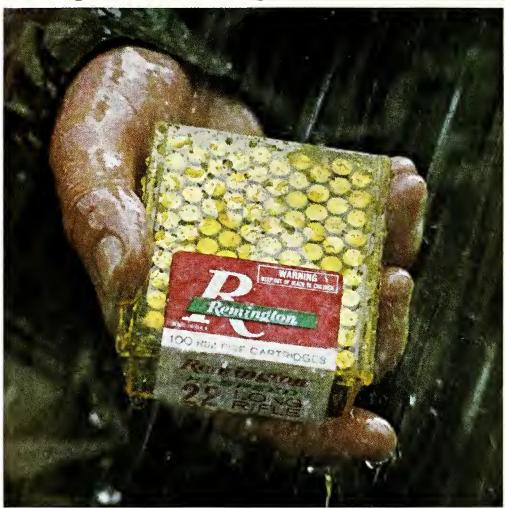


Presenting the case against rough weather:



the new Remington-Peters "Power-Pak."

100 pocketproof powerful "golden" 22 long rifle cartridges in a specially designed

plastic case that really earns its keep...even when it's empty.

First, we made our 22 long rifle cartridges "pocketproof" with a special high-temperature lubricant that resists lint, dirt and grit. Now... thanks to a specially designed, golden, plastic package our 22s are just about everything-proof. The case keeps the

cartridges securely in place and bad weather, moisture and dust out. And it was designed to fit neatly in the breast pocket of a hunting shirt or jacket. The lid of a "Power-Pak" slides back with a series of positive "click" stops

...you can dispense 5 cartridges (or 10 or 15 or however many you need) without fumbling with loose cartridges or packages that are more than a handful. And when the "Power-Pak" is empty, just flip the tray out, and you've got a great place to keep small spare parts, larger cartridges, trout flies, fishing lures, whatever

needs keeping. We think the "Power-Pak" is right on target... worth looking for wherever you buy your ammunition.



Great guns deserve great ammunition. We make both.

The National re Farmer

VOLUME 20

NUMBER 1

OCTOBER-NOVEMBER, 1971

Departments

Looking Ahead	4	Chapter Scoop	32
Mailbag	6	Something New	39
Agri-Careers	28	Joke Page	42

Agri-Emphasis: Livestock

"Liking It Makes It"	18	Brothers Pull Together	24
Teamwork Counts	20	Operating A Swine Station	24
Total Health Management	21	He Wants To Be A Manager	26

Other Features

Youth With A Purpose	8	American Farmer Rule	16
National FFA Convention	10	Action Time!	30
Star Farmers	10	The Fish You Hunt	33
Star Agribusinessmen	12	FFA In Action	34
A Spirit For Conserving	14	Winterizing Your Tractor	36

Our Cover

Steve Moore picks apples in the family archard operated by Moore Brothers, one of the leading orchards in northwestern Ohio. The picking platform attoches to the front of a tractor and is hydraulically operated. A member of the Oak Harbor FFA, Steve's vacational agriculture teacher is Advisor Larry Heintz.

Photo by Rolph Woodin

MAGAZINE STAFF

MAGAZINE STAFF

Editor, Wilson W. Carnes; Associate Editors,
John M. Pitzer, Ronald A. Miller; Editorial Assistant, Twila Renirie; Circulation Assistants,
Norma Salvatore, Frances Hall, Adriana Stagg; Promotion Assistant, Michael Winter; Advertising Manager, Glenn D. Luedke; Regional Advertising Manager, Duane Leach; Regional Advertising Manager, Richard A. Wright; Advertising Assistant, Laurie Welch.

NATIONAL OFFICERS

National President, Dan Lehmann; National Sec-retary, John McCulley; National Vice Presidents, Humphreys, George E. Allen, Daniel Dooley, Jim Beard.

BOARD OF DIRECTORS

Chairman of the Board of Directors, National Advisor, H. N. Hunsicker; Members of the Board, J. L. Branch, James E. Dougan, H. E. Edwards, John W. Lacey, Harold L. Noakes, J. R. Peddicord, Byron F. Rawls, J. W. Warren.

NATIONAL STAFF

Executive Secretary, William Paul Gray; National Treasurer, J. M. Campbell; Executive Director, Edward J. Hawkins; Controller, V. Stanley Allen; Associate Executive Secretary, Coleman Harris; Manager of International Programs, Lennie Gamage; Manager of Contests and Awards, Robert Seefeldt; Director of Informa-tion, Daniel Reuwee; Administrative Secretary of FFA Alumni Association, Jay Benham.

The National FUTURE FARMER, member of Audit Eureau of Circulations.

ADVERTISING OFFICES The National FUTURE FARMER
P.O. Box 15130
Alexandrla, Virginia 22309

703-360-3600

Whatey-Simpson Company 6725 Sunset Boulevard Los Angeles, California 90028

213-463-7157

580 Washington Street San Francisco, California 94111 415-781-4583

CHANGE OF ADDRESS

CHANGE OF ADDRESS
Send both old and new addresses to Circulation Dept.,
The National FUTURE FARMER, P.O. Box 15130,
Alexandria, Virginia 22309.

CORRESPONDENCE

CORRESPONDENCE
Address all correspondence to: The National FUTURE
FARMER, P.O. Box 15130, Alexandria, Virginia 22309.
Offices are located at the National FFA Center on
U.S. Route One, eight miles south of Alexandria.
The National FUTURE FARMER is published bimonthly by the Future Farmers of America at Alexandria, Virginia 22309. Second class postage paid at
Alexandria, Virginia, and at additional maiting offices.
Copyright 1971 by the Future Farmers of America.
Single subscription, \$1.00 per year in U.S. and possessions. Single copies, 20c. Foreign subscriptions, \$1.00
plus 50c extra for postage.

A Debt Repaid

STATISTICS used to evaluate programs of vocational education do not reflect the total value of vocational agriculture and FFA to the student. An example of this "additional value" was given to me awhile back by Mr. J. A. Marshall, state FFA advisor in Texas, who told this true story.

A young agriculture teacher's wife needed an operation. The operation was performed and the couple waited for recovery and the bill which never came. Finally, the teacher went to the surgeon and asked for the bill.

The doctor hesitated for awhile and finally said, "Let me tell you why you have not received a bill. You see, I was nothing until I came under the influence of a teacher of vocational agriculture. And he didn't make an agriculturalist out of me. He made a doctor out of me. I have never had an opportunity to repay him for what he did for me, but I have very much wanted to do something for a vocational agriculture teacher. Now I have that opportunity. You will receive no bill."

The Real Reason

Credit for America's vast food producing power is nearly always given to our advanced technology. A different reason was described recently by Dr. M. C. Gaar, an agriculture educator with years of experience, including service on the FFA Board of Directors.

Dr. Gaar related that in 1955 while standing on the dike of a rice paddy outside Hanoi, he was asked by one of the Vietnamese, "How did American agriculture acquire its vast food producing capacity?"

"And," Dr. Gaar said, "this is what I

"It is because a lot of farm boys like me went down to the ag college and worked our way through school. We then went back into our communities as vocational agriculture teachers, county agents, and other ag specialists taking this new knowledge with us, and helped farmers to grow three blades of grass where they formerly grew one."

On Target

Both of the above examples relate to people and illustrate that vocational agriculture (or agribusiness) and the FFA is right on target with the latest concept that education focuses on people.

Wilson Carnes, Editor

Over 5,000 in prizes

Awarded Monthly



Draw "Winky"

Let "Winky" help you test your talent. You may win one of five \$795.00 Commercial Art Scholarships or any one of one hundred \$10.00 cash prizes!

dred \$10.00 cash prizes!

Draw "Winky" any size except like a tracing. Use pencil. Every qualified entrant receives a free professional estimate of his art talent.

Scholarship winners get the complete home study course in commercial art taught by Art Instruction Schools, Inc., one of America's leading home study art schools.

Try for an art scholarship in advertising art, illustrating, cartooning and painting. Your entry will be judged in the month received but not later than November 30, 1971. Prizes awarded for best drawings of various subjects received from qualified entrants age 14 and over. One \$25 cash award for the best drawing from entrants age 12 and 13. No drawings can be returned. Our students and professional artists not eligible. Contest winners will be notified. Send your entry today.

MAIL THIS COUPON TO ENTER CONTEST

ART INSTRUCTION SCHOOLS, INC.

Studio 10-3540 500 South Fourth Street, Minneapolis, Minnesota 55415

Please enter my drawing in your monthly contest. (PLEASE

mommy democii	(FLEASE PRINT)	
Name		
Occupation	Age	
Address	Apt	
City	State	
*	Zip Code	
Tolophore No.		

Accredited by the Accrediting Commission of the National Home Study Council.

Looking Ahead

Livestock

FUTURISTIC COWS—Researchers at Montana State University say that future milk cows may be bred to produce milk specifically adapted to cheese making or for milk. The genetic varieties of milk casin determine the coagulation time needed to produce cheese. Some dairy cattle breeds produce milk containing a high percentage of casin genetic varieties which make it coagulate faster or slower. Thus, it could become feasible to breed cows which specialize in milk for cheese only. Cheese, an exception to the continued shift of consumer demand from high fat products, will increase in consumption over the next ten years, notes a University of Wisconsin agricultural economist.

NEW VACCINE—The new Marek's vaccine, which protects chicks from developing the lesions associated with Marek's disease, is expected to greatly increase U. S. egg production. With the vaccine, the egg industry anticipates protected pullets will overcome their usual high mortality rate, leaving more pullets to join the laying flock and lay more eggs. In addition, the vaccine will reduce the estimated \$200 million in losses caused by the disease each year in the U. S. alone. The vaccine was developed by USDA scientists and went on the market earlier this year.

HORSE VACCINATION—The vaccination of horses for Venezuelan equine encephalomyelitis (VEE) has been extended to establish a coast to coast barrier against the northward spread of VEE. Federal quarantine to restrict the interstate movement of horses has also been extended beyond the currently imposed states of Texas, Louisiana, Arkansas, Oklahoma, and New Mexico to include California, Arizona, Mississippi, Alabama, Georgia, and Florida. Moreover, USDA officials have sprayed about 2 million acres with malathion and dibrom to reduce mosquito populations, the major carriers of the disease. Latest figures indicate that over 1,300 horses have died and some 1,800 have been reported sick with suspected VEE since the first case was confirmed in July.

Crops

BLIGHT SITUATION—Corn blight has been reported in 32 states, according to the National Federal-State Information Center on Corn Blight. Though heaviest blight levels have occurred in the Corn Belt states, the disease condition also reached eastern and border states, including for the first time Connecticut. Despite the disease, however, USDA crop reporters predict the national corn crop will reach 4.5 billion bushels, or 10 percent above 1970 yields. The large estimates are largely based on the fact that farmers planted 11 percent more acreage than last year and 15 percent above two years ago.

SPRAY DRIFT—A new method for controlling the drift of herbicides and pesticides has been developed by Wilson Company, Inc., Houston, Texas. The new method, called Wilsoo FoamSpray Concept, utilizes a chemical additive and specially engineered nozzles to convert normal tiny liquid droplets to larger and heavier foam drops. The water-soluble foam spray is adaptable for hand guns, booms, or aerial sprayers. Slow evaporation of the foam spray also increases application visibility.

Management

ECONOMIC PACKAGE—Tax relief and the prospects of easing inflationary pressures on production costs are the main ways farmers will benefit from President Nixon's recent economic package, according to an excerpt from the Agricultural Outlook Digest. Impact on demand for farm products at home and abroad this year are not likely to be great, but long run implications should prove more significant. In addition, with larger cash receipts from increased production, net farm income in the last half of 1971 will average well above the depressed level of a year earlier.

The higher the horsepower, the more you need 23° bar angle Deep Treads. We figure you buy a bigger tractor because

We figure you buy a bigger tractor because you've got more work to do—and less time to waste.

That's what Deep Treads are all about. More pull, more hours per tire than any comparably priced tire. The tread, with its 23° bar angle, is the widest, size for size, of any made. And the bite is deeper—25% deeper at center tread than our original equipment tires, 42% deeper at the shoulder.

We put a lot of extra (and extra-tough) rubber in Deep Treads. To reduce flexing, scrubbing and squirming at the base of each bar. To reduce cuts, snags and weather damage in sidewalls and tread base. And we reinforce the bead and rim protector to keep stubble, mud or sand from getting inside.

In short, Deep Treads are made with Firestone Triple-Strength Construction. To keep on pulling and pulling. To give you the most tire your money can buy.



A FEDERAL CASE

I WAS A HAPPY HUNTING DOG. RIGHT FROM THE

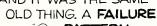
BEGINNING THERE WAS A CERTAIN

CHEMISTRY BETWEEN MY NAMUH AND ME.



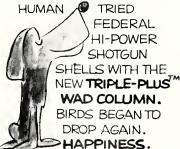
THEN SOMETHING HAPPENED. WE WENT HUNTING. BANG. NOTHING DROPPED. BANG. BANG. BANG. NOTHING.

THERE WERE MORE TRIPS AND IT WAS THE SAME





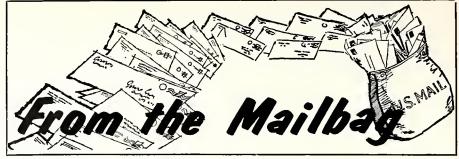
THEN SUDDENLY THE WHOLE COURSE OF OUR LIVES CHANGED. MY



CARTRIDGE CORPORATION MINNEAPOLIS, MINNESOTA 55402



IF YOU WANT THIS COLORFUL 3"x4" HUNTING PATCH AND SHOTSHELL GUIDE SEND 50 s WITH YOUR NAME AND ADDRESS TO: "FEDERAL PATCH", BOX 965.
MAPLE PLAIN, MN., 55359



Modesto, California

I have just been elected to the office of chapter reporter. One thing that bothers me is the question about changing the name of the FFA.

To change the name of our great organization would prove to be a great mistake. If our organization's name is changed, all the things we're known for, as Future Farmers, would be lost.

The more the name is changed the less we can do as an organization. Dissatisfaction would grow with the new name and a new name again would be in order. Changing the name has no significant value to our organization. I urge every member to give backing to our great name.

Paul Wenger

Longview, Texas

Recently at the state Future Farmer meeting of Texas I met Michael (Mike) and Clyde Hollowell. We became friends but unfortunately, we did not exchange addresses. I would appreciate it very much if you would look through the Texas mailing list and send their address to me.

James Calico 1500 East Harrison Road

We have about the same problem as you, James. It is virtually impossible to find a name in the FFA membership files without the mailing address or zip code of the member because that is the way the names are filed. The job is even greater in Texas with over 50,000 FFA members. We will do the next best thing-run your letter in "Mailbag"-and hope Mike or Clyde will see it and write to you.-Ed.

In the April-May issue The National FUTURE FARMER, an FFA'er has a very interesting letter concerning the wearing of the U.S. Flag on the official FFA jacket. It deserves some attention.

People wear the flag on all kinds of jackets. I, too, ask why not the FFA jacket? In the "Chapter Scoop" section of that

same issue, read "Consider buying an FFA Flag to fly with the United States Flag on your school flagpole."

There's patriotism, too. I don't consider it part of a costume or uniform; it's American, about as American as you can get. I'm proud to wear it and not just because I'm in the Navy. I wear it on just about anything I put on my back. I'd like to see them allow FFA'ers to wear it on the FFA jacket. More people should be as patriotic as FFA members.

My second gig concerns the "FFA in Action" articles about the Future Farmers of Vietnam. It was very interesting. You stated it was started in March of 1970. I served with SeaBees of Davisville, Dhock Island in Chuhai, R. V. N. from November 21, 1969 to June 22, 1970 and I never heard of it. While I was there I gardened sweet corn, watermelon, and carrots as a pastime and it grew very well in the Vietnamese soil. The Vietnamese farmers need help and I'm glad the FFA is trying. Keep up the good work.

> Terry Wipperfurth U.S. Navy Air Force

Since the Future Farmers in Viet Nam organization was just getting organized when you were there, it is understandable that you did not hear of it. Hopefully it will grow to be a very active and well known organization.-Ed.

Crosby, Texas

Some of the Crosby FFA members have expressed an interest in an exchange with other Future Farmers for about a week during summer vacation. Two or three of them would like to spend a few days with members in say-Nebraska. Then the chapter in Nebraska would send some of their boys to our chapter.

We feel that this would be very educational and would serve to create better understanding on a nationwide basis.

If there are Future Farmers anywhere in the United States who are interested in an exchange like this, write to us.

B. E. Murff Chapter Advisor

See item about Letcher, South Dakota and Battleground, Washington, exchange in February-March issue, page 28 .- Ed.

YOUR OPINION PLEASE

A girl I know who is going away to college as a Freshman asked her father a very pointed question the other day-"What am I going to do when I get to college if my roommate is using drugs in our room?" She said a boy she knows is wondering the same thing.

What would you do if caught in this situation, and why? Your answer could possibly help others who may be faced with such a problem.

For the three letters providing the best answer in the opinion of the judges, we will pay \$15.00 first place; \$10.00 second and \$5.00 third. The letters will also be printed in the next issue's "Mailbag."

Letters will be judged on the basis of original thought and content, not on the basis of writing skill, or what is right or wrong. Judges will be the staff of The National FUTURE FARMER and their decision is final. Entries must be received before November 1, and cannot be acknowledged or returned. Send your entry to-Mailbag, The National FUTURE FARMER, Box 15130, Alexandria, Virginia 22309.



Dan Phillips makes waves.

When Dan isn't skimming across Ohio's St. Mary's Lake on his high-performance water skis, he's busy at GM's Delco Products plant in Dayton making another kind of wave sound waves.

You see, Dan is a young engineer who is concerned with pollution. Noise pollution. His job is to design industrial motors



give top performance.

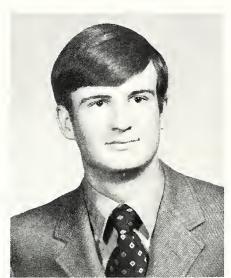
So far, Dan and the other people at Delco have been quite successful. In fact, most of their motors have reached a new level between the people at Delco have been quite successful. In fact, most of their motors lot of people doing big have reached a new level things in a quiet sort of way.

that run quietly. But still of quiet-below 85 decibels-in the battle against industrial noise pollution.

General Motors

Interesting people doing interesting things.

Youth With A Purpose



Kent Kinzie

Competition Brings Out Drive

"I've tried my best to put up a good race," says Cushing, Oklahoma FFA member Kent Kinzie. With an older brother holding the American Farmer degree and a younger brother often times topping him in showmanship, Kent has had to do just that.

Over the last nine years he has won some 240 first places and 70 championships in the show ring—including honors at seven state fairs and the All American Jersey Show. He also received first place in the showmanship contest at the National Dairy Show and has had seven animals nominated in the Jersey Journal national pictorial parade of All Americans.

But, Kent, son of the 1945 national FFA president, has other accomplishments, too. Besides serving as vice president and chaplain of the Cushing Chapter, he has earned the Star Greenhand and Chapter Farmer awards, won the chapter's safety honor, and holds the State Farmer degree. He was a member of the Gold Emblem team at the National Dairy Judging contest and the first place judge at the Sooner State Dairy Show. Moreover, he received the grand champion honor in the state 4-H dairy demonstration contest.

In high school Kent was named Outstanding Senior Boy and elected as Best All Around Senior by popular vote. He is a member of the National Honor Society, served as chairman of Youth Week for his church group, and is a Junior Lions Club member. A tri-captain of the basketball team, Kent was named Cushing Varsity Scholar four successive years. He is currently majoring in dairy science at Oklahoma State University.

Kent has received the Award of Merit for the highest production in Oklahoma by a Junior Jersey member. The Kinzie herd—numbering about 70 registered head—received a type classification in 1970 of 88.1, the second highest in the nation. Recently the young breeder received first place in the National Jersey Youth Achievement contest.

But what inspired him to these many accomplishments? "I hope that through some of my efforts," says Kent, "the Jersey breed has become better known and been improved in Oklahoma and the nation."

Leader in Dairy Industry

About nine years ago Dennis Sattazahn of Robesonia, Pennsylvania, set his sights on becoming a full-fledged dairyman. To Dennis this meant more than milking cows.

Over the years the young dairyman has been active in almost every phase of the industry. His cattle have won such awards as honorable mention in the All Pennsylvania Junior Holstein Show. His accomplishments also earned him the Star Chapter Farmer award, State Farmer and American Farmer degrees, and the Outstanding Holstein Boy for Pennsylvania honor.

As a member of the Holstein-Freisian Association, Dennis served as tour chairman for the 1971 National Holstein Convention recently held in Iowa. In like manner, the vice president of the Pennsylvania Junior Holstein Advisory Board wrote an article about membership in the junior breed association for *The Holstein World*.

Dennis holds membership in the Young Farmers and local Grange organizations and serves as a local 4-H club leader. Furthermore, he is on the state leadership council and has served two years on the county extension board. Dennis' activities in church include serving as president of the youth group and assistant Sunday school superintendent.

In high school, Dennis was chosen as the Agricultural Commencement winner and Senior of the Month. Besides winning the regional public speaking contest and the Berks-Lehigh Farmer essay contest, he served as FFA chapter president, chapter secretary, and area president. As Pennsylvania state treasurer, Dennis participated in an FFA people-to-people tour of eight European countries.

Though it may seem to you that Dennis has accomplished many of his goals, he doesn't see it quite this way. "I plan to continue upbreeding my herd until I have an outstanding registered herd of Holsteins," says Dennis.

Dennis Sattazahn



Just name your interest. With 49 different career fields to offer, there's almost nothing the Air Force can't teach you. And while no one can give you a better knowledge of mechanics, computers and technical areas in general than we can (after all, we are the largest scientific research organization in the world), you may well find yourself being trained in more surprising skills.

Like musical skills, medical skills, photographic and journalistic skills, and many more. The point is, the Air Force can train you in something that the whole world finds useful.

So find your future in the Air Force. And while you enjoy the benefits of steady pay and promotion, medical care, travel and all the rest of it, let us teach you a skill that will last a lifetime.

UNITED STATES AIR FORCE Box A, Dept. FF1071 Randolph AFB, Tex. 78148

Name

High School

Address

City

Zip

Phone

Age

I understand there is no obligation.

Staţe

Find yourself in the United States Air Force



Some 200 members of the National FFA Chorus and Band will strike up the music.

The National Convention Fanfare for FFA

HAT'S what 12-13,000 FFA members will be witnessing when they attend the 1971 National FFA Convention. On Tuesday, October 12, FFA members, teachers, and guests will converge on Municipal Auditorium in Kansas City, Missouri for the fortyfourth Convention. The Convention will officially open on Wednesday morning and last through Friday, October 15.

Highlighting the fanfare of the 1971 Convention will be the new and colorful Star Farmer and Agribusinessmen Pageant. Thursday evening will mark the first time that the FFA's highest

Convention Registration

For the first time, a \$3 registration fee will be charged at the National FFA Convention. The registration fee will be required of active or collegiate FFA members, vocational agriculture teachers, state staffs, and national staff.

FFA members will register as chapter and state groups with no individual registration. Prior to coming to the Convention, each chapter must get an official registration card from their state office and have it properly completed. The card must be signed by the member attending, his local FFA advisor, and principal or superintendent.

Attendance at the convention is limited to six members per chapter or 10 percent of the membership. This number does not include award winners or special participants.

Registration will be in the lower Exhibition Hall of the Auditorium.

awards will be presented in a combined ceremony. Besides selecting the Stars. National Proficiency winners will be honored and American Farmer degrees will be bestowed on Thursday.

Heading the list of contests is the National Public Speaking Contest during the Wednesday evening session. In addition, dairy products, poultry, and meat judging contests will be held Wednesday morning. On the following morning, livestock and dairy cattle judging events will be held. Friday morning all judging winners will be announced.

The coronation of the American Royal Queen, which began at last year's Convention, will take place on Friday morning. The election of the new national officers will occur at this session.

Other important events occurring at the 1971 Convention will include recognition of the winners in the National Chapter, National Chapter Safety, and National BOAC programs. Throughout the Convention, the FFA will honor adults with Distinguished Service awards, Honorary American Farmer degrees, and sponsors to the National FFA Foundation. Delegates will also consider many items of business, including several proposed amendments to the National FFA Constitution and By-Laws.

As always, FFA members attending the Convention will be invited to attend FFA Day at the American Royal, Friday afternoon. Appearing at the Royal this year will be Roy Rogers, Dale Evans, and the Sons of the Pioneers.



STAR Farmer of the North Atlantic Region Dennis Carlberg maintains a dairy herd of 70 Holstein cows. He lives on a 195-acre farm near Frewsburg, New York, and rents 205 acres.

Dennis operates in partnership with his father on a 50-50 basis. "In managing our farming operation I have 100 percent responsibility for the breeding of our herd and selecting sires," says Dennis. Other than that, the partners share equally in all decisions made on the efficient operation, and each receives a monthly paycheck.

Dennis' records show an increased production from 12,600 pounds of milk and 445 pounds of fat to 14,400 pounds of milk and 500 pounds of butterfat in the last four years. He claims major factors for increased production have been careful selection of bulls and a good feeding program. He especially notes that the percent of milk income used for feed went down 4 percent.

Gradually expanding, Dennis plans to continue developing the partnership operation mainly through improved management and increased production. Moreover, he's enlarging the market for his purebred dairy cattle.

The dairyman served as an Agway committeeman and on the farm advisory committee for the local Production Credit Association. A member of Southern Chautauqua County BOCES FFA at Falconer Central High, Dennis served as chapter secretary and president and district president. He also received the Star Chapter Farmer, County Star Farmer, and state Holstein Breed awards. Furthermore, Dennis was a member of the chapter's dairy judging team, coached by Advisor Richard Rawson, which won the district contest.

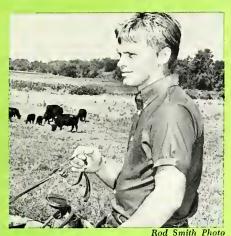
Dennis Carlberg studies his farm books.



Star Farmers



Which one will be honored as Star Farmer of America at the National FFA Convention?



Lonney Eastvold rides out to his herd.

CENTRAL Regional Star Farmer Lonney Eastvold manages a herd of 200 purebred Angus cattle. Starting with two cows and seven steers, the Hartland, Minnesota, cattleman developed his herd to its present size using artificial insemination and progeny testing.

Lonney, a member of a beef testing program, maintains a 100-head cow herd by raising about 30 bulls and 40 heifers yearly for replacement or sale as breeding stock. In addition, he operates two 160-acre farms on contract for deed and rents an additional 120 acres. He winters his cow herd on 120 acres of pasture and raises corn, soybeans, wheat, and oats on 230 acres.

As a member of the New Richland Chapter of the New Richland-Hartland High School, Lonney won the Star Beef and Star Chapter Farmer awards. He also served as chapter president and treasurer. The Central Star Farmer's vo-ag teacher is Advisor Lee Mendenhall.

In his school and community Lonney was active as junior class vice president, vice president of his church council, and a Sunday school teacher. He completed the Dale Carnegie self-improvement course and while on active duty was named Minnesota State Reservist of the Year. Lonney and his wife Betty are parents of an infant daughter Nissa.

Lonney's goals include expanding his herd to 400-500 of purebred stock and increasing his 205-day weight from a current 508 pound average to 650 pounds while maintaining a 99 percent weaning rate. However, before expanding Lonney says, "I'm going to level off at approximately 150 cows until I've built a stronger market for my breeding stock. One ambition of mine is for my herd sire to obtain the 'Certified Meat Sire Qualification.'" In addition, he wants to produce 500 acres of crops.

STARTING seven years ago with six head of beef, Leroy Crawford, the Southern Regional Star Farmer, today owns and maintains a herd of 55 registered Hereford cattle. To boot, he produces market hogs from 10 to 15 commercial sows yearly.

The rancher runs his operation near Ames, Oklahoma, on about 400 rented acres—including 145 acres of pasture and 250 acres of cropland. Besides raising about 20 acres of alfalfa, Leroy grows wheat, mung beans, and peas as cash crops on almost 200 acres.

"Because of the extremely high price of land in this area, it is more economical to lease than to buy land," explains Leroy. "So I plan to use the capital I can obtain to buy equipment and facilities necessary for large volumes of production with a minimum of labor."

In FFA Leroy held the offices of chapter reporter, secretary, vice president, and president. He also served as district vice president and state reporter. His awards include Star Greenhand, Star Chapter Farmer, and local proficiency honors in livestock, crops, and farm mechanics. His vocational agriculture teacher is Advisor Jerry Ott.

After graduation Leroy studied agriculture at Oklahoma State University for two years. Before returning home to farm he served as vice president of the Oklahoma Young Farmers club and Freshman class president at college. He is currently a field staff representative for the National Farmers Organization.

Leroy's interest in farming dates back to the memory of his great-grandfather picking up loose hay behind an old bunch rake on the Crawford homestead. Leroy says, "This is a heritage I am proud of and one that I also want to dedicate my life to."

Leroy Crawford repairs a combine reel.





Irvin Petsch gets ready to vaccinate.

IRVIN Petsch, the Pacific Region's Star Farmer, owns one-third interest in a family ranching business which spreads over some 30,000 acres outside Meriden, Wyoming. "The term vertical integration would best describe our feedlot operation," explains Irvin.

The Petsch operation includes Petsch Ranches, Inc. which owns the livestock; Petsch Land Company which holds land, buildings, and improvements; and Petsch Farms which retains all machinery and equipment. In the operation totaling some 3,100 acres of crops—alfalfa, corn, barley, and oats, 4,400 acres of native hay, 25,000 acres of pasture, and 2,500 Hereford and Angus cattle, Irvin shares equally in management as well as financial interest with his father and older brother.

As historian for the Albin FFA, Irvin won the Outstanding Notebook award four years in a row and was instrumental in helping his chapter win the overall sweepstakes at the Wyoming State Fair. Guided by Advisor Jack Humphrey, he also served as treasurer and president of his chapter.

In addition, the cattleman showed the champion Angus steer at the state fair, won the Star Chapter Farmer honor, received the regional Star State Farmer recognition, and earned four scholarship awards. Irvin's high school activities included student council vice president, junior class vice president, senior class secretary, annual co-editor, and newspaper feature editor.

The Pacific Star Farmer has three main goals for the future. "First of all I want to be a good husband to my wife Donna and a good father to my son Trevor. Secondly, I want to be a good rancher," enumerates Irvin. "Finally, I want to help boys like I was when I enrolled in vo-ag become men like I feel I am now."

October-November, 1971

* Star Agribusinessmen

Who will be selected as Star Agribusinessman of America at the National FFA Convention?

BEEKEEPING is a full-time business for Star Agribusinessman of the Pacific Region Wayne Morris, Fullerton, California. He owns and manages Cal-Mont Apiaries and co-manages the two divisions of Morris Apiaries.

Wayne, a winner of the National Agribusiness Proficiency award in 1970, owns 500 colonies of bees and plans on taking over another 1,600 colonies when his father retires in the near future. "My next goal is to acquire another producer's operations in Montana," says Wayne. "Then my operation will consist of 5,000 colonies of bees."

The experienced beekeeper processes honey—his chunk and white honeys won first place at the 1970 American Honey Show, breeds queen bees and requeens colonies, maintains records, and rents storage for his equipment. Wayne is pursuing a management course at California State Polytechnic College.

Wayne has promoted beekeeping six times on national television and has spoken at the National Beekeepers Convention. "I don't want to be just another beekeeper," he says, "but a leader in the beekeeping industry." Wayne's goal is to be president of the National Beekeepers Organization.

Under the guidance of Advisor Art Boster, Wayne served as vice president and president of his chapter, area president, district reporter, and finally, as a vice president in the California Association. At college he served as president of the California Young Farmers.

In high school he was a student congress officer and named to Who's Who Among American High School Students. An honor student, Wayne received the "Golden Scroll" award at the American Academy of Achievements banquet.

Wayne Morris maintains his bee hives.





James Stone gets parts for a customer.

JAMES Stone of Weatherford, Texas, the Southern Region's Star Agribusinessman, works at a farm implement company and manages a 185-acre crop operation. Beginning as a part-time employee, Jim is now machinery partsman, working directly with three other persons and responsible for another.

Jim started at the Clemons Tractor Company of Fort Worth, when his voag department added occupational work experience. Today he handles a variety of jobs. He keeps tabs on the parts inventory, works with customers, delivers and sets up machinery, and makes repairs.

His main position, however, is tractor partsman. "I've learned that my attitude is important in waiting on customers and discussing their problems," emphasizes Jim. Besides his base pay, he receives a commission on the parts he sells. "Efficiency also pays big dividends, both in my paycheck and in customer satisfaction."

Jim, a member of the Azle FFA Chapter guided by Advisors R. W. Simmans and Benny Clark, held the offices of secretary and president. As a member of the chapter's winning land judging team he participated in local, district, and state contests. He earned area proficiency awards in farm machinery, agribusiness, and crop farming. He was also chosen Star Farmer at chapter, area, district, and state levels. Jim's other activities include membership in the American Quarter Horse Association.

Jim and his wife Linda eventually hope to expand their farming base which now includes 100 head of goats, 20 head of Red Angus, and 470 acres of rented land. While improving his position at the tractor company, Jim figures that his work in the off-farm agribusiness will provide him sufficient income to expand his farming enterprise.

ROBERT Timblin, the Central Region's Star Agribusinessman from Alvo, Nebraska, is making agricultural mechanics his career. To be specific Bob explains, "I plan to stay in the farm equipment and power unit field of mechanics for my lifetime employment."

Since his home farm was small Bob enrolled in the University of Nebraska's school of technical agriculture after high school. In the agricultural mechanics program he learned to service and repair power units and machinery. During his training Bob spent one phase on cooperative work experience at the Beckler-Hamilton International Harvester dealership in Lincoln. Because of his ability and diligence in producing finished jobs the company raised his training earnings faster than usual. When Bob graduated, the company hired him and he now works as a full-time mechanic in the service department.

Besides his cooperative experience, the skilled mechanic made several improvements on the home farm—building a farm shop, painting farm buildings, constructing fences, and establishing a farm library. Eventually, the agribusinessman wants to own his own shop for servicing farm equipment and design special machines for farmers.

As a member of the Waverly FFA, Bob served as secretary and sentinel. He was also on the chapter's state champion parliamentary procedure team coached by Advisor Lyle Hermance.

Bob's major high school activities included serving as freshman and sophomore class president and president of his local and state church youth group. He also qualified for the state wrestling tournament and was honorary co-captain of the football team.

Robert Timblin repairs tractor engines.



The National FUTURE FARMER





Lloyd Wenger delivers one of his sales.

LAST year Star Agribusinessman of the North Atlantic Region Lloyd Wenger sold nearly a half a million dollars worth of farm machinery—making him, at 19, one of the top equipment salesmen in Pennsylvania. As a sideline, Lloyd annually feeds out about 90 dairy heifers and bulls on the 60-acre farm near Myerstown where he and his wife Kathryn live.

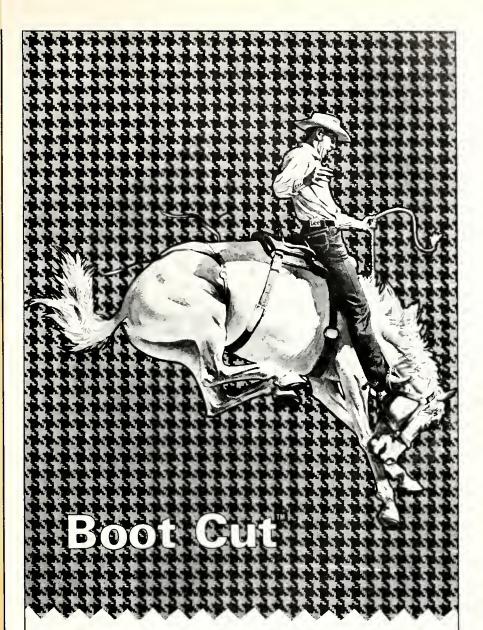
Lloyd began working at Wenger's Farm Equipment, Inc. at the age of ten as a mechanic's aide cleaning the shop and picking up tools. "During the summers my father took me out of state to buy farm machinery," recalls Lloyd. "These trips made me decide to be a part of the machinery business."

The salesman has worked in all phases of the business from the shop and parts department to the accounting and inventory operation. About four years ago Lloyd made his first sale—selling about 12 percent of the company's equipment sales his first year. Lloyd, paid a wage and commission, reached 34 percent last year and is determined to sell \$750,000 this year.

In the Eastern Lebanon County FFA Chapter where Mr. G. L. Strickler is advisor, Lloyd served as historian, parliamentarian, and chaplain. He has completed the Dale Carnegie personal development course and is a member of the Pennsylvania Dealers Association.

On his own, Lloyd started selling a line of small tools. Carrying an inventory of about \$2,000 worth of tools, he grossed \$6,000 in sales last year and hopes to expand to a \$25,000 volume.

With plans of becoming president of the firm and already an owner of stock, Lloyd looks ahead. "My goal is to have Wenger's Farm Machinery sell \$3 million of equipment by 1975. This would make the company the largest of its kind in the eastern United States."



Lee RIDers in new Houndstooth Check!

Take the famous Lee Rider styling, add no-iron Lee-Prest, a center crease and Boot-Cut convenience in a handsome, houndstooth check, and you've got the best in authentic Western fashion. This beefed-up, good-looking fabric comes in three colors: Blue check, Rust/Green and Navy/White. Waist sizes are 27 to 42, inseams 30 to 36.

Look for this branded Lee label

The H. D. Lee Company, Inc.

P. O. Box 440 Shawnee Mission, Kansas 66201 VF



October-November, 1971

A Spirit for Conserving

If you grasp the firm handshake of the past president of the Louisiana FFA you'll realize why he is stalwart of conservation.

By Gene Warren



Agriculture Instructor Charles Chandler takes note of Tim's eight-year-old pines.

IM Price of the Calvin, Louisiana, FFA looked up over a halffilled cookie jar at his mother's table and said, "The FFA has done wonders for me. I was real shy and wasn't able to talk well when I entered high school. But it gave me opportunities to speak and talk and work with people. Some people still think that all a boy learns as an FFA member is how to plow, but they are sure wrong!"

In Tim's case soil and water conservation played the key role in his FFA work. He stood up from the table and said to his Advisor Charles Chandler and Mr. Malcomb McDonald, district conservationist with the Soil Conservation Service (SCS) at Winnfield, "Come on and I'll show you some of the conservation on the farm."

Along the way Advisor Chandler explained that forestry was one of Tim's main FFA enterprises and that he had done such practices as controlling worthless trees and plants, thinning, and protecting trees from fire. Tim helps his father run the 66-acre farm. They grow some 40 acres of trees, 10 acres pasture, and have a fishpond of 3 acres. Tim says that his brother William, also an FFA member at Calvin, helps with farm duties.

"The Soil Conservation Service helped us design and build this pond back in 1964," Tim explained as he waved his arm down the hill in the direction of a well landscaped pond. "We later stocked it with buffalo fish as a money-making project."

He pointed to a trench cut in the side of the pond bank and explained that was where he plans to feed the new crop of buffalo fish that was put in the pond this spring. "Buffalo grow to be about 5 to 6 pounds in one year, and the fish marketer down at Winnfield said he will take all that we can raise. We put close to 2,000 fish in the pond."

As Tim walked back up the slope toward a pine plantation, he reached down and pulled off a handful of seed heads from a brown looking plant. "This is the arrowleaf clover that we planted," he explained. "It's done well and the nitrogen it puts in the soil is sure making this bermuda grow. We also planted it all around the pond edge to keep down erosion." The Prices have planted bahia, ryegrass, and crimson clover on other parts of the field. Tim said that last year they cut over 100 bales of hay per acre.

Tim's father L. W. Price has been cooperating with the Dugdemona Soil and Water Conservation District since 1953. That was when the Prices moved to the farm near Winn Parish. Tim said that the SCS helped develop a conservation plan on the land, and one of the planned practices was planting pine trees on old cultivated fields. "We got around to doing it in 1963 and this is how much they have grown," he said looking up into the tops of long rows of trees about 25 feet tall. "There was a big gully right where you're standing," Tim said kicking a pine straw from a small depression that wound its way down the piney slope. "Since we planted these trees, that gully has about gone."

On the way back to the house, he told how the SCS folks at Winnfield had cost-shared on many of the conservation practices. He praised his mother and father and brothers-John, now at Louisiana State University (LSU) working on his doctor's degree, and Don, who is at Northwestern State University studying to be a vocational agriculture teacher. "All of them," says Tim, "along with Mr. Chandler and a long list of others have made things easier for me."

After serving as chapter president, he went on to become area vice-president and state FFA president. He says his FFA experience at Calvin High helped develop his leadership ability for serving as student council president.

Tim says, "I will probably enter LSU in the fall of 1971. I don't know exactly what I'll major in, but it will be some phase of agriculture."

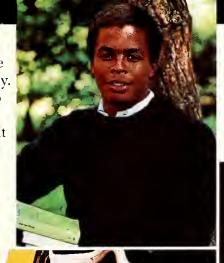
You can say what you want. Tim Price knows what he wants and is working hard to get it.

Tim and Malcolm McDonald, conservationist, check the growth of arrowleaf.



Why would anybody take ROTC?

"With me, it all came down to one word. Money. I needed a scholarship to go to college. And I got one from Army ROTC. It pays for all my tuition, books and lab fees...it's really a good deal."





"My reasons are basically selfish, I guess. Jobs are really getting hard to get these days, and I know for a fact that a lot of employers think an ROTC guy's got a head start in management and things like that."

"I never considered myself especially patriotic, but I do feel that everyone's got an obligation to his country. And by taking Army ROTC, I'll get to serve mine as an officer. It's that simple."



"Maybe I'm different, but I've been considering the Army as a career. I really think I can contribute something, change things, make them better you know?"

Army ROTC
P.O. Box 12703
Philadelphia, Pa. 19134
Please give me more reasons
why I should take ROTC.

Name ____

Address _

City_____County____

College Planning to Attend ___

NFF 10-71

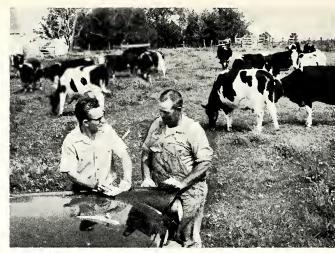
Army ROTC. The more you look at it, the better it looks.

American Farmer Rule

Can your chapter boast of a large number of American Farmers? Mount Ayr can!

MERICAN Farmers are the rule rather than the exception for the Mount Ayr, Iowa, FFA Chapter. There have been 15—quite a number when you consider that the degree normally goes to one FFA member in a thousand. At Mount Ayr the degree is awarded to about one out of every 37 members. This is something of a record for Iowa and must be near the top in the nation.

Furthermore, all those who received the degree have remained in farming or other agribusiness. Ten are farming full time, four mix farming with nonfarm agricultural business, and only one has no farm connections—but he is a USDA plant quarantine specialist.



Agriculture Instructor Hauptmann, left, visits the farm of Marvin Triggs, 1954 American Farmer degree recipient.

Much of the credit for the work of this outstanding chapter goes to Advisor R. E. Hauptmann, who is completing his thirtieth year as the teacher of vocational agriculture at Mount Ayr Community School. He not only has been able to select top candidates for the highest FFA degree, but he has been able to select those students who are going to spend their lives in agriculture. This past year Advisor Hauptmann was recognized by the Iowa Vocational Agricultural Teacher's Association for his length of service.

A recent study on the occupational status of vocational agriculture students from this school revealed some interesting information. During the 27-year period covered by the study, a total of 513 students were enrolled in vocational agriculture from periods of three days to four years. Over half—308—completed the full four-year course. In the group that did not complete the full four years, 108 didn't finish because they moved from the community.

Of the 308 completing the full fouryear course, 108 are farming and 62 have gone into related occupations. This does not include the 18 which are in military service and the 31 in college and 3 deceased. Only 86 of these students found non-farm related careers. Over the 27 years, only 22 vocational agriculture students in grades nine through twelve "dropped out" of school.

Where Are They Now?

Ten American Farmers are still farming in the Mount Ayr community while one farms about 50 miles away. Here briefly, is what all 15 are doing today.

Bob McCreary received his degree in 1942, farms with his son James, 22, who received his American Farmer degree in 1968. They operate about 640 acres, specializing in purebred Yorkshire hogs and polled Hereford cattle.

Dean Gardner (1948) is a plant quarantine specialist with the USDA.

Dick Richardson (1949) farms 700 acres near Ridgeway, Missouri, which includes a beef cow-calf operation, including both registered and commercial cattle, and raises some market hogs.

Wayne Foltz (1950) farms 560 acres and maintains a herd of about 75 commercial Hereford cows and farrows about 25 sows twice per year, marketing from 400 to 500 hogs annually.

Loren Campbell (1951) has a herd of about 80 Hereford cows and raises about 120 litters of market hogs per year. He farms about 585 acres.

Jim Pottorff (1952) farms 800 acres in partnership with his father. Their operation includes a Hereford cowcalf unit and market hogs. They have a total of about 175 head of cattle and market about 750 to 800 hogs yearly.

Dr. Glenn Sickels (1953) is a veterinarian at Fairfield but also farms.

Marvin Triggs (1954) is a dairy farmer and a purebred

hog raiser who farms in partnership with a neighbor. They milk about 30 dairy cows, feed about 75 to 100 head of beef cattle yearly, and carry on a registered Duroc and Spotted swine enterprise. The partners farm 600 acres.

Leland Dolecheck (1955) is the vocational agriculture instructor at Osceola, Iowa. In addition he manages the family grain and livestock farm near Kellerton.

Lee Faris (1957) is employed as a sales executive for a feed company in Humboldt, Nebraska, and owns 80 acres where he keeps a few stock cows.

Howard Martin (1958) farms about 400 acres in a family arrangement with his father. They have a herd of Angus cattle which usually numbers about 50 cows. They feed out some calves and market hogs.

Melvin Gray (1960) operates a 460-acre farm and markets about 250 head of beef annually.

Lyle Faris (1966), Lee's brother, has a dairy farming operation consisting of about 500 acres of land, 30 Holsteins, and about 400 to 500 market hogs yearly.

James McCreary (1968) farms with his father as mentioned earlier.

Wayne Dolecheck (1970) farmed with his father and operated a beef cow-calf program on 500 acres. Wayne, a nephew of Leland Dolecheck, died in a car accident this past spring.

Larry Adams (1971) is nominated to receive the American Farmer degree at the National FFA Convention.

A Variety of Skills and Deeds

He is reaching for a career by trying many agribusiness jobs.

ITH hopes of becoming a teacher of agriculture, Stephen Ragosta of Coventry, Rhode Island, made use of the opportunities in vo-ag to gain experience in many fields of agribusiness. His involvement in FFA—both high school and collegiate—also have improved his leadership qualities.

Throughout his vo-ag training Steve has managed slightly over one acre of market garden. That doesn't sound like much, but it involves intensive cropping and skillful management to clear over \$2,000 annually on one acre.

The young truck gardener owns his equipment and tools in partnership with his father—featuring a garden tractor and a full line of attachments. He grows 1/2 acre of corn, 1/4 acre of beans, and 1/4 acre of tomatoes, and also raises carrots, eggplants, beets, onions, and lettuce.

At first, Steve operated a produce stand and later sold fresh vegetables to local stores. A winner of the state proficiency award in crop farming, he now sells wholesale to buyers with freezers.

Besides raising garden crops, Steve worked one summer on a dairy farm. Another year he worked on an herb farm and it was here he got the idea to sell vegetables on order only. "Much of the valuable experience in herb marketing furthered the production of my market garden," he says.

Steve, now a sophomore in agricultural education at the University of Rhode Island (URI), processed turkeys during the holidays of the following two years. He also worked as a greenskeeper at the local country club in the summer.

Under the guidance of FFA Advisor Thomas Marron, Steve served as chapter president and vice president and attended the Washington, D.C. Leadership Conference. Steve recently completed a term as state secretary, highlighted by presenting the proclamation of FFA WEEK to Rhode Island Governor Frank Licht. Serving as president of the chess club, manager of the basketball team, and being a member of the Honor Society are some of his other high school accomplishments.

Steve is currently a member of the URI Collegiate FFA Chapter where Dr. Donald McCreight is advisor. There, Steve worked at the university farm in charge of three workers on poultry experiments. He used this experience to win first in the regional poultry judging

In the campus greenhouse Steve helped with the care of the tomato seedlings.

contest at the Eastern States Exposition. This past year he worked at the campus greenhouses to learn about their management.

It takes a variety of skills to be an outstanding high school agriculture instructor. And Steve's experience will go a long way in preparing him for his chosen profession.

As state secretary Steve presented his report at the Rhode Island Convention.



Preparing the seed bed for horticultural plants was one of Steve's many duties.





Photos by Author Drop nozzle spraying of corn in early June is Jim's main method of weed control.

"Liking it Makes it"

And to Jim Coffeen this means dairying.

By Ron Miller

AMES Coffeen of Chilton, Wisconsin, says, "I like to work with dairy cattle." His production shows it. With a rolling herd average of 18

cows, his production averages total 19,726 pounds of milk and 663 pounds of butterfat.

In total he owns 47 head of reg-

Agri-Emphasis: Livestock

istered Holsteins—27 cows and 20 heifers and calves. And most important, he doesn't have a cow producing under 500 pounds of butterfat.

Seven of Jim's cows have annual records of over 700 pounds of butterfat. His top cow has two records over 950 pounds of butterfat and a high of 26,428 pounds of milk in one lactation. She is six years of age and has a lifetime record of 3,904 pounds of fat and 109,435 pounds of milk.

Starting with a heifer calf at age nine, Jim began building a herd by raising all heifer calves. From his top animals he also raised the bulls and sold them as breeding stock. In addition, he purchased cows and springing heifers at sales, buying only cattle with records of over 500 pounds of butterfat. "They needed to be big and typy," adds Jim.

The unique thing about Jim's dairy operation is that he manages it on just 75 acres. Jim and his recent bride Diane cash rent the farm including machinery from his father-in-law. His major feed crops are 30 acres of corn and 30 acres of alfalfa. He also raises 15 acres of oats, mainly for bedding.

But to keep field time at a minimum Jim buys additional feed. "This gives me more time to work with the cattle," says Jim. He presently maintains a milking herd of 25 to 30 head throughout the year but hopes to milk 60 to 70 cows in the future.

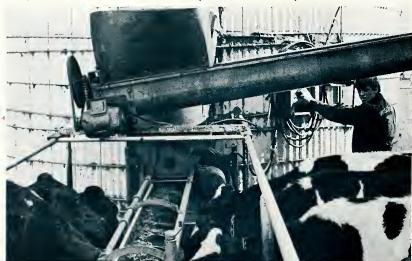
In addition to supplementing protein to cows individually, Jim feeds a ration of three parts corn to one part oats according to DHIA testing recommendations. His roughage program features haylage in the winter and green chopped forage in the summer.

(Continued on Page 20)

Jim's feeding program includes chopping forage into a self-feeding wagon twice daily.

Silos in the Coffeen operation are used to store haylage as well as corn silage. This automatic feeder will permit him to expand his herd faster.





How to fortify dairy feed to fit forage



It's easy with new Mintrates from MoorMan Research

fits all-legume forage



fits part-legume forage



fits non-legume forage



With the great variation in forage quality and nutrient level, it's hard to keep a milking ration correctly fortified and balanced.

But now MoorMan Research has made it easy with a choice of new one-package Mintrates for Dairy Cows.

Each fits a different forage program—for high production, good cow condition and sustained milk flow:

Mintrate AL-36 properly fortifies grain and *all-legume* forage.

Mintrate PL-42 correctly balances grain and part-legume forage.

Mintrate NL-48 compensates for the nutritional shortcomings when grain is fed with *non-legume* forage.

Whatever kind and quality of forage is used with grain, one of these new Mintrates will supply the protein - mineral - vitamin combination that best fits a dairyman's needs.

Each convenient, labor-saving Mintrate can be top-dressed or mixed with grain. Each comes in appetizing crumble form and cows really like it!

Each fits right into a MoorMan Cow Power Feeding Program and encourages each cow to eat an ample amount of properly fortified ration to produce up to her bred-in potential.

These new developments are typical of the extra-flexible, convenient feeding programs a Moor-Man Man brings with his "feed store" direct to the farm.



Moorman Mfg Co., Quincy, Illinois

"Liking it Makes it"

(Continued from Page 18)

The dairy operation includes an 80foot barn with 29 stanchions and 6 box stalls. The setup also features a barn cleaner, cement yard, silo unloader, and automatic, yard feeding unit. Jim currently ships his milk under Grade B regulations but will switch to grade A by the end of the year. His plans include the installation of a milk transfer line.

Before renting the 75-acre farm Jim operated on a 2/3-1/3 partnership basis with his father. Since Jim's father works for a small engine manufacturing company the younger partner managed the larger share of the operation.

Jim, the second place winner in the state dairy cattle judging contest, uses artificial insemination and a herd bull in his breeding program. He has the equipment and knowledge to do much of the insemination work himself. To maintain herd health the young dairyman treats his cows against mastitis when they begin their dry period.

While in FFA Jim showed his cattle at county and state fairs and district "Black and White" shows. Moreover, the former Chilton reporter and vice president won the chapter and state Dairy Farming Proficiency awards.

"When I entered FFA my goal was to show the top cow at the International Dairy Show and be named state Star Farmer," remembers Jim. He has obtained one goal-that of Wisconsin Star Farmer. To accomplish the other, Jim is increasing his herd numbers, culling low producers, and showing his cattle at shows in open class. Meanwhile, his herd's production averages climb and so does his income.

Jim believes that udder sanitation is necessary to maintain high production.





Teddy, left, and Eddie display their trophy case of livestock show winnings.

Teamwork Counts

To them it resulted in prizes and profit. By Lou Speer

OMETIMES it pays to work in tandem. Nine years ago, Teddy and Eddie Miller, brothers in the Arnett Chapter of Oklahoma, jointly received a baby calf. Today, by experimentation, they have parlayed that calf into a \$14,000 wheat pasture-steer feeding partnership.

Working off the income produced by that first calf, they bought a few more calves. They fed them, four on one cow, on their father's 640-acre farm until weaning size. After entering FFA and as their profits gradually increased, they also invested in swine. Eventually, with high school activities demanding more time, they entered their present steer feeding program on an experimental basis.

"We found it didn't take as much individual labor," says Teddy, "and the income was just as much."

They purchase their feeder stock each fall from local sales rings and farmers. Watching the market for a good price break, they look for calves in the 300 to 400 pound weight range. Here, in judging quality, two heads have proved better than one.

The calves are raised on 130 acres of winter wheat pasture which the young livestock men rent from their father, plus a commercial feed mix and hay. Sale day comes early in spring, after wheat pasture is short and as the the market dictates.

The biggest problems Eddie and Teddy have faced so far in their joint feeder program have been those of price and quality. At first, they sacrificed quality for price, but found too much sickness and other problems involved. Now they buy better

calves and have profited because of it.

Their present operation consists of 87 head, mostly heifers due to rising prices. "We are experimenting again," Eddie admits, "but we think we can gain just as much by buying the lower priced heifers."

The young herdsmen's dual interests extend in other directions besides cattle. Both are athletes and vigorous FFA leaders. Each has served as chapter president, won showmanship trophies and public speaking contests, and participated on cattle judging teams. In addition, Teddy has won the Star Greenhand award and participated on shop teams. Eddie, meanwhile, has earned an FFA Foundation award and Chapter Farmer degree.

Upon winning the National Tractor Driver Championship Teddy posed with the Tulsa State Fair Sweetheart and Mr. Jack Savage, his advisor.



Bill Aker Photo

Total Health Management

Does your animal health program include all of these practices?

ALL and winter are the times of the year when animals are brought closer together. And what happens—disease often strikes. Why?

Wayne Feeds Photo

There are many reasons, but mistakes in management play a major

role in disease problems.

Total health management includes nutrition, shelter, and sanitation as well as vaccination programs and parasite control. Exposure to any unfavorable condition causes stress on livestock and makes them more susceptible to disease. A well developed health program will save you time, money, and animals in this regard.

The following management practices are described by Extension Veterinarian Richard Hall of the University of Idaho. These basic health principles can be applied to horses, cattle, hogs, sheep, and poultry.

- Stay informed about the diseases in your area, especially the ones that might affect the type of animals you raise. Beware of the unlikely diseases that sometimes infest livestock and use vaccination and sanitation programs to prevent common diseases of your area.
- Keep complete health records, Not only should you know vaccinations were given, but your records should include the diseases encountered and the drugs and doses used in curing them.
 - Avoid undue stress caused by in-

clement weather, poor feed, and improper handling. If possible, do not work or transport animals in bad weather. Such procedures as spreading out vaccination schedules, feeding more energy feeds during cold or wet weather, and taking special care during weaning and giving birth will limit stress on your livestock.

- Isolate newly purchased animals from other livestock for three weeks. Also, separate sick animals from healthy ones. In each case, isolation pens should be several feet from other livestock so disease cannot be transmitted by contact. In addition to providing adequate housing and shelter from the weather, avoid overcrowding in pens and lots. Above all, maintain herd sanitation and cleanliness.
- Test the nutrient content of your feed each time you change your grain

ration or roughage. It pays not to guess. Supplementing feed correctly not only improves feed efficiency, but prevents disease setbacks.

- Set up a parasite control program. Check feces for internal parasites like worms and provide lice and fly control. Also, establish a vaccination program, but don't rely on it, drugs, and sprays alone to keep your livestock healthy. At the same time, enlist the help of your vo-ag teacher, county agent, and veterinarian. Their knowledge will help you plan a complete herd health program.
- In your long range planning consider breeding a healthy herd. Healthy animals—whether horses, cattle, sheep, hogs, or poultry—are the sum total of heredity plus environment.

Complete management is the basis for herd health. By becoming aware of the management problems facing you, you can prevent disease and increase production. Begin to think of disease as a result of many factors and correct as many as possible of the unfavorable ones with total health management.

Daily inspection of livestock is part of a total health management program. Northwest Steel Photo





Today's Army wants to join you.

We know you have pride in yourself and in what your Country can be.

We know you have a brain and your own ideas.

We know you'd like to share these ideas with hundreds of young men and women from all parts of this Country.

We know you'd like to build your mind and body.

We know you'd like to further your education, become expert at a skill, have opportunity for advancement, travel, and 30 days vacation a year.

We also know you put a price on these things. The price is your individuality. And you question the Army's

willingness to pay this price.

Today's Army is willing to pay this price.

We're committed to eliminating unnecessary formations, skin-head haircuts, signing out, signing in, bed checks, and "make work" projects. You'll find more mature personnel policies at every level.

If you'd like to serve yourself as you serve your

Country, Today's Army wants to join you.

Army Opportunities Dept 200, Hampton, Va. 233	69	Date	
I want to know more about th	e opportunities for	me in Today's Army	2NFF10-71
		Date of birth	
		Date of DIFTH	
City		County	
		Phone	

HE future of two Indiana brothers looked hopeless when their father Mr. David Reinhard died in 1964, following the loss of their mother in 1961. But Max, then 19, and Dean, at age 12, liked farming and vowed to stay on the farm. Today they are milking a 50-head cow herd on a 50-50 partnership basis.

In 1964, the two brothers sat down and took inventory of their situation. Max was through high school and began to put his vo-ag training and FFA experiences to use in managing the farm.

Max, left, and Dean proudly display a sign advertising their registered hogs.



Dean was still in the grades, and his older brother promised to see him through high school.

He kept his word. As Dean progressed in high school he became more and more prominent in FFA work. He served as vice president and president of the Monroe Chapter at Adams Central. He also worked as secretary and treasurer of his FFA district.

Finally, in 1970, Dean was named Indiana Star Farmer. Dean expects to go on to agricultural college for additional training.

Over the years Advisors Martin Watson and Bill Kipfer conferred with the two brothers on which varieties of corn, soybeans, oats, and alfalfa to raise. They helped them analyze their soil testing results and in determining their fertilizer needs. Max and Dean further consulted with their vo-ag instructors about practices used in feeding, breeding, and culling of their cattle.

The Reinhards now farm 320 acres. They own 200 acres—having recently bought 80 acres—and rent the balance. Last year they raised 140 acres of corn, 30 acres of oats, 75 acres of soybeans, and 20 acres of wheat. The remaining acreage was hay and pasture.

Max and Dean are averaging just under 15,000 pounds of milk per cow using a milking parlor system. They **Brothers**

A vow leads to success,

have their own herd sire and about 40 heifers and calves.

In addition, the brothers raise registered Yorkshire hogs. They have shown for a number of years at local and state fairs, winning numerous prizes. They keep about a dozen sows and sell registered gilts and boars to breeders from far and near.

On top of that, Max and Dean took care of the housework, doing their own cooking, baking, cleaning, canning, and even froze their own strawberries. Other than a neighbor woman who came in once a week to wash and iron for them, they did the rest.

In the future Max, who was married last August, and Dean will be expanding their milking herd and will build another large silo beside the 16 x 60 foot silo they constructed three years ago.

HE "little experiment station" is the tag given to an FFA chapter farm in Clinch County, Georgia, by many residents.

"There were some members in the chapter who lived in town and wanted swine projects but didn't have a place to keep their animals," says vo-ag instructor Billy Tinsley. "As a result, the chapter farm was established to give these members a place for their projects and as a place to keep chapter animals." Two acres of land was made available to the Homerville FFA by a local citizen. This land is used for a chapter swine operation and has been turned into a real showplace farm.

The entire operation was planned and built by the FFA'ers. They built all of the pens, farrowing house, equipment house, feeders, waterers, and a hog loading chute.

The hogs owned by the FFA chapter are used for demonstration on showman-ship, fitting and feeding, and as a money-making project for the chapter. "We sell the crossbreds to the farmers in the community at a minimum cost to help improve swine production in the county," explains Mr. Tinsley. The barrows are also sold and the money is used to improve the swine operation and for other chapter activities.

Operating A Swine

While learning these members help local farmers, too!

The Clinch County farm is known as a "little experiment station" because the members experiment with feeds and different types of waterers, feeders, and other equipment in every pen. They sometimes get new ideas from livestock and farm magazines.

Because the land on which the swine operation is located does not belong to the chapter, as much of the equipment and shelters as possible have been made portable in case the operation needs to be moved.

The swine farm has a two-stall farrowing house, a well stocked supply room, and a feed and show room. The chapter buys the feed already mixed for the animals, but the members are now in the process of building a larger feed room. In addition to the pens, waterers, and feeders, all of which are built in the vo-ag shop, the FFA has a stationary loading chute, some portable hog scales, and a one-ton truck. Moreover, the students have made and sold some concrete waterers and barrel-type self-feeders to farmers.

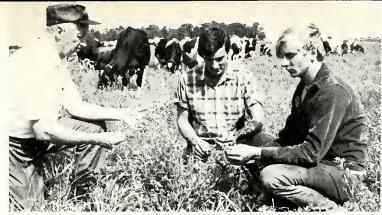
"Most of the work is done by third and fourth year students," explains Advisor Tinsley. "However, each class spends time at the farm and is responsible for various operations."

First and second year vocational agriculture students are taken to the farm and taught how to select an animal and to feed and fit one. Other students use the facilities for getting their animals ready to show.

What has been the results of the hogs fed out on the FFA farm? From one litter they had an average of 77 pounds per pig at eight weeks and 110 pounds at ten weeks. Last year the chapter earned first place in the Moultrie Pig Chain Show and had the grand champion gilt and reserve champion boar.

Pull Together

By Simon Schwartz



On one of Advisor Martin Watson's visits to the farm he joined Max and Dean in checking their alfalfa and bromegrass pasture.

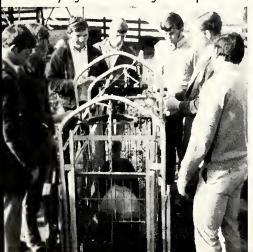
Dean is making repairs and adjustments on the corn picker prior to harvesting.



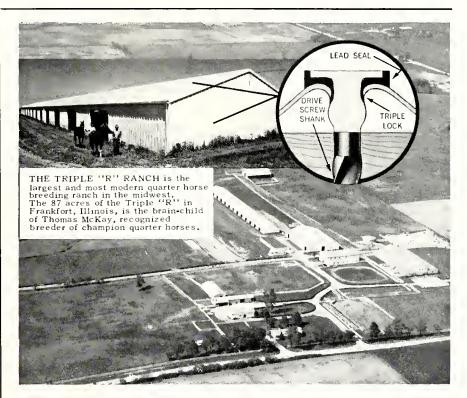
Station

By Eleanor Gilmer

Chapter members built a hog scale for studying swine management practices.



October-November, 1971



TRIPLE"R" used TRIPLE-LOCK*

*TRIPLE-LOCK LEAD-SEAL NAILS

Tom McKay's Triple "R" Ranch recently added another stable to its quarter horse empire. The 685'long and 56' wide wood frame structure with colored sheet metal walls and roof has 80 stalls.

The three-way protection of Deniston Triple-Lock Lead-Seal Nails offers leak-proof results so the Triple "R" used the Triple-Lock* exclusively.

Specifications for Triple-Lock Lead-Seal Nails include the screw or ring type shank which holds firmly when driven in wood. The bump located beneath the nail head, is driven through the metal surface and then the metal springs back over the bump. This prevents the nail from working free of its hold. The lead portion of the nail plugs the hole and bonds itself to the roof. The results are permanent—moisture can't penetrate!

Your customers will appreciate these qualities and you'll appreciate those sales. Send for Bulletin No. 750 for further information.

Deniston Company

3667 West 127th Street, Chicago, Illinois 60658 Our nails are manufactured from American made steel.



Agri-Emphasis: Livestock

He Wants To Be A Farm Manager

And working on this large beef operation he is reaching his goal while attending college.

E now works as an assistant beef farm manager on his eldest brother's farm near Winfred, South Dakota. Besides working on the 400-feeder, 180-cow setup, he is studying agricultural education and animal science at South Dakota State University.

To Ronald Lewis, one-time Williston, North Dakota, FFA member, this opportunity is the peak of his success so far. His story goes like this.

"While in grade school, our mother passed away. Because of our large family (17) many of us were taken to live with relatives. Vicki, my youngest sister, and I went to live with our aunt and uncle on their rented farm," recalls Ron. "There I attended Williston High School and became active in FFA."

On his uncle's grain and livestock farm, Ron learned to operate various types of machinery while planting, cultivating, summer fallowing, having, and harvesting. He also worked for several neighbors doing jobs like harvesting sug-

Ron can weigh up to 26,000 pounds of cattle, silage or grain on this scale.



Ron records the amount of feed and protein fed to each lot for the purpose of later comparing costs to gains.

ar beets, irrigating crops, plowing, leveling land, and packing trench silos.

With the guidance of Advisor Verdine Rice, Ron served as chapter treasurer and president of the Williston FFA. He won the state proficiency award in electrification and the regional Placement in Agricultural Production honor. Later, he served as state secretary and delegate to the National Convention.

On entering North Dakota State University, Ron joined the collegiate FFA and served as reporter. He worked as a counselor at the state FFA convention.

While attending college the agriculture student worked in the agronomy department. He assisted with barley research, disease testing programs, and culturing of leaf hoppers and aphids. Furthermore, he helped with the washing, bagging, weighing, and storing of sugar beets, and he helped with the planting and watering of test crops.

In the meantime, Wesley, his oldest brother, bought the home farm from their father who works as a carpenter and lives nearby with the rest of the Lewis family. His brother offered Ron a job on the feeding operation which turns out 800 head annually, and Ron began working part-time while attending college in North Dakota.

Upon receiving an associate degree at North Dakota State, Ron transferred to South Dakota State University; thus permitting full-time work on his brother's farm. And Ron's interest and enthusiasm in cattle management has benefitted both of them. Wesley has a reliable assistant, and Ron has developed a herd of approximately 25 beef cattle.

"Advisor Francis Murphy of Lake

Central FFA in Madison, South Dakota, has visited the farm and been most helpful. He has encouraged us and taken a keen interest in the beef cattle operation and in my own special enterprise," says Ron.

Much of the general maintenance and repair of the livestock equipment is done by Ron. He has full knowledge of welding techniques and uses them to build and upkeep cattle feed bunks, salt and mineral feeders, creep feeders, and waste handling equipment. His additional duties include checking automatic waterers containing medication and maintaining feedlot and pasture fences.

The assistant beef manager identifies health problems, assists in buying and selling cattle, and oversees many of the artificial breeding and pre-conditioning responsibilities. He has helped construct a farm scale for the weighing of feed, weighing cattle at 60 or 90 days to determine gain efficiencies, and helps keep records on these figures and costs.

"I am impressed with the obstacles that Ron has overcome in order to continue in agriculture," says Lake Central Advisor Francis Murphy. "Many a young man would have given up were he not so dedicated to the profession he holds so high in his sights.'

Don Ericson, North Dakota State FFA Advisor, makes a similar comment about Ron, "This is a very outstanding young man whose record of success in the face of seemingly impossible obstacles is amiable."

No matter what agricultural occupation you're interested in, Ron Lewis' story should be an inspiration for you to succeed.



Rate of gain and breeding records have meant increased profits for Dennis. His office is in his home.

Getting Ready for the Future

To Dennis O'Nan this means leadership experiences as well as agricultural training.

By Betty Rich

believe the FFA provides the foundation for a young man who plans to go into agriculture. I know it has in my life," states Dennis O'Nan of Sturgis, Kentucky.

Dennis is now president of the Kentucky FFA Association. Last year he was president of the West Kentucky FFA Federation and before that was the first junior ever to hold an office (vice president) in the Federation.

Dennis, a member of the Union County Chapter at Morganfield, began FFA by serving as president of his freshman agriculture class. He was also the first runner-up in the state creed contest that year. In both his sophomore and junior years he participated in the state public speaking contest, and previously Dennis served on the state nominating committee.

In 1969, Dennis attended the Kentucky FFA Leadership Training Center at Hardinsburg. At the center he was on the camp council and received an outstanding leader award. Later, under Dennis' presidency of the Union County Chapter, the parliamentary procedure team received a superior rating in the district competition for two years.

The young leader participated in tractor driving contests, showing livestock, welding contests, livestock judging, chapter music, impromptu speaking, and record contests. Recently, Dennis had the degree of Honorary Kentucky Commissioner of Agriculture conferred upon him by the state commissioner.

Dennis believes involvement is the key to success. "I don't think students look at FFA members as farm boys who are just concerned with livestock and growing crops today. They consider them as involved young men, ready to meet tomorrow's challenges," holds Dennis. "Through this program I have obtained leadership abilities and living insight."

Beginning his farming program at the age of ten, he received a purebred Angus heifer as a gift from his father for helping during corn harvest. With the guidance of Advisors Ralph Alexander and Champ Rushing, his farming program has been expanded to 8 purebred Angus cows, 6 Angus heifers, and 3 Charolais heifers. Dennis is also feeding out 25 feeder steers on silage, shell corn, and protein block supplement.

Dennis, who helps farm 1,300 acres with his father and brother Dana, receives ½ interest in the 250 acres of corn, 180 acres of milo, 150 acres of wheat, 25 acres of barley, and 13 acres of soybeans. He says they added milo this year because of the blight's effect on their corn crop.

Dennis and his two brothers do most of the farm work, with the help of one full-time hired hand. All the while, his father runs a construction crew and manages the Gulf Farm Centers in the Sturgis area.

Recently for herd improvements, the O'Nans started artificially breeding select Angus cows to Simmental bulls. Dennis reports, "We have 8 calves on the ground and have 35 cows bred. We really like the calves we do have and their growth is tremendous. We're sold on artificial breeding."

Having completed an American Breeders Service School on artificial insemination, Dennis is a qualified technician. He believes being able to breed their own cows will improve their conception rate, as well as being a savings to the farm.

Dennis spends his leisure time doing all types of outdoor sports and riding his mare or gelding. However, even riding is a part of his work as he uses the horses in herding or rounding up calves. When the opportunity arises and the farm work is caught up, Dennis enjoys water skiing. "Having a farm background, I enjoy almost any type of outdoor activity," Dennis says.

In his school and community Dennis

is vice president and program chairman of his church's youth fellowship, and he is president of the Union County High School Student Council. Previously, he served as junior class president. While carrying a 93 scholastic average Dennis was also an active member of several academic clubs. He has since been enrolled in the National Society of Outstanding American High School Students and selected as an Outstanding Teenager of America.

Moreover, Dennis lettered three times in track and varsity football. He was co-captain of the varsity football squad and has received two most valuable player awards in individual games.

In the fall, Dennis plans to attend the University of Kentucky and major in agriculture. After graduation he hopes to return home to Sure-Green Farms to carry on the farming operation with his father and brothers.

Dennis is removing an ampul of semen from his nitrogen semen storage tank.



Step into your future

XHIBITS depicting career opportunities in agriculture will be on display at the FFA Agricultural Career Show to be held in conjunction with the forty-fourth National FFA Convention in Kansas City, Missouri.

As FFA members tour the display area, they will see exhibits about agribusiness careers and talk to professional people who are involved in a wide range of agricultural businesses. This year 32 trade associations and professional societies will exhibit at the show, says Manager of FFA International Programs Lennie Gamage, who is in charge of the career show.

Besides preparing an exhibit which graphically depicts jobs related to the activities of their organization, each exhibitor provides personnel to answer questions and furnishes printed information relating to the careers they are promoting. A brochure listing each exhibitor and his address is provided to each person attending the show. The exhibiting organizations urge members, advisors, and school guidance counselors to contact them for educational and career materials which they publish.

Beginning on Tuesday, October 12, the career exhibits will open at 1:00 p.m. and close at 5:00 p.m. The career show will be open from 8:00 a.m. to 5:00 p.m. on Wednesday and Thursday. "The career show is a very popular educational feature at the Conven-

FFA members obtain career information from personnel working in agribusiness.



tion," says Mr. Gamage, "and those who attend the convention will not want to miss this year's career show."

Following their tour of the exhibits, FFA members can learn more about career opportunities that interest them. At designated times throughout the career show, spectators will be able to see demonstrations and visual presentations provided by the exhibitors.

The Agricultural Career Show has been so successful over the last five years that most exhibiting organizations continue to come back each year. The show was initiated six years ago as a means of keeping students and teachers of vocational agriculture aware of the wide variety of careers now open in agribusiness and natural resource related occupations. The 1971 version will again provide FFA members with the opportunity to "Step into their future."

Handbook on Careers

The second edition of the Handbook of Agricultural Occupations, especially written for high school youth, presents the broad picture of careers available in agriculture. The 385-page book expands on almost all careers imaginable at all levels—including skill, technical, and professional. It was written by Norman K. Hoover, Associate Professor of Agricultural Education at Pennsylvania State University.

The up-to-date book presents descriptions of 82 typical off-farm agricultural occupations, most of which do not require a four-year college degree. Included, too, are discussions of over 70 on-farm careers, a student self evaluation, and other suggested items to be considered in choosing a career.

A list of films emphasizing on-farm and off-farm agricultural occupations, the names and addresses of film libraries, and a list of reference materials make the book valuable for use in classrooms and at chapter meetings. Besides being almost completely rewritten, the new edition's value is further enhanced by a teacher's guide prepared by Dr. Hoover and Carl E. Herr, the agriculture instructor at Lower Dauphin High, Hummelstown, Pennsylvania.

The 6 x 9 inch casebound book lists for \$5.95, less educational discounts. *Handbook of Agricultural Occupations* is available from The Interstate Printers and Publishers, Inc., 19-27 North Jackson Street, Danville, Illinois 61832.

Environmental Jobs

Opportunities in Environmental Careers, the first comprehensive book covering the vocation, predicts that environmental jobs will increase from 656,000 in 1970 to about 1.2 million by 1980. The book analyzes five areas of environmental management—ecology, earth sciences, resources and recreation, environmental design with architecture, and environmental protection including public health and pollution control.

The vocational guidance manual contains specific help for high school students in designing a curriculum of undergraduate or post graduate environmental studies. For each field of environmental management the author defines terms, describes scope, lists major activities, discusses functions of specific jobs, describes the general career ladder, enumerates education, gives names and addresses of 175 leading colleges, generalizes earnings and working conditions, and lists additional references.

Opportunities in Environmental Careers, which was published as a feature of Earth Week 1971, comes clothbound with dust jacket at \$5.75. It is available in book stores or by mail from the publisher, Vocational Guidance Manuals, 235 East 45th Street, New York, New York 10017.

More Career Information

Agriculture: Should You Go into Agriculture? Single copies free, bulk rate \$2.50 per hundred copies, from Career Information Service, New York Life Insurance Company, Box 51, Madison Square Station, New York, New York 10010.

Zoology: Careers in Animal Biology. Single copies free, quantities \$10.00 per hundred copies, from Mrs. Mary Wiley, American Society of Zoologists, California Luthern College, Box 2739, Thousand Oaks, California 91360.

Botany: Botany as a Profession. Copies 25 cents each as long as present supply lasts, from Office of the Secretary, The Botanical Society of America, Department of Botany, Rutgers University, New Brunswick, New Jersey 08903.

Range Management: Careers in Range Science and Range Management. Two copies free, ten copies \$1.00, 11-20 copies \$1.50, beyond 20 copies 5 cents per additional copy, from Executive Secretary, Society of Range Management, 2120 South Birch Street, Denver, Colorado 80222.



Here's how Santa Fe is ready to do the big job for you

Take grain for example. We just added 1,300 new 100-ton covered hopper cars, bringing our total number of these giant covered hoppers to almost 10,000 cars.

But, grain cars are only a small part of Santa Fe's freight fleet. We have thousands of other types of cars, specially designed to meet the many specific requirements of our shippers —more than 77,000 cars traveling nationwide, moving commodities from coast-to-coast.

We have folders describing all Santa Fe freight cars. Just ask your Santa Fe Sales Representative for a set, or write Dept. 333, Santa Fe Railway, 80 E. Jackson Blvd., Chicago, Illinois 60604.

Santa Fe - for total service

moving by rail, truck, air freight, pipeline and land development



Support ASTRO: a sound transportation plan to meet tomorrow's needs



"I want to express to you my appreciation for what you are," said the President. "You represent the heartland of America."

ACTION TIME!

That's what FFA state officers experienced at the State Presidents Washington Conference.

By Ron Miller

Conference participants saw the inner city community recreation programs.



HAT a week of experiences to take home with me!" exclaimed one state officer attending this summer's State Presidents Washington Conference.

Training sessions, workshops, committee reports, question and answer sessions, ceremonies, political celebrities, and tours filled the week with action for the 74 conference participants. Each state officer will remember different events better than others. But a few stand out in the minds of all.

Training sessions led by national officers on topics such as "The Kind of Leading That Matters," "Impressions Are Lasting." "Preparation—Key to Success," "The Role of A State FFA Officer," "How to Inspire Your Fellowman," and "How to Be Optimistic" will influence the activities of the state presidents throughout the year. A tour of the National FFA Center and a question and answer period with program development, supply service, and magazine personnel helped them learn more about FFA at the national level.

State officers also had the opportunity to chair committees, sit in on panels, emcee programs, and lead discussions. Workshop topics included convention and meeting planning, member involvement, publicity, various ceremonies, and other special FFA programs. In addition, they exchanged ideas about FFA programs carried on in their states.

Besides learning more about leadership in the FFA the state officers promoted FFA and vocational agriculture to their Representatives and Senators. Individually, they visited elected leaders

The National FUTURE FARMER

from their home state and distributed a packet of information about the FFA and agricultural education. Prior to this, the state officers hosted their Representatives and Senators at a congressional breakfast. Here host and guest alike became more informed on the eight study areas in agricultural education via a slide presentation narrated by the national officers.

At the breakfast, Representative Paul Finley of Illinois stated the sentiments of his colleagues. "What is it that makes FFA members so outstanding? I believe it's that every FFA member is challenged to do a better job in his agriculture pursuit, thus challenging old habits and old procedures."

Every state officer at the conference will remember his visit to the White House. Besides getting a tour of the gardens and the many rooms in the White House, they met the President of the United States. In an informal talk to the state FFA officers President Nixon stated, "The real test of young people now that America is rich and prosperous is to maintain character and strength in themselves. Your organization, the FFA, represents the real strength and character of this nation." In closing the President said, "Not everyone gets to come into the Cabinet Room, but I would like to make your tour a very special one. Now I want you all to go into my office because some day one of you might be sitting there."

Next year you may well hear your state president tell you about his bus tour in the inner city of Washington, D.C. Mr. Curtis Taylor, Office of Youth Opportunity Services, District of Columbia, gave them first hand answers to the challenges facing urban centers. Conference participants learned how community and youth programs in Washington—like the ones conducted in major cities of their states—are operated.

They visited a lunch program site funded by the USDA and had a question and answer session with the food station manager, dietician, and service personnel. At one stop, the FFA officers witnessed inner city youngsters learning football, baseball, swimming, and dancing from older students and coaches. On another site rehabilitated by inner city youth, the FFA officers talked with children engaged in dancing, swimming, and driving cart horses.

Representing Secretary of Agriculture Clifford Hardin at the premiere showing of "Building Our American Communities," a film produced by the USDA was Mr. William Galbraith, USDA Deputy Under Secretary of Congressional Affairs. He told the state officers, "If we want to talk about beautifying America we've got to start with the person. To me this group present here this morning and those that belong to the membership in your states are the



State officers distributed an FFA public relations packet to their Congressmen.

representatives of the true America."

On Capitol Hill the state and national officers also attended a luncheon with the Senate and House Agriculture Committees. Jerry Baldree, president of the Berrien, Georgia, Chapter, was on hand to explain what their chapter is doing to improve rural America. In his talk he said, "Berrien County has educated us, has trained us to be concerned, and given us the best it has to offer.' He went on to stress, "Rural America has long subsidized urban America with its educated young people. We have no desire to migrate to the urban areas of this nation, to add to their crowded problems, to be packed in the apartments of large cities. Help us gain opportunities and we will make our own security. We are eager to help."

While sightseeing conference participants witnessed a spectacular program about the history of the American Flag beside the Jefferson Memorial. Later, the national officers led a wreath ceremony at the Tomb of the Unknowns,

and the FFA visitors saw a patriotic program at the Iwo Jima Memorial.

The conference banquet featured a talk by Dr. Sam D. Proctor, Professor of Education at Rutgers University, and singing by the state winning Oak City FFA quartet from Bethel, North Carolina, who also performed at the congressional breakfast and luncheon. State officers began each day with a flag raising ceremony and closed the conference with a vespers program on the banks of the Potomac River.

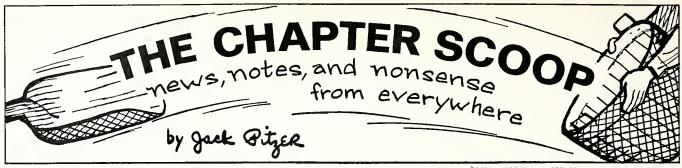
Summing up the conference one FFA officer quoted, "This leadership training is sure a good way to kick-off a year as state president."

"Seeing President Nixon and going to Washington's inner city really made an impact on me," remarked another.

A list of their impressions about the Washington Conference could go on and on. But, as they make their travels throughout their respective states, you will be hearing first hand about their experiences in the Nation's Capital.

Selections by the Oak City quartet entertained the audience at the luncheon.





Beaverhead FFA at Dillon, Montana, reports that past Maryland State President Gary Hubler is getting plenty of first hand ranching experience. Gary contacted several western state FFA associations and chose to work for a rancher near Dillon to see how he'd like a ranching career.

Orange beats red for hunter safety. Proven by U.S. Army and others. Wear hunter orange.

Gerald Johnson, Randall Swan, Kevin Farr, Mark Joosten, Duane Van Keulen, Dennis Van Keulen, and Mike Wreath, all *Balaton*, Minnesota, FFA'ers, helped unload and reload Blood Mobile on its visit to town. Too young to donate, but not to help.

The best FFA judging team at National Angus contest was Caledonia, Mississippi. Terry Loftin, Sam Darrell, Lonnie Atkins, and Terry James.

Kevin Smith, Robin Hawkins, and Robert Apple took team honors at Illinois Hereford field day for Oakland.

Is there a vocational printing class available to help your chapter?

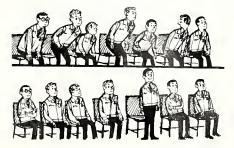
Programs for Ohio FFA Convention made it on time because two advisors delivered them by private plane.

Chehalis, Washington, annually presents outstanding wrestler of their school the "Mr. Hustle Trophy."

N.N.N

Every year *Granton*, Wisconsin, presents each mother a dozen gladiola bulbs. It means flowers all summer.

Dads and lads—hearing about several chapter trips where Dads are invited too.



Dan Miranda won Best Informed Greenhand contest in *Ceres*, California, FFA. He was last one left standing in true-false quiz session.

Rogersville, Missouri, FFA won the local Kiwanis Club \$100 award for the planting most wildlife food plots.

Don't forget about those members who graduated but still can contribute to the chapter.

Rifle, Colorado, FFA takes an annual fish and pack trip into the Rockies.

Chapter reporter of *Hessmer*, Louisiana, writes, "We went to Astroworld in Houston for our summer trip."

And Bainville, Montana, plans to sponsor an old-timers dance. Wonder if it's for older people, former members, or just old-style dances???

N-N-N



Received a clipping about a pullet owned by **Stephen Carlisle** of *Palacios*, Texas. She didn't place at the show but laid a three-yolk egg.

Stigler, Oklahoma, claims the smallest president. Larry Clark is 4'7" and weighs 87 pounds.

FFA'ers and local citizens joined forces to make cement floors in 120 pens for *Hampton*, Iowa, fair. Project lasted over three years.

James Edens and Richard Hume from *Greenbrier West* Chapter in West Virginia attended state leadership camp at Cedar Lakes.

Will your chapter's officers take advantage of some extra leadership training? Some chapters host training sessions for all club officers in school.

Lake Stevens, Washington, Chapter hosted judging demonstration contest with fitting and showing demonstration for new members of FFA and 4-H.

Carl Myers, Newberg, Oregon, received Sportsmanship and Citizenship award from state Broadcaster's Association. Based on action during state fair.



Mazeppa, Minnesota, Chapter rented 39 canoes and went 15 miles on local river. "We invited some girls along and everyone had a good time."

"Our chapter has 17 pairs of brothers and 1 brother and sister." *Calmar*, Iowa.

Middlebury, Vermont, FFA is cooperating with the local garden club in replacing trees that are taken down in their community.

Pheonix, Oregon, FFA worked at a state pistol and rifle association meet. They set skeet, scored, and pulled trap.

Pierceton, Indiana, reports a broken leg and a broken arm at last two meetings. Some parliamentary procedure!

One of top buyers at Berkshire gilt sale at Pennsylvania Farm Show was Manheim Chapter. Bought two.

Cathy Young, Fredericktown, Missouri, Chapter, won All Around Camper at FFA leadership training camp.

Brad Cox reports that Newman Grove, Nebraska, appeared on local TV station. Promoting observance of farm safety week.

Geddes, South Dakota, FFA took first prize in parade with "Ram The Wildcats" float. Float had two garden tractors—one decorated as ram and one as wildcat.

Members will wear jackets and ties as admission to *Thoreau*, New Mexico, Chapter sponsored holiday dance. Have their own FFA band.

Paul Beckman, Weiser, Idaho, one of Union Pacific's fiftieth year scholarship winners. His father Fred, who is advisor, won one in '45.

What did your chapter do during the summer to keep members involved and make the chapter run smoothly? Share the wealth with other chapters.

David Smith holds the record carp he bagged with his bow and arrow rigging.

VEN in Texas where things reputedly grow bigger, 40-pound carp and 100-pound gars are not exactly commonplace. So the 41-pound, 12-ounce carp caught near Austin (by David Smith) and the 5-foot, 11½-inch alligator gar, weighing something more than 100 pounds taken near Port Arthur (by Max Greiner, Jr.) were significant because of mammoth size, if nothing else. Yet they also were newsworthy in that they were not caught in the popular usage of the word; they were shot with bows and arrows.

Bowfishing, as it is called, is challenging sport which is widely available. Rough fish like carp and gars literally are everywhere.

If you think fish react violently to a hook, try stabbing one with a sharp arrow point. I've seen brute carp take off like jet-powered locomotives, stringing plumes of mud-stained water behind, and gars that cleared the surface by two feet with frantic leaps.

Although rough fish can be sought

Carp can be hunted in shallow water when they come to spawn in the spring.



The Fish You Hunt

By Russell Tinsley

with bow and arrow practically anytime of year, the optimum period for carp is spring, March through early June (depending on the locale), when fish gather in shallow coves and sloughs to spawn. Gar, on the other hand, are most vulnerable during the hot summer months, as they surface to gulp air.

Hunting Carp. When carp are spawning they can be seen wallowing in water not deep enough to cover their backs. The bowman can wade and hunt, but he must walk gingerly, sliding his feet. for the fish are extremely spooky in shallow water.

The closer the shot the better, particularly if the arrow must pass through water before reaching the target. Water creates considerable resistance, slowing the projectile and reducing its penetration power.

At other times of the year carp are best hunted at night with a light. As they move into shallow water, over sandbars and sandflats, the fish will rise to near the surface, feeling secure with the protection of darkness. Most people hunt in pairs, one holding a light attached to a 12-volt battery, the other standing ready with bow and arrow; but it is possible to tape a light to the bow where the archer hunting alone can handle everything himself.

Surfacing Gar. Gars also are susceptible at night and my favorite spot is just below a dam where gars, moving upstream, gather in abundant numbers. One such place is Dardanelle Dam in central Arkansas. Gars mill and feed in the Arkansas River just below the huge concrete structure, big and little gars rolling everywhere on the surface. During the day they might just show for a split-second as they roll, but at night they remain near the surface, clearly visible, eyes shining in the bright light.

The fish also congregate in huge schools on man-made impoundments during the summertime. On Lake Marble Falls, near my central Texas home, friends and I often boat on hot summer days, watching infinitely for a group of surfacing gars. Then we sneak close

(Continued on Page 35)



FFA IN ACTION

New National Contests

Two new contests have been approved by the National FFA Board of Directors and the National FFA Officers. Beginning in 1972 or when funds are available, contests in agricultural mechanics and ornamental horticulture will be held for FFA members at the National Convention, along with the five current contests.

Starting in 1971, Oscar Mayer and Company, Madison, Wisconsin, will sponsor the Meats Judging contest at the National Convention. Thus, Meats Judging becomes the third of five contests to be sponsored by agricultural businesses. Dairy Products and Dairy Cattle Judging contests are to be co-sponsored this year by Associated Milk Producers, Inc. of San Antonio, Texas, and Mid-America Dairymen's Association, Inc., Springfield, Missouri. Sponsored contests are under a signed agreement with the National FFA Foundation.

Farm Safety Slides

Cooperating with the Iowa Highway Patrol, the Hampton Chapter helped develop a slide series on country road safety. The set of slides deals with legal and operational aspects of farm tractors and machinery. The visuals will be distributed state-wide for use in driver training classes, adult driver groups and vo-ag farm safety classes.

Hampton Chapter members cooperated in setting up about 30 situations concerning tractor and machinery highway safety. With a patrolman and FFA members as subjects, slides were taken of the "Do's" and "Don'ts" in farm safety.

The Hampton Chapter coordinated this activity with Farm Safety Week, July 25 through 31. In addition, the chapter plans to make "Slow Moving

In one of the slides a patrol officer and FFA'ers show how to display SMV's.



Vehicle" signs available to farmers at cost this fall, and conduct their annual corn harvest safety program. (David Flint, Advisor)

Young Farmer Institute

Approximately 550 Young Farmer delegates and guests will participate in the fifth National Young Farmer Institute, November 28 to December 1. The South Carolina Association of Young Farmers will host the Institute at the Jack Tar Poinsette Hotel in Greenville.

Institute highlights will include slide presentations and discussions of Young Farmer activities, agricultural public relations, and tours of Young Farmer operations in the Piedmont area. Tour stops will feature modern poultry, beef, and swine operations. The Institute will be sponsored in cooperation with agribusiness firms in the state.

The Institute began in 1967 when a small group of Young Farmers met to exchange ideas. It has grown each year and the fourth annual meeting at Wichita, Kansas was attended by some 450 delegates, representing 22 states. Previous Institutes were held concurrently in Ohio, Texas, and Pennsylvania.

Aggie Awards Program



A.GR. GULTURE U.S. A.

National Vice President Dan Dooley appeared on the annual Aggie Awards program. He is shown with John Stearns, host of the national Agriculture U.S.A. show, a weekly public service series. Also appearing on the show was 1970 Star Farmer of America Merrill Kelsay.

Working Together

In Anderson, California, the Young Farmer chapter sponsors a rodeo and the FFA chapter puts it on. The activity provides members with experience in organizing, financing, promoting and increasing FFA membership.

The rodeo draws about 125 contestants from the area between Sacramento, California, and the Oregon border. A maximum of 20 compete in bareback riding, 20 in bull riding, 10 brone riding, 20 calf roping, 40 as team ropers, 15 in barrel racing, and 15 in goat tiers.

The Young Farmers provide organizational insurance for the event. In addition, contestants and contractors buy their own insurance. Local merchants donate buckles as prizes, and individual citizens help out as announcers, secretaries, timekeepers, judges and pickup men. (Jim Thomas, Vice President)

First State FFA Alumni

Kansas became the first state to charter an affiliate FFA Alumni Association. With past officers taking the leadership role, organization ceremonies took place in Manhattan, on July 12.



Chairman Lauren Libby, left, received the charter for the Kansas Alumni from Administrative Secretary Jay Benham.

On August 6, Louisiana became the second Alumni affiliate to be chartered. The third state to affiliate was Indiana on August 23. They were followed by Ohio FFA Alumni which was chartered on August 27. States affiliating prior to the National FFA Convention will receive the official charter from Alumni Chairman Gus Douglass at the Convention, October 14.

AIC Conference Held

Four FFA chapters won national honors and 18 received state recognition at the Summer Institute of the American Institute of Cooperation (AIC). The event was held August 1-4, 1971 at

(Continued on Page 37)

The Fish You Hunt

(Continued from Page 33)

and bombard them with arrows, and sometimes we even hit a few. I've killed river gars simply by walking the bank and looking for surfacing fish.

Equipment. No elaborate equipment is necessary for bowfishing. Any ordinary hunting bow will suffice, but it should be at least 45-pounds pull (poundage required to draw a standard 28-inch arrow full length), preferably even stronger. The more pounds of pull the better to get extra penetration through the water and into the fish.

A bowfishing kit composed of an arrow, harpoon point, reel, and line sells for about eight "bucks." The reel is drum-shaped, made of light metal or plastic, and the line is spun back manually after a shot. An alternative is to employ a closed-face spinning reel, set on free-spool where line will flow off freely when the arrow is shot; then to retrieve the archer just turns the handle as he would when fishing with rod and reel. It is easier to play big fish with a spinning reel, too.

The arrow is solid fiberglass, for more weight to get added power and penetration, and because of strength. A wildly thrashing or rolling fish will break a hollow fiberglass or wood arrow and will bend aluminum. Plastic or rubber vanes are used to stabilize the arrow in flight, rather than feather fletching, which quickly deteriorates in water.

The point, similar to a harpoon, will be retractable or removable. One model has two airplane-wing-like prongs that

Sports Cabinet

This three-way sports cabinet is adapted to storage of camping-hiking gear, hunting-fishing equipment, or for golf, ski, tennis, and ball equipment. Detailed plans are available for 10 cents from: American Plywood Association, 1119 A Street, Tacoma, Washington, 98401. Request plan number FW 65-350.





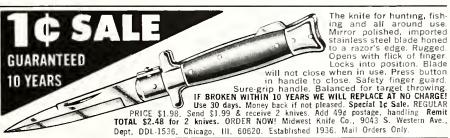
Harpoon barbs on the arrow point keep the fish from pulling the arrow loose.

fold down as the arrow passes through the fish, then pop open to prevent the point from slipping back through the hole. Another has rigid prongs, and the head must be unscrewed before the arrow can be removed.

About 50-pound-test monofilament is used to link arrow with reel, both to handle powerful fish and for pulling arrows loose from bottoms or snags.

Hitting a fish with an arrow is not as rudimentary as it appears, even for exceedingly close shots of less than 10 feet, due mainly to refraction. Light rays bend when they strike the water surface, making a fish seem closer to the surface than it really is. In water no more than six-inches deep there is no problem; the archer can aim directly at his quarry. But the deeper the water the more refraction, and the bowman must compensate by aiming below the fish. Just how much depends on the actual depth, which the bowhunter learns to judge through experience.

Bowfishing not only is fascinating year-around sport, it also is an excellent way of learning the fundamentals of bow shooting. The same style needed for competitive archery or bowhunting—a perfectly synchronized motion of draw, anchor, and release—is necessary for accuracy. And there is no worry about missed shots for the game is plentiful. Rough fish in one form or another are in astronomical supply.





Winterizing Your Tractor Helps

Proper care will save you time while cutting costs!

By Melvin Long

S your tractor ready for the cold weather ahead? Whether you plan to use the tractor regularly, or lay it up over winter, correct servicing now is essential if you are to obtain the best service from your tractor and keep future repair costs at a minimum. Here is a check list of the recommended servicing.

• Cooling system. Before adding anti-freeze, check for leaks around the radiator top and bottom tanks, in the radiator core, and around the hose connections. Anti-freeze is more difficult to "hold" than water, so if you've been "getting by" this summer with small leaks, better get them fixed before adding anti-freeze.

For fast warm-ups, install a new thermostat of the correct heat range for the type anti-freeze that you plan to use.

Also check the condition of the fan belt. Inspect the underside, as breaks generally show up there first. Be sure to adjust the fan belt to the correct tension as specified in your owner's manual.

It is also wise to remove the grille and clean out the chaff and dirt that has collected in the radiator core.

• Battery. If the battery is two or three years old, you will probably save yourself a lot of inconvenience by replacing it now. The chances are that you will have to do so anyway, some cold morning this winter. If your battery is not "overage," check and refill the liquid to its proper level.

An inexpensive hydrometer will enable you to keep a check on the state of charge. Clean up any corrosion around the terminals and tighten both connectors. A coating of vaseline or rubber cement will prevent further corrosion. Check to see if the battery holdown clamps are in place. The bouncing around received by an improperly secured battery will shorten its life considerably.

• Ignition. If you have used the spark plugs and ignition points all summer, they will need attention to insure easy starting in cold weather. Remove the plugs and have them cleaned with a sand blast cleaning machine. If the porcelain is not cracked, the plugs can be properly gapped, and reinstalled. Be sure to use new copper gaskets under the plugs.

If the ignition points are pitted, it's advisable to install new points and condenser. The timing should be checked after point installation. Your owner's manual should tell you how to do this. However, you may want to have this done by a mechanic.

Check over the general condition of the connectors, distributor, and spark plug wires. Any wires with broken insulation should be replaced.

• Air cleaner. After a dusty summer's use, the air cleaner probably needs a thorough cleaning. Remove the oil cup, drain, and clean with solvent or gasoline. Then, remove, disassemble, and clean the air cleaner body according to your tractor manual. Replace on the tractor, filling the cup with winter grade engine oil.



If you want your tractor to start easily and run smoothly on those cold winter days, you should service it soon.

• Fuel system. Remove and clean the sediment bulb, being careful not to lose the screen and gasket. When reinstalling, be sure that the screen and gasket are properly in place. Adjustment of the carburetor varies with the tractor, so consult and study your manual before attempting this job.

• Crankcase. Drain and refill with the recommended winter grade of oil. The best time to drain the crankcase is at the end of a day's operation, when the oil is hot and all the dirt is in suspension. It's also a good idea to replace the filter element when you change the oil. Be sure to add extra oil to allow for absorption by the filter. Also clean the crankcase breather cap by washing it in kerosene or solvent.

• Hydraulic system. Most hydraulic systems should be drained and flushed twice a year. Each spring and fall is a good time. After draining and flushing, refill with the recommended fluid.

The hydraulic systems on some tractors have a tendency to become noisy in cold weather. This happens because the oil will not flow into the pump fast enough in cold weather, resulting in the pump actually pumping bubbles of air. If your tractor does this, and the manufacturer lists SAE 10 oil as the proper hydraulic fluid, you can greatly improve the noise situation by substituting SAE 5W20 multiple viscosity oil in the hydraulic system.

• Transmission and final drives. The transmission and final drive cases should normally be drained, flushed, and refilled twice a year. Some tractors require a thinner lubricant in winter, so check your manual.

• Front wheel bearings. Most front wheel bearings need repacking with grease only once a year—under normal service. Since you're checking all the other items, this would be a good time to check for looseness in the bearings, and repack with the recommended grease.

• Brakes. This also is a good time to adjust the brakes to their proper tightness. To avoid dangerous side-swerves when the brakes are applied while traveling in road gear, be sure they are equalized.

• Nuts and bolts. A few minutes spent in going over the entire tractor, replacing any missing nuts, capscrews, or cotter pins, as well as tightening all the nuts and bolts, will oftentimes enable you to avoid many potential breakdowns.

FFA in Action

(Continued from Page 34)

Colorado State University, Fort Collins.
About 2,500 agricultural leaders, rural youth, and young farmers—including 300 to 400 FFA members—attended the annual AIC conference. They witnessed National FFA President Dan Lehmann addressing the general session, co-chairing the youth session, and serving on the selection committee for the Miss AIC Youth Scholar.

The national winners in the chapter cooperative contest were: Bloomer, Wisconsin, FFA; Prairie Heights Chapter, La Grange, Indiana; South Sumter Senior FFA, Bushnell, Florida; and the Wenatchee, Washington, Chapter. These winners shared the \$2,000 AIC award to attend the Summer Institute stressing the theme "Business Leadership."

Chapters receiving state plaques included: Eaton, Colorado; Cairo, Georgia; Sycamore, Illinois; Iowa Falls, Iowa; Hart County of Munfordville, Kentucky; Saline, Louisiana; Rockford, Michigan; New Ulm, Minnesota; Allentown, New Jersey; Ellicottville, New York; West Columbus of Cerro Gordo, North Carolina; Williston, North Dakota; Marysville, Ohio; Chestnut Ridge of Fishertown, Pennsylvania; Bowman, South Carolina; Warren County of McMinnville, Tennessee; Turner Ashby of Dayton, Virginia; and Greenbrier East of Lewisburg, West Virginia.

Testifies for Farm Credit



Greg Bamford, Haxton, Colorado, farmer and former national FFA president, appeared before a subcommittee of the Senate Agriculture Committee to testify for a bill to expand the lending services of the Farm Credit System. Greg was a member of the commission on Agricultural Credit, a panel of 27 credit and farm leaders whose proposals formed the basis for the bill approved recently by Congress.

Forestry Camps

Approximately 250 young men, mostly FFA members, benefited from forestry camps held in North Carolina, Tennessee, and Virginia. Another 250

attended forestry camps in Florida.

The camps are operated by several state forestry agencies and the Southern Forest Institute, with financial support from many pulpwood and paper companies in these states. Camps received extensive publicity in state papers and enthusiastic receptions from campers.

Grand Entry

During this year's July 4th celebration at the Buffalo Bill Stampede in Cody, Wyoming, 55 FFA members presented the Grand Entry.

With half of the members dressed in the official FFA jacket and the others wearing a blue FFA vest designed by the Cody Chapter, each member carried a flag as they performed the serpentine drill before some 5,500 people. Members carried the 50 state flags, plus the flags of Mexico and Canada, The Wild West Flag, the FFA Flag, and the United States Flag.

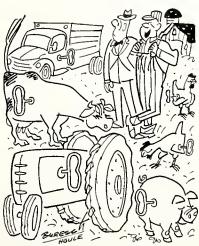
Forty-seven members from the Cody FFA and eight from the Powell Chapter were involved in the event. (Jim Facinelli, Advisor)

Forestry Special

A passenger train dubbed the "Forestry Special" carried more than 400 guests—including state officers of the Alabama FFA Association—from Montgomery to a forestry site near Banks, Alabama. There, they witnessed a program staged by Seaboard Coast Line Railroad (SCL) to bridge the environmental communication gap between the public and the forestry industry.

Bill Cofield, Alabama president, Frankel Hunnicutt, and Kenny Morrow, vice presidents, rode the train along with some 150 business, industrial, and political leaders. The guest list represented more than 120 businesses and industries from some 25 states and read like a "Who's Who" in U.S. enterprise.

Among the more than 1,200 people attending the event were: Alabama Governor George Wallace; William Gal-(Continued on Next Page)



"Mine is a highly mechanized farm"

Sure, you can buy welders for less money...and for even more money...but YOU CAN'T GET A BETTER WELDER VALUE THAN A LINCOLN!

Lincoln Electric, the world's largest manufacturer of arc welding equipment, builds welders to industrial standards in high volume. You get these unbeatable values:

- Longer life . . . some Lincolns over 50 years old are still going strong.
- Dependable service . . . get the job done right, and fast, every time.
- Easy to operate ... no spit, no sputter. Easy to start, easy to set controls.
- Versatile . . . weld sheet steel through heavy plate, cut, solder. Braze with the arc torch.



• Safe . . . built to conservative, industrial ratings.

COMPARE THESE VALUES

Only \$95 (Zone 1 list) for this 225-amp shop welder. Complete with accessories, electrode kit, power cord, instruction book.



Air-cooled engine-driven Weldanpower⁹. Goes anywhere, welds anything. 130 amps AC for welding, plus auxiliary power for fools. Zone 1 list price \$407.



Versatile, heavyduty Idealarc[®] AC or AC/DC welder. Range 30-300 amps. Single phase. Zone 1 list price (AC/OC) \$310.

(Suggested retail prices above are subject to change without notice. Optional features, taxes, local delivery and Zone 2 freight charges will after these prices.)

MAIL COUPON FOR FREE LITERATURE



	In Electric Co I, Cleveland,	
l am interested in □ Weldanpower 130 □ 225 AC shop welder □ Idealarc 250 □ Send free copy of Pocket Welding Guide.		
Name		
Address_		
City	State	Zıp

FFA in Action

(Continued from Page 37)

braith, Deputy Under Secretary of Agriculture; C. William Moody, state forester of Alabama; Fred Stines, chairman of the National FFA Foundation Sponsoring Committee and publisher of Successful Farming; and the Honorable William Dickinson, U.S. Congressman. More than 200 FFA members from across Alabama were in the audience.

During the four-hour program Bill Cofield presented an Honorary State Farmer degree to main speaker Mr. Henry G. Van der Eb, president and chief executive of the Container Corporation of America, for support to the FFA Foundation. President of SCL Prime F. Osborn, III, also received the Honorary State Farmer degree in recognition of SCL's 27-year history of sponsoring FFA forestry awards in the Southeast.

Other attractions included 15 actionpacked forestry demonstrations presented by leading corporations and government conservation organizations. They provided up-to-the-minute views of clear cutting, pesticides and herbicides, air and water pollution control, low cost housing, disposables, transportation, forest research, tree farming, fire, logging equipment, wildlife, recreation, and chemical products from trees. Aerial fertilization using helicopters was also demonstrated. Ten members of the Brundidge FFA Chapter, under the direction of Advisor W. K. Roberson, acted as guides to demonstration stations.

Pledging Cooperation

With the signing of an agreement on July 13, 1971, the United States Department of Agriculture officially pledged cooperation with the FFA in the "Building Our American Communities" program. The agreement embodies the cooperation in the program which is now a feature of vocational agriculture classes and the out of school program of the FFA.

Secretary of Agriculture Clifford M. Hardin signed for the USDA as well as James V. Smith, administrator of the Department's Farmers Home Administration. Their signatures indicate that FHA will take leadership by providing technical knowledge and extending loans through the agency's offices located in more than 1,700 communities.

Dan Lehmann, national president of the FFA, was a signatory as was National FFA Advisor H. Neville Hunsicker. Pledging support from some 9,000 vo-ag teachers was Glen D. Mc-Dowell, president of the National Vocational Agriculture Teachers Association.

The Secretary of Agriculture summed

up the agreement in commenting, "Each of you has a tremendous stake in the future of rural communities because you have so many years in which to build and to enjoy the benefits."

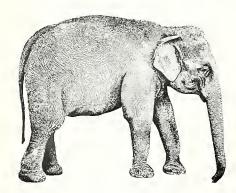


Secretary of Agriculture Hardin prepares to sign the agreement as National FFA Advisor Hunsicker, left, National FFA President Dan Lehmann, and NV-ATA President Glenn McDowell watch.

Experimental College

Dave Dietz, past national vice president from the Pacific Region, is currently serving as a director of the "Experimental College" at Oregon State

(Continued on Page 40)



ELEPHANTS NEVER FORGET ...

but they might forget if they were as busy as an FFA chapter or its advisor.

So this is another reminder for your chapter to get in its order for 1972 Official FFA Calendars.

When these high quality FFA calendars are hanging throughout your community for 12 months, they will attract extra public interest in the chapter and the vocational agriculture department.

Your chapter can choose from a variety of participation plans. Plan A orders have a local business sponsor and the chapter can earn 25% sales commission.

Plan B orders are paid for by the chapter themselves and let you thank supporters of the chapter.

Plan C orders are for those individual members who

might want their own calendar or for chapters who wish to only order a few this year.

Perhaps the FFA officers would like to use the vinyl Wallet calendar-calling card for 1972. The popular Home and Office Style, the useful Desk style, and the large Poster style means your chapter can choose from four styles.

Be sure someone gets in the order so your FFA will get the extra publicity.

Calendar Department
The National Future Farmer
P.O. Box 15130
Alexandria, Virginia 22309

Something New

The Bullrider felt hat is now available from Bailey Hat Company, Los Angeles, California. Bob Berger, Rodeo Cowboys Association top contender in bull and saddle bronc riding, wears this Bullrider in black with a 6%inch high crown. The felt comes in other colors, with 4-inch or narrower raw edge brim.



New Holland has introduced an 8-hp lawn and garden tractor. Available in two models, the S-8 comes as a one-lever controlled hydrostatic unit or as a clutch/brake operated mechanical transmission unit. Features include safety starter, parking brake and a five-position, steering wheel.



Joining the Arctic Cat snowmobile family is the new Cheetah with an 801/2inch chassis. The Cheetah has a 17 x 39inch track and is equipped with torsion spring, slide rail suspension. Also standard are center mounted 6%-gallon gas tank, handlebar mounted emergency shut-off switch, and special airflow cooling hood. Other models are the Panther (84-inch chassis) and the Puma and Lynx (both 74-inch chassis).



The Outrider 5-hp mini-bike is one of three newly introduced models by Allis-Chalmers. It has a 1-inch, 14 gauge tubing frame and fork assembly, shock absorbers with swing rear axle, and automatic variable speed torque converters. Other bikes include the 4-hp mini and 5-hp trail bikes.

LEARN MORE ABOUT THE WORLDS MOST PROFITABLE BEEF BREED!

Write for free information and your copy of GUIDE FOR FUTURE CATTLEMEN.

American Shorthorn Assn. 8288 Hascall St., Omaha, Neb. 68124





CORRIEDALES

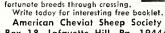
Bred and developed to roise for maximum "NET Profit." for maximum "NET Pr Ideal for FFA projects.

Write for list of breeders and free brochure. American Corriedale Ass'n.

Seneca, III. 61360

CHEVIOTS have what it takes:

- To survive lombing hazords; Ta develop desirable carcass
- weights on milk and grass alone; To import these qualities to less





Box 18, Lafayette Hill, Pa. 19444



HAMPSHIRES..

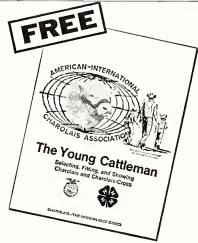
Far Uniformity, Dacility, Quality and a money making breed use Hompshires. Write for information.

The American Hampshire Sheep Assn. Stuart, Iowa 50250 Telephone: (515) 523-1486

SUFFOLKS—THE SUCCESSFUL ONES

Suffalks are the meat makers and the maney makers of the sheep business. To get complete infarmation, write

> NATIONAL SUFFOLK SHEEP ASSOCIATION BOX 324 F, COLUMBIA, MO. 65201



"The Young Cattleman"-for the first time a booklet prepared and developed to give today's junior livestock producer and showman the true facts of beef production . . , the role played by Charolais and Charolais crossbreds ... the influence of performance and economic traits on production efficiency ... and selecting, fitting and showing Charolais and Charolais crossbreds.

If the beef cattle business is your future goal, write for your copy of this new booklet "The Young Cattleman" today!

> American-International Charolais Assn.

1610 Old Spanish Trail Houston, Texas 77025



Write for FREE catalog and sample of our work

QUALITY PRODUCTS, INC. P. O. Box 564-FA Columbus, Miss. 39701

Montana FFA Club Raises \$7,700 Cash

Easy, fascinating fun way to get the money you need

Your group doesn't have to be big to earn big money—and have fun doing it! Supply M-K PURE Vanilla, granulated, "sneezeless" Black Pepper, other M-K spices and flavors. Famous for purity and quality—not available in food stores! Big profits—repeat orders!

Free literature—Write for details and the complete profit story. No obligation.

MARION-KAY COMPANY, INC.

Dept. NFF-101

Brownstown, Indiana 47220

FOR all Official

FFA

MERCHANDISE



SEE YOUR
CHAPTER CATALOGUE
ORDER FROM

FUTURE FARMERS SUPPLY SERVICE

P.O. Box 15159

Alexandria, Va. 22309

Owned and operated by the
Future Farmers of America

FFA in Action

(Continued from Page 38)

University. Working with another director, Dave is planning the curriculum for this fall and finding facilitators, or instructors, for the courses.

"What we are attempting to do at Oregon State is to provide a student-oriented, university approved alternative to pure, or hard, education," explains Dave. Students at the university decided they wanted a semi-autonomous system of educating themselves in areas of personal interest. Courses include loneliness, draft counseling, guitar, photography, karate, amateur radio, comic books, students and their legal rights, wine appreciation, weaving, film making, astrology, introduction to wilderness, outdoor program, and courses on many controversial issues.

To organize the courses, Dave contacted facilitators throughout the summer and scheduled the time and place for the course. "As we expect enrollment to top 2,500 by early next year, the task is gaining monumental proportions," says Dave.

Sponsors Crop Proficiency

The 1971 FFA Crop Production Proficiency award program will be sponsored by Producers of Funk's G-Hybrids through the National FFA Foundation.

The contract for sponsorship was signed in Bloomington, Illinois, July 20, with Wayne Humphreys, Vice President, Central Region, representing the FFA.

As sponsors, the Producers of Funk's G-Hybrids will financially support the complete 1971 National Crop Program including certificates, plaques, and cash awards. In addition, they plan to furnish specially prepared materials relating to corn and sorghum production of interest to the 8,176 FFA chapters. Guideline material furnished by Producers of Funk's G-Hybrids will come from the company's experience since 1956 in sponsoring the 304-Bushel Challenge program for FFA members.

In signing for Funk's, Vice President



"I've gotta hang up now, Helen—I think the coach wants to use his phone."

and Manager of Marketing Robert Walston said, "The Producers of Funk's G-Hybrids appreciate this opportunity to sponsor the 1971 Crop Production Proficiency program and to work with such an important segment of our future producers of food."



National Vice President Wayne Humphreys hands Funk's Marketing Manager Robert Walston a pen at the signing.

BOAC News

Lilly Endowment recently announced their continued sponsorship of the "Building Our American Communities" program for the next two years. Results of the BOAC program have been so encouraging that Lilly Endowment has substantially increased its investment through the National FFA Foundation.

Noteworthy also, more than 100 copies of the film, "Building Our American Communities," developed by the Farmers Home Administration of the USDA, have been booked for most of this school year. The distributor is The Venard Organization of Peoria, Illinois.

Special Safety Award

The Santa Fe FFA of Alachua, Florida, received a special safety achievement award from the American Medical Association. Brian Stone, right, and Woodrow Beville, co-chairman of the chapter's safety committee, accepted the award from Dr. L. J. Snyder, chairman of AMA's Council on Rural Health. The health citation went to Margaret Holden, Crowley, Louisiana.



The National FUTURE FARMER



Michigan State Photos

From the many combinations generated by computer Pat weaves different textile patterns.

AT Velderman, a former treasurer of the Middleville, Michigan, Chapter "wove" his way into the spotlight at the Apparel Manufacturers Association trade show in Dallas, Texas. And he did it via computer.

In the trade booth with Pat was a loom, a computer print-out terminal, volumes of computer printed patterns, and bolts of fabric he has woven incorporating computer-generated designs.

To illustrate how he does this, take a simple eight-thread repeat for which a computer print-out shows 881 patterns with instructions for treadling. Pat follows these instructions, weaving the patterns he finds visually most promising or interesting. And this is just what he did at the trade show, while the computer printed out patterns.

Pat, an honor student in dairy science at Michigan State University, has developed an avid interest in weaving. It all started about two years ago when Pat spent the 1968-69 school year as a Youth for Understanding exchange student in Sweden. A member of his exchange family owned a weaving shop and taught him how to use the loom.

But what really spurred him on in the scientific study of patterns was a tablecloth—a linen tablecloth woven in an old Scandinavian design by an elderly weaver in the shop. Compared to Pat's relatively simple eight-thread patterns, this cloth used a 94-thread repeat. Imagine the pattern variations the computer would generate for that!

At the time, however, Pat didn't understand how computers operated. But, in tinkering around with pattern variations on the loom, he decided "there must be a faster way of developing new weaving patterns."

During the trade show, Pat was the only university student with an exhibit of his own. In fact, unlike other exhibitors who pay premium prices for booths and floor space, Pat's booth was donated by the Apparel Manufacturers Association. That's how impressed de-

C P a t a t t e r s

signers are with his "Patterns Generated by Computer" project.

"It was an opportunity that comes once in a lifetime," says Pat, remembering the hurried phone calls to Dallas, to his department chairman, and back to the phone company. He coordinated all arrangements for the exhibit and for the money to pay his own expenses to the trade show.

But how does a dairy science major end up in the weaving laboratory and what brought him success? Call it talent, creativity, or insatiable curiosity, Pat applied his scientific knowledge to a problem in textiles.

What Pat, an agriculture fraternity member, came up with—after two courses in computer science, one course in weaving, and the aid of two interested instructors—was a computer program that generates all possible pattern variations for a given threading.

Today the computer is Pat's tool for creating new patterns. His demonstration at the trade exposition could well mark the end of a promising dairy science career for the member of the terminated Middleville FFA.

As drum major, Pat leads the Michigan State 100-man varsity marching band.



Livestock and Horse Show

OCT. 15-23



FOR THIS FREE!

Make money. Know how to break and train horses and ponies. Send name and zip-code for this free booklet with special offer of a course in Animal Breeding. If you are interested in Gaiting and Riding the sanddle horse check () Do it today!

Write to BEERY School of HORSEMANSHIP 20210 Pleasant Hill, Ohio 45359

Candles Are Money Makers

Earn \$500 and More for Your Club or Church

for Your Club or Church showing America's Finest Line of Holiday

CANDLES

Beautiful decorative candles that everyone will want, Generous profits. Send name of club or church and we'll send free candle and other best selling candles on approval to show your group.

We'll also send FREE Catalog with 600 other money We Finance You!
No need to send money. Order, sell, remit low wholesale cost. You don't risk a cent but can add hundreds of dollars to your treasury.

ADRIANE
FUND RAISING PRODUCTS

1-875 Finch Bldg., Park Sq., St. Paul, Mn. 55101

Change of Address

If you are moving, please let us know promptly so you will continue to receive your mogazine without interruption. Fill in your new oddress below and mail it along with the address label (Attach below.) from the last issue of your magazine.

To Subscribe

Keep The National FUTURE FARMER coming—even after you are out of high school. Fill in your name and address below and mail this form with your payment. Enclose \$1.00 for each year you wish to subscribe. If you are renewing your subscription, attach address lobel from your last magazine.

Attach address label from your last magazine here!

This is a (check below)
Subscription order
Change of address

Mail To: The National FUTURE FARMER P.O. Box 1S130 Alexandria, Virginia 22309

lame	
oute	
ox No	
ity	
	Zip Code

Two flies landed on a knife handle

that lay atop some round sliced cold

cuts. After eating some meat the flies

flew away and immediately fell dead. The moral of the story: Don't fly off the handle if you're full of baloney.

Karen Sedivy Verdigre, Nebraska

Ouestion: What is vellow and fuzzy and goes 180 miles per hour?

Answer: A fuel-injected peach. Roger Noland Springfield, Arkansas

Teacher to Student: "How do you spell 'melancholy'?"

Student: "Same as every one else." Raymond Vaughan Sumter, South Carolina

A little girl asked her mother if all fairy tales began "Once upon a time."

Her mother replied, "Now a days most of them begin, 'If I'm elected.' " Rodney Nall

Brandenburg, Kentucky

Rich Lady: "Be careful in carrying that dish, it is 3,000 years old."

Moving man: "You can depend on us. We'll be as careful as if it were new." Ronnie Shipman

Bernie, Missouri

"Company, attention!" barked the sergeant. "Now every man lift his left leg and hold it straight out in front of him. One nervous rookie held up his right leg next to his buddy's left leg. "Okay, snapped the sergeant, "now who's the wise guy holding up both legs?"

Joe Cuka Tyndall, South Dakota

Young Wife: "Don't forget to bring

Husband: "What's the matter with

Sue Newman Beaver Dam, Wisconsin

SHORT CREEK FEED CO. TOWELL

"It was in our suggestion box."



As Cletus and Ethel were walking along a path, a green snake slithered by. Cletus was about to pick up the snake when Ethel yelled out, "Don't touch it! It might be as dangerous as a ripe one!" Gina Rismiller Versailles, Ohio

"How many feet are in a yard?"

"It depends on how many people are in the yard."

Peggy Greir Dawson, Georgia

That last joke was about as funny as screen doors in a submarine.

Randy Harris South Hill, Virginia

Old postmen never die; they just lose their zip.

John Rosenboom Manson, Iowa

Two boys quarreling whose father was stronger.

Tom: "Well you know the Atlantic Ocean? My father's the one who dug the hole for it."

Fred: "Oh, that's nothing. You know the Dead Sea? My father was the one who killed it."

Pamela Cromer Brownfield, Texas

A couple of fellows decided to be big he-men and went camping in the woods. Nine thousand mosquitoes were also camping in the same woods. At last our two brave men pulled the blankets up over their heads to keep the mosquitoes away. Finally one peeked out to see if the mosquitoes had left and happened to see a few lightning bugs.

"It's no use," he told the other pioneer. "We might as well give up and go home. The darned mosquitoes are out looking for us with lanterns."

L. Edward Babcock Winnebago, Minnesota

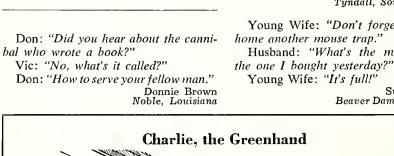
"I want your driver's license," the officer said. "This is your library card."

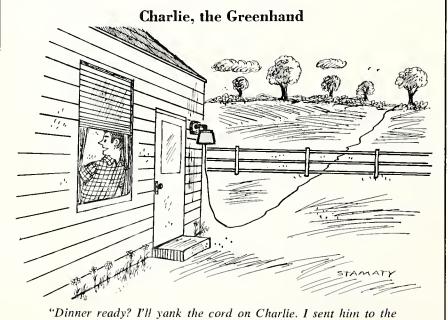
"I'm looking for it," the lady said. "I just thought you'd like something to read until I find it."

Danny Prince Boaz, Alabama

FFA JOKE BOOK

A collection of the escapades and antics of one of FFA's funniest members, "Charlie, the Greenhand." Plus other jokes that have appeared in The National FUTURE FARMER. For your copy, send 50 cents with your name and address to: Joke Book, The National FUTURE FARMER, P. O. Box 15130, Alexandria, Virginia 22309.





creek to practice his electric guitar.'



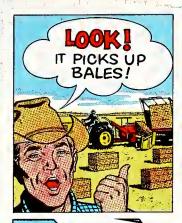
8 Stock No. 7040

Rodeo clown John Wilson rides fighting bulls backwards. Rodeo clowns work together to bring excitement to the audience and protection to the cowboys.

Tony Lama craftsmen work together too. They bring you exciting styling and long, comfortable wear in every pair! That's why most rodes proschoose Lama. There's nothing backwards about that.



OR WRITE FOR NAME OF YOUR NEAREST DEALER 1137 TONY LAMA STREET . EL PASO, TEXAS 79915 Jones Co., INC.









It's Super-machine!



So much for the fun.

The fact is, a New Holland automatic bale wagon is all business out there in the field.

It does nothing less than revolutionize haymaking. For the first time, haying becomes a fast, easy, one-man job.

Even with the smallest model (shown) in the line of six, you'll move 54 tons a day. With the largest, up to 121 tons. That's from field to stack...all automatically, all by yourself. (Based on an 8-hour day and a mile-away stack.)

Prefer to unload one bale at a time along a level feed bunk or onto a bale elevator? Some models are equipped for this. Want to be able to take the stack away as quickly as you made it? Several units are stack retrievers as well as stack builders.

But you've got to see this machine to believe it. Once you do, you'll never again want to go back to bale handling by hand.

Head for your New Holland Super-dealer. Ask to see the Super-machine.

New Holland Division of Sperry Rand Corporation.



NEW HOLLAND