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Farming, as you know, is tough, demanding work. It requires tough, hard-working tires. Tires you can depend on to get things done. The kind of tires that Firestone builds.

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Firestone tractor tires. With 23° angle traction bars. For 10-16% more traction, double the tire life. Firestone 23° tractor tires come as original equipment on new tractors.


Firestone passenger-car tires. First choice of the car makers. Make them your first choice, too.

Firestone

A Sponsor of National Student Traffic Safety Program, National 4-H Automotive Program and FFA.

August-September, 1968
In This Issue

14 How Tom Biggers Succeeds
His approach to farming has been two-fold. He continued his education after high school graduation and earned a bachelor of science degree in agriculture at the University of Missouri. He further expanded the farming program he started while a member of the FFA and a student of vocational agriculture at Mark Twain High School. This article describes his operation today—where emphasis is on brains rather than brawn.

16 A Frame For Life
Of the 1,000 lives lost each year in tractor accidents, 600 are due to turnovers. It has been estimated that three-fourths of these might be saved by protective frames and seat belts, or crush-resistant cabs. This article traces the development of tractor overturn protection and, if you drive a tractor, you will find it of particular interest. Future farmers should be keenly aware that one-third of the victims are under 25 years old.

34 Water Skiing
When water skiing first originated, those who tried it merely rode behind the boat, crossing and jumping the wake. Now, for the more hardy, just ordinary water skiing doesn’t suffice. They turn to trick riding, and when they learn one trick they go on to something harder. But for the beginner, water skiing can present a real challenge unless you go about it in the right way. This article tells you how.

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Our Cover
The cover photo this issue shows Tom Biggers, a Missouri livestock and grain farmer, in his field of top yielding grain sorghum. An outstanding FFA member, Tom was named Star Farmer of Missouri during his senior year in high school and was later awarded the American Farmer Degree. He returned to the farm after college and used his education in agriculture managing his farming operation.

ADDRESS ALL CORRESPONDENCE TO: The National FUTURE FARMER, Alexandria, Virginia 22306. Offices are located in 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 22306. Second-class postage paid at Alexandria, Virginia and at additional mailing offices. Copyright 1968 by the Future Farmers of America. This issue published in national and regional editions. Single subscription is $7.50 per year, $11.00 per year, single copies, 20c in U. S., 30c elsewhere. CHANGE OF ADDRESS: Send both old and new addresses to Circulation Dept., The National FUTURE FARMER, Alexandria, Va., 22306.
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New Havoline Motor Oil. It’s better.

“Old” Havoline was the best motor oil you could buy for farm equipment. But that doesn’t stop the kind of research people we have at Texaco. They came up with something even better—new Havoline. The only motor oil good enough to put old Havoline out of business. This approach to product improvement is one reason why Texaco sells more gasoline than anyone. We’re first, and we think that’s a big responsibility.

Quality petroleum products for the farm: Havoline and Ursa motor oils; Marfak Multi Purpose grease; Multigear Lubricant EP; Rando HD oils for hydraulics; Fire Chief gasoline and Texaco Diesel Fuel.

August-September, 1968
Looking Ahead

Livestock

MONEY FROM WASTE—Wise use of manure means not only less pollution, but added income as well. Greenhouse studies conducted by a University of Wisconsin research group show that corn plants make efficient use of cow manure that has been stored anaerobically (in sealed storage tanks) before application to the land. Plant nutrient content of dairy cow manure stored anaerobically is valued at about $2.50 per ton. Manure from steers fed at high levels of nutrition is valued at about $3.60; hog manure is valued at about $2.60, and chicken manure at about $7.00.

THREE-HAMMED HOG?—Because of tremendous strides in the fields of feeding and genetics, the average hog today yields 14½ pounds more lean meat—or about the weight of an extra ham—than did the average hog 12 years ago. This observation is from Robert Nelson, secretary of the Pork Industry Committee of the National Live Stock and Meat Board. In other words, more lean and less fat, more protein and fewer calories—just what the doctor ordered; and what the modern weight-conscious consumer is demanding.

NEW MEAT PROBE—An inexpensive, stainless-steel probe has been developed by University of Wyoming animal scientists to measure carcass fat. The new instrument will enable packing plant operators, meat producers, and retailers to determine cutability more accurately.

COMPARISON COSTS OF WASTE-DISPOSAL METHODS—Washington State University dairy scientist reports that scrape-and-haul cleaning can meet sanitary needs at less cost than flushing the waste down the drain with high-pressure hoses. The comparative annual costs: $601 for scrape and haul, and $1,044 for high-pressure hosing.

FEEDLOT IS A FEEDLOT—University of Missouri researchers have reported that cattle fed in plain old dirt lots did every bit as well as those in lots with mounds, shade, and large aprons. Only improvement in the dirt lot was a 2-foot concrete apron in front of the feed bunk.

ADDITIVE REDUCES OFF-FLAVOR IN MILK—A substance added to cow feed reduced or eliminated oxidized flavor in milk in a University of Maryland experiment. Adding Ethoxyquin to cattle feed would be a practical way to control oxidized flavor. It is an approved food additive but not yet approved for milk.

FEED COMPLEMENT—A high potency pre-breeder and Farm. It is called Concept-A-Mate and is a feed complement that improves show animal appearance by adding bloom, increases breeding efficiency, and helps to prevent disease. It also provides high levels of vitamins and minerals.

LITTLE THINGS COUNT—One place where little things show cattle conditioner has been formulated by Carnation Count is in the poultry industry. Feed waste is one of those little things that are probably the most costly of all management errors, according to Dr. Douglas Hamm, Clemson University. A way to reduce this waste is by filling feeders no more than one-third full.

Crops

ESSENCE OF ORANGE PEEL—A new process that may improve flavor and aroma of citrus products—from frozen orange juice to canned grapefruit slices—has been developed by the USDA. In studies with instant orange juice, orange essence (made from peels) was added, as well as orange oil, and resulted in improved flavor.

GOOD-BYE PEA PICKERS—More machines and fewer hand pickers are moving into North Carolina vegetable fields at harvest time each season. Experts agree that mechanical harvesting is coming to the major vegetable crops just as it has already come to wheat, corn, soybeans, peanuts, and cotton. Present obstacles are mechanical and economic. Machines are not available to do some types of vegetable harvesting, and acreages per farm are often too small to justify machines. Interest in tobacco mechanization has accelerated interest in vegetable mechanization.

“SUPER SEEDS” AREN'T SUPER PROFIT-MAKERS—One of the quickest ways to lose money on a wheat crop is buy “super seeds” from a smooth salesman who promises rich rewards in one growing season. Kansas State University crops and soils specialist, Howard Wilkins, reports that some producers got caught this year. They bought seed that was mixed with other grains, such as rye; seed that was a blend of several wheat varieties; or seed that was not adapted to the state's growing conditions.

PERFORMANCE OF STURDY—Sturdy is a new short-straw hard red winter wheat that was the bright spot in wheat production this year at Texas Research Foundation. Growers may find the new variety a partial answer to the need for a wheat with fewer problems and potentially higher yields on better soils in north central Texas.

Management

CONSIDER THE BIG FIVE—When you buy or consider the cost of irrigation, don't forget depreciation, interest, repairs, taxes, and insurance, says Bill Peterson at South Dakota State University. These, plus fuel and lubrication or power costs per hour of operation, are important when selecting an irrigation pumping unit.

LIABILITY INSURANCE A FARM ASSET—In spite of efforts to maintain safe farm conditions, it's good business to protect yourself against damaging lawsuits by having personal liability insurance. According to farm management specialists at the University of Delaware, landowners are responsible for the safety of others—even trespassers who enter the property illegally.

ORCHARDMEN GET THE JITTERS—When the fruit trees start to bloom and weather gets nice, orchardmen start to worry about sudden drops in temperature. Smudge pots can raise the temperature only a little. "This new natural gas system we've installed will be a boon to us," said A. C. Lloyd, an Arizona orchardman. System is series of natural gas heaters which gives better, cheaper temperature control with less labor.

HIRED HELP—If you want to keep good help, University of Arkansas suggests that the role of hired laborers on farms must be upgraded. The farm job must have respect, position in the community, regular vacation and time off, and advancement opportunity to attract laborers.
Man ascending.

A mile and a quarter beneath the sea a small orange submarine moves slowly toward a curious object on the ocean floor. Then a steely claw reaches out and — Lights! Camerat! Action! And the Deep Ocean Work Boat — DOWB — makes another entry in its scientific logbook. The 17-foot self-propelled DOWB’s home port is General Motors AC Electronics-Defense Research Laboratories in southern California. Its two-man crew can stay under for nearly three days if necessary and range up to 30 miles. With their front-mounted claw they can pick up or position a 50-pound object over four feet away. A combination of TV and direct optical systems lets the DOWB’s men see in all directions. And sonar and fathometer equipment on board complete the gear necessary for underwater surveillance, research and recovery. The DOWB may not look like Jules Verne’s Nautilus. But every trip marks another step in man’s ascendancy over the world around him.

General Motors

Chevrolet • Pontiac • Oldsmobile • Buick
Cadillac • GMC Truck • Opel Kadett • Fisher
Body • Frigidaire • Detroit Diesel • United Delco
AC Spark Plug • Euclid • Allison • Electro-Motive

August-September, 1965
A Word with the Editor

THE LAST week of July is normally a busy week for FFA in Washington, D. C. This year activities were started earlier and involved more FFA members. You will be hearing about some of these activities later since press date was too close to permit coverage in this issue, but here is a briefing on the events.

They began on July 14 with the arrival of delegates to the National Leadership and Citizenship Conference. On hand were the presidents of most state associations and a few other participating members. “FFA—An Opportunity for Youth” was the conference theme, and the purpose was to inspire, inform, and encourage these members to return to their respective states better prepared to meet the challenges of leadership in agriculture.

The program provided the officers an opportunity to develop a greater appreciation for their American heritage and a better understanding of their nation’s government, as well as to study and plan for the future of FFA.

A Special Study Committee convened on the evening of July 18 and met over the following weekend to consider changes needed in the FFA as we look to the future. Members of the committee were the national FFA officers and members of the FFA Board of Directors. They will take action as a Board of Directors on July 24 through July 26.

The annual meeting of the Board of Trustees of the Future Farmers of America Foundation on July 22 and 23 will give top priority to the FFA awards program and the Foundation budget.

On July 24, donor representatives to the FFA Foundation hold their annual meeting. These are the people in business and industry whose support to the FFA through the Foundation makes possible a nationwide program of awards to members.

All of these meetings, like those of your local chapter and state association, contribute to the success of FFA, which has been serving students of vocational agriculture since 1928. Sometimes those who do not possess a complete understanding of the FFA organization and how it operates are inclined to overlook the relationship of FFA to the program of vocational education in agriculture. It is difficult to visualize how either could operate successfully without the other and the close ties which have existed over the years. We should be ever mindful of this relationship and make every effort to see that it is understood by others, particularly educators who may have a voice in charting the future course of vocational education at the local, state, and national level.
The latest step in the evolution of the scoop shovel.

Time was when animal rations were formulated with some grain, maybe some molasses, a strong back, a scoop shovel, and liberal doses of guesswork.

But today the scoop shovel and guesswork are gone; this is the day of the computer, the PhD, and sophisticated approaches to manufacturing and marketing.

That's the way it is in agriculture. Today the production of food and fiber is the nation's largest industry, and the young man or woman with a future in agri-business might be a computer scientist, an economist, a statistician, a microbiologist, a pharmacologist, a management specialist, a journalist, a psychologist, an electronic engineer, a biochemist, a veterinarian, a mechanical engineer, a physicist or any of a whole host of others.

Here's where it's happening—in agribusiness. It's the industry with opportunity . . . to serve . . . to grow.

For more information on careers in agribusiness, write Department 259.
Mansfield, Louisiana

I am a junior at the All Saints High School and a member of the FFA there. I enjoy the articles in The National FUTURE FARMER Magazine. I hope that you will continue to publish this wonderful magazine.

After reading the articles concerning agriculture and agriculture and the many fields available, I've decided to enter agriculture after I graduate.

I have enjoyed competing in parliamentary law contests, horticulture, and many other contests.

Dennis Brantley

Evansville, Wisconsin

Please send me a copy of the circled items which I feel may add to our knowledge of these areas. I use many of these in teaching vocational agriculture. Keep up the good work.

Erwin Zweifel
FFA Advisor

Hastings, Minnesota

In your June-July issue of The National FUTURE FARMER, the timely article on "Financing Farm Equipment" caught my eye. I was surprised after reading the article to find no mention was made of Production Credit Associations as a source of credit. I believe it is important to explore alternative uses of capital, be it borrowed or cash on hand, for many times the alternative will give an operator a far greater return than the original choice.

Since money management is the most important part of farming today, I think you could provide a vital service by having a special department on financing in every issue.

Lloyd A. Larson
PCA Branch Manager

River Falls, Wisconsin

I felt I should write directly to you, since I feel that policy wise you do not wish to ignore the farmers co-op credit system and Production Credit Associations in particular, which I represent and am speaking for.

I refer to the article in the June-July issue of The National FUTURE FARMER on page 14, "A Close Look at Financing Farm Equipment," by Douglas C. Grant.

I know you recognize PCA and the pioneering we do because on page 19 of the same issue you show a transcript of a PCA cash flow statement, but, at the same time, all references in the article are to banks as the lender. Whether or not you acknowledge it at the present time, eventually you will, that PCA is the best equipped and best qualified, with advanced ideas and personnel, to handle farm credit for many reasons not mentioned in this letter; but perhaps basically because it is cooperative, owned by the farmer members who have a voice in shaping its policies.

The last paragraph of the first section states, "Available to farmers are four acceptable sources of financing for farm equipment. They are banks, manufacturers' finance companies, independent finance companies, and the federal government." Isn't Production Credit financing acceptable? After all, modern machinery financing is based on one of the practices pioneered by PCA—intermediate term loans with up to seven years to pay without renewal. PCA has pioneered the budget loan projection so as to have credit available on call when needed and not pay interest on it. Other modern farm credit factors pioneered by PCA—credit on the basis of ability to pay, sound financial position, consideration of purpose of loan. The other two, man factor and collateral, have always been of major significance with other lenders. New loans can also be covered by credit life insurance at most reasonable rates compared with most lenders.

Naturally, you cannot blame me for being concerned about being omitted in an important publication as The National FUTURE FARMER, especially so since I believe most PCA's lend their financial and moral support to the FFA program. Recently, we were one of the sponsors of the local parent-son FFA awards and recognition banquet. One of our branch managers received a plaque from his local chapter in recognition of the help he had given to them. Other support we give that has not been mentioned is a $300 annual scholarship to a college freshman who will major in the field of agriculture, and our educational loan program is available and has been used extensively, not only by students in agriculture, but for any higher education since the only requirement is that the sponsor be eligible to become a PCA member.

We feel PCA's are in better position to talk farm credit with the farmer because our men are college graduates with a farm background and imbued with the philosophy that the farmer must be best for PCA." After all, the earnings (Continued on page 12)

The National FUTURE FARMER
This is the extremely accurate, unbelievably inexpensive, and highly embarrassing Remington Model 788.

It wasn't all those things last year, when we introduced it.

Oh, we knew it would be inexpensive, all right. We designed it to sell for less than $90.00, which would make it one of the lowest-priced big-game rifles available.

But it wasn't long after we began selling it that the letters started coming in.

Embarrassing letters.

Someshooters found that their 788's were shooting better than rifles that cost them twice as much. And when your lowest-priced big-game rifle starts shooting like a target rifle, it can be pretty embarrassing, believe us.

Just where did we go wrong? Well, the Remington 788 has the fastest lock time of any center-fire rifle on the market today. (Lock time is the interval between pulling the trigger and when the rifle actually fires.) The 788's lock time is around half that of most other rifles. And that can make a big difference in accuracy.

For instance, we chambered the 788 for the "old, outdated" 30-30 cartridge and found that it would fire three shots into a 1" circle at 100 yards. We chambered it for the "heavy, inaccurate (up until now), short-range" 44 Rem. Magnum and got 3-shot groups of under 1 1/2". The super-accurate varmint calibers, 222 Rem. and 22-250 Rem., we won't talk about; we're embarrassed enough.

This year we're offering the 788 in 243 caliber as well. For $89.95. And if this new caliber shoots as well as the others, we're in for another embarrassing year.

Remington

It's not an inexpensive rifle that's also accurate; it's an accurate rifle that's also inexpensive.
Chores Go Easier in Justin Work Wellingtons

Style No. 3509

Take on the toughest job in easy stride and reliable ruggedness with Wellingtons that are especially made to meet the most demanding task. One wearing and you'll discover how Justin's built-in comfort can relieve the work load.

Meet the EXCITERS!

Yamaha's "terrain tamers" — built to blaze the trails the other bikes follow. On your left is the new, improved Trailmaster 100. Its high-torque, rotary valve engine with bigger, better combustion is combined with a 4-speed gearbox for a broad power range. Features Autolube oil injection, electric starting, quick-change sprocket, adjustable shocks and larger brakes. Yamaha's Trailmaster 80 (right) takes you into the roughest country, handles great and is priced to fit the most modest budget. Ride either one, and you'll know why off-the-road enthusiasts are going Yamaha.

Meet the Exciters now at your Yamaha dealer's. Ask for your free copy of Yamaha's brochure covering all 20 Exciters for '68. Or write P.O. Box 54540, Los Angeles, California 90054. Dept. NF-8-B. In Canada Yamaha Division of Fred Deeleuy Ltd., British Columbia.

Mailbag
(Continued from Page 10)

and surplus of PCA belong to its members, and we truly provide credit at cost to the farmer members.
I will be interested to have your reaction to my letter since I am sure it will have an influence on future PCA support of the FFA program.
Leonard M. Johnson
PCA General Manager

Elm City, North Carolina
I have been looking over some of the previous editions of The National FUTURE FARMER. I would like for the staff to add a page or two about how to judge beef and swine. I have been interested in this for a few years.
I think the Magazine covers most all things very well. Keep up the good work.
Robert Proctor

Avondale, Arizona
The first weekend in May, Saturday, May 3 and Sunday, May 4, John Gemmill went on a camp-out with the freshman FFA students of his chapter. Do you know of any other chapters that have had a national officer go with his fellow FFA members on a camp-out?
I think that we are the only chapter this year that has a national officer and a state president at the same time.
James Farris

Pleasant Dale, Nebraska
Thank you for sending me the materials that I have requested in the past. Enclosed please find two request sheets for free materials.
I always find The National FUTURE FARMER interesting and meaningful to read. I can always find an idea to improve our FFA chapter at Milford. I also find ideas to improve my home farm.
I especially enjoyed the article in the April-May issue entitled "Do You Know Your Dad?" I realize that both our fathers and mothers are important in helping us to grow up. Keep writing the interesting articles. Thanks for sending the materials to me.
Paul Hejny

Lake Crystal, Minnesota
I really enjoy reading The National FUTURE FARMER. In the April-May, 1968, issue, you had an excellent article called "Wily Mr. Red" by Russell Tinsley. I thought it was excellent, and I wish that everybody could read it.
Dean C. Johnson

Williamston, Michigan
I wish to take this opportunity to thank you for publishing such a great magazine. I feel it is a complete and concise magazine dealing with articles of large interest to FFA members. I enjoy the FFA Magazine as I'm sure all the readers do. The only fault I find in it is that it comes out only six times a year. Thank you from a very satisfied reader.
Randy Bedell

The National FUTURE FARMER
Differences that make a GLEANER combine stand out against the other ten.

The differences start down in front—with the Allis-Chalmers Sure-Feed system for controlled feeding and threshing...the shortest header-to-cylinder delivery of all, and under full mechanical control to within one inch of the cylinder. Crop feeds evenly across entire cylinder width for full threshing, full capacity in light or heavy crops.

Next, exclusive Down-Front cylinder design. Puts the pivot point behind the cylinder. So material always feeds in at the same angle, even while header moves up or down. All others pivot ahead of the cylinder, resulting in varying feed angles and over- or under-threshing. The down-front cylinder design gives much greater separating area, too—more capacity everywhere it touches the crop.

Only Allis-Chalmers has two-fan cleaning. Upper fan pre-cleans the crop before it reaches the shoe, the lower fan finish-cleans at the shoe. You know you are putting cleaner kernels in the bin!

Now add the broadest selection of corn heads for all three GLEANER models...see chart—the differences go on and on. Get the whole story at your Allis-Chalmers dealers. Even his credit plans are different from the others!
“FARMING TODAY demands that you place more emphasis on working with your brains rather than your hands,” says Tom Biggers, successful young livestock and grain farmer in Ralls County, Missouri. This is the reason Biggers decided to obtain a college education before returning to the home farm.

Named Star Farmer of Missouri in his senior year at Mark Twain High School in Center, Missouri, Biggers was also awarded the American Farmer Degree. “FFA stimulated my interest in farming,” Biggers explained, “and in addition to guidance from my dad, I give a lot of credit in my early training to Mr. Wenneker, my former vocational instructor. Instead of having us spend our time building cattle chutes and sawhorses, he made us develop ourselves. He especially promoted field trips. We met interesting people, and we observed new ideas in action.”

Raised on the family farm near Perry, Tom worked with his father and uncle while in high school. By the time he reached his junior year, he was in partnership with them and in addition to raising row crops, he was beginning to build a livestock program with hogs and registered beef cattle. During his junior and senior years at the University of Missouri, he served as president of the Missouri Junior Angus Association. “I tried to confine my curriculum to beef and pork production courses plus farm management and agricultural economics courses I felt would help me later when farming.”

During his senior year at the university, Tom married Judy. He was graduated in 1966 and the following fall they purchased a 730-acre farm on the outskirts of Perry. This farm is on rolling ground with about 550 tillable acres. “Some of the land has been in grass for over 70 years. I felt that the farm had a lot of potential for a grain-livestock operation.” Tom explained.

While Tom was in high school, his father bought 50 registered Angus cows to form the nucleus of an outstanding herd. This past spring, the herd was dispersed. “We approached the decision to disperse our cattle with a great measure of reluctance,” Biggers said. “However, with the additional land we were farming, which tripled our row crop acreage, our labor burden was drastically increased. Also, because of a more intensive row crop system, there was less grassland available for the cow herd.”

“The Angus were the product of many years of careful attention to bloodlines and individualism. We knew that we wouldn’t be satisfied in devoting any less than our fullest attention to the herd. The dispersion was our only alternative,” he continued.

“Our farming program now is centered around about 1,000 acres of crops which includes 75 acres of wheat and a little over 300 acres each of corn, soybeans, and grain sorghum.” Biggers said. “We feel that we can turn the fastest dollar per acre with these crops. In addition, we can stretch both planting and harvesting over a longer period of time and utilize much of the same equipment for handling the crops.”

As an example, last year they raised 120 acres of corn in 36-inch rows. “We’d like to go to 20-inch rows, but we wonder if an increase in yield would offset the added investment in a new planter and a narrow-row corn head for the combine,” Tom said. He has good reason for wondering. In a yield contest last fall, a measured acre of corn in Biggers’ field which was weighed over the scales, yielded 171 bushels per acre!

The remaining 730 acres of row crops last year were planted with a grain drill. The 180 acres of soybeans and 550 acres of grain sorghum were planted in 20-inch rows by leaving every third hole open and plugging the rest on a 16-hole press drill. For fertilizer placement and application, they closed the hole directly in line with the seed furrow and...
used the fertilizer opening next to it. "When you place the fertilizer seven inches from the seed, it's important that you use a highly soluble fertilizer," Tom said.

This method of planting has worked very satisfactorily for them. The drill takes the place of a six-row planter. Equipment costs are spread over an even greater acreage by double cropping most of the wheat ground and planting more grain sorghum within hours after the wheat has been combined.

"Narrow rows definitely help slow down erosion on rolling ground," Tom said. "The leaves shade the ground early, and this shades out the weeds that try to get started while at the same time it cuts down on the evaporation of much-needed moisture. This is especially important when double cropping. You try to take one crop off and get the next planted without losing moisture. After a day of combining wheat, I like to move into the field at night and plow the ground so that it's ready to plant the next morning," he said.

A good weed control program goes hand-in-hand with narrow rows. "The best soybean and grain sorghum fields were never touched from the time the crops were planted until harvest last season," Tom claimed. He relies heavily on a local aerial applicator to spray herbicides. "When you spray on the chemicals from the air, it doesn't matter if the fields are rain-soaked or not. The custom spraying relieves me of one more job in an era when it's almost impossible to hire farm labor."

Biggers uses maps of his fields to record day-by-day information such as seed varieties, rates of fertilizer, weed control, planting and harvesting dates. Also, crop performance, yields, standability, and weed chemical performance are all carefully noted and recorded for future use. "When you notice a few weeds in a field at harvest time, you can record this information and know exactly where to expect outbreaks of these weeds the following year," he explained.

As soon as soybeans are ready for harvest in the fall, Tom moves in with his combine to begin harvest. Following soybeans, the grain sorghum is harvested. Corn is combined last, and in the past years Tom has utilized a custom operator to handle this job. "The custom operator can be taking care of our corn crop at the same time I'm finishing the grain sorghum," he explained. "This has saved making an investment in a corn head for the combine until we decide what row width we'll settle on for our corn."

Since dispersing the registered herd, they have concentrated on buying good commercial cows that can be turned over in about 90 days. These animals, bought in late fall, are turned into the grain sorghum and corn fields to pasture the stals and fallen grain. "We usually have around 300 acres or more of stalks plus improved grass and bluegrass for pasturing. With a normal year, I can plow the soybean and grain sorghum fields in the fall and still have enough stalk fields for them to feed on. Then we'll be ready to market these cows before it's time to begin field work in the spring," he said. "There's usually a good market for cows in March."

"We plant grain sorghum because it's a good, cheap feed. We don't want to raise much more than we can feed ourselves, however," he added. "The feed value is practically the same as corn, but the market price isn't as good. Yields of more than 150 bushels per acre were recorded in fields that Biggers began combining last fall before the cold, wet weather set in. The last of the crop was harvested after the ground was frozen in January, but there was loss from rains and snow.

Through the summer, the Biggers also graze 75 to 80 steers that they purchase in the fall. "These steers are bought in small bunches and are not uniform. They're middle-of-the-road cattle that we sell the following September or October. They receive no grain," he added. "Last year we managed to average $50.00 per head for the grass they grazed."

They have a herd of 60 gilt that are farrowed twice yearly. "The next project is to find a man to be responsible for the hog operation," Tom said hopefully. "We're held up on multiple farrowing because of facilities. An old saw barn on the farm where I live is utilized for farrowing at present. We'd like to be able to ship hogs to market every week to help spread income throughout the year. With crop farming, the expenses are on one end, and the income is on the other. Anything to help spread the income will help."

As for the future, Tom has set up some specific goals but also keeps an eye to current trends and can be quite flexible in management decisions. "Our goal is to net $100 per acre on crops. This will mean 150 bushels per acre of grain sorghum and 40 to 45 bushels per acre with soybeans. Crop drying facilities will probably be the next major investment. I feel that grain drying will be one of the key factors of a man staying on the top in the next few years," he said. "Our labor problem will be solved when Brent takes an active interest in farming!" Born March 2, 1967, young Brent has an exciting era in agriculture ahead of him.

Judy and Brent (below left) admire some of Tom's 171-bushel per acre corn. Tom pauses for a quick picture (center) as Judy snaps shutter with home in background.

With pencil and paper in hand (below right), Tom makes notations of weeds that will need attention as well as seed germination in one of his corn fields this spring.
PRESENTLY, ABOUT 600 persons are killed each year in tractor overturns. Thousands are injured. And the medical costs, property damage, and time losses amount to millions of dollars.

Though tractor upsets often do not result in severe injury, every upset without operator protection has the potential to kill or cripple, especially if the tractor rolls 180 degrees or more.

To protect an operator in a tractor overturn, some kind of device must be mounted to restrict tractor roll to 90 degrees and be strong enough to withstand both sideways and backward upset impact to prevent him from being crushed.

Such protection can be afforded by a frame structure vertically encircling the driver or by a reinforced, crush-resistant cab. Considerable extra protection is available by the use of a safety (seat) belt to confine the driver within the zone of protection.

The concept of roll bars and overhead protection is not new. It has been applied for years in racing, logging, construction, and military vehicles. Work to adapt this concept to agricultural tractors began in the early 1950's.

Roll Bars
Roll bars and roll frames have been used for many years in racing, test, and stunt vehicles to protect drivers in overturns. Countless lives have been saved by such devices, and no driver would think of operating without this protection.

A driver of a roll bar equipped vehicle, securely strapped in by a safety belt and shoulder harness, can survive all but the worst accidents—walk away from spectacular flips that otherwise would be certain death.

Stock cars used in racing are fitted with sturdy roll frames, giving drivers considerable protection in case of accidents involving side collision or overturn. Stunt vehicles are likewise equipped to protect drivers during "dare devil" performances.

Industrial Experience with Protective Frames
A number of industries, especially lumber and construction, have used overhead protection on wheel and crawler tractors for many years. Earlier, the purpose was to protect the operator from being struck by objects or obstructions. But more recently these frames have been designed with added strength to also protect the operator in case of roll-over.

Since March, 1967, the U.S. Army Corps of Engineers has required all of its contractors throughout the nation to have roll-over protection on tractors.

European Experience with Protective Frames and Cabs
Sweden was the first country where efforts to minimize injuries and fatalities from tractor upsets took concrete form in regulations, testing procedures, and common use of protective frames.

Regulations on tractor operator protection have been passed also in other European countries. However, most information on European experience reflects that of Sweden.

Tractors in Sweden often are used in bad weather and, therefore, have long been equipped with cabs to protect operators from rain, wind, and cold. The cab usually consisted of rubberized canvas on a light steel frame.

Tractor Tipping Demonstrations
Tractor tipping demonstrations have been put on for years in many states before thousands of farm people to show
the potential value of overhead protection in preventing deaths and injuries. These demonstrations began in the early 1950's and usually were sponsored by extension or engineering departments of agricultural colleges.

They have been held at state and county fairs, special agricultural events, extension field days, public farm safety meetings, etc. Considerable efforts were invested to make demonstrations both spectacular and educational.

An audience, in addition to being exposed to the concept of protective frames, could see familiar circumstances involved in tractor upsets (high hitch, hitching obstructions, speed, running off edge of embankment, etc.). The narrator also could spell out tractor safety rules at a time when people were generally receptive to such information.

Farm Equipment Industry

Considerable design and experimental work has been done by farm equipment manufacturers in developing practical protective frames for agricultural tractors. However, no attempt is made in this article to go into any detail on manufacturers' design and testing programs because that would be a voluminous story in itself. Most of the technical information derived from all this work has been shared through the Farm and Industrial Equipment Institute.

The protective frame for farm tractors was first offered commercially in America in the fall of 1966 by a major farm equipment maker. In 1967, this firm followed by offering buyers a crush-resistant cab.

Conclusion

We have traced the development of farm tractor operator overturn protection from earliest concepts and application to the 1966 introduction in America of a commercially available protective frame for agricultural tractors.

The protective frame and crush-resistant cab can provide tractor operators with needed overturn protection, saving lives and lessening the severity of injuries—especially if safety belts are employed.

The sturdy protective structure also can reduce damage to a tractor in an overturn, minimizing down time and repair expense.

Based on available data, for every 1,000 tractor overturns without operator protection, calculations indicated that:
(a) all will result in property damage in varying degrees; (b) 60 persons will be killed; (c) 20 persons will be injured severely enough to retain some kind of permanent disability; (d) 450 persons will incur temporary injury many of which are bed disabling; and (e) 470 accidental overturns will result in only property damage with no disabling injury.

If overturn protection were used on all farm tractors in U.S. and if our actual field experience corresponded to that of nations where it is used, then we could expect a substantial reduction in fatalities and disabling injuries due to overturn accidents. This could mean a drop of three-fourths in deaths and one-half in injuries, severity of injuries would be considerably lessened.

In addition to safety, the protective frame when equipped with a canopy offers good sun protection and provides a convenient mounting place for a fire extinguisher and first aid kit.

The crush-resistant cab offers much more. It can be designed to provide not only safety but also health and comfort benefits such as air conditioning, effective heating, noise reduction, and protection from rain, dust, wind, chemicals, insects, and pollen. Even stereo music is a possibility. Tractor work thus would be pleasanter, less fatiguing, safer, and more productive.

These Ohio Future Farmers learn by demonstration the hazards involved when a tractor overturns. Tractor frames can save lives and it's easy to see why.
Selection guide to
Mechanical Bunk Feeders

By Melvin Long

These permanently installed labor-saving devices are available in many sizes, shapes, and types. Since they are a permanent long-range investment, careful attention should be given to their selection. In most instances, each type is available from more than one manufacturer.

In any attempt to compare the cost of a mechanical bunk feeder with the cost of a bunk feeder wagon and fence-line bunk arrangement, remember that for dependable all-weather use, you'll need a good quality driveway along the entire length of one side of the bunks. Although fence-line bunks eliminate the cost of a fence, the cattle can use only one side. Thus, you'll need twice as much length per head as compared to a bunk in the lot.

In general the fence-line and bunk wagon arrangement is considered best suited for very large layouts, for widely scattered feedlots and buildings, and for use with horizontal silos.

When planning a bunk-feedings system, consider the possibility of future expansion. Lack of such planning often produces a system which makes future expansion completely impractical or even impossible.

Also, think about access and ease of manure cleaning with your tractor. The feedlot should be arranged so it does not interfere with silo filling.

A roof over the feed bunk helps keep feed and equipment dry. In some cases, the roof is extended to provide protection for cattle while they're eating.

Manure dropping into the bunk can be reduced by placing the bunk on a step which is 6 to 12 inches high and which extends 1½ to 2 feet out from the bunk.

Calves and larger cattle on full feed need about one foot of bunk space per head. For large cattle and dairy cows, allow about two feet of bunk space per head if they are all to eat at once.

Available Types

Each type has certain advantages as well as some limitations. The best type for your situation depends upon your individual requirements.

Open-Bottom Auger. This is probably the most widely used type. It's usually an 8- or 9-inch diameter auger with a 2- by 10-inch plank on each side. In operation, the feed falls out the bottom of the auger, starting at the "near" end. As the feed builds up to the level of the auger, it forms a "bottom" which causes subsequent feed to be carried farther before it drops into the bunk. This process continues until the feed reaches the "far" end of the auger.

Total amount of feed distributed can be changed by adjusting the height of the auger and plank assembly above the feed bunk. Primary advantage of this type is its simplicity which reduces maintenance problems and helps keep the initial cost down.

Limitations include its lack of ability to distribute different rations to two or more bunches of cattle. If silage and concentrate are to be blended, the concentrate must be metered in proportion to the flow of silage from the unloader for best results. In practice, some farmers simply fill the bunk with silage and then run in the concentrate. The difference in particle size between the silage and the concentrate tends to permit the concentrate to escape from the auger and mix with the silage.

In some feeding situations, the fact that the bunk is filled progressively from one end may cause crowding by the cattle.

The auger is usually arranged to turn about 200 rpm. At this speed, power required is about one horsepower for each 20 to 25 feet of auger length.

Enclosed Auger. In this arrangement, the auger is enclosed either in a tube which completely surrounds the auger or in a trough to which a cover can be added for protection if desired.

Small holes or slots are arranged in the side of the auger enclosure. The holes nearest the feed end are highest. The holes are arranged so that a small amount of the feed from the top of the "stream" drops out each hole. Thus, within a short time after the auger is started, feed is dropping from all the holes.

In the enclosed auger, the holes are adjusted by rotating the tube. The trough type auger has sliding gates.

Total amount of feed distributed depends upon the length of time of operation. Silage and concentrate need not be fed into the auger at the same time, because the auger will distribute the concentrate along the entire length of the bunk.

With either type enclosed auger, a diverter can be used to direct the flow of feed to the opposite sides of a

(Continued on Page 24)

Mechanical bunk feeders will be a permanent long-time investment and should be selected with special care. They come in several sizes, shapes, and types.
You Have EVERYTHING TO GAIN

By Johnny McElroy

At the end of my freshman year in agriculture at Snyder High School, I was really surprised when I was named the Star Greenhand of our FFA chapter. Little did I realize that my work with a growing beef herd and the beginnings of my sheep and swine operations would lead to such recognition. I'll never forget the thrill or the inspiration it gave me.

Right then and there, I determined to succeed in the FFA—to take full advantage of the awards available to all of our members.

My parents and FFA advisor encouraged me to work hard in the FFA. The work paid off in 1966 when I was Star State Farmer of Oklahoma. I was especially lucky that year for I also received the proficiency award for the Southern Region in livestock farming. Last year, after being elected state president, it was my honor to be called onto the stage in Kansas City as the national winner of the FFA Foundation award in soil and water management.

These awards are not mentioned here as a brag. Instead, this shows the tremendous opportunity open to all FFA members through the incentive awards program made possible by the National FFA Foundation. I know that if I could do it, many other FFA members could also win Foundation awards, especially with the expanding awards program. I feel that I have benefited greatly from the experiences gained through participation in these award activities.

One of the reasons I have become so interested in this is due to an assignment last fall. As an official delegate to the 40th National FFA Convention, I had the pleasure of serving as chairman of the National Foundation and Awards Committee. In the meetings we held during the convention, many new ideas were forthcoming from the six other members. One of our chief concerns was the problem of reaching every FFA member so that all of you would have a better understanding of the many awards provided by the National FFA Foundation.

Since all award competition begins with members in the FFA chapters, we felt more emphasis should be given on the local level. Chapter officers and committee chairmen must insure that contest and award participation are covered in the written program of activities and explained at meetings. Upperclassmen who have won awards and the chapter advisor can work with Greenhands to see that they know and understand the awards available. They can be encouraged to make plans for awards they are interested in and begin to work toward those goals during their very first year.

A chapter committee can be assigned to make a neat display of all award medals available from the National FFA Foundation. This committee can also see that current award forms are always on hand in the chapter files—and that they are given (and explained) to members. Copies of applications that have won state or national recognition can be kept as good examples of how to complete the forms. When awards are presented at your parent and son banquet, invite a state officer to make a dynamic statement on the value of Foundation awards and the achievements possible through them.

While we are busy promoting incentive awards to FFA members, there is one thing that should not be forgotten. The report of our national committee stressed that the importance of recognition of donors to the FFA Foundation cannot be overemphasized. This should come from all levels in our organization and especially from those members who benefit from an award. We should invite local representatives of national donors to attend chapter banquets and programs where awards are presented. Officers can see that they receive proper recognition at these occasions.

Furthermore, the use of thank-you notes and letters is a good way to recognize others and improve FFA public relations. Every award winner should express his appreciation. Since you can’t write to each donor, of course, you should send a letter to the chairman of the Sponsoring Committee. FFA Foundation, Inc. His company title and address are found in the booklet that goes to Foundation award winners. This important aspect of the awards program could involve everyone.

It is too bad that each year some awards are not presented on the local and state levels due to an apparent lack of interest or participation. The members of the National Foundation and Awards Committee sincerely hope these ideas can help to improve this situation. We believe this would be a step toward making the FFA organization stronger. But most of all, every FFA member can benefit from active participation in the Foundation incentive awards program. You have everything to gain.

August-September, 1968
Breaking the entry barrier

"Tune in" ... get more from what you read and hear

YOU'VE GOT TO "tune in" to earn a future in farming. Those who succeed in breaking the entry barrier into farming will spend more time listening and reading because it's an essential part of the managerial decision process. A bonus for you... knowing how to listen or understand the ideas you read can help earn better grades in high school and college.

Researchers from 13 agricultural experiment stations, the USDA, and the Farm Foundation have been working together on project 59. Its purpose: "The Identification and Measurement of Managerial Ability and Its Effect on Resource Use in Farming." That's a fancy way of asking, "Why do successful farmers succeed?"

One of the contributors to this project, M. E. Wirth, Washington State University, takes a close look at the successful managerial decision process.

He notes that experiments show the best problem-solving managers ask more questions. More important, however, their rate of asking questions was slower and more efficient. Apparently the better farm managers know how to read and listen, and thus plan better than less efficient managers.

The question: How can you become a better listener to the ideas you read or hear? That answer could give you a head start toward becoming a successful farmer of tomorrow and a better student today.

Ralph G. Nichols, head of the Rhetoric Department, University of Minnesota, provided some answers during the recent meeting of the American Society of Agricultural Engineers and reported in "Agricultural Engineering."

Notes Dr. Nichols, "Communication is the very heart and soul of managing any enterprise. How on earth can we hope to get other people to do the things that must be done if we cannot communicate with them?"

After careful study of differences between good and bad students at the University of Minnesota, Dr. Nichols identified ten factors that separated one group from the other. These facts are summed up as "don'ts" which should help improve your "listening" to ideas you read or hear.

Don't call the subject uninteresting. This is a habit with bad listeners. They say, "Herd health—I have been around that topic 40 times. Why can't we get something new and interesting. Now that date I've got tonight . . .," and off he goes on a mental tangent.

A good listener starts at the same point, but with a frankly selfish point of view: "Well, inasmuch as I'm trapped here or stuck with this book, I may as well tune in and see if there is anything I can use."

The good listener is a sifter, a screener, a winnower of wheat from chaff. He is always looking for something to store away and put to work.

Don't criticize the presentation. This is a pastime for most bad listeners. They tune out a good book because the reading looks too heavy or the book is too long. If it's a speaker, they pick apart his delivery or how he's dressed.

Again the good listener may note these same facts about a book or speaker. However, he says to himself, "I have to 'dig' this chemistry if it kills me." He knows that the message is ten times more important than the way it is delivered. The truth is that we assume half the obligation for completing each communication.

Don't judge until the end. "Here comes the judge, here comes the judge" is a good way to describe most bad listeners. Before the speaker or author has started, they want to challenge him. As a result, they become over-stimulated and their listening or understanding efficiency drops to zero.

To be a good listener, withhold evaluation until the end.

Don't listen just for facts. Dr. Nichols asked the 100 worst listeners what they concentrated on when they listened. With pride they said, "We listen for the facts."

The 100 best listeners declared, "We try to understand the central ideas as best we can." The good listener is the idea listener, he understands the central ideas, and he uses them to make sense and system to a book or discourse. It then becomes easy to fit the facts in place. More important, you will remember the facts longer than the guy who tries only to learn facts.

Don't outline everything. If you are shopping for a business idea or better grades, you'll probably take notes. Most bad listeners in Dr. Nichols' study outlined everything, while the others fit their notes to the speaker.

The National FUTURE FARMER
The best idea catchers adjust their note-taking pattern to the pattern of the speaker or book... or to the complete absence of any pattern.

Don't fake attention. To grasp a new idea or a new understanding is hard work. For best results you have got to focus tension inside yourself that can only be resolved by getting the ideas and facts the communicator is trying to convey.

Don't tolerate distraction. When there’s a noisy clique around you, should you submit? Never! Tell the speaker, “Mister, I can’t hear you back here.” If you are trying to read, glower fiercely at the people around you and ask for quiet.

Don't dodge the difficult. In the study, the 100 worst listeners were asked about their radio and TV habits. Not one had sat clear through “Town Meeting on the Air,” or “Meet the Press.” Instead they were authorities on Bob Hope and Red Skelton. The best listeners knew about these shows, but they had sat through some of the more challenging programs.

Don’t let words get in the way. A single word may have such an emotional load that it will cause us to turn the author or speaker right out. Researchers say: for example, that 40 percent of all American makes tune out when the word “mother-in-law” is used.

Remember, the word is not the thing... it’s merely a symbol for it. Yet too often we go through life letting symbols stand between us and self growth.

Don’t waste thought speed. The cruising speed of your thoughts are a lot faster than a man can talk and most can read. That’s why it’s so easy to let your mind wonder on to something else in the middle of a speech or paragraph.

The best idea listeners put this speed to work. Here’s how: Anticipate the next point. If you can guess his next point, you’re in the money because this idea has registered on your brain twice. Learning has been reinforced, perhaps doubled.

If you guess wrong, you still win. You compare your point to his point. You are applying the oldest law of learning, which is that we learn best by contrasting one idea with another.

Identify what is offered as evidence. Books and speakers can’t merely assert points. They must build them. Pick these out, and it will give you a better foundation upon which to accept or reject his proposition.

Periodically summarize what has been said. Take timeouts during hard listening or reading and summarize the best points. This way you can rephrase what’s been said several times. Such summaries interspersed throughout can double our ability to understand and recall.

FELLOW FUTURE FARMERS OF AMERICA:

Our 40th Anniversary FFA Convention will be held in the Municipal Auditorium, Kansas City, Missouri, October 15-18, 1968. The national convention will open with a Vespers Service on Tuesday evening, October 15. An outstanding program featuring inspirational speakers and FFA leaders of the past and present has been planned. It is extremely important that all sessions be attended because they are carefully planned to conduct business, recognize achievements, demonstrate leadership, and set the course of our organization for the coming year. I believe every person who attends should go home more inspired and dedicated to the ideals and purposes of the FFA.

All chartered state associations in good standing with the national organization are expected to send two official delegates and two alternates. The delegates should be in Kansas City by 9:00 a.m. on Tuesday, October 15 for official delegate orientation and to attend the Officer-Delegate Luncheon. Convention committees will meet in the afternoon. State associations should have award recipients, American Farmer Degree candidates, candidates for national office, and others who have official business in attendance for the first session of the convention on Tuesday evening.

Each chapter is encouraged to send representatives equal to six members or ten percent of its total membership. This number does not include award winners or special convention participants. It is imperative that the representatives be carefully selected, registered, and oriented, using “You and Your National Convention” as a guide. This should be done before coming to Kansas City. During October 15-18, many eyes will be on the FFA as the “blue and gold” jackets gather in Kansas City. Thus, each member should set a gentlemanly example in conducting himself and wear the official jacket.

This convention marks the 40th Anniversary of the FFA. A great program can only be successful with the cooperation and support of all those in attendance. I, therefore, urge your enthusiastic support to make this convention a memorable one.

Sincerely,

Greg Bamford
National FFA President

August-September, 1968
A fast picking non-stop team—the 234 Harvester and the 656 Hydrostatic All-Speed Drive tractor.
International 234 saves your crop like a combine corn head

You know from your own field experience how a conventional corn picker can lose up to 10 bushels an acre.

Not so with the International 234 corn harvester. It's the corn harvester engineered to pick like a combine corn head to save those ten bushels. The snapping unit has exclusive scalloped snapping rolls and adjustable stripper plates. Stalks are pulled straight down—no kinked stalks or ears whipped off. Ears snap before they contact rolls—cut shelling losses to almost nothing even in single-cross seed corn.

Snap, husk or shell with the versatile 234! Each of these rear-processing units mates to one universal frame—with all the necessary power drives built in. One man, with no tools, can drop the snapping unit in three minutes. Switch to a 12-roll husker, a sheller or a snapper-hopper in five minutes. Free your tractor in ten minutes.

And should the weather force you into late season harvesting, you've got the flexibility to husk or shell or store ears with the husks on. One of your present tractors probably fits the 234 like a glove. Six makes, 26 different models already do.

Visit your dealer. Look over the International 234 corn harvester. Read about its worth-more features in his free catalog.

First to serve the farmer

International is a registered trademark of International Harvester Company, Chicago 60611.
Bunk Feeders

(Continued from Page 18)

divided bunk. Thus, by proper arrangement of lots and feed bunks, the same auger can be used to distribute different rations to two bunches of cattle. Additionally, the adjustable openings could also be arranged so that they could be controlled in separate groups along the length of the auger. This would permit dividing the space on each side of the auger into more than one lot, each of which could be supplied a different ration.

Advantages of the enclosed augers include the ease with which delivery can be controlled, both in amount and place in relation to the auger. Additionally, the uniform delivery along the length of the auger reduces crowding.

Primary limitation of this type auger is the increased cost as a result of its greater complexity. Also, extra care will be required, especially in cold weather operation, to make sure that the auger is permitted to empty completely before it is shut off. Otherwise, the silage may freeze and cause start-up troubles.

At auger speeds of about 200 rpm, the power requirement is about one horsepower for each 30 to 40 feet of auger.

Rotary Feeders. One of the least complex complete systems can be obtained by arranging the feeder around the silo. Here the feed bunk is constructed against the silo. A steel bar, to which rakes or paddles are attached, also encircles the silo. A small motor slowly rotates the bar around the silo as the silage drops from the chute into the bunk.

Advantages of this arrangement include its simplicity and low power requirements—about 1 1/2 to 2 horsepower. The circular arrangement also allows more cattle in relation to the length of bunk.

Limitations are lack of flexibility in feeding different rations to more than one bunch of cattle, impossibility of expansion of capacity, plus the disadvantages of working in the feedlot while filling the silo.

Swinging Auger. In this arrangement, an elevated, horizontal auger swings around a central post to convey the feed to a circular feed bunk. At the feed bunk end, an elevated track supports the auger. A separate, small electric motor moves the outer end of the auger along the track.

The overhead auger is long enough that the required curvature of the feed bunk will permit cattle to eat from either side of the bunk. The bunk can extend over as much as three-fourths of a circle, leaving the remaining one-fourth of the circle for a building and for access space for the cattle to enter.

A separate auger is required to deliver the feed to the inner end of the swinging auger. At the outer end of the swinging auger, the feed drops by gravity through a flexible spout into the bunk. The 50-foot horizontal auger can supply a feed bunk 225 ft long when it is arranged as three-fourths of a circle.

The small swing motor at the outer end of the auger is reversed by a switch which is tripped by a small stop attached to the overhead track. The blocks can be positioned to limit the swing to any desired portion of the bunk. Thus, by properly setting the blocks, the auger can deliver feed separately to different lots along the feeder.

Concentrate can be metered into the swinging auger along with the silage, or the silage can be distributed first and then the concentrate spread separately.

Primary advantages of this type outfit is the length of bunk that can be filled in relation to the length of the auger. This arrangement reduces power requirements. A three horsepower motor powers the auger, while a one-fourth horsepower motor moves the outer end along the track.

Expansion of capacity is very easy up to the three-fourths of a circle length of bunk. No machinery is added—only the bunk and the overhead track.

The primary limitation is the restriction of the length of the circular bunk to three-fourths of a circle. If additional length beyond this is needed, it is not practical to add it to this type outfit.

When comparing types of feeders, remember that there is no "best" one; rather there is only a range of how nearly each one meets your particular requirements.

In planning a bunk feeder system, it's often a good idea to visit existing systems in your area to benefit from their experience.
Does Your Organization Want $60.00 TO $660.00 OR MORE WITHOUT ANY INVESTMENT?

Then accept my SAMPLE KIT of
12 CHRISTMAS CANDLE VASES
on 10 Days FREE TRIAL

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Remember, you invest nothing to get going for your favorite cause, be it your church group, youth group, school class, band, special project or charity. Coupon brings you valuable guidance on organizing, publicity, answers to questions you may have. And I’m as close as your mailbox and enjoy helping. Please don’t put it off... Send the coupon in today.

Mary Mayfair FUND-RAISING HEADQUARTERS
Dept. 15-B
4411 West Cermak Road, Chicago, Ill. 60623

Imagine the excitement when your members open my compact Kit to reveal a dozen “Gift of the Magi” Candle Vases, a glitter in metallic gold, green and red. Friends sniff the exotic Frankincense and Myrrh, see that the vases are decorated with life-like holly and berries, and find them irresistible. Sure as Christmas is a-comin’, friends will buy at first sight.

Members Grab Up the First Dozen for Themselves!
You’ll find that Christmas is the generous time of the year for organization fund-raising when your group shows friends, neighbors and relatives my unique “Gift of the Magi” Christmas Candles Vases. When my Kit is opened it immediately brings the spirit of Christmas into the home. It’s fun for members to see this happen before their eyes and find themselves asking friends, “How many?”, even before the low price of $1.25 for each gorgeous Candle Vase is mentioned.

How to Reach Your Fund-Raising Goal Easily
The quick way to filling your treasury is by sending the coupon for my 10-Day Free Trial Offer of a full Kit of 12 Christmas Candle Vases. Check the box at the bottom and have it signed. I’m confident your members, when they see the sample Kit, will favor going for one of the larger, Extra Bonus goals given in our literature. Or, you may choose to send only for information about my fund-raising program, without any obligation. But don’t delay mailing the coupon.

SEND FOR 10-DAY FREE TRIAL SAMPLE OFFER

MARY MAYFAIR FUND-RAISING HEADQUARTERS, Dept. 15-B
4411 West Cermak Road, Chicago, Illinois 60623

We are interested in raising $60 to $660 or more for our group. Please send full details of your proven No Investment Plan, postpaid and without any obligation.

Name of Organization __________________________ No. of Members ______

Your Name __________________________ Title ______

Street Address __________________________ (Do not give P.O. Box or APO)

City __________ State ______ Zip ______

☐ Please send above member complete Kit of 12 Gift of the Magi $1.25 Candles Postpaid. We will keep $5.00 as our profit and pay you $10.00, or return kit postpaid in 10 days.

Authorized Person Sign Here __________________________ Title ______

August-September, 1965
Co-captains of the Clark, South Dakota, FFA softball team this summer are Marshall Seefeldt and Gail Smith.

Lamar FFA Chapter at Rosenberg, Texas, has 165 FFA members, according to The Texas Future Farmer.

Don Meyer, reporter of Brunswick, Missouri, FFA won FFA’s ugly leg contest.

Chaperones at the Holden, Missouri, Chapter’s barnwarmin’ chose the “spooniest” couple. Very interesting!

With help from two local veterinarians, Manchester, Iowa, FFA vaccinated 119 dogs.

Star State Greenhand of Montana is Richard Dorn of Big Horn Chapter.

Ainsworth, Nebraska, won recognition for their accomplishments in the state’s centennial activities.

Pleasant Plains, Illinois, FFA’er Dan Lehmann took state champion in fencing for the second year. No, not driving steel posts, but the sport.

Members of the Pojoaque, New Mexico, Chapter provide free service for area farmers. Available for castrating, dehorning, and branding.

Tim Jaeger of Lodi Chapter served as state parliamentarian at the Kansas state convention. Earned this office because of his work as member of the winning parliamentary procedure contest team.

Baltic, South Dakota, Chapter owns six FFA ties. Used by officers.

Oak Hill, Indiana, FFA contributed $100 to fund for a school activity sign.

W. C. Todd, Needville, Texas, FFA’er has a herd of seven registered Brahman.

Lexington, Missouri, Chapter planted popcorn in the extra 1 1/2 acres at school.

FFA Greenhands of Amboy, Illinois, Chapter sponsored a dance to help pay for calves to put on the chapter’s farm.

Member Jerry Day was honored by the Sierra Chapter of Tollhouse, California, for high scholarship. Made 3.9 during four years of vo-ag.

Star Greenhand and Star Chapter Farmer of Lamar, Arkansas, FFA are brothers, Herman and Arnold Ahrens.

Monroe, North Carolina, has a new record. Have had three FFA members become State Star Farmer. BUT—they’re all brothers, Jimmy Davis in 1963; Wayne in 1964; and Bobby in 1966.

The newly elected secretary of the Fife, Washington, Chapter has two self-addressed post cards from every member. Sends cards as reminders to members of summer chapter meetings.

Four Snake River, Idaho, Chapter Greenhands were elected as officers for next year. Zane Hansen, vice president; Paul Thompson, secretary; Kris Mecham, reporter; Kevin Ellis, sentinel.

Chapter greenhouse of Lyman Hall, Connecticut, FFA was cleaned out in a week. Got $130 donations for annuals and vegetable plants.

Greg Bamford, national president, spoke at the annual parent-son banquet of Morton Chapter, Wyoming.

All kinds of experiments are conducted. Don’t understand, but Doland, South Dakota, had a report on the weed patch at a meeting.

The Ivanhoe, Minnesota, FFA had 268 column inches of newspaper coverage in local paper during the year.

Word is that Scituate, Rhode Island, Chapter won the most first place awards at the state university’s annual field day.

A monthly meeting followed with a good recreation period planned by the Spooner, Wisconsin, Chapter.

Dave Williams of North Salem, Oregon, FFA won a halter at a recent judging contest.

Lapeer, Michigan, Chapter reporter wrote that 104 members and guests attended the chapter banquet.

Union Area, Pennsylvania, Chapter sold one of their Charoalais heifers (Jamaica May Rob Miss Terry) for $1,500.

Saline, Louisiana, FFA invited a wildlife commission representative to speak on poisonous snakes at their meeting. Speaker showed samples!

Joe Osterman of Madera, California, escorted his lamb to waiting trucks after a judging contest—by carrying lamb in his arms.

“FFA Develops” was topic of TV program conducted by Montgomery County, Georgia, Chapter.

Norlebo FFA won Pennsylvania’s state scrapbook contest for the fourth year in a row.

Both the poultry and dairy judging teams of Elgin, Ohio, Chapter won second place in the state contest, according to reporter Larry Price.

Jerome Mansfield, Sammie Goode, and Ronnie Jett are on the dairy judging team for Heath Chapter of West Paducah, Kentucky.

FFA Mothers Club of the Davis, California, FFA Chapter conducted a chicken supper as a chapter fund-raiser.

Don’t leave me out in the hot sun holding an empty basket. Send the N-N-N from your chapter.

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The Owl That Isn't

By Russell Tinsley

WHEN THE far-flung owl family was created, it seems some mix-up befell the burrowing owl. Scientifically, it is a true owl. It looks like one. But in no way does it act in the manner befitting the popular image of Mr. Big Eyes.

Owls habitually are creatures of the night. That is, all owls except the burrowing owl. These birds of prey perch and live in trees... the exception being you-know-who. Most birds have no desire to dig or, in fact, even know how. But the burrowing owl can disappear into the earth posthaste, digging its own hole if that's what it takes.

Of course the burrowing owl won't dig unless necessity demands it. Being a pragmatic creature, it prefers to let some other animal undertake this arduous task. A prairie dog, for instance, might construct a burrow deep into the soil, only to find later that a tenant has moved in. The burrowing owl goes into the hole with the prairie dog and lives a compatible life. There seems to be some sort of mutual trust among creatures who inhabit these burrows. It has been known for the likes of prairie dogs, burrowing owls, and rattlesnakes sharing the same hole with no animosity among the various inhabitants.

Although it appears odd in its habits, the burrowing owl, like all wild creatures, was created with its environment in mind. It lives in the ground and is diurnal (belonging to the daytime) in its habits by design rather than happenstance. The burrowing owl is primarily a bird of the treeless prairie, and circumstances demand that it live and reproduce on or under the ground. The bird's food supply, in the form of insects, small mammals, birds, and snakes, is most active during the day. After nightfall, the larger predators such as the wolf and coyote are prowling and survival dictates that less imposing creatures like the burrowing owl should be safely inside the ground at this time.

The burrowing owl is a diminutive bird, a size to permit easy entrance into the earth. Offhand, it appears much larger than it really is, being about 9½ inches in length, but most of the bulk is feathers; the owl's actual fleshy body is tiny, about the size of a mourning dove's. It easily can scurry into an opening that's no more than three inches in diameter. If no such hole is available, it picks out a sandy area and with a quick scratching motion really gets with its digging. Normally, it nests at least three feet from the entrance of its den.

You'll find burrowing owls most anywhere there are grassy plains. Its basic range is the unforested regions of the western United States and southwestern Canada, from the Pacific Coast to western Minnesota, and across parts of South Dakota, Nebraska, middle Kansas, Oklahoma, Texas and southeastern Louisiana, down into Mexico. The Florida burrowing owl is a subspecies inhabiting the palmetto prairies of that state, as well as some surrounding islands. A few stray from these ranges into timbered areas, but the ones I've seen among trees still remain on the ground, ignoring the trees. Flying away when alarmed, perhaps, but always dropping back to the ground.

The bird's coloration is mostly brown along the back, shading to whitish barred with brown on its underparts. It is known by such nicknames as Billy owl and ground owl in places.

Just about any animal that digs in the ground stands the chance of finding a burrowing owl homesteading its burrow. A prairie dog colony always has a few owls hanging about. Inside the hole, the owl constructs a rough nest and lays from 5 to 11 pure-white eggs, with the average being five to seven. The ground burrow gives mama owl some protection against animals who enjoy a brace of eggs for breakfast.

After the young are born, they have a voracious appetite, which includes most anything from ground squirrels and lizards to grasshoppers and small snakes. Naturalist S. N. Rhoads wrote in 1892 about some small burrowing owls he took to raise. He had them in a tin box where he kept them for several days. During that time, he noted they gobbled anything offered, fresh or putrid, and after awhile they began attacking and devouring each other.

The burrowing owl isn't a migratory bird; it raises, lives, and dies in much the same area. But Allen Duvall, an ornithologist with the U.S. Fish and Wildlife Service and for ten years chief of the banding division, reported that a banded owl once went from Utah to the Baja California peninsula in Mexico. Even a home-loving bird like the burrowing owl seems to get an urge to take a vacation sometime.
The shotgun that teaches a boy how to use shotguns.

Shotguns have been neg lected for years. Snooty shotguns with all their fancy engraving. Confusing shotguns with all their complicated actions.

But what about a nice, simple, down-to-earth shotgun that could take a boy in hand and teach him the fundamentals of shotgunning?

Announcing the Model 370.

Class begins the second a boy loads the 370. It's a single shot. So he learns to put one shell at a time in the chamber. (Instead of two or three shells he can lose track of in the magazine.)

And when he cocks the 370, he pulls back a hammer on the outside of the gun with his thumb. That way, cocking a shotgun becomes a safe, easy to understand operation. (Instead of something mysterious that goes on inside the gun.)

The Model 370 even lends a boy a helping hand when he takes aim.

In the front, there's a brass bead sight that helps an untrained eye zero in on target. In the back, a nonskid butt plate that's especially good for small shoulders. And inside, there's that one shotshell just waiting to teach a boy how to make every shot count.

Of course class isn't dismissed once the 370 is fired.

The hammer automatically pops back a safe distance from the firing pin. And the shell automatically ejects from the chamber.

So if a boy wants to fire her again, he has to go through the whole rigamarole all over again.

But that's what learning is all about, isn't it?
Future Farmers on the European study tour were entertained by the Berks Federation of Young Farmers in England. Above, FFA'ers show the girls how to square dance. Past national officer, Keaton Vandemark, is caller.

Grand finale of a full slate of FFA Week activities at Tate High School, Marvell, Arkansas, was the sweetheart ball. Escorting the sweetheart, Miss Loistene Clark, is Chapter President Jerry Sims.

Dennis Sandmann, left, and his twin, Doug, at right, were chapter officers at Lamberton, Minnesota. Now they have both been elected district officers. Their advisor, Ronald Kelsey, is at center.

Members of New Jersey’s state dairy judging team, of Newton, were honored by a milk producers cooperative. Pictured below are Allan Pullis, Jacob Tans, John Langeraap, and the advisor, Louis Gombosi.

Secretary Freeman chats with Dennis Lorenz, left, of Indiana, and Rodney Johnsen, Illinois, during their trip to Washington as junior spokesmen for the manufacturers of various products from corn.
There's more than one way
to stay in farming... There's more than one way to capitalize on that fine agricultural background of yours. A Case farm machinery dealership, for example. Here's a rewarding business almost made to order for the young "farmer" who likes farming, farm people and farm machinery.

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Jack Dahl, North Dakota Rancher, agrees...

Livestock profits are greater at the full-service market.

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"I think that West Fargo has the best feeder cattle market anywhere," Jack says. "We have worked for a long time to establish a reputation as a top calf producer, and we have to be certain that we market our calves where the buyers know our quality and pay us what they're worth.

"The service at West Fargo is outstanding. We couldn't ask for a finer auction or for more buyers looking for high quality feeder calves anywhere in the country.

"We lean heavily on our market agency at West Fargo to keep us advised on the trends and demands for our feeders.

"I am convinced that the central public stockyards system, particularly our market at West Fargo, does more to protect the livestock producer's interest and to help insure a higher net return than any other marketing system. You can bet we'll keep shipping our calves to West Fargo."

Your full-service United Livestock Market is geared to serve all your marketing needs. Ship to livestock marketing professionals. Their business is protecting your profits...it's a million dollar-a-day responsibility.
Pondering Your Future?

Will it include college?

By John Gerstner

THE SCRAMBLE for college is on. But while many high school seniors are anticipating the starting gun, others aren't sure they even want in the race.

Are you one of those puzzled youths? I was when I was in your position.

I'm now a Senior at Kansas State University majoring in agricultural journalism. My last-minute decision to attend college was an "I'll try it" proposition. I guess I'm still trying it.

But I have no regrets. I'm glad I entered college because I know my college education is an investment in the future.

I know you're probably filled to here with encouragement to attend college because you'll make more money, or it will make you a better citizen, human being, and so on.

But if you're pondering the college route, I say—try it. If you lack the resources or the desire to farm, an ag major in college will allow you to stay close to farming.

I'll admit, at the beginning that mountain of books, classes, and hills appeared insurmountable. I had qualms about whether my small rural high school training, dominated with four years of vocational agriculture and FFA work, had prepared me to compete in that intellectual jungle called college.

I found I was prepared in most areas. In the others, I just had to work harder.

College helps sever those binding ties with family and community. New faces, activities, and thoughts crowd out the old and familiar, replacing them with the different and more challenging.

A throng of decisions ranging from what courses should I take to should I get a part-time job have helped me get ready for later adult decisions.

Meeting and exchanging ideas with students from all over the United States and the world allows you to see the usual in new ways.

Agricultural courses give you an entirely different look at the agriculture with which you are familiar. You see farming as only a small part of agriculture. You see plants in terms of cells, nutrient needs, and photosynthesis. "Dirt" becomes soil with peculiar needs and characteristics.

Then there's the courses which prepare you for life, not just for a future job. That's why your ag courses are supplemented with courses in English, social sciences, mathematics, and humanities. These are designed to help turn you into an awakened citizen as well as a professional agriculturalist.

Of course, there's the obvious part of going to college: the daily walk to classes, reading, taking notes and tests, studying, and homework.

And there's fun. The dances, parties, cokes, and hull-sessions add spice to college life. All this is crowded into the college day which usually includes a lot of the night, too.

If you're puzzled about continuing your education, I encourage you to at least try college. I know you won't regret it.

"Remember what they used to provide us with? Bicycle racks!"

August-September, 1968
WATER SKIERS are a hardy and distinctive group. At a ski meet you may see trick riding on one ski, two skiers on one pair of skis, a skier removing his skis, or a pyramid of skiers. If you're lucky you may see some of the few who can actually stay on top of the water barefoot.

How expensive is water skiing? Costs can be kept to a minimum if a group organizes to buy and care for a boat. Water skis cost about $30.00, and 60 feet of good rope about $4.00. Ski schools charge from $10.00 to $15.00 to teach you to ski.

Water skiing can be done by everyone. Unless you are hopelessly uncoordinated, you can be skiing the first time you try it. The best place to learn is on dry land.

Place your skis on the beach, parallel, about six to nine inches apart. Put them on by pushing the foot as far forward in the binding as possible and pulling up the heelpiece. Now sit on the back ends of the skis with legs bent tight against the chest. It is very important to always keep your arms straight.

With someone holding the other end of the rope and bracing his feet against your skis, let him pull you up to a standing position without any assistance from you. Try this several times, keeping knees bent, arms straight and body slightly forward. It is the same motion you make in getting up evenly from a low chair.

When you have mastered the getting-up procedure on dry land, you are ready to hit the water. There are numerous ways of starting, but let's start from the beach.

In about two and a half feet of water, put on your skis and grab the tow bar. Now raise the tips of your skis above the water as a signal for the boat driver to get underway, giving you a fast, steady pull. When he does this, allow yourself to be brought slowly to the standing position, as practiced on land.

Remember to keep your knees bent, arms straight, and to balance weight directly over your feet in a half-crouching position. If you have trouble with the skis wobbling, they will automatically assume a straight position when the boat has attained a speed of twenty miles per hour. Do not pull up with your arms at the takeoff. Keep them straight and let the boat pull you.

A slow speed of twenty to twenty-five miles per hour is recommended at first, until you get the "feel" of the skis. To steer the skis to the right, merely relax your knees, push slightly with your left leg, and lean your body in the desired direction. To change direction, shift your weight and exert the pressure with your right leg. Keep practicing these turns inside the wake until you have mastered them.

Now you are ready to cross the wake—that large mound of water that has been hemming you in on both sides. Let's try the right side. Pull to the left, inside the wake, and make a right turn like you have just been practicing—but this time do not stop; pull straight through the wake with knees relaxed and slightly bent to "take it with the knees" so that they absorb the shock like a spring on a car. This is the same principle to follow when hitting rough water at any time.

Now to get back inside the wake, pull out to the side about twenty feet and reverse your turn. It is easier to cross back if you hit the wake going straight toward it, rather than trying to slip back in sideways.

The easiest part of water skiing is the stopping. Here is what you do: Let go the tow bar and, after sliding along on top of the water for about fifteen feet, you'll slowly sink into the water.

These are the basic techniques of water skiing: starting, turning, crossing the wake, and stopping. Now strive for perfect form—back straight, arms extended, shoulders back, head erect, skis close together.

A few words of caution: Good, safe water skiing practice requires two in the tow boat at all times—one to watch the motor and the skier, another to keep his eyes front for other boats and obstructions. No one should water ski over shallows less than five feet deep.

The driver of the boat should avoid making sharp turns since the backward pull of the skier will tend to slow the boat and sink the skier, putting an undue strain on the rope and boat. When recovering a fallen skier, the driver should come up at idling speed and make a half circle around the skier so that he drags the line into the skier's hands without bringing the boat on top of him.

Keep your knees flexed slightly, your arms out straight, lean back to get a pull from the tow boat, and enjoy it.

At left, Tempe, Arizona, Future Farmer Deke Moore unpacks his custom-made ski to get into action on Canyon Lake. The single ski offers even more challenge.

Color photo by Guy Price

August-September, 1968
The Philadelphia FFA

By Jack Pitzer

The Philadelphia Chapter of the FFA has over 120 members at W. B. Saul High School. Yes, a chapter in the city of Philadelphia.

The W. B. Saul High School of Agricultural Sciences draws its students from the entire city. Students travel by public transportation to and from the school.

On the 78 acres of land are facilities for field crops and vegetable production; an agronomy laboratory; a greenhouse and a nursery; a modern 20-cow dairy barn (with pipeline milker); a small poultry house; a building for meat cutting and shop for cutting and packaging meat with adjoining classroom demonstration center; a small animal house and laboratory for technician's training; a large machinery sales and service shop; and turf growing areas.

The school is currently operating as a pilot project to develop and evaluate courses in the agricultural sciences for use with urban students. Courses considered for the future are produce technology and floral design.

During the ninth and tenth grades, students receive nine weeks of orientation in each of seven specialized courses, plus a nine-week course in agricultural careers. The seven areas of specialization are agricultural business, ag machinery sales and service, agricultural production, horticulture, animal technician's science, turf technology, and meat cutting. Students select one of the seven specialized courses starting in the eleventh year in preparation for work or admission to college. In addition to the specialized courses, the students follow a curriculum of academic or general preparation courses like most high schools—English, math, history, sciences.

The Philadelphia FFA Chapter is an active one. In March they participated in the Pennsylvania Horticultural Society's Spring Flower Show. They set up an exhibit depicting education in the agricultural sciences, including a visual incubator with eggs hatching throughout the eight-day show. Also their exhibit had a Cheviot ewe with her two lambs, a slide sequence showing the school and its program, and demonstrations of floral design. The chapter received many compliments for their exhibit as well as the way they handled the animals and met the thousands of visitors at the show.

Philadelphia, Pennsylvania, FFA Chapter's exhibit at the 1968 Spring Flower Show. John Garret shows a chick to one of the children who visited the show.
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60—Show Day Countdown—A schedule you can follow to get the job done right and to be ready for show day. Starts with suggestions that you should follow beginning about two months before show day. Written in simple statements and is easy to follow. (Holstein-Friesian Association of America)

61—Weaver Scopes—Which scope is best suited to your requirements? This colorful booklet will help you in selecting and using the correct telescopic sight, depending on the game you will be hunting. Includes a section on how to sight-in to obtain maximum accuracy from the rifle, scope, and ammunition. (W. R. Weaver Company)

62—Attitudes and Platitudes—Almost one-third of the drivers involved in fatal accidents on highways last year were under 25 years of age. Automobile accidents claimed 52,200 lives and injured 4,200,000 persons in 1967, according to this handy booklet of highway accident statistics. This is the first appreciable reduction in tragedies on the highways in more than a decade. (The Travelers Insurance Companies)

63—Futures Trading in Choice Steers—Beef is big business. This factual brochure describes that big business of beef, its importance to society, and its changes. It includes information about factors affecting supply and demand. Another helpful section is the arithmetic of hedging. By providing a new and successful mechanism for the shifting of unavoidable price risks, the futures market for choice steers plays a vital and growing role in the “beef revolution.” (Chicago Board of Trade)

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August-September, 1968
MINNESOTA—The Stillwater Chapter ended their 1968 seedling tree-planting season with 172,000 planted. They are claiming a world record with 1,450,000 trees planted in nine years. In fact, they've challenged other chapters to match this total.

The chapter's complete service to landowners includes picking trees up at the nursery, planting them, and applying herbicide. They used over 5,000 pounds of herbicide in 1968. The project is an activity for community service and for earnings and savings.

Two work crews operate together. The crews are made up of three members, with a tractor, tree planting machine, and granular herbicide applicator. The Stillwater Chapter owns all the equipment for outfitting two crews except one of the tractors. They also own a pickup for hauling trees, fuel, herbicide, and the work crews.

Members of this national award chapter have planted every one of the nearly 1.5 million trees themselves. The equipment has not been rented for use by other groups. In 1968, nearly $1,000 was paid for 900 hours of member labor by the chapter on an escalating scale based on experience.

Members may increase their tree-planting wages by passing a special examination on tree planting details as well as by good attendance at regular chapter meetings. One-half of the wages go into a savings account to be paid with interest upon graduation from high school. Many members elect to put all of their wages into the savings account which pays 5 percent.

Seedlings are planted under the Agricultural Conservation Program which cost-shares planting expenses with the landowners. The Stillwater Chapter has 104 members. (Ray Erwin, Advisor)

NEW YORK—Alan Cornwell has plans for a farming career and the 18-year-old New Yorker is already being recognized for his achievements as a farmer. He was named national canning crops champion in the junior division by the National Junior Horticultural Association and the National Canners Association.

Alan's winning crop was five acres of sweet corn with a total yield of 39 tons. His average yield of 7.4 tons per acre compares with the average yield in New York of 5.2 tons per acre.

To produce the winning crop, Alan carefully planned every stage of production, from seedbed preparation to marketing the crop. He used a soil test, fertilized heavily, applied a herbicide, sprayed for insects, and even kept a rain gauge in the field so he would know the amount of moisture his crop received. He also sought the advice of company field men and his FFA advisor, Mr. John B. Keller.

In May, Alan was in Washington, D.C., to receive his award. He plans to stay in farming and is presently building a dairy herd and looking forward to developing a partnership with his father.

Alan holds the State Farmer Degree in FFA and has served as president of his local chapter at Perry Central High School. He has been very active in other school, community, and youth organization activities. These include varsity basketball, National Honor Society, and a national director of the National Junior Horticultural Association.

DELWARE—Members of the Delaware Future Farmers of America elected officers at the closing session of their 38th annual convention at the University of Delaware.

Charles Poslue, Milford, a student at the University of Delaware, was elected president. Vice presidents are Bart Shetler, Middletown; William Abbott, Harrington; and Gary Marine, Laurel.
Henry Hershberger, Wyoming, was elected treasurer, while John Comeys, Hartley, was named secretary.

Other elected officers include Rick Nechaz, a member of the Caesar Rodney Chapter, chaplain; Steve Henry, Laurel, reporter; and George Wilkins, Milford, sentinel.

Named to the executive committee were former state president Dewey Whitmore, Greenwood; Thomas Unruh, Middletown; and Thomas Davis, Milford.

Wayne Hendricks, a Harrington High School graduate, received the Star State Diamond Farmer Degree.

First place in the junior public speaking contest was awarded to William Harris, Milford. Edward Davis, Newark, was awarded first place in the senior division. The parliamentary procedure award was presented to members of the Caesar Rodney FFA Chapter.

State Diamond Farmer awards were also presented to Eugene Dill, Caesar Rodney; E. Mark Phillips, Sussex Vocational-Technical; and George Wilkins, Milford.

WASHINGTON—Annie is a five-foot-two blonde with eyes of blue, a peaches complexion, and ruby red lips. She has contributed much to the rural first aid training for members of the Quincy FFA Chapter. Each member has had an opportunity to practice mouth-to-mouth resuscitation.

Annie is a rubber dummy loaned to the chapter by the Grant County Public Utility District.

The long term goal in the chapter's program of work in first aid is to have at least one member of every rural family trained in first aid procedures. Quincy Chapter was presented a special award by the American Medical Association for their accomplishments in farm safety. The AMA award was presented for the chapter's widespread activities in safety practices among the members and in the local community. The chapter also was named Gold Emblem chapter in the National FFA Foundation farm safety program last October.

Demonstrations and panel discussions were presented to the farm, civic, and professional organizations.

The Quincy Chapter received statewide attention by suggesting legislation for slow-moving-vehicle emblems. Two state representatives and a state senator sponsored the legislation.

The chapter also conducted 83 farm inspections and located 385 hazards. Improperly shielded equipment led the list of major safety hazards corrected.

Chapter members conducted a vehicle safety check. Farm safety exhibits by the chapter at the Grant County, Washington, Fair showed potential tractor-driving hazards.

IOWA—The Northwood-Kensett FFA Chapter has constructed its own swine breeding station. The station is located within ten blocks of the school on the chapter's farm. The swine station was built to help the chapter members locate better boars for their swine improvement programs.

The facilities were constructed by the chapter and include three four-pen hog houses with adjoining platforms. This gives 12 separate pens.

The chapter now owns five outstanding boars. During the breeding season (two six-week periods in the spring and fall), the boars are kept at the station. Members bring in their gilts and sows. The females are held at the station until they are serviced twice.

This spring was the fifth time the station was used. During the last six-week period, 100 head were bred. The conception rate has been over 90 percent on first service.

Chapter members are charged a nominal $2.00 per head for breeding fees and 25 cents per day for board. This helps to meet part of the expenses. So far the chapter has invested $2,000 in the station and, at present, has invested $1,000 in boars. (H. A. Rupert, Advisor)

VIRGINIA—The Appomattox Chapter was recognized as winner of the State FFA Chapter Contest and cited for community service during the closing ceremony of the 42nd state convention. In winning the chapter contest, the accomplishments of the Appomattox Chapter were recognized as being the best of the 203 local FFA chapters in Virginia.

The president of the Appomattox Chapter was presented a check for $50.00 and a plaque. Chapter advisors are H. B. Pack, R. B. Carter, and W. T. Johnson. Earlier during the convention, the Appomattox Chapter had been cited for outstanding work in public relations, chapter forestry, and chapter wildlife, and members of the chapter had won state awards in forestry and soil and water management.

The Appomattox Chapter has 146 active members. They conducted an average of 49 productive enterprises per member. Fifty-four members improved their farm entrances by constructing concrete mailbox posts.

More than thirty farms in the county have hogs bred by Certified Meat Sire boars maintained by the chapter. The chapter maintains a loan fund for assisting members in purchasing purebred animals.

The chapter raised more than $4,000 through six fund-raising activities to finance its work. They cooperated with other agencies in fire prevention, production of food for wildlife, and reforestation.

During the year, the chapter presented two educational programs before community organizations. One hundred and thirty-seven members participated in the chapter safety program.

Runner-up for the state award was Montevideo, and third place went to Turner Ashby, C. T. Smith, Patrick Henry, and Tunstall placed fourth, fifth, and sixth respectively.

Annie helps Quincy, Washington, members learn first aid.
MAJOR LEAGUE ball players are called on to fill in at different spots in emergencies, but not many get the call that Bob Humphreys of the Washington Senators received recently. Bob, a relief specialist with Washington, was asked to meet the challenge of Baltimore's John O'Donoghue in a cow-milking contest at Washington's D.C. Stadium. Bob won the silver cow bell prize with the help of a good battery mate, a Holstein named Reta Mae who reportedly produced 12,391 pounds of milk over the last two years.

Bob learned his milking, and early lessons in baseball, in the farm country around Covington, Virginia, where he was born and raised. He played his first organized ball for the Montvale, Virginia, High School and was a member of the Montvale FFA Chapter. Poultry was his main supervised project. Humphreys went on to Hampden-Sydney College where he played four years of varsity ball. He helped lead their team to the Mason-Dixon title in three of those years and a state championship in his Junior year.

Bob was signed by the Detroit Tigers' organization after graduation. He got off to a good start with their Montgomery, Alabama farm team in 1958 when he won ten games while losing only five. He struck out 95 batters and finished with a fine 2.29 earned run average. The Tigers shuttled Bob between five of their farm teams for more experience during the next three years. During that time, he appeared in 182 games, winning 35 and losing 26. He fanned 403 batters in those games.

Humphreys got his first chance with Detroit in 1962, but it was to be just a four-game stand before he was traded to the St. Louis Cardinals in 1963. Playing with their Atlanta team that year, Bob won seven games, lost two, fanned 64 batters, and had a fine 1.92 ERA. He was called up at the end of the season and appeared in nine games, all in relief. St. Louis called on him for 28 relief roles in 1964, and Bob finally won his first two major league ball games. He fanned 36 batters and allowed only 2.51 earned runs a game. Humphreys thought this would be his big start in the majors, but St. Louis had a deep pitching staff and traded him to the Chicago Cubs in 1965.

He appeared in 41 games for the Cubs that year, winning two games, fanning 37 batters, and compiling a 3.14 ERA. The Cubs gave Bob another plane ticket in 1966 when they traded him to the Senators.

Many players might have given up after compiling so much travel time, but Bob came to Washington and became a star in the Senators' bullpen. A relief pitcher's job is not as easy as it looks for they can expect to be called on at anytime and must be able to warm up in a hurry. They usually enter a game under great pressure with runners on base and often with a slim lead to protect. Bob Humphreys, at 5 feet, 10 inches and weighing around 170 pounds, is not as big as many of today's pitchers, but he has a strong throwing arm. A right-hander all the way, he throws all the pitches—a good fast ball, curve, slider, and change-up. He also has a strange sort of side-saddle windup that may throw the hitters off stride when he brings both hands together beside his right hip during his windup.

Humphreys came to Washington and stepped right in as one of their best middle or long relief pitchers. He was called on 58 times in 1966 and worked 112 innings, striking out 88 batters. Bob won seven games, lost only three, and had a good 2.81 ERA. He also started one game and held the New York Yankees scoreless for five innings. Bob made the trip in from the bullpen 48 times last year and picked up six wins against two losses. Contract negotiations and a sore arm got him off to a slow start this season, but he is back in form now. His record on July 1 was 36 innings pitched in 19 games with two wins and no losses. He has fanned 25 batters and has a 3.50 ERA.

In his four full seasons of major league play through 1967, Bob had pitched 343 innings in 189 games in which he won 17 and lost only 7. He has struck out 227 batters and has a good 3.39 earned run average. Bob Humphreys will be a good "fireman" in the Senators' bullpen for some time to come.
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August-September, 1968
Overheard in an elevator: "She's such a slow typist, every time the little bell on her typewriter rings, she thinks it's time for a coffee break."

Joe David Goad Hawesville, Kentucky

Two parents, each a chaperone at a high school party, were chewing the rag when suddenly one exclaimed, "Just look at that youngster, the one with the cropped hair, a cigarette, and the tight trousers. Is it a boy or a girl?"

"It's a girl, my daughter," was the reply.

"Please forgive me, my good fellow, I never would have been so outspoken if I had known you were her father."

"Well, I'm not. I'm her mother."

Dennis Dammen Osage, Iowa

"Err, do you have an easy payment plan sir?"

Driving instructor: "If there's any kind of emergency, put on the emergency brake."

Student: "Doesn't it come with the car?"

Steve Louden Greensburg, Indiana

A big truck was stuck, and the sweating driver was trying to dig it out. "Stuck in the mud?" a passing motorist shouted.

The farmer took time to spit, then answered, "No, I'm not stuck. My truck died, and I am burying it."

Robert Kriley Stockton, Kansas

A farmer, after saving for a long time, went out and bought a brand new tractor. While admiring it, he noticed a spot of dirt on the tractor and called to his wife to bring him a rag.

She replied, "I'm wearing it."

Roy Caldwell Yuma, Arizona

A salesman was traveling on a country road when he saw a puddle blocking his way. He stopped his car and asked a farmer standing nearby if the puddle was deep. The farmer said no, so the salesman started driving through when he and the car sank. When he asked the farmer why he had said it wasn't deep, the farmer put his hand to his chest and said, "It only came to here on my ducks."

David Cate Tonica, Illinois

Sign in window of apartment No. 1: "Piano for sale."

Sign in window of apartment No. 2: "Hurrah!"

Paul Carlson Hugo, Minnesota

The salesman, after gaining entrance to the prospect's home, put on his personality act. "My, what a lovely home you have," he gushed. "And pray tell me what is in that beautiful vase on the mantel?"

"My husband's ashes," said the young wife.

"Oh, I'm sorry," exclaimed the salesman. "How long has he been dead?"

"He's not dead," replied the wife. "Just too lazy to find an ash tray."

Thomas LaMance Calpella, California

Brother (sitting at the table): "Sis, pass the lasses."

Sister (in high school and trying to act important): "It's not lasses, it's molasses."

Brother: "How can I say more lasses when I ain't had no lasses?"

Samuel Gregory Gloucester, Virginia

A clerk was handed a pay envelope which, by error, contained a blank check. The astonished clerk looked at it and moaned, "Just what I thought would happen—my deductions finally caught up with my salary."

James M. Doyle Lakin, Kansas

Charlie, the Greenhand

"Charlie sure is going all out to win that new agribusiness award."
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