIN PHOSPHORUS, ONE OF THE ELEMENTS THAT PLANTS, ANIMALS AND HUMANS NEED FOR THEIR GROWTH.

PHOSPHORUS DOES NOT OCCUR FREE IN NATURE, BUT ITS COMPOUNDS ARE FOUND IN MANY ROCKS (PHOSPHATE ROCKS), ANIMAL REMAINS (BONE ASH) AND PLANTS (VEGETABLE MOLD).

PHOSPHORUS WAS FIRST PREPARED IN ELEMENTAL FORM BY AN ALCHEMIST, HENNIG BRAND, OF HAMBURG, GERMANY, IN 1669.

THIS PART-CHEMIST, PART-MAGICIAN THOUGHT HE HAD FOUND THE LONG-SOUGHT "PHILOSOPHER'S STONE" IN THE STRANGE POWDER HE HAD DISCOVERED. IT GLOWED IN THE DARK AND TOOK FIRE SPONTANEOUSLY UPON EXPOSURE TO AIR. IT WAS STARTLINGLY NEW AND MYSTERIOUS — SURELY THE MAGIC THAT WOULD TURN LEAD TO GOLD AND GIVE EVERLASTING LIFE TO MAN!

BUT, ALTHOUGH THIS DISCOVERY WAS AN IMPORTANT STEP FORWARD IN CHEMISTRY, BRAND'S METHOD OF PRODUCING PHOSPHORUS (FROM THE REMAINS OF EVAPORATED URINE) WAS NOT PRACTICAL. A HUNDRED YEARS PASSED BEFORE ANOTHER SCIENTIST, KARL SCHEELE DEVELOPED A MUCH EASIER METHOD OF PREPARING PHOSPHORUS FROM BONES...BUT STILL NOT A PRACTICAL METHOD COMMERCIALLY.

THEN, IT WAS DISCOVERED THAT PHOSPHATE ROCK CONTAINED PHOSPHORUS ALONG WITH CALCIUM AND MAGNESIUM. AGRICULTURISTS KNEW THAT CROPS GROWN ON THE SAME PIECES OF SOIL YEAR AFTER YEAR GRADUALLY REMOVED THE NATURAL SUPPLY OF PHOSPHATES. THIS MUST BE REPLACED IN A SOLUBLE FORM THAT WOULD ACT MUCH QUICKER THAN THE PULVERIZED ROCK.

IN 1842, SIR JOHN LAWES OF ENGLAND OBTAINED A PATENT ON A PROCESS OF TREATING NATURAL ROCK PHOSPHATES WITH SULPHURIC ACID FOR THE MAKING OF SUPERPHOSPHATE — AN EXCELLENT SOLUBLE FERTILIZER.

PHOSPHATE ROCK IS A SEDIMENTARY FORMATION USUALLY INTERBEDDED WITH MARINE SHALES OR LIMESTONES. IT WAS FORMED DURING MANY GEOLOGIC PERIODS OF TIME. COLLOPHANE IS ITS ESSENTIAL CONSTITUENT...A NON-CRYSTALINE MATERIAL COMPOSED LARGELY OF TRICALCIUM PHOSPHATE $[Ca_3(PO_4)_2]$.

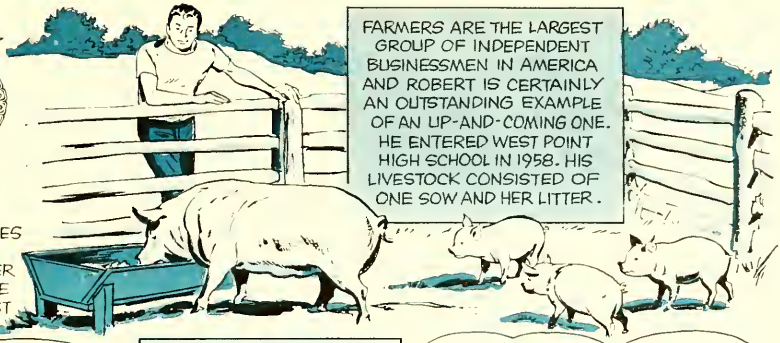
FLORIDA AND TENNESSEE CONTAIN THE LARGEST DEPOSITS OF PHOSPHATE ROCK IN AMERICA.

WITH MODERN METHODS TODAY, CRUDE CALCIUM METAPHOSPHATE IS PRODUCED WITH A RELATIVELY HIGH CONCENTRATION OF PLANT NUTRIENT PER TON COST.

NEXT ISSUE POTASH

A TRUE STORY OF FFA

by AL STENZEL



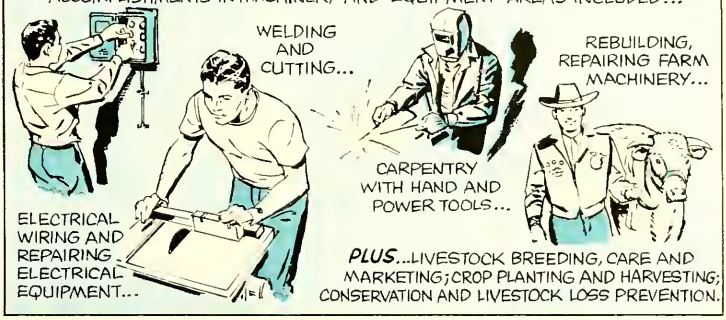
ROBERT E. REPPERT, 19, LIVES WITH HIS PARENTS, HIS TWIN BROTHER, ROGER, AND YOUNGER BROTHER, CLAY, ON A 700-ACRE FARM IN CUMING COUNTY, WEST POINT, NEBRASKA.

BY GRADUATION IN 1962, HE HAD A TOTAL EARNED LABOR INCOME OF $3778.92 FROM PRODUCTION PROJECTS IN THE AREA OF FEEDER STEERS, SWINE AND BEEF BREEDING, CORN, LEGUME HAY, AND SHETLAND PONIES.

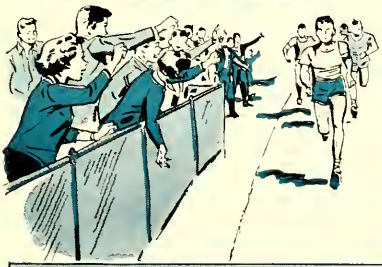
(BOB'S FATHER AND UNCLE CONDUCT A PONY AUCTION—GRADE AND REGISTERED—EVERY SPRING AND FALL).

AND THAT'S NOT ALL...

BOB'S FARM IMPROVEMENT CONSTRUCTION JOBS, HOME IMPROVEMENTS, AND ACCOMPLISHMENTS IN MACHINERY AND EQUIPMENT AREAS INCLUDED...



PLUS...LIVESTOCK BREEDING, CARE AND MARKETING; CROP PLANTING AND HARVESTING; CONSERVATION AND LIVESTOCK LOSS PREVENTION.



BOB WAS AN USHER IN CHURCH, TOOK PART IN CLASS PLAYS, A LEADER IN THE CHURCH YOUTH PROGRAM AND A MEMBER OF THE FOOTBALL AND TRACK TEAMS.

WE HAVEN'T ROOM TO LIST ALL OF ROBERT'S **FFA** ACTIVITIES...THEY WERE MANY AND VERY OUTSTANDING. HE EXHIBITED AT COUNTY AND STATE FAIRS...ATTENDED MANY CONFERENCES, ALWAYS IN AN EXECUTIVE CAPACITY. BOB IS A MEMBER OF THE WEST POINT, NEBRASKA FFA CHAPTER.

FOR HIS EXCELLENT RECORD IN FFA WORK AND IN PARTICULAR HIS OUTSTANDING ACHIEVEMENTS IN FARM MECHANICS, ROBERT E. REPPERT WAS THE 1962 NATIONAL WINNER OF THE FFA FOUNDATION'S $250 CASH AWARD IN FARM MECHANICS.

SADDLE UP WITH SLIM

Lee RIDERS

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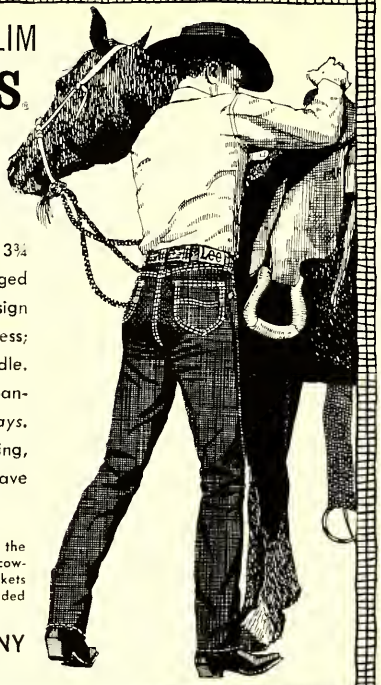

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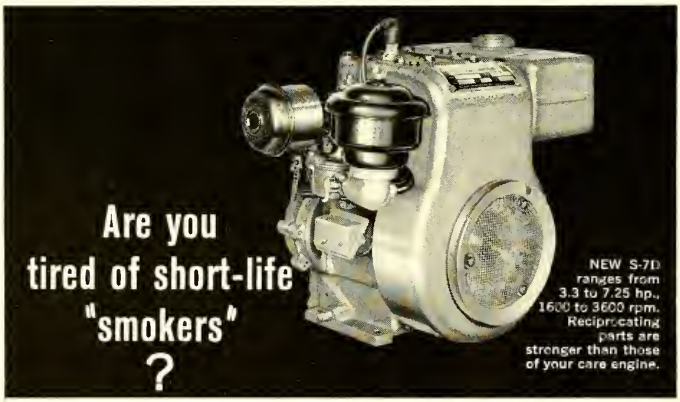

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Seeding the

MEMBERS of the Gettysburg Chapter are literally seeding profits into their treasury by providing a service to their Pennsylvania farm neighbors. By this time of year, Advisors Elmer Schriver and George Glenn will have confirmed that another $350 has been banked from thousands of packets of spring seeds and nearly as many vegetable plants that chapter members sell.

But what makes the Gettyburg seed selling program really unique is the teaching program that accompanies it. Even as far back as 1938 when Elmer Schriver worked out the seed sales program with the Eastern States Farmers' Exchange, he had such a program in mind.

Farmers are basically salesmen, so why not develop the talents early? The whole cycle starts in the late fall when the Future Farmers join in to help compile a list of necessary seed catalogs and order blanks. Not too many weeks before Christmas, the catalogs arrive and chapter members polish up their salesmanship over the holidays.

Robert Cullison checks bagged seed potatoes that the chapter also sells.

Chapter Treasury

Advisor George Glenn with one of the greenhouse flats of lettuce plants soon to be offered for sale to farmers in the community.

Eastern States Photos

January and February are the busiest months, as students add to their lists of seed orders in hope of winning either the $5.00 individual award or the top-selling class reward of cherry pie and ice cream. Before the selling ceases around the latter part of February, three separate orders will reach the cooperative's Massachusetts headquarters.

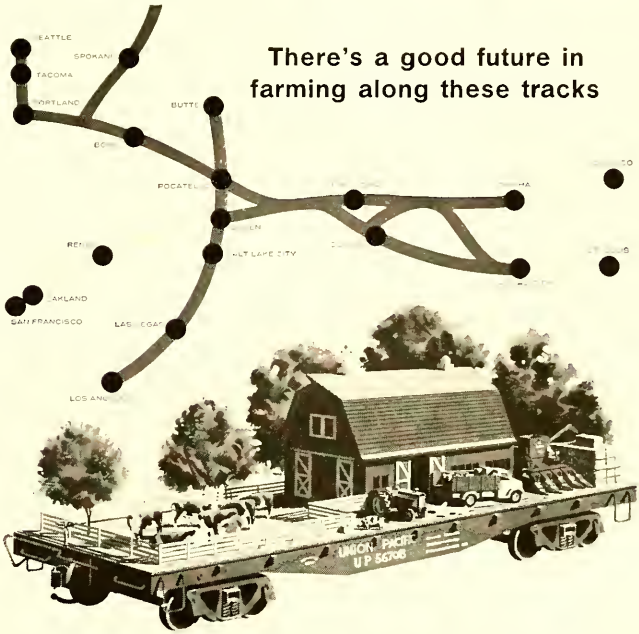
This past year over $1,200 worth of seeds were sold, with the chapter retaining a neat 20 percent as its profit. Another $100 comes in from early vegetable plants the members propagate in the chapter greenhouse adjoining the shop. Here's where the main learning experience comes from.

The flood of seeds arrives in early March in bulk form. Each class then takes the responsibility of arranging the seeds both in alphabetical and garden variety order on the shop worktables. Individual salesmen compile their order lists from the array of seeds, then check for correctness and possible shortages. "They get good experience from this bookkeeping exercise," Advisor Glenn told us.

The other phase of training comes from the greenhouse outside. Here the specially prepared soil-sand-organic matter mixture is fumigated, then metered into flats early in the season. The freshmen and sophomores sow the seeds, transplant them, and harden the seedlings before farmers in the community come to buy tomato, cabbage, pepper, and cauliflower stock early in April. "We've got sale for lettuce, broccoli, and Brussels sprouts, too," Glenn explained. And of course, students keep all records.

We learned that around 40 flats of tomato plants and 20 flats of cabbage plants are sold, in addition to the other vegetable varieties. "Many local people depend on us year after year," Advisor Glenn was quick to add.

Gettyburg's seed selling program is certainly not new, nor is it one of a kind. It is, however, a good example of how many chapters are serving their communities while benefiting themselves.



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Run it Out!

Fiction by Richard L. Hebert

He made it a bone-bruising slide, feet first, that bowled over the waiting catcher like a tenpin. Dust spurted high. But above the shrill scream of the spectators, Fred heard the umpire . . .

FRED DIXON, face set with determination, blue eyes narrowed, selected a bat from in front of the dugout and strode purposely towards the plate.

He nodded as he heard Coach Stewart's encouraging cry: "It's up to you, Freddy boy! Get on that base! Jack and Eddie will get you around!"

This was Gulf State's last chance. It was the bottom of the ninth and Dothan Prep, the visiting high school team, led 7 to 6. Gulf State High had failed to get a hit from the bottom of the sixth inning. A new pitcher had come in after Gulf State scored six runs in the fifth, and had pitched like a whiz kid.

Three strikeouts, one by Fred himself, had been chalked up by Oliver, the new pitcher, and the remaining blows had been weak taps to the infield and a puny blooper or two. Ned Sandal, Dothan shortstop, had made two near impossible plays to save hits on the only two balls the Gulf State boys had gotten the wood on. But Fred knew that was to be expected, as Sandal was conceded the best high school shortstop in the state and had been scouted by both the Senators and the Yankees in the past two weeks.

Oliver, the Dothan Prep pitcher, was a big boy and determined. He eyed Fred Dixon, nervous in the batter's box. Oliver was a farm boy, strong, rather tall, and with big hands and muscular arms and shoulders. He took no formalized windup: he simply pitched. The ball came towards the plate like a bullet, catching Fred a bit off balance.

"Strike one!" yelled the umpire.

Fred tapped the plate viciously with his bat and moved his feet back and forth until the ground felt even and secure beneath them. Again Oliver pitched.

Fred brought his bat around and heard the welcome sound of the ball, but he could feel that it was far from being a solid smash. Another blooper!

Fred flung his bat to the ground in sudden anger and started legging it for first. His quick glance told him the soft fly was in the direction of short. Fred saw Ned Sandal move a yard or two to his left, raise his hands, and wait.

A child could catch it, Fred thought, and Sandal never missed. Fred broke stride and slowed to a dog trot as he headed down the line. There was no need to make a dash; the soft fly was an easy out . . .

Suddenly Fred cried aloud in dismay at what he saw. Ned Sandal had muffed the easy fly!

Fred's powerful leg muscles tightened and fairly flung him down the base path towards first. He heard thunderous yells from the stands. The first base coach was waving him on frantically. Fred made one last desperate leap. But he was too late!

Ned Sandal, always a fighter, had scrambled for the ball, recovered it, and shot it to first. The throw beat Fred Dixon's wild leap by inches.

"Out!" bellowed the first base umpire.

Head hanging in shame, Fred walked slowly to the dugout. His face was crimson with guilt for not having run out the soft fly.

Fred slumped to the bench, blue eyes staring despairingly straight ahead. None of his teammates had spoken to him. Even a substitute seated next to him looked away with a frown when Fred tried to say something.

Jack Parker, the next batter, took two quick balls and

(Continued on page 62)

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11—Soybean Farming—The soybean is now the most important oilseed crop in the U. S., and many farmers are switching to it for a cash crop. Tells what returns you can expect in comparison to other cash crops. A handy map lists varieties recommended for individual states. (National Soybean Processors.)

12—Practical Water Management—A water management plan is the first step in reclaiming land eroded by run-off. Pictures and step-by-step instructions are contained within this publication to help you plan your fields. Learn why fences must be moved, rotations revised, and terraces and ridges built and maintained. (Danuser Machine Company.)

13—Bright Ideas with Do-It-Yourself Aluminum—A wealth of handy man projects using aluminum has been put together, complete with several patterns. Using the new "Do-It-Yourself" aluminum, even the inexperienced Future Farmer can make such items as wall desks, cold frames, cabinets, and wall plaques. (Reynolds Metals Company.)

14—Selecting, Fitting, and Showing Beef—Ever envy the lucky winners at beef shows you attend? Well, don't, because with these basic tips, you can have a chance at the winner's circle. Here's a complete program starting with selecting the animal and following through with feeding, clipping, and handling for show. Small details such as curling the hair and shampooing are included. (Albers Milling Company.)

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Run it Out!

(Continued from page 60)

a strike from Oliver. He was a solid hitter when he connected, but not a dangerous one, and Fred and the Gulf State High players felt they would be going down to defeat.

Then Parker connected. The ball would carry far because there was not too much altitude.

Parker was around third as the Dothan Prep center fielder threw to the cut-off man, Sandal, who had run far from his position in an effort to hurry the throw home. It was not necessary for Parker to slide; it was a stand-up homer. The score was tied, 7-7.

Fred Dixon was deeper now in the mire of despair than before. But for his bonehead play in not running out the soft fly in the ninth, he would have been on first when Parker slammed out his home run. The score now would be 8-7 in favor of Gulf State, the game in the win column.

Eddie Biggert, the next hitter, fanned, as did Modulesky. The inning was over and Fred took his position at first base for the top of the tenth inning without enthusiasm.

Dothan Prep went down one, two, three. So did Gulf State in the bottom of the tenth.

Outside of a walk and a hit batsman in the eleventh inning, the Gulf State boys were unable to scratch even a single off Oliver. The runners died on base.

Then came the twelfth with Fred to be the third hitter of the inning. There was but one way for him to atone for his mental lapse in the bottom of the ninth. He must hit a homer!

The first two batters went out quickly, one on a weak tap to Sandal and the other striking out on three pitched balls.

Fred walked slowly to the plate again, face white. This time Coach Stewart said shortly, "Up to you, Fred," without his usual enthusiasm.

Fred gritted his teeth in desperation. Coach Stewart had given up on him. He knew he had not played the game as he should have when he failed to run out that fly. He had made a mistake. He was determined now to never again allow such a lapse . . . but now it was too late.

The only way to make up for it was to slam out a homer but, Fred knew, such heroics might well be beyond his ability. He was not a slugger. He punched hits to all fields, but seldom was he able to hit the long, hard ball. To hit a home run now would be, well, something of a miracle.

Oliver sneaked an inside pitch past Fred for a strike. Then came two balls followed by a foul. Then another weak foul. Fred had swung wildly at the two balls he had fouled. He was striving for that needed homer. Suddenly Fred heard Coach Stewart's shrill yell, "Look 'em over, Fred! Make him pitch to you!"

It was three balls and two strikes now. Fred faced Oliver with a grim determination he had never known before. Oliver scowled, nodded to his catcher, and threw the ball.

It was ball four. Fred, his brain suddenly clearing at the free gift of a base on balls, then did something he was never able to explain. He sprinted for first base with the speed of a dash man!

"Throw to first! Throw to first!" he screamed out the words to the catcher as he sped down the baseline.

The Dothan Prep catcher was momentarily rattled. Even though the batter had been given a free walk to first, he was running to the base like one possessed! The catcher rifled the ball towards first.

The first baseman, caught by surprise, stabbed at the ball, but it passed inches over his outstretched glove and into right field near the foul line!

Fred Dixon rounded first with the speed of a champion sprinter and headed for second. Just before reaching the sack, he threw a quick glance towards right. The fielder was just stooping to pick up the ball. Fred streaked for third. Twenty-five feet away from the bag he got the coach's signal to slide to the right of the base. Fred threw himself forward, head first, his left hand reaching for the third sack, his body swinging wide to the right.

He knew he was safe, and a split second later the umpire's signal was low with hands spread wide.

Fred was pleased with the new feeling as expressed by the spectators, the team, and the coach. The Gulf State players were standing in the dugout, all yelling their delight. Coach Stewart was on the top step, hands to his mouth as he yelled instructions in the direction of third base.

The Dothan Prep infield, calling "Time," congregated at the pitcher's mound to plan the immediate strategy. The plate umpire walked out to hurry them in reaching a decision. After another nodded agreement by Oliver, the Dothan Prep pitcher, the players returned nervously to a position on the edge of the infield grass so as to cut the run off at the plate.

Oliver, understandably nervous now, faced the hitter. Finally he pitched.

Fred bluffed a dash for the plate with Oliver's motion and pitch, knowing the Dothan Prep infield would be expecting a squeeze bunt in an effort to score him. The catcher was jumping with nervousness at the unexpected sight of Fred almost too far up the baseline towards the plate.

Without bluffing a throw, the catcher threw like a bullet to the third baseman, who was almost as far toward the plate as Fred. The catcher's throw was too fast and too high. The third baseman had to leap for the ball, high and to his right. The ball smacked into his bare hand instead of the glove. The baseman juggled the ball momentarily, a half second too long.

For Fred, eyes and reflexes attuned now to taking advantage of every move by his opponents, was arrowing towards the plate! He made it in a bone-bruising slide, feet first, that bowled over the waiting catcher like a tenpin. Dust spurted high. But above the shrill scream of the spectators, Fred heard the umpire's welcome, "Safe!"

The team pounded Fred Dixon's back as they fairly carried him to the dugout. There was a hint of tears in Fred's eyes when he faced Coach Stewart.

"I—I had to do something, Coach," Fred said brokenly, for the long run around the bases had winded him. "I—I made a terrible mistake in the ninth when I didn't run out that popfly. But it—it kind of taught me a lesson. From now on I'll run 'em out, Coach."

Coach Stewart threw his arm around Fred's shoulders, and there was pride showing on his deeply tanned face.

"I know you will, Fred," he said softly. "You learned a lesson in your own way, and that's the most valuable way of all."

"Well! I would have sworn it said 'No dogs allowed'!"

A Chapter on Wheels

By A. G. Shepherd

FUTURE Farmers at Cleveland, Mississippi, have given their chapter an added advantage—wheels. With the recent purchase of a new $6,000 bus for official chapter use, FFA members in this central Mississippi town have opened the way for increased field trips, farm tours, and side trips to the FFA camp at Long Beach.

Most unusual about Cleveland Chapter's purchase of the bus is that it is only part of $10,000 worth of farm machinery and equipment massed in the past six years under the direction of Advisor G. L. Dowell. Back in 1956, Advisor Dowell started organizing a chapter farming program to raise money for the chapter treasury. Land was rented and Future Farmers pitched in to plant and harvest cotton and soybeans.

As the program and the students' initiative grew, machinery dealers, ginners, and fertilizer distributors offered to help. This past year, the Chapter rented 17 acres of land for $250. Members planted 10 acres of cotton and two acres of soybeans. Figuring the 11 bales of cotton and the soybeans harvested, Cleveland's Future Farmers estimated they earned $1,550 above costs this year alone.

From this type of farming program, the Chapter saved to purchase a tractor, disk, cultivator, and pickup truck and built a club house on Lake Beulah. Then last year FFA members decided to sell the club house, adding the receipts to the growing chapter treasury. The new bus was the result.

Cleveland's entire community shares in the pride of the students in their blue and gold chapter bus. As Advisor Dowell deftly put it, "Having the bus for transporting the FFA members for all activities makes them more interested in making a success of money-earning projects."

In fact, next summer the Cleveland Chapter is planning a 12-day tour through six states in their new bus. According to Dowell, he and several fathers of FFA members, plus School Superintendent W. L. Parks, will accompany the Future Farmers.

Advisor Dowell sets down a few simple rules for other chapters to heed if they plan to follow suit: Use the bus only for official FFA activities; have either the chapter advisor or an approved adult drive the bus; and develop a worthwhile chapter program of work to earn money to purchase it. All in all, it adds up to good experience with the benefits of chapter transportation as an extra.

Cleveland FFA officers and their advisor pose with the new bus. It is painted the FFA colors, blue and gold.

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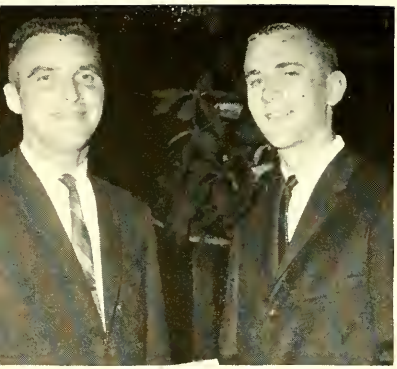

David shares the winner's spotlight with his local fieldman, John Jilek.

Sweet Corn Champ

By July 31, the corn was 38 inches high, and David, left, was recording all growth. At harvest, John Schmidt, Advisor Hoseck, and Jilek came by.

By Paul Weller

A combination of good records, a detailed fertilizer program, and close supervision made David Anderson a top corn farmer.

FORTY-FIVE young farmers stepped onto Miami Beach one day last December from the trains and planes that had gathered them from their farms in 11 states. Guests of the nation's canning industry, they had come here to compete for awards based on the crops they had raised the previous season.

A tall slender Future Farmer, David B. Anderson from Minnesota, had entered his 10 acres of sweet corn in the national canning crops competition. The winner would need to have the very best in horticultural practices, detailed project records, and school activities. But then, David had all of these through four years' participation in the FFA back home in Hector. And it paid off, for David was named the national winner.

The 18-year-old farm boy had left quite an impressive crop record behind him on the home farm. It all started one day two years ago when John Schmidt, fieldman for the Green Giant Company, drove into David's farm and got him interested in a canning awards program sponsored by the National Junior Vegetable Growers Association. David wasn't long in agreeing to enter.

That first year gave the Future Farmer both another good vo-ag project and experience in preparing for the national competition. Last year he set out to win. He and his father picked a likely spot on the farm where 10 acres could be plowed for sweet corn. Only five years before, this spot had been permanent pasture, but the Andersons planted it in soybeans and canning crops for extra income back in 1957.

David's soil tests showed the soil to be high in nitrogen but low in phosphorus. After some figuring, he decided 220 pounds of 8-24-12 per acre should be plowed down. It was then that David's vo-ag training began to pay off. "They encouraged different types of experimentation," he told us, "so there was no problem in dividing the project into four plots to test different fertilizer levels." Advisor Doug Hoseck aided materially in the experimental program.

"We divided the field into a four-acre plot and three two-acre plots," he explained in his report. "The largest plot would have the optimum amount of fertilizer, while two of the smaller plots would vary either 100 pounds too much or too little. The fourth plot would receive no fertilizer." With carefully kept records, David then set out to combine both good corn managing and testing.

When the special seed corn arrived from the Green Giant organization last May, full plans were already under way for the corn project. June 12 was the seeding date, followed 10 days later by cultivation with a rotary hoe. Two cultivations in early July finished that part of the work. David was everywhere, supervising the corn and compiling a complete photographic record for his project book. It was a summer of ample rainfall around Hector, so irrigation wasn't necessary. Nor was insecticide spraying. David found out from his frequent inspections.

Scribbled figures, hurried trips to the corn plots, and hours spent compiling information became second nature to the Future Farmer. Within the pages of crop data, he was keeping a weekly record of growth from the amount of rainfall to the humidity and temperature. Graphs filled his work sheets. At the end of the season he would sit down and study the factors so that he could do even better another year.

By August 14, David found that the height of the corn varied as much as nine inches from one plot to another. He would find later that receipts were $12 per acre more on the correctly fertilized plot. The experiment was paying off. When it came time to pick the crop, the record was almost complete: only the results were needed.

Neighbors could hardly believe their eyes! This young beginner's 10 acres averaged 9.4 tons per acre . . . double the average for Minnesota. His profit came to almost $800, or about $33 an hour for the time he spent with the sweet corn!

It was more than enough to win over the other 425 contestants that entered the initial competition. Asked what he planned to do next year, he replied, "I'm curious about the effects of individual soil nutrients on sweet corn development. I hope to conduct the tests again next year, only this time using single fertilizer elements."

Then it was back to his studies at South Dakota State College and taking up his duties as president of the 1,200-member freshman class.

Our Community Service

By Clay Ballance

BEING a vo-ag instructor to Future Farmers here in the great Northwest is a profession of which I have always been proud. I have watched my students come and go through the years and have followed their progress in life with much interest. Now my present group has initiated a project that I want to relate to Future Farmers everywhere.

These students have undertaken the job of filling the tremendous need for youth in the Eastern Oregon State Hospital here in Pendleton. The dreams they fulfilled by befriending the less fortunate here are endless. They learned that they could do a man-sized job that many men would consider hopeless. This was the day my Future Farmers decided they had found a way to serve humanity.

At Christmas they worked on a project of selecting individual gifts, wrapping them, and delivering them to the men patients. When spring weather opened up this past year, they pitched in to raise money for new softball equipment, fishing licenses, and rods and reels. They were so successful that there is still money in the fund for the following year.

The softball teams my Future Farmers organized and coached became one of the turning points of the patients' lives. These confined humans had never been as captivated as on the Saturdays the students came to entertain them.

My young men became a part of their lives. Somewhere in the patients' pasts there was a teen-ager that these men remembered, and the Pendleton Future Farmers brought back these memories. To see the glint of pleasure light their eyes when the students arrived complete with popcorn machine for the Saturday doubleheader was a sight to behold.

It took tremendous effort on the part of the hospital staff, the parents of the Future Farmers, and the private citizens who donated to the cause, but somehow I believe the greatest amount came from the students themselves. These Future Farmers learned that being confined to a state hospital was not something to be ashamed of but a problem that needed attention on the part of all citizens.

Softball teams were organized and coached by Future Farmers at the hospital.

Personally, I learned how to be a better man from my group of students. What they brought into my life and the others they came in contact with is the universal service being performed by all our Future Farmers.

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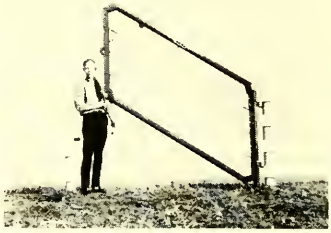

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Points of View . . .

Why One Boy Left the Farm

I left my dad, his farm, his plow, because my calf became his cow;

I left my dad—'twas wrong of course—because my colt became his horse;

I left my dad to sow and reap, because my lamb became his sheep;

I dropped my hoe and stuck my fork, because my pig became his pork;

The garden truck I made to grow, was his to sell and mine to hoe.

Why Another Boy Didn't Leave the Farm

With dad and me, it's half and half, the cow I own was once his calf;

No city for me, I will not bolt, because my horse was once his colt;

I'm going to stick right where I am, because my sheep was once his lamb;

I'll stay with dad—he gets my vote, because my hog was once his shoat;

It's fifty-fifty with dad and me, a profit sharing company.

These two poems were written by L. J. Miller and Kennedy Stevens, members of the Seminole County, Georgia, FFA Chapter.

Answers to Insect Puzzlers on page 14.

A—Boll Weevil
B—Colorado Potato Beetle
C—Common Housefly
D—Grasshopper
E—Corn Borer
F—Locust (Periodical Cicada)
G—Japanese Beetle

City Cousin

"Bought two tractors, a wagon, and a cow by just nodding my head."

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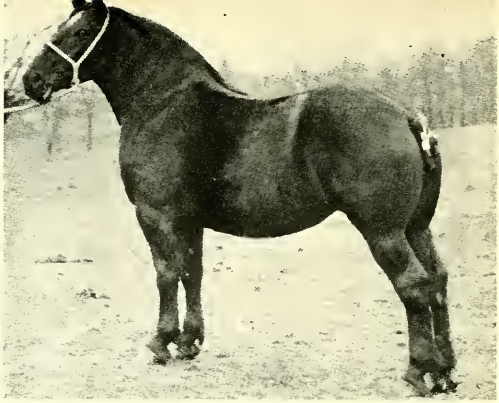


The Percheron

IMAGINE the handsome chargers of European knights crossed with Arabian stock brought from the Crusades of the Middle Ages, and you may have an idea of the origin of our modern Percheron horse. The actual beginnings of the breed are lost in antiquity, but legends and penned histories take its ancestors back over a thousand years.

Percherons first made their debut from the small farming province, Le Perche, in the Normandy district of France. Here local farmers sent their muscular horses into the internal wars that plagued France during the 11th and 12th centuries. Fame for the fine horse stock was not long in coming to this 50- by 66-mile province.

Louis XI started the breeding programs which popularized Percheron stock for agricultural use. As the demand for draft horses grew, Perche became widely known throughout France as "the nursery of good horses." Many breed modifications came about as the demand shifted from horses to pull the coaches of prerailroad France to plow teams to turn the sod.

By the mid 1700's, Le Perche farmers were holding four fairs a year to sell their famed horses. The Royal stables of the French Monarchy contained Percheron stock, and the breeding of horses replaced industry as the major source of income.

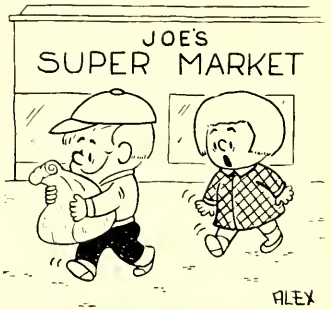
As French settlers came to North America, Percherons were brought in one by one. Early records tell of Percherons being imported to the Lakes Region around Quebec in 1670. These were dapple grays, standing 15 hands high and weighing around 1,200 pounds.

The modern foundation stock can be traced to the famous stallion, Jean Le Blanc, foaled in 1823. He sired many of the first true-type Percherons as we know them today. Then in 1839, a farmer in New Jersey imported the first Percherons to the United States. Next sizable importation was into Ohio in 1851. From here they spread to Illinois, where in later years they would be most numerous.

By 1916, the Percheron Society recorded 9,044 registered horses in a single year. The total that year in the U.S. was 90,000 Percherons out of the 150,000 draft horses on farms. There were more Percheron horses in this country than all the other draft horses combined, and the majority were American bred by this time. In fact, many thousands were exported to Europe as artillery horses during World War I.

With the great mechanization of American agriculture following World War II, Percheron numbers dropped off. There are still many thousands in the farming areas and many used daily for farming chores. The typical Percheron stallion now weighs between 1,900 and 2,100 pounds, stands 16½ to 17¼ hands high, and varies in color from dapple gray to black.

Breed headquarters are maintained under the name of Percheron Horse Association of America with offices at Fair Oaks, Indiana.



"I still think Mom wanted three pounds of string beans. Not jelly beans!"

Arnold Palmer tries an iron shot to hit under par in the '61 British Open Classic.

Sportrait

By Stan Allen

KING of the "links" in today's world of professional golf is Arnold Palmer. He makes shots even other pros find hard to believe.

Palmer, who hails from Latrobe, Pennsylvania, was practically raised on a golf course. His dad was a golf pro and had Arnold hitting balls when he was three years old. So it was only natural for Arnold to try for the Latrobe High School golf team on which he starred for four years. He was only 14 when he played his first high school game and scored a 71. As Pennsylvania's State High School Champion, he finished second in the 1946 Los Angeles Hearst National Junior Tournament. He won the Western Pennsylvania Amateur five times and three Western Pennsylvania Junior Championships.

Palmer's fine high school record won him a golf scholarship to North Carolina's Wake Forest College. He won two Southern Conference titles and finished high in intercollegiate competition while earning an education in business administration. Palmer left Wake Forest in 1951 for a three-year hitch in the U.S. Coast Guard. He was able to continue playing and returned with ambitions set to make good in the world of golf. He worked hard to win the 1954 U.S. Amateur Championship, and this success, plus getting married, persuaded him to turn pro that year.

His first big win on the pro circuit in 1954 was the Canadian Open and a $2,400 check. He brought his earnings up to $7,958 in 1955 and joined the top 10 money winners in 1957 with earnings of $27,802. He has not dropped below fifth spot on this list since and topped all pro golfers in 1958, 1960, and again last year.

In 1960, Palmer entered 27 matches of 72 holes each and won eight. In major tournaments, he won the U.S.G.A. Men's Open and Masters. He took home a record $80,738 in prize money, and the Professional Golf Association named him Golfer of the Year. He also won the $10,000 Hickok Belt award as Professional Athlete of the Year, the first golfer to win this honor since Ben Hogan in 1953. Arnold teamed up with Sam Snead to win the Canada Cup for the United States in 1960. He dropped to second place on the money list in 1961 but added the Western Open to his wins.

Though downgraded by some experts after his 1961 performance, Palmer came back to enjoy his best season in 1962. He started with a win in the Palm Springs Classic and went on to win the Phoenix Open, the Masters (in a playoff), the Texas Open, the Tournament of Champions, the Colonial Invitational, the American Golf Classic, and his second British Open in a row. He teamed with Sam Snead again to give the U.S. another Canada Cup. He won his second Vardon Trophy in a row and was again named P.G.A. Player of the Year. He topped the money winners with $81,448 and pushed his all-time winnings to $341,415, which is second only to Sam Snead.

Some of the experts are still reluctant to class Palmer with the likes of Ben Hogan, Byron Nelson, or Sammy Snead. He does not have the smooth swing of Snead or the iron magic of Hogan, but he does get the ball in the cup. He is 5 feet 10 inches tall and weighs around 175 pounds; yet he drives a ball farther than a 200-pounder. His assets are stamina and a great competitive spirit. He is a bold player who will shoot for the cup on every shot and is notorious for sub-par last round finishes, such as his 1960 National Open win. He was in fifteenth place and seven strokes behind going into the last round, and then he fired a 65 to win, the best closing round ever shot in the Open.

At 33, Arnold Palmer could have 10 good years of pro golf left. This should be enough to make believers out the skeptics.

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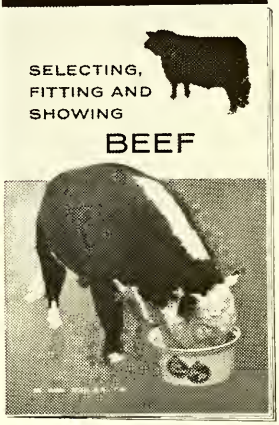

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"Nothing much," replied the conductor. *"We hit a cow."*

"Oh," said the lady, *"was she on the tracks?"*

"No," replied the disgusted conductor, *"we chased her into the barn."*

Jim Robey
Butler, Missouri

She: *"What's the difference between dancing and marching?"*

He: *"I don't know."*

She: *"I didn't think you did. Let's sit down."*

Jerry Allen
Healdton, Oklahoma

Borrower: *"I used to know Mr. Smithers, who was with your bank. I understand he is a tried and trusted employee."*

Banker (coldly): *"He was trusted, yes; and he will be tried when we catch him."*

Elmer Sheldon
Clayton, Michigan

Deep in the Louisiana swamps three men stopped to watch a small boy fishing in a roadside lake. Finally, one man asked, *"Boy, are there any snakes in this water?"*

"Naw, suh, they sure ain't," replied the lad slowly.

The three men left their clothes on the bank and went in for a refreshing swim. After swimming out a few yards, one man asked, *"Why aren't there any snakes in this lake?"*

"The alligators ate 'em," replied the boy.

H. E. Douglas, Jr.
Lenoir, North Carolina

"We didn't start spraying early enough and now they're beyond control!"

Charlie, the Green Hand

"Lots of people have learned to ask for 'Charlie's chickens.'"

A farmer's daughter started to practice singing. One day her father came home from the fields unexpectedly early. *"What's that strange noise?"* he asked.

"That, dear," said his wife proudly, *"is Mary cultivating her voice."*

"That's not cultivating," said the farmer. *"That's harrowing."*

Raymond Kriley
Hays, Kansas

A jaunty salesman parked his foreign sports car in front of a village store and went in to make a purchase. When he came out, a farmer was looking at his car.

"Well, what do you think of it?" asked the salesman.

The farmer replied, *"Picked it before it was ripe, didn't you?"*

Michael Gore
Tabor City, North Carolina

I never knew how hard it was to drive a bargain until I bought a second-hand car.

Wayne Burgess
Cardwell, Missouri

Teacher: *"Where does non-fat milk come from?"*

Student: *"Skinny cows!"*

Marcia Phipps
Rockville, Indiana

A tourist visiting a New England town stopped to talk with a farmer beside a road-stand. *"I understand you have a very short summer up here."*

"Yep. Last year it was on a Wednesday."

Bruce Kins
Ionia, Michigan

Don't throw away your empty seed packages. They are often just the right size for storing your crop.

Karen Thompson
Leesburg, Florida

After two city cousins had examined a new salt feeder with mineral and salt each in a separate side, one exclaimed. *"Look, Mike, they're even feeding cattle salt and pepper nowadays."*

Duane Schuur
Chandler, Minnesota

A town official was criticized in the local newspaper. He swore to a friend he would get revenge.

"Do nothing of the kind," the friend answered. *"Half the people who read the paper did not see the article. Half of those who saw it did not read it. Half of those who read it did not understand it. Half of those who understood it did not believe it. Half of those who believed it were of no importance anyhow. So forget it."*

Michael Newton
Lillington, North Carolina

The bride of a struggling young writer was the big success of the evening, and all the men at the party elbowed each other to dance with her.

"She's charming, old boy," the host said enthusiastically to the husband, *"and her dress is a poem."*

"Not one poem," answered the young writer gloomily, *"sixteen poems, five short stories, and nine articles."*

Darlene Abersole
Stevens, Pennsylvania

The National FUTURE FARMER *will pay $1 for each joke published on this page. Jokes must be submitted on post cards addressed to The National* FUTURE FARMER, *Box 29, Alexandria, Virginia. In case of duplication, payment will be made for the first one received. Contributions cannot be acknowledged or returned.*

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