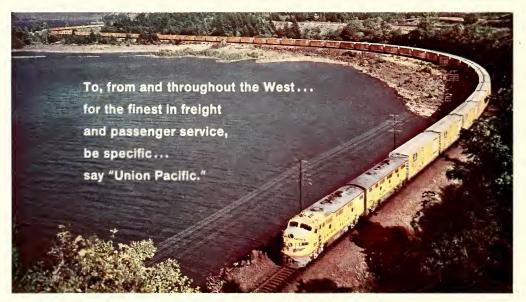
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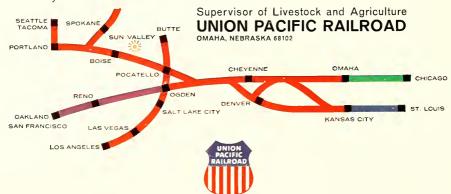
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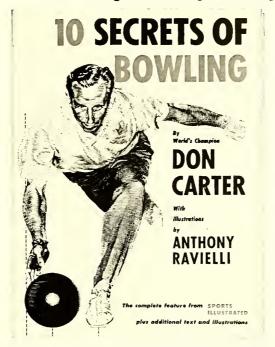


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Our Cover

Charles and David Wagner put emphasis on marketing at their roadside stand near Stockport, Ohio.

The Future Farmer brothers, members of the Waterford Chapter, look forward to harvest time and the opportuuity to bring polished fruit from the orchard to anxious buyers.

PHOTO BY BOB E, TAYLOR

THE NATIONAL FUTURE FARMER is mailed

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The National FUTURE FARMER



THIS MAN IS NO ASTRONAUT

He looks like he's wearing a space suit, but he's not. He's actually standing on the outside and just reaching in through the suit to do his work.

But he's doing a special job, and he's helping to push a new dimension into scientific research. He's reaching into a germ-free, air-controlled chamber, and packaging Pur-Pak Chows. They're called Pur-Pak because they're pressure-processed to be free of harmful pathogens.

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and bacteriological control to critical experiments with laboratory rats, mice and hamsters.

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Whatever it takes, Purina has it in operation. Now Pur-Pak Chows have joined the continuous line of new products from Purina Research.

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October-November, 1964 5



TEACHERS ON...



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Your Editors Say.



MEMBERSHIP in the FFA is continuing to increase. It reached an all-time high in 1964 with 401,468 members reported. This is 5,656 more than in 1963, the previous record year.

This means that the FFA is influencing more lives today than ever before in its history. And you are a part of it. Your membership and active participation in the organization are more important than ever in making the FFA a worthwhile influence on the lives of the young men who choose to join its ranks.

You can do this by working hard to help make your chapter one of the best—supporting all of its activities, serving on committees or as a chapter officer, entering contests and awards programs for Future Farmers, and making suggestions at chapter meetings on how you think your chapter can be improved. No organization is stronger than its members choose to make it.

Your ideas may not always be accepted, and you may fail a few times at some of your undertakings. But don't let this discourage you. The success stories of other Future Farmers reveal that they too have met with their share of setbacks. But they kept trying and the experience of participating paid great dividends, as it will for you in the years ahead.

This participation is one of the most important values you will receive from the FFA. Former members can be found in the halls of Congress, in the governor's chair in several states, and in many other leadership roles in agriculture and public life. Time and again, these men have praised the FFA for the training and participating experience it provided them. It can do the same for you.

THIS ISSUE is the beginning of the thirteenth year for your National Magazine. Only a dream during the early years of the FFA, it came into being in the fall of 1952, when the first issue was published. Now it is a regular visitor in the homes of over a quarter million FFA members.

Since the beginning, the main objective of the Magazine has been to gather and print worthwhile and inspirational information on farming and FFA activities for FFA members and chapters. During the past 12 years, thousands of Future Farmers have been inspired by articles in the Magazine, motivated to greater achievement, or found new ideas to point them on their way to success. At the same time, the Magazine has helped to strengthen the ties between the local, state, and national levels of the FFA. And while serving the organization, it has offered friends of the FFA in business and industry an opportunity to reach Future Farmers with their advertising message. You can find many of these friends in the advertising pages of this issue. The money they pay to advertise their products and services helps pay the cost of putting out your Magazine.

While the success of the Magazine has been significant, it does not lessen the challenges that lie ahead. The primary aim is to continue publishing a magazine that will meet the needs of FFA and Future Farmers in a changing agriculture and to place a copy of each issue in the home of every Future Farmer. With your help, I'm sure this will be possible.

Wilson Carnes, Editor



Breakdowns can put you in the red.



Texaco Farm Service can help you stay in the black and help you effect up to 15% saving in fuel costs.

You're sitting in the tractor seat with five acres to go and time running out. Wham! Breakdown. A couple more of these and you can end up in the red.

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Your Texaco Farm Service Distributor can help you in other ways, too. He can show how you might be able to reduce your fuel costs up to 15% with an efficient maintenance program, and using top-quality Texaco products. He can give you up-to-the-minute information on servicing and lubricating the equipment on your farm. And he can supply you with the Texaco petroleum products that can help you farm more efficiently and economically.

Got a problem? Tell it to your Texaco Farm Service Distributor. He'll give you the help you need.

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Looking Ahead

PUSH-BUTTON FLY CONTROL

Instead of swatting flies, you may soon be able to push a button and control them with sound waves! Researchers at Virginia Polytechnic Institute and the USDA are cooperating to develop test sound chambers generating sound waves with frequencies from 100 to 100,000 cycles per second. Tests have shown that moths were controlled and their reproduction virtually stopped by a continuous low hum barely audible to humans.

CALVES IN CARTONS

Calves are going air-borne—in cartons—to all parts of the world! Specially designed heavy-duty cardboard cartons have been developed for 100-pound calves, permitting them to be shipped in the holds of aircraft with other cargo. The 40- by 36-inch cartons feature ample ventilation and a moisture-repellent bottom. Calves have already been kept in the cartons successfully up to 18 hours. Shipped at no extra cost above other cargo, calf exports are new trade possibilities between the U. S. and Europe.

CUT TREES WITH LIGHT

Already in use is the "laser," an electronic device that produces such high energy beams of light that it can cut down trees, prune high limbs, and start back fires from an airplane to fight forest fires. The laser produces a beam of light in excess of one million watts per square centimeter—enough to vaporize all materials. Foresters at the American Forest Products Industries say its big drawback is its cost of usage.

"APIDICTOR" INSPECTS BEEHIVES

An electronic "Apidictor," developed in England, can pick up sounds from within bechives to warn of hive trouble without disturbing the bees. The device can detect swarmings up to 30 days in advance, reveal the condition of the broodchamber, and check on the queen bee through a small microphone and headphones. Different sounds in a hive have definite meaning to an expert operating the device.

INFRARED GRAIN DRYER

Drying grain with infrared rays and mechanical vibration may be a reality on the farm in the future. Grain has been dried successfully under infrared lamps as it is vibrated up and down at 1,000 cycles per minute. The new method dries grain faster by transferring heat directly from the lamp to the grain. It does away with inefficient heating of air and air movement in present-day dryers. Michigan State University researchers say operating cost is a limiting factor.

MILK TESTER CALLED "IRMA"

A new machine called "IRMA," the Infrared Milk Analyzer, can flash out the amounts of fat, protein, and lactose in a sample of milk in less than a minute. The machine passes a beam of light through a milk sample, each milk component absorbs different wave lengths, and the difference is registered on a read-out meter. Taking far less time to analyze milk, the "IRMA" can open new possibilities in testing milk for both solids and fat.

REGULATOR INCREASES SOYBEAN YIELDS

Want to increase your soybean yields from 10 to 20 percent? It may be possible in the future as scientists from the International Minerals and Chemical Corporation begin work on an exclusive plant regulator—triiodobenzoic acid—increases yields by diverting plant growth from the leaves to seed. Only one ounce of the regulator per acre of beans, applied as a spray, will divert the plant's growth.



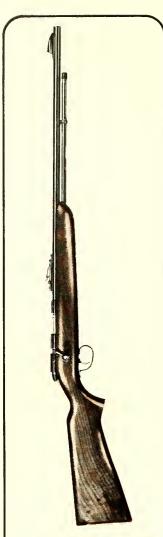
Some people will do anything to wear Lee tapered slacks

(Even Lee's Master Tailor)

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That's the new Remington 512-X... in both looks and action. Traditional steel and walnut construction adds up to beauty, accuracy, reliability. Buttersmooth bott shucks in short, long and long rifle 22's interchangeably. Tubular model (shown above), \$41.95.* Clip model, \$38.95.* Single shot model, \$26.95.*



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East Thetford, Vermont

I read your editorial in the latest issue of The National FUTURE FAR-MER and enjoyed it very much. I believe that a change in the Creed would be a very timely thing, since agriculture has changed so vastly in the 34 years since the Creed was written. I agree with the Pinedale FFA Chapter that "agriculture" would be a little more appropriate than "farming" in the Creed, since three out of four people employed in agriculture now live in the city.

I do not believe that the name of the FFA should be changed because to do so would lose a great deal of the public prestige that has built up over the years. I also think by changing the name we would lose part of the great heritage that goes along with it.

Looking forward to the next issue and another of your editorials.

your editorials.

Michael E. Anderson

Springville, Utah

The editorial in your latest issue distressed me more than anything I have ever read in my six years of subscription and membership.

The idea of changing the name of the FFA to satisfy the whims of a few people who believe that "farmer" and "farming" mean a dirty, ragged man and a low-income, low-education trade is mere foolishness. The FFA is a fine name, and to change it would be like changing your own. Sure you would be the same person, but you wouldn't know when your new name was mentioned.

The person in the related field is just as much a farmer as the man who keeps America strong through food-producing power. If some group of boys is too good to be called farmers, then let them form their own organization of "Future Florists" or "Girls and Boys for Playing Chess."

I call on all true FFA members to stick by the name and the ideals. Now is the time to act. Look around and be proud to say, "I belong to the Future Farmers of America."

Milt Diamond State Officer, 1963-64

Beaverville, Illinois

The editorial in the August-September issue is a good one on the Creed. I agree that a few words could be substituted to suit a local chapter. However, it is my belief that the last paragraph should not only remain whole but should be a guiding light in the eyes of all FFA members.

Those people who "believe in the future of farming—with a faith born

not of words but of deeds" will become the leaders of tomorrow, of whom other FFA members can say, "He was once a Future Farmer."

Warnell Aten

Rubicon, Wisconsin

I am a 17-year-old girl and a member of the Hartford, Wisconsin, FFA Chapter. Last year for the first time, our school allowed girls to take vo-ag. Three of us took the course.

Now I am told that I can't have an FFA jacket just because I am a girl.

I hardly think it's fair, since I maintained good grades all through the first year of vo-ag. I have what I consider an excellent farming program. It consists of a purebred Holstein cow, two dairy heifers, plus two Angus heifers. I work on the farm during the summer doing such jobs as discing, cultipacking, loading hay, raking, and taking wagons to the barn. I even keep the farm records.

I made the FFA window display during Dairy Month and helped with stall decorations at fair time. I plan to be a farmer, which makes me a Future Farmer, I thought. I would like comments from other Future Farmers saying whether or not I should be able to have an FFA jacket.

Susan Feutz

How about it, fellows? Should girls like Susan be allowed to become members of the National FFA and wear official jackets?—Ed.

Beaver Crossing, Nebraska

In your latest issue, I was interested in the article "PCA Credit for College," as I am interested in financial help for the coming school year.

Can you tell me if this Production Credit Association educational loan is primarily for boys or does it include farm girls, too? Also, could you tell me where I can locate a PCA loan office in Nebraska?

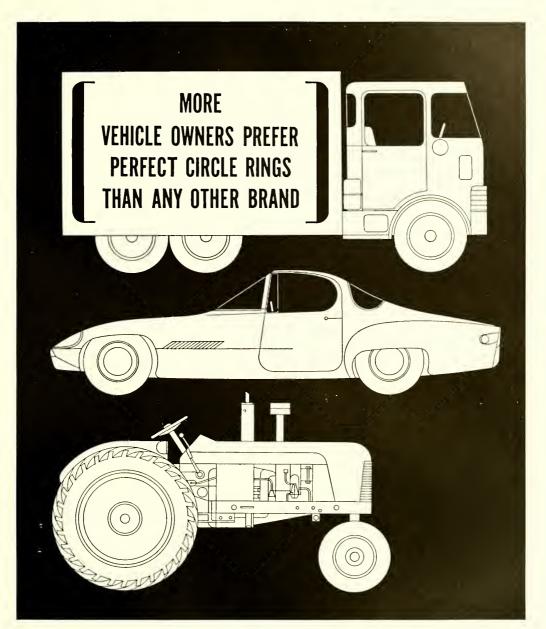
I enjoy reading your Magazine whenever I have the chance. I have two brothers in the Utica FFA Chapter, and I feel the FFA is a very worthwhile organization.

Patricia Deremer

It is our understanding that PCA educational loans are available to both boys and girls, the only qualification heing the student or sponsor must be an eligible PCA borrower owning or operating a farm. You can get details from the PCA office in Lincoln.—Ed.

(Continued on Page 18)

The National FUTURE FARMER





PERFECT CIRCLE

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Heritage

of

Opportunity

Another Green Hand is initiated. Another state president is elected. Another Star Farmer of America is named. FFA opportunity is seized. FFA success is achieved. Year after year the heritage of FFA opportunity deepens, broadens, and reaches new heights. Improved agriculture. citizenship, and leadership are the results.

Founded in 1928 as an organization for students of vocational agriculture, the Future Farmers of America has become more than just another high school club. This "largest farm boy organization in the world" has grown to become a brotherhood, a fraternity, steeped with tradition.

Ours is a heritage of inspiration passed from advisor to member and from members to fellow members. The importance of the close inspirational ties cannot be overemphasized. Ours is

a heritage of responsibility—that of reaching our own decisions, managing our own farming enterprises, governing our own organizations, and developing our own abilities. Ours is a heritage of youth leadership and genuine fellowship in a combination without equal outside the FFA.

More than this, though, ours is a heritage of opportunity that has spelled success for thousands of Future Farmers in a multitude of different ways—an opportunity that, over the years, has spelled success for the Future Farmers of America.

The FFA, like the acorn that became an oak, has grown from an infant in 1928 to the present sturdy oak of prominence, respect, and admiration. The roots of our oak reach deep into the soil and tap the riches of our American heritage—of George Washington and



By Nels Ackerson National President of FFA

Thomas Jefferson and all men who have realized that the roots of freedom are in the soil.

Its solid, unyielding trunk reaches high into the sunshine of a brighter tomorrow, promising better days through better ways of FFA leadership, cooperation, and citizenship.

Our oak's strong branches reach from Maine to Hawaii and from Washington

Take a tip from top raisers... FEED THE



Holstein breeder N. Newcomb, Cods Point Farm, Trappe, Md.

"Our calves and heifers both benefit from the Milk-Bank Boost. Kaff-A Milk Replacer gives us healthier, heavier calves, cuts scouring Kaff-A

scouring. Kaff-A Booster Pellets help heifers grow faster, breed sooner."





Manford Stewart, Frankfort, Ind., leading Hampshire breeder

"We produced 4,000 certified pigs last year, and Kraylets is a key part of all our feeding programs. The Milk-Bank Booster gives us bigger, healthier litters, better feed efficiency, less backfat. Keeps sows in good condition."





Henry Kruger, owner of Kruger's Poultry Farm, Dinuba, Calif.

"During a recent cold snap, some of my neighbors had 50% drops in production. My flock held its 76% average, thanks to the Milk-Bank Boost of Pex Pellets. I get 80% large eggs and less culls, using Pex the year around."



to Puerto Rico. They spread over golden fields of grain and grazing cattle, over fruit-laden orchards and brightly painted barns.

Its leaves number 401,468—one for every Future Farmer. Each leaf is a success story of its own, colored with the green of enthusiasm, provided with a stem of inspiration, and intermeshed with veins of determination.

The FFA oak tree draws its nutrients from our heritage, our Aims and Purposes, our Creed, our Motto, our rituals, and our constitution. Channelled through the trunk of our national organization, the branches of our state associations, and the twigs of our chapters, these nutrients take the form of unlimited opportunity available to every Future Farmer.

With the efforts of each individual member, we have created the heritage and the success of our FFA. This success will continue to inspire members to climb on the same rungs of achievement by "Learning to do; Doing to learn; Earning to live; Living to serve."

The key to the future success of the FFA and of every Future Farmer can be found in three words: inspiration, education, and dedication.

Inspiration is the spark that can ignite the fires of education, dedication, and opportunity. FFA inspiration in-

cludes example, ambition, confidence, and a deep-rooted belief in the ideals of our Creed: a belief "in the future of farming with a faith born not of words, but of deeds"; a belief "that to live and work on a good farm is pleasant as well as challenging"; a belief "in leadership from ourselves and respect from others"; a belief "in less dependence on begging and more power in bargaining."

Every Future Farmer must possess the confidence expressed in the last paragraph of our Creed: "I believe that rural America can and will hold true to the best traditions in our national life and that I can exert an influence in my home and community which will stand solid for my part in that inspiring task."

Education is the handrail for the ladder of success. A Future Farmer must be aware of the many goals that can be reached in his organization. From studying the FFA Manual, he can learn there is a place for fulfilling personal hopes and dreams through the ideals and activities of our FFA. By studying application forms for Foundation awards and the American Farmer Degree, he will be able to set high goals and follow them to completion. From discussions with his advisor, state and national officers, and other Future Farmers who have preceded him, he will find new opportunities, new goals, and better plans of personal development. Education in the FFA includes instruction both in and out of the classroom. It is essential in establishing the primary aim of the FFA: development of agricultural leadership, cooperation, and eitizenship.

Dedication, hard work, patience, and perseverance provide energy for the long climb to the peak of our highest ambitions. These are present in any Future Farmer who has reached a worthwhile goal. From the Green Hand in Oregon to the Star Farmer of America; from the Green Hand in Georgia to national president of FFA: from the Future Farmer in Nebraska to the most successful wheat producer in the nation; from the Future Farmer in New Hampshire to president of one of our nation's large farm organizations: from the Future Farmer in Ohio to the research scientist who develops a hybrid for 300-bushel-per-acre corn; from the Future Farmer in Colorado to President of the United States-perhaps this will be the success story of FFA tomorrow.

We have opportunity in the FFA that can become our promise of success. Time is not the answer but, rather, that we fill our lives with inspiration, education, and dedication. Our "part in that inspiring task" awaits us. Our future is in our own hands.

MILK-BANK BOOST

Milk by-product feed boosters by KRAFT



F. Miller, Mgr., Santa Rosa Stables, Texas, Waggoner Quarter Horse breeders

"Pace Pellets give our colts what they need—a fast, healthy start. The Milk-Bank Boost of Pace is part of our program for mares, studs and show horses, and we think it has a lot to do with keeping them in top condition."





Minnesota Dairyman Archie Zarling raises own Holstein herd replacements

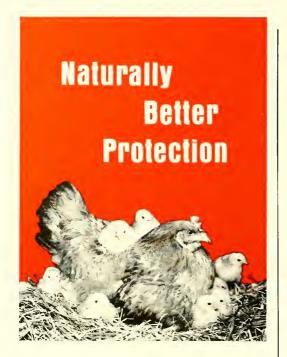
"Kaff-A Milk Replacer gives me big, thrifty, healthy calves. And the Milk-Bank Boost of Kaff-A Booster Pellets produces that can be bred at 12 to 13 months. It keeps my cows' milk production high."



W.W. Callan, owner of Callan Ranch, Waco, Tex., Santa Gertrudis breeder

"We give our showcase herd the Milk-Bank Booster, Kaff-A Booster Pellets. It brings out the best qualities of our stock, helps them gain faster, stay in top health and condition, and gives them extra bloom and gloss."





The protection a mother hen offers her chicks is an example of nature at work. And so is the protection Kendall Farm Lubricants offer for your equipment.

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Chairman Stoup Aims For New Goal

CURRY W. STOUP, president of New Idea Division of Avco Corporation and 1964 chairman of the FFA Foundation's Sponsoring Committee, has announced a goal of \$200,000 by the National FFA Convention. "I want to be able to announce at the Convention that we have \$200,000 in hand," he said recently.

At publication date, the 1964 drive had brought in \$193,262 under the capable direction of Chairman Stoup. His tircless efforts and visitations netted 86 new donors to the FFA Foundation since the beginning of 1964. He ultimately hopes to hetter last year's record Foundation donations of \$201,534 before the December 31 deadline.

Stoup, also a group vice president of the extensive Avco Corporation, has been an FFA supporter for many years. A native of Ohio, he was graduated from Miami University at Oxford. Beginning his career in advertising, he joined the farm equipment firm of Harry Ferguson before coming with Avco in 1954. Since then he has risen to president from his former position of general manager.

The FFA Foundation that Stoup serves provides over 70,000 medals and cash awards for achievement to students of vo-ag. He maintains his position until December 31 of this year.

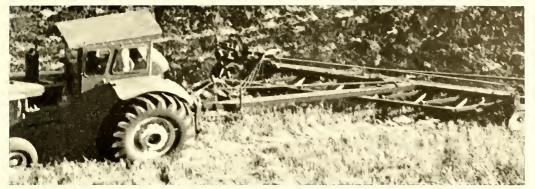
Former National Officer Wins JC Contest



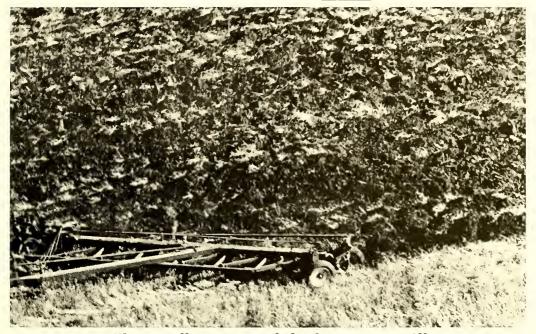
T WAS an exciting evening for William D. Gunter of Orlando, Florida, as the master of ceremonies announced that he was national winner in the U. S. Junior Chamber of Commerce "Speak Up" contest. Bill, national president of the FFA in 1954-55, won the honor over winners from 49 states in Dallas recently.

The former national FFA officer polished his speech, "Service to Humanity Is the Best Work of Life," to win the coveted national Jaycee speaking award. "FFA training and background made the victory possible," Bill told us in a letter after his victory. "I'm trying to put the experience to good use."

Gunter, now manager of an insurance firm in Orlando, Florida, is also first vice president of the local Junior Chamber of Commerce. An outstanding community leader since leaving the FFA, Bill Gunter points out in his speech, "The way to get up is to get down; the way to receive is to give."



With 7 bottoms in rye stubble, BFG nylon Power-Grips . . .



"just walk away, and don't even snort"

B.F.Goodrich

NYLON FARM TIRES

Usually, we talk about how the B.F.Goodrich Power-Grip is a good value because it costs less than a lot of other tires that don't have nylon cord. Nylon is important, of course, because it means you get extra protection against bruises and breaks for longer, more dependable service life. But along with low cost and nylon cord construction, the Power-Grip also gives you the advantage of outstanding traction. We build the Power-Grip

with cleats 29% wider and 9% higher at the shoulder than any replacement tractor tire we've made before. The result is something you have to see and feel to appreciate. As one of our farm friends said when the traction

test pictures above were taken in a South Dakota field, "They just walk away, and don't even snort." We couldn't say it better. The Power-Grip is one of many kinds of tires made by B.F.Goodrich for farm service. If you would like to learn more about farm tires, their construction, maintenance and safe use, write for your free copy of the new B.F.Goodrich 32-page illustrated book, "What you should know about farm tires". Write to:

Farm Book, The B. F. Goodrich Company, Departmen 53-E, Akron, Ohio 44318.





From township and hamlet, 10,000 Future Farmers converge to make the October 13-16 National Convention one to remember.

RALL brings a touch of blue to the streets as well as to the skies of Kansas City each year at National FFA Convention time. This year from October 13 through 16, nearly 10,000 blue-jacketed Future Farmers will again signal the arrival of the world's largest farm youth convention at this Midwest city. If you are on hand, you will witness another jam-packed week of FFA events.

Action begins as early as October 8, when your national FFA officers come to town for an extensive round of meetings. By Tuesday, October 13, when official delegates from each state association register, the huge Municipal Auditorium is humming with activity. And

if you arrive early on Tuesday, you won't want to miss the planned afternoon educational tours of the Kansas City area.

Activities start early on Wednesday with registration in the auditorium lobby before the opening session. Representatives from each of the nearly 8,500 chapters in 50 states and Puerto Rico will be on hand to attend. Going for three full days and evenings, the Convention promises to be another colorful event with such speakers as Don Fuqua, once Florida state FFA president and now a member of the U. S. Congress; Jim Patton of the National Farmers Union; Wayne Poucher, winner of the National FFA Public Speaking Contest

back in 1939; and folksy Henry Schriber, Ohio's noted farmer-philosopher.

Your official delegates will be voting on such constitutional amendments as "Members participating in the six months' armed service program shall be eligible for one full year of extended membership," in addition to a list of other important proposals.

And there'll be the exciting Friday afternoon at the American Royal Horse Show, the Star Farmer ceremony, and the big American Royal parade on Saturday morning led by our own FFA Band. If you don't get to Kansas City this year, read about all the happenings next issue.

1964 CONVENTION PROGRAM HIGHLIGHTS

Tuesday, October 13

10:00 a.m.—Registration of Official Delegates,

11:45 a.m.-Officer-Delegate Luncheon.

1:00 p.m.—Educational Tours of Kansas City; Regional Public Speaking Contests; FFA Talent Show Auditions.

8:00 p.m.—FFA Vespers Program; Special Meetings.

Wednesday, October 14

9:00 a.m.—Opening Session, Municipal Auditorium: Welcome by Mayor Davis of Kansas City; Speaker, Honorable Don Fuqua, U. S. House of Representatives.

2:00 p.m.—Second Session: Conferring Honorary and 405 American Farmer Degrees; Address by Jim Patton, National Farmers Union; Green Hand Initiation Demonstration.

7:30 p.m.—Third Session: Band Concert; National Public Speaking Contest; Gold Emblem Chapter Awards.

Thursday, October 15

9:00 a.m.—Fourth Session: Presentation of National Chapter

Awards, Farm Proficiency Awards; Address by Wayne Poucher, 1939 Public Speaking Winner; Pageant Entitled "Agriculture, Our American Heritage."

1:00 p.m.—Tours to Places of Interest.

2:00 p.m.—Fifth Session: Discussion of Amendments to Constitution; Business Session.

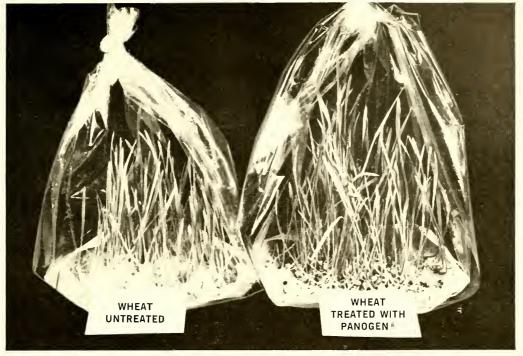
7:30 p.m.—Sixth Session: Recognition of FFA Foundation Donors; Star Farmer Ceremony and Movie; FFA Talent Show.

Friday, October 16

9:00 a.m.—Seventh Session: Recognition of Foreign Guests, Greetings from Morio Kubeyma, Future Farmers of Japan: Address on "Cows, Kids, and Citizens" by Henry Schriber: Election of National FFA Officers.

11:30 a.m.—FFA Day at American Royal Livestock and Horse Show, American Royal Arena.

7:30 p.m.—Eighth Session: Special Talent Program; National Officers' Night, Installation of New National Officers; Closing Ceremony; Firestone Show.



Notice the thicker stand and healthier growth with the Panogen-treated seed. (Similar results can be expected by Panogen treating other small grains, flax, cotton, peanuts, safflower, peas and beans.)

Seen by almost 1,000,000 farmers and future farmers

In March of 1963, we offered the Panogen seed treatment plastic bag test kits to County Agents, Vo Ag Teachers and 4-H Leaders to use in meetings and classes as visual proof of the benefits of seed treating. Since then, nearly one-million farmers and future farmers have seen this proof.

The plastic bag test visually proves the benefits of treating seed with Vapor Action Panogen—the world's most widely-used, most thoroughly-proven seed treatment. Through the clear plastic bags, you can see the black and gray disease molds form and spread to kill and weaken seeds. You can also see the clean, healthy look of the Panogentreated seeds...their absence of mold...and their superior root and foliage development.

When you have seed treated, or recommend seed treatment chemicals for small grains, flax, cotton, peanuts, safflower, peas, and beans—specify Panogen—the Vapor Action Seed Treatment, used for 25 years by farmers all over the world.

There is a limited quantity of the Panogen Seed Treatment plastic bag kits available to County Agents, Vo Ag teachers, 4-H leaders and FFA chapter officers. Write to Morton Chemical Company, c/o J. Greer.

Note: There are six demonstrations per kit.



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B DIVISION OF MORTON SALT COMPANY

October-November, 1964



From the Mailbag

(Continued from Page 10)

St. Paul, Minnesota

Please send me extra copies of the latest issue of your Magazine, as the Minnesota Division of the American Cancer Society would like them. They will forward one to their national office in New York. They were pleased to learn that the cancer photo and caption appeared in such an influential and popular publication as The National FUTURE FARMER.

We are grateful to your staff for giving us a hand in publicizing our state FFA convention anti-smoking resolution (FFA In Action, Aug.-Sept., 1964). The state of North Dakota has now passed a similar resolution, and we expect several other states to follow suit.

Wayne J. Kortesmaki FFA Executive Secretary

Milford, Iowa

I am a Chapter Farmer in our local chapter and now hold the office of vice president. I'm writing to you to ask if you have any information on the feeding and care of sheep. I'd be thankful for any material you could send. I enjoy all your articles.

John Halbur

We are enclosing three booklets from our source file on feeding and care of sheep. We hope you benefit from these, John.—Ed.

Florala, Alabama

My address reads as Alabama, but actually we are one-half mile from the Alabama-Florida state line. We are in the Florida FFA Association, and our Paxton Chapter has been one of the top three chapters in the Florida Association for the past three years.

My father is principal of the Paxton

High School and an Honorary State Farmer. When I joined the FFA four years ago, I did not have any leadership abilities, nor could I get up before a crowd and speak. I can truthfully say now that I can perform these duties, and I owe this to the FFA and my advisors.

Warren Nall

Columbia, Louisiana

Could you give me information and suggestions on locating a young man to help me with my cattle?

I would like to find a dependable, intelligent, clean-cut young man with a nice personality to live at our home as a member of the family and help with the cattle on a profit-sharing basis at first. Later on he could work into a part-ownership of the land and cattle.

Since your Magazine is for young farmers, do you think I could come in contact with young men interested in something like this?

John Whittington Route 2, Box 117

It sounds as if you have a good opportunity for some young man, Mr. Whittington. In addition to publishing your letter, we suggest that you contact the advisors at nearby Caldwell High School.—Ed.

Coon Rapids, Iowa

Thank you for the copy of your fine Magazine. We are pleased that you recognized our Charolais cattle in your "History of the Breed" feature. We believe the Charolais breed will help to fill the future needs of our "Future Farmers and Ranchers."

Charles L. Moore Star Charolais Farms

R. E. NAUGHER RETIRES



R. E. Naugher, a long-time friend of Future Farmers, retired on September 1 as assistant director of the Agriculture Education Branch, U. S. Office of Education. In recent years, Mr. Naugher was best known by Future Farmers as a member of the FFA Board of Directors and advisor to the Nominating Committee at the National FFA Convention.

Mr. Naugher grew up in Mississippi and started his vo-ag teaching career at Loris. South Carolina, where he now lives. He later served as an assistant supervisor before moving to the national office in the early forties. In 1949, he was awarded the Honorary American Farmer Degree by the FFA.

The National FUTURE FARMER



All these "extras" are standard equipment when you buy an International pickup



Our pickups have the fuse panel where you can find it - in the glove compart-



INTERNATIONAL pickups are built three inches lower at the tailgate to save you 1/2 mile of lifting a year.



It's safer inside an INTERNATIONAL pickup because the gas tank's outside. We put it



Our crankshafts work longer because they're 35 lbs. heavier. Special steels strengthen every component.



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We spend \$5 on extra gauges to save you a \$500 engine. Warning lights just can't warn you soon enough.

All this, and more, makes an INTERNATIONAL like no other truck. Get the right model for your job from an INTERNATIONAL Dealer or Branch - listed in the Yellow Pages. International Harvester Company, 180 North Michigan Avenue, Chicago 1, Illinois.

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"Build a truck to do a job - change it only to do it better"

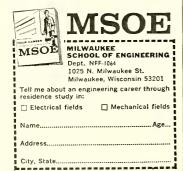


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Planning your education correctly now will enhance your career later! That's why you should obtain all the facts about MSOE programs in Electrical and Mechanical Engineering and Technology.

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G. McCormick "Number 30" trailer has heavy-duty load rating of 9,000 pounds for normal use, 6,000 pounds for rough areas. It features welded, all-steel body, roller bearings, shorter turning radius. (International Harvester)

something new



H. Lightweight, versatile "Model 450" saw has "Insto-Primer." Designed for casual use, cuts in any position. (Pioneer Saws)



J. Series III, D-10 one-row tractor has a live PTO, 30 hp, "Traction Booster" controls, power-shift rear wheels. (Allis Chalmers)



L. Low-priced, galvanized steel automatic waterer for 40-125 head. Above "Model 36" is heated. (Ritchie)



1. Three-inch-high "Custom Compact" binoculars for hunters feature 6 x 25 size, weigh only 11 ounces. (Bushnell & Co.)



K. Vinyl "SAV-R" silo bags offer instant silage storage. Air-tight silos available in 12-, 35-, and 50-ton sizes. (Staff Indust.)

Free detailed information is available on the above products. Send coupon to National Future Farmer, Alexandria, Virginia 22306.

Please send information on products circled below.
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Offer expires October 31, 1964



Announcing the Honda Trail 90

A brand new trail machine with a 30% boost in power.

The Honda Trail 90 has 30% more power than the famous Honda Trail 55. It carries heavier loads over rougher terrain than any other trail bike in the business. Out on the open road, it does an honest 56 mph. And goes better than 160 miles on a gallon of gas. What else is new? The only standard-equipment spark arrestor approved by the USDA Forest Service; a rugged tube-framed skid

plate; a 4-speed foot shift with an automatic clutch; and a steel front fender. As for price, \$330* makes it the best trail buy on the market today. For the address of your nearest dealer or other information, write: American Honda Motor Co., Inc., Dept. DI, 100 W. Alondra, Gardena, Calif.





FFA Foundation's Board of Trustees, from left: C. C. Eustace, Kansas; H. C. Colvett, Tennessee; C. W. Hill, New York; Neal Andrew, New Hampshire; E. J. Johnson, Washington, D. C.; R. E. Naugher, Washington, D. C.; A. W.

Tenney, president, Washington, D. C.; J. M. Campbell, Virginia; Paul Gray, Washington, D. C.; T. L. Faulkner, Alabama; H. M. Byram, Michigan; Ralph Edwards, Idaho; Percy Kirk, Wyoming; and Neville Hunsicker, Washington, D. C.

FFA FOUNDATION MEETS IN WASHINGTON, D. C.

IT WAS another group of business sessions to remember for leaders of the FFA as they met in Washington, D. C., from July 27 through 31. The FFA Foundation's Board of Trustees convened first with sessions on budgets and awards, followed by meetings of the FFA's Board of Directors and Student Officers. An afternoon time-out on Donor Day, July 29, brought over 100 donors and FFA officials to the FFA Building for a picnic lunch and tour of *The National FUTURE FARMER* Magazine and FFA Supply Service. All in all, it was a rewarding week.

Air-conditioned buses unload donors and FFA officials in front of the FFA Building housing the Magazine and Supply Service. A tour of the building followed a picnic lunch.



After-lunch program was highlighted by inspirational talk by national FFA president, Nels Ackerson. His message on the value of the vo-ag and FFA included a lesson for all.





Phil Schultz, New Idea Equipment Company, greets donors on behalf of Chairman Curry Stoup. Over 70 FFA Foundation donor representatives met for a day of informative talks.



For a luncheon under the trees, FFA staff members served fried chicken to over 100 donors, FFA officials, and employees. New Supply Service warehouse is at left, rear.

Building tour included visits to all Magazine and Supply Service departments. Here John Foltz, left, "National FU-TURE FARMER" ad manager, tells donors of research.



The National FUTURE FARMER

four reasons why ACs are best for your farm tractors



1. AC's extra-strength insulator and shell—features Buttress-Top design to reduce flashover, helps prevent installation breakage and withstands heavyduty use.



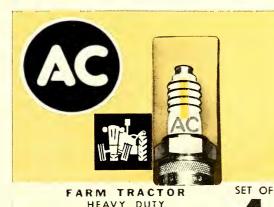
2. AC's exclusive selfcleaning Hot Tip heats fast to burn away fouling deposits as they form, cools fast to discourage damaging, powerrobbing pre-ignition.



3. AC's Knurled Center Electrode—provides greater sparking capability to ignite combustion gases faster—delivers maximum power, maximum fuel economy.



4. AC's new extruded Internal Gasket—provides gas-tight sealing for peak engine compression and top power under severe operating conditions.



New AC Farm Tractor Heavy-Duty Spark Plugs are designed specifically for farm tractor use.

Ask for the convenient 4-Pac wherever AC products are sold.

For hints on proper engine maintenance—Send	
for your FREE "Tonic For Lazy Horsepower"	
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TYLAN® MAKES THE BIG DIFFERENCE!



Start your pigs on a creep feed with Tylan. Then keep them on this modern antibiotic all the way to market weight for the kind of

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Your hogs on Tylan will have shiny hair coats and look healthy . . . vigorous, fast-gaining, thrifty. They'll be "good doing" hogs—and you'll know it by sight.

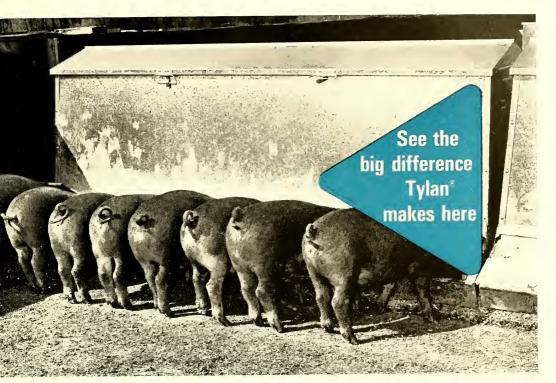
Because Tylan in feed helps your hogs maintain rapid growth and avoid setbacks, it returns extra profit. Tylan is tops as a gain booster and for improving feed efficiency. Put your returns from Tylan fed hogs against returns from hogs on other antibiotic programs. You'll quickly see *Tylan's superiority*.



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* * REGIONAL STAR * * FARMERS

From among 405 Future Farmers recommended for the FFA's highest degree, these four American Farmers shine the brightest. Here are their stories.

* PACIFIC REGION

"Tug" Hamilton was six years old when his grandfather gave him a sow to care for on the Hamilton ranch near Chandler, Arizona. From profit on her came an Angus cow, and the future Future Farmer decided he might make a career in agriculture. With his brothers as partners, Tug rented 15 acres of land even before entering high school.

With vo-ag and Advisor Carlos Moore's help, Tug Hamilton put to use the farming practices he learned in school. From broilers to beef to cotton, he built a farming program, not owned in partnership but 100 percent by himself. "I was in complete charge . . ." he told us. "I went directly home after school . . . disked, plowed, and cut stalks. The self-discipline I learned then is still my most important efficiency factor." By graduation in 1961. Tug had 39 acres of cotton, 40 acres of sorghum, 22 steers, and 27 dairy animals.

When the Future Farmer married his school sweetheart, Judi, in 1963, he moved briefly to town but maintained his lease and farming program. Six months was enough for Tug. He traded his leases in Chandler to his father for the lease on a 456-acre state-owned farm 30 miles southeast, near Magna. There he and Judi moved to grow cotton, sorghum, and beef this past year. At the same time, they purchased equipment on the farm for \$1,500 and a new pickup truck, in addition to the cotton picker they already owned in partnership. They counted assets of nearly \$30,000.

"His farm is a show place of sound agricultural practices—concrete ditches, level fields, straight rows, and high yields," Carlos Moore, now state FFA advisor, recently explained. "This past year his short staple cotton yield was 2.144 pounds of lint per acre, over twice the state average." Odro Ragsdale is now Tug's FFA advisor at Chandler.

Short staple cotton yielded "Tug" Hamilton a record four bales per acre. Ex-Advisor Carlos Moore gets much credit.



★ CENTRAL REGION

The three years since high school graduation in 1961 have been busy ones for Lyle Nielson of Creighton, Nebraska. They've been filled with marriage, a farm of his own, and hard work toward fulfilling his dream of becoming a successful farmer.

When a neighbor of Lyle's decided to sell his 160-acre farm that graduation year, the Future Farmer jumped at the chance to buy a farm of his own. Because he was under 21, the land was deeded to Lyle's father with an agreement that the Future Farmer would receive the deed as soon as he turned the legal age. There was the note from a private lender to pay for the farm, plus the money from his supervised farming program for livestock and machinery. He knew success or failure hinged on careful planning and hard work.

The new farm was anything but a breadwinner when Lyle took over. The buildings were run-down, equipment was lacking, and conservation practices were nonexistent. He and his new wife, Alice Kathryn, began work immediately. While Alice planned the interior decorations of the farmhouse, Lyle began building over 2½ miles of farm fences, laying a farm water system, and changing the locations of the granary and corrals.

Soil Conservation Service officials helped the new farmer plan practical soil practices, such as grass waterways and contour strips. Fertilizer and chemicals to control the badly infested pastures filled with bindweeds were applied. Last spring the Regional Star Farmer bought a bulk milk cooler and new milkers for his growing dairy herd, all the while building it with purchased cattle and calves.

For Lyle Nielsen there are the 20 dairy cows, 15 gilts and sows, and 350 laying hens, plus his corn. oats, hay, and pasture on the fast-improving home farm. The one-story farm home now sports fresh paint, a modern kitchen, new heating plant, and complete insulation. Outside, there'll soon be a new hen house alongside the remodeled barn, hog house, and milk house. Nebraskans look to their Regional Star Farmer and his farm, with assets of over \$31,000, as a vote of confidence in farm youth. He is a member of the Creighton Chapter where I. K. Parker is FFA advisor.

Lyle Nielsen makes a spot check on his winter wheat crop. Good root growth and stooling promise a good harvest.



★ NORTH ATLANTIC REGION

For three generations the Tyler family of Conneautville, Pennsylvania, has farmed their 225 acres not many miles from the shores of Lake Erie. This year, Grandson Don Carlton Tyler was named Star Farmer of the North Atlantic FFA Region.

Don was only 12 years old when his father was injured in an accident and the entire farming responsibilities were left to him. From his hospital bed, his father offered advice, while Don accepted the responsibilities. It was then that Don decided that farming was to be his life's work. By his fourteenth birthday. Don had received complete charge for the dairy and 30 cows averaging over 10,000 pounds of milk.

By 1960, when his personal farming program had grown to eight dairy animals, 12 acres of field crops, and 25 acres of timothy seed, Don assumed one third of the profits from the complete farming operation. A year later, upon graduating from high school, Don and his father shared the profits of the farm 50-50. By this time, Don had built the dairy herd to 46 cows, with an additional 26 heifers and calves. Over 900 hens were in the farm laying house.

In early 1963, Don, his new wife, Pat, and the Tyler parents sat down to work out an Article of Agreement with a local lawyer. The Article gave Don complete rights to huy the 225-acre farm at the rate of \$150 per month, with an additional \$2,000 per year for the livestock and equipment. Don and Pat could have one house, while his parents retained resident rights to the other. Soon after, Don bought a new tractor, corn planter, and two forage wagons. By now he had rented an additional 291 acres of farmland nearby for \$5.00 an acre.

Driving into the Tyler homestead today, you'll find a new 16-by 50-foot silo, a new turkey house, a loose housing pole barn for 28 cows, and fresh paint almost everywhere. Over 70 milk cows average 12,398 pounds of milk, 3,000 fryers and broilers leave the farm annually, and nearly 600,000 pounds of milk is sold into the Pittsburgh milkshed. Don Tyler, counting a net worth of \$36,000, "realizes the many opportunities given me through my FFA program can never be fully evaluated." His FFA advisor is C. H. Mostoller,

Spraying hayfields with herbicides is one of Don Tyler's many crop chores. He is managing over 525 acres of land.



★ SOUTHERN REGION

When George Culverhouse's grandfather came to Florida as a young man, land was selling for 5 to 25 cents per acre. The elder Culverhouse bought 12,000 acres of the rough native land near the town of Fort Pierce on Florida's east coast. Today that same land, now worth \$200 per acre, is "Hereford Haven," home of the Southern Region's 1964 Star Farmer.

It was 1953, when George was 10 years old, that the land was deeded to his mother, brother, and himself. At that time, with his parents' assistance, the land was put on an improvement basis. It was given rent-free to local growers for them to clear and crop for one season. As the land was cleared, the Culverhouses planted it to coastal Bermuda grass for pasture for the grade beef cows, During this period, the family decided to sell 600 acres to a fruit company for further development.

George's interest grew as he pitched in to help improve the land and beef herd. Purebred Hereford bulls were brought in for breeding, approved management practices were used, and pastures and rations were improved. By the time he entered vo-ag at Fort Pierce in 1958, George was an accomplished agriculturalist.

Using vo-ag studies with Advisor John Wetmore's help, George took the major management responsibility of the huge ranch. He used drainage, brush clearing, and fertilizer recommendations from experiment stations to bring the rough land into pasture production. At the same time, he supervised the breeding of purebred bulls on the grade cattle to upgrade the herd. His herd grew to 492 head of beef animals and 40 head of dairy cattle by graduation. In addition, he carefully managed 30 head of hogs and 50 acres of hay.

Married now, George and his wife, Irene, oversee the 11,000 acres, 50 purchered Herefords, and a new 1,200-acre citrus grove fast being developed. As a one-third owner of the 11,000 acres, George plans to continue adding cleared pasture and citrus groves, in addition to building cattle pens and fences. A community leader at 20, George Culverhouse counts a net worth of \$843,801, with an eye to having an outstanding beef herd and citrus empire.

The farm office is also a display area for George Culverhouse's cattle awards. He has 70 blue ribbons, 35 trophies.



October-November, 1964 27



Clyde Wissler, left, and Advisor Gene Daugherty both check feedlot plans.

LYDE WISSLER closed the feed-

barn, silo, and beef feeding area. We

need to change, he thought, change for

The 93-acre Wissler farm in Pennsyl-

vania's fertile Lancaster County al-

ready supported a fine herd of Angus

cattle, but Clyde wanted to modernize

and plan for expansion. It hadn't been

long since Gene Daugherty, his advisor

at the Garden Spot Chapter, had sug-

gested that he enter a feedlot planning

contest sponsored by the A. O. Smith

Harvestore Company for vocational

agriculture students. It occurred to

the future.

lot gate behind him and peered

over the present layout of the

PLANNING A FUTURE FEEDLOT

Clyde that he could use this opportunity to plan a larger, mechanized feedlot to handle the growing beef herd.

"I began to gather material and information which I could use in my plans," Clyde recalls. "This information was taken from beef books in the vo-ag classroom and visits to neighboring modern feedlots."

With Advisor Daugherty's encouragement, Clyde made numerous trips to study ideas from nearby feedlots, measuring and sketching new ideas and possibilities. With these in mind, the Future Farmer came back to his own feedlot and began to study his operation more closely. Then in front of a drawing board, Clyde began to draw and work out his feedlot plans,

"It took many hours of drawing, about 23 at the drawing board, to be

The future feedlot, shown with present modified feedlot on right, features two self-unloading silos, concrete filling platform, roofed winter manure storage, two-story hay barn and loafing shed, heated waterer, covered liquid manure pit.

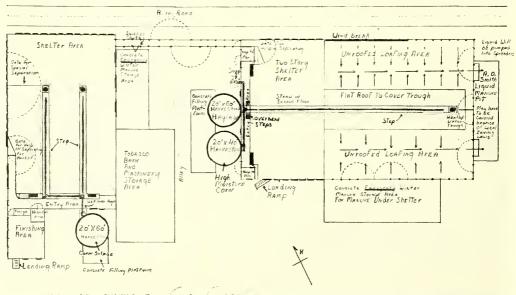
exact," he said, "and more time just thinking and studying our present system. I feel now that the most important step in starting a plan is to know the measurements of your present setup and how large the additions need to be. Then sit down and sketch for a few hours, trying everything and anything to see where you might get your best setup. When the decision is made as to where the feedlot should sit and how it should look, draw the final plans. Being able to picture it in your mind is a great help."

Clyde's new feedlot plan more than doubled his present operation, extending the feedlot some 160 feet out into what is now a cornfield. There's room for two large, self-unloading silos, a concrete filling platform, a two-story shelter area with a loafing area below and a hay storage area above, additions to the auger silage feeders, and a liquid manure pit where manure will be pumped into spreaders. Silage will be high-moisture corn, while all water will be supplied in heated automatic waterers.

"We are planning on seeing these feedlot plans to completion," Clyde told us. "It will be kept at full capacity unless the cattle market becomes unfavorable."

The Wissler feedlot plans were enough to win Clyde first-place honors, including a plaque and a \$100 cash award. But more important, the hours of feedlot planning gave him a new insight into the work and study necessary to produce a modern, efficient farming operation.

AFTER



HAT'S IT like to start an FFA chapter in an area where people aren't familiar with the program and where agriculture is NOT the most important industry? Where do you begin? What comes first?

These thoughts flashed through Dan Dunham's mind last summer as he began the task of organizing a vo-ag program and FFA chapter in Drain, Oregon. But for Dan, national FFA president in 1955-56, the challenge of bringing the FFA to this Douglas fir lumbering community was stronger than any discouragement he could encounter. The task ahead was an opportunity to prove once again the merits of vo-ag. FFA, and supervised agricultural instruction.

Drain is a town of 1,200 persons some 140 miles south of Portland in the south end of the rich Willamette Valley. The soil is mainly heavy clay loam, poorly drained, and lying in a climatic area closely resembling the coast along the Mediterranean Sea. The main source of income for Drain is from forestry and lumbering.

As Dan Dunham drove through the area in summer, 1963, he noted the small, open valleys harboring scattered farms, many of them part-time operated with sheep as the major enterprise. "There is a good future here for intensive, specialty cropping," he thought. With vo-ag help, he knew also that horticulture and nursery management could be added. All that was needed was vo-ag... and community support.

Duties began with a flurry in July, 1963. First activities involved finalizing orders for equipment for the vo-ag shop, originally built as an auto mechanics work area. Then came the endless personal contacts, so important in gathering community support. Advisor Dunham asked several of the leading citizens to serve on an adult advisory council to help establish the new vo-ag-FFA program. All agreed, and a meeting was set for later that month. "This early visitation was probably the most important factor in assuring the success of our program," Dunham admitted. "People are by nature sincerely interested in young people in their community.

Then came the many self-written articles that Dan placed in the local Drain Enterprise newspaper. The first one appeared on July 11, telling about the new vo-ag program and the meeting called for that following Monday evening at the high school. It was one of a complete series that Advisor Dunham placed in the newspaper to inform the community of the new vo-ag and FFA program.

The first FFA meeting held that Mon-



Birth of an FFA Chapter

Iuto a non-farming area dominated with lumbering. Dan Dunham brought his idea and success of an FFA chapter.

day brought out 24 prospective Future Farmers, 23 of whom were later to become active chapter members. Advisor Dunham and Principal McIntyre of the Drain High School explained the organization of the new chapter. Dunham knew that he would have to have a nucleus of students active in the summer program to lay a solid foundation for the chapter that fall. Around the interest of these 24 students, he planned such activities as practice judging sessions, fairs, and a trip to the Pacific International Livestock Exposition at Portland.

Between personal visits, forming a student advisory committee, and supervising the vo-ag shop outfitting, Dunham sparked interest in a new sheep chain provided by the Sears-Roebuck Foundation. Forms were distributed and arrangements made for the purchase of a Southdown ram and 10 ewes. It wasn't long before George Churchill, a local Polled Hereford breeder, donated a cow and calf to start a beef chain as well. And to welcome their new FFA neighbor, the nearby Central-Linn FFA Chapter gave Drain a Yorkshire gilt to initiate a swine chain among the new Drain members.

Not all was easy for Dan Dunham and the budding Drain Chapter. There were the doubters who didn't support the idea and the area newspaper that said the Drain area had no agricultural future. Dan went before the Drain Chamber of Commerce that time to rebuke the statement and to tell the community leaders of the progress of his broadening vo-ag program.

Toward the end of July, another student meeting was called; this time a board of eight students was selected to head the organization of the Drain FFA Chapter and to plan chapter activities. As the fair and judging season slowed down just before school started, Dunham called another community meeting for parents of prospective students. By the opening of school, nearly 50 students were present.

The big chore facing Drain's new Future Farmers was organizing the shop and classroom facilities over the next six weeks. "I could have done much of this during the summer," Dan admitted, "but I felt my time would be better spent working with the community and prospective students. Thankfully, this policy paid off. In addition, the experience of students putting their own house in order proved invaluable."

Today Drain FFA Chapter has over 50 members and an additional 30 to 40 members expected this fall. As the area does not have an abundance of farms. many Drain Future Farmers have entered into "Work Experience" agreements with local farmers and agricultural employers. In addition, a newly acquired "project center." with area for up to 35 student projects, will help voag students with no home farm. Drain citizens now know what vo-ag and FFA is, as this thriving chapter becomes established. The farms that have been allowed to grow up with wild blackberries have promise of being put back to use, as the Future Farmers from Drain take their place in agriculture.



How to Succeed in Ray Smith trims rose bushes in front of the sales room. These will be used in fulfilling a landscaping contract.



Agribusiness - By really trying!

Vo-ag and FFA training pays off for David Smith.

By George Wallis

ARDEN shops and landscaping offer excellent opportunities to students of vo-ag and horticulture," says David Smith, founder of Smith's Garden Supply and Nursery at Largo on the Gulf Coast of Florida.

This former Future Farmer studied agriculture, horticulture, and landscaping at the University of Florida; and after graduating in 1961, he returned to his home town to establish a modern garden center and nursery. Now in its third year, the company stocks over 10,000 plants and requires the full-time service of five employees.

In establishing the garden center, David Smith became a partner with his brother, Ray, who also likes to work with plants and do landscaping. And to head their public relations and sales department, they employed Elmer Williams, also a recent graduate of the University of Florida, with a major in journalism and a minor in agriculture.

"The FFA and vo-ag program at Largo High School was a tremendous aid in establishing our business," Dave Smith explained. "Both my partner, Ray, and our associate, Elmer Williams, were presidents of their local FFA chapters. Ray served this duty during 1957-58; and Elmer, in 1958-59. I was president my senior year in 1954.

The former Future Farmer added, "The technical training and leadership learned in FFA have been invaluable. As nurserymen, we are called on to give many talks before organizations and trade groups. Our vo-ag training has come in very handy."

"With gardening and outdoor living

possible almost the year around, Floridians take pride in the beauty of their homes. Landscaping is an important profession in the Sunshine State," Dave Smith points out.

"Nearly all the new residents of this area are from the North and know little about tropical plants or landscaping a semitropical area. They need skilled help and dependable advice, and that is our business. We can furnish anything from a few plants to a complete land-scaping job," Smith added.

For their location, they chose a corner on East Bay, a four-lane, heavy-traffic highway. Here they get lots of free advertising from their 280 feet of frontage on the highway and 1,380 feet on Highland Avenue, a residential boulevard.

They now grow one third of their plants and expect to increase their nursery each year. They have in stock more than 30 varieties of trees, ranging from citrus and palms through figs and mangoes to bananas. Among the popular shrubs are poinsettias, hibiscus, begonias, and camellias. They have 50 varieties of patented roses, 30 varieties of non-patented types, and numerous

They feature roses and are doing lots of experimenting and research to develop and perfect plants adapted to the climate of Florida. When the author visited their garden center in mid-January, approaches to their sales office were banked with white and cream Peace roses as large as saucers.

"Many of our customers are retired or semi-retired and should not be lifting heavy bags of fertilizer. We, therefore, Partner, David Smith, is a graduate of University of Florida in horticulture.



stock nothing above 50-pound bags except for citrus groves. We load all fertilizer and furnish a hand spreader for lawns. We even deliver and spread yard fertilizer for \$1.00 per lawn, plus the cost of fertilizer," Elmer Williams explained,

Some of the larger chain stores have garden shop departments in their area. When asked about holding their own with this competition, the young businessmen replied:

"The department stores and chains can, with large quantity buying, undersell us on lawn equipment; but we should be able to hold our own in most respects. We have our own plant farm, while most of the chains have to pay the nurserymen a profit. On most plants we can sell at their prices and obtain both the wholesale and retail profits. If competition becomes too keen, we can cut out one of these and still have a

"We have two graduate horticulturists to assist customers with their problems and planning. They have specialized knowledge of tropical plants and their diseases, which gives us further competitive advantages. We have grown up in this state and learned a lot through years of experience.

"Largo is our home town. We are interested in our community and active in its affairs. With quality products, good service, and hard work, we should be able to get along very well."

FFA CHAPTERS PARTICIPATE IN CROP PROGRAM

"Acres of Mercy" tended by FFA members ship food to the Christian Rural Overseas Program.



Corn planting time this past spring brought Girard FFA members to their "Friendship Acre," harvested for CROP.

B<mark>y</mark> Kathlyn Gay

HISTORIC land tract near New Windsor, Maryland; nearly 900 acres of ripe corn on Indiana's fertile soil; sections of state highway property planted to grain in Illinois and to beans in Michigan; plots of ground farmed by Future Farmers—all of these are battlefields for a constructive war which uses an "army" of tractors and manpower to create hope.

This effort began over a year ago when a group of farmers wanted to contribute to CROP, the community appeal (now in its eighteenth year) which provides food, seeds, and tools for the overseas programs of Church World Service. Instead of designating an acre of land apiece as a "friendship acre"—one way farmers have for contributing their produce to CROP—30 to 40 farmers and FFA members near Goshen, Indiana, banded together to plant, cultivate, and harvest a 68-acre farm.

Once the grain was harvested, CROP made arrangements for the processing and export of the corn products through New York to points overseas. In Ghana corn syrup is used in milk formulas for babies; refugees from tribal wars in the Congo find corn meal essential to their diets; and Greek children living in poor land areas receive their only full meal in school lunch programs from energy-giving corn oil supplied by U. S. farmers as a dip for their bread.

This small war to eradicate the causes of malnutrition—and even starvation—has advanced in dozens of countries. The Girard FFA Chapter in Macoupin County, Illinois, has a project in which members cooperatively farm two acres of land to raise funds for the local

chapter. This year they decided to give the produce from one acre to CROP.

"We are challenging every other FFA chapter in the county to match us," said Joe Alford, president of the chapter.

This challenge must have been heard beyond the county line because in Monroe County, "Skip" Frank of the Valmeyer Chapter states that he is contributing a "Friendship Acre" of grain to CROP and says: "This is my opportunity to give community service and work toward the State Farmer Degree."

On another front, a 27-acre parcel of land from a farm near New Windsor, Maryland, has surrendered its yield for the hungry. This land was once the site of many Indian raids, as the gun ports in the 200-year-old farmhouse testify. Today the land supports crops for undernourished people around the world.

Churches cooperate, where possible, with CROP projects, including many Protestant denominations, rural residents of the Catholic faith, and civic and farm group members such as FFA.

This is evident in the various affiliations of the farmers working a 60-acre farm in York County, Pennsylvania a part of the eastern front of this "war."

In Indiana enough men and equipment were lined up early this spring so that a 62-acre farm was plowed and harrowed in less than four hours. The same type of cooperative effort took place on five other farms in the state during both the planting and harvesting periods. And individuals, many of them FFA members, harvested single friendship acres to assist people in developing countries.

Lack of a farm to harvest for CROP

does not discourage volunteers. In Michigan 30 acres of highway property was used to grow food for the hungry. In this same state, FFA chapters set aside acres for CROP, with the harvest usually in beans rather than corn. Michigan FFA members are also actively involved in the fall canvasses for CROP, soliciting funds and collecting grain.

Elmer A. Lightfoot, FFA Executive Secretary of Michigan, stated: "FFA members in the state have taken part in CROP since it began in 1947. Their efforts at the close of World War II were significant to the immediate needs of war displaced persons, providing food for refugees."

In a similar way the Ohio Association of Future Farmers has also been participating in CROP, soliciting grain and funds in county CROP campaigns. Last year the Ohio FFA raised approximately \$3,000 for rice to be sent to Hong Kong, where thousands of school children receive their only meal a day because of this type of assistance.

A harvest on a farm here can mean hope in the form of food to jobless refugees in Korea, Jordan. Algeria: it can mean hope in the form of tools for young agriculture students in many new African nations: it can mean hope in the form of seeds to struggling peasants in Latin America. Haiti. Grenada, parts of Asia. As long as the tractors reap a bountiful harvest, there may even be a hope that the world will be well fed instead of the majority of the people undernourished, underfed, just existing. It's a hope the small CROP army can help create.

October-November, 1964





Dave Knop, left, and older brother, Don, look over 14-acre lake at left. The 30- by 80-foot pole building at right serves as a recreation center.

When their rough farmland wouldn't support a profitable beef operation, these Future Farmers built a recreational area and opened for business.



RECREATION versus beef cows became a major decision for the Knop family—Don, Dave, and father, Herb—on their farm near Ross-ville, Indiana. The 45 acres of rough land couldn't offer much potential if utilized through the family beef herd, so off to market went the beef animals and work on a recreational development got under way.

Dave tends the bait shop located in a corner of the new recreation building.

Photos by Kenneth Pyle

A welcome swim for Don and his daughter, Kim, in the 14-acre man-made lake the brothers built. A beach surrounds the lake; the floating platform is for diving.



The Knop's were immediately optimistic about their new farm enterprise. "This rough 45 acres could pan out to be a better money-maker than the other 155 acres of nearly level cropland," said older brother Don. The Knops, both Future Farmers, realized, however, that they would have a long way to go before they could call this new venture a success.

Total acreage of the Knops is over 200, including 11 acres recently purchased to give easy access to the new 14-acre lake, which became the hub of the development. Crop practices learned while the brothers were in vo-ag helped finance the operation. "Record keeping learned in vo-ag is helping most," David explained.

It all started nearly two years ago when Don, who likes to fish, asked the local Soil Conservation Service about a pond on the rough north 40. When the site was investigated by SCS technicians, they suggested a much larger site on the south end of the farm. With this larger lake, recreational possibilities would be rather easy to develop. As the plans began to develop, the 45 selected acres became part of a plan calling for a mile of access roads; one-half mile of screen plantings of autumn olive, silky dogwood, and multiflora rose; two acres of grading; four acres of fescue seeding; and 10 acres of woodland pruning and thinning. At the same time, plans were made for a game farm habitat with alta fescue as cover.

The Knops were anxious to get ideas from many sources. They visited other recreational facilities in Indiana. In April, H. W. Gilbert, an extension land-scape architect from Purdue, visited the Knop farm to give additional ideas. He suggested plantings to screen the planned recreational area from the farm buildings where the new recreational building and parking area would be located.

Then the Farmers' Home Administration furnished funds for the 30- by 80foot recreational building planned to include a bait shop, rest rooms, shower facilities, and a concession stand. In its center, social gatherings such as square and round dancing could be held. Following through, the FHA also assisted with funds for a new well, water lines, sewage disposal, picnic tables, and fishing boats. Other cooperating agencies were the Federal Land Bank and the Agricultural Stabilization and Conservation Service, who helped share costs on the lake dam.

The farm recreation idea began to catch on with area residents as the word got around. The 14-aere lake was a drawing card with its gently sloping wading areas and a deep area for diving. Guests began to come from Lafayette, a city of 50,000 some 16 miles from the Knop farm. In the first nine weeks of operation last year, over 2,900 fishermen paid the Knops a visit. Dave and Don had to restock the lake with channel catfish seven times as eager fishermen caught over 4,500 pounds of fish.

The former Future Farmers charge customers \$1.50 per pole to fish at the lake, plus an additional \$1.50 per campsite around the lake if the guests stay overnight. Picnic tables are set in shaded areas and rent for \$1.00 each from the hungry campers. Swimming in the clear lake costs 35 cents for adults, 20 cents for children. One Sunday alone, 300 people flocked into the Knop farm to relax and find rural seclusion.

Fish are kept in the lake by regular stockings of bluegills, bass, and channel catfish. Every fish that is removed from the lake is recorded by one of the Knops so that the fish population can be kept in check. Fishermen pick up fishing tickets as they enter the lake area, then leave them with one of the Knops when they leave for the day. This gives the Knop family a chance to weigh each customer's catch, as well as get an accurate accounting of the number of fish removed.

Farm recreation has become an important part of the Knop family's operation as they expand and improve the camping and swimming areas. For them their rough land became an asset rather than a tax liability.

Farm Law

By Terrell Benton, Jr.

The "Law of the Land" is important to you as a farmer-landowner.



Terrell Benton, now a lawyer, was FFA Student Secretary during 1955-1956.

Is IT important to know how the law affects you as a young farmer? As a former member of the FFA and presently a practicing attorney in a rural area, I know that it is very important.

The rights of those engaged in farming are the same as those of other persons except in a few instances where local statutes pertain only to agriculture or farming operations. Likewise, the liabilities of farmers follow the same rule of liability with the same exceptions.

The areas most likely to cause concern to the beginning farmer are rights and liabilities arising from contracts, rights and liabilities arising from sales, agreements resulting from the relationship of landlord and tenant, water rights, fencing rights, liabilities resulting from the keeping of livestock, irrigation rights, rules and regulations pertaining to marketing of farm products, liabilities resulting from the operation of motor vehicles and farm equipment, and laborers' liens.

It is difficult to give an answer to any particular question on laws affecting farming because of the conflict and variance of laws among the 50 states. Therefore, this article must remain general.

All deeds, contracts, leases, wills, insurance policies, and other important instruments should be kept where they will not be burned, lost, stolen, or otherwise destroyed. Perhaps a safe-deposit box at the local bank would best serve this purpose. All too often important papers are stored haphazardly around the home. Thus, when needed, they are often not available. Regardless of where you keep important papers, make the place known to your wife, the named executor of your will, or some other responsible person.

Secondly, retain a copy of all transactions, including both sales and purchases, with other persons. You

need not establish an expensive filing system to properly maintain your records, but it is important that you, your tax consultant, and your attorney have copies of transactions filed in a systematic manner. Also, they should be retained for a reasonable length of time.

Equally important to the beginning farmer is the location of farm boundary lines. Whether you purchase a farm, acquire additional acreage, or simply make improvements on presently owned property, it would behoove you to acquire the services of a civil engineer or land surveyor. Further, when erecting buildings, constructing fences, building dams, or making other permanent improvements, you should find the exact location of the land line between you and the adjacent owner.

Having all corners and land lines well defined is a precaution that avoids troublesome disputes. In this regard, if a "line fence" exists, there should be a complete agreement or understanding with the adjacent owner concerning its maintenance.

The beginning farmer in his particular locale should make it his responsibility to learn the laws of that area as they pertain to farming. As examples, you need to know where liability rests when guests or visitors are injured by machinery on your farm; what duty you owe to hunters; what liability you may incur as a result of the negligence of employees; and the liability, if any, when your livestock are involved with a motor vehicle in a highway accident.

The final suggestion to the young farmer is perhaps the most significant one; that is, to seek the advice, counsel, and guidance of a qualified person whenever problems arise.

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TAKE CARE OF YOUR



By Melvin Long Here's how you can "stretch" the useful life of your chain saw with a maximum of care but a minimum of expense.

POUR CHAIN saw is a highperformance, precision piece of equipment designed to give you many years of trouble-free service if properly used and maintained. Only by doing this can you obtain all of its potential usefulness.

One of the most important factors is keeping the chain sharp. In general, you should plan to resharpen it after each half-day of use. Since a direct-drive saw drives its chain faster, it requires more frequent sharpening.

For long days of operation in the woods, an extra chain is a convenience. It permits you to change chains at



If your saw runs into the ground, stop, clean it, and inspect chain carefully.

Too much oil can cause carboned spark plugs, stuck rings, and hard starting.

American Forest Products Plate



noon and then resharpen both chains at the shop where a vise is available to hold the saw.

Because of the many individual sections of the chain which are connected by rivets or pins, wear on the rivets increases the length of the chain. To keep this "stretch" to a minimum, frequent oiling of the chain is essential. Plan to oil the direct-drive type about every 15 seconds and the gear-drive type about every 30 seconds when you're sawing.

Since the chain throws off most of the oil, you must allow for this when applying it. It needs oil inside the chain itself and at the groove where the chain contacts the bar. Usually, only the groove is lubricated by oil, which is applied while the chain is running at high speed. The saw must be idling or stopped to lubricate the rivets and rivet holes.

Chain tension is another factor in saw performance and chain life. First, make sure that the chain is correctly oiled. Then, tighten the tension adjustment until you can pull the chain around the bar easily by hand. If the chain is hot from use, allow it to cool a few minutes before you adjust the tension. The chain should be cool enough to contract to its normal length.

A chain that is too loose chatters and bounces around in the cut. This causes severe strains and extra wear in the joints. A loose chain tries to climb the sprocket and may even jump off the bar.

Depth gauge settings depend upon the conditions. Powerful engines or softwood permits lower settings. Smaller engines or hardwood requires a higher setting. The gauges must be set the same on each side. Otherwise, the chain runs to the outside. The chain dulls quickly unless adequate depth gauge clearance is provided.

Be sure to brush the dirt off timber before cutting. Also keep the chain off the ground. If it is accidentally run into the ground, stop and inspect it carefully. It may be necessary to touch up the chain with a file. After each day's use, clean, dry, and oil the chain. The saw should always be kept in its cover when not in use.

The two-cycle engine is lubricated by oil mixed with the gasoline. Your owner's manual lists the exact proportions. Most engines use about 34 pint of SAE 30 non-detergent oil to each gallon of gasoline. The oil and gaso₇ line should be mixed thoroughly in a separate can before they are poured in the fuel tank. Too much oil causes carboned spark plugs and exhaust ports and stuck piston rings. Hard starting and reduced power are the result. Too little oil causes overheating, scored cylinder walls, and burned-out bearings.

The air cleaner must be clean and properly sealed to prevent entrance of unfiltered air. Wash the air cleaner frequently, and be sure the gaskets are sealing. The cooling fins on the engine must be kept clean. Accumulation of sawdust and dirt prevents proper cooling and shortens engine life.

If the saw is to be stored for an extended period, clean out all fuel. You can let the engine "run out of gas." Fuel left in the lines and carburetor will evaporate, leaving a gummy deposit which will cause hard starting.

A chain saw can be a safety hazard if improperly handled. It's impossible to make the saw "fool-proof" safety-wise and still retain its capacity for sawing. Therefore, safe handling by the operator is absolutely necessary. Here are some suggestions:

- 1. Keep inquisitive bystanders clear of the working area.
- 2. Before starting to cut, be sure that you have a clear place to stand and a safe exit route from a falling tree.
- 3. Check the lean of the tree as well as loose bark, rotten limbs, and intertwined branches.
- Wear heavy shoes or boots with nonskid soles.
- Stand at the end of the saw when operating it, never to the side.
 - 6. Never touch a moving chain.
- 7. When walking through brush, never carry the saw with the engine running. A branch may strike the throttle, open it, and start the chain.
- 8. When removing the saw from a cut, shut off the engine before the chain leaves the tree.
- 9. Carry the saw by the handles
- 10. Never operate the saw in a closed room, such as a farm shop.

BEEF CATTLE and **AUTOMATION** Dairyland

Claire and Francis Flease give much of

BvStan Henschel

Two former Future Farmers find that profit is the result of farm mechanization.

their success to this automatic feeder.

XPERIENCE we received as FFA members has led to many moneysaving conveniences on our farm today," Francis Flease told the author on the Flease brothers' farm near Waupaca, Wisconsin. He spoke for his brother Claire, too, as he recalled their six years of FFA membership.

Today their 700-acre spread in eastcentral Wisconsin has been made into a successful beef and dairy operation, largely through automation and laborsaving farm equipment. Some years back when the Flease brothers took over fresh out of FFA, there was room for only 30 head of cattle on the squaremile farm. You can stand there today and see nearly 400 head of dairy and crossbred beef animals on the fertile

Three out of four of the animals are raised strictly for beef. Why? "There is money in marketing beef cattle if you can bring them to market for top prices in a short time," the brothers stated. Their successful crossbreeding program uses purebred Angus bulls on Holstein cows. Most of the breeding is done artificially.

Much of the labor of farming has been taken out over the past few years through the installation of modern worksaving devices, the most dynamic being the silo unloaders and rotary livestock feeder. These are completely automated and operate without a single manual switch. Five times each day every day

of the year and even in winter at 30 degrees below zero, the unloaders and auger feed the 400 cattle at preset times around the clock. Regardless of the weather and the Fleases' work load, their cattle are fed.

What causes this dependability? Basically, the feeder is controlled so that no feed is allowed to remain in the conveyor to freeze in winter or spoil in hot weather. Paragon switches on the feeding operation work this way:

The feeding times are set on the switch by placing a pin at the desired point on the 24-hour dial. The length of the ON time can be anywhere from two to 55 minutes. At the preset time, both the silo unloader and feeder are started, but another timer takes over and permits the feeder auger to operate after the silo unloaders have been shut down by the time switch. This time delay relay permits the auger motor to empty all feed into the feeding bunks after the unloader stops, eliminating spoilage and freeze-ups. This delay automatic switching cost the Flease brothers under \$75.00; yet the savings count up in both time and labor saved.

Francis finds that it takes about 10 minutes for automation to adequately feed his beef cattle in the 130-foot-long feed bunk. The only labor required in feeding the huge herd is removing a silo door once a week to allow the unloader to continue its downward movement. "The savings in man-hours alone were we to compare them to a manual unloading and cart feeding method would be fantastic," he told us. "It would be a full day's work for any man to feed 400 head of cattle five times a day.'

Modern equipment and planned automation of the two former Future Farmers have given them higher returns and more leisure time away from the farm. The two men are able to manage 700 acres and feed out 400 cattle themselves. at the same time shipping a ton of milk each day. Because automation gives strict regularity of feeding, fewer unexplained drops in milk production from the 100 dairy animals have come about. "This regularity in feeding renders a more even production of milk, too.' Francis was quick to add. "Although one of us likes to be present at feeding to check for cows that may be off-feed. he added, "we don't find it necessary. We can have breakfast together, my wife and 1, and also take the children to church knowing all our livestock are being adequately fed.'

Time controls such as the Fleases' are available to save valuable time in such farm chores as watering livestock. misting, and unloading grain and shelled corn hins. The Flease brothers found that these automatic hired hands enable them to devote full time to planting. harvesting, and management. They are successful brothers who are farming for tomorrow-and making it pay.



Darrell Braun snaps an FFA Safety Week photo for an Ellinwood, Kansas, paper.

TTURE Farmers, you're in an ideal position to supplement your funds by taking and selling pictures in your high school and community.

Elected reporter of the Ellinwood, Kansas, FFA Chapter my junior year, I had to take pictures of chapter events. I didn't know much about cameras or photography then, but by working with the equipment in school—a 4-by-5 press

Author Gordon Bieberle used schoolowned equipment to develop photos.

File your negative alphabetically by subject with an index to get reorders.



camera and a 21/4-by-21/4 twin lens reflex—I soon learned.

The FFA chapter and school clubs often cooperated with church and civic groups in their activities. Whenever FFA members helped the town police with auto safety checks or the Rotary and Lions Clubs with city clean-up projects, I'd naturally snap pictures for the chapter scrapbook and the school yearbook.

My advisor, John Cragun, suggested one day that I supply pictures to the weekly newspaper in Ellinwood, a small town of 3,000, and to a daily in nearby Great Bend, a city of 15,000. He introduced me to the editors of the papers. Both were interested in publishing pictures of our chapter events. The editor of the daily even offered to pay me \$3.00 for every picture be published.

I kept track of the materials I used and paid the high school for them. The organizations often bought one or more copies of the pictures and were happy to pay \$1.50 for an 8-by-10 or 75 cents for a 5-by-7 print.

"But our FFA chapter doesn't have a camera, and I'm not yearbook photographer, so I don't stand a chance," you may say.

Your possibilities aren't doomed. All you need to get started is a camera with adjustable focus, shutter speeds, and f-stops. Your best bet would be a 35mm or twin lens reflex. You can buy a good model of either type for \$30.00 to \$50.00. You might be able to get a used one for even less.

You'll need a darkroom equipped

with an enlarger, too, but you may get by without buying this equipment. I was able to get permission to use our school facilities.

"But I've never developed pictures before!" you exclaim. Get off the panic button. You can do it. Get someone who knows how to show you the routine. You might check out a library book on darkroom technique or go to your photo dealer and ask for a beginner's handbook.

"How am 1 going to go about finding individuals and organizations who want to buy my pictures?" you ask.

Start by contacting those you're most familiar with. Farm groups are interested in pictures of their activities. Other community organizations, such as ladies' home demonstration units, garden clubs, and guilds, want pictures of fashion shows, flower exhibitions, and new officers. These clubs sponsor many events, and they want pictures for their files. Newspapers are glad to get shots of such happenings, too,

Don't forget high school parties, barn warmers, and picnics. Take your camera along whenever you go to a party. Snap pictures of couples. Make some small prints and show them to your friends. Offer to make 5-by-7 or 8-by-10 enlargements for your regular prices. If a queen is crowned, be sure to get pictures; newspapers will use them, and the queen is sure to want one or two copies.

The Chamber of Commerce uses lots of pictures, so introduce yourself to the secretary and leave your phone number. You'll be surprised. When that merchant-sponsored drawing for the Christmas turkey rolls around, she'll call you. Lots of these pictures will be salable to newspapers, as well as to the Chamber and individuals involved.

Carry your camera wherever you go. Editors are eager to get "spot news" pictures. When you get one of a fire or accident, rush the unprocessed film to the paper office—it's equipped to process it faster than you can. Editors usually pay more for these than they do for feature shots.

As the quality of your work improves, there's no reason why your prices shouldn't go up. You won't have much to say about the amount newspapers pay you, but after you've had several of your pictures published, you can ask for a raise. About a year after I started shooting for the Great Bend newspaper, the editor raised my pay from \$3.00 per picture to \$5.00 per picture.

In 1963, the fourth year I took pictures for money, I cleared over \$400. This, combined with my other income and a scholarship, was enough to send me through my junior year of college. You can earn just as much or more.



Spotting each shot with a 20-power telescope is an important part of rifle firing.

FFA Rifle Clubs



Classroom instruction in sighting goes along with actual range firing. Here an instructor shows windage and elevation.

Want to get more fun out of your shooting? It's easy—organize a Future Farmers' junior rifle club as they did in Clare, Michigan.

MEMBERS at Clare do a lot of hunting for deer and small game. This, and the need for proper training in firearms safety and small arms marksmanship, made formation of the club a "natural."

Floyd Norcutt, FFA advisor, told the National Rifle Association that "with your help it was easy. We now have one of the most popular recreational facilities in the entire area."

He explained how his FFA club got started several years ago. He said that a safe outdoor shooting range for use in good weather was not hard to find near Clare, a small town north of Mount Pleasant in central Michigan, but that an indoor range did not exist in the area.

After an extensive search in and around Clare for a suitable site, one was found—a "partially excavated area approximately 25 by 75 feet under the auditorium of the high school building."

With the approval of local school administrators and the Clare Board of Education, FFA members lugged off in pails hundreds of cubic yards of dirt—cnough to make space for a rifle range. The farm shop class then poured cement and laid cement blocks for the floor and walls of the corridor. The rest of the building was completed in minimum time, at minimum expense.

Future Farmers made a low cost, but highly satisfactory, target carrier by mounting bicycle wheels at each end of a 12-foot steel shaft. Two endless belts of clothesline, from the wheels at the firing line to the far end of the range, carry the targets back and forth, making it unnecessary for the shooters to go down-range to examine their targets.

Before the actual shooting got under way, Norcutt took an NRA instructor's examination and subsequently was certified by the association as one competent to train junior marksmen.

Within a few weeks after the range was completed, adults in the community asked to use it. So popular did it become that a senior pistol and revolver club was organized and affiliated with the NRA, as was the junior group. Cost: \$10.00.

Each fall the Future Farmer Marksmen Junior Rifle Club elects its officers for the year from local FFA membership. This gives FFA members further opportunity to show individual leadership and helps broaden their base of learning. The shooting program is most active during the fall and winter, when outdoor recreation is at a low ebb.

This year FFA members cooperated with the high school's physical education department and assisted in the teaching of gun safety to boys and girls from Clare and surrounding communities.

"Several of our club shooters," Norcutt said, "have carned NRA Expert Rifleman ratings: the one who carned the highest rating, Distinguished Rifleman, promptly became a life member of the NRA upon his achievement."

Mr. Norcutt says that the experiences gained by members of his FFA junior rifle club "have been extremely worthwhile and rewarding and that all Future Farmers look forward each year to the shooting season."

Undoubtedly, there are many other successful FFA rifle clubs around the country—clubs that were started from scratch and developed into real assets to local communities.

It doesn't take a great deal of money to form an organization to provide a place to shoot. All it takes is a little imagination on the part of a group leader, a lot of enthusiasm from the numbers themselves, and some cooperation from the National Rifle Association in Washington, D. C.

The latter is simple. Just send a letter to the Program Division, NRA, 1600 Rhode Island Avenue, N.W., requesting information on how to form a junior rifle club. The NRA even provides, at a small cost, range construction plans.

The Director of Civilian Marksmanship at army headquarters in Washington furnishes, at no cost, small bore target rifles and ammunition to NRAaffiliated clubs.

One of the safest of all sports, target shooting teaches timing, coordination, attention to detail, and good sportsmanship. Physical strength, agility, or athletic prowess is not necessary to become a good shot.

The NRA is prepared to assist FFA chapters in contacting local shooting instructors and training new personnel to become certified small arms instructors.

Want to organize a rifle club? It's fun and will make a contribution to recreation in your area.

October-November, 1964

The 2nd Richest Chapter in Texas

By Orlan and Wini Jones



Pete Douzat gives a "horse laugh" to Mike Dugat from atop the Dayton Chapter's new all-metal arena. Once only a few roping chutes, the arena is worth \$50,000.

Their own rodeo arena with four programs a year has given Dayton Future Farmers a "wealth" of business experience and chapter funds.

HEN THE Dayton, Texas, school board offered the local Future Farmers the lumber from an old football stadium 15 years ago, the FFA decided it would build a rodeo arena.

Today the Dayton FFA has an allmetal arena; stages four rodeos a year, three of them in association with civic organizations; and owns a string of bucking horses, dogging steers, and wild Brahman bulls.

The chapter is now netting from \$5.000 to \$7,000 a year, making it the second richest FFA chapter in Texas. As a coincidence, the Texas chapter that tops Dayton income-wise, Cypress-Fairbanks, also makes its money from a rodeo arena. Located just a few miles north of Houston, Cypress-Fairbanks found it had a ready-made audience from the city and stages a rodeo every Friday night during the summer.

Anson Rigby, Dayton chapter advisor when the arena plan was spawned, says that from the beginning the project—like all good projects—kept leading to bigger and better things, until today the property has a book value of \$50,000.

That first arena was "little more than a couple of roping chutes," but enthusiasm was high and FFA members soon managed to round up enough material for some bucking chutes and a few bleachers. To start with, the installation was on a three-acre tract owned by the school. Since then, the chapter has bought eight adjoining acres.

In the first year, FFA members learned a thing or two. First, they found that if they hired wild stock for their rodeos, the cost was so high they didn't make any money.

That led to summers of combing the countryside for cantankerous animals. It also led to some pulled muscles and stiff backs because they had to try critters out to make sure they were good bucking stock before offering them for public exhibition.

Part of the Dayton FFA's success has been its reputation for staging good shows, and the hunt for contrary animals is an essential part of making this possible.

Community acceptability of the arena was a problem in the beginning, and to win this, the FFA made the community a part of the rodeos by taking in other organizations as co-sponsors.

The annual July 4 rodeo is in cosponsorship with the Lions Club and American Legion. For its annual rodeo on the first weekend in August, the chapter is co-sponsor with the Young Farmers chapter, and the annual Labor Day event is with the Dayton Volunteer Fire Department.

When the FFA has a co-sponsor for a rodeo, expenses are deducted and proceeds are split evenly. Over the years, the funds have helped civic organizations carry out important projects.

By-products of the rodeo are numerous. Since a cattle trailer was needed, the members built one in the vo-ag shop. Word got around, and they began getting orders for others. Last year they made and sold seven trailers at prices which varied from \$650 to \$850. The FFA realized a profit of \$200 on each.

A cattle truck was purchased by the FFA to move rodeo stock, and this is available to local farmers for a small fee when not in use.

All profit made on the rodeo arena is plowed back into improvements. The all-metal arena was built in 1956, new bleachers were added in 1963, and new lights were put in at a cost of \$2,400 in 1964.

Beginning this year, the FFA will urge many of its members to raise a calf as a project, and rodeo money will underwrite the initial cost for those who could not otherwise participate.

All members of the chapter help out each summer with the rodeos, but an average of only 15 volunteers from the 65-member chapter rides the stock.

For an average rodeo, the FFA hires five professionals to work the chutes, an announcer, and a clown. All other work is handled by club members.

Advisor Galyean says the cooperation of the FFA members in the rodeo project has made it a success over the years.

"If I were offered the arena today free of charge, I would hesitate to accept because I doubt if it could be run profitably," he states. "But as an FFA project, it has earned a place in the community."





Dean Oliver Six times World Champion Calf Roper.



Jim Bynum Four times World Champion Steer Wrestler.



Guy Weeks 1963 Saddle Bronc Champion and consistent All-Around contender.





John Hawkins 1963 Bareback Champion and three times runner-up.

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EVERY BOOT HAND LASTED



EVERY HEEL HAND MADE







Bill Kornell Rookie of the Year and Bull Riding Champion for 1963.



Tom Nesmith
All Around contender
and '62 Champion
Steer Wrestler.

Chuck Parkison

Favorite Announcer — the voice of many great rodeos.



Jo Ann McEnaney Beautiful and talented trick rider and rodeo performer.

ARE FOR STYLE AND WEAR!



ROUNDED ARCH HAND MADE



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Jama Gold Label Boots





STYLE 513-X-3 THE GUITAR

Champagne pearlized Kangaroo foot with genuine Lizard wing tip and counter. Matching Kangaroo top. New toe medallion and zig-zag stitch.

ALLIGATOR X-3 Chocolate pieced, genuine Alligator foot with Chocolate Kid top.

STYLE 500-X-0 THE ANNOUNCER Sorrel Kangaroo foot with silver grey, hand buckstitching and silver grey, genuine Lizard wing tip and counter. Matching Kangaroo top.

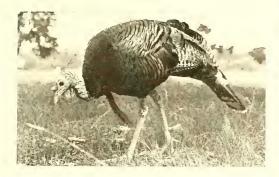


The world expects a Western Star to wear boots reflecting Western High-Fashion. Rex Allen, television, movie and recording star chooses Tony Lama Boots. Rex says "You can depend on Lama boots to top all other brands in design and durability."

This catalog shows the favorites of leading rodeo champions and Western stars. Keep the catalog for easy selection of your next Tony Lama boots. When you order you'll know Tony Lama stands for 51 years of hand-crafted quality.

The Challenge

By Russell Tinsley



of Turkey Hunting

This sport puts accent on patience and skill.

OU DON'T simply go afield and pop a wild turkey for Thanksgiving, or even for Easter dinner, for that matter. The wily turkey is much too smart for that. It is quite an achievement to kill a woods-wise wild turkey. In fact, during last year's spring season in Missouri, the ratio of successful turkey hunters was one in eight. For every man who got one, seven went home disappointed.

There's no magic short cut to success. When you bag a wild turkey, you earn it. Yet there's nothing quite like going afield after a super-sly wild turkey, for it's the ultimate in huntine.

The wild turkey population is now growing with each passing year. In the early 1950's, for instance, the turkey population in Alabama was less than 20,000 birds; today the number exceeds 100,000. But because they are getting more plentiful doesn't mean they are easier to hunt. Added hunting pressure in recent years has made the turkey wary and shy. It is a master of the "now-you-see-it, now-you-don't" disappearing act in the woods. The careless hunter will never make a successful turkey hunter, for the accent is on skill.

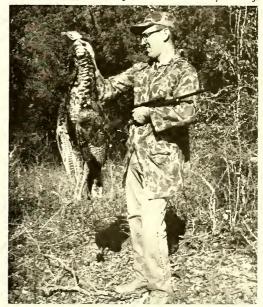
Turkeys are hunted in one of two ways—from a stand or with a call. Both have their merits. For the average hunter, the stand is the best bet, for no call is better than a poor call. But there's always that certain magic and suspense in luring in a gobbler with a call if you're good enough.

Most states have a fall turkey season, and some allow hunting in the spring, soon after the breeding season. The latest state to adopt a spring season was Colorado last year. (Continued on Page 44)



When you are turkey hunting by staying in a stand, you'll need to use camouflage, stay hidden, and be statue-still.

The author holds up a turkey he bagged in Texas. Although he used a rifle, the shotgun is best for turkey hunting.



October-November, 1964



This is the 22 that's made like a big-game cartridge

This is a Remington "Hi-Speed" 22. When you want a long-range 22 caliber varmint buster, this is the one to go with. We put it together as carefully as we do our big-game ammo. First, we start off with a strong, hard-brass case, loaded with special powder. We put in famous "Kleanbore" priming, the original non-corrosive mixture that helps protect barrel accuracy and life. Finally, we add exclusive "Golden" bullets, made to micrometer tolerances for fine accuracy. Result--Remington "Hi-Speed", the 22 with more speed and wallop at 50 yards than standard 22's have at the muzzle!

• Get Remington "Hi-Speed" 22's in short, long and long rifle cartridges, solid or hollow point, Other top Remington 22's: Standard Velocity for shorter range shooting; Rifle and Pistol Match for very finest accuracy in target shooting. Get 'em at your nearest Remington dealer.



Remington,

"Kleanbore" is Reg. U.S. Pat. Off., "Hi-Speed" is trademark of Remington Arms Company, Inc., Bridgeport 2, Conn. In Canada; Remington Arms of Canada Limited, 36 Queen Elizabeth Blyd., Toronto, Ont.

CHAPTER ADVISORS:

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IMPORTANT BENEFITS INCLUDE:

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- Government Assistance-Rifles, Ammunition, Targets.
- Range Construction Plans.
- Free "Club Champ" medal—annually.
 "The Club Leader's Guide", outlining NRA's year round Junior shooting program, awards, etc.
- A subscription to THE AMERICAN RIFLEMAN — all about guns — and "shooting bulletins" each month.

Plus many other benefits-All for a Charter Fee of just \$5.00

Write today for FREE information packet,

Gentlemen: Please send me your free YO-1 packet, containing information on how to organize a junior rifle club in my FFA Chapter. Name

Address City, State

1600 FF Rhode Island Ave., N.W., Washington, D.C. 20036

wouldn't have it any other way. PARCEL POST তা তা 0 0

"Yes, it may be opened for inspectionbut I wouldn't advise it."

In the fall the turkeys will be in flocks, usually the hens together in one group, the gobblers in another. Look for telltale signs where the feeding birds have been scratching along ridges, or pinpoint their roost. Cover yourself with camouflage-colored clothing, find a well-concealed spot near the feeding grounds or roost, and prepare for a long wait. It might be days before you see a turkey. And seeing one certainly doesn't mean that turkey is in the bag. The bird has the knack of eluding even the bestplanned ambush.

The best turkey-hunting weapon is a 12-gauge shotgun, full choke, loaded with No. 4 shotshells. Aim for the head and forward part of the body, the turkey's most vulnerable spot.

In spring the turkeys will be widely scattered and will be roaming along or in pairs. The hens will be on their nests. while the gobblers will be strutting around, their tail feathers fanned out provocatively, hollering their defiance at the world. Catfoot through the woods until you hear a tom gobbling. Approach as closely as possible without spooking the bird, get hidden effectively, and go to work on the call, avoiding any movement that might betray your whereabouts.

The favorite call is the one that imitates the soft clucking of a hen; but at times it may take the raucous gobble of a challenging tom to bring the standoffish gobbler running toward you, There are commercial calls, available at any sporting goods store, that simulate either call. Just remember to practice at home until you have the call down pat; then use it sparingly in the woods. The more you call, the greater your chances are of hitting a sour note and scaring the bird.

If this sounds complicated and difficult, it is meant to be. There is nothing easy about bagging a wild turkey, certainly not the older and wiser toms. But that's what makes turkey hunting the ultimate sport it is. Any veteran turkey hunter will tell you that he



No matter where you march in this parade, you're a leader. Army training gives you the habit of leadership, gives you the confidence people respect.

If you're good enough, you get full recognition from the Army. And think of how proud she'll be of your sharpshooter's medal.



Something to write home about...your experiences in the many fascinating cities and countries where American soldiers are stationed.



Share great moments with other great guys

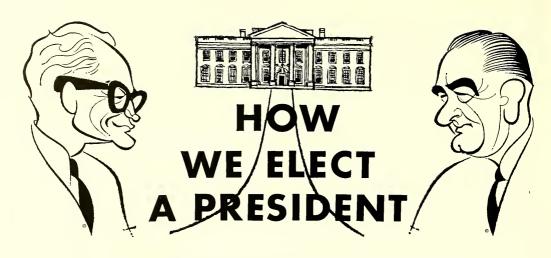
No wonder some of the greatest songs of all time have been marching songs—there's nothing as stirring as the feeling you're part of a great group moving as a perfect unit.

Unless it's the excitement of your first medal...or seeing a foreign country...or knowing you're serving your Country in one of its finest organizations.

And there are quieter satisfactions, too. Learning a valuable occupational specialty—the Army has hundreds to choose from. Developing your body, increasing your self-confidence, becoming more mature. Living a life made up of great moments.

Talk to your local Army recruiter. Let him help you find out if the Army is right for you...and if you're right for the Army. The moments you spend with him may lead to that great moment when you discover that...if you're good enough to get in, a proud future can be yours in today's action

Army



A candidate does not become President merely by receiving the most votes. He still must face the electoral college.

AS WELL-INFORMED Future Farmers know, the excitement of the political conventions. hundreds of speeches and television appearances by the two major candidates, and countless campaign buttons and posters all contribute to the election of a U.S. President.

But did you know that no matter who wins the Presidential election on November 3, the political cycle of finding the next tenant of the White House will begin almost the morning after? Do you understand the complex workings of the electoral college and how it figures in the "official" election of a President?

This year an estimated 100 million Americans are eligible to vote, and about 70 million will do so according to Compton's Pictured Encyclopedia. They will be participating in an activity of government which is neither pure democracy nor pure Constitutional law, but a combination of both.

They were witnesses to party nominating conventions that combined extravaganza, tedium, and—occasionally—true suspense. They will cast votes that will not be "official" until an institution called the electoral college tallies them a month later.

Barry M. Goldwater and Lyndon B. Johnson are campaigning today for popular votes that must be translated into the minimum of 270 electoral votes required for victory.

These men, through the voters, will be competing within the framework of an electoral college devised by the framers of the Constitution to avoid what they feared would be "the tumult and disorder" of a direct election by a thinly scattered population not always able to adequately inform themselves on the qualifications of candidates.

They will be participating in an election ritual that some historians believe is outdated and a violation of democratic principles, but which the major parties defend because it makes the individual states (and their party machineries) a weightier factor in the outcome of the election.

They will become part of the sometimes erratic history of the electoral college, which has twice resulted in the candidate with fewer popular votes winning. In 1876 Rutherford Hayes beat Samuel Tilden by one electoral vote although trailing him, 4.033,768 to 4,285,992, in the popular vote. Again, in 1888 Benjamin Harrison defeated Grover Cleveland in the electoral college (233 to 168), although Cleveland rolled up more than 100,000 additional popular votes.

The electoral college is a group of electors chosen in each state for the sole purpose of electing the President and Vice President. Each party nominates its own slate of Presidential electors for each state. These electors are pledged to vote for the candidate of their party if they win the general election in their state.

The Presidential electors are within the Constitutional rights in voting for whomever they please, but rarely do they break the pledge to party and voters.

The election takes place every four years on the Tuesday following the first Monday in November. While the results are generally known by midnight

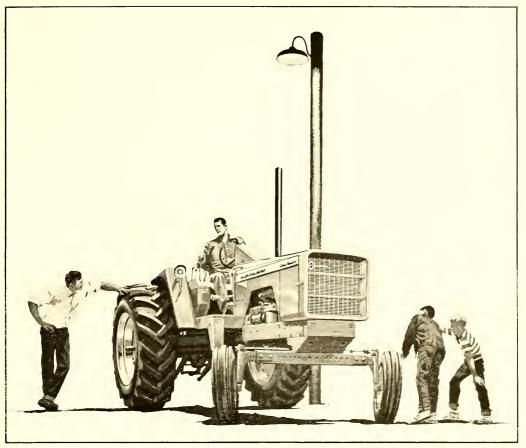
of Election Day, the technical voting by the electoral college does not occur until December. Then, on a date fixed by federal law, the electors meet in their respective state capitals and formally cast their ballots. The candidates are formally elected when Congress counts the electoral votes from each state.

As reviewed in Compton's Pictured Encyclopedia, it has sometimes resulted that individual electors in the electoral college have not functioned as the voters intended.

In 1820 an elector voted against James Monroe, in 1956 an Alabama elector voted against Adlai Stevenson, and in 1960 an Oklahoma elector voted for Harry F. Byrd rather than Richard Nixon. In each instance, the elector broke his pledge to cast an electoral vote for a specified candidate, although his act of rebellion did not change the outcome.

If no Presidential candidate receives a majority of the electoral college, the 12th Amendment provides that the election shall be decided by Congress. The House of Representatives chooses the President by ballot from the three candidates with the highest electoral totals. Each state has one vote. A majority of votes is needed to win. The Senate selects the Vice President from the two candidates having the most electoral votes.

The House has twice elected a President: Thomas Jefferson in 1800 and John Quincy Adams in 1824. The Senate elected one Vice President, Richard M. Johnson, in 1837. What comes about this Election Day is part of the fascination that is politics.



"New tractors like this One-Ninety make farming more exciting every day!"

The Tractor People left no doubt about how strongly they believe in the future of farming when they decided to develop the exciting Allis-Chalmers One-Ninety. That could be why it looks and handles, even *sounds* like no other five-plow tractor.

The Tractor People include engineers, research scientists, skilled assembly people in the factories, distribution people in the branches, dealer people and service people—a big part of them born and raised on

farms. Many of them members not so long ago of farm youth organizations, just as you are. All of them convinced that what makes farming great is the *people* in it.

With this background it isn't so surprising that they started the One-Ninety differently than anyone else might have. Instead of drawing four circles for the wheels and building up—they started with the contoured seat and built down. They built the One-Ninety around the driver who would

command it, to be part of him!

They put the Console Control exactly where his right hand would naturally be. They sloped the hood long and low to give him visibility. They put a big 48-gallon Day-Long Fuel Tank at his back so he'd be able to keep five bottoms going without stopping to refuel. And so much more.

Here's a glance into the exciting tomorrow of farming—and it's available right today! You should see it the great new One-Ninety from . . .



SWALD Vorthmann opened a small white packet given to him by a Sunner, lowa, FFA member last fall. To Farmer Vorthmann's surprise, out tumbled the weirdest array of materials he had ever seen. He checked the package again. "Safety Six-Pack," it said. Above this was written "FFA Safe Corn Harvest Program."

Vorthmann was getting his initiation into Sumner FFA Chapter's annual farm safety program in this eastern lowa farming community. The vanguard of the safety program was specially prepared reminder packets sent to nearly 400 corn farmers like Oswald Vorthmann. Inside each "Safety Six-Pack" surprised farmers found a bandaid, a paper clip, a rubber band, one kernel of corn, a short piece of string, and a common safety pin.

An accompanying letter on FFA stationery read in part: "Band-aid—This may be placed on the dash of the tractor or combine to remind you that accidents really hurt. . . . Safety pin—Wear this pin on your shirt or jacket as a reminder to stay alert and keep your guard up against corn harvest accidents. Piece of string—This could be tied to your finger; however, may

be uncomfortable, so tie it to the steering wheel to remind you to 'string along with safety.' Rubber band—Please stretch your efforts in order to stop accidents. Hook this rubber band around the gear shift lever or on the throttle. Paper clip—'Don't let accidents clip you.' Wear this clip on the edge of a jacket pocket or your coveralls, as a reminder. Kernel of corn—Carry this in your pocket with your change. Every time you reach for change . . . be reminded that members of the FFA are counting on you to help prevent accidents in our community."

If safety on his farm was far removed from Farmer Vorthmann's mind before this reminder arrived, it now suddenly was thrust to his attention. He, like other Sumner area farmers, would soon find himself face to face with a Future Farmer complete with safety hazard tally sheet in hand. With the farmer's permission, the FFA member would check through the farm to point out safety hazards. Red-lettered tags, "Safety Hazard," would then be attached to each area.

Oswald Vorthmann blinked as he read down the tally sheet that arrived a short time later. "To the Vorthmann farm family: Listed below are 'hazards'

to safe farming and safe living that have been observed on your farm. It behooves us all to practice safety at all times. We will all live longer, happier, and more successful lives if we do. The members of the FFA will very much appreciate your taking the proper steps to eliminate these hazards. Help us to make our community a safer place in which to work and live."

Farmer Vorthmann saw a list of three safety hazards that FFA members had found on his farm. Beside each one was a space for him to fill in what corrections had been made.

Sumner's safety on the farm goes far beyond the phase Farmer Vorthmann saw. Under Advisor John Scott, an extensive rural traffic safety campaign gets much of the Sumner Future Farmers' labors. Last year 425 persons saw FFA members give a demonstration on tractor safety, while an additional I.600 cars were checked for hazards. Chapter members cut corn at 52 rural intersections where drivers' vision was obstructed, then made stop signs for the driveways of each member's family to remind them to stop before entering the main road.

During school each fall, members carefully demonstrate gun safety to the 200 junior and senior high school boys, including how to hunt safely in the woods. Out on the farms again, Sumner Future Farmers helped correct over 500 safety hazards on neighborhood farms. There were farm fuel tanks to relocate, safety shields to replace, lightning rod installations to check, and electrical wiring to inspect—not to mention, of course, the hundreds of "Stop—Read the Label" stickers that they attached to insecticides, herbicides, and packages of seeds.

If there were a "Safety Chapter," Sumner would surely capture the title. At least the national FFA Foundation agrees. They awarded them the national chapter safety award in April.

The safety-check planning committee receives the news that the Sumner FFA Chapter has won the FFA's national safety award. Most are community leaders.



48

ONLY THE RICH CAN AFFORD A CHEAP FEED

Unless you have money to burn, there's only one way to judge the value of a feed supplement:

Does it help produce meat, milk or eggs at *low* total feed cost?

If it doesn't, it's expensive—no matter how little you pay for it per ton.

If it does, it's a good buy—whatever its price per ton.

That's why we don't lose sleep when someone says: "Sure, MoorMan's is good feed, but it's too high-priced."

We'd much rather hear that than: "Sure—your feed is cheap enough, but it just doesn't do the job."

We're convinced that there isn't much of a long-run future in making feeds just to sell at a low price. But we feel sure there is a future in helping you get good feeding results—at economical total feed cost.

Every move MoorMan's makes—in research, in ingredient selection, in feed manufacturing—has one goal: Low-cost production for our customers. We figure that's good business for everyone concerned.

That's why MoorMan Research people test and test—and test again—to make sure that every Mintrate[®] or Premix-trate[®] supplies proteins, minerals and vitamins needed to balance grain and roughage efficiently.

Most important of all, we know we can't help you hold down production costs by selling you more of feeds you already have. We use no grain, no grain left-overs such as midds, bran, mill screenings, etc. These can reduce the price per ton of feed but increase your cost of production.

What you do get are proven combinations of working ingredients that help livestock and poultry pull nutritional power from homegrown feeds.

Where's the proof? It's in the low-cost performance of MoorMan's on the farms and ranches of thousands of satisfied users.

Let your MoorMan Man show you examples the next time he brings his on-the-spot service direct to you.



Moorman Mfg. Co., Quincy, Illinois

49

October-November, 1964





When Dennis Cox of the Crestview, Ohio, Chapter needed a drill press, he decided to build one. From an old combine, he constructed this model.





"You fellows can shave off my mustache if you can sign up 100 percent of the vo-ag enrollees in FFA," Advisor Clifford Luke, left, told members at Roosevelt High School, Minneapolis, Minnesota. And Advisor Luke lost by a hair, as members took cow clippers at a monthly meeting to do the shaving.

Four FFA chapters won in farm cooperative work when the American Institute of Cooperation met at Michigan State University. Plaques were accepted by Jim Doerstler, Hagerstown, Ohio; Dick Hartung, Belvidere, New Jersey; George Andel, Perry, Georgia; and Ron Kindsfather, Eaton, Colo.



Another honor for 1963-64 Regional Star Farmer Kenneth McMurray, left, came recently as he was named "Outstanding Young Farmer" of the state of Washington. He and Mrs. McMurray visited Richard McJilton of the Junior Chamber of Commerce, who helps sponsor the program.



It was "FFA Day" at the Hesston Manufacturing Company in Hesston, Kansas, recently. Over 75 FFA members and advisors gathered from 10 chapters for a tour and luncheon. Later President Lyle Yost, center, became an Honorary State Farmer before FFA officials, Eustace and Lacey.



The National FUTURE FARMER



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at so low a price!*

HERE ARE THE FACTS:

11.5% Deeper Lugs! Sure-Grip lugs average 11.5% deeper, 7% longer than those of its nearest low-priced competitor!

You get extra working rubber -- at no extra cost!

18% More Traction! Even under adverse conditions, Sure-Grip outpulls competitive tires by as much as 18%.

You get extra productive time, extra fuel savings-at no extra cost! 30% Longer Life! 530-hour tests on concrete prove Sure-Grip outlasts competitive tires by 30% - or more!

You can get months, or years, of extra service -- at no extra cost!

Extra-Strength Body! Sure-Grip contains only top-grade rubber and Goodyear's exclusive triple-tempered 3-T cord!

You get extra protection against punctures, bruises—at no extra cost! Get Sure-Grip by Goodyear - the economy-priced rear tractor tire that gives you far more at no extra cost. Sure-Grip prices start at only \$34,

plus tax and recappable tire. See your Goodyear Dealer or Goodyear Service Store today, Goodyear, Farm Tires, Akron, Ohio 44316.

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FFA MERCHANDISE



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ву Jack Montgomery

Letter Jo Reporters

A Minnesota Future Farmer poses a challenge to his fellow reporters.

MAYBE YOUR chapter isn't the most exciting or colorful, but you can still play an important role as an FFA reporter.

Your duty is to observe and inform. However, this duty takes far more than a monthly sitting at the typewriter after a brief conference with your chapter advisor or president. You should gather information and write stories and articles. Interview community personalities, check out statements, research facts, and then present the finished product to the reader.

Here is a check list for writing a story.

1. Is the report factual? There are three basic rules in reporting: accuracy, accuracy, and more accuracy.

2. What exactly is the story? A report about the qualities of a certain type of beef cattle and a feature about

your advisor's pet Hereford are very different.

3. How should the story be treated? Should the story be presented with background information or interpretation?

4. Are the quotes correct? You will probably wish to quote from an interview at some time. Since you probably won't have access to a tape recorder, be careful in getting direct quotes. If you paraphrase, do so correctly.

5. How much background? Many stories need no background, while others are meaningless without it.

6. Should humor be used? Sometimes humor or satire can be used effectively to illustrate a point.

7. Use the whole truth. When presenting the facts of a story, present all of them. Half-truths and other such distortions are inexcusable.

8. Opinion or fact? Reporters must be constantly separating opinions from fact

This may be your first contact with reporting. You can make it productive or routine. You can write good stories and give useful information, or you can merely be a figurehead chapter officer. You have been entrusted with an important position. It is now your responsibility to present information for public consumption. You should interview, research, circulate, observe, and write. You are a reporter and you have a job to do.



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"Okay, okay! We'll see about a new



GM scientist explains combustion in the Research Laboratories' quartz pistan gasaline engine to student Leo Song Leo

Getting a piston's-eye view of engine knock

GM research scientists think that the best place to study combustion processes and problems is from a ringside seat in a combustion chamber.

So they built this single-cylinder laboratory engine with a transparent quartz piston crown. Then, by positioning a mirror in the cut-out side of the piston skirt, they can look periscope-style up through the piston and into the chamber.

From this vantage point, GM researchers observe and film engine knock, ignition of fuel by carbon deposits, and other combustion problems. By varying conditions like spark timing, compression ratio, or spark location,

they can study combustion in almost any situation. From these studies come better ways of converting fuel to power, thus improving engine performance.

The quartz piston engine is an example of GM's constant effort in the areas of research and development. An effort that will pay off tomorrow in better engines, better products.

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Lee Song Lee. 14. nn exchnnge senior from Klang. Sclangor. Malaysia, and an honor student at Arondale High School. Aaharn Heights. Michigan, recently risited the GM Tech Center, in Warren, Michigan. He hopes to pursue a career in either mechanical or electrical engineering. Lee's hohy is gardening.

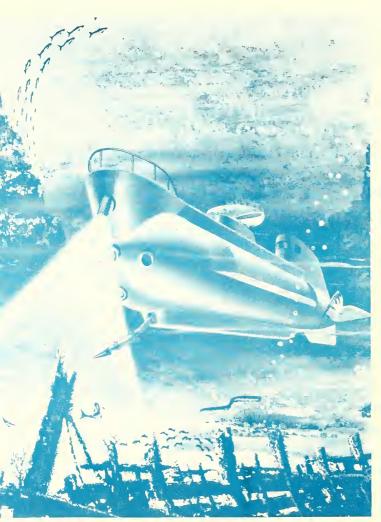
October-November, 1964 53

Will We Soon Be Farming The

OCEAN Bottom?

Noted scientists and the U. S. Navy are planning entire cities beneath the seven seas. You may see ocean creatures mining ore, men herding whales like cattle, and underwater farms where tractors cultivate seaweed.

> By Henry Ferguson



CENTURY ago, husky mountain men and lean plainsmen probed the unknown prairies to open the way for settlers who were shortly to begin flowing westward. Today a new breed of courageous and highly trained explorers is roaming the uncharted parts of another primitive region, preparing for what may be the strangest migration in the history of the world. Their theater of operation is the sea—our last frontier on this crowding globe.

Advance elements of scientists have already scouted the outer limits of this new realm and found it suitable for man's abode. There is food to be had for the taking; crops can be grown with no more difficulty than on land; the mineral resources are beyond belief.

The mysterious kingdom under the sea is immense in size, occupying four times the area of land on the globe. It has towering peaks higher than Mount Everest, huge ditches that dwarf the Grand Canyon, vast undulating plains, broad plateaus, and high sheer cliffs. There are jungles and live volcanoes, endless caverns and mysterious grottos. Yet, great as its expanse is, it is quite likely that two thirds of this vast area will be colonized by humans within the next 25 years. It is hoped that the first underwater city will be a reality within the next decade.

The French oceanographer, Jacques-Yves Cousteau, is one of those individuals pioneering this colonization. In 1963 he sent seven of his associates to the bottom of the Red Sea to spend a month at a depth of 50 feet. The team lived, worked, ate, and slept in a squat, aluminum house shaped like a starfish and anchored by chains and weights to the floor of the sea near Port Sudan.

The crew enjoyed air conditioning and had comfortable accommodations for cooking, sleeping, bathing, and working. There were even foam rubber settees for relaxing.

During working hours, the men left their quarters by escape hatch, swam to an adjoining garage where their torpedoshaped motor scooters were housed, and spent six hours a day exploring and photographing sea life.

Sometime this year the U, S. Navy will send a team of four men to spend three weeks in a 40-foot-long laboratory 192 feet helow the surface of the Atlantic Ocean near Bermuda. The lab

(Continued on Page 73)



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And the 525 price . . . that's the biggest news of all. See your dealer tomorrow. Oliver Corp., Chicago, Ill. 60606.

OLIVER LIVE



October-November, 1964 55

FFM MACTION

IOWA—Out Vinton way, Future Farmers are especially community-service minded. This summer they decided on a new activity to continue their record of a community service each year.

The answer was a "Space Age" safety shelter for the local West Grade School. The rocket-shaped shelter was given to the grade school students as an expression of thanks to the Vinton community for the support of FFA activities.

But the new safety shelter wasn't all the Vinton FFA has done for the local community. In years past, Future Farmers have built a highway sign for the town, helped the sheriff's office hold car safety checks, sponsored a Kiddie's Barnyard at the Benton County Fair, and conducted a 20-acre demonstration plot for area farmers. "Their activities set the example for other youth of our country," Advisor Hoyt said.

Vinton's Future Farmers with Advisor Lindley Hoyt, right, momentarily stop beside the shelter before presentation.



MINNESOTA—June Dairy Month brought a flurry of excitement to the town of Owatonna in southcentral Minnesota, as Future Farmers worked hand-in-hand with the local chamber of commerce on publicity.

First off, a three-day milking contest was held in different sections of town to create publicity for the Dairy Month program. Owatonna FFA members had the responsibility of locating breeds of dairy cattle for the contests, arranging transportation for the cows to town, providing equipment for milking, and having the cattle at the right place at the right time.

On one of the contest days, members grouped in front of the Owatonna *Photo News* offices. Other notables to milk the bossies were the Minnesota state FFA president, president of the Owatonna Chamber of Commerce, Owatonna's mayor, and Miss Owatonna.

Neighbors gather to watch community leaders try a hand milking FFA members' cows during Dairy Month activities.



Photo courtesy of Photo News

KANSAS—It was another "first" for the East Central District FFA'ers when Future Farmers under the direction of the Council Grove Chapter met for a livestock judging contest at the local Moxley ranch. The event marked the first FFA contest featuring a class of Quarter Horses to be held in the state of Kansas.

Future Farmers Craig Ridenour and Lawrence Gaston of the Council Grove Chapter wanted to promote the Quarter Horse breed among their fellow FFA members and, with the district FFA's permission, arranged for the class. Interestingly enough, the contest was held at the very spot where the first stock horse judging in Kansas was held many years ago.

Members Ken Muller and Glen Skeen furnished four geldings, while Dick Reed furnished the Quarter Horse stallion for the type demonstration. Following a talk on the breed's conformation, the Lawrence team walked off with top Quarter Horse judging honors. Gordon Morrison, advisor at Council Grove, now expects the horse judging contest to be a regular feature.

UTAH—Grant Richards and his prize Holstein, Rich-Herd Roburke Matchless, have done it again in dairy circles. This time his prize dairy cow is one of only 12 nominated for the All-American cow designation in the senior division. Matchless, a six-year-old, finished this past year with a record of 20,980 pounds of milk and a 4.2 percent butterfat test over a 326-day milking period.

This isn't a first for Grant and Matchless, for the prize cow was named the junior All-American in 1961, a year before Grant was himself named state Star dairy farmer. On the home farm of 85 irrigated acres, Grant has produced two All-American cows since 1960, when he was a Green Hand in the Pleasant Grove Chapter, Matchless has been an All-American four times now under Grant's careful management.

The Utah Future Farmer, a native of American Fork, was president of his FFA chapter and finished third in the National Public Speaking Contest at Kansas City in 1962. He is now in partnership with his father with 78 high-quality cows and heifers.



Grant Richards, top, has built much of his herd around "Rich-Herd Matchless," bottom, his four-time All-American cow.



The National FUTURE FARMER

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

CALIFORNIA—Agriculture is big in California, but officials at Cal Poly College at Pomona wanted to make it even bigger and better known this spring. Their answer was a day-long

Open House to bring agriculture into the limelight.

Cal Poly students and faculty presented demonstrations in areas such as animal husbandry, horticulture, and business management. Future Farmers from dozens of high schools from Fresno to Imperial Counties flocked to Pomona for the demonstrations and competition. In all, over 70 awards were presented to winners of the agricultural skills contests.

One of the proudest winning teams was the El Cajon Chapter, who walked away with top honors in citrus judging. Their biggest award was the winning smile from the Poly Vue Queen, Gail Brooker, when she presented the hardwon trophy to team members. From left, Don Walker, Dayel Berger, Alan Mayl, and Advisor James Dyer.



Don Broom's heroic efforts at the fire saved the life of a fellow FFA member.

MISSISSIPPI—Tragedy struck the Improve High School earlier this spring, and as in most cases of misfortune, a hero came forward to meet the situation. He was Future Farmer Don Broom of the Improve Chapter.

Don was sitting in the classroom of the Improve vocational building when an explosion rocked the shop next door. A five-gallon drum containing varnish had exploded. The Future Farmer saw Charles Bass, a fellow FFA member, reel away with his clothes afire.

Immediately, Don ran into the burning vo-ag shop and carried Charles outside to safety. Although Charles and fellow Future Farmer Archie Bond were seriously burned in the fire that destroyed the vocational building, the quick action by Don Broom probably saved Charles' life. Don was the hero of the hour at Improve.



ALABAMA—A good idea for a vo-ag shop activity at the Chilton County High School at Clanton was a small motor repair program for FFA members. Few people thought when the program started some time ago, however, that a new chain saw would be the reward.

Members brought in motors from area farms to be repaired, while Advisor J. Reed Thompson developed a unit of instruction for the vo-ag class. The small motor repair program was so successful and caused so much interest around Clanton that James Smith, owner of the local Smith Lawn and Garden Supply, got into the act.

Smith presented Jim Edwards, president of the Clanton Chapter, with a new chain saw in appreciation of the chapter's work with small motor repairs. The presentation grew out of the close working relationship that Clanton Future Farmers enjoy with local farm equipment dealers.

Jim Smith, a local Clanton equipment dealer, presents Chapter President Jim Edwards with a new FFA chain saw.



NEW MEXICO—Close cooperation between community and civic leaders and the Artesia FFA Chapter is one of the main reasons that Advisor John Short and his Future Farmers have a successful chapter.

"One of the best examples," Chapter Reporter Bob Bailey told us, "lies in the efforts of a civic-minded automobile dealership—Guy Chevrolet." Owner Clyde Guy decided back in 1948 that the best way he could help the Artesia FFA was to give them a new pickup truck. And for 16 years, Clyde Guy has done just that.

But providing a truck isn't all that Clyde Guy has done for the FFA. Not long ago he helped to finance a \$50,000 Eddy County Fair Association building for FFA use, as well as bought a number of animals at various FFA fairs and livestock shows. "He is setting a pace for others to follow," Bob Bailey explained.

Keys to another new FFA pickup go to Artesia Chapter President Bill Joy. Al White of Guy Chevrolet makes award.



Future Farmer Turns Conservationist



Northern Pennsylvania's long winters take a smaller toll of wildlife, thanks to this dedicated FFA member.

Wildlife conservation for Jim includes a wood duck nest, left, a wild turkey feeder, and a cornstalk pheasant shelter. His father, Michael, is at right.

A LL OUTDOORS is the domain of Future Farmer James Denkenberger of Troy, Pennsylvania.

This Regional Star State Farmer, a member of the Troy FFA Chapter, has already earned the respect and admiration of sportsmen and game officials for his dedicated work in conservation. And he's a modern Thoreau, intimately familiar with the hills and woods of his home region in the north-central section of the Keystone State.

A few of his conservation projects have found him raising mallard ducks and pheasants: taking care of injured animals and birds: maintaining deer, wild turkey, and squirrel feeders; building wood duck nests: and planting thousands of forest seedlings for wild-life feed and cover.

Not long ago you could have found Jim at the state conservation camp, where he was an instructor, as well as in the midst of the National Rille Association's firearms safety program teaching gun safety to others. By far, Jim Denkenberger at 18 is the youngest officer in his local rod and gun club's history.

This past fall. Jim began an experiment in pheasant propagation to find out how he could prolong the lives of ringnecks in his area. Although the state game commission releases birds each fall in the Troy area, the severe

58

winters of the north-central Pennsylvania hill country take a terrible toll of young birds.

Jim made up his mind to raise 100 ringnecks from day-old chicks, then keep 36 hens over the winter in his newly built 25- by 50-foot pheasant pen. The Future Farmer's plans were to release the strong, adequately fed hens at winter's end so that they would raise hardy offspring in the natural environment. The experiment paid off and Jim watched strong chicks hatch this spring in the fields nearby.

So well established is Jim's role as an authority on conservation and unofficial game protector that his neighbors make it a habit to bring him injured animals and wildfowl eggs disturbed in their farming operations. It's not uncommon for them to call him to report wildlife infractions and ask advice on conservation problems in their area. In fact, Jim makes a habit of helping neighboring farmers with predator control, trapping of weasels, and shooting crows.

"How do you recognize an owl flyway?" a neighbor asked him not long ago. He knew that Jim sets traps on pole platforms in the flyways of great horned owls to control them. "Just think like an owl," Jim told him.

In turn, neighbors furnish Jim with corn and grain for his feeding programs and give him access to their ponds and swamps for his conservation projects.

Jim Denkenberger credits his father, Michael, with first stimulating his interest in nature. He has a book of feathers of 125 different species of birds, which he completed in seventh grade by collecting loose feathers. No birds were killed. And, as Jim points out, his advisor, Sam Davey, had a lot to do with encouraging him to practice good conservation practices.

"He has re-created a balance of nature in his home area," Richard Donohue, the district game protector, explains. "It makes for more and healthier wildlife."

The Future Farmer plans to carry on his conservation practices on the home farm until he is 21 and eligible for duty as a deputy game protector. Then, at 23, he can take examinations for the Ross Leffler School of Conservation, Pennsylvania's school for game protectors.

Many friends will be pulling for Jim's completion of the game protectors' school, including perhaps some who wear fur and feathers. As the district game protector sums it up, "The future of our country from an outdoor standpoint rests on conservation-minded young people" . . . like Jim Denkenberger.

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It's as simple as that.

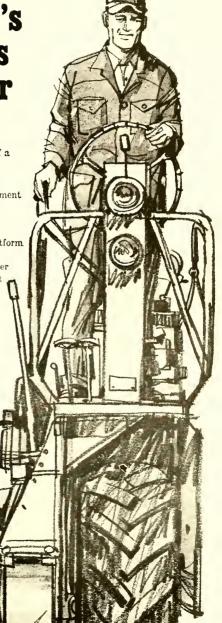
The Uni-System actually delivers greater savings for each dollar invested as you let it do more and more jobs for you.

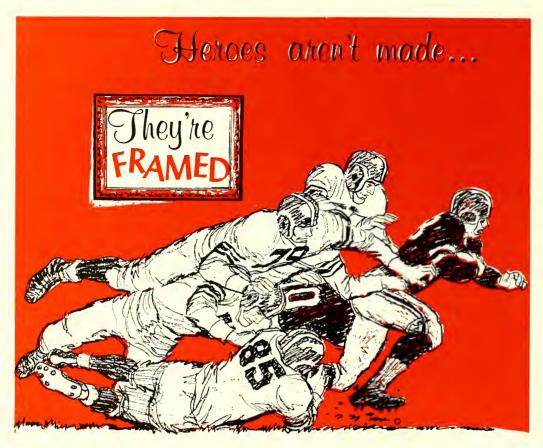
If you're already a Uni-System farmer, you'll be glad to know that we have a whole bag full of ideas for applications of the Uni-System — all designed to take full advantage of this versatile Power Unit.

Uni-System — another bold new idea from New Idea, Coldwater, Ohio

where bold new ideas pay off for profit-minded farmers







Fiction by Paul Johnston

I didn't plan on letting anyone else grab me by the giggle box, so I took off like a scalded hog.

WAS the first one to get to the dressing room on the night of the big game against Oak Fork, but it wasn't because I was anxious to get into my suit. Truth is, I was straining my brain to figure some way to get out of wearing that suit. Just the thought of playing football made me shiver like a wet hound in a snowstorm.

I sat down and fished Hoppy, my pet bullfrog, out of my overcoat pocket. "It's all your fault," I growled as I set him on the bench beside me. But he just sat there, puffing his big mushy chin in and out as he grinned up at me.

I knew it wasn't really Hoppy's fault that the team had selected him to be their new mascot. After all, what better mascot could the Hooperville Hoppers have than a giant bullfrog? And, since I'm Hoppy's owner, I guess it's only natural that they chose me to be Guardian of the Mascot. But it wasn't until

after I had accepted the job that I found out I'd have to be a substitute player, too.

You see. Hooperville's a small school, and the coach, Hap Morris, has a hard time rounding up enough boys to make a team. Until they got me, "Freckles" McClure was the only substitute they had. To me this whole business about a mascot was looking more and more like a frame-up.

Pretty soon Coach Morris and some of the boys came into the dressing room. The coach pulled a big red ribbon out of his pocket and called to me, "Hey, Herc, here's something for Hoppy." They all crowded around as Coach Morris tied the ribbon in a big bow around Hoppy's neck.

Now, old Hoppy always was a showoff, but with that big red bow around his neck. I reckon he must have been about the proudest frog in the world. He started hopping around the room, and every once in a while he'd let out a loud croak that sounded like an elephant with a sore throat.

Seeing old Hoppy so happy kind of perked me up, too. But then I opened my locker, and the sight of that football gear gave me a fresh attack of the "scared-to's." I put on the most pitiful face I could manage and turned to the coach. "Coach," I moaned, "I won't have to play, will I?"

"Well, Herc," he said, "your main job is to watch after the mascot. But 'Freck-les' McClure came down with the mumps today, so you'd better suit up just in case."

This news caused the butterflies in my stomach to turn into a whole flock of wild geese. "Y-you mean I'm the only sub tonight?" I gasped.

(Continued on Page 62)

The National FUTURE FARMER

Chico ... of the Santa Fe



for the Santa Fe, either.

But our Chico is more... he is the spirit of the Santa Fe.

He is the mascot of the Santa Fe.

When children ride through Chico's country, on any of Santa Fe's Chiefs, through the mountains and canyons and among cowboys and Indians, Chico is their friend, passing on his love of his country to them. helping make them feel at home.

Chico is the vital, energetic spirit of the Santa Fe that keeps it "always on the move toward a better way." This year, for example, Santa Fe will invest \$100 million in capital improvements . . . new freight cars, passenger cars and the like that will mean better service for shippers and travelers.

The spirit of Chico rides with the Santa Fe freight trains, rolling through the night or day, saying, however they say it in Indian talk, "Take care! This is valuable cargo. Get it safely there! On schedule too!"

The face of Chico smiles out from the counter of every Santa Fe ticket office, at the businessman, the honeymoon couple, the vacationer, or the student. With the promise, and again we translate, "Come along. Go my way. People expect the best of the Santa Fe!



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Heroes Aren't Made . . .

(Continued from Page 60)

"I'm afraid so," Coach Morris answered.

"Please don't play me if you don't have to." I said. "Those Oak Fork boys look like a bunch of giants, and I know they'd just love to play a game of hopscotch on my backbone."

"All right," the coach said as he opened my locker, "I won't play you if I don't have to. Now, I'll help you get into your suit."

Coach Morris put the shoulder pads down over my head, and I felt like an underfed snapping turtle. It was the smallest suit they had but still way too big for me.

The coach started taking the slack up in my shoulder pads. "Better pull those straps tight." I said, "or the whole contraption's liable to slip down around my knees."

"Right," Coach Morris answered. Just as he gave a healthy tug on one of the straps, his hand slipped and he poked me in the ribs with his finger.

Without even thinking, I let out a yelp and cracked the coach under the chin with my elbow. He stumbled backward, shaking his head and blinking. "Say, you're mighty ticklish."

I forced a weak grin. "Yeah. Mom says it's a wonder I'm not web-footed, I'm so goosev."

Being careful not to touch my ribs again, the coach helped me finish suiting up, and we went out to the field. I sat down on the side lines and tied a long string to one of Hoppy's legs so he could hop around while I watched the game.

The Oak Fork players were a lot bigger than our boys but not as fast. And when the going got rough, we could usually depend upon Bobby Burns, our quarterback, to come through with some flashy passing. Any way you looked at it, though, it was going to be grunt 'n' puff all the way.

The score was tied 14-14 at the half, and Coach Morris took the team into the dressing room for a pep talk. Since it didn't look as if I'd have to play any, the coach let me stay out on the field to watch the half-time show.

I was sitting there, grinning like a cat in a creamery as I watched those cute majorettes frisk up and down the field, when I noticed Hoppy's string had gone slack. I looked up, and there was Jug Wales towering over me.

Jug Wales is a tackle on the Oak Fork team and built like a muscle-bound gorilla. I had heard he was as mean as a bull in a briar patch, and from the way he was scowling at me, I didn't figure he had come over to play paper dolls.

Then I discovered what was wrong with Hoppy's string. Jug was standing on it. His dark face jerked into a sly grin as he leaned over and watched Hoppy tug at the string. "Now what we got here?"

I wet my lips and gulped. "J-just a little old frog."

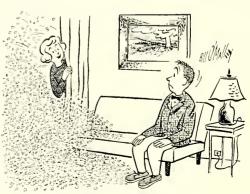
Jug raised his huge foot and held it over Hoppy. "Think I'll just have me some frog's legs for supper."

I blinked a couple times and started working my jaw up and down, but the only sound I could make was a tiny squeak.

Just then Coach Morris and the team came back out of the dressing room, so Jug eased his foot to the ground. "I ain't got time to fool with you now, punk," he growled, "but after the game I'm gonna get me a hop-toad!"

As Jug stomped off across the field, I pulled Hoppy to me and untied his string. I figured it would be safer for both of us if we stuck close to the coach.

(Continued on Page 64)



"I hope you like popcorn?"

Handsome truck on a down-to-earth job. Ready for another long, hard day. Over the fields and through the gears. Lots of bumps, dirt, dust, heavy loads. Lots of toughness, too. It's a Dodge. Dodge trucks are Job-Rated to give you the best truck for your kind of work. Try one.

> Dodge toughness doesn't cost any more. Why settle for less?



Dodge Builds Tough Trucks DODGE DIVISION



October-November, 1964 63

Heroes Aren't Made ...

(Continued from Page 62)

Oak Fork stopped our boys cold during the third quarter, and we had to punt three times. Meanwhile, they scored another touchdown, and we were trailing 21-14 going into the final quarter.

Oak Fork figured they could run the clock out, so they started running power plays straight up the middle. Yard by yard they ground their way down the field, and it was looking as if they might score again. But when they got down to our 17-yard line, our boys tightened up and held them.

The ball went over to Hooperville on downs, but the scoreboard showed just a little over two minutes to go. If we didn't score this time, we probably wouldn't get another chance, so Bobby Burns went to the air.

Hank Green, a lanky, loose-jointed senior, is our best pass receiver, and Bobby started hitting him on short sideline passes. Bobby didn't dare try any long passes to Hank, though, 'cause Hank was so near-sighted. Even with his contact lenses, Hank had trouble with the long ones.

Things were going good, but our luck changed. Hank had just made a leaping one-handed catch of one of Bobby's passes at the Oak Fork 40, and he was still in the air when Jug Wales hit him. It was a spine-snapping tackle, but it didn't jar Hank loose from the ball. It did jar him loose from one of his contact lenses, though.

Time was called, and we all started looking for Hank's lens, but it was like hunting a chigger on a mule's back.

After about 15 minutes, we still hadn't found the lens, so the officials decided we'd have to go on with the game. Coach Morris called the team around. "Well, Hank," he said, "you won't be able to finish the game, will you?"



"Now meet your partners and head for the doors, Or you'll never get home for the morning chores!"

Hank wanted to play, but he wouldn't lie to the coach. "Coach," he said, "without that lens, I couldn't tell a football from a turkey buzzard."

Coach Morris turned to me. I knew what he was thinking, and I didn't like it. "P-please, coach," I stammered, "couldn't you just play with 10 men?"

Coach Morris shook his head sadly. "With only 10 men, we wouldn't have a chance. Now, Herc, all you'll have to do is help with the blocking. Bobby will either carry the ball or pass, and you just run ahead of him and fall in front of the first Oak Fork man you come to."

I scratched the back of my head. "Well now, falling down's one thing I'm pretty good at. But . . ."

They didn't even give me time to finish. Coach Morris took Hoppy from me, and before I knew what was coming off, both teams had lined up and were starting to play.

Bobby took the ball and dropped back to pass, and I just stood there, trembling like a widow with a mouse in her mitten. Just as Bobby threw the ball, an Oak Fork man hit his arm, and the Hooper-ville fans gave a loud groan as they watched the ball go flip-flopping into the air. Then I gave a loud groan as I watched it come sailing straight at me. It would've hit me smack in the face if I hadn't thrown my hands up.

The ball fell "kerplunk" right in my hands and stuck there. My first thought was to drop the ball and run for the side lines, but those howling fans sounded almost as mean as the Oak Fork tacklers. Before I could decide what to do, Jug Wales plowed into me at full gallop, so I just clamped my eyes shut and hoped they'd send lots of pretty flowers to my funeral.

Jug made one mistake, though. He tackled me around the waist, and the minute he dug his big fingers into my ribs, my elbows turned into buzz saws. One of those runaway elbows caught Jug flush on the nose, and his head bobbed like a Yo-yo as he melted to the ground.

I didn't plan on letting anyone else grab me by the giggle box, so I took off like a scalded hog. Some of the tacklers I went over, some I went under, and a few I think I went straight through; but none of them stopped me. I was all alone as I loped into the end zone for the touchdown.

The Hooperville fans went wild, and I was feeling pretty big as I trotted back out to my teanmates. I couldn't understand Bobby's worried look as he grabbed me by the arm. "Here, if we kick the extra point, we'll be tied 21-21."

"Yeah," I grinned, "you won't need my help for that, so I'll just go over and watch from the bench."

"Oh, no," Bobby said. "We've got to



"It's all right, officer. They're props for our driving class at school."

beat Oak Fork to win the championship. We're going for two points."

"Y-you mean you want me to run the ball over?"

"That's right," Bobby said. Then he pointed his finger at me, pistol-fashion. "I'll be right behind you. And if you start to slow down, pow! You get it right in the ribs."

Bobby took the snap and slapped the ball in my middle. I headed to my left, looking for an opening, but there wasn't any. After my touchdown, the whole Oak Fork team knew I'd probably carry the ball, and they swarmed after me like hounds on a wounded possum.

As soon as the first Oak Fork man hit me, Bobby stabbed me with his finger. He hit me right in my goosiest spot, and I went wilder than a tomcat in a barnful of bulldogs. Oak Fork players went flying in every direction, and I saw there was only one more in my road. It was Jug Wales.

Jug was standing right on the goal line, feet spread wide and eyes ablaze. I thought about trying to cut around him, but then I remembered what he had threatened to do to Hoppy. I gritted my teeth, lowered my head, and aimed straight for Jug's belly button.

With my head down, I didn't see Jug jump out of my path at the last minute, and I slammed square into the goal post. I wasn't hurt, but it sounded like there were about a thousand bumblebees loose inside my head.

I was still staggering around in the end zone when the final gun went off. My teammates ran up and hefted me to their shoulders, but all I could think of was getting to Hoppy. I was trying to get down to the ground when I spotted Coach Morris. A flock of fans had put him on their shoulders, too, and there was old Hoppy, sticking his big fat face out of the coach's pocket. The red ribbon was still in place around Hoppy's neck, and he was croaking at the top of his happy voice.

Jug Wales wasn't anywhere to be seen.

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This veteran trapper hauls in a large beaver caught in a drowning-type trap.



Auburn University illustrations



Equipment includes wire sack, hatchet, knife, pelt stretchers, rubber boots.



Trap rigged for beaver drowning Locking device at left keeps him in water.



Trapping For Extra Cash

端 谎

Some inexpensive equipment, these trapping tips, and lots of patience can net you \$2.00 per hour.

By Earl Kennamer

HROUGH the centuries, trapping has been livelihood and adventure for young and old. Today, if you live near numerous small streams, you may make extra cash from fall and winter trapping, since water provides excellent hangouts for mink, muskrats, and raccoons. Big streams, lakes, swamps, and ponds are excellent not only for these furbearers but also for beavers and otters.

A trapper in good territory may average \$1.00 to \$2.00 per hour after mink. muskrat, 'coon, and beaver. Otter brings a good price, often \$20.00 or more, but otters are never numerous. Other furbearers—fox, opossum, and skunk—just aren't in demand, and the pay per pelt is low.

In some states trapping booklets are available through your vo-ag teacher, the county agent, and the state conservation department. Check your local library of trapping literature, and by all means study habits of furbearers. Learn how to identify tracks, droppings, and other signs of furbearers. In practically every rural area, there are veteran trappers who will often give you worth-while tips, if they know you are interested.

If you are in school, you probably won't be able to work more than 12 traps. I've taken small furbearers with a variety of styles of traps, but if I had to choose one trap for varmints smaller than beaver and otter, I'd pick the No. 2 Victor coil-spring trap.

Yau't neat So. 3 and No. 4 traps for bower and otter. I've caught most beavers with No. 14 Oneida. The No. 330 Conibear trap is a humane trap that kills instantly.

Standard equipment includes hip boots, hatchet, knife, wire plikes baling wire for small traps, and No. 12 or stronger wire for beaver and otter sets. You can use lure or bait, but I prefer to take varmints in "blind" sets. For drying pelts you'll need stretching boards, such as adjustable wooden stretchers or round hoops for beaver, Use a burlap sack for carrying traps and other equipment on your trapline.

Here's a simple mink set. Find a sand or silt bar where mink tracks enter or leave water. Dig sand so the set trap will be level with sand bar. Stand in water as you work. Attach a piece of wire to trap chain, and drive a stake in water at least one foot deep. Lay a few thin, water-soaked leaves over trap to hide it. Sprinkle sand or mud over leaves. Fashion sticks, rocks, or other natural material on each side of trap to encourage mink to go through trap, rather than around it. Splash water over everything to wash away human scent, Don't expect to capture a sawbuck mink in one night! A week may pass before it returns.

Drown heavers instantly; otherwise they will wring-off a foot and escape, if you use the ordinary flat-set steel trap. In your vo-ag shop make L-shaped pieces of steel with one portion three inches, the short portion 1½ inches. Drill holes in each end, Attach long end with wire to trap chain about eight to 10 links from trap. Fill a burlap sack half full of rocks. Wrap one end of eight to 10 feet of bare No. 12 or stronger wire to sack anchor. Slip other end of wire through hole in short end of "L" device, so long end of "L" slides toward anchor.

Set trap at base of the beaver slide (pathway of beavers leaving and entering water). Wind free end of wire around strong stake on one side of slide. Throw sack anchor into water at least 3½ feet deep and set trap. The trapped beaver strikes out for deep water, pulling trap along wire. The "L" gadget

lets him go only one way—to the anchor, where he drowns within minutes. If you buy the Conibear, set it so walking or swimming beavers must go through the square jaws. Otters are often caught in heaver sets. If you live in a region of cold winters, you'll have to learn how to make ice sets.

Check trapline daily, since pelts spoil in warm weather. To be humane, kill or release trapped animals if the trapped foot is not mangled.

Skinning is as important as capturing varmints. All furbearers except beaver are "case skinned" (the pelt is removed like peeling off a wet sock). Raccoons can be "open skinned" and dried square, but case skinning raccoons doesn't apparently reduce value and is easier. To case skin, split skin from anus along back of each leg to foot, and work pelt toward head, using knife sparingly. You can pull mink and muskrat pelts off easily. Leave feet on pelt of mink, but cut feet off at second toenail joints. Animal feet with no fur—'coon, 'rat, beaver, and otter—are cut off.

Leave tail fur on pelts of mink, 'coon, and otter. Pull out tail hone with open jaws of slip-nose pliers, and split tail on underside. Cut close to skull when you pull pelt over ears and eyes. Leave nose on pelts. Scrape away fat and lean meat. Slip pelt, fur side in, over drying hoard and tack down bottom edges to hold it snugly. Don't "stretch" pelts—they'll shrink and may become too thin for top price.

When skinning beaver, cut belly fur in a straight line from scaly tail base to chin. Then with sharp knife separate pelt from carcass. There will be a thick gristle layer remaining on hide. Shave this away, using a sharp knife blade at an angle. Don't cut deeply enough to

an angle. Don't cut deeply enough to

"They're carnations; I'm allergic to orchids."

expose black hair roots! With sacking needle and strong fishline, sew pelt edges to round hoop.

Hang pelts inside building so air can circulate around them. Pelts must be completely dry before shipping. "Green" furs spoil. Sell pelts to a licensed buyer in your state or to a buyer advertising in trapping magazines. Wrap pelts in burlap. Mail small quantities of pelts by parcel post, heavy bales by insured express.

Even if you don't get rich by trapping, you'll have fun. You'll certainly become a better outdoorsman because the serious trapper learns more about nature than the average hunter or fisherman.



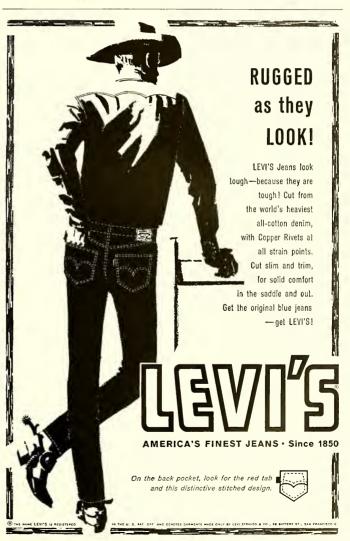
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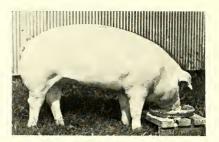
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History of the Breed

The Chester White

TWO VETERAN swine breeders and L a bit of fate brought the name "Chester White" into the American farmer's daily vocabulary. The place was eastern Pennsylvania; the year, 1848

Swinemen Hickman from Chester County and Harvey of neighboring Delaware County had developed a large white hog with the mating of Lincolnshire, Cheshire, and Large White hogs from a breeding program that had begun over 30 years before, in 1815. The two men agreed that the one winning the most blue ribbons at the state fair that year would get to name the breed.

Hickman won, and the breed became known as "Chester County Whites." But as the restless settlers spread west from Pennsylvania, the term "County" was dropped and "Chester Whites" took their place as a recognized hog breed.

The breed's popularity spread throughout the present-day Cornbelt, and as far back as the late nineteenth century. Chester Whites were blossoming into one of the nation's leading swine breeds. The litter size, mothering ability, rate of gain, efficiency, and uniformity of the white hogs had created a demand that startled even Hickman and Harvey.

By 1884, the first Chester White Record Association was started to register and record the growing breed. Small associations formed across the country as the hogs moved westward, finally consolidating about 1900 under the direction of F. F. Moore of Rochester, Indiana. He and his three sons soon afterwards started publishing a breed magazine, the Chester White World, known today as the Chester White

During the war years of the 1940's, the Chester White breed moved into the limelight by winning the majority of the barrow shows in the U.S. Then in postwar America, the breed's popularity tapered off until 1958, when an extensive program of carcass testing and selection for higher percentage of lean meat brought the breed back into demand by hog farmers.

Today the vastly improved lean meat production, plus the sound bones and feet needed in modern confinement feeding programs, merits the Chester White a prominent place among the leaders of the industry. A favorite crossbreeding, Chester Whites have increased in registrations each year for the past four

The headquarters of the breed with "Quality Lean and More Meat in the End" are located in Rochester, Indiana, under the general direction of Executive Secretary Marvin Garner.



"Now there's a prospect for the Olympics if ever I saw one!"

The National FUTURE FARMER

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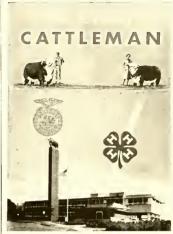
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They keep an eye to the future, and their work is geared to the seasons. The amount of work they do is enormous considering their size. Yet they tackle it with so much enthusiasm you would think it was a picnic. Weighings have proven that it takes 20,000 "beeloads" to bring in one pound of nectar.

Nectar is the raw material of honey, and the bees condense it into honey by evaporating the excess moisture. About four pounds of nectar go into making one pound of honey. So one pound of honey represents 80,000 "hee-loads" of nectar. The bees may have traveled a combined distance equal to three times around the equator to bring home the nectar for just one pound of honey! Still many hives in a single season produce 100 pounds of honey over and above what the bees themselves eat.

At night the bees flip their wings to generate a flow of warm air which evaporates excess moisture from the nectar. If you put your ear to a bechive on a warm night, you can hear the hum of tens of thousands of bees keeping the air conditioning going. They use their air conditioning also to keep the center of their city, where the nursery is, always at the same temperature. Bees were air-conditioning experts before humans had even heard of the word.

But this is only part of the activities in the bee community. Before bees can start housekeeping, combs have to be built. This is a job for the younger bees. They form living scaffolds: One bee hangs from the ceiling by its front legs, a second bee grabs its hind legs, and a third hangs by the hind legs of No. 2. Then they scrape the tiny discs of wax from their bodies, where it is produced by glands. Imagine builders' producing their own building material! They knead the wax with their jaws and construct the honeycombs which are composed of tens of thousands of six-cornered cells.

Being smart engineers, they build the combs in such a way that the cell walls on one side of the comb support the floors of the cells on the other side. Scientists have figured out that it is not possible to design combs of equal strength using less wax than the bees do. It took a lot of mathematics just to check on this!

The young bees, called nurse bees, take care of the larvae, the tiny "worms," from the moment they hatch. The nurse bees have a built-in baby food factory in their necks. These glands produce royal jelly, a milky fluid on which the larvae feed. When the larvae are old enough to spin themselves into coccoons, the nurse bees seal their cells with a wax lid.

The young bees also store nectar and pollen, which the older bees bring in. Often they move quantities of honey to make room for expansion of the nursery or broodnest. Then there are combs to be repaired—the highways and streets of the city have to be cleaned up. A dozen or more nurse bees take

care of the queen. The queen bee does not rule, but she specializes in laying lots of eggs.

In spring, a good queen will lay up to 2,000 eggs a day for a month or more. Imagine a hen laying her own weight in eggs day after day! Small wonder the queen is too busy to take care of herself. So her attendants bring her food—royal jelly—and keep her clean.

Other bees stand guard at the entrance of the bee city to keep robbers out. When there are no blossoms to yield nectar, some bees try to rob their neighbors. Then the guards fight them off. and often you can see lively scraps at the entrance.

When bees are two weeks old, they go into the fields to gather nectar and pollen and haul water. While visiting the blossoms, they pollinate half of our commercial crops. Fifty crops would not pay if not pollinized by bees. For instance, cantaloupe growers in Texas found that they pick seven crates of fruit per acre in the absence of bees to pollinate the blossoms. But with enough bees on the job, they harvested 270 crates of cantaloupes per acre.

Growing alfalfa seed does not pay without plenty of bees around. The pollinating job performed by the bees is much more important than the honey they produce. The reason that bees do such an outstanding pollinating job is that they have to work so many blossoms to produce even a small amount of honey. For instance, to gather enough nectar for one pound of honey, the bees visit and work 7,500,000 blossoms.

The better you get to know bees, the more amazing they become!



Inexpensive calf stall includes plywood partitions, slatted floor, a hay rack, feed bunk across front, and board to keep bedding from being scattered.



Simple steel dowel latch keeps machine shed doors tight at bottom. Dowel rod is held in place by two bent strap iron guides. Rod fits into pipe set in floor.



Portable two-sack holder allows one man to sack feed and seed rapidly. Frame is two feet square of 2 x 4's. Headless nails hold sacks. 1 x 6's act as braces.

Specials

RAINY Saturdays and after-school hours this fall make ideal opportunities to construct these simple, yet handy, "Shop Specials." You'll find them to be welcome additions to the home farm.

Photographer A. M. Wettach found these farm-tested ideas already in use on several Midwest farms and experiment stations on his periodic visits. All had proved worthwhile and practical.

The calf stalls were in use on the University of Illinois dairy farm, where farm managers found individual pens with a hay rack, feed bunk, rack for a bucket, and slatted floors gave them healthier, better-gaining calves.

Farmer Ralph Pennebaker's New London, Iowa, farm sported the latches

This chain fastened to the gas cap of a pickup keeps it from being lost. Screw holds chain to cab, top, while a small nail soldered through cap holds bottom.

illustrated on this page, He made similar rod latches for his machine shed and granary doors from scrap on his farm. No more loose doors for him.

The University of Wisconsin's noted farm center is the home of the gas cap chain and cable reel ideas. Researchers at the Arlington, Wisconsin, center found the reel especially handy for taking current from the barn to equipment such as elevators, crop dryers, and electric drills.

Max Kemp, a Conesville, Iowa, farmer, designed the portable sack holder when he had trouble finding help to fill sacks. The cattle salter is a product of Purdue University's dairy farm at Lafayette and is used both in the lot and on pasture.

Skids feature this portable cattle salter designed for pasture and feedlot. Oneinch boards cover 3-foot depth, 4-foot length. Trough is 16 inches from ground.



Discarded flat paint pan serves as tool tray for working under machinery. Ring magnet holds small washers, nuts; pegboard cover piece holds screwdrivers.

Seventy feet of heavy duty cable can be mounted on this wooden reel. Double receptable on end. Pipe fittings hold axle, make the stand and handle.







October-November, 1964





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Chart Rack for the Vo-Ag Room

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Herman Peace

NOW YOU can build a storage cabinet in the vo-ag shop to safely store charts and reference materials.

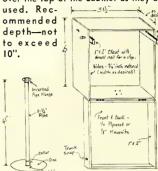
The vo-ag teachers of Texas have viewed and expressed approval of a standard-size chart and storage cabinet designed for these charts. The storage cabinet pictured here in Figure 1 was designed by the late Bob Craig of Texas A&M University and Merrell Barfield of Wharton, Texas.

This storage cabinet for standard 28- by 28-inch-size charts would eliminate the necessity of storing randomsize charts in a haphazard fashion.

The cabinet also doubles as a display stand. The storage cabinet can be quickly removed and another placed on the stand. This feature would enable the vo-ag teacher to group charts on similar subjects in different cabinets so that they could be quickly interchanged as needed.

Once a chart has been placed on the rack in the storage cabinet, it becomes a simple matter to display the charts one at a time and then fold them over the top of the cabinet. Note that the charts are bound at the top with two pieces of 34 - by 1/2 -inch white pine strips, which extend beyond the edge of the charts.

Note: This cabinet is designed for a maximum chart size of 28" x 28". Desired series of charts can be moved to forward end of cleats and charts thrown over the top of the cabinet as they are



Each series of charts is clamped with 1/2" x 1/8" x 291/2" strips

Maximum Chart Size 29" + 28 of wood or of metal with 1/8-inch stove bolts. The chart rack, when closed, re-

sembles a box mounted on a pipe stand.

Jarrold Davis California



Coleman Harris Indiana



Charles Skeans Oregon



Virgil Wilkins West Virginia

Awarded National FFA Fellowships

GAIN in 1964 four leaders in vo-ag A received national FFA Fellowships from Massey-Ferguson, Incorporated, Detroit, Michigan. Awarded for a year of study at the University of Maryland's College Park Campus, the fellowships help train outstanding vo-ag teachers for positions as state executive secretaries, as well as other leadership positions in vocational agriculture and FFA, Part-time work and observation in the National FFA Office in nearby Washington, D. C., are part of the training. Each of the four 1964 recipients

and FFA advisor. Coleman Harris, Galveston, Indiana, taught vo-ag for three years in Cass County schools; Virgil Wilkins was vo-ag instructor for three years at Hundred, West Virginia; Charles Skeans, a former rancher in Oregon, was vo-ag instructor at Madras, Oregon, for five years; and Jarrold Davis, Grass Valley, California, served as vo-ag instructor at Nevada Union High School for 10 years. The four men will attend and participate in the National FFA Convention, Kansas City.

has had experience as a vo-ag instructor

The National FUTURE FARMER

Farming the Ocean Bottom

(Continued from Page 54)

will have electric lights, bunks, a lavatory, fresh-water shower, cooking facilities, heaters, and a workbench. The men will venture as much as 1,000 feet from their quarters.

Scientists even have in mind for the future a gill-like mechanism which men may wear under their arms, enabling them to absorb oxygen directly into their bodies like a fish.

What is the motivation behind these experiments? It is the fact that the population explosion is causing our globe to become uncomfortably crowded. The United States, for instance, now contains 190 million people; between now and 1980 this figure is expected to increase by about four million a year. It may be possible to ease this situation by creating cities at the bottom of the seas where people can live.

Many citizens of this new world will be engaged in stock raising, farming, and the introduction of new types of marine life to our dinner tables. Eventually we may be eating such things as sea slugs-which the Chinese already consider a delicacy-and a huge marine worm which is able to accumulate edible protein faster than a fish.

Many vegetable foods will come from the sea. Many companies are already experimenting with seaweed and microscopic floating plants known as algae. The latter is highly nutritious and grows faster than land crops. A wheat farmer who is lucky to get a ton of salable grain from an acre would find it easy to raise from 25 to 50 tons of algae to an acre of sea.

The "oceanauts" will be working on activities such as climate-changing and fish-herding. They will be searching the sea for minerals and attempting to find out what happens to sound waves in the deep. The scope of their activities will he enlarged shortly through use of the Aluminaut, a 50-foot submarine now being built by Reynolds Metals Com-



"Great scott, Ed, it doesn't have to be exactly 23,322 kernels per acre!"

pany, which is designed to explore the ocean depths to 15,000 feet. It will be equipped with sonar, TV camera for detailed observation of the ocean floor, and robot hands to obtain specimens.

Columbus Iselin of the Woods Hole Oceanographic Institution, dean of U. S. oceanographers, thinks we may be able to get sea creatures to do our underwater mining for us. Huge areas of the ocean floor are littered with lumps of high-grade metal ore-some of them as much as 50 percent pure metal-iron, manganese, nickel, copper. In the deep they are big as basketballs. Many scientists feel these metal lumps are produced by microscopic sea creatures that secrete indigestible metals. If this is true, Iselin believes these tiny organisms can be bred on undersea farms and the metals harvested like a crop.

In 20 or 30 years ocean farming may play a big part in feeding the world. By the end of the century, according to one estimate, we'll each be eating four or five sea-food meals a week instead of the present average of less than one. Some scientists believe it also may be possible to breed whales as we now breed cattle.

Cousteau is presently constructing a working model of an undersea village. Three prefabricated buildings will be lowered to the bottom of the ocean and assembled to form quarters for the first major experiment in undersea living. Air will be pumped from the surface, and the buildings will be connected by closed-circuit TV and telephones. One of the buildings will be a garage and repair shop for the underwater tractors used to pull submarine trains to various sites being investigated.

Cousteau hopes to eventually construct a village where undersea residents will live in dry, gas-filled houses on the bottom much like householders ashore. Small nuclear plants will extract the necessary oxygen from sea water.

Cousteau looks on the sea the way Daniel Boone once looked on Kentucky -as a fine place to colonize. He feels that settlers will one day move to the bottom of the ocean as they once migrated to the great areas of the West. New generations of youngsters will be born there, go to school, work, marry, and raise their own families. They will return to their former homeland on the earth's surface only to visit. New nations will exist beneath the waves.

"Our present experiments," he explains, "are the beginning of the big invasion. There'll be cities, hospitals, theaters, even street cleaners. Man has no choice, with human population increasing so rapidly."

The animal that became man deserted the sea some 300,000,000 years ago. Now it seems that he may be completing a great cycle, returning to his original home beneath the waves.

444



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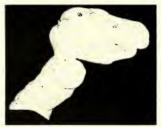
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Vegetable Funnies

B_{Y} Grover Brinkman

THE human race has its clowns, and sober faces, too. The animal world also has its plug-uglies. But how about the vegetable kingdom? There are many faces in our gardens. The photographs here are "vegetable faces." They are not trick photos, merely common vegetables photographed with their "best faces forward." Take a quick look. How many can you identify? Check your answers with those on page 78.



I. "Look, pal, I'm just as tough as those World's Fair dinosaurs!"



2. "Keep away, Romeo; I'm already sitting on your fertilized eggs!"



3. "I'll go nine rounds with anybody. Your money where your mouth is!"



4. "All right, Skinny, say it-I'm listening! And don't call me Fatso!"



5. "You crawl along with me, Maisie, and we'll make the dirt fly!"



"Short-legged gals don't rate, Mister! Look at me!"

Tips For The College-Bound

Richard Gever

IF YOU are going to college to prepare for a career in agriculture, here's some timely advice from L. R. Conradt of Swift and Company's employment division. It is based on his experience in interviewing on agricultural college campuses.

It's good advice even if you plan to return to the farm after college. Experience shows, however, that many farm boys who start college with plans to farm enter another

occupation upon graduation.

Check your personality rating. Agricultural college students are often timid and retiring, Conradt reports. "This is especially true of students who, because of location or to save money, commute to school and never get an opportunity to mix very well with their fellow classmates," he adds. "Some of these young people make such a poor impression when they come in for interviews that we just aren't able to make them an offer."

If you need money to live on campus, investigate all financial aid possibilities. Agricultural college administrators say many scholarships go begging because there are not enough candidates to meet their requirements for the scholarships. But you may qualify. Also, rural banks and Production Credit Associations have started making college loans with low rates and favorable repayment terms.

Part-time jobs requiring contact with others—for example, selling and office and laboratory work—will help your personality as well as your pocketbook.

Take public speaking courses. And, if you have time, join campus organizations that provide experience in meeting and working with others.

At graduation time, appraise your own employment qualifications. "There is a wide spread of ability in a typical college graduating class." Conradt says. "Hence, there is a wide spread in salaries and kinds of jobs offered. So many just average' graduates are completely unrealistic about their abilities. They think they ought to be receiving the kind of offers extended to really outstanding candidates."

Analyze your potential contributions to your employer. "The newly hired graduate is overly eager for advancement," Conradt notes. "In fact, he's ready for it in his own mind long before we have decided it is true."

A student who takes college courses that present "case history" problems for solution is likely to think that he is capable of solving important business problems. Unfortunately, his assignments are likely to involve a great deal of detail, leaving the big problems to his department head or an officer of the company.





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Here by the Owl

Mr. Advisor:

"On what personal problem do Future Farmers most frequently ask your advice? What is your answer?"



Elvin Walker, Advisor Norman Park, Georgia

THAS been my pleasure and privilege to teach vocational agriculture for 21 years. Twenty of these years have been spent in the same school in which 1 am now teaching. To farm boys, as 1 advise and counsel with them, the problem is always the same. They ask, "Mr. Walker, what does the future hold for a boy who is studying vocational agriculture?"

My answer has been the same through the years. There will always be a need for good farmers engaged in the production phase of agriculture. With mechanization, better seeds, fertilizers, insecticides, and all other new developments, there also have been opened many new fields of employment for young men with farm backgrounds and training.

Our increasing population and better standard of living make it necessary to have more people ready with the skills to perform these new jobs. The passing of the 1963 Vocational Act will open new doors to farm youth.

We, as teachers of agriculture, will be encouraged to teach skills on a broader scope—skills that not only make better farmers but make youth more desirable employees for agriculture-related jobs. New horizons continue to open for farm youth.



Sam Stenzel, Advisor Russell, Kansas

THE last line of the vocational agriculture teacher's creed reads, "My love for farm youth will spur me on to impart something from my life that will help make for each of my students a full and happy future."

With increased efficiency in the production of farm products, the number of farms has gradually decreased while the size of the farms increased. This trend decreased opportunities to return to the farm as an owner and operator.

This is a major contributing factor which frequently brings a student to my office for counseling and guidance on his future occupation.

I consider questions on the choice of a lifetime vocation the most serious personal problem as the Future Farmer nears the completion of his high school career. His decision on his life's work is upon him. This is not a simple decision; its consequences are far reaching . . . throughout his and his family's lifetimes.

With approximately 40 percent of all employment forces in the United States working in agriculture, it is not too difficult to show a student that there is a continued need for him in agriculture. If he is unable to get established in farming, there is a definite opportunity for him in agribusiness as well as in occupations related to agriculture.

A Future Farmer should not be discouraged from becoming a farmer if he has a genuine desire to enter the production phase of agriculture, especially if he has the opportunity to get finances and the equipment to get established.

There is also a need for rural boys to enter agribusiness. Opportunities exist in supplying and servicing the farm and ranch operators, as well as in marketing, processing, transporting, storing, and distributing the farm products.

There are many occupations related to agriculture which are not in the agribusiness industry. Some of these are in forestry, soil conservation, horticulture, wildlife, recreation, and the professional fields.

The amount of education and training required to enter these occupations is varied. Several can be entered immediately after completion of high school, whereas others require training beyond the high school level.

I definitely encourage a student who has the ability and initiative to do college work to get a college education before he enters his chosen vocation. Furthermore, I encourage a student to pursue a vocation wherein he can make use of his agricultural background and training. It is common knowledge that only about 50 percent of the jobs in agriculture requiring a college degree are filled annually.

Rural youth has the background and leadership training so eagerly sought in agriculture, agribusiness, occupations related to agriculture, and other industries for important positions.



A characteristic position for Brooks Robinson, Orioles' star third bagger.

Sportrait

ByStan Allen

BALLOTING for the American League's Most Valuable Player award is still pending, but experts agree that Brooks Robinson, All Star third baseman of the Baltimore Orioles, has the honor about locked up.

Going into the last month of the 1964 season, Brooks has made a fine comeback after his slump last year. He is currently in third place in hitting, with a .306 average. His 149 hits rank third, and he has batted in 87 runs for the "Birds." Robinson will better his season's home run total this year, as he already has 23, his previous high mark. His hitting and fancy fielding, which have helped keep the Orioles in the pennant race, should earn him another Oriole Most Valuable Player award. He is the only player to receive the honor twice, in 1960 and 1962.

Brooks hails from Little Rock. Arkansas, where his dad, who had also been an infielder, had him playing ball as soon as he could walk. "Robby" was a three-letter man in high school sports: a good track man, an all-state basketball star, and an outstanding baseball player. He played American Legion ball with the Eberts Post in Little Rock and led them to a state championship with a .450 batting average. His play earned him the attention of major league scouts and scholarship offers from several big colleges.

Brooks decided on baseball and signed with the Orioles in 1955. His first team was York, Pennsylvania, where he launched his pro career in fine style. After hitting .331 in 95 games, along with 11 homers and 17 doubles, he was called up to Baltimore late in '55. He got off to a good start with two hits in the first game but then was baffled by the pro pitchers. He divided the next three years between Baltimore and San Antonio's AA team, Robby had a respectable .238 batting average in 145 games in 1958 and started the '59 season in Baltimore

Hitting at a .284 clip in 88 games in early '59, he thought he was in the big leagues to stay but was sent to Vancouver's AAA club for more seasoning. Brooks found his batting eve there and was called back to the Orioles after hitting .331. He has been a permanent fixture at third base for Baltimore ever since. After hitting a fine .294 average in '60, with 14 homers and 88 runs batted in, Brooks finished third in the voting for the American League's Most Valuable Player award behind Roger Maris and Mickey Mantle. He hit for a .287 average in '61 and raised it to the .303 mark in 1962, one of his best seasons. His .937 fielding average led all big league third basemen as did his batting average. His 192 hits were good for sixth place honors, as he finished sixth in slugging percentage with a .486 mark.

Opposing players have hung the tag of "Mr. Impossible" on Brooks due to some of the great plays he makes at third. He is great on topped hits and playing bunts, although he does not have an exceptional throwing arm or speed. He does have good size, standing 6 feet I inch and weighing around 190 pounds. He has fine hands and, according to some of baseball's great ex-third basemen, the greatest reflexes of any player in the game.

Robby also earned the tag of "Iron Man," as he has played in 483 consecutive games including all Oriole games in 1961 and '62. He has missed only four of 716 games since he rejoined the team in '59. He is a mild-spoken man who has never been ejected from a game in over 1,100 starts. His teammates cannot recall his ever throwing a bat or getting mad over his play.

The Rawlings Gold Glove award for the best American League defensive third baseman should go to Robby this year for the fifth straight season. He has played in the All Star Game for the last four years and was named to the Associated Press All Major League team in 1962. A nine-year veteran at only 27, Brooks Robinson should plague the other American League teams for some time to come.

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The First One Doesn't Have A Chance!

The millionaire's young daughter returned from finishing school, and her father gave her a tour of their new mansion. At the swimming pool they stopped to watch several athletic young men diving and stunting.

"Oh, Daddy," she exclaimed, "you've stocked it just for me!"

> Henry Sherrer, Jr. Bay City, Texas

The Beatles couldn't see where they were going, so they bumped into suc-

> Larry Armstrong Ouemado, New Mexico

Jim: "Isn't it bad luck to have a cat follow you?

Bob: "It depends. Are you a man or a mouse?"

> Carl Sellers Mammoth Springs, Arkansas

Tommy: "What have I to be thankful for? I can't even pay my bills,"
Joe: "Then be thankful that you

aren't one of your creditors."

Dan Miller Georgetown, Ohio

Byron: "What is green and red all over?'

Roger: "I don't know."

Byron: "A sun-burned Green Hand," Byron Lane Perry

Rayne, Louisiana

One section of a broken line on a road to another: "I wonder where the vellow went."

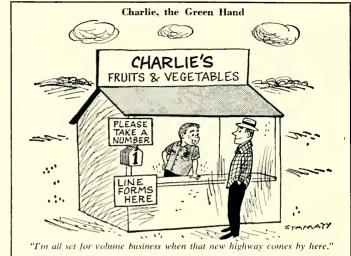
Gene Bendiburg Clymer, New York

The trouble with life is that you're halfway through it before you realize it's one of those do-it-yourself deals.

Gwen Cantrell Englewood, Tennessee



"Don't get any on the lawn! I have to mow it."



When an American visiting a small English town lost a valuable dog, he asked to have a notice printed in the local evening paper offering \$300 for its return. Evening came, but no paper appeared. After waiting for some time, the American went to the newspaper office and found no one but the night watchman. "Isn't the newspaper coming out?" he asked.

"I doubt it, sir," the watchman replied. "The whole staff is out hunting for a lost dog."

> Tom Richardson Waddy, Kentucky

A man who was always playing jokes on his friend sent a telegram collect which read, "I am feeling fine."

Several days later he received a heavy package on which he had to pay postage. Opening it, he found a big block of concrete and a note which said, "This is the weight your nice telegram lifted from my mind.'

Kathy Hutto Bamberg, South Carolina

Rick: "What made you decide to become a parachute jumper?"

Nick: "A plane with three dead engines.'

David J. Prieve Litchfield, Minnesota

Reckless driver: a motorist who passes you on the highway in spite of all you do to prevent it.

Ronnie Green Salem, New Mexico

Answers to "Vegetable Funnies" on page 74

1. Two Irish potatoes, joined.

Two squashes, one stunted in growth.

Two Idaho russets right out of the field.

Two cucumbers, joined in growth. Two sweet potatoes, one of which has grown through a glass ring.

A sweet potato.

Joe: "Why does a puppy have many friends?

Moe: "I don't know."

Joe: "He wags his tail instead of his

Monty Solomon Poole, Nebraska

You have reached life's difficult stage when you are too tired to work and too poor to quit.

> Charles S. Long Newport, North Carolina



"Then I said to myself, 'Where will I find people that can use my services?'



Fastest With The Mostest

That is the way "Monk" Parker came to college.

A member of this institution's first graduating class, and now a successful college president and evangelist, Dr. Parker gives this significant description of his return to college following his first summer vacation:

I hitchhiked from my home to within two miles of the college. The driver discharged me; and there I stood, a trunk in one hand, a large suitcase in the other, and a small suitcase under one arm. My heart was beating a tattoo of excitement. It never occurred to

me that I should wait for another ride. With all that luggage, I ran those last two miles back to school. That's how glad I was to return.

So it happened 35 years ago; so it still is—Christian young people come running to Bob Jones University. They come across the continent from every state and around the world. But that's not so unnatural when you consider that they come to the "World's Most Unusual University" for training that cannot be duplicated elsewhere.

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