You'd never mistake Winchester's Model 190 automatic for anything but a real, honest-to-goodness rifle.

The gracefully contoured stock and forearm are good solid wood.
The barrel is steel.
The sights are metal. And it'd take a hammer to knock them out of line.
And the receiver's made of a new rugged, rustproof metal alloy.
The point is, Winchester still believes 22's are real rifles.
The 190 is made with the same honest metal-to-wood workmanship that has always put Winchesters in a class all by themselves.

So when you take it out in the field you can be darn sure it'll work. And shoot where you point it. And keep on doing it. (The 190, by the way, can handle 21 Short, 17 Long, or 15 Long Rifle cartridges interchangeably.)

Of course, this new rifle doesn't have some of the fancy frills you get in Winchester's more expensive 22's. Like checkering and Monte Carlo stocks, engine-turned bolts, et cetera.
But then it doesn't have the fancy price tag either.
How fast can you save up $43.95?

If you're saving up for a Winchester 22, now it won't take so long.
Firestone introduces a new 23° angle tire—now on new tractors

The All Traction Field & Road—A completely new 23° angle traction bar tire, developed by Firestone, effectively harnesses the high horsepower that tractor builders are putting into their new models.

Now original equipment on modern tractors, the new All Traction Field & Road gives far greater traction than old style 45° angle tires. Rugged traction bars are placed at a 23° angle for maximum traction. Traction bars make shoulder-to-shoulder contact, actually put more rubber on the ground. An important result: this husky new tire delivers 10 to 16 per cent more of that new tractor horsepower at the drawbar.

Another advantage, the new All Traction Field & Road outwears any other original equipment tractor tire ... gives up to double the life of old style tires on hard surface roads.

Five years of extensive use on farms prove the high performance superiority of the 23° bar angle design in the new All Traction Field & Road. This is another example of how Firestone keeps pace with tractor manufacturers to provide farmers with the greatest traction on earth.

Firestone
QUALITY AND SAFETY COME FIRST AT FIRESTONE

December-January, 1966-1967
If you're growing up on a farm, you are a wanted young man!

You are unique. You are wanted in the expanding world-wide business of producing, processing, and marketing FOOD!

If you plan to go to college, and then plan to go...
back into some phase of farming, that's fine. If you plan to go to college but don't want to go back to the farm, think twice before you jump clear over the fence and throw away your farm background. Think you'd like a career in chemistry, journalism, accounting, engineering, art, or architecture? These and many other careers are open in the growing field of agribusiness. Salaries and opportunities are rising steadily.

What are the jobs? What are the salary levels? What are the college courses that prepare you for one of these careers? For information, write Department 259, Ralston Purina Company, Checkerboard Square, St. Louis, Missouri 63199.
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Our Cover

While we don't always think of it as such, the vocational agricultural class is also a science class.

This visit to a class in Coolidge, Arizona, is proof of our point. For more on science in agriculture, see cover story on page 16.

PHOTO BY BOB E. TAYLOR

Address: The National Future Farmer, Alexandria, Virginia 22306. Offices are located in the Future Farmers Building on U. S. Route One, eight miles south of Alexandria.


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Change of Address: Send both old and new addresses to Circulation Department, The National Future Farmer, Alexandria, Virginia 22306.
"If you think you're going to sell me a new Dodge truck very soon, you're wrong."

My '56 Dodge pickup looks like it still has a lot of miles and a lot of years left in it. I bought it new and have put 66,000 tough miles on it since, many of them off the road, hauling feed, grain and hay on my dairy farm. It doesn't use much more oil than it did new. Maintenance has cost almost nothing. One valve job in ten years is all. Rings and bearings haven't been touched. Gas mileage is 18 to 19 to a gallon, too. I bought my first Dodge truck in 1937 and have used them ever since. They've all been the same. Tough, dependable, hard to wear out."

Arthur Bowers
Route 1
Marion, Wisconsin

If you're looking for a new truck that's "tough, dependable, hard to wear out," better go see your dependable Dodge dealer now. No matter what type of truck is best for you, he has it—from the only compacts with V8 power to big diesels. And they're all priced nose to nose with Ford and Chevy. Get acquainted with your dependable Dodge Truck dealer. He's a good man to know. Dodge toughness doesn't cost any more. Why settle for less?

Dodge Builds Tough Trucks

December-January, 1966-1967
ANOTHER National FFA Convention has been placed in the record books. Next comes Christmas, the New Year—then National FFA Week.

We have a lot to celebrate in 1967. It will be the 40th National FFA Convention, the 50th anniversary of vocational agriculture, and the 20th year for the national officers’ goodwill tour.

National FFA Week is February 18-25, the week of George Washington’s birthday, and the theme for 1967 is “Agriculture—Strength of America.” But if you wait until National FFA Week to start a public relations program in your local community, you are already a month and a half behind schedule. Why not have a year-long program, starting in January, designed to inform “every man, woman, and child” of the contribution FFA and vocational agriculture has made to this “Agriculture” which is the “Strength of America.”

It is indeed a proud story we have to tell in the FFA. First came vocational agriculture established in 1917 under the provisions of the National Vocational Education (Smith-Hughes) Act. As stated in the Act, vocational agriculture at that time was for “...persons over 14 years of age who have entered upon or are preparing to enter upon the work of the farm or the farm home.” The Vocational Education Act of 1963 amends the previous legislation and broadens the objectives to include training for “...any occupation involving knowledge and skills in agricultural subjects...” This presents the challenge, and the opportunity, for vocational agriculture to make an even greater contribution to American agriculture in the future than it has in the past 50 years.

Right from the beginning, the students enrolled in vocational agriculture felt a spirit of comradeship due to their background of country life and their desires regarding farming as a vocation. Within a few years, these students had developed organizations. In many instances they were largely social and recreational in nature but often included certain education, self-improvement, and cooperative features. Later statewide groups composed of these local units came into the picture. Between 1923 and 1928 a number of states actually formed organizations of vocational agriculture students.

In 1928 the call came clear and strong from various sections of the country. The first National Convention was held in November of that year, and the FFA was on its way. Today there are 445,386 members in the 50 states and Puerto Rico with local chapters in Guam and the Virgin Islands. In addition, the FFA idea has spread to other countries. The best examples of organizations in other lands patterned after the FFA are the Future Farmers of Japan and the Future Farmers of the Philippines.

The primary aim of the FFA is the development of agricultural leadership, cooperation, and citizenship. Some of the best farmers in the country today as well as many outstanding leaders in public life are counted among the organization’s former members.

Yes, it is a proud story we have in the FFA. Let’s tell people about it in 1967!

Wilson Carnes
Editor
"I work equipment hard. I rely on oil with muscle to work it longer."

Farmer Robert W. Krenek said that. He produces cotton and corn—with the help of son Bob, Jr.—on 112 acres in Wharton, Texas. Has farmed this land for some 20-odd years. Owns and operates 2 tractors, a cotton picker, and a pickup truck. Uses Texaco's Havoline Motor Oil.

"Every extra year I get from my equipment is pure profit," says Mr. Krenek. "And that's O.K. with me. I want my engines to last a long time.

"My problems used to be a fuel-guzzling engine and a couple of repair jobs that set me back some. So I was ready for help when my Texaco Farm Service Distributor brought me Havoline. Havoline helped all right. Still does. It's got the stamina for the heavy work I do. Doesn't thin out after hours and hours of operation under high engine heat.

"And those engine deposits that used to build up and waste so much fuel and wear out parts? No more of that for me. Havoline keeps my engines clean by preventing deposits from forming in the first place."

Helping farmer-customers find solutions to their problems is a habit with your Texaco Farm Service Distributor. He's got the top-quality products—he provides top-quality service. And his deliveries are prompt and dependable. Give him a call. He'll lend a hand.

Trust Texaco Farm Service

Looking Ahead

Crops

FAST PHOTOSYNTHESIS—A report by two California chemists before the National Academy of Sciences shows that they have succeeded for the first time in producing a high rate or photosynthesis outside the cells of green plants. Using a material derived from spinach, the process takes place at about 65 percent of the speed of nature. Such a method might someday be used to enrich the protein and fat content of vegetable crops or convert useless plants into high-quality animal feed.

WORLD FOOD PRODUCTION STANDS STILL—Because of widespread drought, the Food and Agriculture Organization says in its annual report that this year’s food output was no larger than in 1964-65, with the result that per-person production of food fell by 2 percent. Another result—retail food prices continued to rise in almost all countries, and in many European countries and Australia it rose faster than in 1965.

ASPHALT UNDER SOIL BOOSTS YIELDS—Michigan State University scientists have found a method to literally “pave” the way to better food crop production. They’ve done it by putting a thin layer of asphalt two feet under a sandy soil. Crop production increases of 20 to 100 percent have already been recorded for beans, potatoes, and cucumbers. It is estimated that such a “barrier” could double the acreage of rice paddies in some Far Eastern countries.

Machinery

VERSATILE COTTON BED SHAPER—A University of Arizona Agricultural engineer has developed a new and unnamed machine which, in one trip across the field, can: (1) make and shape two beds for planting cotton, (2) plant the seed at intervals predetermined by the grower, (3) apply systemic insecticides around seed, and (4) spray herbicides.

MECHANIZED BEEKEEPING—Wisconsin engineers haven’t taken the sting out of beekeeping, but they have found a way to reduce labor. The result is a vehicle for use in the bee yard. The vehicle looks like a pickup truck with a boom which is used for moving and loading colonies of bees or supers of honey. Other equipment includes an air compressor, electric generator, and hydraulic system.

Livestock

BEEF—Beef producers could save $5.00 or more per cow by feeding their beef cows less energy during the winter, according to an Iowa nutritionist. Cows fed low energy levels saved 3.6 percent more calves from birth to weaning than the moderate level group. Cost of wintering the low energy group was $15.42 less than the group on a moderate energy level.

HOGS—Before the end of this decade, north central states could be hit by an animal waste disposal problem so serious it might curtail meat production. So says Edward Berry, professor of bacteriology at South Dakota State University. Two hogs produce as much waste as five adults. Already South Dakota has a waste problem equal to that produced by a population of 64 million people. Berry points out.

University of Missouri research indicates that bred sows need more feed during winter. Pigs from sows fed seven pounds during the last 30 days of pregnancy averaged about a half pound more per pig at two weeks than those fed four pounds per head, per day. Sows also showed more gain during the season.

DAIRY—A British dairy company has developed a process which keeps milk fresh for six months in any climate without refrigeration. The Express Dairy Company of London has a plant which is producing 2,000 gallons of long life milk per day. The milk is now being sold to Malaysia, Central America, the West Indies, West Africa, Libya, and Saudi Arabia. Regular shipments are also being made to some European countries.

Ohio State University research shows a 4 percent increase in milk output for cows that can get water any time. The production was compared with cows receiving water twice a day. And, note this, water consumption affects production of high producers more than low producers.

POULTRY—Record high poultry and egg production is in prospect for 1967, according to USDA’s Economic Research Service. Egg production is expected to be up 3 percent, turkey production is expected to increase about 5 percent; and broiler output is expected to increase 5 to 10 percent. If the expected increases come about, this would be the largest year-to-year egg production upturn in a decade and would be large enough to reverse the downtrend in egg consumption, which has declined from 393 eggs per capita in 1951 to 301 eggs in 1966.
FIGHT THE HIGH COST OF HEALTHY GAINS

with the Milk-Bank nutrition of Kraft Feed Boosters

Here's their bank of milk nutrients: dried whey, delactosed whey, hydrolyzed whey, cultured whey, cheese.

Sure, if money were no object, you could get fast, healthy gains easily. The trick is to do it without adding to your feed cost, and if possible, cut your cost per pound of gain.

It is possible with Kraft Feed Boosters—Pex products for poultry, Kraylets pellets and Kraft Pig Pre-Starter for swine, Kaff-A products for dairy and beef cattle, and Nutri-Plus Boosters for sheep. And, to give horses extra bloom, gloss, and vigor, you can use Pace Pellets.

These feed boosters give animals nutrients that ordinary rations don't usually provide: milk nutrients rounded out with other important ingredients. With the lactose, protein, minerals and vitamins that the milk nutrients supply, any ration will produce more healthy gains more efficiently. Here's why:

LACTOSE—HARDWORKING CARBOHYDRATE

The Milk-Bank Boosters provide lactose, a hard working carbohydrate, especially important for young and growing animals. It outperforms all other sugars, giving you a better rate of gain with fewer digestive upsets.

In addition, lactose promotes acidity in the digestive tract, keeping it clean and healthy. And with lactose in the ration, animals absorb and use more calcium, phosphorus, and magnesium.

PROTEIN RICH IN AMINO ACIDS

Protein is another key element in the Milk-Bank. Lactalbumin and casein are among the richest in essential amino acids, ideal complements to grain protein.

They promote animal health and growth, help build soft tissues and disease-fighting antibodies.

BONUS IN MINERALS AND VITAMINS

Milk-Bank Feed boosters offer a good supply of minerals, too: calcium, phosphorus, potassium, sulphur, and magnesium plus trace elements such as manganese, iodine, copper, iron, and cobalt.

The vitamins—members of the B complex—in these feed boosters supply added nutrition and reduce the need for vitamin supplements. Finally, Milk-Bank feed boosters provide unidentified growth factors which stimulate growth and improve over-all feed efficiency.

Feed rations that work harder and bring out the best in your stock—rations that include the Milk-Bank Boosters by Kraft. Ask your dealer or write for Kraft Research Proved-Farm Tested feed formulas now. Kraft Foods Agricultural Division, Dept. 19, 500 Peshtigo Court, Chicago, Ill. 60690.

KRAFT

... where better nutrition starts with milk
Bowosso, Michigan

I would like to call to your attention the picture on the front of the latest issue of The National FUTURE FARMER. On the cover was a picture of a man who had been hunting and holding a pheasant. In the background was someone operating a corn picker. I think this was a very bad picture for the magazine, mainly because of the safety viewpoint. In the four years I have received the magazine, they have always stressed safety.

John Erolka

Wai‘anae, Hawaii

Aloha from Hawaii! Thank you very much for giving us a wonderful tour of The National FUTURE FARMER offices. We certainly enjoyed every minute of it.

Robert Akia, Carl Kobashigawa
Neal Fujiwara, Jack Yoshidura

Thank you for your letter of October 10 regarding the article “A Letter From Mother.” We were sorry to learn of your son’s experience and hope that he will soon be fully recovered. We thought this particular article had a special message for young men and hoped it would help them realize that they have a responsibility to their parents as well as themselves.—Ed.

St. Louis, Missouri

It was with a great deal of interest that I read the article, “Wanted! Rural Appraisers With A Farm Background,” in your October-November issue. This is an interesting article that should arouse young men beginning to decide on a career. Since Doane Agricultural Service, Inc., has been in the rural appraisal business since 1919, and I imagine we have more rural appraisers (over forty) than any organization, it was somewhat disappointing not to be mentioned. Also, I know that a large number of our staff are former FFA members and current supporters.

We realize your editors cannot mention everyone in an article such as this, and we also realize that we have a specific reason for our loyalty toward Doane in the rural appraisal field. As a matter of fact, Doane Agricultural Service, Inc., employed Clifford Orbaker for eight or ten years while he was expanding his farm management business in the Philadelphia area.

I am merely giving you this information as a little further background regarding your article.

J. W. Hackamack, Vice President
Doane Agricultural Service, Inc.

Baldwin, Kansas

I would like for you to send me the two free booklets that I have marked on the enclosed coupon. I just became a Future Farmer last week and think it is a fine organization. I enjoy reading the magazine. I was very lucky to win our chapter’s FFA creed contest. My reward is a trip to the National Convention which will be a great experience.

Bob Russell

New York, New York

I have enclosed two coupons for free materials.

I live in New York City and travel to school where I have been an FFA member for three years. I have organized our local chapter newspaper and can appreciate the effort you put into your magazine.

Herbert Orange

Cazenovia, New York

The Chapter of Cazenovia would like to get some information on the FFA calendar. In past years as an FFA member, I haven’t seen a local or New York State chapter represented in any photograph.

As reporter, I would like to know how we could get our chapter of Cazenovia to be acknowledged so we may represent one month in “our” calendar.

Any information on this matter would be greatly appreciated.

Lawrence Emhoff

We certainly appreciate your chapter’s interest in the Official FFA Calendar program.

We rely on FFA chapters, vocational agriculture teachers, and state FFA associations to send us most of the color pictures used on the FFA calendar.

Our technical requirements call for professional quality, 4 by 5 color transparencies. The pictures must be of Future Farmers in action (at work or at play) in FFA Jackets. Since the pictures are used nationwide, we especially prefer that the name of the state and chapter and the date on the front (i.e. Reporter, 1967) do not show.

Send us a 4 by 5 color transparency and maybe the editors will choose it for use on the 1969 Official FFA Calendar. (The pictures have already been selected and printed for the 1968 calendar.) We review all transparencies as they are submitted. So we can’t promise for sure, but it’s worth a try. We pay $50.00 for the pictures that do finally end up on the calendar.

Good luck with the camera.—Ed.

Big Sandy, Tennessee

Please send the free booklets you offered in your August-September issue of our magazine. This is my fifth magazine, and I enjoy it very much. It is always awaited at my home. There is something for everyone in the family in it.

Jim Flowers

The Firestone Tire and Rubber Company was presented a special citation by The National FUTURE FARMER during the National FFA Convention in recognition of ten years of continuous advertising. Above, Mr. Raymond Firestone accepts the plaque from Howard Williams.
Here's one pickup that hasn't gone soft.

The first thing you need in a pickup is power. And the strength to stand up under a load when the going gets rough. Then comes style and comfort. An INTERNATIONAL® pickup gives you just that. Don't let the soft seats and padded dash fool you. Test drive it. The firm feel of the wheel, the sure movement of the gear shift, the decisive action of the clutch tell you that beneath the attractive exterior is a finely engineered vehicle. And when you notice the full range of standard features, you'll know it was engineered for safety, too.

This, of course, is what you want in a pickup. You'll get it in an INTERNATIONAL. And if you want it plushed up, we'll customize it to your taste. See your INTERNATIONAL Dealer. He'll prove it!

INTERNATIONAL HARVESTER CO.
CHICAGO, ILLINOIS
When a crack electronics expert is needed fast, you're the guy they call.

Sometimes you feel like a country doctor with sixteen cases of measles in town.

But working on emergencies is nothing new to you.

You're the expert and emergencies are your job.

You're the one guy in the company that can practically field-strip a computer and put it back together again. Circuits are so pressed into your brain you can almost hear a short one. They make the TV's you repaired back in high school look like crystal sets.

If it wasn't for the electronic training you got in the Army, you'd still be a tube tester. But the Army opportunity came along and you took it.

A full-dress, eight-hours-a-day, five-days-a-week school that taught you a skill you'll build a career on.

A solid career that can mean sound security all your life.

There's nothing like being an expert. That's what you can be in today's action.
LAST NIGHT AS I was plowing I had that feeling again; a feeling which no cement-treading, city-dwelling boy can ever experience. With each round I made, the sky grew darker and one by one the stars came out. The world, with all its roaring of factories, its honking of horns, and its chattering people, slowly went to bed. The air was saturated with the aroma of freshly-turned sod, and the only sound was that of the tractor. It was doing in a matter of hours what would have taken my father and his father several days to accomplish with their team of horses.

When it is still and quiet on a night like this, it's easier to think. Somehow it helps to look into the sky and see the stars. It helps to breathe the clean fresh air without exhaust odor or the smell of gagging chemicals from the nearby city.

Although no one could be seen, I knew I was not alone. At such a time you realize there is a God and that He is close. I only wish those philosophers at school who are saying "God is dead" could be here at this moment. Then those "blind men in dark rooms looking for black cats that don't exist" would see that God is very much alive.

As I went from one end of the field to the other, I thought of my friends who just a year or two ago were enjoying ball games, pest hunts, greased pig contests, and FFA meetings. Some are now fighting in the swampland jungles of Vietnam, giving their lives for reasons many Americans feel less than sufficient to justify such a war. As I looked skyward, I thought of our achievements in space exploration and other fields where the quest for knowledge and the power of the human mind seems unlimited. I thought of the race riots in our own country and of the hunger which plagues so much of the world. It seems a pathetic situation that man, with all his knowledge, has yet to learn how to live in peace with his fellow man.

I thought of the future—the dream of my girl and me getting married, buying a farm, and having a family. No poet will ever be able to put into words these feelings.

This morning I awoke early and went out to do the chores. As I gazed over the freshly-turned, rolling hills, I could not help but imagine it being the night before. I envisioned His hand reaching from the sky and transforming the land with its dead debris and frost-bitten vegetation into a rolling carpet of deep, rich brown soil. It would now lie in rest, awaiting the coming spring when again this earth would give rise to a blooming blanket of green.

Ah, if only everyone could share the experience I had last night as I was plowing.

The author is Boyd Hastings, a former FFA member from Xenia, Ohio, who is majoring in ag education at college.
UR COVER PHOTO illustrates a point made by William T. Diamond, secretary-treasurer of the American Feed Manufacturers Association (AFMA) at a recent feed industry fact conference for farm magazine editors. He said, “When I was a young man, if you couldn’t do anything else, you could always farm. Today, if you can farm, you can do almost anything else.”

In one of Thomas Jefferson’s letters on the founding of the University of Virginia, he said, “Agricultural science should be the crown of all the sciences.”

Make no mistake, you are living in the age that Jefferson dreamed about. But wearing the crown means keeping alert because there are many changes ahead. This is true not only in farming but in all the ag-related fields. A Future Farmer who chooses a career in feed manufacturing, for example, must concern himself with economics, finance, law, chemistry, medicine, research, communications, and the humanities; in addition to administration, and the production, packaging, advertising, and marketing of his product. To be successful in marketing the product, he had better have a more than passing knowledge of his customer, the farmer.

This new agriculture requires a study plan which includes many of the sciences. H. N. Hunsicker, chief of agricultural education and national FFA advisor, said recently, “The vocational agriculture student should be just as much at home in the chemistry lab as in the farm shop. In fact, a student of vocational agriculture should plan his high school program to include as many of the sciences as possible.”

The number of changes and the speed at which they are occurring make this kind of knowledge a must. You need to know and understand these new developments whether you decide to farm or work for a company who serves the farmer. If you are a farmer, it can mean the difference between profit and loss. If you are working for a company who serves the farmer, it can mean the difference between holding and losing your customer.

To understand why change is coming at such a fast pace, consider how extensive research is being applied as a profit catalyst for today’s agriculture. As an example, the 74 companies represented on the Nutrition Council of the AFMA are annually using more than 5,000 dairy cattle, 37,000 hogs, 6,000 sheep, two million broilers, 800,000 layers, and 174,000 turkeys in their research work. These companies have a total of 1,306 people employed in their research.

(Continued on Page 18)

Today’s new agriculture requires a study plan which includes many of the sciences. Tom Knowles, left, and John Farris show off some of the books of courses studied. They are Lubbock, Texas, FFA members and vo-ag students.
It's a mighty tractor with a working reach that takes in the whole year in a wide variety of crops—corn, beans, small grains, cotton, sugar beets, the works. Let's size up the new "5020" Row-Crop's work loads and work year...

- Plow with 8 bottoms, turning under 6 acres per hour.
- Hustle a minimum tillage rig planting eight 30-inch rows, or...
- Plant twelve 30-inch rows per pass as you apply chemicals, or...
- Bed and list 8 at a time with an easily handled integral unit.
- Cultivate up to twelve 30-inch rows in one pass.
- Forage harvest two rows... 1/4-inch cut... at speeds up to 4-1/2 mph.
- Disk rice stubble across a 13-1/2-foot cut with a 2-ton harrow.
- Drill grain across a 40-foot span.

Production Opportunity is the new 132 h.p. "5020" Row-Crop. Visit your John Deere dealer... see the new "5020"... get full details on the big tractor with the big, bright future.
and experimental work. Of these, 78 are college-trained people involved in dairy research; 102 in swine, 93 in beef cattle, and 149 in poultry. They conducted over 3,000 test projects using over 3.6 million birds and animals in the past year alone. Remember this is only one industry and does not include the significant work being done in the agricultural experiment stations.

Results—Feed From Wood

Since the feed industry is one of the largest industries serving the American farmer-businessman, let's look at some of their research results. These results can make a difference since feed expenses may account for 50 to 75 percent of your total costs in the production of meat, milk, and eggs.

On September 15 we flew to Laurel, Mississippi, to see how scientists had succeeded in extracting food from wood. The new product called Masonex, and often referred to as “wood molasses,” is a by-product of the hardboard process of the Masonite Corporation. Wood chips are exploded and partially disintegrated into a coarse fiber. After the fibers have been washed with water and when most of the water has been evaporated, a brownish, free-flowing liquid remains. Best of all, this high energy feed (liquid form contains a minimum of 55 percent carbohydrates—dried form, 84 percent) sells for one-third less than other sources of energy for feeds.

Other recent developments include:
- The expanded use of urea in ruminant feeds. Recent research indicates levels of feeding may be raised.
- The addition of a high quality poultry feather meal and by-product meal to the protein supply.
- Soybean hulls have become available as a by-product of producing 50 percent soybean meal. Citrus pulp production has expanded. Both citrus pulp and soybean hulls are excellent substitutes for beet pulp in dairy rations.

“To stay abreast of new technological developments, young farmers are attending evening classes conducted by teachers of vocational agriculture, or working out arrangements whereby they can attend a two-year technical school or four-year college of agriculture. Those young men who are seeking careers in ag-related fields often complete work beyond the B.S. degree level,” explained National FFA Advisor H. N. Hunsicker.

The challenge for agricultural science is easy to spot. As Dr. Robert Schoeff of Kansas State University points out, “Based on average storage stocks in 1965 and average per capita consumption, there was only a four-day supply of red meat, seven days of chicken, four days of eggs, 25 days of condensed and evaporated milk, and none of fresh milk.”

The Future Farmer who stays abreast of new technological developments will have the responsibility for shaping the role of a new agriculture as “the crown of sciences” strives to feed the world.

A new hemicellulose extract produced at this plant will serve those in animal agriculture by reducing feed costs.

American agriculture has been the envy of the world and, especially our enemies because of the production miracle. "Foodpower is mightier than Missiles."
Here's our story of the FFA's colorful National Convention in a kaleidoscope of facts and photographs. The editors take you "on-the-scene" for an account of this historic 39th meeting of the largest farm youth convention in the world. You will meet the speakers and sense the drama as the organization names a new Star Farmer. This 1966 meeting saw the largest registration since Eisenhower spoke at the 1953 convention. More than 11,600 made up the kaleidoscope of FFA action.
National Officers 1966-67

Gary Hatch, Gilbert, Arizona, wins Public Speaking Title.

GARY HATCH, Gilbert, Arizona, won the National FFA Public Speaking Contest with his original speech, “The Modern Farmer in this Space Age.” He won in the final elimination of a nationwide contest that started in local chapters. He received a cash award of $300. Judges were Richard J. Babcock, president and publisher of Farm Journal; Wayne O. Reed, associate commissioner, U.S. Office of Education; and John A. Stearns, producer of “Agriculture U.S.A.”

WINNERS NAMED FOR PROFICIENCY AWARDS

ELEVEN TOP students of vocational agriculture were named as 1966 national winners of FFA Foundation proficiency awards during the Thursday morning session.

The winners by proficiency achievements were Frank Clifford, Belvidere, New Jersey, Agricultural Mechanics; Dale Dillon, Bedford, Iowa, Crop Farming; James Salesman, Argyle, Wisconsin, Dairy Farming (The Dairy Farming Award was presented at the National Dairy Cattle Congress.) Charles W. Marshall, Mason County, Kentucky, Farm and Home Electrification; Jeff Stephan, Fetch, Michigan, Forestry; Paul Shockey, Ravenswood, West Virginia, Home Improvement; Gregory Bamford, Haxton, Colorado, Livestock Farming; Thomas Chant, Lancaster, California, Ornamental Horticulture; Ervin Wilkins, Jr., Mathias, West Virginia, Poultry Farming; Eaton, Colorado, FFA Chapter (chapter award), Farm Safety; and David Deason, Oney, Oklahoma, Soil and Water Management. Each winner received $250.

Gary Swan, a 19-year-old dairy farmer from Jasper, New York, was elected to serve as national president. Elections took place during the seventh session of the 39th National Convention. The new president recently served as state president of the New York FFA Association. Gary lives on a 415-acre dairy farm. Main enterprises include 75 head of dairy cattle and over two hundred acres of crops used in the dairy operation. Gary has complete ownership of 17 head of dairy animals.

Paul Tarpley, a 20-year-old beef cattle raiser, is new national secretary of the FFA. His home farm near Trout, Louisiana, is located in the rolling hills of the north central part of the state. A former Louisiana State FFA president, he was also elected student body president of Jena High School. A growing herd of 18 registered Aberdeen Angus, plus nine acres of improved pasture and 20 acres of forest land make up Paul’s supervised farming program. He is a student at Louisiana State University.

Harold Brubaker, a 19-year-old member of the Elizabethtown FFA Chapter, has been elected national vice president for the North Atlantic Region. Harold lives at Mount Joy, Pennsylvania, on a 210-acre dairy and crop farm in picturesque Lancaster County. In partnership with his parents, he raises broilers and tobacco in addition to the dairy operation. A State Star Farmer in 1964, Harold has also served as secretary of his state association, and is a member of the Pennsylvania Farm Show Commission.

Richard Morrison, a 19-year-old Gilbert, Arizona, Future Farmer, is the newly elected national vice president for the Pacific Region. Beginning with 100 beef feeders and three acres of alfalfa, Richard has expanded his operation to 542 beef feeders and 94 acres of milo. He lives with his parents on a 4,700-acre farm in Gilbert. A past president of the Arizona Association, he was State Star Farmer in 1965. Outside the FFA, he was high school student body president and valedictorian of his graduating class.

Keaton Vandemark, 20, is the new national FFA vice president for the Central Region. He operates a 600-acre dairy farm in partnership with his father near Elida, Ohio. In 1964-65, Keaton served as president of the Ohio FFA Association. His leadership record includes being named “Top Teen-age Boy in America” at the National Youth-Power Conference. Keaton personally owns 30 head of registered Ayrshire dairy cows and rents 260 acres. The 1964 milk champion came from the Vandemark herd.

Monte Reese of Mooreland, Oklahoma, will serve as national vice president for the Southern Region. The 19-year-old FFA'er follows in the footsteps of his older brother, Nathan, who served as a national officer in 1957-58. In 1964 Monte was state public speaking winner, and in 1965 he was elected to Oklahoma's highest FFA post, state president. His supervised farming program includes 14 head of Angus beef cattle and one-third interest in 50 acres of winter wheat and 390 acres of pasture land.

Back row, left to right, National Vice Presidents Harold Brubaker, Monte Reese, Richard Morrison, and Keaton Vandemark. Front row, left to right, Gary Swan, president; Paul Tarpley, secretary. They will serve the FFA for one full year.
The spotlight illuminates the "cream of the FFA crop." These 460 Future Farmers were elected to the American Farmer Degree. It is the highest degree given by the organization and is obtained by "one in a thousand."

Business Session Highlights

YOUR OFFICIAL delegates at the National FFA Convention voted on a variety of constitutional changes and discussed the Ad Hoc Study Committee's many recommendations. Most of the far-reaching recommendations made by the committee were adopted.

Two key provisions for change recommended by the committee were voted down by the delegates, however. The proposal for reapportionment of delegates to the National Convention, and the recommendation to drop the word "male" from the constitution by inserting in its place "student of vocational agriculture" were both defeated. Both provisions were defeated by substantial "no" votes. Many of the FFA delegates had interpreted the vote on dropping "male" from the constitution as a vote for or against girls belonging to the FFA.

The Ad Hoc Committee, which met in May of 1966, had made recommendations on the FFA's constitution, bylaws, procedures, rituals, recognition of adults and recommendations for expansion. A complete run down on voting results and other convention highlights may be obtained from the helpful manual "National Convention Proceedings."

Twenty-five Advisors Receive Honorary Degrees

TWENTY-FIVE vo-ag teachers were presented the FFA's Honorary American Farmer Degree (see photo below) during the National Convention. It is the highest honor the organization bestows to non-members.

Selection was based on a score card of achievement which included the teachers' years of service, the number of award winning FFA members developed, number of boys established in farming, and the records of group achievements posted by their chapter.

The honored teachers were Gilbert Butler, Sylvania, Alabama; E. W. Underwood, Eutaw, Alabama; Paul Bell, Avondale, Arizona; Dino Petrucci, Madera, California; Rex Davis, Kersey, Colorado; Oswell Smith, Patterson, Georgia; James Guilinger, Williamsthield, Illinois; Jack Pedigo, Edmonton, Kentucky; Leonard Tolley, Damascus, Maryland; Stephen Douglass, West Plains, Missouri; James Schulz, Lewiston, Montana; Herman Larson, Leids, North Dakota; Howard Fox, New Castle, Pennsylvania; Cecil Boreing, Jonesboro, Tennessee; Walter Hunt, Jr., Trenton, Tennessee; Herman Woody, Decatur, Tennessee; William Holcomb, Hughes Springs, Texas; R. E. Johnson, Winnsboro, Texas; John McAnelly, Hondo, Texas; Wilson M. Mills, Cuero, Texas; Robert Nielson, Fillmore, Utah; Marvin Huff, Woodlawn, Virginia; H. P. Jennings, Floyd, Virginia; Charles Tilson, Dublin, Virginia; and Charles Vaughan, Jr., Rural Retreat, Virginia.
**Star Farmer Ceremony Highlights Convention**

YOU COULD ALMOST hear a pin drop as the crowd which filled Kansas City’s huge Municipal Auditorium awaited the naming of a new Star Farmer of America. Except for the hundreds of Future Farmers who crowded around the giant stage to pose their cameras for a shot of the winner, one could have been attending a solemn event. Suddenly their flash bulbs exploded in a blinding flash of light as Richard W. Engelbrecht, 22, of Madison, New York, was named winner of the nation’s top award for a young farmer.

The $1,000 award, with all its accompanying national recognition, climaxed the sixth session of the National Convention. More than 11,000 FFA members, teachers, and guests were present to cheer the new Star Farmer. (See “Young Man With a Plan” in the October-November issue.)

The young dairy farmer shared the spotlight with three other FFA members who were named Regional Star American Farmers and who received checks of $500 each. They are Ralph Smith, Booneville, Mississippi; Gary L. Organ, McLeansboro, Illinois; and Frank Albert of Stanwood, Washington.

Selection of the Star American Farmers is based on their achievements in farming and their leadership in activities of the FFA. The four were picked from among the 460 members who, earlier in the convention, were presented the FFA’s highest degree, that of American Farmer. Prior to the naming of the new Star Farmer, a film showing each Star Farmer in action on his home farm drew heavy applause.

Thursday afternoon, a committee of judges met in Kansas City to review the applications and select the one to be named Star Farmer of America. LEFT TO RIGHT, seated: R. S. Stevenson, chairman of the board, Allis-Chalmers Manufacturing Company; Russell DeYoung, chairman of the board, Goodyear Tire and Rubber Company; Wallace E. Wilson, vice president, General Motors Corporation; James Durkee, president, National Vocational Agricultual Teachers’ Association; H. H. Stonaker, dean, College of Agriculture, Colorado State University; Byron J. Nichols, vice president, Chrysler Motors Corporation; W. B. Sommer, president, Keystone Steel and Wire Company; and Roderick Turnbull, agricultural editor, *Kansas City Star*.

Left to right, standing: John A. Morgan, president, Butler Manufacturing Company; Robert F. McLeod, vice president, Corn Products Company; Forrest Davis, Jr., 1950 Star Farmer of America; M. G. O’Neil, president, the General Tire and Rubber Company; Ralph M. Buzard, executive vice president, International Harvester Company; Herschel D. Newsom, master, the National Grange; and H. N. Hunsicker, national FFA advisor.

Above from left: Star Farmers Frank Albert, Jr., Stanwood, Washington, Pacific Region; Ralph Smith, Booneville, Mississippi, Southern Region; Richard Engelbrecht, Star Farmer, Madison, New York; and Gary Organ, McLeansboro, Illinois, Central Region.

At right: New Star Farmer of America Richard W. Engelbrecht waves to crowd during American Royal Parade.

This group of outstanding leaders in business, agriculture, and education posed for the FFA camera before selecting a new Star Farmer of America for 1967.

**The Judges**

Richard Engelbrecht’s smile shows the happy emotion of just learning that you are suddenly Star Farmer of America and $1,000 richer. Sharing the happy experience are (from left) his mother, wife Gail, and teacher of vo-ag at Madison, Mr. Durwood Carman. **Staff Photo by Len Richardson**
FIFTEEN-YEAR DONORS HONORED FOR FFA SUPPORT

SEVEN nationally-known business and industrial concerns were honored during the National Convention for their long-time support of the organization. They were presented plaques of appreciation for 15 years as donors to the Future Farmers of America Foundation, Inc. About $225,000 is contributed by the donors each year.

Donors honored for 15 years’ support were: American Oil Foundation; AVCO New Idea Farm Equipment Division; Dairymen’s League Cooperative Association, Inc.; Gulf Oil Corporation; International Minerals and Chemical Corporation; Quaker Oats Foundation; and the Renown Foundation.

The FFA Foundation was established late in 1944. Forty-five donors have been honored previously for 15 years’ support.

O’Neil Elected Chairman, 1967 Sponsoring Committee

MR. M. G. O’NEIL, Akron, Ohio, president of the General Tire and Rubber Company, has been named to serve during 1967 as chairman of the Sponsoring Committee for the Future Farmers of America Foundation, Inc.

Working with him as vice chairman will be L. W. Davis, Milwaukee, Wisconsin, general manager, Farm Equipment Division, and vice president of Allis-Chalmers Manufacturing Company.

Retiring Chairman Byron J. Nichols reports new FFA Foundation record.

FFA Foundation Has Record Year

FOUNDATION CONTRIBUTIONS from more than 400 business and industrial concerns, organizations, and individuals are expected to hit a new record this year.

A goal of more than $200,000 is budgeted each year. Byron J. Nichols, Sponsoring Committee chairman, reported that contributions are expected to reach $244,000. If reached, it will be more than $3,000 above the record set last year. Nichols also pointed out that 47 new donors contributed to the foundation this year.

Fifteen-year donor representatives with a selection.
Above, foreign guests related home farming experiences while, below, FFA exchange students show interest in Scottish kilt worn by FFA'er Gyle Faust.

Honorary American Farmer Degrees were awarded to 15 persons and Distinguished Service Awards were given to 25 who have served the Organization.

**Honorary American Farmers**

THE HONORARY American Farmer Degree is presented each year to men who have rendered outstanding service to the Future Farmers of America organization.

Those honored at this year's convention were Earold M. Byram, Michigan State University; Ralph W. Canada, Colorado State University; R. W. Cline, University of Arizona (awarded posthumously); James Durkee, president of The National Vocational Agricultural Teachers' Association; T. L. Faulkner, state supervisor, Alabama; C. T. Grable, assistant supervisor, New Mexico; R. D. Hagan, district supervisor, Missouri; C. W. Hill, Cornell University; Thomas H. Kerrey, Agricultural Education Service, Michigan; L. H. Lebo, area supervisor, Pennsylvania; W. Howard Martin, University of Connecticut; Byron J. Nichols, vice president of Chrysler Motors Corporation; Wayne O. Reed, associate commissioner, U.S. Office of Education; Len Richardson, associate editor, The National FUTURE FARMER Magazine; and Floyd J. Ruble, assistant state supervisor, Ohio.

**And The American Royal**

ON FRIDAY afternoon there was a recess in the convention so all Future Farmers could attend the FFA Day at the American Royal Live Stock and Horse Show at the edge of town.

Members packed the arena to see Future Farmers walk away with livestock and show honors. Benny Powell of Ryan, Iowa, was big winner of the day. His Shorthorn and Angus steers both won Champion honors, and the Angus won the over-all Grand Champion award. All winners are pictured below.

The American Royal Queen addressed convention and urged members to attend FFA Day at American Royal.

The National FFA Band annually leads Kansas City's American Royal parade.

Benny Powell, Ryan, Iowa, with Shorthorn and Angus champions. The Angus steer was named Grand Champion.

Don Blehm, Kingfisher, Oklahoma, with his lamb that won championship.

Jimmy Roberson, Hurrah, Oklahoma, with his champion Hampshire barrow.

**Gold Emblem Chapters Named**

SIXTY-ONE LOCAL chapters were honored with Gold Emblem awards. Judging was done by agricultural specialists representing the U.S. Office of Education. They were Alabama—Gurley, Section; Arizona—Coolidge; Arkansas—Mansfield; California—Thomas Downey and Modesto; Colorado—Eaton, Fort Morgan; Connecticut—Housatonic Valley; Florida—Bartow, Santa Fe Senior; Georgia—Early County, Perry; Illinois—Maroa, Sycamore, Williamsfield; Indiana—Hagerstown, Iowa—Andover, Washtenaw; Kansas—Garden City; Kentucky—Memorial, Metcalfe County; Maine—Mars Hill; Maryland—Gaithersburg; Massachusetts—Wachusett; Michigan—Corunna; Minnesota—Fairbault, Stillwater; Mississippi—Inverness, Marion; Montana—Fergus of Lewistown; Flathead; Nebraska—Central City; New Jersey—Belvidere; New York—Newark, Mexican Hatch; New York—Barker, Hamilton; North Dakota—Minot, Rugby; Ohio—Fairfield, Oklahoma—Collinsville; Pennsylvania—Grassland, Northern Lebanon; Rhode Island—Scituate; Tennessee—Bradley, Dayton; Meigs County; Texas—Nacogdoches, Pleasanton; Utah—Bear River; Virginia—Patrick Henry, Monticello, Turner Ashby; Washington—Pomeroy, West Virginia—Ripley, Terra Alta; Wisconsin—Granton, Mondovi; Wyoming—Frontier, Pinedale.
Yes, the 39th Convention of the Future Farmers of America was truly a kaleidoscope of young Americans in action. Inspiring events, such as the naming of the new Star Farmer of America, or simply a chance to meet a national officer, will leave a lasting mark on the lives of those who attended. The editors hope that our own kaleidoscope of facts and photographs brought you "on the scene" if you were unable to attend. Who knows, you may be a part of next year's 40th anniversary convention as one of the big winners.

Convention Photos by Arch Hardy

FFA's Top Judging Teams

Poultry and egg judging champions are from Manhattan, Kansas. They were instructed by Merwin Stearns.

This team from Galesville, Wisconsin, coached by J. O. Beadle, won the national FFA meats judging contest.

First place in the livestock judging contest went to Hanford, California. Team was coached by Thomas Mora.
FFA Honors Organizations for Service to Youth

President Williams presents citation to National Grange Princess Miss Linda Settle as Grange Master Herschel Newsom looks on.

4-H Club member Tom Jackson receives FFA citation from President Williams. Also on hand was John Benning of the 4-H Clubs.

National FHA President Miss Susanne Hand accepts their club’s citation, while Associate National Advisor Miss Betty Joyce looks on.

Boy Scout Terry Schreier received the award on behalf of the nation’s Scouts. Looking on was Scout Executive George Myers.

Jim Wall accepts FFA citation on behalf of The National Vocational Agricultural Teachers’ Association from FFA President Howard.

Two dairy stars Miss Carol Ann Armacost of Maryland, American Dairy Princess, and James Salesman, Star Dairy Farmer, of Wis.

AT WATERLOO

National Dairy Finals

MENTION WATERLOO to most any Future Farmer, and he automatically thinks of FFA’s national dairy finals. For Waterloo, Iowa, and the National Dairy Cattle Congress is the scene of the National Dairy Judging and Dairy Products Judging Contests. The Congress opens with the naming of a new Star Dairy Farmer of America.

James Salesman, 19, of Argyle, Wisconsin, a member of the Monroe FFA Chapter, was named national winner of the Future Farmers of America’s Star Dairy Farmer award. He was presented a $250 check by the FFA Foundation during a colorful pageant, “The Parade of Stars.” Members representing 42 states participated in the ceremony, carrying state flags and leading animals representing major dairy breeds.

Three other FFA members were presented Regional Star Dairy Farming awards of $200 each. They were Joe Roberts, Jenkins County, Georgia; Richard Eaton, Williamson, New York; and David Zylstra of Snohomish, Washington.

The Dairy Cattle Judging Contest was completed on September 26, and awards were presented Tuesday evening at a dinner sponsored by the Sears-Roebuck Foundation at the Electric Park Banquet Hall. The FFA team from California took first place and the special team trophy. Team members were Tim LaSalle, Gary Robinson, and David Gomez; all of Hanford.

Dairy products judging was completed on Tuesday at the Carnation plant, and awards were presented at the Sears’ banquet. The Ohio team composed of Daryl Wilson, Dan Richardson, and Dean Parmiter, all of McConnelsville, won first place.

First place in Dairy Judging went to the team from Hanford, California, coached by Mr. Leonard DeRuiter.

The team from McConnelsville, Ohio, coached by Mr. Loren Wilson won the Dairy Products Contest in Waterloo.
Breaking the entry barrier

OWN YOUR OWN OR CUSTOM HARVEST?

Ever hear of a farm without equipment? It’s possible . . . by custom hiring machinery!

Custom hiring of farm machinery is just one of several ways in which young farmers can cut equipment costs as they strive to break the entry barrier into farming. Another way is exchange work where each farmer in an area owns one or more pieces of equipment and shares them with other operators, in exchange for the use of their machinery. Renting is still another cost-cutting method (see “A New Look at Renting” in the August-September, 1965, issue of The National FUTURE FARMER), although it is not being used extensively.

Farmers use custom and exchange work for about 30 percent of their operations. The average varies depending upon the type of equipment. In 1964, custom and exchange combining accounted for 28 percent of the 153 million acres of grain harvested.

Shipping products to market or to off-farm storage often requires heavier equipment than is needed for regular on-the-farm duties. Many farmers hire trucks for the heavy loads and long hauls. In 1964, 52 percent of farm products were custom hauled.

At the other extreme, custom and exchange work accounted for only 4 percent of total plowing, planting, and drilling; and 2 percent of disking and harrowing operations.

Although the extent of hiring these operations has been relatively small in the past, the increasing size and cost of equipment makes it an area that every prospective farmer must explore.

To help you arrive at a decision on whether you should own or custom harvest, A. L. McLaughlin, assistant extension economist at Mississippi University, has outlined steps you will need to consider before deciding whether to own or custom harvest.

Too often young farmers do not consider full costs of ownership. If you are considering buying a corn picker, hay baler, or other such equipment, you can figure costs in terms of acres to justify ownership, or in terms of total per-acre cost based on a given size of operation. It is customary to separate total costs into (1) fixed, or overhead costs, and (2) into variable costs, which depend upon acres of use.

**Fixed Or Overhead Cost**

Suppose you are considering buying a one-row corn picker that costs $1,200 with an expected life span of 10 years. In this case, we will assume it has no salvage value.

_Depreciation_ is the purchase price divided by expected life, or $120 a year.

_Interest_ is figured as the average investment times the interest rate. A simple formula is to divide the equipment cost by two and multiply by the interest rate. In this case, assuming a 6 percent interest rate, it becomes $1,200 (equipment cost) divided by two, or $600, times 6 percent (interest rate) for a cost of $36 per year.

_Taxes and Insurance_ for this example total $25.00 per year.

By adding these fixed or overhead costs together, you arrive at your total fixed cost of $181 for buying the corn picker. In the case of equipment with a salvage value, you would use the purchase price less salvage value in computing depreciation and interest, instead of the purchase price only.

**Operating Or Variable Costs**

Operating costs include repairs and servicing of the picker as well as the tractor, and any other pieces of owned equipment that you would not use if you harvested corn in some other manner. If you need labor for this operation that has other uses or otherwise would not be hired, include these labor costs as a part of the operating costs. For this example, let’s say that operating costs are $3.00 per acre.

**Acres To Justify Ownership**

To justify ownership, compare with harvesting in some other manner. Let us say custom harvesting will cost you $7.00 per acre. Subtract operating costs from custom harvesting cost and divide the remainder into the annual fixed cost. The $7.00 per acre custom harvesting cost less the $3.00 per acre operating costs leaves $4.00. Four divided into our already established fixed cost of $181 gives us 45.25 acres that would be necessary to justify owning a corn picker in this example.

**Per Acre Cost Of Ownership**

To find per acre cost of owning equipment, divide your annual fixed cost by annual acres to be harvested and add this to the operating cost per acre. Let’s assume we have 35 acres of corn to harvest. Using our same figures, we would divide 35 into $181 for a fixed cost of $5.17 per acre. We then add the $3.00 per acre operating cost to arrive at $8.17 as our total per acre cost of ownership.

In addition to these dollars and cents questions, there are some other possibilities you should consider. The more important ones include: (1) possibility of your doing custom harvesting to reduce fixed cost per acre, (2) possible loss of crop or quality if you use custom harvesting, (3) returns if you invested this amount elsewhere in your total farm operation; and (4) is custom harvesting available?

EDITOR’S NOTE: Breaking the entry barrier—is a subhead you want to watch for in future issues. Articles with this subhead will guide you in making management decisions that can lead to successful farm establishment.
Things to do before

Storing Tractor for Winter

By Melvin E. Long

If your tractor will not be used during the winter months, plan to spend about an hour getting it ready for storage. Otherwise, the tractor may “age” more during storage than it would from regular use during the same period.

The biggest factor is protection from the elements. Therefore, if at all possible, the tractor should be stored in a dry and protected place. If indoor storage is not available, plan to enclose the tractor in a tarpaulin or plastic covering after it has been serviced.

A good first step in preparing the tractor for storage is to wash it thoroughly. When all accumulated mud and debris has been removed, lubricate it completely.

Tire Protection. To reduce tire damage during storage, they should be protected from light—especially direct sunlight. When washing the tractor be sure to scrub and rinse the tires thoroughly to remove all accumulated dirt. Ideally, the tractor should be jacked up so there is no load on the tires during storage. Inflation pressure can be reduced just enough to maintain the normal tire shape. If the tractor cannot be jacked up during storage, inflation pressure should be checked at regular intervals.

Engine Protection. Operate the engine long enough to completely warm the oil in the crankcase, then drain it immediately. Remove the oil-filter element. Clean out any sludge in the filter case and replace with a new element. Then refill the crankcase with fresh oil, and run the engine several minutes to make sure the new oil has been circulated to all parts of the engine.

Fuel System. Procedure here varies with the type of engine. For gasoline engines, drain the fuel from the tank and carburetor and clean out the fuel-strainer sediment bowl. Failure to remove all gasoline will lead to formation of gum in the lines and carburetor as the gasoline evaporates.

On LP-gas engines, start the engine and run it until it stops from lack of fuel.

On diesel engines, check your manual for specific recommendations. One typical recommendation is to drain all fuel from the tank, then prepare a mixture of one-half kerosene and one-half SAE 10W motor oil. Place enough mixture in the fuel tank to run the engine for 10 to 15 minutes. Then start the engine and run it at about half throttle until the engine stops from lack of fuel.

Combustion Chamber Protection. On gasoline and LP-gas engines, remove the spark plugs and squirt in about one tablespoon of new lubricating oil into each cylinder. Crank the engine two or three times to distribute the oil over the cylinder walls, and then replace the spark plugs. On diesel engines, remove the injection nozzles, spray new engine oil into the combustion chamber, and crank the engine two or three revolutions before replacing the injection nozzles.

Cooling System. The cooling system should be thoroughly drained and flushed. Any hoses that are in poor condition should be replaced.

Recommendations vary regarding whether or not the system should be empty or full during storage. An empty cooling system will not be damaged by freezing, but it does tend to permit rust formation. To avoid this, the system should be refilled with a solution of water and antifreeze mixed in relation to the lowest winter temperature in your area. Since the engine will not be operating, the less expensive, nonpermanent type antifreeze is satisfactory.

Valve-Operating Mechanism. Remove the cylinder head cover and pour about one-half pint of preservative oil, which is soluble in engine oil, over the rocker arms, top of the cylinder head, and the under side of the cover. Then re-install the cover.

Distributor. The distributor cap should be removed and the polished surface of the breaker cam lightly coated with petroleum jelly. In some cases, the owner’s manual recommends

(Continued on Page 49)

Pour preservative oil over rocker arms.

December-January, 1966-1967
In your future—the 1206 Turbo. Big power to shrink fields, shorten days, build income.

With a big McCormick® Farmall® 1206 Turbo tractor, one man in one day can show up to 50 acres plowed. Or in the same time, can disk 150. Or apply its giant power to whatever else needs doing. One of the important reasons behind its capacity is the big 18.4x38" tires for maximum traction.

This is what’s needed for big acreage. Or when help is scarce and expensive.

The main thing about the 1206 is its ability to earn money on a scale that matches its size. No equipment ever paid for itself easier.

Go see your IH dealer. He’ll show you the 1206 and tell you about it. You’ll be meeting a friend who can play a big part in your earnings a few years from now. The dollar-saving 1206 is another prime example of the progressive engineering that keeps farmers looking to IH for the most profitable equipment.
A Blooming Business

EVERYTHING HAS BEEN coming up roses, or we should say orchids, since Thomas Michael Chant enrolled in vocational agriculture at Antelope Valley High School in Lancaster, California. With limited opportunities (a small city lot), and no plants or equipment, this 17-year-old Future Farmer fashioned a horticultural business that walked off with FFA’s first national award for Ornamental Horticulture.

Tom enrolled in vo-ag as a freshman in 1963 and built his first greenhouse (10 by 12 feet) in October of that year on his parents property. “I filled it with orchids,” Tom explained. “I began by selling orchids to the local florists and to my friends at prom time.”

By June of Tom’s sophomore year, he had built a second greenhouse (12 by 24 feet) under his parents aluminum-covered patio. It was becoming increasingly clear that he was outgrowing the limited facilities of the home place. He explains, “By now it wasn’t just an excuse for a vo-ag project but a ‘blooming business’ that needed more room. I talked with my parents and asked if we could move to a bigger lot in the suburbs. I knew my dad didn’t care for the restrictions of the city, and besides the part of town where we lived was not zoned for business.”

Tom succeeded in selling his folks on moving, and three weeks before moving date greenhouse number three was under construction. The new greenhouse (14 by 40 feet) was large enough to hold plants from the old place. In one month the big move was completed, and within six months Tom had moved his other two greenhouses to the new location at Quartz Hill, California.

The business had now grown to the point where he was selling about 20 blooms per week on a consignment basis. “I leave the blossoms at the flower shop, and the owner pays me for the flowers he sells,” Tom explained.

Thomas also found time for school and community activities. He has served as his FFA chapter’s secretary and has been active in the San Fernando Orchid Society, as well as the Southern California Orchid Society. And, of course, he has been active in local and state horticultural competition. He explains, “I have felt like a pioneer in this field, since there are only five good horticultural projects in our chapter of 150 active members.”

Pioneering paid off when he won not only the California Ornamental Horticulture Foundation Award, but the State Farmer Degree as well. It’s easy to see why. His inventory of orchids alone is worth over $6,000. “I have valued all orchids at $10.00 each, but many of them are worth from $75.00 to $150.00 at current prices,” Tom points out.

What about the future? Tom will graduate from high school in June of 1967. He then plans to attend a state college and major in horticulture and agricultural education. He is the son of Mr. and Mrs. Leonard H. Chant of Quartz Hill, California. His vocational agriculture teacher at Antelope Valley High School is Mr. James E. Bort.
SIR EDWARD COKE said, "A man’s house is his castle." Such is the blessing that Paul Shockey, a 19-year-old Ravenswood, West Virginia, farm boy, has helped make possible for his parents, Mr. and Mrs. Carrol E. Shockey, and a younger brother and sister. The effort earned Paul the Future Farmers of America Foundation’s first national award for Home Improvement.

The 1965 graduate of Ravenswood High School won a cash award of $250. All national Future Farmers of America Foundation award winners receive the $250 prize plus travel allowances to help pay their expenses to the National FFA Convention in Kansas City where the awards are presented. Paul had previously won $100 for capturing the West Virginia Home Improvement honor.

Paul lives with his parents on a 260-acre family farm six miles north of Ripley, West Virginia, on Crooked Run Road. The farm was purchased in two separate tracts in 1950 and 1956. Paul has already earned an interest in the farm. He explains, “For working extra time on the farm, my father gave me a 10 percent interest in the home farm. In addition, I rent 40 acres in two tracts from my neighbors.”

Under the guidance of his vocational agriculture instructor, Mr. Jackson C. Friend, Paul developed and set into action a comprehensive home improvement program. Paul told about some of the construction projects that he has completed. “With the encouragement of my family, I have been able to construct a new front and back porch, a new bathroom, and a new board lawn fence. I have also helped install aluminum storm windows, doors, siding, and roofing along with insulation for our house. My remodeling of the kitchen, dining room, living room, and three bedrooms with vinyl tile, wall-to-wall carpeting, and new wall paper has benefited the whole family,” he concluded.

The dramatic results of young Shockey’s home improvement program can be seen from the before and after photos which accompany this article. It has had the added bonus of giving Paul practical “learn by doing” experience in masonry work, building steps, laying concrete blocks, and pouring porch floors, footings, and walks. An important part of Paul’s program included the keeping of accurate records.

When Paul enrolled in vocational agriculture, his farming program was made up of two beef cows, three sheep, a hog, one acre of corn, four acres of mixed hay, and a quarter acre of potatoes. During four years of vocational agriculture, this assortment of enterprises has grown into a sizeable farming operation. Included in his farming operation today are 42 head of Hereford beef cattle (mostly registered), 18 sheep, 19 hogs, 3 acres of corn, and 70 acres of pasture and hay.

In addition to his home improvement and farming activities, Paul has found time to serve his FFA chapter as secretary, vice president, and president. In school he was also a member of the Latin and Math clubs. His leadership experience led to his election as state FFA vice president.

Paul has entered West Virginia University where he is preparing for a career in veterinary medicine. “Upon graduation I plan to start a general practice, purchase a farm of my own, and specialize in registered Hereford cattle,” he says.

BEFORE AND AFTER: Below is Paul’s home before any repairs or improvements were made. At right is the improved home with front porch, steps, roofing, siding, and new storm doors.
A Newspaper Towel Rack

Vocational agriculture instructors and their students will appreciate this gadget when it is time to clean up at the end of the shop period. It is easy to construct by using the diagram, bill of materials, and these simple instructions. Fasten one section of the base to the upright with four-inch lag screws.

Cross the second section to the base. Nail the braces to the base and the upright. Complete the two pieces at the top with nails to hold the paper. Use a strap hinge and eye hook.

This idea was submitted by the Marshville, North Carolina, FFA Chapter and their advisor, Lee Baker.

**BILL OF MATERIALS**

1 piece 2" by 3" by 24"
1 piece 4" by 4" by 24"
1 piece 4" by 4" by 4'
2 pieces 4" by 4" by 26"
4 pieces 4" by 4" by 7"
1 hook and eye
1 strap hinge 3"
2 lag screws 4"

Editor's Note: The National FUTURE FARMER needs farm shop project ideas of items that FFA members can build. We will pay $20.00 for the best idea published in each issue and $10.00 for each additional item used. Submissions must include a clear black and white photo along with a brief yet complete description of materials used and a few pointers on how to build.

**Tractor Muffler Cover**

The muffler or exhaust cover makes a good metal project and can be made for ten or twenty cents, depending on the size of the muffler pipe. The pieces may be arc or acetylene welded or even brazed together.

This idea was submitted by Mr. Kenneth Cherry, vocational agriculture teacher at Hollidaysburg, Pennsylvania.

**BILL OF MATERIALS**

1 base—1/8" by 5/8" band iron to 10" long depending on size of muffler pipe.
2 standards—1/8" by 5/8" by 2 1/2"
1 cover iron—1/8" by 3/4" by 6"
1 cover plate—16 or 18 gauge sheet metal 1/2" larger in diameter than the muffler pipe.
2—1/4" by 1" machine bolts

**PROCEDURE**

1. Bend 1/8" by 5/8" band iron to fit around muffler pipe with a 3/4" lip on one end and 1/2" clearance between lips. Then drill a 1/4" hole through the center of both lips 1/4" in from edge of lips. This will form the base.

2. Now, offset grind 1/8" from one side of each of the 2 pieces 1/8" by 5/8" by 2 1/2" for 1 1/8". Then drill a 1/4" hole in each of the two pieces 1/2" from the end that was ground. These form the standards.

3. Grind or cut 1/2" taper on one end of the 1/4" by 3/4" by 6" piece and then weld that end to the sheet metal cover.

4. Weld the two standards to the base which fits around the pipe, being sure to allow a 3/16" space between the standards.

5. Next, take the cover plate and cover iron which were welded together in step No. 3 and crimp the edges of the plate in 1/4" and at a 30 degree angle.

6. Now center the cover iron in the standards so that the inside edge of the cover plate is 1/4" from the standards when setting level, then mark the cover iron through one side of the standard and drill a 1/4" hole.

7. Bolt pieces together using two 1/4" nuts on the standards and cover iron so that they can be locked in place allowing the arm to move freely. Finally, grind off back end of cover iron until the cover plate end is the heaviest.
We make three do the work of four

In tractors up to four-plow size, Ford's three-cylinder design offers real advantages over a "four." Consider these points:

1. Three-cylinder Ford design puts fewer, stronger parts in a shorter, stronger engine. Look at this connecting rod—big, brawny, with huge bearing surfaces.

2. Four main journals on this massive crankshaft for tremendous rigidity, smoother performance. Extra large bearings and big oil seals for long life.

3. Bigger bore makes room for bigger combustion chambers with larger valves and manifold passages. Ford's "three" is a deep breathing, more efficient engine.

Biggest three-cylinder Ford is the 201-cubic-inch diesel. It's a quick-starting, responsive engine with exceptional lugging ability. You get the same kind of strength and performance from gasoline models, too.

Take a few hours in the field with a Ford. You'll be amazed at its remarkable performance and economy. See your Ford tractor dealer, soon.
For a different kind of shooting

TRY CROWS

This winter or anytime you will find there is no sensation like trying to shoot this aerial acrobat.

The CROW is not considered a game bird like the pheasant. Yet, anyone who has tried "his luck" can tell you Mr. Crow is one of the most intelligent winged targets to be found in the field.

The crow is practically omnivorous; it eats anything from the choicest poultry, the eggs of wildowl, and most of all corn. In October, corn constitutes about 50 percent of a crow's diet.

These feeding habits can give you some helpful "how to's" on crow shooting as long as you remember that he is always on guard. When a flock feeds in a field, a sentry is posted in a nearby tree to warn of approaching danger. When it is the sentry's turn to feed, another bird relieves him. If you are seen near a feeding area, the uncanny birds will leave and not return until you are seen departing.

The birds will put up with a fair bit of shooting on feeding grounds and flight lanes, but shooting in or near their roost may cause your targets to depart for good. Before arriving at a feeding area, the flock sends in a scout to look things over. He warns them not to come in if danger is present, or gives them the okay if nothing seems to be wrong.

By the time you have discovered these facts from experience, you won't mind taking a few unfair advantages of these wily rascals. Two factors add up to your best chance to outwit the crow. He has an unending hatred for the great horned owl and a real concern for his fellow crow.

Owls and crows are natural enemies. The owls hunt and kill crows by night, and crows strike back during the day whenever they find an owl by ganging up on it and driving it from the area. The crow also forgets caution when another is in trouble by diving to its assistance.

These failings will help you ground enough birds to make the sport challenging. In fact, you will probably find out that you are not as good with a shotgun as you had first believed.

A fence row, a patch of woods, or an abandoned barn can serve for cover. Add a few limbs and twigs to give the best concealment. You may even want to use camouflage clothing and a face mask. The less you move while shooting the better.

A few decoys and a good mouth call are necessary items on feeding grounds. Many crow hunters add to their calling range by using a recording and a battery-operated turntable. You may want to prop up a few shot crows to add realism to your decoys. Another worthwhile trick is to bring along some eggs that have flunked the candling test and spread them out for the crows to find . . . and they will. If there's one thing to make a crow drop his guard, it's a selection of overripe eggs.

Your shooting stand should be crosswind or upwind, since the birds normally settle in against the breeze. Besides, those rotten eggs are another good reason for avoiding the downwind side. It's hard to shoot crows with watery eyes and while holding your nose.

It is best to locate your shooting stand a safe distance away from the feeding area so you do not alarm incoming birds, but close enough to call them in range. If you want to beat the scout, plan on arriving in the feeding area early to set up your equipment.

Another worthwhile trick is to place a stuffed great horned owl in a tree near your stand. Hang several of your decoy crows alongside to add realism to the scene. Then turn on your loudspeaker with the record of screaming crows in the act of attacking an owl. In a short time you will have plenty of action.

Most crow shooters prefer No. 7½ shot, although some use No. 9 shot. It doesn't matter if your aim is true. There will also be times when you won't want to stop and reload, so an automatic 12-gauge shotgun would be ideal, but not necessary. If the distance from your stand to the decoys is rather close, a one-bore cylinder choke is most effective. However, at greater distances a 28- or 30-inch choke is substituted.

For a different kind of hunting experience try matching your wits with Mr. Crow. You will find real excitement as well as difficult wing shooting.
What will you be doing four years from now?

Think ahead four years. If you have gone on to college you will be about to graduate. Chances are you will be getting ready for some form of military service, for you will still have a military obligation.

How will you perform your military service? Will you take advantage of your education by serving as a commissioned officer?

If you start now by planning to take Army ROTC in college you can earn both your degree and an Army officer's commission at the same time.

Army ROTC studies require only a few hours each week, and a six-week period of summer training. You learn to organize, motivate and lead others. You acquire personal and leadership qualities that will pay dividends for the rest of your life, in either a civilian or a military career.

Now is the time to learn all you can about this important program for college students, and the pay, opportunities for a scholarship and other advantages it offers.

Mail the coupon below for a copy of the ROTC booklet: "Where the Leaders Are."

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Street Address: ____________________________

City: ____________________________ Zip: ________

State: ____________________________

I plan to go to __________ college (or university) entering ________

F-4
Bring Home the Gold

By Tom Davidson

Are you a part of the FFA "team" that brings home the gold? If not, you and your fellow FFA members should stop and evaluate your chapter's program of activities (formerly called program of work).

Have you noticed that chapters with an outstanding program of activities also have more than the average share of American Farmers, State Farmers, Foundation winners, or community award winners?

There is a good reason for this. Let's compare an FFA chapter with a football team. The advisor could be compared to the coach, the chapter president to the quarterback, since he calls the plays; and the vice president to the center because, being in charge of committee work, he gets the ball started. The chairmen of the divisions of the program of activities may be compared to other members of the starting team. The other chapter members may be compared to the remaining members of the football team. The point is that every member of a winning football team has something to do with each and every victory, and the same is true with an FFA chapter. It requires a team effort to bring home the gold of a Gold Emblem Chapter Award.

If your chapter develops an outstanding program of activities (the plays of a football team), then your chapter will have American Farmers, State Farmers, and other winners. And you may be one, for these individuals develop from a strong program of activities.

Set chapter goals high when revising the program of activities. Ask your FFA advisor to acquire an application for the National Chapter Award Program and make revisions in your program of activities to meet as many requirements as possible. On page 53 of the 1966 Official FFA Manual, the National Chapter Award Program is explained, and should be studied carefully.

The National Chapter Award Pro-

(Continued on Page 48)
A FREE MOVIE
"men who feed the world"

the story of Jimmy Carter and his Brown Swiss calf Heida...

This is a story that really happened... of a calf that really did exist... really did win a prize ribbon... and really was fed Florida Citrus Pulp in her feeding program. This full color 16mm film, with a running time of 14 minutes, is available for showing to all clubs and organizations. Just fill in the coupon and we will ship you the film with enough Citrus Pulp Brochures for each member of your group.

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FLORIDA CITRUS PROCESSORS

December-January, 1966-1967
WINTER HAZARDS
and how to cope with them

By Parker H. Kendall

WINTERTIME IS FILLED with skiing, skating, snow shoeing, ice fishing, and hiking through the woods and fields blanketed with snow. A knowledge of the following common winter hazards, and how to treat them, will continue your winter fun right through to next spring.

Frostbite is the freezing of some part of the body and is always a danger in sub-zero weather, especially when the wind is strong. The first sensation is numbness rather than pain. Grayish or yellow-white spots will appear on the skin before you can feel anything. One good way to guard against a serious case of frostbite (in addition, of course, to wearing adequate clothing) is the buddy system.

Treatment. First of all, some don'ts. Despite what you might have heard, don't apply snow or ice. Don't rub the injured part. You may tear frozen tissues and cause further damage. Don't try to thaw out a frozen part by exercising. This only increases tissue damage and might easily break the skin and let in infection.

What should be done? Warm the frozen part rapidly in water until soft, even though this treatment is painful. Air Force doctors have found that water at 107 degrees Fahrenheit is most effective, but water either cooler or warmer can be used. If water isn't available, wrap the frozen part in blankets or clothing and apply improvised heat packs. If your ears show traces of frostbite, put your bare, warm palm against them. Hold frostbitten hands against the chest, under your armpits, or between the legs. If you suspect your hands or feet are frostbitten underneath frozen shoes and mittens, thaw out the shoes and mittens before removing them. Finally, don't stand or walk on frostbitten feet.

Immersion Foot (often called Trench Foot because it is common among soldiers) results from prolonged exposure to temperatures just above freezing. In the early stages, your feet and toes are pale and feel cold, numb, and stiff. If preventive measures are not taken, feet will swell and become very painful. In extreme cases, the flesh dies and amputation may be necessary.

Treatment. Feet should be kept warm and dry. If possible, the feet and legs should be kept in a horizontal position to increase circulation. As in frostbite, the early stages of immersion foot are not very painful. Immersion foot can best be prevented by keeping feet dry (your footwear should be waterproof), cleaning and drying your socks and shoes every chance you get, and drying your feet as soon as possible after getting them wet.

Severe Chilling resulting from accidental immersion in cold water or long exposure to extreme cold on dry land lowers your body temperature. Unlike in cases of frostbite and immersion foot, your body will quickly tell you when you are suffering from severe chilling.

Treatment. The only remedy is warming of the entire body by the best means available. The best treatment is a hot bath. Out in the woods on a camping trip, drape yourself in blankets and sit close to the camp fire.

Snow Blindness symptoms are burning, watering, or sandy-feeling eyes, headaches, and poor vision. A pair of good sunglasses is your best protection.

Treatment. Protect the eyes from light, use cold compresses if there is no danger of freezing, and take aspirin for the pain. Most cases recover within 18 hours without medical treatment, but the first attack of snow blindness makes you susceptible to others.

Carbon Monoxide Poisoning can be caused by a fire burning in an unventilated shelter. Most of the time there are no symptoms; the victim lapses into unconsciousness, and death follows. Sometimes, however, there may be pressure at the temples, headache, a pounding pulse, drowsiness, and nausea.

Treatment. Get into the fresh air at once. The victim should also be kept warm and quiet. In severe cases, artificial respiration should be applied.

Summing Up. Wear adequate clothing (remember that several layers are more effective against the cold than one heavy piece), watch for frostbite on exposed parts of the body (ears, cheeks, nose, wrists, hands, fingers), keep feet warm and dry, be aware that glaring snow can cause temporary blindness, and make sure any fires you build in an enclosed shelter are properly ventilated.

Now that you're aware of winter-time hazards and how to cope with them, there's no reason why this winter shouldn't be your most enjoyable one yet. Get outside and have fun!
Keep your eyes moving when you drive

To become an expert at the wheel, learn to keep your eyes on the move as you drive.

The key to good driving is to shift your vision every two seconds. Keep checking near, then far and to both sides. Don’t just focus on one object ahead. And remember to check your mirrors, too, at least once every five seconds. At night, try to see beyond the range of your headlights. Keep your eyes moving.

Shifting your vision as you drive keeps you posted on traffic conditions and other cars. It's a good seeing habit according to Harold Smith, originator of "The Smith System of No-Accident Driving." And—it will make you a better, safer driver.

Ford
FOR A SAFER AMERICAN ROAD
Two past presidents—former President Eisenhower, and Howard Williams, 1965-66 FFA president—chat in Kansas City when "Ike" attended the "People to People" meeting.

William Frizzell, Colebrook, New Hampshire, who was named Star State Farmer at the Eastern States Exposition, is congratulated for his work by his vocational agriculture instructor, Mr. Peter Edgecomb.

Walter Von Schmidt and his Grand Champion Jersey received lots of notice from Governor Richard Hughes, Vice President Hubert Humphrey, State Secretary of Agriculture Phillip Alampi at New Jersey's State Fair.

State FFA association presidents who attended the Regional Leadership Training School in Bozeman, Montana, were (left to right) Dee Thompson of Utah; Dan Haddon of Wyoming; Mark Brownton of Oregon; John Gammill of Arizona; Gene Perry of Colorado; Mike Quesnell of Idaho; Jim Beardsley of Montana. School was for all state officers.
FREE for YOU

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

20—America’s Water Problem—A four-color publication that presents statistics on water conservation, gives examples of cities confronted with a water shortage and their solution to the problem. It also lists the titles and sources of available information on protecting this valuable natural resource. (Caterpillar Tractor Co.)

21—Tiny Threads Of Waste—A richly illustrated, 36-page volume in four colors about the parasite problem. One of the best sections is on roundworm identification, which includes unusual color microphotography of the most common types of cattle worms. Symptoms, diagnosis, and life cycle are outlined for each parasite shown. Also included is the McMaster method of making an egg count and a glossary of technical terms. (Merck and Co., Inc.)

22—Photographic Science—A 12-page illustrated booklet containing photographic examples of the many branches of photographic science and engineering. Answers such questions as: What is photography? What is a scientific career? What careers are available in photographic science? How and where can one prepare for such a career? (Society of Photographic Scientists and Engineers)

23—Breed Improvement—A 50-page illustrated book with an attractive four-color cover. Provides basic knowledge that will help the reader understand genetics, heredity, beef cattle mating systems, and the potential improvements which can be expected through the use of good records. The four main sections of the book are divided between genetics and heredity, production measure, herd classification, and carcass evaluation. Each section includes several sub-topics. (American Angus Association)

20 21 22 23

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February 28, 1967

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Built to take the tough, man-sized jobs of livestock and farm production.

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A NEW LOOK AT

Beaver Trapping

By Earl Kennamer

A recent upsurge in raw beaver pelt prices could mean that the king of pelts is making a comeback.

THIS MAY BE your year for trapping the fur bearer that helped shape our country's history. I'm speaking of the beaver, victory prize of the French and Indian War, fore-runner of the famed Hudson Bay Company, and early mainstay of John Jacob Astor's American empire.

For the past few years, there has been an upsurge in raw beaver pelt prices. Beaver blanket pelts from the Southwest sold at top level prices of $14.00 to $16.00 in 1960, $17.00 to $17.50 in 1964, and $18.00 in 1965. If this trend continues, prices should be $19.00 to $20.00 this coming season. One auction company that handles more beaver pelts than any other firm in the country says the biggest price rise applies to prime beaver pelts suitable for bleaching. These seem to be in more demand, provided the pelt is properly handled. With proper skinning, stretching, and drying, you can expect a 25 percent to 50 percent better price for a beaver pelt.

Prices for beaver pelts will vary according to sections of the country. For example, a No. 1 "extra large" pelt from Mississippi might make a top price of $15.00, while in Wisconsin last year the price for such a pelt reportedly reached $20.00.

Coupled with this price rise and demand for beaver is the increase in the number and spread of beavers. About 20 years ago, the beaver population in this country was probably at its lowest ebb in history. A restoration program was initiated and in some cases is still being carried on. This was the release of live-trapped beavers in sections of the country where conditions were suitable for their survival and increase. In one state beavers were dropped by parachute! Everything looked promising because beaver pelts were bringing $30.00 to $60.00 or more, and this was real money in those days!

Then a decline in the fur market took place soon after the Korean War. In Alabama the average price for a No. 1 large beaver pelt dropped to $3.00 or $4.00. Since a $1.00 federal tag had to be attached to each pelt sold, interest in trapping declined.

Worth Protecting

However, beavers are now numerous on every stream in the nation where they can find suitable living conditions. These include food trees such as gum, river birch, willow, and poplar. In some states this largest rodent of North America has been classified as a pest and can be killed the year-round. I receive hundreds of requests annually asking for information on how to eradicate beavers. Fortunately, no effective poison has been devised, because the beaver is worth protecting. The beaver does his greatest damage by flooding bottomland timber, but he also conserves water and soil. Where his dams flood valuable pastures, he creates good duck ponds. I have caught many a string of big bluegills from beaver impoundments. Where he cuts a few trees for food and dam construction, the beaver provides a habitat for the muskrat. Incidentally, prices for prime muskrat pelts are making a comeback.

Of course, the beaver is not condemned in some states. These states provide a limit per trap, per season, and this may be only five or so pelts per trapper in a county.

In the South and Southwest, beaver ponds provide livestock water that otherwise would be available only if man-made ponds were present.

The legal system for trapping beavers is different in every state, and even the season varies from late November to spring months. This means you must check with your local game warden or state conservation agency. You'll need a trapping license.

Best Harvest Tool

Newest harvest tool for beaver is the Victor #330 Conibear. This trap, developed in the 50's, has proven to be the best for trapping beaver. A humane trap, it kills the animal rather quickly. It does not have to be set in water deep enough to drown beavers, as with the conventional traps. (See my article in The National FUTURE FARMER. October-November, 1964.) This trap can be bought through local hardware stores or from one of the
large mail-order houses. Like other large traps, it can cause serious trouble if not handled properly. For this reason, I insist you should practice setting the trap at school or at home to master all safety features. Ask for help if necessary. An illustrated brochure showing how to set the Conibear is furnished with your purchase.

Find a seasoned beaver trapper and ask him for help in making the most successful sets for beaver. Any beginner in trapping should go along with a buddy. (I can't recall hearing of any trapper drowning or beginner being seriously injured. A trapper learns the ways of the wild better than any other outdoorsman.) The average trapper cannot handle more than three or four of the bigger Conibears and one or two No. 4 steel traps in drowning sets, because he will capture more beavers than he can efficiently skin and process.

I know one trapper 75 years of age. He has a heart condition and has acquired a helper to carry his catches from the woods. He caught 95 beavers in a two-month season!

Preparing The Pelt

In preparing a beaver pelt for drying, you can expect to spend an average of 1.5 hours. Skinning is simple. Split the beaver hide along the belly from scaly tail to chin tip and with a knife separate pelt from carcass. Cut off legs at the fur line joint. Take care not to enlarge the eye holes. Cut the ears close to the skull. My rule of thumb is simply to cut close to the meat and bone rather than the pelt.

There is a thick layer of dark red gristle on the beaver's hide. This must be carefully sliced away with the skinning blade of your pocket knife. I find this a good job for the sheath knife.

The next step is buying a small sacking needle from the local hardware store and sewing edges of the pelt to the sides of a circular hoop. Old fishing cord, say 15- to 20-pound test, that is not easy to break makes good lacing. Some trappers tack their pelts to the inside wall of a building, but this often results in poor drying and, in most cases, the pelt is not round. If you sew your pelt to a round frame, you can hang it from the garage or barn rafters. But be sure the pelt is round! Don't put salt or any chemical on the pelt. Remove grease with cotton waste or rub dry hardwood sawdust on the greasy hide and brush it off. Don't use pine sawdust.

Finding A Buyer

When all pelts are completely dry, simply wrap them in burlap and send flat to a reliable fur buyer or to a firm that handles pelts through auction. The auction may result in a higher price, but you may have to wait up to three months for your check. If you would like a free list of raw fur markets, write the editor, The National FUTURE FARMER, Alexandria, Virginia 22306. He'll send you one by return mail.

Of course, there is no guarantee beaver pelts will continue their price climb, but at least you can expect to trap beaver for a reasonable labor income again.

A Conibear set in deep water with "fence row" sticks placed on each side to guide beaver against trigger.

A wildlife biologist is pictured removing a beaver’s fur coat with a very sharp skinning blade of his knife.
Charlie the Greenhand says order your 1967 Official FFA Calendar to day. Turn to page 51.

Your working partners

"Chap Stick" lip balm protects your lips—relieves drying, chapping, cracking.

"Chap-ans" medicated cream works while your hands work—helps heal red, rough, irritated skin.

Test your talent

$675.00 Art Scholarship awarded monthly!

If you like to draw—even if you like to doodle—you may have natural art talent worth training. Here's how to find out—and possibly win a free scholarship: Draw the Santa in pencil, any size you want (except a size that would look like tracing). If your drawing is chosen, you'll get a complete $675.00 course in commercial art. You'll be taught by professional artists of America's leading home study art school. Everyone who enters will get a professional estimate of his talent, free. Entries for the January contest must be received by January 31, 1967. Winner notified. Amateurs only. Our students not eligible. Mail your drawing today!

Cartoon Caption Contest Winners

THOUSANDS of Future Farmers sent in entries for the Cartoon Caption Contest which appeared in the October-November issue of The National FUTURE FARMER. In cases of identical entries, the entry with the earliest postmark was selected. Judges' decisions are final, and all entries are property of The National FUTURE FARMER.

Here are the winning captions:

FIRST PRIZE $15
"They are always filled to the brim with a delicious assortment of goodies."
Steve Raschke, Conneaut, Ohio

SECOND PRIZE $10
"You're probably looking ahead to a career in big-scale farming."
Daniel West, Cherry Valley, New York

THIRD PRIZE $5
"You can't fool the working cowboy!"
Garland Wilcox, Fort Supply, Oklahoma

HONORABLE MENTIONS
"Withstands over 2,000 lbs. pull."
Bob Logghe, Peck, Michigan
"Aiming is quick and easy."
Robert Struck, Chancellor, South Dakota
"You'll find out how slippery it is and be able to adjust your speed to it."
Gary Brownfield, Smiths Grove, Kentucky
"You're the guy they count on to keep the moving parts moving."
Richard H. Brouse, Lancaster, Pennsylvania
"Interested?"
Mike Mackey, Kiowa, Oklahoma
WATCH for
These Winter STARTING PROBLEMS

CHANCES ARE IF YOU live in the West or South you have more winter starting problems than if you live in an area where the winters are characteristically severe.

You probably depend on battery jumper cables to start farm vehicles which are difficult to start. This is often a quick and easy way to get the engine started, but it can lead to expensive damage to ignition system components if the "dead" battery is overmatched in voltage by the supplying battery, batteries, or other power source.

Today, most cars and trucks are equipped with 12-volt systems. Using a booster source of 18 to 25 volts will spin over today's engine at a very rapid rate, well in excess of what is normally needed for starting purposes; but it is likely to lead to damage to the components of the 12-volt system.

Under conditions of up to double normal voltage, distributor breaker points can turn blue, and the ignition coil can be temporarily overstressed to a point where it will become damaged permanently. If the engine being started is equipped with any transistorized components, such as transistorized ignition, alternators, or even transistor radios, the sudden jolt of excessive voltage can knock out the transistors and/or diodes immediately.

If a well-charged, 12-volt booster battery will not start the engine, chances are that something other than a discharged battery is causing the trouble. If considerably more than 12 volts are used to eventually start such an engine, there exists a strong possibility that extensive and expensive damage to vehicle electrical components will result.

A word of caution: watch that polarity when connecting the booster cables to the battery. Positive always goes to positive, negative to negative.

Farmers Negligent

Farmers, due to their normally remote locations, certainly rely on their automobiles more than most other car-owning groups. It is, therefore, baffling to discover that farmers are somewhat negligent in car maintenance and, consequently, above average on the list of people who experience engine starting problems.

An independent research organization recently discovered some of the reasons for these starting problems. The results showed a direct relationship between frequency of engine tune-ups and winter starting difficulties. Farmers, as it turned out, experienced starting difficulty at a rate of 24.9 percent, while the average motorist had trouble only 23.6 percent of the time. Only 20.7 percent of the farmers surveyed had had engine tune-ups compared to 24.3 percent for all others polled.

The farmer cannot blame his frequent starting problems entirely on the blizzards and sub-zero temperatures often occurring on the plains, prairies, and rural sections where he lives and works. The research proved conclusively that weather conditions and climate are not the primary factors in automobile starting difficulties. For example, motorists in the Canadian province of Quebec, where weather is characteristically severe, had fewer starting problems than car owners in the semi-tropic deep southern section of the United States. The reason—drivers in Quebec purchase a higher percentage of pre-winter auto maintenance than any other geographic region surveyed.

Nearly everyone is familiar with the discomfort and inconvenience that accompanies mid-winter car trouble. Statistics prove that this can often be reduced or avoided with a simple engine tune-up. This service should include an inspection of the battery and cables, primary electrical circuits, distributor points, condenser, air cleaner, carburetor, ignition timing, choke, fan belt, compression, and spark plugs.

Public transportation in rural farming areas is usually scarce at best. It is simply good sense, therefore, for the farmer to ensure the dependability of his primary link to neighboring communities and markets—his automobile—with regular engine maintenance.

According to a study conducted by Champion Spark Plug, the most frequently used method of starting a "can't start" vehicle is by means of battery jumper cables. Chart also shows other conventionally used methods.
Bring Home the Gold

(Continued from Page 38)

program creates competition, and through competition ideas emerge that enable one chapter to achieve more than another. Award winning chapters meet the basic requirements and go further by projecting ideas that continually strengthen their program of activities. So being a top chapter nationally is not enough; the challenge is to remain there.

Here are ideas that made it possible for the Cheyenne Frontier Chapter and the Pinedale Chapter to represent Wyoming in the National Chapter Award Program and to receive Gold Emblem national awards:

Both chapters have a program of activities that is adequately financed and approved by school administrators; a program that offers a challenge to all members of the chapter, and one from which individual winners can emerge.

Both chapters conduct meetings with strict parliamentary procedure and have a challenging awards program which offers incentive for individual members to seek recognition and personal growth.

Both chapters emphasize public relations. When the community is informed of chapter activities, they are willing to give support. They want to help make their chapter a success.

Cheyenne’s Program

The Cheyenne Chapter has an outstanding livestock program which includes livestock chains to help members become established in farming. Besides their registered Chester White swine herd, they have outstanding Suffolk, Corriedale, and Rambouillet sheep flocks and registered Hereford and Angus beef herds. Chapter committees make sure that sound livestock management practices keep these herds in top condition. Because of these practices, the chapter has won many awards exhibiting at fairs. As a community service, they rent their registered boar and rams to local ranchers.

This year Cheyenne won the state farm safety award for the second year. Highlights of their safety program included special meetings on farm safety, a guest speaker from the Wyoming Highway Patrol, a meeting on civil defense, free distribution of SMV (Slow Moving Vehicle) emblems to local farmers and ranchers, sponsorship of a farm safety radio and TV program, and demonstrating farm safety at a public program.

During National FFA Week, chapter officers make a goodwill tour of community businesses and ranches to promote an understanding of the FFA and to learn more about their community. Officials visited during the tour are invited to a dinner program which climaxes the event.

Pinedale’s Achievements

The Pinedale Chapter has participated in the Golden Spike Livestock Show at Ogden, Utah, for many years with pens of feeder calves. Feeder calves are selected, fed, groomed, exhibited, and sold in the auction ring by chapter members. This project is supported by ranchers in the Pinedale area and provides experience in complete marketing of feeder calves.

The Wyoming Future Farmer, a state FFA publication, was introduced and published by the Pinedale Chapter. Local chapter and state news, as well as ideas other chapters might use, was prepared and written by the FFA members. Experience in publication make-up was also provided.

Other activities included cooperating with a local organization in developing a tree nursery, operating a national car safety check, and participating in a chapter exchange program with the New Hampton, Iowa, Chapter.

The Cheyenne Chapter is located in a metropolitan area, and the Pinedale Chapter is in a rural area. They received National Gold Emblem Awards because their programs of activities were developed to meet the needs of each chapter in respect to the school.

Did individual winners emerge from their programs of activities? Of the three American Farmers from Wyoming this year, one came from Cheyenne, and one came from Pinedale. Of the State Farmers, three came from Cheyenne, and two from Pinedale. Pinedale also had the Star Regional State Farmer and the State Livestock Foundation winner.

“You’re right, Wilford—it’s how you play the game that counts. Now I’ll tell you a thing or two about how ‘you’ play the game!”

The National FUTURE FARMER
Storing Tractor for Winter

(Continued from Page 29)

removal of the entire distributor if dampness is expected during storage.

Openings. All openings in the engine and electrical equipment should be covered and sealed with plastic or other waterproof covers and attached with waterproof tape. These openings include air-cleaner inlet, exhaust pipe, and crankcase-breather opening.

Battery. The battery should be removed from the tractor and all corrosion cleaned from it. Add water to bring the electrolyte to the correct level, charge to a "fully charged" condition, and store in a cool, dry place where it will not be subjected to below freezing temperature. Every four or five weeks the battery should be checked and, if necessary, recharged.

Remove all corrosion from battery.

Miscellaneous Precautions. Relieve the tension on the fan and generator belts. If practical, the belts should be removed, tagged for identification, and stored in a cool, dry place. The clutch pedal should be blocked or wired in the disengaged position so that the clutch facing will not stick to the engine flywheel.

Reactivation. Preparing the tractor for operation when spring arrives consists essentially of re-installing the parts removed, removing the coverings from all the openings, re-inflating the tires, and checking the lubricant levels. After closing the fuel system drains and filling the tank with fresh fuel, start the tractor and allow it to run at slow idle speed for several minutes to make sure that it is operating properly before placing it under full load.
NEAT, NOT BEAT
New Look in Men's Clothing

HOW WOULD YOU describe our life and times? “Turned on,” swinging, rebellious, the age of involvement? In about a century or so when the social historians get down to the serious business of reconstructing the good old days of 1966, they well may label it the year of the relaxed generation.

This doesn’t mean the lie-back-with-your-feet-on-the-couch kind of relaxed. For there never was, nor will there probably ever be, a more action-oriented, up-and-doing, go-go society. And that goes for everybody—high school students, the population of college campuses, junior executives, the young marrieds, and the rest who just think, act, and feel young.

Why the relaxed generation? There has been an easing of the rigid standards in so many areas of everyday life: that keeping track of the changes is like trying to round up a barn full of sparrows.

And nowhere is this relaxed attitude more apparent than in apparel—specifically, men’s wear. A spokesman for one of the nation’s leading men’s wear manufacturers, Hart Schaffner & Marx, said recently that the old rules in men’s fashions have become as dated as last week’s hit record. Colors and patterns are as bright as any male plumage worn since the days of the Renaissance.

A revitalized awareness of style has captured the American male’s imagination. This, by the way, is not to be confused with certain current fads for outlandish attire. But staid old taboos are relaxing, being done away with.

Leisure time activities smack in the middle of 1966 run the gamut from sky diving, skiing, painting, surfing, mountain climbing, and hunting to completing a correspondence course. Usually, it’s a dazzling combination of activities that help people to feel complete, to be fully alive.

Can a bright young farmer who wears work Levi’s and a tee shirt during the work day find happiness and fulfillment in dress slacks and a sweater for a weekend date? Or in bermuda shorts for a summertime outing? You bet he can. And the men’s clothing industry, ever watchful of the slightest change in tastes and trends among the “turned on” set, is fully prepared to meet the challenge.

A spokesman for another clothing brand—Sterling & Hunt—believes that American men have finally summoned up enough courage to freely admit to one of the most often-rumored facts of life: that men take as much pleasure in their clothes and personal appearance as a woman does in her world of wardrobes.

Men no longer buy the first dark suit that “seems to fit okay.” Buying clothes has become the selective, pleasurable activity it ought to be.

Millions of American men have become, literally, fashion connoisseurs. They are aware of the way-out styles that hit the market. But they don’t buy—until the ultra-styles have undergone considerable modifications.

Relaxed or not, the mature man who truly cares about his appearance shuns extremes in fashion. These include pants that are too tight and end too far above the shoe tops, skinny jackets that would do justice to an organ grinder’s monkey, overly ornate jewelry, or dandified accessories.

However, advanced styling trends have captured the men’s fashion market. The fitted jacket, slanted pockets, pleatless, beltless trousers, and other styles from England and the Continent all had to undergo many modifications before they became popular.

To suit the American male’s current taste, clothing must be lightweight and have little padding. Summer weight clothes of ten years ago are now being worn year-round.

Color It Young

Forget everything you ever learned about color wheels and harmonic tones. Today’s swinging society pairs off Paisley with plaid, tweeds and twill, and white ducks with double-breasted blazers.

To be truly well-dressed today, it is pointed out, a man’s wardrobe should fit his activities and his hobbies. No man can be considered well-dressed unless he looks “at home” in the outfit he is wearing. Clothes should flatter a man’s ego. It is decidedly “out” to buy clothes because everybody else dresses that way.

But one thing is certain. BEAT is fast giving way to NEAT. Somewhere along the line, our society has come to the startling conclusion that one can take part, “swing,” make the big moves and do it looking neat and well-groomed.

A recent study of the grooming and clothing habits of young men reveals that an average wardrobe consists of suits, often in the lightweight, year-round materials, several pairs of slacks, jeans and bermuda shorts, tweed sport jackets, and a varied assortment of outerwear.

Add to that a constantly increasing array of accessories and good grooming helps—electric shavers, colognes, cuff links, shoes, hosiery, shirts, sweaters, ties, and so on—and you have the biggest blooming brigade of potential Beau Brummels in history.

Guy Martin of Junior Achievement and a student at Vanderbilt University wore a conservative coat and tie to bring greetings to the National FFA Convention delegates in Kansas City.

The National FUTURE FARMER
"Changing The Sign" is the official painting on 1967 FFA Calendars. Plan C program calendars listed below have the message—A nation's "growing" power is in its agriculture, its youth, and education.

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IOWA—Delegates Barrie Swinbank and Eddie Wiederstein of the Iowa Association discussed the workings of the business session and the responsibilities of the official delegates at the National Convention with the FFA representatives from the Virgin Islands.

Lauriel Oliver, vice president, and Daryl Brow, vice president, represent the two chapters and 41 Future Farmers in the Virgin Islands. Although two chapters does not qualify them as an official association, the Future Farmers in the Virgin Islands send representatives each year to participate in the National FFA Convention activities in Kansas City.

WASHINGTON, D.C.—Jim Stitzlein, Ashland, Ohio, past national FFA vice president, shared the spotlight with Secretary of Agriculture Orville Freeman as part of the opening day program at the USDA Cooperative Month celebration.

National Executive Secretary Wm. Paul Gray introduced the FFA-cooperative program by telling of the hundreds of FFA chapters who have formed their own cooperatives, or use the services of existing ones.

Jim used slides to show what four FFA chapters did to become national winners of a $2,000 award from the American Institute of Cooperation for a trip to its August, 1966, conference at Fort Collins, Colorado. The winning chapters were from Belvidere, New Jersey; Alachua, Florida; Audubon, Iowa; and Eaton, Colorado.

Their activities included class projects such as using cooperatives for their own buying and selling, giving talks and setting up exhibits on cooperatives, and other promotional and educational programs.

Left to right, Jim Stitzlein, past FFA vice president, and Wm. Paul Gray, executive secretary, at co-op meeting.
MISSOURI—District FFA president, David Thomas of Monett, Missouri, was awarded a Top Teen award at the Third National Explorer Delegate Conference. David graduated from Purdy High School where he was a member of the Purdy FFA Chapter. He has earned his State Farmer Degree in the FFA and is majoring in agriculture at the University of Missouri.

Other rural scouting news comes from Florida. Explorer Post 110, an agricultural special-interest post, gives boys in the area an opportunity to explore agri-business. It is sponsored by the McCollough Farm Supply and meets in the high school vocational agriculture building. The advisor is Lonnie Sims who is also FFA advisor.

OREGON—Two outstanding Future Farmers were selected for Jersey calf awards at the Oregon State Fair.

Bob Oliver, from the Pacific FFA Chapter, was presented his calf by the Oregon Jersey Cattle Club. Bob lives on a 200-acre dairy farm and has already started building up his dairy herd, with 26 head of dairy animals to his credit so far. Bob plans to use the new heifer to upgrade his herd. He already has his herd on a record system so he can keep a close tab on each cow’s production.

Another Pacific Future Farmer, David Knapp, won the Fred Meyer Jersey Calf certificate. David’s program includes an acre of Christmas trees, a beef heifer, and a work experience program. In addition to all of his activities, he shares the task of milking and caring for the 84 head of Jersey cows at home.

INDIANA—This past summer, the Indiana Association conducted its first FFA orientation camp program (Operation Head Start) for eighth grade boys who were planning to enroll in vocational agriculture this fall. The purpose of the program was to inspire, inform, and encourage potential FFA Greenhands.

Approximately 130 eighth grade boys, representing 30 chapters, attended the three-day session. Instruction was provided by 12 top FFA leaders selected from those who attended the State Leadership Training session conducted for chapter and district officers.

The prospective Greenhands were given orientation to the FFA program and its motto, creed, the qualifications for the Greenhand degree, basic parliamentary procedure, and the symbols of the officers’ stations. A typical chapter meeting was conducted and special emphasis was given to what lies ahead for a Greenhand—degrees, officer positions, and awards.

They also were given an opportunity to work with the state officers and former national vice president, Jim Stitzlein, of Ohio. (Coleman Harris, State FFA Executive Secretary)

December-January, 1966-1967
HAVE YOU EVER been to an FFA meeting in which members had difficulty in changing a main motion to a more desirable form? Or perhaps they had made so many attempts at changing the motion no one knew what the situation was?

There need not be such difficulty or confusion if the presiding officer and members know the correct procedure for amending a main motion.

An amendment is for the purpose of changing the motion under consideration, assuming that it is amendable.

There are two kinds of amendments—first rank and second rank. An amendment which applies to the original motion is of the first rank. An amendment which applies to an amendment is of the second rank.

It is incorrect to have more than one amendment of each rank pending at a time. As soon as each is voted upon, however, another of the same rank may be proposed.

An amendment must pertain to the motion to which it refers. For example, an amendment must pertain to the original motion. An amendment to the amendment must pertain to the amendment.

FFA members frequently err by letting an amendment to the amendment pertain to the original motion instead of the amendment.

If an amendment and an amendment to the amendment are pending, and a member desires to propose a modification of the original motion, he must wait until both amendments are voted upon then propose his modification in the form of an amendment.

There are three ways in which an amendment, either first or second rank, may modify or change. These are by striking out, inserting or adding, or by striking out and inserting words.

Amendments must receive a second. A majority vote is required for their passage. Too, amendments are debatable when the motion to which they apply is debatable.

The procedure through which an FFA chapter may go in dealing with amendments can be long. If, however, the presiding officer and members know the proper procedure well, there need not be undue confusion, and members will better be able to arrive at decisions desired by the majority. This, of course, is an underlying purpose of parliamentary procedure.

(Next issue: "Nominations and Elections")
Larry Leck Carries on
A Family Tradition

THE STAR FARMER of America in 1935 was Paul Leck of Washington, Kansas. This year, his son Larry received the American Farmer Degree. This is believed to be the first son of a Star Farmer to receive the American Farmer Degree.

Back in 1935, Paul Leck’s supervised farming program was quite varied, but not too unlike his son’s program for 1966. His vocational agriculture instructor was Mr. Hale Brown. Mr. Brown dug back in his scrapbook and told us that in 1935 things weren’t exactly easy going. There had been bad weather and, of course, the poor money situation. Mr. Leck’s program included a sow and two litters, 316 turkeys, 455 chickens, 10 geese, 8 cattle, 6 acres of grain sorghum, 12 acres of corn, and a quarter acre of vegetables. A newspaper clipping from the former Kansas City Weekly Star, dated October 23, 1935, stated that the distinguished judges of the contest were particularly impressed with Mr. Leck’s program in that he had taken advantage of every opportunity to advance himself despite the money situation and drought. He put to use a trench silo to save an already-short feed supply. And he took steps to beautify the farmstead despite the general lack of enthusiasm during those days. Mr. Leck also served as Kansas State FFA president and was high individual on the milk judging team at the American Royal.

Larry Leck, 31 years later and a 1966 American Farmer from the same chapter, rents 120 acres and raises milo and a quarter-section of wheat. His beef program includes 30 head of Hereford cows and calves. He has an extensive farm mechanics program including all the necessary equipment to do all the repairing of machinery. His work includes complete overhaul of major items of machinery. His vocational agriculture instructor while he was in high school was Don Kastl.

Mr. and Mrs. Paul Leck, son Larry, and son John (who is chapter sentinel this year) live near Washington, Kansas. Vocational agriculture instructor at Washington High School is Mr. Gary Gish.

Congratulations to Larry Leck, 1966 American Farmer, from his family and Advisor Mr. Gary Gish. Larry is the first son of a Star Farmer to win Degree.

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December-January, 1966-1967
FOOTBALL FANS in Baltimore, Maryland, November 6 received full value on their tickets in the duel between two of professional football’s finest quarterbacks, Sonny Jurgensen’s Washington Redskins lost the game, but Sonny turned in a fine personal performance considering the pressure put on him by the Baltimore Colts’ defensive team. He managed to get off 32 passes, completing 21 (more than 65 percent) for 220 yards gained and one touchdown. Most experts agree that Jurgensen is the best quarterback in the Eastern Conference of the National Football League. They would like to see his record backed up with a good team.

Jurgensen, 32 years old now, is in his tenth season of pro ball. He was a fourth round draft choice of the Philadelphia Eagles in 1956 after an outstanding collegiate career at Duke University. A three-letter high school star at Wilmington, North Carolina, he received scholarship offers from several colleges and was offered a baseball contract by the old Philadelphia Athletics. However, Sonny decided to stay with his favorite sport, football, and turned in a brilliant career for Duke University.

Joining the Eagles in 1957, he led them to four wins in five games before the team obtained Norman Van Brocklin in a trade. This move spelled bad news for Sonny as he inherited the phone spot on the bench. It is from this unhappy position that a reserve quarterback stays in contact with team game scouts. Sonny was to spend the best part of four years on the bench. During this period, he attempted only 141 passes, completing 72 for 1,242 yards gained and 11 touchdowns.

Van Brocklin retired in 1961 to become head coach of the new Minnesota Vikings team, and Jurgensen was given his long awaited chance. During 1961, his first season as a regular, he almost rewrote the N.F.L. record book. That year for the Philadelphia Eagles he broke two records with 235 completions in 416 attempts, gained 3,723 yards via the air ways, and threw 32 touchdown passes. Even though the Eagles finished last in 1962, Sonny had a very good year leading the league in total yards gained with 3,261, and average yards gained passing of 8.91 yards.

The Eagles team was caught up in dissension and Jurgensen was traded to the Washington Redskins for Norman Snead.

Sonny has been good for Washington fans even though there hasn’t been a good team around him yet. He has had many good days in the Washington Burgundy, and one of the best was October 11, 1964, against the Eagles when Jurgensen out-dueled Norm Snead by pitching four TD’s against the Eagles in the first meeting of the traded quarterbacks. On another such day, November 28, 1965, in a game with the Cowboys, Sonny sparked the greatest comeback win in Redskins history. Down 21-0, Sonny led a comeback victory of 34-31 by passing more than 400 yards for three TD’s.

It adds up to an outstanding pro career. He owns the record for the most yards in one season by passing for 3,723 in 1961. He is the only pro gunner to ever gain over 400 yards in more than one game. He has four such performances to his credit. In addition he has tossed five TD’s three times in a single game; completed 33 passes in a single game, and once attempted 57 passes in a single game. What a career!
L. Dodge offers three new stake model trucks like the D-300 shown above with a nine-foot body on 133-inch wheelbase. Standard is the 140 h.p. slant six engine. (Dodge Trucks)

M. Ford's all new top-of-the-line Styleside pickup, the F-100 Ranger for 1967. Sporting a new exterior, the cab is over three inches wider. (Ford Division, Ford Motor Co.)

N. New big tractor middlebuster is built to withstand stresses of middlebusting with up to five bottoms under a 100-plus horsepower tractor. Easy to mount. (Oliver Corp.)

O. New Holland's model 675 spreader is made to order for farmers with large livestock operations. It can haul over six tons of manure per load. (New Holland Machine Co.)

P. This new bunk feeder serves livestock on a tray. Big advantage is no separation of feed supplements. A tray system is also clog proof. (The Wyatt Manufacturing Co.)

O. Flashing colored mirrors are sealed inside this clear, heavy plastic "Twirl-A-Lure" fish-getter. Takes any fish that will hit an artificial lure. (Norkin Laboratories)

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

Please send information on products circled below.

L M N O P Q

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A man sent this postcard to the weather bureau: "Dear Sirs: I thought you would be interested in knowing that I have just finished shoveling three feet of 'partly cloudy' off my front steps this morning."

William F. Stagg, Jr., Alexandria, Virginia

Under the spreading chestnut tree
The village smith he snoozes,
No nag since 1943,
Has come to him for shoes.

Earl Gray
Yazoo City, Mississippi

A young lawyer pleading his first case had been retained by a farmer to prosecute a railroad for killing 24 hogs. He wanted to impress the jury and shouted, "Twenty-four hogs, gentlemen! Think of that! Twenty-four! Twice as many as there are in the jury box."

Bill D. Ligon
Old Hickory, Tennessee

Tom: "This hum came up to me and said he hadn't had a bite in two days." 
Friend: "What did you do?"
Tom: "I bit him."

Randy Moore
Morris Chapel, Tennessee

Son: "Daddy, may I borrow your car tonight?"
Dad: "What are your feet for?"
Son: "One for the gas pedal and the other for the brake."

Robert Thomas
Darlington, South Carolina

Salesman: "We have a parrot here that sings 'Yankee Doodle' when you pull one leg, and he'll say The Declaration of Independence when you pull the other leg."
Customer: "What happens when you pull both legs?"
Parrot: "I fall, stupid!"

Clarence H. Scotten, Jr.
North Salem, Indiana

Mr. Jones: "How is it you are able to keep your children at home?"
Mr. White: "No problem, Mr. Jones. We just make the home atmosphere pleasant and let the air out of our tires."

Stephen Weappa
Sebeka, Minnesota

Teacher: "Today, I want to talk on honesty. How many people read the twenty-fifth chapter in your textbook?" Nearly all the students raised their hands. "Good," said the teacher. "You're just the ones I want to talk to. There is no twenty-fifth chapter in the textbook."

Ricky Grimes
Alpharetta, Georgia

Speaking of milk, how about the gal who ordered 54 quarts from her milkman.
"My doctor told me to take a bath in milk," she explained.
"Do you want it pasteurized?" the milkman asked.
"No, just up to my chin," she replied.

Carl Alexander, Jr.
Talihina, Oklahoma

A lady was going to town in her Volkswagen when suddenly she saw another lady in a Volkswagen pulled to one side of the road with the hood up. She stopped and said, "Are you having trouble?" "Yes," the lady said. "My motor is missing." The other lady cried, "Oh, don't worry. I have an extra one in the trunk."

Ronald Atwell
Hardyville, Kentucky

"Any physical defects?" asked the draft board doctor.
"Yes," replied the hopeful inductee, "no guts."

Tom Harris
Fairmont, Minnesota

Son: "Can you write your name with your eyes closed?"
Father: "Yes, I think so."
Son: "Sign my report card with them closed."

Brenda Starks
Iva, South Carolina

"Please check the water for both—the radiator and the chickens."

Charlie, the Greenhand

The National Future Farmer will pay $1,00 for each joke published on this page. Jokers must be submitted on post cards addressed to The National Future Farmer, Alexandria, Virginia 22314. In case of duplication, payment will be made for the first one received. Contributions cannot be acknowledged or returned.
THERE IS MORE TO BOB JONES UNIVERSITY THAN MEETS THE EYE

What is a university anyway? Is it a faculty, brick and mortar, library, and teaching aids? Certainly not just these, although you must admit they are among the first things that come to mind, for universities are made of these. Bob Jones University has all of these, of course. In fact, they can only be described in superlatives.

But it is the Christian philosophy underlying all this that enables Bob Jones University to produce graduates who know how to build a life with the instruction they have gained. "Education with direction" it has been called. Just another of the many reasons why people have come to recognize this as the "World's Most Unusual University."

BOB JONES University

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* On spreaders, it's sides made of a modern corrosion-resistant steel that stands up to the slam-bang of today's power loading.

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