



The National

Future Farmer

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August-September, 1962



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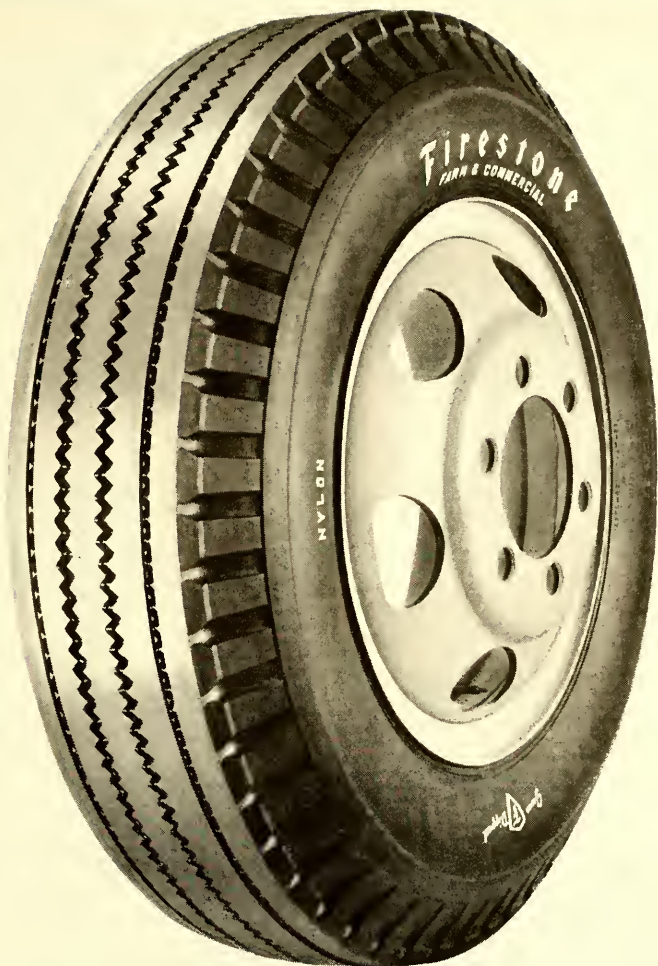
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Firestone Farm & Commercial cannot be matched as an economy truck tire with built-in quality features. Buy *now* at lowest prices from your Firestone Dealer or Store. You can charge them or buy on easy terms. *You know what you're getting when you buy Firestone.*

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OUR COVER (Photo by C. A. Cromer)—Double the size of your farm without adding an acre! Some people have . . . with irrigation. Gary Klein, member of the Scotia, Nebraska, FFA Chapter, is our "checker."

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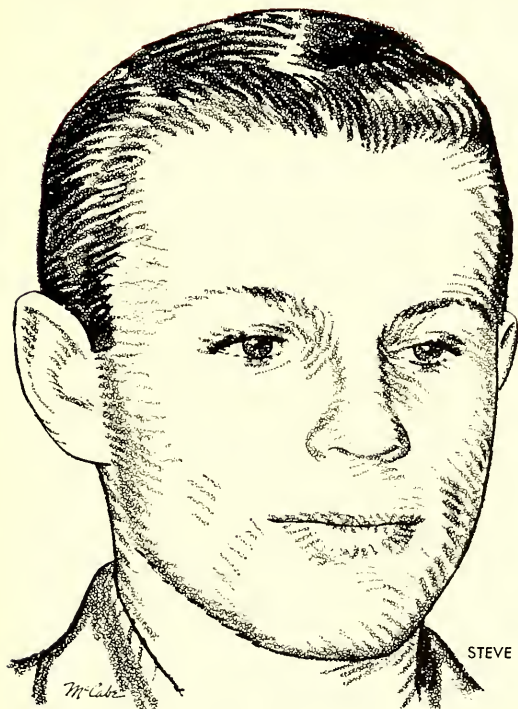
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STEVE HOUSTON



Steve Houston won the Grand Championship at Ak-sar-ben with this pen of Angus steers. He bought them as feeders on the Omaha market.

Youth's 4-H projects help him to college and a career

Nine years of 4-H Club activity brought many honors to Steve Houston of Dow City, Iowa. His projects earned money to help pay for his education at Iowa State University, where he enrolled as a freshman in 1961. His club experience built an interest in farming and he will return to livestock raising when he finishes school.

Steve enjoyed outstanding success as a club member. He held every office in 4-H and once was named 4-H-er of the month. In competition, he has won nearly threescore ribbons, including two Grand Championships, with pens of five steers, at Ak-sar-ben. He recently received the 4-H achievement award as a cattle feeder.

In high school, Steve earned eight athletic letters and set the Boyer Valley scoring record in football with 118 points. He is active in vocal and instrumental music in Dow City.

Purina salutes Steve Houston on his success and on the strides he is making toward a bright future in agriculture.



THE DANFORTH FARM YOUTH CENTER, on the Purina Research Farm at Gray Summit, Missouri, is dedicated to helping rural youths with their livestock projects. This picture shows some of the dairy cattle with a group of visitors at the Youth Center. Specialists at the Youth Center develop feeding and management programs especially for animals grown for the show ring. The Danforth Farm Youth Center is visited by approximately 2500 young people each year. Some of them are on Research Farm trips, but most come in special groups on educational tours. Ask your nearby Purina Dealer or the Purina Salesman in your area to give you details on programs developed especially to help young people with livestock they're raising for the show ring.

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STREET

CITY OR TOWN STATE

TELEPHONE Dept N



Firth, Idaho

I accept the invitation to express
opinions on going steady in high school.
I feel it has some mighty tempting advantages.
You get to know a girl a lot,
good habits and bad. You have someone
to share troubles with. And you have
someone to depend on when you ask
for a date. Of course, there is the other
side . . . early marriages, parents
against it, and religious teachings. It's
up to the person, or persons, involved
to decide whether it is right or not.

Laurie Wrede

Greenway, Arkansas

I do not approve of steady dating in
high school. I am a senior, and in my
past three years, I have noticed the
ones who date steady make lower
grades. They aren't interested in school
. . . and many drop out to get married.
I do not feel the average high school
student is mature enough to meet the
problems that arise from steady dating.
We can date steady after high school
is over and even perhaps after college.
Today's trend is to higher education.
To me, steady dating, hours of study,
and good grades just won't work out!

Benny M. Hollis

Glenwood, West Virginia

I don't think steady dating is bad
while still in high school, but I do
think homework and other school work
shouldn't be neglected. I think in some
ways it is good and in others it is bad.

John Steele

Davis, Oklahoma

I think steady dating is bad in high
school. Statistics show it leads to earlier
marriages. Who, while in high school,
can pick out a partner for life? A few have,
but many have failed. We are too young
to take a chance. One mistake now can
ruin our lives. I think we should "shop
around before buying." There is always
someone a little bit better.

Bill Chaffin

California, Missouri

There are advantages and disadvantages
to going steady. It's okay if you have
looked around and found the one you like.
Every member of our chapter subscribes
to the Magazine. Let's have it more often!

Alan Heidbreder

Karnak, Illinois

I don't think you should go steady
while in high school. There are more
important things to do. You have plenty
of time to pick a mate after you have
completed schooling.

Lindell Whitlock

Soper, Oklahoma

If you're sure you like one particular
girl, it's all right to go steady. I go
steady and I'd rather go steady than be
out running around by myself. Our
chapter really appreciates the national
FFA Magazine.

Herman Wright

Thanks, fellows, for sharing your
views on this question of current interest.
Another topic is suggested in the
box on this page.—Ed.

Austrian Mission, Furfanggasse 4, Wien XIX Austria

I'm transferring from the snowed-in
Alps to the rolling flat farm country of
upper Austria. FFA members aren't
the only ones concerned with weather;
it has rained continuously—and was
cold enough to snow on June 2. Farm-
steads here are built in "hofs," usually
four big mason buildings built like the
sides of a box around a courtyard. In
one, the cows are kept the year around.
Almost all are dual-purpose. Two other
buildings hold hay, grain, horses, and
hogs. The family lives in a big, clean
building, and their life centers around
the kitchen. The people are warm and
generous, and the women can outwork
the men. They raise rye for bread,
clover and grass for the cows, and some
truck crops. Many farms now have
tractors and electric milkers, but a lot
of hay still is cut with a sickle. Every-
one goes to school until 14, and there
is an agricultural school in Vienna for
those who wish it. My very best to
everyone!

John Creer

Future Farmers, you may recognize
John as 1961 national FFA vice-president
for the Pacific Region. He is on
a mission for his church.—Ed.

U. S. AID, Box B, APO 231, New York

I am a former FFA advisor at Steele,
Missouri, now in Libya at the El Aweila
School of Agriculture. One of the many
things so badly needed in Libya is an
organization similar to our great FFA.
This is being promoted, but progress
is slow. Enclosed is my check for a
two-year subscription.

Ralph E. Jones

(Continued on Page 9)

BIGGEST PROBLEM?

What is the biggest problem facing
agriculture today? Future Farmers,
your comments are invited for the
next Reader Roundup. Name the
problem and then give us any
thoughts you have on solving it.

Texaco Marfak could have kept it going...



because Marfak seals out dirt—prevents bearing breakdowns

When your farm machinery breaks down on the job, take another look at your lubricant. It may be you're using a grease that's too lazy to keep dust and dirt out of the bearings. But not too lazy to form an abrasive compound with these contaminants, causing time-wasting breakdowns. Next time, use Marfak, Texaco's hard-working, all-purpose



lubricant. It sticks to bearings better and longer than ordinary grease. Molds a tough collar around open bearings that seals out dust and dirt. Resists water. Doesn't pound out, dry out, leak out. Helps keep your equipment *working* longer. Get Marfak—from your Texaco man. On the farm or on the highway...

TRUST THE MAN WHO WEARS THE STAR.

TUNE IN TO THE HUNTLEY-BRINKLEY REPORT, MONDAY THROUGH FRIDAY, NBC-TV.

What's it worth to feel like a man?



If you won't settle for less, the Army's the place for you

You feel like a man

when you can do a man's work, put your mind and muscle into a job you can be proud of . . .

when you can live a man's life, get out of the rut, travel clear across the world . . .

when you can decide for yourself what you want from life, what kind of work, what kind of play, what kind of future.

You feel like a man in the Army

because you can prove yourself physically, mentally and emotionally fit to do a man's work. You can have the satisfaction of helping to keep America so strong the war the whole world dreads need never happen . . .

because you can visit strange and romantic countries while you're still young enough to see everything, do everything, get all that travel has to give you . . .

because you can decide your own future. You can get a good education, you can get training in your choice of many different fields. The opportunities for advancement, the chance to become a leader as a commissioned or non-commissioned officer, the retirement prospects . . . all are better than most men think.

You can try the Army on for size . . .

There's nothing quite like an Army career; you don't have to gamble years in a job that may not work out for you. Fulfill your military obligation in the Army, and you'll have a chance for a good, close look at Army life, Army men, Army opportunities.

Then you may decide it's Army for you all the way.

Choice of training before enlistment for those who qualify. See page at right, and talk to the Army Recruiter.

In the

U.S. ARMY



**you can choose
your SPOT
before you enlist:**

COMBAT ARMS

If you welcome the physical challenge, the adventure of combat training, there's a spot that's just right for you in Infantry, Armor or Artillery. First step, a talk with the Army Recruiter.

SPECIAL PROGRAMS

If you have a strong urge toward Army Airborne (includes the Paratroopers), Army Band, Military Police, Army Intelligence, Army Air Defense Command (the ADC works with those missiles that knock down missiles) ask the Army Recruiter for the whole story.

SERVICE OVERSEAS

In the Army, you can choose your travel, too, before you enlist, sign up for service overseas in the Infantry, Armor, or Artillery. Enlist in an outfit with friends, if you like and see the world together. Choose Europe, the Far East, the Caribbean, Alaska, Hawaii, and assignment to the area of your choice is guaranteed. Talk travel with the Army Recruiter.

TECHNICAL TRAINING

If you're technically minded, you may choose a classroom course, and on-the-job training, in any one of many fields including:

Radar Repair
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Diesel Engine
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Tandem-Rotor Helicopter Repair
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Refrigeration Equipment Repair
Motion Picture Photography
Medical Laboratory Procedures

For complete, up-to-date information on Technical Training in the Army . . . for the answers to any Army questions . . .

TALK TO YOUR ARMY RECRUITER

August-September, 1962



Victor Butler

FELLOW Future Farmers, it's nearly convention time! Your National FFA Convention is scheduled for October 10-12. State associations should have in attendance: official delegates, candidates for American Farmer Degree, candidates for national office, members to receive awards, and others with official business.

Any local chapter is entitled to have a maximum of six members or 10 percent of the total membership attend. They should be carefully selected members, accompanied by one advisor. This number does not include award winners, band members, official delegates etc. *Completed registration cards are a must!*

Your convention program this year will include a vespers program on Tuesday night for those who arrive early. It will also embrace more of the American Royal Livestock and Horse Show.

Convention features: We will hold the National FFA Public Speaking

National Convention

October 10-12

Contest, recognize outstanding achievements, execute business, demonstrate and promote leadership training, elect new officers, and serve as an inspirational and informative experience to everyone attending. The Star American Farmer ceremony will be on Thursday night.

FFA talent again will play an important part in our program. Via the grapevine, we've heard about some outstanding FFA talent around the nation, but, to date, only a few entries have been submitted. The deadline for entries is August 30. Send to Dr. Vern Frech, Coordinator of Student Programs, Michigan State University, East Lansing, Michigan. Each state is limited to two acts.

The thirty-fifth annual National Convention will be the highlight of our FFA year. My fellow national officers join me in issuing this call and invitation. See you in Kansas City!—*Victor Butler*

(Continued from Page 6)

Reader Roundup

Blackfoot, Idaho

I want to thank the donors to the National FFA Foundation for the \$200 check I received when named Star State Farmer. I have tried to put the money to good use. My projects have been Hereford cattle, hay, and pasture. While attending the National FFA Convention in Kansas City last October, I fully realized what it meant to belong to such a wonderful organization. My greatest hope and ambition is to try for an American Farmer degree.

Gary Pratt

Stanfield, North Carolina

My father and mother enjoyed the free booklets I received just as much as I did. I'm sending for more.

Ronnie E. Smith

Lynden, Washington

My project in vocational agriculture is beef cattle. I have five Hereford heifers and plan to increase to about 25.

Nicky Weidkamp

Basin, Wyoming

"Target Youth" was an informative article (June-July issue). Few people realize the threat that communism is to American young people. Your article shows how a Future Farmer can combat communism in his own community and chapter.

Lyman Maxwell

Bedford, Iowa

In journalism class we are writing term papers on some phase of journalism. I chose to write on *The National FUTURE FARMER* and would appreciate any information you can provide.

Richard Beaver

Oberlin, Louisiana

Speaking for my chapter (as treasurer), I want to express our appreciation for the useful information and good reading we receive the year around in *The National FUTURE FARMER*.

Michael Guillory

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Looking Ahead

"POP" GO THE SCARECROWS!

No, the Civil War hasn't broken out again! The noisy reception is for crows and raccoons—those that would invade South Carolina watermelon patches. Growers are turning to acetylene guns as a means of control. The guns fire automatically at short intervals—doing an excellent job, although hard on nerves.

ON SCHEDULE OR NOT?

Five or six years from now, you may get a phone call from a fieldman: "Your peas will be ready for harvesting six weeks and three days from now. We estimate your yield will be 3,600 pounds per acre . . . and run 95 percent fancy." Fantastic? Yes, a little—at least right now. But such predictions, based on an array of facts, now seem well within reason. Visitors heard this at the dedication of Libby's new research center, Janesville, Wisconsin.

TRACTOR FOR APPLE PICKING

An apple won't know the difference—in pickers, that is! What may be the forerunner of tractor-mounted pickers has been used successfully to harvest plateau-trained apple trees. Pennsylvania engineers reported on the test model at the American Society of Agricultural Engineers' summer meeting in Washington, D. C.

PLOWS OF THE FUTURE

Plastic coverings are the newest fashion for moldboard plows. A New Mexico engineer says they keep soil from sticking and reduce power needs up to 23 percent. If you've heard of Teflon-covered frying pans (no grease needed), that's the kind of plastic being used. Meantime, a German engineer speaking in Ohio said faster plowing may cut costs more than bigger plows. He indicated tomorrow's plows may include such features as "oscillating devices" to prepare the seedbed faster and better.

CHICKEN ON THE MOON?

Scientists have developed germ-free chicks . . . and they could be used to detect microscopic life on our lunar neighbor. Besides, they wouldn't contaminate the moon with earthly bugs. Dr. Joseph Pensack, American Cyanamid Company, raises such birds. Along this line, a program of developing specific pathogen-free (SPF) chickens has begun in Maine. Dr. H. L. Chute, University of Maine, reported on progress at a Charles Pfizer and Company research conference in Chicago, Illinois.

COULD TRY FOR TWINS

A hormone injection to induce twins is one way to scale down beef production costs. Sir John Hammond, Cambridge, England, made the recommendation at Washington State University. ". . . This is the basis of economy in fat lamb production," he noted. You can overcome disadvantages—weak calves, etc.—by extra feeding before the cow calves, he added.

RENT YOUR DAIRY COWS!

If you can't afford to buy cows for a start in dairying, maybe you can rent them. University of Illinois farm economist, Franklin J. Reiss, has developed a dairy cow rental agreement. Should you or someone else in your FFA Chapter see that it has local applications, you may want to check into it.

THINGS TO WATCH

Livestock—Farmers report intentions to increase fall pig farrowings 2 percent. Turkeys—Prices from September-December will be moderately above low average of 18 cents per pound last year, believes the USDA. Wheat—The 1962 crop may be one of the smallest in recent years.



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If, in a full season's use (90 days from purchase date) your Super-Torques do not prove to have better field traction and less tread wear than any other rear tractor tire (used under the same conditions for a like period of time), your Goodyear Dealer or Goodyear Service Store, upon return of the tires, will refund in cash any payment made plus any allowances made for your traded-in tires.

(This guarantee excludes comparison with special purpose rear Tractor Tires.)

Like all Goodyear tires, the Super-Torque also is guaranteed against defects in workmanship and material without time or mileage limits. Any Goodyear tire dealer in the U.S.A. will make allowance on a new tire based on original tread depth remaining and current "Goodyear Price."

That's right! The Super-Torque tires you put on your tractor have to outpull and outwear any others you've ever owned — under any working conditions. Or you can return them and get back every cent you paid for them.

We can make this pledge because Goodyear's exclusive "Angle-Braced" lugs give the Super-Torque today's most efficient tractor tire tread. They bite down deep for greater pulling power in the fields — stand up to more abrasion for longer wear on the road. Matter of fact, after a full

year's use, the Super-Torque will probably have more traction and wear *left* than a brand-new conventional tire.

Proof? That was established in field tests by 1,000 farmers the country over. But you can prove to yourself how much more Super-Torque gives you for so little extra. And without risk! Just visit your nearest Goodyear Dealer or Goodyear Service Store — only places you can buy the great new Super-Torque tires. Do it today! Or write: Goodyear, Farm Tire Department, Akron 16, Ohio.

GOOD YEAR

Super-Torque — T.M. The Goodyear Tire & Rubber Company, Akron, Ohio

for the
same reason
you oil



The cattle oiler is an investment in protection against parasites that pays off in better conditioned and faster finished stock. The oil used is probably the only farm "lubricant" that Kendall doesn't make.

However, when it comes to equipment care, use Kendall Lubricants. All are refined from the choicest 100% Pennsylvania Crude Oil which means higher viscosity lubricants which last longer, reduce both consumption and repair. Each has proven the Economy of Kendall Quality to countless farmers.

Look to lubrication of costly farm machinery as an investment in protection. Then look to your Kendall dealer—for specialized oils and greases that will pay you handsome dividends in terms of better, longer lasting care.

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Your Editors Say . . .



Perhaps no subject is being discussed more in agricultural circles than the future of agriculture itself. The mass of information being presented paints a confusing picture for the young man considering a career in agriculture. It is made even more confusing when counsel is given without all the facts. In many instances, a student chooses a career outside of agriculture, even though he is better suited for and would be happier in an agricultural career. This was pointed out quite vividly in a recent letter from an FFA mother. She says in part:

"The school districts . . . have been reorganized, and our new guidance director really does not know enough of the real worth of FFA activities. He is directing all students who seem to be college material away from vo-ag! I think this is a common error in educational circles . . ."

"A lady at Grange asked if a boy who had FFA training could make it in college! I think a boy with this training is much more capable than he would be without it. Our son will have enough money to see him through college because of his supervised farming program. But all of this is lost if we let FFA fall into disrepute through the guidance counselor. . . ."

This mother realizes the true value of vocational agriculture and FFA to a student who will farm or choose a career in the areas related to agriculture. The decreased enrollment in agricultural colleges, however, means that fewer young men are choosing an agricultural career. In 1940, for example, 12.3 percent of the students enrolled in the 59 Land-Grant colleges were in agriculture. By 1960, this had dropped to 6.8 percent of the total enrollment. Even today agricultural colleges are not training enough graduates for the many opportunities that are available. Many counselors are doing a good job of guiding students to these challenging careers, but local FFA advisors should see that counselors are informed about the opportunities in agriculture.

The pay in an agricultural career is comparable with other careers requiring similar skills. At the University of Illinois, starting salaries for 1961 graduates in the College of Agriculture averaged \$5,200 per year. An Illinois study also revealed that the average salary in 1960 of some 2,500 graduates was \$9,225 a year.

The question of how vo-ag graduates do in college has been the subject of numerous studies. A recent study at Ohio State University agrees with other studies that vocational agriculture students are successful in the College of Agriculture. However, this study also revealed that vocational agriculture students do as well as other students in the Colleges of Arts and Sciences, Commerce, Education, and Engineering. Certainly any student planning to go to college should make adequate preparation in English, math, chemistry, and other college preparatory subjects, but this should not prevent the study of vocational agriculture in high school. Study after study has revealed that vo-ag students do equally as well or better in college as non-vo-ag students, particularly in the College of Agriculture.

If our nation is to continue to enjoy its wealth of abundance, many of our better students are needed in this big, complex, and dynamic industry of agriculture.

Wilson Carnes, Editor

The National FUTURE FARMER



Truck muscle and hustle to handle any job you have!

Sunup to sundown . . . and plenty of times into the night . . . thousands of INTERNATIONAL Trucks are taking the guesswork and drudgery out of all kinds of farm work.

That's because **every** INTERNATIONAL model, including the scrappy little SCOUT® and new medium-duty C-150 shown here, is engineered to soak up the punishment that comes with farm jobs . . . built to move over rough ground as well as speed to town. **And no other truck maker offers you a broader choice of models!**

New this year, the C-150 is designed specially for loads in the 14,000-lb. GVW class. Its heavier-duty

channel frame, wider front springs and big power brakes give it the backbone you need. Two wheelbases, for 9- or 12-ft. bodies.

The SCOUT, now a popular favorite across the country, carries cargo in its handy 5-ft. loadspace, hoards regular gas on or off the road. Chores are lighter when you fit out a SCOUT with the equipment you need and one of the six tops you like.

What kind of truck do *you* need for your farm? Your INTERNATIONAL Dealer or Branch can give you the answer—see him now! International Harvester Company, 180 N. Michigan Ave., Chicago 1, Illinois.

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WORLD'S MOST
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New Remington Nylon 11 clip and Nylon 12 tubular... more style, savvy and sizzling features than any other guns around!

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Features? The Nylon 11 and 12 give you plenty! Custom-grade features you won't find on 22's at twice the price! Examples: Super-accurate three-point bedding, the same principle used in expensive target rifles... perfect checkering and inletting... streamlined, chrome-plated Mannlicher-type bolt handle... and unequaled structural-nylon strength and durability. Plus practical features like handy top-mounted thumb safety, fully adjustable rear sight and receiver grooved for "tip-off" scope mounts.

So if you want a gun that's tops for features, fun and fine shooting, see the Nylon 11 and 12. They're at your Remington dealer's, now!

NYLON 11—Clip model takes short, long or long rifle cartridges. Capacity: 6 in clip plus one in chamber. (10-shot clip also available.) \$36.95* ■ **NYLON 12** (shown at left)—Extra-capacity tubular model holds 22 short, 17 long or 15 long rifle cartridges. \$39.95* ■ **NYLON 66**—Famous structural-nylon autoloader now in Apache Black and chrome... \$54.95*. In traditional Mohawk Brown. \$49.95*

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Pinpoint accuracy is made possible by amazing stability of structural-nylon, permitting same three-point bedding principle found in target 22's.



Nylon can take it! Submerged for days, subjected to rain, dust and temperature extremes, Remington nylon guns still worked perfectly!

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This Future Farmer is developing leadership through public speaking.

Your Future In the FFA

THE FFA has a national reputation for developing rural leadership and good citizenship. Its leaders are highly respected by industry and agriculture alike. It should be noted, however, that the FFA does not develop leaders—it only provides the means and the opportunities for members to develop their potentials for leadership and good citizenship.

It has often been said the FFA is an organization of, by, and for boys interested in agriculture. There is much truth in this statement. Members have an opportunity to help plan the program of work and to take part in a variety of activities, most of which are designed to broaden leadership abilities.

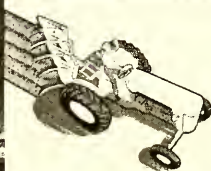
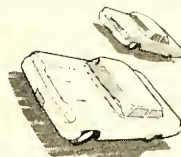
Conducting or participating in a chapter meeting; serving as a chairman or member of a committee; making a report to the chapter; working cooperatively with other members of the chapter to achieve a common goal; being understanding and tolerant of other members' views and opinions; considering all pertinent facts in arriving at a satisfactory solution to a problem; serving as a delegate to a district, state, or national convention; acting as a district, state, or national officer; achieving state, regional, or national awards—all are experiences which contribute to the development of your leadership abilities.

To get the most from the FFA, start where you are! Always seek opportunities to get additional leadership experiences or to gain more proficiency in those you already have experienced.

The future of the FFA is what you make it. And "your future in the FFA" is limited only by your interest and initiative in taking advantage of the opportunities that are available.

By Cola D. Watson, Vermont State FFA Advisor, in the *Green Mountain Future Farmer*

The National FUTURE FARMER



**PERFECT CIRCLE PISTON RINGS
ARE INSTALLED AS ORIGINAL
FACTORY EQUIPMENT IN 99
BRANDS OF VEHICLES AND ENGINES**

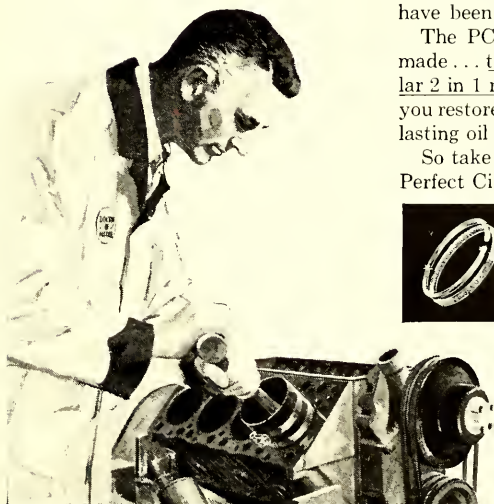
WHY RACING "PROS" PREFER PERFECT CIRCLE PISTON RINGS

Racing "pros" know that precision-made Perfect Circle piston rings help their engines deliver dependable power and superior performance.

Proof: 80% of the last 35 Indianapolis "500" races have been won with Perfect Circle-equipped engines!

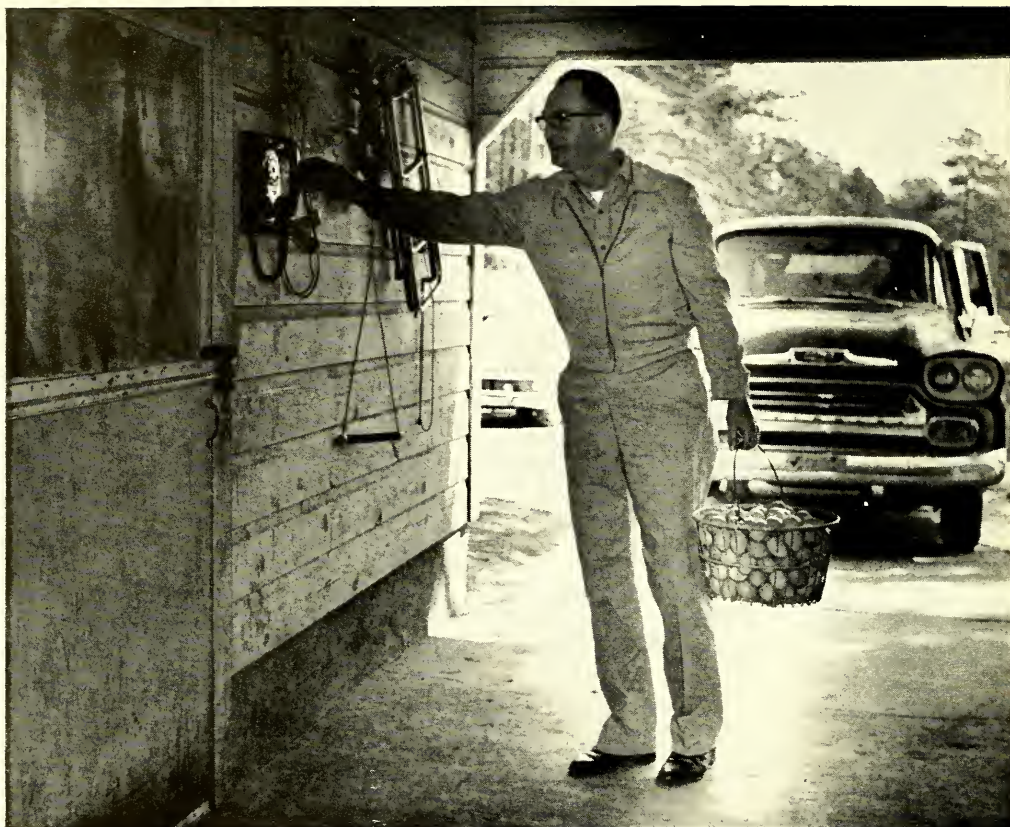
The PC rings these "pros" prefer are not specially made... they're no different than those found in regular 2 in 1 replacement sets. These piston rings can help you restore like-new power, economical performance and lasting oil control in *your* farm equipment.

So take a tip from the racing "pros." Always specify Perfect Circle—the piston rings preferred and installed by so many leading vehicle and engine manufacturers, race drivers, fleet operators and mechanics the world over.



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Hagerstown, Indiana • Don Mills, Ontario, Canada



***"It's worth as much every day
as it costs me every month"***

Last year, Charles Culpepper's laying flock produced 700,000 hatching eggs on his farm near Gainesville, Ga. It's a one-man operation, so Charlie has no time to waste.

But last summer, he realized that he *was* wasting time when he interrupted his work to hurry to and from the house telephone. And, even at that, he sometimes missed, postponed, or forgot calls.

The solution was an extension phone installed

in the egg house where he spends a good deal of his time.

Has this extension paid off?

Charlie put it this way, "It's worth as much every day as it costs me every month."

If you're wasting time running to a distant telephone, it will pay you to get an extension. They cost only a few cents a day. Your Telephone Business Office can give you the exact figure.



BELL TELEPHONE SYSTEM



Down through the years, show winnings have increased, until in 1960, scholarships totaled \$800.



by
John Russell



Richard Black

NATIONAL STUDENT SECRETARY

Here's a real believer when FFA members say,
"I believe in leadership from ourselves . . ."

RICHARD BLACK, national FFA student secretary, is a Future Farmer of many talents. A dairyman at home near Prairie Grove, Arkansas, he is a leader, a speaker, an agricultural engineering enthusiast, a show cattle exhibitor, and a singer.

You don't hear much about the latter, but Richard has done some voice work and enjoys dallying with light opera. He also once was a member of an All-State Chorus.

All these combined give the FFA an officer it can be proud of. And you may be sure the FFA has had a lot to do with Richard's leadership development. Behind his excellent speaking ability, for example, is a good record of participation in FFA public speaking, parliamentary procedure, and radio and TV shows.

Record keeping, of course, is another talent . . . one that every FFA secretary must possess or develop. Supervised farming records have helped Richard with this talent, and so did his duties as a state FFA treasurer. Altogether, he has held five chapter, federation, and state FFA offices.

As a farmer, Richard has a full one-third interest in a family farming operation. "We all work together and live together to run our farming operation," he says. "We" means his brother, Russell, and his parents, Mr. and Mrs.

Keith L. Black, in addition to himself.

The family has rented 357 acres of land . . . or did until recently. They now own 140 acres of this amount. Each partner shares equally in the cash rent. Russell was president of his local FFA chapter last year.

A herd of 85 registered Guernseys was developed, 25 of them belonging to Richard. He entered vocational agriculture work with six head and took advantage of every opportunity to expand. Sometimes money has been borrowed to buy herd additions, at other times Richard has used monthly milk receipts to make payments, and a third method of "growing" has been to buy replacements when other animals are sold.

Both Richard and his brother have been "regulars" at dairy shows. Two of three scholarships your national student secretary earned came by way of show activities. The third? For leadership.

A major change is in the offing for the dairy program, however. "Come fall, Russell and I will be off to college," says Richard. "So we're getting ready for Father to operate by himself." This means converting from dairy- to beef.

For Richard, college will mean a return to the University of Arkansas. He is majoring in agricultural engineering and dropped out temporarily to perform FFA duties. A believer in the future of farming, he hopes that somehow, somewhere, he will be able to stay in agriculture.

"But three of us won't be able to farm our present setup," he claims. It isn't big enough for three men under today's standards.

Other parts of Richard's outstanding leadership record include president of freshman and senior classes in high school, president of the student council and of a local chapter of the National Honor Society. He was co-captain of the football team, too. Membership is held in both state and national dairy organizations, and in the Arkansas Artificial Breeders Association.

Leadership always has represented a challenge to Richard. He truly means it when he says, "I believe in leadership from ourselves . . ." You may be sure, too, if the past is an indicator of the future, that he will always cherish the opportunity to uphold the statement from which this line comes—the FFA Creed. ♦♦♦

BETTER COWS FOR BETTER LIVING



"A progressive, changing world sees a tractor in the horse stable, hybrid corn in the fields . . . and—I submit—should see purebred dairy cows in the milking parlor."

GRANT L. Richards, Utah FFA secretary and state public speaking winner, says this with conviction—and with authority, too! He has won national honors for two consecutive years in a Junior All-American Contest; his father heads the dairy department at Brigham Young University; and they milk an outstanding herd.

A certificate of registry doesn't make a cow different, Grant admits. But it tells you what she is, where she came from, and what her ancestors were. It is a guarantee of these facts and others, backed by the integrity of the breeder and the careful controls and checks of the breed association.

"This guarantee—this knowing about the animal—is worth dollars," Grant explains, "because it is the first and primary step in breeding better and more efficient dairy cattle."

Similar statements can be found in textbooks. Over-all selection guides should include production records, health, physical appearance, and breed, as well as pedigree. These same things may be applied to other types of livestock, and the principles are applicable to choosing seed for crops.

So-called purebred animals are those whose ancestors on both sides have been accepted by the national associations for registry. Pedigree information is readily available for purebred animals, but it is not always available for grades, as Grant points out.

An unregistered animal is, to all intents and purposes, a grade. It may be purebred, or it may be 99 44/100 pure, as a soap commercial goes, and seem to be just as good as a registered animal. But its offspring will always be a grade, and a grade animal usually is never as valuable as a registered purebred.

Registered animals of the five major dairy breeds actually do produce more milk than grades, according to the U. S. Department of Agriculture. In 1959, to quote Grant's figures, the average registered cow produced 30 pounds more butterfat and 138 pounds more milk than the average grade cow.

For someone who finds it impractical to switch to registered or purebred stock, there is a "next best" plan: breed female stock to a proven sire. Regardless of whether animals carry the blood of more than one breed, the Future



Grant has owned two Junior All-Americans of his breed.

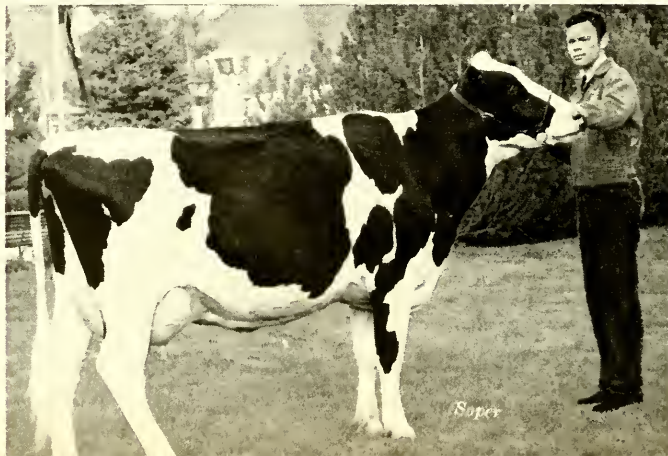
Farmer should use the best sire he can afford.

Why all the emphasis on a good start—in dairying or any other field? This is the way Grant sums it up: "Greater profit potential, greater net worth, recorded inheritance, pride of ownership, and unlimited opportunity for personal achievement."

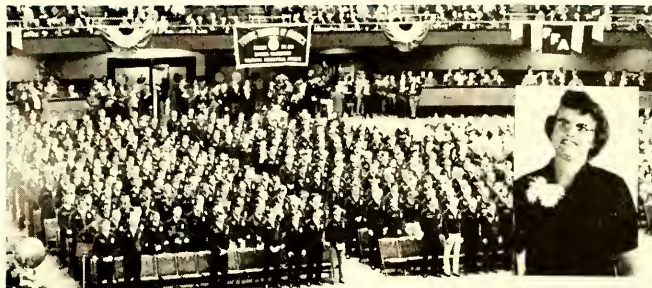
Once an enterprise is underway, an FFA member needs to know if progress is being made. This calls for production records. "Anyone who thinks he can get along without records is fooling only himself," says Grant. "What will it be, Bossy—milk or hamburger?" This is the way he deals with dairy cows—but he does it with TLC (tender loving care).

Another pointer for dairymen: With today's wide use of artificial breeding, you don't have to own a bull to use a good one. Of the animals registered last year by one breed association, 59 percent were sired artificially. Artificial insemination is finding favor among other types of livestock raisers, too.

Rich-Herd Roburke Matchless was 1961 three-year-old All-American; Texal Rich-Herd Becky was top aged cow in 1960.



Mom Goes to the Convention



By
Mrs. Glen E. Schmidt
Roggen, Colorado, FFA Mother

WHEN THE committee recommended Jack for the State Farmer Degree, it started a chain of events that will provide fond memories for the rest of my life. Our chapter is small and Jack is its first State Farmer. So if you think we were excited about going to the state FFA convention, you are right! Besides, none of us had been in the San Luis Valley.

We set the alarm for 3:30 a. m. My husband rolled over with a sigh that asked, as in war time, "Is this trip really necessary?" We ate breakfast on the road . . . with Glen fumbling for an answer when asked how he wanted his eggs. At home he takes whatever the frying pan offers.

We saw the famous artesian wells near the head of the valley. And our hearts were in sympathy with ranchers as we drove on and noted short pastures with thin cattle. We almost lost one traveler when he learned a nearby stream was stocked with 18-inch trout.

Mr. Ball, Jack's advisor, was waiting at Monta Vista to show us to our motel. Then we toured Del Norte. Signs on the windows said, "Welcome FFA." This made us feel wanted and happy to be even a small part of such a big and highly respected organization.

Meanwhile, all of Jack's expectations seemed to be centered on that moment when, because of his achievement, we would be recognized. I hoped to be able to qualify for this honor. We signed the guest book and took our seats.

Although the FFA has never ceased to amaze me, I was still unprepared for the perfectly organized and conducted meeting. A podium was flanked on each side with national blue and cornflower yellow carnations. The delegates, two from each chapter, sat behind name cards.

We didn't hear the chair recognize our delegates from Prospect Valley, but we learned they served on special committees.

Each item on the program made me think, "Now this is the most exciting part!" For years I had heard about a "standing ovation." Now I saw one . . . for the national, regional vice-president of the FFA. It was a thrilling moment!

Later we were applauded, ourselves, along with other guests when Jack received his honor. I suddenly realized with a start that we stood longer than necessary. What an experience to remember!

The real and lasting impression, however, was the terrific vitality and ability of the whole convention body. Each FFA member took part. The entire afternoon gave the effect of a perfectly rehearsed and coordinated performance. Lucky indeed is the FFA member who truly understands and respects the privileges, the ideals, and the obligations connected with the FFA . . . and wearing an FFA jacket.

Shortly afterwards, a National Western Stock Show incident was recalled. Jack had exhibited his dog Eva and nine pups. Now the state FFA executive secretary, Mr. Lawson, and state advisor, Mr. Foster, came over to inquire about Eva. It was like meeting old friends! These men, who could coordinate a meeting of more than 400 Future Farmers, were not too preoccupied to ask about a plain, working sheep dog!

Later at the motel, a woman passing by glanced into the open doorway. That evening I saw her again—on the stage with her son . . . named Colorado's Star Farmer! I wished we had met.

The evening session brought honors to many. Knowing the terrific demands of perfection in character, scholarship,

behavior, leadership, and supervised farming programs behind each winner, I rejoiced that agriculture could look forward to such leaders.

A mixed feeling swept over us when new officers were installed. Would it be possible to find a team from all those blue jackets who could do as well as the retiring officers? But again I had underestimated the FFA. It didn't take long to see this.

Early next morning, a forlorn call came from a nearby cabin: "Mom, what shall I wrap this fish in?" Perhaps it was addressed to the same Mom I had seen the evening before. Next door to us, a man locked his car keys inside the car. Glen saved the day with a coat hanger.

We followed a different route home. We had noticed by the FFA Chapter scrapbooks that most chapters try to see as many things as possible. But Jack and another Future Farmer soon were dozing. They had slept in sleeping bags at the convention, and before they went to sleep, they mentioned the only bit of horseplay we heard about—the irresistible urge to open valves on air mattresses. Naturally, they needed sleep.

At home everything was fine, although the kittens had created a minor crisis by playing Tarzan around the house. Now all the other pieces were in place for a perfect trip.

One wonderful part about this story is that it isn't unusual. The FFA presents one of the finest and most varied programs for achievement I know of . . . and the chances to share in it are unlimited.

The most touching moment came when my son said in a casual way, "Say! You looked pretty good standing there while they clapped!"

So, I'm no longer just plain me; I'm the mother of a Colorado State Farmer!

The

FFA

In

(Here is a new feature of your national FFA magazine. Let us hear from you if your chapter has a good story or picture.—Ed.)



Sulligent, Alabama

**Church
Career
Ahead**

Jimmy Barnes, 1961-62 Alabama state FFA president, plans to enter the ministry. His first sermon found a congregation filled with ministers, relatives, schoolmates, teachers, and friends.

Jimmy, 17, was graduated from high school with the class of 1962. He was state FFA public speaking winner last year. "The contest was a deciding factor in my choice of careers," says Jimmy.



**Clean Up
After Litterburgs**

Bakersfield High School FFA members in California picked up litter along both sides of a 30-mile stretch of the Kern Canyon Highway as their 1962 National FFA Week project. They collected 169 beet-pulp sacks full of litter, walked an estimated 300 miles, and put in 200 student hours. They wore regulation highway-crew red vests and were traffic-protected by flagmen with "stop" and "go" signs.



**Catering
To
Kiddies**



FFA "barnyards" are popular attractions at state fairs and other agricultural events all the way across the country. Lee Anderson, 1961-62 Colorado state president, helped tend this one called "Children's Ranchland" at the National Western Stock Show.

**Sign of
Achievement**

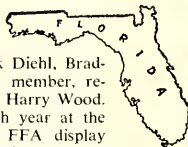
How did you obtain your FFA jacket? In Montrose, Colorado, you earn it. Incoming members must accumulate seven points before they can receive a jacket and wear it. These points are based on school subject matter, project size, a 2,000-word essay on agriculture, and a supervised farming program.

If, at the end of one year, an FFA member has earned all the necessary points, he receives his jacket.

**FFA Produce
On Display**

"A bountiful crop!" Frank Diehl, Bradenton, Florida, Junior FFA member, remarks to state FFA advisor, Harry Wood. One of the top exhibits each year at the Manatee County Fair, this FFA display consists of oranges, grapefruit, strawberries, pole beans, bunch beans, tomatoes, cabbage, field peas, squash, cauliflower, turnips, and sweet corn.

Five FFA Chapters in the county prepare the exhibit. They produce fruit and vegetables on 30 acres at three different locations. Twenty-five additional acres are rented for livestock projects.



**Operation
"Scrap Shack"
A Community
Service Project**

Most of Georgia's 236 FFA Chapters are taking part in a mammoth drive to rid the state of unused and unsightly farm buildings. "Many of these are fire hazards, dangerous for children, and a haven for rats and other rodents," says Mr. J. G. Bryant, state FFA advisor.

Landowners are asked to sign a statement indicating an interest in the project. In some cases FFA members actually help a farmer in the dismantling process. More than 18,000 Future Farmers are competing for a trip to the National FFA Convention at Kansas City—the top award. The Atlanta Journal is sponsoring the trip along with four \$50 awards to the top district chapters.

**Pigs
In the
Ag Shop!**



Lyle, Minnesota, FFA members had to go into action quickly when confronted by an animal crisis. They installed a farrowing pen under hooded vents in the ag shop just in time for a gilt to present 14 pigs to its owner, David Howard.



ACTION

Corn State Poultrymen



It's the chicken business for FFA members at Maquoketa, Iowa! Town members are especially happy. Following school board approval, they built a 12- by 14-foot brooder house with five objectives:

- (1) To provide supervised farming opportunities for town boys.
- (2) To invest chapter resources in agriculture.
- (3) To provide a cooperative learning experience with poultry.
- (4) To earn money for chapter activities.
- (5) To observe a total agricultural procedure . . . from production to consumer. Broilers are processed in cooperation with a local poultry firm. "Our next step," says chapter advisor, William Stewart, "is to barbecue some of the birds for a chapter treat . . . and for FFA supporters in the community."



Landscaping! "Learning By Doing"

Portales, New Mexico—FFA members planned and planted the shrubbery at the new Portales High School. Each Ag III student drew up a plan, and these were combined into one master plan.

FFA members worked closely with the student council and other organizations to obtain financing for the project. Future plans call for bringing evergreen trees from the mountains to finish the job.—**Sunshine Future Farmers**

Joint Meetings On Conservation

Conservation education in Nebraska vocational agriculture departments has received a real boost since joint meetings were started with Soil and Water Conservation Districts.



Two Stars In His Crown

Naturally you would be proud of your students if you were an FFA advisor. Mr. Don Elser, Elko, Nevada, is especially proud of two that he has coached: Robin Van Norman (left) is 1962 Nevada Star State Farmer, and Keith Simmons is a national FFA vice-president. Mr. Elser was Keith's advisor at Enterprise, Oregon, in 1959, when Keith was Oregon Star State Farmer.



National Officers To New England

West Springfield, Massachusetts—Victor Butler, national FFA president, and Randall McCutcheon, North Atlantic vice-president, will lead a delegation of about 550 FFA members at the forty-first Eastern States Exposition, September 15-23.

Twelve North Atlantic states will be represented in the selection of a regional Star State Farmer, public speaking contest, educational exhibits, and other activities.



Chapter Barn

San Antonio, Texas—For years, there has been a topnotch FFA Chapter smack in the middle of this city of more than 1½ million. Always a problem was providing facilities for city students to carry on project work.

But now—thanks to San Antonio Rotary Club support—a \$3,000 livestock barn is being constructed on the Burbank Vocational High School's 50-acre farm. There will be six pens to accommodate the projects of 40 to 50 Future Farmers. Seventy-five of the chapter's members have been building the barn.—**Texas Future Farmer**

It Pays! Tractor Maintenance



How's your tractor's horsepower? Lagging? FFA members at Alger, Ohio, suspected the same—and increased the power of 12 tractors by 11 percent.

Using a school-owned "Dynamometer" (pictured), they determined the horsepower before and after maintenance work. Gapping plugs, adjusting governors, and installing new points and spark plugs are some of the things that made the difference.

"Son...take over"

His father disabled,
this Future Farmer
proved he could
bridge the gap
with vo-ag training.

By
Wally E. Schulz



DICK ARNOLD, FFA member, lives on Route 1, Janesville, Wisconsin. He is nearly 19 now, but he was only 15 when it happened. Parkinson's disease crippled his father. He had to take over the family's 160-acre dairy farm . . . "my sophomore year."

"We'd been milking 40 Milking Shorthorns," Dick recalls. "It was plenty difficult . . . getting chores done and trying to find time for school homework, too."

He burned midnight oil in the tractor . . . on school studies, too—achieving an excellent scholastic record. Then Dick earned the state's highest FFA honor, State Star Farmer.

Perhaps spurred on by words he has become accustomed to repeating . . . "I know the joys and discomforts of farm life and hold an inborn fondness for those associations which, even in hours of discouragement, I can not deny" . . . as well as because of necessity, Dick kept his sleeves rolled up.

"The folks and I decided to sell our dairy herd in 1959," he adds. "I didn't have much free time to devote to studies, and I did want to complete my education."

He turned to cash crops and swine, starting with six Hampshire sows. Forty-eight market hogs went to town from the first litters. Then the swine program was expanded to 13 sows, and new farrowing pens were built. "I took care of feeding in the mornings before school and again in the late afternoon." Last year he marketed over 100 swine, topping the market with each shipment.

For his work Dick has received and does receive a percentage of crops and livestock. This has gone toward purchasing a part of his father's machinery. He now owns more than a 50 percent interest.

Chapter Star Farmer, farm mechanics award, DeKalb award, crops award—these are some of the other honors. "And," adds Mrs. Arnold, "Dick also won the state and regional contests sponsored by the National Junior Vegetable Growers in 1960." He grew 19 acres of peas.

With the State Star Farmer Award of \$200, Dick invested in a larger tractor. This helped him win another N.J.V.G. award on his 1961 pea crop. He worked in cold April weather after school, evenings, and Saturdays chopping cornstalks, plowing, disking, and dragging fields.

"The fieldman for the pea canning company picked the planting date," Dick said. "On May 1, I stayed home from school and planted and dragged the peas." He sowed 245 pounds per acre, using 175 pounds of 5-20-20 fertilizer per acre, as determined by a soil test. Later 25 additional acres were planted. The seed was inoculated with nitrogen-fixing bacteria.

A 12-acre field yielded 32,396 pounds for an average of 2,533 pounds per acre. A bigger field did well, too. Eight portable viners were used during the harvest.

Because of his accomplishments, Wayne Martin, Dick's FFA advisor at Milton Junction High School, looks upon him as "a shining example" of the best type of American youth.

Dick also finds time for his church, where he is an usher and the president of the Youth Fellowship. His hobby is working on junked cars. He completely overhauled a pickup truck to sell at a profit.

"The Lord Giveth, and the Lord Taketh Away," Mr. Arnold remembers as he gazes out the window. The strength has been taken from his once active body, but the Lord has given to him a son of whom he is very proud.

Awards are only part of the story of cooperation between Dick and his FFA advisor, Wayne Martin, former FFA member.



Stay in School

LESS THAN 50 years ago, you were considered ready to face the future when you had learned your father's trade. But this is not so today. Now there is a need for more training in nearly every profession—farming included.

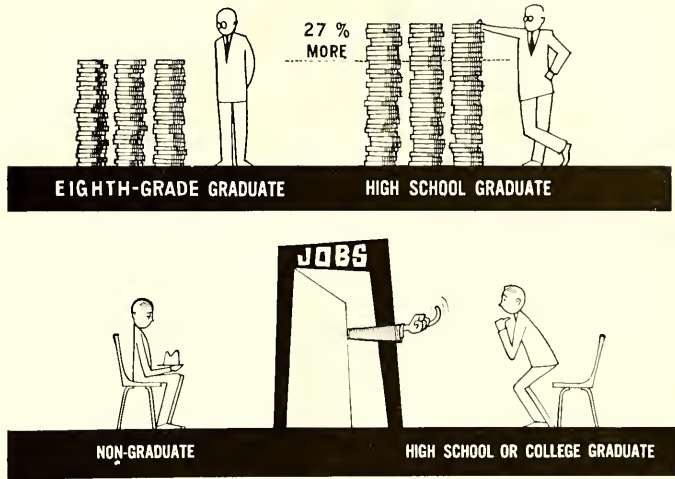
A high school education is becoming the minimum requirement. It can help you get a job or be the basis for further training and advancement. For this reason you owe it to yourself, and your country as well, to stay and finish—to earn a diploma.

Everyone talks about unemployment; yet one of the major problems facing our nation's leaders is a shortage of trained manpower. Demand for skilled and professional workers actually is greater than the supply. On the other hand, in the semiskilled and unskilled classifications, there are more workers than jobs.

As a Future Farmer, you are in a position to do something about your future—whether in farming or some other field. You have reached an age when you can make decisions; yet you don't have all the responsibilities of



"Of course it's only an opinion, but I'd say you've fertilized that field enough."



Think about it! Read about it! Ask about it!
Learning increases earning and sets the stage
for jobs and living standards as well.

adulthood. Now is a good time to acquire good habits you will need to be happy in work and life. Get in the habit of learning, and you will go on learning through life.

Most of your classmates will complete high school and graduate. Do the same! Build a solid foundation. If you are going to farm, get all the vocational agriculture you can get. In addition to vo-ag, more and more farmers are turning to Young Farmer classes, adult classes, and colleges to get further training.

If you plan to leave the farm, consider this other startling fact, too. In the single year of 1965, the number of young people reaching the age of 18 is expected to jump from 2.6 million to 3.8 million . . . a rise of nearly 50 percent. You need to stay in school just to get ready for the competition!

Mr. Arthur Goldberg, U. S. Secretary of Labor, views the situation in a much broader light. "American youth must stay in school and graduate if the country and its citizens are to meet the goals of the future."

Fortunately, you have many people interested in you and your success, right now, in school. Your FFA advisor, your other teachers, your parents—all want to help.

Think about school as a good place to get hold of the tools of living. The way life goes in school is likely to be the way it will go when you get out. Getting along with teachers, fellow Future Farmers, and others prepares you

for getting along with people later in life.

Take a look around you at what happens to students who finish school. You, like them, want to earn money when you finish. The typical high school graduate will receive \$60,000 more during his adult earning years than the eighth-grade graduate. And he will earn \$40,000 more than someone who drops out of school. You can buy a farm for this.

What happens on the other end—to four in ten teen-agers who drop out of school? Unemployment figures for last October provide one harsh answer. One million young men and women between the ages of 14 and 24 who were no longer in school were looking for work.

The picture was the worst for out-of-school 16- and 17-year-olds. One in five was searching. Most had dropped out of school before graduating. They found lack of education and skill a serious handicap. The largest number of dropouts occur in the tenth grade according to the U. S. Department of Health, Education, and Welfare.

Of course, there is no "quickie" way to acquire an education. It takes time. But every day in school builds toward it. You have more time now, however, than you will have when you start working or have a family.

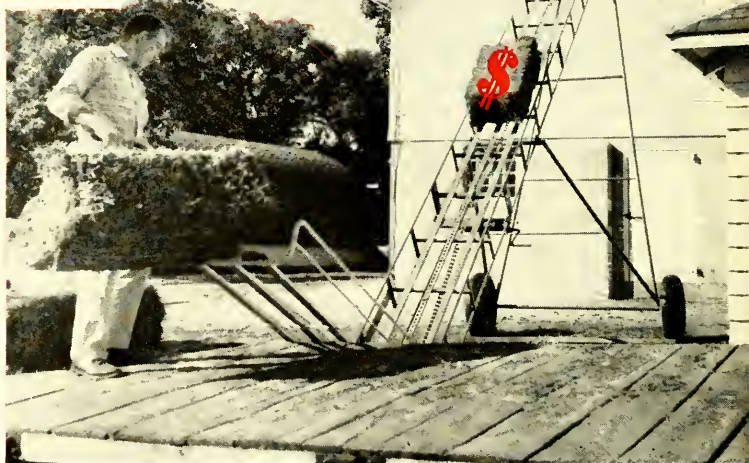
So think about where you will be, or want to be, five years from now or 10 or 25. You can go as far as you want—in farming or another field. But one thing is sure. Education will help you get there.



Good Hay Will Pay

Here is how you can put
up high-quality forage,
or maybe improve your
present system, with the
latest haying practices.

by John Russell



HAYMAKING means hot sun, perspiration, and a water jug. But if you have livestock, it also means putting away high-quality forage that will make animals grow or produce at their very best.

You can have topnotch hay by: (1) preventing as much leaf loss as possible, (2) holding weather damage to a minimum, and (3) cutting as early as practical.

"I like to feed hay that is tender, green, and leafy," says James Isaac Messler, 1961 Star Farmer of America, Greenback, Tennessee. He helps maintain high production from a dairy herd this way. Armin Nelson, National FFA Crop Farming Award winner, McPherson, Kansas, boosts beef gains in the same manner.

Good haymaking begins with an even job of mowing. The cut needs to be clean (not chewed), meaning your mower should be checked out regularly either at home or in the vo-ag shop. A cutting speed of three to four miles per hour probably is best according to a

University of Tennessee agricultural engineer.

Generally, cutting should start in early March in extreme southern states and by late May in northern areas. The accompanying chart may be used as a guide in most areas. Your FFA ad-

visor can supply more specific information for your locality . . . along with other good pointers.

The time of day to cut will depend on local conditions, along with personal preference. One Pennsylvania farmer takes "early" cuttings so literally he cuts not only at the right bloom stage but at the crack of dawn. He claims he gets more carotene (vitamin A) by doing this.

Some farmers prefer to dry hay in the swath; others windrow it. If you plan to field dry, one good way is to rake hay into windrows just as soon as the plant is thoroughly wilted. It should be left in the windrow until the moisture content is down to 20 to 25 percent—or maybe 15 in humid areas. An experienced eye can tell you when this point is reached, or maybe you have access to moisture-testing equipment.

Leaf shattering generally starts when hay dries below 35 to 40 percent moisture. One way to greatly reduce this, other than going to grass silage, is to make hay at 35 to 40 percent mois-

When to cut hay

Alfalfa—1/10 to 1/4 bloom or when basal shoots appear.

Alsike, Red Clover—Early bloom to half bloom.

Crimson Clover—As flowers fade at base of advanced heads.

Sweet Clover—Beginning bloom.

Ladino Clover—Full bloom.

Cowpeas and Soybeans—When pods are 1/2 to 3/4 developed.

Annual Lespedeza—Full bloom to early seed stage.

Serecia—12 to 15 inches high.

Grasses—Heading to bloom stage.

Small Grains—Boot to early milk stage.



One new development is the use of "conditioners." Crushing the stems allows them to dry faster. One night less on the ground can be important in haying!

ture and then dry it mechanically. Artificial drying can mean savings in time as well as quality, although, of course, there is more cost.

Nowadays, a lot of farmers also are "conditioning" hay. By crushing the stems, the hay dries uniformly. "We believe we paid for a conditioner the first year we used it," James Isaac adds. Flail harvesters, too, are being used to increase the drying rate.

If it rains, special care must, of course, be taken to get the hay dry . . . and to keep it as green as possible. "If hay is anything but green, you will be losing money when you feed it," insists a Texas A & M specialist. Cows will

eat yellow or brown hay, but they won't do as well.

Authorities recommend raking hay in the same direction as it is mowed. Windrows should be uniform, with the leaves turned inward and the stems outward.

Balers, too, can be a factor in determining quality. Small bales of 50 to 65 pounds dry faster and are easier to handle. The baler also should follow the cutting and raking pattern.

Field wafering is another new development. Hay to be wafered is coarsely chopped and squeezed into 2-by 2-inch wafers. One advantage is cutting down storage volume. Some farmers prefer to only chop hay and store it as such.

Some pencil work may help determine which is the best way to handle hay and store it. Maybe, for example, a custom baler should be hired. Maybe the type of drying will make a difference. Barn drying, the cheapest artificial method, saves 5.9 percent more dry matter, 6 percent more protein, and twice as much carotene as field drying, according to the U. S. Department of Agriculture.

You can find any number of other new developments in haymaking—new systems, new equipment, and new ideas. A check around the neighborhood could be a wise investment of spare time.

With today's heavy strain on one man's labor, a farmer almost has to have a system that requires only a mini-

Improve Your Reading

As you read this story, ask the questions that are suggested. Then try to answer them with what you read. It'll make your reading a lot more profitable!

What is good hay?

A. Consider James Isaac Messler's remark.

When should it be cut?

A. Study the maturity chart.

B. Correlate this information with your own local conditions.

How should hay be handled?

A. Consider time and method of cutting, raking, baling, and transportation to barn or stack site.

B. Consider costs.

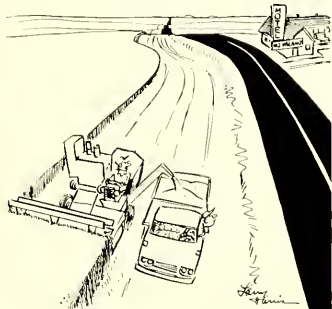
How can you improve your present haymaking?

A. Compare your hay and hay-making methods to those mentioned.

B. Study the new things—such as drying, crushing, chopping, or wafering.



The compactness of wafers is shown by this Illinois researcher. Hay in his left hand will compress into one wafer.



"No vacancy! I told you we should have made reservations."

THE COMMON MARKET



Future Farmers have a stake in this move for free trade because of its possible effects on farm exports.

SUPPOSE YOUR FFA Chapter and others nearby teamed up on livestock production. You buy breeding stock from one another to avoid marketing costs. Or you buy fence posts for pastures from within this group. By working together, you hope to gain an economic advantage.

Note the last line again. This is what six European countries are attempting—the six that make up the “Common Market.” Probably no other single farm topic has been given more international attention recently—or deserved more. Its effects on agriculture could be far-reaching.

Also known as the European Economic Community, the Common Market was established in Rome in 1957. A treaty provides for a future “free flow” of commerce between the six nations—just as it is among states of the United States. The first stage of a three-stage plan has just ended.

As a Future Farmer, you need to know what the Common Market is, how it works, and what effect it will have on your future in farming. Exports to these countries last year amounted to more than a billion dollars. Any change in trade policies is sure to have meaning to American farmers.

The Common Market countries are France, West Germany, Italy, Belgium, the Netherlands, and Luxembourg. They are tearing down trade walls that have separated them for centuries—a radical change in some instances. Eventually, commerce within the combined area will be carried on freely—something they believe will be helpful to all six.

What about the rest of the world? The United States? Many see the Common Market as a new competitive threat. In agriculture our poultrymen, for example, see an uncertain future. Poultry is exported in substantial quantities to the Common Market area. The

Common Market policies call for restrictions on imports and for increased production of poultry in member countries.

On the other hand, our cotton producers see new opportunities in the Common Market. There are prospects of large and expanding cotton consumption—with a relatively small amount of production in the Common Market area. Various situations exist for other products.

The root of concern—the thing that American farmers see as a real threat—is a system of (watch this one) “sliding tariffs,” or “duties.” Tariffs, as you probably recall from history lessons, are a form of taxes charged against imported goods. In this case, the “sliding tariffs” are designed to protect Common Market farmers from outside competition.

By raising tariffs to high levels on goods that Common Market farmers can produce themselves, the six countries could conceivably keep out the products of other countries. This is where the Common Market becomes a serious matter for U. S. farmers. The Common Market would help “insulate” European agriculture, which, in general, is less efficient than U. S. farming.

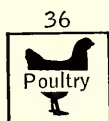
Meantime, our government is attempting to work out trade agreements with the Common Market countries. American farmers hope these will favor continued trade of all kinds. Europe now produces about 87 percent of her farm needs. The remainder is imported.

A development in 1961 was Great Britain's decision to join the Common Market. Britain now is working toward full partnership. And several other countries also have expressed interest.

“Whether our exports to the Common Market shrink or swell will depend in part upon how good we are at political trading,” says Professor L. H. Simerl of the University of Illinois. “Our bargaining power,” he insists, “is mainly in being able to offer competitive prices on what we want to sell and reduced tariffs on products that Common Market countries want to sell us.”

UNITED STATES EXPORTS TO COMMON MARKET COUNTRIES -- 1961

Millions of dollars



A champion! That's every showman's dream, and Keith James has made it come true . . . not once, but several times. His formula: good animals.



Photo by Dale Cotton



"Only the best calves have a chance to reach the top," says this Star State Farmer.

IF YOU LIKE to win in livestock shows, you could run into trouble around where Oklahoma's 1962 Star State Farmer is exhibiting. Keith James's record speaks for itself . . . 9 grand champions, 1 reserve grand, 21 breed champions, 54 firsts, 26 seconds, and many other lesser placings.

Ever since he entered the FFA, this Pond Creek, Oklahoma, Future Farmer has been exhibiting show steers and breeding cattle. He owns a sizeable interest in 80 Angus cattle and picks show calves from 50 cows. But let Keith, who is Oklahoma's state FFA

reporter, tell about how he produces champion animals:

What kind of calves do you start with?

"'Beefy,' high quality animals from high-producing cows. You should start with the best possible calves because only the best have any chance of reaching the top."

How do you handle young calves?

"We wean at seven months. Steers are on a nurse cow at 300 to 350 pounds. We also creep-feed to weaning age."

How do you start animals on feed?

"Half-feed at first, but they reach a full-feed quite soon because they are creep-fed. I mix my own calf ration:

1200 lbs. oats
600 lbs. barley
400 lbs. corn
400 lbs. grain sorghum
300 lbs. bran
300 lbs. soybean meal
5-10% molasses"

When do you change feeds?

"Corn and milo (grain sorghum) are
(Continued on Page 31)

Here's **BIG POWER** with a



big difference!

Only the new Massey-Ferguson Super 90 has full 5-plow power plus the Ferguson System

New this year, the big Super 90 Diesel has already proved itself on hundreds of farms. Proved time after time it can work a 5-bottom plow, mounted or pull type, without breaking stride. Proved its fast, smooth handling and precise work control. Because it's a *genuine Ferguson System* tractor—the most powerful Ferguson System tractor ever made! Works biggest mounted implements with unmatched control and precision. Lugs big drawbar implements too. Never before has so much power been so efficiently harnessed.

UNSURPASSED FUEL ECONOMY . . . proved on job after job. The Super 90's new Massey-Ferguson 302.2 cu. in. diesel power plant with Direct Injection Combustion does it. Gets more power per gallon. Gives you the most efficient combustion a diesel ever had. A dynamic balancer keeps the engine running smoothly at all speeds and under all loads. Chrome sleeves, ceramic coated muffler, and many more long-life features minimize maintenance. And you have 8 forward gear speeds to work in.

NEW WORK COMFORT. You sit up high out of the dust in a deep-cushioned, shock-absorbing, torsion-suspended comfort seat. It adjusts to your height and weight; slides back for plenty of standing room. All controls are within easy reach. You get power steering too, and Variable Drive PTO. Also available with gasoline power if you prefer. Call your dealer today and arrange to test-drive the new Super 90!

4 FRONT END STYLES. Shown (right) is the tricycle twin front model Super 90, with the efficient MF 62 Mounted 2-Row Corn Picker. Also available in standard, tricycle single front, and high arch models.



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Many Banks, Coops, Feed and Seed Dealers, Farm Equipment Dealers, etc., already are using commercial calendars for advertising. Just give them a chance at FFA Calendars and see what happens.

An Official FFA Calendar for you, too, because most business firm sponsors would like to have advertising calendars hanging in FFA homes as well as the homes of their other customers. With three official calendar styles, a chapter may have one sponsor for all three styles, or different sponsors for the different styles. Try to get all three FFA calendar styles distributed in your community.



A 1963 calendar project kit is sent to your chapter earlier. If misplaced, ask your chapter advisor or president to write for another.

ORDER
NOW
FOR

1963

**CALENDAR DEPARTMENT
The National FUTURE FARMER
BOX 29 ALEXANDRIA, VIRGINIA**

How I Raise Champion Steers

(Continued from Page 27)

stepped up at the end. When steers are on full-feed, I give them all they will eat in 30 minutes."

Do you feed steers in groups?

"In small groups of three to five. This makes a calf more competitive at the feed bunk, and the rate of gain is higher. I feed twice a day for a period of six to 12 months."

Do you use hormones or antibiotics?

"I don't use hormones because of the danger of undesirable side effects and

because my show heifers are in the same lot. However, I do recognize the advisability of using hormones in commercial feed lots. We feed no antibiotics."

Do you exercise animals?

"Yes! This is important. No animal is going to be alert and consume sufficient feed if allowed to lay around all day. My calves are kept in a large lot, and I lead them 15 to 30 minutes a day."

What about water and shade?

"A stock tank provides water. For shade there is a barn and trees along one side of the lot."

When do you start grooming for a show?

"My calves are taught to lead when they are put on the nurse cow or at weaning age. The earlier that you teach them to lead, the easier it will be. You should also begin setting feet properly. And calves should be washed at weekly intervals and brushed for a half hour



Four years in a row Keith has shown the grand champion at his county's fair.

daily, beginning two and one-half months before the first show."

That is Keith's program. Your own may need to be different.

Check the "Do's and Don'ts" listed in the box for some good pointers. These come from Mr. Rudolph Setzler, livestock specialist at the State College of Washington.

Show calves are selected from the offspring of this high-quality herd of Angus cows. Keith owns part interest and also has purchased a flock of Dorset sheep.



Steer Feeding Pointers

Castrate early (in the first two weeks of life if possible). Use a knife. Dehorn before two months of age.

Select a "Fancy" grade feeder. Buy at weaning time.

Get started on grain and hay before weaning if possible.

A feeding period of seven months is usually required for "prime" beef.

Many rations produce top quality steers. Feed prices should be considered.

Start on feed slowly—do not rush the rumen organisms. It takes five or six weeks to get a calf on full-feed.

Make feed changes gradually.

Do not overfeed.

Two or more steers fed together will eat better than one alone.

Fresh feed should be offered at least twice daily. Keep troughs and drinking utensils clean.

Provide shade and comfortable surroundings.



Anastasios

"To Practice BROTHERHOOD..."

American Farm School in Salonica, Greece—thanks to a \$300 scholarship from the Illinois FFA Association. This scholarship, provided through local chapter contributions, makes it possible for Anastasios to study for one year.

The school—with 50 buildings, 500 acres of irrigated land, and an 80-member staff—provides 200 rural Greek boys with a four-year training program. Courses are similar to those in our schools. Students do all the work on the farm, construct buildings, and handle other tasks.

They are "Learning by doing!"—just like FFA members. Anastasios hopes

to pass on what he learns to others in his village.

"Our family lives in a two-room house," he wrote Illinois Future Farmers. We have 12½ acres of land in six separate pieces . . . plant wheat, oats, and cotton. Besides our house, we have a stable for our donkey, a grain shed, and a chicken coop."

Illinois FFA members hope this small endeavor will further develop understanding between Greece and the United States. They also want to help Anastasios finish four years of training.

Maybe your chapter or state association would like to try a similar project. There are needs all around the world.

GREECE is a long way from the Midwest, but Illinois FFA members are finding it a lot closer since they started a project in international understanding.

You see here 14-year-old Anastasios Manikadjis. He is a student at the



Specialists in their field . . . Joel Wong (left), author, and brother, Ronald.

Wongs' Watermelons

FIRST OF all, let me explain our farm organization. . . . "Golden Melon Farm," located near Waimanalo, Hawaii. We have a family partnership consisting of my father, Gee Chong Wong, my brother Ronald, and me. Ronald and I, both, are former Future Farmers.

Golden Melon Farm is made up of 21 acres of fertile soil, ideal for growing almost anything. We specialize in watermelons. The bulk are conventional melons, averaging 30 to 40 pounds apiece. They have either striped or dark green rinds and sweet, juicy, red flesh.

Our trade name, Golden Melon Farm, comes from a type of melon called Royal Golden. This melon has a rich, orange-gold rind and dark red flesh. We also grow midget melons,

orange-fleshed melons, round melons, and long melons. Our new pride and joy, however, is the "Cobb Gem," which grows to an average of 100 pounds. This melon has a striped rind and pink flesh.

Let me tell you the story of "Cobb Gem." It was developed in Texas, and the unofficial world's record is 135 pounds. Our first contact with it was when we saw the 135-pounder on TV—on the "People Are Funny" show.

We obtained seeds in 1958. In that year, because of the difference between Hawaii and Texas conditions, our largest melon weighed only 70 pounds. In 1959 we got it up to 84 pounds. Next year the weight dropped back to 71. But in 1961 we grew a melon weighing 101 pounds. With added experience and better techniques, we are aiming

for some 135-pound melons this year.

Melon growing in Hawaii is difficult and tricky. In certain areas bacteria in the soil cause vines to wilt. To combat this, we have to either import wilt-resistant seeds, or graft a watermelon scion to the stock of a squash plant. We use the latter system.

Grafting melons is tricky and delicate. The system originated in Japan. It is used extensively in Hawaii. By grafting a melon scion to a squash stock, you get wilt-resistant plants with vigorous growing vines.

To combat the melon fly, a large variety of insecticides are used at frequent intervals. However, many flies build up an immunity. This forces us to wrap each pollinated fruit from infancy stage to maturity . . . meaning two to four wrappings, depending on the size of fruit.

When a melon attains baseball size, we record the date tag nearby. Thirty days later, the melons are ripe. We confirm this by thumping.

We sell our melons on the retail market at an average of 13 cents per pound. All go directly to consumers—at several different locations on the island of Oahu. Demand has been good. We advertise in newspapers and on the radio.

Last year we donated two tons of golden melons and "100-pound melons" to the Board of Public Parks and Recreation. They held a watermelon-eating contest with 300 to 400 semi-underprivileged children. We plan to do this annually.

That is the story at Golden Melon Farm!—By Joel K. W. Wong.

(Joel, 22, was a member of the Kaneohe FFA Chapter. He is now a member of the H. H. Gibson Chapter of the Hawaii Young Farmers' Association.—Ed.)

One-hundred-pounders like this one donated for a watermelon-eating contest are the goal of the Wongs. Alan DeGuair, 4, is nearly hidden.



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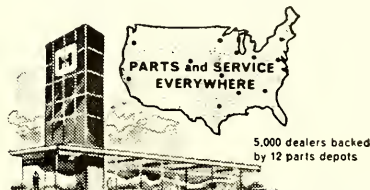
Compare . . . see how much more you get in a new McCormick® International® 303 with corn head. Don't settle for less.

You'll save corn others lose. Full stripper plate snapping and extra deep gatherers assure clean, fast picking. Parallel-to-cylinder ear delivery, plus use of cylinder filler bars, give cleanest shelling. Fast separation at open grate concave prevents cracking of kernels.

You'll pick faster. Wide feeder resists plugging . . . big top-driven elevators handle heaviest yields with ease. Bonus grain tank capacity (75 bushels with extension) cuts down on unloading stops. And the rugged 65 hp, six-cylinder IH engine masters heaviest going.

Brute strength takes rough fields in stride. Rugged, box-beam axles, massive axle supports, and structural steel sills make the 303 strongest by far in its class.

The 303 has a champion's pedigree. IH combines finished 1, 2, 3 in the 1961 National Corn Picking Contest. New capacity, strength, and handling ease make the 303 even better. See it now.



INTERNATIONAL HARVESTER
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Farm Power From a Pig Sty

by
L. J. Fry

SANITARY disposal of droppings has received little consideration on modern farms where the trend is toward greater numbers of livestock. You may want to give this some thought if your future plans call for feeding livestock.

In 1957 this problem became serious on my farm, eight miles south of Johannesburg, South Africa. Soggy heaps, flies, smells, and outbreaks of death in my pigs were constant reminders.

I tried a few experiments, and two facts emerged: that pig droppings rot anaerobically (through small organisms) and that the gas created is over ten times the amount from humans. Cattle and poultry values are similar.

These discoveries led me deeper into the subject. I read every publication I could find, gleaned facts from professors and sewage engineers, and studied modern disposal methods.

After months of thought, I designed and built a plant to take all the droppings of my 900 pigs. I gambled \$3,500, months of work, and neglect of the piggery.

The plant has worked four years now. Most of the gas is used to drive an engine powering a generator which provides light and power to the farm. The system has paid off handsomely.

This is how it works:

The dung is mixed with a little water in a receiving trough. It enters a large container similar to a septic tank, called a "digester." At intervals decomposed material is removed from the other end.

Gas is trapped under a gas-tight roof. It is 70 percent methane and 30 percent carbon dioxide and fuels a converted diesel engine to make the best use of its 120 octane rating.

Waste heat from the engine is led back from the cooling water and exhaust to maintain the temperature in the digester. The best conditions for the tiny bacteria to work in also give the highest gas yields and most rapid decomposition.

In addition to this free fuel, the rotted mixture is ready for growing plants and does not scorch like raw manure. It loses no fertilizing value whatever and can be sprayed by tanker truck, irrigation ditch, or nozzle sprays.

My own plant, the first of its kind for pigs that I know of, has proved itself in every way, not least in having saved \$9,000 in diesel fuel in three years. The only costs are lubricating oil and spark plugs.

The engine has run day and night for lights in the house, pumping boreholes, spray irrigation, alfalfa dehydration plant, floodlighting, water heating, cooking, stoves, polishers, irons, and heat lamps for pigs. There is such a surplus of power that a heater is to be installed in the swimming pool to give the engine "ballast" when the power is not required elsewhere.

The gas is also used as a straight fuel in stoves, refrigerators, barbecue fire starters, and as a flame thrower for weed killing.

An analysis showed that 10 percent of

the mixture is dry matter containing 6 percent nitrogen, 5 percent phosphates, and 1 percent potash. My farm is therefore fertilized with 92 tons of plant food yearly, of which 5 tons are nitrogen, $4\frac{1}{2}$ phosphates, and about 1 ton potash.

In Germany, experiments have resulted in abandoning a similar system. It was too expensive. In Italy, France, and England, plants of a different design are used, requiring considerable labor. Experiments are being made in India. China has a vast network of plants working on the covered lagoon principle. These can only work in warm weather.

Experiments have begun at Iowa State University. I hope they will be fortunate enough to hit on the same combination of factors which has made my plant so successful.

Conclusions

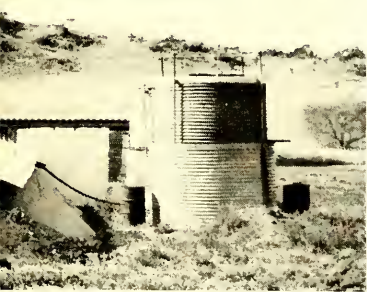
My own gas plant proves this form of disposal is practical.

The limiting factor is the slow spread of knowledge about this system.





(Editor's Note) Mr. Fry migrated from Great Britain to South Africa in 1947 after serving ten years as an RAF pilot. His ingenuity helped pay for a small farm in six years. He has traveled widely, including the United States, where he was impressed by the FFA. His ambition is to move to this country and develop his "gas plant" ideas further.



I have little time and still less funds to concentrate on finding applications for "Dungas."

This discovery should be taken much further. Much remains to be investigated.

Animals droppings are universally available. Power is not.

In many countries the dung is burned as a fuel, resulting in a total loss to the individual, the soil, and the country. In others it causes a river pollution problem.

Rotted material from the "digester" is spread on fields with a tank truck.

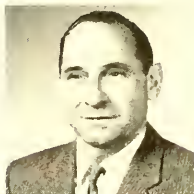


"Here by the Owl"

Mr. Advisor:

How Can The FFA Help Me Become A Better Farmer? Isn't Vo-Ag Enough?

Arthur L. Schick
FFA Advisor
Sterling, Illinois



IF YOU are enrolling in vocational agriculture, by all means join the FFA. While it is not mandatory that all students taking vocational agriculture should join, many worthwhile activities connected with agriculture courses are sponsored by the FFA. Talk to some former FFA members! Many will testify that the FFA has been a very helpful organization, whether they are now in farming, related occupations, or some other field.

The founders of the FFA were farsighted in setting up the purposes and framework under which the organization functions. To be a better farmer, you need training in leadership, cooperation, earnings and savings, community service, and public speaking, to mention some of the major areas. The more experience you can get while in school, the better you will be able to serve your fellow man and country later in life. Vocational agriculture and the FFA are so closely integrated that it is hard to draw a line. Any FFA member can find some activity in which he should be able to excel.

One example of how you can profit from FFA: If you are appointed to a committee, you have a chance to assume responsibility and practice teamwork. Also through FFA meetings you have a chance to develop socially and to gain more poise in parliamentary procedure. Yes, the FFA can be a real help to anyone who is planning to farm.



L. Howard Hutchings
FFA Advisor
Fallon, Nevada

THE FIRST aim and purpose of the FFA is to develop leadership, cooperation, and citizenship. . . . essential qualities for any young man desiring to become a better farmer today. In vo-ag you can obtain a general knowledge of agriculture and practical experience through supervised farming. This is the first step on the ladder to success in farming, but it is not enough.

The farmer of the future will be faced with many new challenges. He must cope with a highly competitive market, mechanization, automation, and specialization. Because of competition and the fact that fewer farmers are required to produce the nation's food supply, a space age farmer must excel in order to survive and be successful. Membership in the FFA affords many opportunities for growth and development. You have the stimulus for building good character and expanding talents and leadership ability through the cooperative and civic activities and the public speaking and parliamentary procedure contests. Awards provided by the National FFA Foundation in livestock farming, dairy farming, soil and water management, crop farming, farm mechanics, and rural electrification provide more incentives.

Because the FFA is a national organization, you can go as far as you want. Taking part in both programs should help you prepare for a good future in farming.



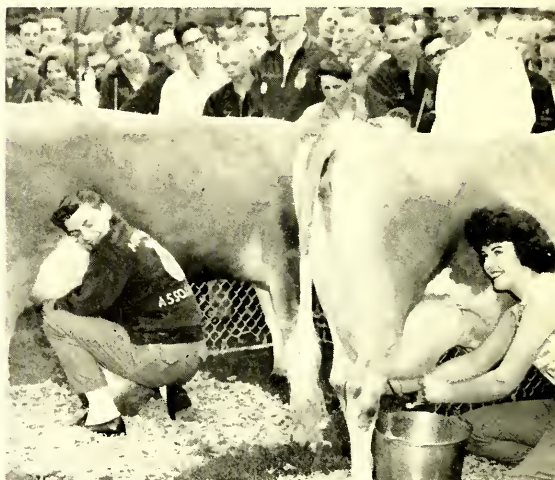
Lucky FFA member! Gary Long, Springfield, Mo., won this Arabian gelding simply by naming it for Goodyear Co.

photo roundup

Sweet corn co-op yields dividends for FFA members and the chapter alike at Ferndale, Washington. Corn sold fresh and to cannery.



Six pairs of brothers, and all State Farmers this year at the Michigan FFA Convention. Any twins? All four pairs at the left. The posing arrangement has brother behind brother.

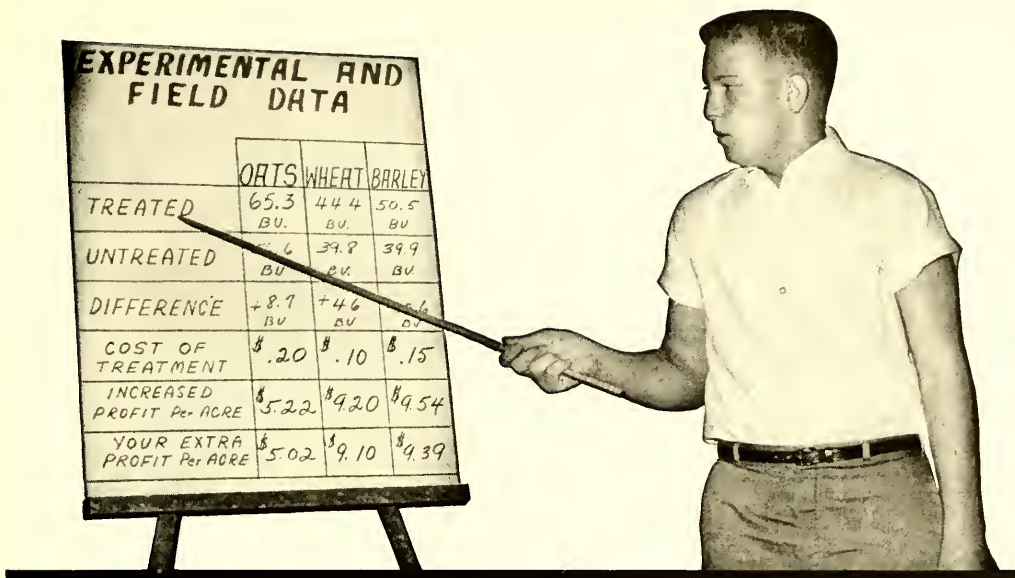


It could have been "embarrassing," but wasn't! Embarrass, Minn., Star State Dairy Farmer, Victor Gunderson, defeated Diane Kramer, Dairy Princess. First FFA title in seven years!



A visit with the governor! Mississippi FFA officers, like those in many other states, made this part of National FFA Week activities. Gov. Ross Barnett "talked" farming several minutes.

The National FUTURE FARMER



Increase farm income \$25,000 to \$300,000 per county with seed treatment

"Best way I know to put \$25,000 of extra spending money into my home county would be to treat all the small grain seed with a good seed treatment," says Danny Lamb, Swainsboro, Ga., winner of the 1960 Georgia Crop Improvement Project Award.

Danny's work shows that income from oats can be increased by \$5 per acre with seed treatment . . . wheat by \$9.10 . . . and barley by almost \$9.40. This figures out to well over \$25,000 for the small grain acreage in his home county.

Counties with larger acreages in small grains, cotton, sorghum, flax, and peanuts can reap still bigger benefits . . . as high as \$300,000 per county for the high-producing grain counties of the Great Plains.



MORTON CHEMICAL COMPANY

Agricultural Division • 110 N. Wacker Drive

Chicago 6, Illinois

You can help increase farm income in your county by telling more farmers about the benefits of seed treatment. Morton Chemical Company, makers of Panogen seed fungicide, Drinox seed insecticide, and Pandrinol dual-purpose treatment will help. They'll provide booklets, films, and other helpful materials. Use the coupon below to request information.

Don't let farmers in your county miss out on the extra crop yields and bonus income that seed treatment can bring. Tell them the seed treatment story hard and often!

MORTON CHEMICAL COMPANY

110 N. Wacker Drive
Chicago 6, Illinois

Send me full information on materials available to promote seed treatment with farmers in my area.

NAME

TITLE STUDENT ☐

ADDRESS

What Would YOU Do?



As the ball reaches the plate, the pinch hitter's bat meets it solidly, at a slight angle, and sends it whizzing toward far right field . . .

IT IS THE last half of the ninth inning.

You are catching. You are the captain of your team.

The game is for the championship. The score is 1 to 0 in your favor. Your opponents have a runner on third base and a runner on second. There are two men out.

The weakest hitter on your opponents' team is due to bat. You smile in confidence. You know he cannot hit your pitcher. He has struck out twice and has rolled a puny grounder to your third baseman for an easy out at first base. He is as good as out right now. The championship is almost in your school's grasp.

The trophy will be presented to the winning school immediately after the game. It is on the grounds now. It is the most attractive championship trophy you have ever seen.

You, as captain of the winning team, will receive it. Following a tradition of your school, you will be allowed to keep it in your room for a week. Then it will be placed in the school's trophy

By
Tom Sayres

case. Forever after, it will be a prized treasure of the school. In years to come when you return to visit the school, you will gaze at it in pride. You will remember that you were captain of the team.

But now there is work to be done. You have another man to put out before the game is over. He doesn't come to bat. You look toward the opponents' bench to see why. The coach has called him back. A pinch hitter is to be sent in.

Now you are alert. Pinch hitters can be dangerous. A single will win the game. An infield error will tie it. The batter following the pinch hitter will be the opponents' lead-off man. You must get the pinch hitter.

But before you give your pitcher the signal and the spot to pitch to, you must learn something about the new batsman—and fast. You must study every move

he makes; you must size up his physique—his build; you must watch what kind of bat he uses; where he stands in the batter's box; how he holds his bat; what temperament he is; how he reacts to the crowd; and anything else that might give a clue to his strength and weakness.

The pinch hitter is short and stocky. He has short arms. His reach will be limited.

You have your mind pretty well made up about the new batter's weakest spot, judging only from his build. But as he selects his bat, your judgment is confirmed. He picks up a short bat.

He steps into the batter's box—and—you feel almost on the point of shouting in joy. He takes his stand as far to the left of the plate as the batter's line will let him. Now you are ready to tell your pitcher all about him. You are ready to flash the signal.

The pinch hitter's most vulnerable spot will be a pitch on the outside. You could risk a strike on the corner, preferably a fast ball, in case a curve did not break perfectly. But why risk a fast ball and a strike zone pitch with two men on

base—the tying and the winning run?

You call for a wide curve, which the batter's club cannot touch. The pitch is delivered as ordered. But the batter does not swing. "Ball one!" the umpire bellows.

The umpire is standing behind the pitcher. Because the conference—composed of small schools—has not sufficient funds to permit any expense beyond bare necessities in conducting its athletic program, it has engaged but a single umpire. He is well known to all conference fans, well liked, a symbol of honesty and fair play. An old-time amateur ball player, he has slowed up year by year in every way except in his enthusiasm and zest for the game, and in his willingness to help out the boys and the schools by handling their games. He has his own way of handling games, one practice being to rule the play from behind the pitcher. The conference considered itself lucky to have him handle its crucial games.

So when he called the first pitch a "ball," everyone agreed it was a "ball."

Now you are crouching for the second pitch. What will you call for?

You would like to get in a strike; but you are not worried about walking the batter yet. With the winning run on second base, you must not allow the batsman to hit safely. You must keep the ball away from him. There must be no slip-up, no hitting of a ball "by accident."

So you call for another curve, outside the plate.

Your pitcher delivers the pitch.

But the pinch hitter does not swing. It is "Ball two!"

Now you must tighten up. It is time for a strike. But you still feel safe. He will not be able to do much with a ball

(Continued on Page 40)

To the parents of FFA members



Here's what you should know about our company before you buy your son's life insurance

In the April-May and June-July issues of this magazine, the American United Life Insurance Company offered a *special life insurance plan for FFA members*.

If this has been called to your attention, the extremely low cost of the A•U•L policy may have caused you to question the value of this protection.

We accordingly invite you to make a careful investigation—not only of our Young Farmers Life Plan—but also of our Company's responsibility, financial strength, and record of performance.

Now in its 85th year of policyholder service, American United Life is a *mutual* company with more than 175 million dollars in assets, and over 1 billion 800 million dollars of insurance in force. Its steady growth now ranks it in the top 3% of all life insurance companies in the nation.

A•U•L is not affiliated in any way with The Future Farmers of America, but we have supplied the national FFA headquarters and all FFA chapter advisors with complete details about our Company—including a current financial report, a list of management and operating executives, and sample copies of the actual insurance policy described in our advertisements.

At your request we will be glad to mail you the same material, so that you may properly evaluate the quality of the protection we are offering your son, and your family.



Indiana's Oldest and Largest Mutual Life Insurance Company

American United Life Insurance Company, Dept. G
P.O. Box 368, Indianapolis 6, Indiana

Please send me complete information about your Company and its "Young Farmers Life Plan."

Name _____

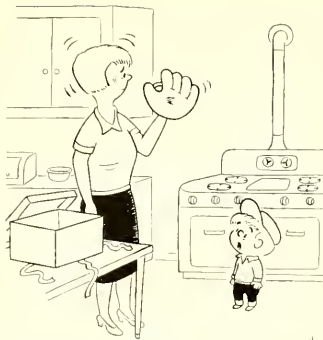
Address _____

City & State _____

City Cousin



"What happened to the sunflower I planted?"



"Happy birthday, Mom! When you're not taking hot stuff out of the oven, can I borrow it?"

What Would You Do?

(Continued from Page 39)

on the outside corner, even in the strike zone. Besides, the chances are he is under instructions not to swing, both for fear that he will not hit safely and in hope that a walk will give the lead-off man a chance to bat.

However, your pitch must be inside and need not be down the middle. A fast ball, catching the outside corner, is your pitch.

You signal your hurler and hold your mitt as a target.

Your pitcher rears back and throws.

But before the ball leaves his fingers, the batsman has gone into action. He has stepped in toward the plate and is crowding it. He also has slanted his stance slightly toward right field. He is ready to hit a pitch that catches the outside strike zone.

It is too late for you or your pitcher to do anything about it. The pinch hitter has outwitted you. By his false stance and his short bat, he has lured you into a trap. He has made you give him the exact pitch he wanted.

As the ball reaches the plate, the little pinch hitter's bat meets it solidly, at a slight angle, and sends it whizzing through the air toward far right field . . . well out of reach of the right fielder. It is one of those curving, high liners that generally hit the grass on safe territory but keep on rolling and curving until crossing the foul line.

An exultant shout of triumph bursts from your opponents' side of the diamond where their fans are massed, and increases in volume and in shrillness as the ball soars, continuing to curve to the right.

Then, suddenly, the roar of your opponents' crowd stops, and in its place arises a mighty shout from your own team's fans, your crowd.

The spectators have seen how fast the ball is curving toward foul territory.

The entire crowd held its breath. Would the ball drop in safe or in foul area?

Then, and not until then, was it noticed by everyone in the ball park that a serious oversight had occurred in preparing the field. The foul lines had not been marked beyond first and third bases. Foul flags had been placed in position in the far outfields, but the customary white lines from home plate to the flags had not been staked out.

As the result of the slip-up, only one person on the field could tell precisely whether a ball landing beyond first base was fair or foul. That person was the catcher. YOU. (And your rival back-stop.)

With the crack of the pinch hitter's bat in the ninth inning, you knew the ball game was gone. And you knew that you had lost it to a better man . . . a better team. You—your team—your school—had been outplayed . . . by one pitch. That's the way your coach had told you most big league games were lost . . . by one pitch.

But now, suddenly, you were alive again. The ball had not yet landed on fair territory. Maybe it never would. That gust of wind and the curving of the ball—sort of "sliced" as it had been, although hit solidly—might save the game.

You hold your breath. And watch. And wait.

Then you take your stand back of plate, with your eyes catching its right edge, first base, and the foul flag far out. You are in position to judge whether the ball lands fair or foul.

Suddenly, out of the corner of your eye, you catch sight of the umpire. With his weight and his age handicapping him, he is lumbering in toward you from where he had stood behind the pitcher when the ball had been hit. He wants to be in position to call the play, "fair" or "foul!"

But he is too late.

The ball hits the ground.

The spot where it strikes is so near the imaginary line that the roar of the crowd rises to crescendo. Not a spectator knows yet whether the ball is fair or foul. The roar has been one of hope rather than triumph.

But you know.

You know the ball landed in fair territory but has rolled across the invisible line. It is a fair ball.

But it has not yet been called one. Neither has it been called a foul ball.

By now, the two base runners have crossed the plate; the stubby pinch hitter is parked on the second sack; the

right fielder has retrieved the ball and has returned it to the infield; and the umpire, puffing and panting, is standing on home plate in front of you.

He is trying to call the hardest decision in his life—trying to call a play he did not see and could not have seen from his position when the ball landed. The white foul line that could have helped him did not exist.

With the uproar of the crowd now at its peak, with bellows and screams of "Fair ball!" and "Foul ball!" splitting the air, the umpire faces the opposing captain, who has raced to the plate from the bench, excited and exultant, yet waiting to hear the official decision.

Then the umpire does a strange thing. He turns and faces you. He asks: "Catcher, what was it? A fair ball or a foul ball?"

What do you tell him?



The Editor wants to know what you would tell the umpire. And why? What thoughts would go through your head and your heart? What would be the basis of your reasoning?

For the best letters The National FUTURE FARMER will award prizes of \$10.00, \$7.50, \$5.00, and ten honorable mentions. Your letter may be of any length, written or printed in ink, or typed, double spaced. It should be addressed to:

Sportsmanship
The National FUTURE FARMER
Box 29
Alexandria, Virginia

Letters must be postmarked not later than August 20, 1962.

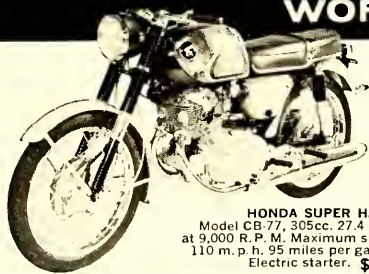


"I think it's silly to have to stand at attention when somebody whistles 'Dixie' just because the Sarge is from the South."

The National FUTURE FARMER

4 REASONS WHY HONDA'S HOT

Test Ride These Great Touring Models from the Maker of the
WORLD'S FINEST MOTORCYCLES

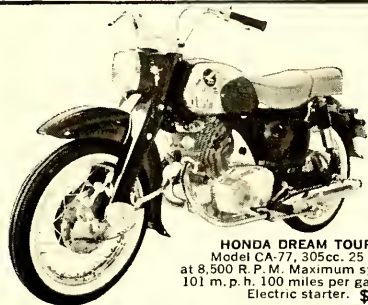


HONDA SUPER HAWK
Model CB-77, 305cc. 27.4 H.P.
at 9,000 R.P.M. Maximum speed
110 m.p.h. 95 miles per gallon.
Electric starter. **\$665**

From 50cc to 305cc HONDA offers you the world's finest touring machines—superb quality at prices unmatched by any other line of motorcycles. Why not get on the smooth, powerful CB-77, the CA-77 or the CA-95 for a test ride soon? You won't want to get off! All three offer HONDA's unbeatable performance, durability and economy. All three feature HONDA's famous twin-cylinder, overhead cam 4-stroke engine. And all three have HONDA's popular electric starter.

If you're a 50cc fan, nothing on the market equals the sensational HONDA SUPER SPORTS "50" (4-stroke OHV single-cylinder engine) for price or performance. And it gets up to 225 miles per gallon! For touring fun, *for every purpose*, get a headstart with a HONDA!

All prices plus destination and setup charge



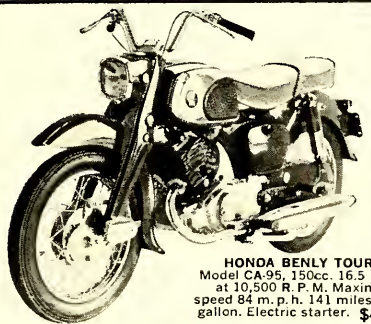
HONDA DREAM TOURING
Model CA-77, 305cc. 25 H.P.
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101 m.p.h. 100 miles per gallon.
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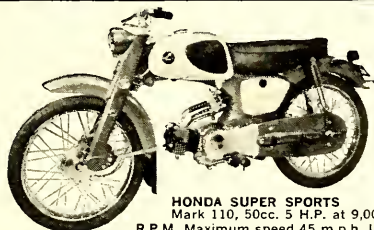
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R.P.M. Maximum speed 45 m.p.h. Up
to 225 miles per gallon. Ram-injection carburetor.
Special high-compression aluminum alloy head. **\$275**



A cotton gin at Cassatt, South Carolina, is falling down, but the pulpwood industry is growing.

Pine Trees in Cotton Country

**Timber is a profitable
new crop for FFA members of the South**



People and pines are growing together around Midway. Eighty percent of old corn and cotton land now is in timber.

Nacogdoches FFA members spent over 1,500 man-hours improving their plot during the period from 1953 to 1958.



IF YOU live in the South, there is a chance you have shared in a miracle. It is called the "Miracle in the Southern Forests," a 25-year record of tree production.

Many Future Farmers have! All the way from South Carolina to Texas are FFA Chapters and individual FFA members who are working in some way or another with forestry . . . or growing trees.

The miracle is this: Today the South is producing more wood than it uses. Where 12 trees grew in 1935, 13 grow today and 15 have been cut. The timber industry is climbing!

There are many reasons . . . a new breed of woodsmen, research, scientific management, fire prevention, reforestation, and others. In tree planting alone, there has been a spectacular conversion of idle acres into profitable forests.

You get an idea of the FFA role by observing chapters like Midway in Kershaw County, South Carolina, and Nacogdoches in deep, east Texas. Members of these chapters share in forestry demonstration plots, and many have individual projects as well.

Some set pines and carry out forestry practices where their parents used to hoe cotton or dig potatoes . . . indicating another major shift. Trees—or pulpwood—have become a cash income source just like cotton or some other crop. Along with this trend has come more livestock and poultry farming.

"My father began setting pines about two years before I was born," says Jimmy West, a Midway FFA member. Jimmy has grown up with a fondness for growing trees. "They'll help pay for further education when I leave high school," he adds.

William Reynolds, a fellow chapter member, sees a different use for his trees. He will tap a stand of pines some day for lumber to build a house. Meantime they will help guard against soil and water losses . . . something that got to be quite a problem under row-crop farming around Midway.

The members of Jimmy and William's FFA Chapter started setting out their plot in 1947. It not only has been a training ground, but has served as a demonstration of good forestry practices for the community. The same is true of the Nacogdoches project, started the same year.

At Nacogdoches FFA members improved two acres of leased forest land each year until they had completed ten acres in 1958. Since then they have improved one acre a year.

Nine years of participation in a forestry contest has added approximately \$1,000 to this FFA Chapter's treasury. Altogether, members have accumulated about \$4,000 in a savings account to be used as a down payment on their own tree farm.

About 20 Nacogdoches FFA members have set out pine seedlings to improve or establish home wood lots. They obtain the seedlings through the state forest service, the same as Midway FFA members. In South Carolina, for the state as a whole, FFA members set out more than two million seedlings last winter.

And so it goes . . . the story of a miracle. But the miracle is only beginning. FFA members at Midway and Nacogdoches agree that their seedlings and plantings of today will definitely affect their future in farming tomorrow.



The National FUTURE FARMER

KENNY HOWARD polished off the last bite of his supper and darted out the back door. In almost nothing flat he was at one of his favorite haunts.

Fine waves rippled in the evening breeze. A few cattails shook their heads lazily. You guessed it! A farm pond—source of some of the best fishing you can find. There are about 1½ million farm ponds across the country stocked with game fish—mostly large-mouthed bass and bluegill.

This particular evening, our FFA fisherman picked up one end of a heavy 40-foot line and replaced a couple of No. 2/0 hooks. They were attached to short lengths of 10-pound test line spaced every two feet up and down the main line.

Yes, you are right again! Kenny is a trotline fisherman. This particular pond is full of “blue cats” (not the little “bullheads” which often ruin good fishing). He can put out a trotline or throwline after supper and the next morning—if the “cats” are cooperating—have fish for breakfast.

But when company comes or when there is some leisure time, Kenny wears a different hat! He likes pole fishing, too, and then attention turns to bass or bluegill. Here again you can't beat a good pond in Kenny's book. There aren't the picturesque rocks and rills around a farm pond, but who thinks of that when the fishing is good?

Kenny baited his trotline with big, fat minnows. Sometimes he uses worms. He was careful to thread the minnows through the full length of their body. “Catfish seem to like dead bait,” he explains.

But if the minnows were for bass . . . it would be different. He threads minnows intended for bass through the back. Nothing like a live, wiggling minnow to attract an old lunker!

His hooks baited, Kenny tied one end of the main line to a willow sapling. On the other end was a rock showing signs of having been to the bottom of this Moniteau County, Missouri, pond many times. He gave it a healthy toss, and the line was stretched half way across the pond.

That was it! The day's work was over . . . and half the fishing. Now the night hours must work their magic. And they would, too, if past luck is an indication. Kenny has done well—catching “cats” up to seven pounds.

Perhaps you may prefer another way to fish ponds. There are many . . . and just as successful as Kenny's. Maybe even more fun! The reason most pond fishermen are bass and bluegill fishermen is that this is an almost unbeatable combination of species. You should check with local conservation



FAST FISHING



You need only a few minutes to enjoy this source of the most relaxing sport known to man.



Photo Courtesy Texas A&M College

officials about what kinds, numbers, and combinations of fish are suited to your area.

Another pond fishing expert in Kenny's state is Mr. Richard H. Rotsch of the Conservation Commission, an artificial-bait fisherman. “I start fishing ponds in the early spring, when it is best to use underwater lures such as Lazy Ikes, Flatfish, and spoons or weighted fly and spinner combinations,” he says.

As the water warms up, he switches to topwater lures, including popping bugs and a fly rod. A rod with a small fly and spinner combination usually furnishes him good strings of bluegill, while a tiny popping bug pays off later in the year.

Whatever your method of fishing, it

pays to fish a farm pond heavily, along with following other good management practices. If a pond isn't well fished, the population will rapidly deplete the food supply. This results in stunted fish. An acre of pond water needs from 300 to 500 man-hours of fishing each year.

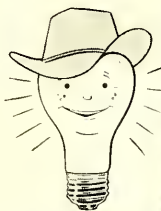
Have fun!

Pond Fishing Tips

Make as little disturbance as possible, especially if wading.

Fish to a bank and retrieve outward. A boat is an advantage if pond is large.

Three to five pounds of bluegill should be taken for each pound of bass.



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DETROIT LELAND HOTEL

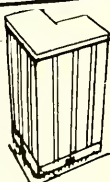


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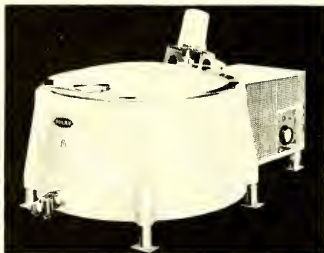


Metal locator finds buried treasure or mineral deposits (Metrotech Inc., 670 National Ave., Mountain View, Calif.)



Low-cost way to store 500 bushels of grain—erects in minutes. (Made by Bin Bag, Inc., Box 222, Fort Dodge, Iowa)

something new

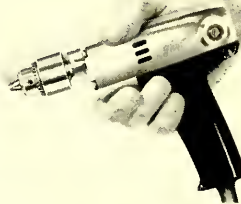


Economy milk tank in four sizes—110, 160, 210, 300 gals. (U. S. Industries, Inc., 250 Park Ave., New York 17, N. Y.)



Plastic feed tub comes in round or square-cornered shapes for calf and horse feeding. (Albers Milling Co.)

"Smallest electric drill ever built" is the claim for this quarter-inch palmful. (Thor Tool Co., Aurora, Ill.)



Wide "Terra Tires" enable the "Desert Rat" and similar vehicles to go where others can't. (Goodyear Rubber Co.)



Instant Fish Bait

This tasty morsel for fish is nothing more than
the young of certain grain beetles.

NOTHING was further from their intentions! USDA researchers were studying how to control a pesky insect. But what did they come up with? Fish bait!—something you can find around granaries, bakeries, or produce in a box.

Mealworms! These are the culprits—or delights—depending on whether you are a fisherman or grain handler. You can find out how to either control them or raise them in a leaflet on mealworms (No. 195) that is available from the Superintendent of Documents, Washington, D. C., (5 cents). Here is how you can go into business:

A wooden box or flat 8 or 10 inches deep, two feet long, and 18 inches wide makes a satisfactory rearing container. Perforating a thin sheet of zinc cut to fit inside the rim of the box and rest on a narrow wooden strip all around makes a suitable lid. This cover can be removed easily and will allow good ventilation.

Fill the box to within about 2 inches of the top with wheat bran containing a little graham flour and commercial meat scrap. Since the worms like moist foodstuffs, add from time to time raw fresh vegetables such as carrots, potatoes, or lettuce. Do not mix these vegetables with the bran, but place them on a thin piece of board or metal laid on top of the bran. This tray can be removed for cleaning. Take care to keep the bran from becoming so moist that molds or mites may develop and ruin the culture. Add fresh bran as needed.

Start the culture by introducing from 500 to 1,000 larvae or beetles, whichever can be obtained. The demand will indicate how many boxes of fresh cultures to start each spring.

Maybe you can supplement your supervised farming income by producing fish bait commercially. It wouldn't take much capital!



"I thought that last soil sample was oily."



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A college scholarship fund for FFA members was their goal. They went over top.

Leave it to Mothers

**Determined push for higher education
gets the backing of an entire community**

FFA MOTHERS are on the march! Just look at what they are doing at Watonga, Oklahoma. In less than a year, what was only an idea for an FFA scholarship is now a reality.

"We decided to do something really worthwhile, not only for our FFA Chapter but for the entire community," says Mrs. Grace Haigler, president of the Watonga FFA Mothers' Club. That

is when the idea of a college scholarship came up.

"Not only did we go over the top on the 1962 quota, but we are well on the way toward next year's goal," she adds.

The scholarship, awarded for the first time to Future Farmer Richard Carter, provides \$500 annually to an FFA member who meets the qualifica-

tions. Next year's candidates have until April 1, 1963, to apply.

Previously, members of the mothers' club were mainly concerned with sponsoring the Watonga FFA banquet. They also provided small gifts for individual accomplishments and gave moral support and encouragement to FFA members.

The new project is much, much bigger. "That's the reason we realized from the start we couldn't do it alone," Mrs. Haigler says. "Its success depends on the support of the entire community."

A questionnaire was the first step. It brought a good response. Interest was high. Then a committee of mothers and business people prepared rules and regulations. Professional advice was obtained from representatives of Oklahoma State University.

One thing the club found necessary was to incorporate. This way donors can subtract their contributions from taxes.

Future Farmers with a grade C average, or better, may apply for the scholarship. At least two years of FFA membership were required for the 1962 award. It will be three in 1963 and four thereafter. The Watonga FFA advisor serves as a nonvoting committee chairman.

How would this idea work in your own FFA Chapter? The Watonga mothers would be happy to share their idea.



THESE new books are reviewed as a reader service. If your local bookstore doesn't have them, write directly to the publisher and mention *The National FUTURE FARMER*.

Camping Maps, U. S. A.; Camping Trips, U. S. A.; Camping Maps, Canada; and Private Camp Grounds, U. S. A. (Camping Maps U. S. A., Box 862, Upper Montclair 18, New Jersey, \$2.95, \$1.00, \$1.00, and \$1.00, respectively)—Glenn and Dale Rhodes (a husband-wife team) have assembled some handy tools for outdoorsmen. *Camping Maps, U. S. A.*, is a spiral-bound book locating over 10,000 campgrounds

throughout the country. *Camping Trips, U. S. A.*, pinpoints campsites along major highways. *Private Campgrounds, U. S. A.*, is a pocket-sized edition, listing privately operated campgrounds state by state.

Projects: SPACE (Science Service, 1719 N Street, N. W., Washington 6, D. C., 45 cents plus 5 cents postage)—This is a full account of America's space activities—up to the moment of John Glenn's dramatic flight. A paperback, it is written by Judith Viorst of Science Service and published by Washington Square Press. The book describes the space shots that have already been launched and those that are coming up in the near future. Readers will find it a timely publication.

The Meat We Eat (The Interstate Printers and Publishers, Inc., Jackson at Van Buren, Danville, Illinois, \$5.50)—Future Farmers who are preparing for meat judging, meat identification, and similar contests can get an assist from this new edition of a book by P. Thomas Ziegler of Pennsylvania State University. It can be used by housewives, too, for it is a handbook on meat

preparation from the feedlot to the table. For 38 years, Professor Ziegler was in charge of slaughtering and meat courses at Penn State.

Oregon At Last! (William Morrow and Company, Inc., 425 Fourth Avenue, New York 16, New York, \$2.95)—This is a story based on historical facts about a boy of 13 who led his brother and sisters across the American wilderness in the 1840's. John Sager wanted to carry out his father's wish—of getting to Oregon—after his parents had died on the trail. It is a story of real heroism, first published in Dutch in the Netherlands. Its author: A. Rutgers van der Loeff.

Public Relations Handbook for Agriculture (Department of Animal Science, Washington State University, Pullman, Washington, \$2.00 plus 4 percent tax)—How to deal with agriculture's No. 1 problem is taken up in this hardback collection of papers given at the Washington State University Stockmen's Short Course. FFA public speakers who choose to speak on public relations for agriculture will find this a good source of information.

History of the Breed



The American Brahman

THE American Brahman, now fourth in importance of the major beef breeds in the United States, is unusual in both appearance and origin. The other three breeds originated in the British Isles and are usually spoken of as British or European breeds. The Brahman was developed in the southern United States by blending several types of cattle from India into a single breed.

A hump on top of the shoulders, longer legs, large pendulous ears, large dewlap or abundance of loose folds of skin under the neck, and distinctive color—these give the Brahman its unusual appearance. Breeders have made remarkable progress in improving the conformation, disposition, and other characteristics. They have retained many of the features of the hardy Indian ancestors.

The Brahman is large in size. Mature bulls weigh from 1,600 to 2,200 pounds and cows from 1,000 to 1,500 in range condition. The calves are small at birth, weighing only 60 to 65 pounds, but grow rapidly.



"My machine's busted . . . will any of you old-timers show me how to milk a cow?"

Brahmans vary in color from a very light gray or red to almost black. The preferred color is a light or medium shade of gray. Mature bulls are normally darker than cows and usually have dark areas on the neck, shoulders, lower thighs, and flanks. Red color is increasing in popularity. White or dark spots on a gray or red background are acceptable, but not popular.

An unusual characteristic of Brahman is their heat tolerance. They do not require shade and will graze or rest in the hottest weather without any apparent discomfort. They are nearly immune to pinkeye, cancer eye, anaplasmosis, tick fever, and several other diseases. They are little affected by insect pests such as ticks, flies, and mosquitoes.

The rise in popularity of the American Brahman has been largely due to its value for crossing with the British breeds to produce a hardy, thrifty range animal. In experiments conducted by the United States Department of Agriculture, crossbreeds have consistently been heavy at all ages.

Brahman cattle now are found in all states of the United States and in 43 other countries. The greatest concentration is in the states bordering the Gulf of Mexico, particularly Texas, Florida, and Louisiana. Cuba ranks next to the United States in numbers, followed by Venezuela, Colombia, and Mexico.

It was in 1924 that the American Brahman Breeders Association was organized. J. W. Sartwell of Houston, Texas, the first secretary, proposed the word "Brahman," and it was adopted. The herd book was established, a standard of excellence adopted, and the secretary began to record and register cattle.

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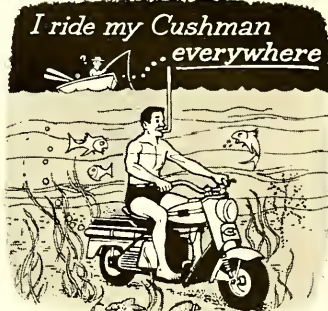


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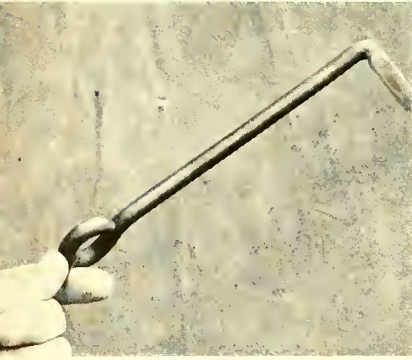
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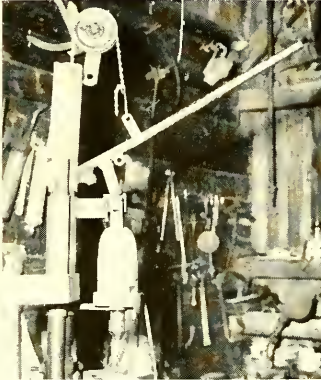
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FARM MADE



Trash weed knife made like gate hook cleans wrapped twine, weeds, vines, and hay from reels or shafts. (patented)

... and handy are these gadgets and improvements on Iowa and Illinois farms! Caught by the eye of the A. M. Wettach camera, they can provide ideas you may want to try on your farm. A little work in the shop, either at home or at school, can make a big difference in appearance or convenience around your house or farmstead.



Electric hand drill mounted in bracket converts it to post drill. Pressure on hand lever pushes the drill down.

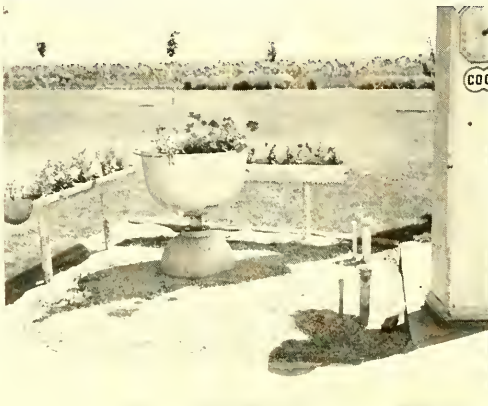


Steel drum, tire rim, stove grate, and four steel legs make a good brazier for backyard barbecues and picnics.

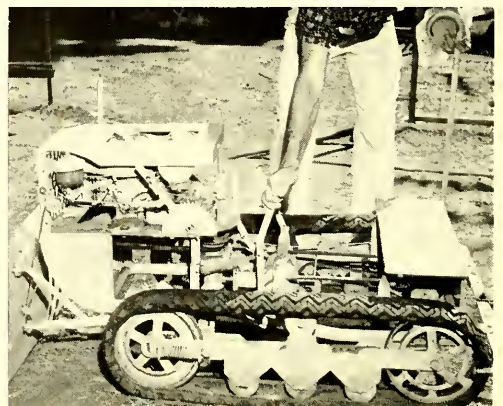


Two-inch pipe buried in concrete makes it possible to remove 1/2-inch clothesline poles when grass needs cutting.

Gas pump area is attractive instead of unsightly through addition of flower boxes made of split range boilers and large iron butchering kettle. Paint job adds extra touch.



Something different in miniature tractors. Odds and ends from around shop make up this model. It can pull a small trailer with light loads, or be used for snowplowing.





Free for You!

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

123—The Camping Blue Book—A gem for campers, this booklet is one that Future Farmers and parents alike will want. If your FFA Chapter goes camping, a copy on a shelf at school also could be helpful. There are stories on gear to take along, how to pack, outdoor cooking, boating, tents, pests, and bad weather tips. (Red Wing Shoes)

124—Farm Structures Planning Guide—If you are thinking about improving or expanding your farmstead, or just considering farming in general, you can use this handy publication. It contains a check list covering many basic factors to consider in planning an efficient farm layout. (Stran-Steel Corp.)

125—Aquathol Bulletin—Are farm pond weed problems bothering you? This booklet pictures and identifies common aquatic plants and tells how to get rid of them. (Pennsalt Chemicals Corp.)

126—Lawn Facts—What some of the experts say about crabgrass is included in this booklet containing various articles about its control. Lawn maintenance practices and chemical control are given special treatment. It'll help you save some back work come next spring. (Diamond Alkali Co.)

127—Do You Have What It Takes To Drive Like A Pro?—Illustrated in color pictures, this is a story about two high school reporters who visit the proving grounds of an automobile company to get a story on good driving. Readers will find their visit with a test driver an interesting one. It also provides information that should help you improve your own driving. (Chrysler Corp.)

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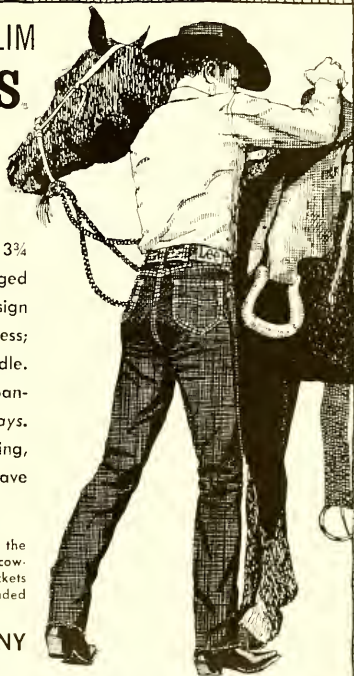
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BRUCE AND BERNARD also invented self-propelled two- and four-row pickers for snap and lima beans, black eyed peas, and cherry peppers. Their inventions are built by Paulson Brothers Industries, Inc., Clear Lake, Wisconsin.



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Two Wisconsins power the machine through V-belt drives. A 12.5-hp AGND operates the picking reels and conveyors. A 9.5-hp vertical-shaft engine powers the separator fan for discharging leaves. Independent power also enables operators to relate reel speed to ground speed, regardless of foliage.

The Wisconsins meet picking requirements with power to spare. They are built for heavy duty with minimum

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Sportrai

By Stan Allen

IT'S THE LAST of the ninth, bases loaded with no outs, in a 1-0 game when the call goes to the bullpen. This is a typical situation facing a relief pitcher. Not many pitchers want this job and consider the relief corps a low spot on a mound staff. And yet, ace reliever of the Pittsburgh Pirates, Roy Face, is considered by many as one of pro baseball's top hurlers.

Elroy Face came up to the major leagues via high school and sandlot ball around Stephenville, New York, his home town. He signed his first pro contract with the Philadelphia Phillies in 1948. Playing with their class D Bradford team in 1949, he posted a fine 14-win, 2-loss record for his first pro season. He had a good 3.32 earned run average (ERA) with 150 strikeouts. In 1950 he had 18 wins against only 5 losses with 150 strikeouts. His 2.58 ERA led the Pony League that year and earned him a ticket to Class A ball when the old Brooklyn Dodgers drafted him.

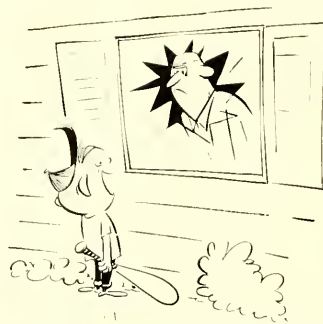
His 23 wins against nine losses led the Western League in '51, and he also posted 171 strikeouts. After another winning season with the Class AA Ft. Worth team in '52, he was drafted by Pittsburgh. This was a break for Roy, as the Pirates were rebuilding their team. He learned his big pitch from Pirates' coach Joe Page, great ex-New York Yankee reliever.

Face had a good fast ball and curve but needed another pitch for a stopper. Page taught him how to throw a fork

ball. This pitch is thrown by holding the non-seamed part of the ball between the middle and index fingers and throwing hard. Page, the last pitcher to use this pitch, was a big 6-foot, 4-inch 210-pounder. It's hard to understand how 5-foot, 8-inch, 150-pound Face can throw a fork ball with his short fingers. Elroy Face has mastered the pitch to become one of baseball's greatest all-time relief pitchers. Roy has appeared in 454 league games in his eight years with the Pirates plus four All-Star and four World Series games. Only three other relief pitchers have appeared in more games and all over a longer period. This doesn't include the countless number of times a reliever warms up but doesn't get called in to pitch.

Roy came up to Forbes Field with the Pirates in 1953 but didn't stick. After a good 12-11 season with New Orleans in '54 he came back to stay. He appeared in 68 games in '56 to lead the league in that department; won 12 and lost 13 and pitched in nine consecutive games over a ten-day period for another Major League record. He worked in 59 games in '57 and 57 games in 1958, starting only one game in '57 which was his last starting role.

He came back in top form in '59 to enjoy one of his best years, appearing in 57 games with 18 wins and only one loss. With his 17th win he had 22 wins in a row, only two away from



"Would you like me to autograph it for you, Mr. Dooley?"



Roy Face
Pittsburgh Pirates' Ace "Fireman"

Carl Hubbell's Major League record. He got 10 of those wins in extra innings. After 34 games Roy had an amazing 0.90 ERA and finished the season with a fine 2.71 ERA. His .947 percentage of games won led the league.

Face contributed 10 wins to the Pirates' league pennant in 1960. He led the league again in games with 68 and had an excellent 2.90 ERA with 72 strikeouts. He ended last season with only six wins against 12 losses but he did save 17 games for the Pirates last year, a statistic not on the record books. In fact, Roy has saved a total of 84 games for the Pirates. He was still Pittsburgh's top "fireman" last year and continued to show his amazing control. At one point he pitched 32½ innings without giving up a walk. He walked only 10 batters in 92 innings pitched during the year.

Many of the experts thought he was reaching the end of the trail after the '61 season, but Roy keeps in good shape and his arm strong during the off season working as a carpenter. He is off to a good start this season, ranking fifth in National League pitching with four wins against one loss. He appeared in both ends of a double header against the Milwaukee Braves on June 10th in relief—Pittsburgh won both games. Roy Face did not get either victory, but he did help save both wins. This is the role of a "fireman" in relief—a role Elroy Face plays well.

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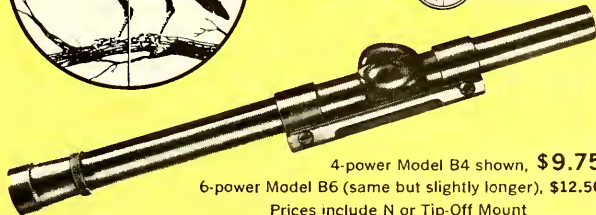
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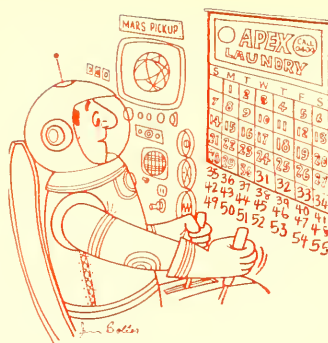


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Time On Mars

FIFTY-FIVE days hath September, March, June, and December . . . when you are keeping time on Mars!

Hours and days, as well as months and years, have different meanings on Mars. A day is 2.7 percent longer. And since this planet is about 1½ times as far from the sun, it takes nearly twice as long for it to orbit around the sun. That is why there are about 687 Earth days, or 668.6 Mars days in one Mars year.

All months but March, June, September, and December have 56 days. In Leap Year (yes, Mars has them, too!) December gets the extra day. However, a day is added every three out of five years instead of one out of four.

Because of the time differences, you would have to be able to determine the time both on Mars and Earth. The world's first interplanetary timepiece, however—the Hamilton Space Clock—already has made this possible. It was invented by Dr. I. M. Levitt, director of the Franklin Institute's Fels Planetarium in Philadelphia.

A journey to Mars should last about 260 days. During this period you would only be able to judge day and night by

watches. In space the sun always shines.

When the space timekeeper shows five days have passed, you will have traveled almost a million miles. The Earth will appear small. Seventy days later there will be a spectacular sight. You will see the Earth and its moon visible against a flaming background of the sun. There will be plenty of time to look, for the transit time is eight hours. But you must use dark-colored glasses.

When you are about four Earth months and 40 million miles from home, you will still be receiving radio broadcasts, beamed by a special transmitter from one of the space stations orbiting the Earth. Meanwhile, you may be eating some kind of special lightweight food—probably Algae—that fellow Future Farmers were just beginning to talk about back in 1962.

Ten days before your space ship is close enough to be captured by the gravitational pull of Mars, you will be busy unloading unnecessary cargo and carefully calculating rate of speed. And 24 hours before the ship enters an orbit around Mars, you may look out a port-hole and see the planet—now a huge, varicolored disk which seems four times the size of the sun.

Soon you start descending into Mars's atmosphere . . . and speed is reduced to 120 miles per hour. The heavy craft touches down and grinds to a halt. You step out in your pressurized suit and literally float to the surface . . . the gravitational pull is so weak!

Once our pioneers begin functioning on Mars time, a young man who would have reached that wonderful age of 21 on Earth will theoretically find himself age 11½ again. If you only worked from nine to five on your farm, you would put in an extra 12 minutes a day on Mars. But . . . your two-week Mars vacation would last four Earth weeks.

The modern study of space, though it delightfully teases the imagination, is a serious business. It will one day actually help to send our first adventurer to Mars . . . and bring him home!



"For goodness' sake, Mom! You act like you've never heard of the space age!"



Whole family gathered for a portrait. That's the nucleus at right, her youngest at left. The owner is a proud Future Farmer—naturally.

The Story of Ernie and Susie

WHATEVER personal effort is involved when you earn the coveted American Farmer Degree, there are always others who contribute in some way . . . parents, advisor, and friends. For Ernie Kuhlman, North Platte, Nebraska, add the name of "Susie." Without Susie, Ernie might still be working toward the degree.

You may have guessed it! She's a cow—a registered Polled Hereford. Ernie bought Susie 56 while a Green Hand in the FFA. His American Farmer Degree application lists her again—still a part of the herd.

She is over seven years old now and has been responsible for a large part of Ernie's increase in inventory. She also has been instrumental in helping Ernie select his means of livelihood—the highly competitive "purebred" business.

Now, look at some of the other things Susie has helped Ernie accomplish. He has exhibited four grand champions in the FFA division of the Nebraska State Fair. He is a past winner of the state FFA gold medal Beef Showmanship Award. In addition, he has shown cattle in many other states, including such shows as the American Royal in Kansas City, the International at Chicago, Denver Stock Show, the National Golden Spike Show at Ogden, and the Arizona National.

As a veteran showman, Ernie feels the modern beef breeder needs to exhibit to keep up to date with improvements which are taking place. He believes competition is one of the biggest incentives toward improvement of cattle. Shows provide selling opportunities, too.

Among Ernie's top sales have been an eight-month-old bull calf, named

Diamond Ace, which sold for \$1,400 and a yearling bull which brought \$2,000. His particular pride and joy is a yearling bull, still in the herd, named Dynamic.

Ernie sees a good future in beef breeding. Of all the factors for success, he regards quality as the most important. He realizes that purchasers will buy with one primary purpose in mind—upgrading their herds.

No cattleman has a greater responsibility to the cattle industry than the breeder of registered animals, Ernie believes. Commercial cattlemen must have a constantly improving source of seedstock if they are to actually upgrade their cattle. That is where he sees his own future.



Ernie believes this bull calf is the kind it takes for a good herd sire.

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The First One Doesn't Have A Chance!

"Have you heard about the farmer who dressed his scarecrow in a tuxedo?"

"How did it work?"

"It didn't protect the corn, but it attracted a better class of crows."

Ernest Estes
Statesville, North Carolina

Brother: "I asked you not to tell Mom what time I got in last night!"

Sister: "I didn't. I just said I was too busy getting breakfast to notice the clock."

Elmer Seeman, Jr.
Wolsey, South Dakota

A farmer hung a new painting first one way, then another. Each time the effect was confusing. Finally his wife asked, "What in the world is that supposed to be?"

"Why," he said, "it's a realistic picture of the farm situation. No matter how you look at it, it just doesn't make sense."

Johnny Sherrer
Bay City, Texas

A western farmer with a lantern in his hand shook his hired man before daylight. "Wake up!" he said. "We've got to start cutting oats."

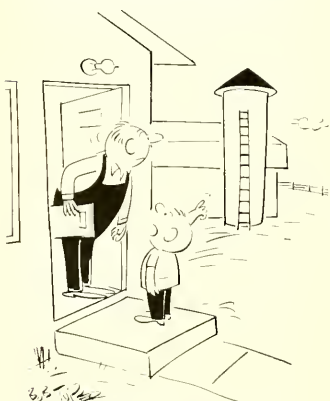
The hired man pried his eyes open and replied, "Are they wild oats that we have to sneak up on them in the dark?"

T. A. Dimock
Willowdale, Ontario

"Do you know that a grasshopper can jump 100 times its own length?"

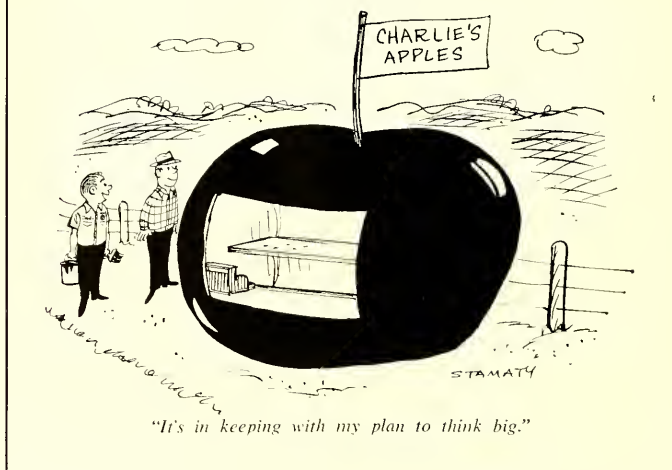
"No, but I've seen a wasp lift a 200-pound man three feet."

Peter Pail
Lena, Wisconsin



"What time does your rocket ship blast off, Mister?"

Charlie, the Green Hand



Every day Mr. Jones's secretary was 15 minutes late. Then one day she slid snugly into place only five minutes tardy.

"Well," said Mr. Jones. "This is the earliest you've ever been late."

James Powell
Wadley, Alabama

A Texas GI, playing poker with some English soldiers, drew four aces.

"One pound," ventured the Englishman on his right.

"I don't know how you-all count your money," drawled the Texan. "but I'll raise you a ton."

Ellis Goodson
McAlester, Oklahoma

Drivers of small cars have to make quick decisions . . . like which tailpipe to go up when the truck ahead of them makes a sudden turn.

Steve Erickson
Westboro, Missouri

Policeman (to man on roof, ready to jump): "Think of your mother and family."

Man: "Don't have any."

Policeman: "Think of your girl."

Man: "I hate women!"

Policeman: "Well, think of Robert E. Lee."

Man: "Who's he?"

Policeman: "Go ahead and jump, you Yankee!"

Helen Kuykendall
Waverly, Iowa

Time had come for Bill Smith and his family to go home after a visit in New York, so Smith called a cab.

"How much to take the whole family to the station?" Smith asked.

The cabbie, knowing he was up against a bargain hunter, replied: "It'll be \$2 each for yourself and your wife and the four kids, of course, can all ride free."

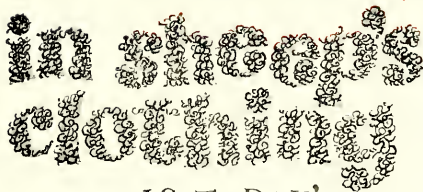
Turning to the children, Smith directed: "Pile in kids, your Ma and I will go by subway."

Larry Ray
Lewisburg, Tennessee



"Come right in—the refrigerator is waiting for you."

A WOLF



IS TODAY'S "WORLD-VIEW" PHILOSOPHY of EDUCATION

Satanic and subversive philosophies often hide behind what seem to be good motives.

On the basis of "world understanding" and "unity," radical educators say we should rewrite our textbooks to get rid of the "narrow," nationalistic approach—in other words, old-fashioned American patriotism and pride in our country and its heritage are taboo or passé in a shrinking world.

These educators are betraying the patriots who died for America. By cutting Americanism from the character of today's youth, the step to enslavement is an easy one.

The "World's Most Unusual University" actively opposes this destructive philosophy. Bob Jones University sends out Christian leaders proud of their national heritage, aggressively patriotic, and loyal to the principles that have made the United States a great nation.

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HAND CLUTCH



**this
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works
for you
four ways...**

- 1 It gives you on-the-go shifting between low and high range.
- 2 It provides for live PTO.
- 3 It permits full regulation of forward travel speed. This is especially helpful for PTO operation in changing crop and ground conditions.
- 4 It gives hand-clutch convenience for stopping and starting.

This hand clutch is actually a Power Director. It is oil-smooth and oil-cooled. It is built for full-duty use. You control forward travel from a creep up to full gear speed. You shift on-the-go as needed . . . down to low range with 42 percent more pull, up to high range with 42 percent more speed. See and feel the difference Power Director makes with machines like these.



D-15 TRACTOR AND 50 FORAGE HARVESTER — Match your ground speed to heavy or light crop stand exactly. Keep the forage wagon filling at a continuous rate. For ensiling or green feeding, the hand clutch gives you complete control over delivery at the silo or feedlot.

D-19 TRACTOR AND NEW 190 CORN PICKER — Capacity where it counts to boost corn-handling ability in heavy yields — 3 gathering chains per row, aggressive new snapping rolls, new rotary feeders. And with the hand clutch you keep rolling steadily at the right speed for every variation in stand, ears, or condition of the crop.

D-15 TRACTOR AND 172-T ROTARY MOWER — Chop all kinds of stalks and crop residue thoroughly and rapidly. Cut down tree-sized brush, dense undergrowth and weeds. You can move the hand clutch to neutral and ease ahead by feel in heavy going.

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