

The National


June-July, 1975

# Future Farmer

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The National  
**Future Farmer**  
Owned and Published by the Future Farmers of America

Volume 23 Number 5  
June-July, 1975



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## A Word With The Editor

### A November Convention

There is something new in FFA this year, a National Convention in November. Well, it is not really new. There have been several National FFA Conventions in November before but not in recent years. Some people have voiced an objection to the new dates but there are reasons for the change.

The shift in dates for 1975 from October to November 11-14 was made because of a change in dates of the American Royal Livestock Show. The FFA depends upon the American Royal for its cattle for the judging contests, much of its entertainment, personnel and other assistance. When the Royal was moved to November the FFA Convention was moved to coincide with it. The Board of Directors plans to study the effect of the change and its future implications for 1976, so let's give the new dates a fair trial this year; then let us have your opinion.

### Our Bicentennial Year

The countdown has started. Are you ready?

Like the old game of "Hide and Seek" ready or not, here it comes. Our Bicentennial year, 1976, is just a few months away. We would like to share your Bicentennial—FFA activities with other FFA members and advisors. A special page in each issue will be used for this purpose. Tell us what your chapter is doing to celebrate. Just write it up, enclose pictures if you have any, and send it to Box 15130, Alexandria, Virginia 22309. Let everyone know the FFA is building on its proud heritage.

*Wilson Carnes*

### Dr. William T. Spanton

One of the founders of FFA and the man who held the post of National Advisor longer than any other individual died May 16 after a long illness at Fairview Southdale Hospital in Minneapolis. Dr. Spanton was Advisor from 1941 until his retirement in 1961. His career in agricultural education spanned 46 years, 37 of which were on the national level. An article about his contributions to the FFA will appear in the next issue.

## In This Issue

Thrust '75 .....	10	Machinery in 1980 .....	34
Bringing Home a Winner .....	14	Principal is a Speedster .....	38
Tooling Up .....	15	Putting Ag Energy into Focus .....	40
Learning and Earning .....	16	Flying High in Nevada .....	46
State President Survey .....	18	<b>In Every Issue</b>	
How a Show Can Grow .....	24	Looking Ahead .....	6
Charged Up .....	26	News in Brief .....	8
Home Sweet Home .....	27	From the Mailbag .....	10
A Truckin' Business .....	28	Something New .....	37
The Trend to Diesels .....	29	Chapter Scoop .....	44
Play It Safe .....	32	FFA in Action .....	50
		The Joke Page .....	56

### The Cover

How can young people earn an honest dollar in an era of mounting national unemployment? One bit of advice might be do what you do best. For Pat Larson

that means working with horses. He helps his father train horses for others who seek a quicker and more elusive jackpot. (See story Page 14.)

*Cover photo by Gary Bye*

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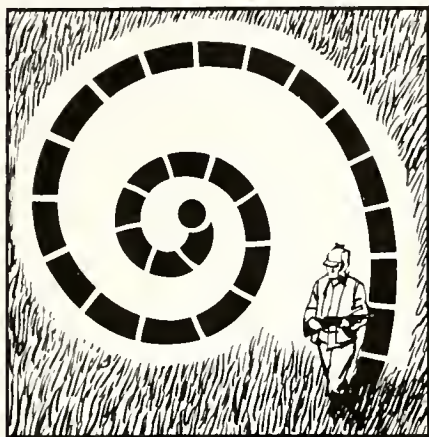
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H. G. TAPPLY, Editor—Field & Stream

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# Looking Ahead

## Agriculture

**AG GRADS IN DEMAND**—Continued strong demand for graduates of agricultural colleges in the Midwest, during 1974, resulted in a 6.5 percent increase in average starting salaries as compared with a year earlier. More than 94.6 percent of those graduating were able to find employment, according to a placement survey of 14 midwest colleges. The survey included colleges which graduated 4,987 students with B.S. degrees. Strongest demands for graduates continued in the areas of agricultural business, high school vocational agriculture teaching, agronomy and food science.

**THE GARDEN BOOM**—The boom in community gardening of 1973 and '74 is definitely not a passing fad. A recent Gallup Poll finds that one out of ten American households maintained a vegetable garden away from their home in 1974. Forty percent were first-time gardeners and Gallup predicts their number will double in 1975 if land is available. The poll revealed that 18,000,000 people would garden if land was available for community gardening.

**ANIMAL WASTE FOR FEED**—Recovering nutrients from animal manure can alleviate waste disposal problems, cut livestock production cost, increase supplies of available proteins and conserve natural resources, according to a USDA staff scientist at the recently held International Symposium on Livestock Wastes. "Of all concepts for utilization of animal wastes the recovery of nutrients for feeding to animals appears to be the highest value use for which a practicable technology exists." Processes now available for treating animal wastes includes dehydration and pelleting, ensiling and fermentation or other biological techniques.

**GRAVEL HELPS GROWTH**—Ordinary gravel may be used one day to transform barren prairies into crop-producing land. Recent tests have shown that a mulch of gravel on bare soil increases crop yields by reducing soil water evaporation and increasing soil temperature. The mulch may enable crop production in semi-arid lands that are now uncultivated and stabilize crop yields where crop yields in dry lands where irrigation water is scarce.

**NET FARM INCOMES DROP**—Realized net income from farming will be down this year, according to Secretary of Agriculture Earl L. Butz. He said realized net income for 1975 would total around \$20 billion. That's down about 25 percent from the 1974 total, 37 percent below the record 1973 net but still the third highest in history.

**FARM NUMBERS STABLE**—The number of farms in the U.S. during 1974 was 2,830,000, only slightly fewer than the year earlier total of 2,844,000. The preliminary estimate for 1975 is 2,819,000. Total land in farms changed little, off less than 1 percent in 1974 to 1,088 million acres. Another similar size decline is expected this year.

**FARM SIZE EXPANDS SLIGHTLY**—The average size of farms continues to grow but at a smaller rate than during the past decade. The 1974 average of 384 acres was one acre larger than in 1973 and 52 more than 10 years earlier. A one acre increase is expected this year.

**PRODUCTION TO BE CONCENTRATED BY 1980**—Dairy farms, herds and cows are becoming more concentrated in the United States according to a University of Wisconsin economist. He predicts that today's leading milk producing states—Wisconsin, California, New York, Minnesota and Pennsylvania will be joined by Texas, Washington, Vermont, Florida, Idaho, South Dakota, Maryland and Louisiana as the top 13 dairy producing states by 1980. Fewer cows are producing more milk. The preliminary estimate for 1974 milk production is 114,857 million pounds, .7 percent less than the 1973 total. Milk production per cow was 810 pounds compared with 800 a year earlier.

**DID YOU KNOW?**—According to estimates from the U.S. Department of Transportation, you are paying slightly less than 16 cents or slightly over 11 cents per mile when you drive your car, depending on whether it's a standard or subcompact size vehicle. Over a ten year or 100,000 mile life span, costs are \$15,892 for the average standard-size car.



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# News in Brief

## The FFA

**MEMBERSHIP RECORD SET**—Figures from the National FFA Center indicate that on May 1, the final day for submitting new FFA members, the membership count stood at over 481,000 FFA members. The figure set an all time record, surpassing last year's final count of 465,180. The official count for 1974-75 will be announced following final processing of all memberships.

**REVEALING QUESTIONNAIRE**—An article seen in *Successful Farming* magazine noted the results of a recent survey they ran. The questions were "Do you believe a college education will make your son or other young relative a better farmer? Do you believe 4-H or FFA will make him a better farmer?" To the first question 60 percent answered yes; to the second, 80 percent. The implication *Successful Farming* drew: "Many farmers think 4-H and FFA a better training ground for prospective young farmers than college. Meaning that they probably place more stock in learning by doing than learning by reading."

**MORE DRIVE IN '75**—Is this year's FFA Alumni membership campaign theme. The goal—to have at least one Legion of Merit Citation recipient from each FFA chapter before the National FFA Convention. Mailings of campaign materials have been made to each FFA chapter. For every 500 active FFA Alumni members in your state, the National FFA Alumni Association will provide one Leadership Scholarship to the state covering full registration and enrollment fees for an FFA member to attend the Washington Conference Program this summer.

**NEW ITEMS AVAILABLE**—The FFA Supply Service introduced several new items this spring. Among the items introduced were an insulated vest, a pull-apart key tag and a money-clip with knife and nailfile. The new items were listed on a flier recently sent to FFA chapters. Also on the flier are the popular FFA caps and a reminder that the FFA Supply Service has gift certificates in \$15, \$25, \$50, and \$100 denominations.

**HUNTING AND FISHING DAY**—September 27 is National Hunting and Fishing Day, according to National FFA Executive Secretary Wm. Paul Gray who serves on the NHFD Steering Committee. The endeavor calls attention to conservation and wise use of the nation's abundant wildlife resources. For information on National Hunting and Fishing Day contact the National Hunting and Fishing Day Committee, 1075 Post Road, Riverside, Connecticut 06878.

**TURKEY FEDERATION AWARDS**—The National Turkey Federation has awards available to youth active in the turkey industry. Winners are selected by state turkey associations for competition in the national award program. Deadline date for entries is December 4, 1975. National winners receive an all-expense paid trip to the National Turkey Federation Convention on January 7-9 and a \$500 scholarship. Contact your state turkey association or the National Turkey Federation, Reston International Center, Suite 302, Reston, Virginia 22091.

**DAIRY TEAM TO TRAVEL**—Members of the winning national FFA dairy judging team will compete in international competition in Europe this summer. The team from San Luis Obispo, California, will leave July 6 and return July 27. In addition to competing in the International Dairy Stock Judging Contest in Wales, members will also visit the isles of Guernsey and Jersey, plus several European countries.

**WASHINGTON CONFERENCE PROGRAM**—Close to 700 FFA chapter and state officers from all over the United States will spend a week in Washington this summer attending one of seven leadership conferences operated by the National FFA Organization. The function of the conferences is to develop leader confidence and skills. Participants also meet important national leaders in agriculture and FFA plus visit historical sites and their National Center.



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# From the Mailbag

## Readers Report

### Lancaster, Wisconsin

You have been wasting your money for years. Whenever there are two, three or more FFA boys in one family why have you no way of mailing just one copy per family?

You better get checking on this with the schools because I've heard families complain of the same thing. No one can stand wasting money—specially farmers.

The magazine could have articles on farm pricing their products. The FFA could include teaching the boys the injustice to farmers on consumer demands of cheap prices and how the government seems to listen to consumers. Agriculture is beginning to say, "Look here, we are the country's largest consumer and 40 percent of all jobs are ag-oriented."

What's the use of playing up FFA when farming is a go-broke occupation?

Wake up FFA! Why are you heading interested boys into a fruitless love of farming and they don't know the why or how of farm pricing?

I'll be watching to see if we get only one copy next time and would appreciate any reply concerning my letter.

*Mrs. Mary Frederick*

It was thoughtful of you to write and suggest that we could save money by sending only one copy of the FFA magazine to families that have two or more children in the FFA. There is a way of doing this but the local chapter must exercise this option when they send in the membership, otherwise we have no way of knowing that is the way they want to handle it. The situation is that the organization has ruled that every member who pays national dues is entitled to a one-year subscription to the national FFA magazine. In families with two or more members, they can send the extra magazines to someone else but they are entitled to receive them. Our problem is that in many families each member wants to receive his own magazine and the idea you suggest is not acceptable to them. Therefore, we have no way of knowing unless the parents can make their wishes known to the local advisor and he in turn can request that only one magazine go to the family and that the extra magazine be sent to someone else which the local chapter should designate.—Ed.

### Oneida, New York

I am a girl 14 years of age. I was wondering if you have any information on farming. I plan on being a farmer. Any information you can give me will be appreciated.

If you were wondering where I received your address, I obtained it from my school guidance office.

*Julie Colvin*

### Absarokee, Montana

Thank you for the attractive binder for my Future Farmer magazines. It's always a pleasure to receive a magazine from a respected, up-and-coming organization

like the FFA.

The articles are informative and educational. The binder will help me keep these magazines in good condition for future reference.

*Norman Herem*

The binder was a prize in a recent Cartoon Caption Contest in the magazine.—Ed.

### Studio City, California

Being a writer and senior citizen, I find myself urgently needing the help of your readers to write about the tree pawpaw (*asimina triloba*). I need some seeds of this plant for testing and experiment.

I have tried the seed firms without results—they cannot supply. Any information about these plants, their history or seeds will be appreciated. (Send to: 12207 Moorpark St., Studio City.)

*James D. Volts*

### Marion, Kentucky

Received April-May issue of the magazine. Read same and enjoyed it very much. Find it most instructive and helpful.

I realize the great accomplishments and advancements of farmers as I was born in April, 1893. Have seen crop yields advanced threefold or more. I attribute this advancement to the members of FFA. Were it not for these efforts more people would no doubt be hungry.

I also see more advancement, more know-how and larger yields to come from these same sources, for which I am indeed thankful.

Have been honored by local Crittenden County Chapter on several occasions.

Wishing your magazine and the FFA organization everywhere God's speed.

*R. W. Croft (Retired)*

### New Auburn, Wisconsin

I really liked your article on compound bows in the April-May, 1975, issue. My uncle holds the top score in the state of Wisconsin now.

This is my first year in FFA, but I like it and I'm glad I get our magazine.

*Steve Butterfield*

THRUST  
75



Nearly 2,500 vocational agriculture and FFA leaders attended Thrust 75.

THE first phase of "Thrust '75" has been completed. Thirty-five two-day workshops were held throughout the nation and Puerto Rico. From all initial comments the sessions were well received.

National and state staff and FFA officers were involved as were high school and university instructors of agriculture education.

If you were in attendance, you probably were impressed with the array of new materials and audio-

visuals being made available. They will serve as important tools for promoting the use of FFA as part of the instruction program in vocational agriculture/agribusiness.

Now the very important task of disseminating the information and materials and putting it to real use has been handed to all those persons who attended Thrust '75 meetings.

The true test of how successful Thrust '75 is will be determined by the extent to which the original goals are met. Among those, the expansion of use of the FFA by vo-ag instructors preparing students for careers in agriculture, the increased student participation and involvement in FFA activities designed to be part of the instructional program, and extending FFA membership to include all students enrolled in vocational agriculture.

Hopefully through this cooperative effort we not only will obtain those goals but also FFA will continue to be the youth pace setter of today.

Several new "how to" publications and audio-visuals were introduced.





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# BRINGING HOME A WINNER

**W**HAT does a teenage jockey, a high school's most valuable wrestler, an honor roll student and the high scoring individual in the national FFA agriculture mechanics contest have in common?

Just a lot of hustle and desire in the person of Pat Larson of the Santa Rosa, California, FFA Chapter. He's done all those things.

"Horses have been my life," says Pat, who is the son of a professional horse trainer. "I started riding professionally as a bug boy (a jockey apprentice) at 15. In two years I rode in 30 races and even won three of them," he claims. "Then I got too big, so now I'm a gallop boy."

Pat rides daily, exercising horses be-

fore school for their trainers. He can ride up to eight horses a day at \$3 a horse or up to \$5 for rank (ill-tempered) horses. It also serves as part of his FFA agribusiness project.

The money he earns will go for his college education along with the college scholarship he hopes to acquire for his wrestling skills. During his high school wrestling career he compiled a record of 77-13 and was 35-3 last year. As a result he became the first wrestler ever from Santa Rosa to participate in the California State wrestling championships. All the while he maintained his 3.5 grade point average.

The agricultural mechanics team is where Pat really gets serious. After failing to make the team (opposite page) as

a sophomore he decided to prove he could be the best. Last year at Kansas City he did just that placing as the high point contestant and leading his team to a second place ranking in the national contest.

Pat says the training comes in handy around the horse ranch when things need repaired or constructed. He hopes to build on that training by working toward a college degree in some field of mechanics. He would also like to become a champion wrestler and later in life he might like to get back into the horse business as a trainer.

That sounds like a pretty tall order, until you look at his track record. Then you'd have to rate the odds better than a long shot that he can do it all.





**"T**HESE contests are not a fun thing. It's a pressure situation. And the people that can handle the pressure during that period of time will come out on top."

The words are Mr. Jim Carter's, agriculture mechanics instructor from Santa Rosa High School in California. Carter is coaching the FFA chapter's agriculture mechanics team. Last year his charges placed second in national competition and this year's team would like to improve on that record.

"First, of course, it's necessary to win the state contest and that's no easy task. The state contest usually draws up to 40 teams, many of which have already competed in a number of chapter and college sponsored contests held throughout the state," says Carter.

California has had an agriculture mechanics contest for at least 20 years and it is one of the more popular competitions in the state. This, despite the fact that such competition began on the national level only three years ago.

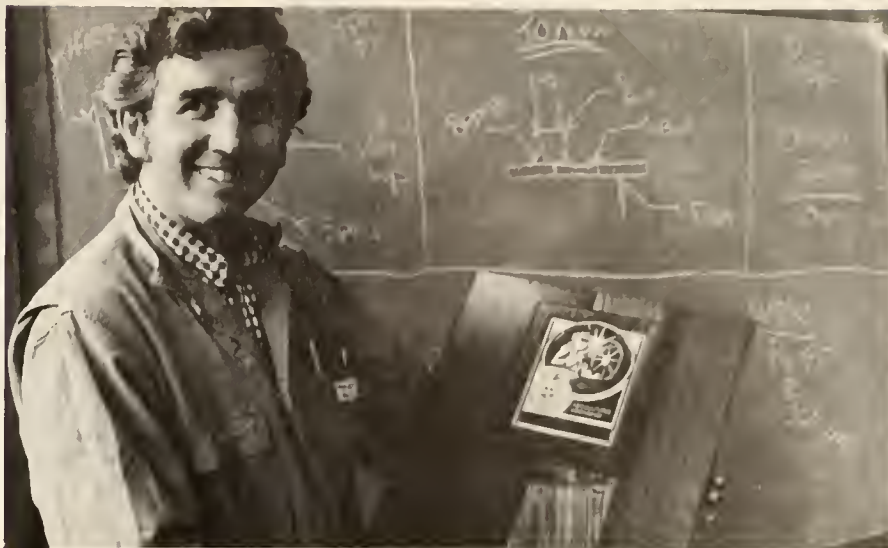
The Santa Rosa team takes the challenge seriously. Carter says winning and losing is not important to some people but he reasons that with the value of time today, his team of hopefuls which practices six to eight hours a week had better be working for a win.

The basic skill training necessary to compete in the contest is taught in the agriculture curriculum, but the study and practice that makes a team a winner takes place after school. Also with individual study at home.

Training begins early in October with a broad look at all segments of the contest by FFA members trying out for

## Tooling Up

Number two tries harder says Santa Rosa's ag mechanics team as they prepare for this year's contests.



Mr. Carter displays chapter plaque used to provide incentive for team hopefuls.

the team. When the team starts traveling, the number is narrowed down to six. "By then we've covered just about everything that might be in a contest. The boys might not be good at it but at least they have a general knowledge of the subject," notes the coach. Finally two weeks before a contest the team zeroes in on particular skills.

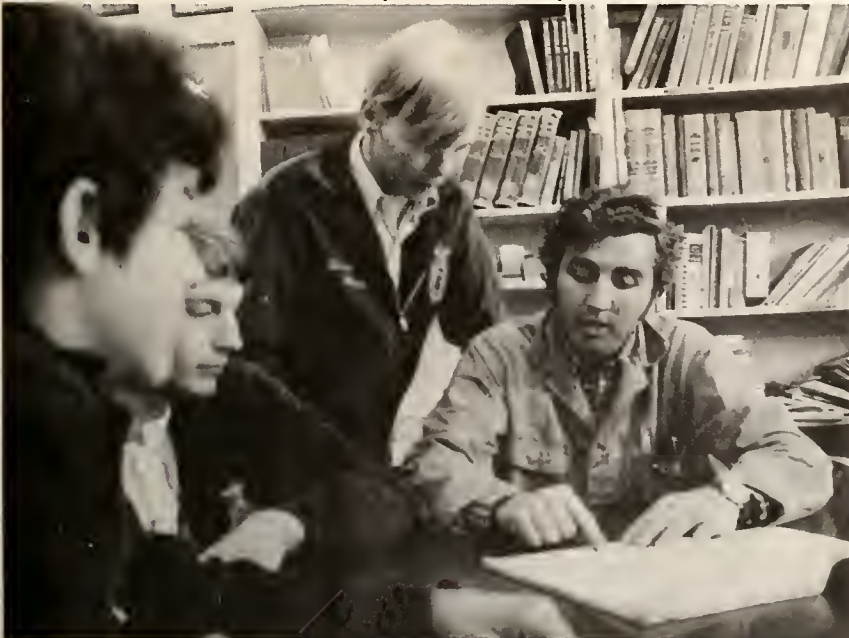
Prior to the state event, a mock contest is held for the team candidates to

see who will represent the school. Just as in the actual situation the students must demonstrate skills in metal and wood construction, electricity, fencing, rope work, problem solving and a number of related skills.

After the completion of each contest the team likes to take advantage of the opportunity to improve its skills and understanding by reviewing each

*(Continued on Page 16)*

Team training involves skull sessions to improve problem solving skills. Last year's winning team included Andy Martinez, Cary Hawkins, and Pat Larson.



Past members assist in preparing new team by demonstrating necessary contest skills.





## Tooling Up

(Continued from Page 15)

contest area, with the judges if possible, to pick up any pointers that might help them later on.

The system seems to work. Carter has coached four teams at Santa Rosa. They started in 1971 with a ninth place finish, a third place the following year and for the last two years his team has placed first and won the trip to Kansas City to represent their state in the national contest sponsored by the Firestone Tire and Rubber Company.

"There is a lot of team pride now," says Carter, sounding as much like a football coach as an ag mechanics teacher. "Last year's team is already involved in training this year's team. For example, if one of the new team members is having trouble with the horizontal weld, they'll show up to give some special help to that student. We've developed the pride to where everybody is interested in the team, past, present, and future and that keeps the members psyched up."

As per design the contest has some added benefits for the students who develop their talents to a winning level. "They have the skills to do a lot of things," Carter points out. "The skills are usable whether it's in an occupation or just around the home."

Pat Larson, a team member last year concurs. "Welding, for example, is something you need. There are so many things you can do with it throughout life. You can save yourself a lot of money and even make a little extra once in a while."

"That's where I make my extra money now," chimes in Carl Hawkins, another past team member and candidate for California's agriculture mechanization proficiency award winner. "My father hires me to weld for him in his farm machinery business."

The mechanics classes also put out a lot of usable projects. Despite the predominantly urban makeup of the students who have no farm facilities at home all students get some practical experience in project construction by contracting with individuals in the community to construct projects for them.

Special emphasis is given to safety training for all members of the class. Six weeks of instruction is given on the subject and a special sectional contest sponsored by the local farm bureau is hosted by the Santa Rosa Chapter. Setting up and running the safety contest is left entirely up to the students.

Whether this year's new team can duplicate the success of the '74 team is yet to be seen, but you can almost be sure they'll be in the running.

# Learning and Earning

The chapter combines skill training with money making as they construct portable greenhouses.

By L. J. Emerson

"YES, we sell greenhouses," answered Mr. Bill Thompson, vo-ag instructor at Burlington-Edison High School in Burlington, Washington. "I can't promise a delivery date but I will add your name to the 13 others on our present order list if you are still interested."

"Definitely," comes the voice on the other end of the line. "I've seen the one my neighbor purchased from you and I think it is great!"

"Thank you for your call and one of the students will be contacting you as soon as a greenhouse is available," Thompson says as he hangs up the phone and adds another name to the growing list of orders.

Just how did this chapter of Future Farmers of America get involved in constructing and selling greenhouses? It all started when students in Thompson's classes, decided they would like to have some small, portable greenhouses.

Thompson obtained plans of several different types of greenhouses but didn't find what he felt met the needs of his students. So he designed his own 8 feet

by 12 feet portable greenhouse. His plans are so complete and well done that the students can do all of the construction work with very little supervision of adult help. The self-contained unit is 7 feet 8 inches from the floor to the peaked roof and is covered with a clear corrugated fiberglass.

The finished product includes a heating unit, ventilation system, plus lighting and an outlet. Wood used in construction is treated with a copper naphthenate wood preservative and foam strips are used wherever fiberglassing is attached to form a tight seal with the frame. The entire unit plus delivery is sold for \$300.

The FFA chapter finances the project by using chapter funds to purchase the required materials for construction. Profits from greenhouse sales are put back into the chapter treasury for later use.

Students from Thompson's other classes as well as from Mr. Walt Schuh's classes are involved in the planning, distribution and record keeping requirements of the project. Mr. Schuh is the other vo-ag instructor in the Burlington-

Wiring is an important skill learned in construction of the greenhouse.







FFA members make an inspection visit to one of the greenhouses they sold.

Edison vocational agriculture program.

The actual construction of the greenhouses is done in the vo-ag shop. Most of the work this year is being done by selected vo-ag students. But other shop students help with the construction when they have time off from their other projects being built in the shop.

When a greenhouse is ready for sale, FFA members dealing with the distribution phase of the project take over. The person whose name is on the top of the waiting list is contacted and a delivery time and place are arranged. Thompson says, "Part of the success of the project is due to the free service that is provided to the purchaser after delivery. We assist by providing horticultural information they may need or help in selecting plants."

Why are people willing to wait for up to a year to get one of the greenhouses? Thompson explains, "We have a product that is very functional and it

is of good quality. At this stage of the project we are striving for quality in our product rather than quantity and people are willing to wait for a quality product."

People in the area became aware of these greenhouses when the FFA chapter put one on display at a local shopping mall the last two years during Vocational Education Week. During National FFA WEEK an article, along with a picture of the greenhouse was published in the local newspaper.

When asked about exhibiting one at the fair, Thompson said, "All the completed units are sold as soon as constructed so none have been available at fair time. We tentatively plan to construct one in the summer to be shown and sold at the fair."

Eight units were constructed and sold during last year. Most of these have gone to people living outside the school district. So far this year two have been

sold with two more near completion. Plans are for four completed units by the end of the school year.

Most of the ones sold have gone to older people who use them to supplement their existing gardening operations. One or two have been built by students for their own use. Mr. Jerry Dickson, one of the satisfied customers who lives in the neighboring town of Sedro Woolley, enjoys having students stop by to see what he is doing with his greenhouse. He is an avid gardener with great knowledge to share with students. When leaving his home one day a student was overheard saying, "I'm going to come back here some time after school and talk with Mr. Dickson, he really knows what is going on."

Like all new projects, some bugs needed to be ironed out in the beginning. Bugs weren't the main concern in this case, it was birds. While driving down the road delivering their first greenhouse which was covered with plastic, Thompson became concerned with the birds that zipped past the window of the pickup. Luckily they reached their destination without having any birds or other object puncture the thin greenhouse covering.

After this episode it was decided that if this unit was portable and likely to be moved around, it would be better to have a fiberglass cover. This not only eliminated the possibility of birds flying through but adds strength to the structure. The greenhouse is still light enough to be carried easily by four students.

Through this project, students learn construction techniques; are able to put record keeping practices to use; become aware of the techniques involved in planning, selling and distributing a product; and most important of all, learn to take pride in a job well done.

Greenhouse plans are available for \$1.00 through the Vocational Curriculum Management Center, Coordinating Council of Occupational Education, Olympia, Washington 98504.

Precision work is a must in greenhouse.

The greenhouse provides an excellent place for starting new garden plants.





# State President Survey

Some little known facts about some well known people—your state FFA presidents.

Usually we know a lot about the FFA background of state presidents. They did pretty well in FFA, else they would not be state presidents. But most of the time we don't know much more than that so we asked them to tell us something about themselves by sending each a questionnaire. The questions and answers are given here. The percentages are rounded out to the nearest whole number and are based on the number of returns (35) received at cut-off date.

**Question:** Name the American you admire most.

**Answer:** President Ford was number one with 14% of the returns naming him. Runner-up was President Lincoln with 11%. Next, with 6% were Harry Truman and "my father." (Isn't that great?) Others, named at least once are: Henry Kissinger, Neil Armstrong, my vo-ag instructor, Alpha Trivette, Thomas Jefferson, George Washington, George Wallace, John Wooden, Johnny Cash, Ralph Nader, John Wayne, Jack McCann, Benjamin Franklin, Alexander Graham Bell, Lowell Lundstrom, Spencer Kimball, each U.S. citizen, Brigham Young, Bop Hope, Carl Albert, John F. Kennedy, and Theodore Kawamura.

**Q.** What do you consider man's greatest invention?

**A.** The wheel was named by 17% of those answering, 11% said electricity, 9% named the printing press, 9% said combustion engines, 6% each were communications, space travel, and the computer. Mentioned at least once were: alphabet, mass publication, nuclear reactors, engine, airplane, ability to preserve energy, automobile, harnessing the atom, and telephone.

**Q.** What do you think will influence you most when voting?

**A.** There was a lot of agreement on this one with 71% saying the candidate would influence them most. The remaining 29% said the issues. No one said political party even though it was listed on the questionnaire as a choice to check.

**Q.** Do you believe politicians are honest?

**A.** Many thought this was a lousy question and told us so. However, 57% gave politicians a complete vote of confidence by answering yes while 37% answered no. However, many of these commented that you cannot classify all politicians in one group or the other.

**Q.** Do you go to church?

**A.** 49% regularly, 25% frequently, 20% sometimes, and 6% answered never.

**Q.** What is your favorite sport?

**A.** They're football fans, at least 37% said football, 23% basketball, 9% wrestling, 6% skating and 6% track. Others listed included: rodeo, softball, gymnastics, hunting, and horseback riding.

**Q.** What sport do you most enjoy participating in?

**A.** Again, football was number one with 23%. Basketball rated second with 17%, rodeo 9%, track and wrestling 6% each. Others listed were: soccer, water skiing, softball, gymnastics, hunting, volleyball, tennis, swimming, baseball, bowling, and horseback riding.

**Q.** What sport do you most enjoy watching?

**A.** Number one is still football with 49%, followed by basketball 20% and wrestling 9%. Others mentioned were: rodeo, baseball, motocross racing, boxing, hockey and ping pong.

**Q.** Do you, or did you, get an allowance most of the time when you were a child?

**A.** A big 77% said no, 17% said yes, but no one said they were getting an allowance now. Several said the money they got was based on need.

**Q.** What is your favorite magazine (other than *The National FUTURE FARMER*)?

**A.** First choice only listed: *Newsweek* 20%, *Reader's Digest* 11%, *Sports Illustrated* 9%, *Farm Journal* 6%, *Popular Science* 6%, *Progressive Farmer* 6%. Others named were: *National Geographic*, *Western Horseman*, *U.S. News & World Report*, *Horseman*, *Iowa Future Farmer*, *Cycle*, *California Farmer*, *National Lampoon*, *Ensign*, *Time*, *Kansas Farmer-Stockman*, *Successful Farming* and *Sports Afield*.

**Q.** How often do you watch television?

**A.** Sometimes 66%, frequently 20%, daily 11%, and no one checked "never."

**Q.** What is your favorite TV program?

**A.** Rated first was "60 Minutes" with 14%. Others were "The

Waltons" with 9%, and 6% were: "Little House on the Prairie," "Lucas Tanner," "MASH," "Hogan's Heroes," and "All in the Family." Others listed were: "Kolchak," "Baretta," "Meet the Press," "Columbo," "Cannon," "Star Trek," "Emergency," "Bugs Bunny," "Mac Davis," "Carol Burnett," "Happy Days," "World at War," "McCloud," and "Good Times."

**Q.** Do you read books?

**A.** Sometimes 57%, regularly 31%, never 9%. Some noted that while they did not read books, they did read other materials. The choice of books showed a wide range of reading interest with no book proving to be the most popular.

**Q.** Do you read a newspaper?

**A.** Daily 57%, frequently 31%, sometimes 11%.

**Q.** Do you listen to radio?

**A.** Daily 77%, frequently 20% and sometimes 3%.

**Q.** What is your favorite recording or entertaining group?

**A.** Chicago (17%) was the most popular but again there was no clear cut majority. Six percent selected one of the following: Elton John, Beach Boys, Bread, Carpenters, and Doobie Brothers. Others mentioned were: Eagles, Billy "Crash" Craddock, Three Dog Night, Beatles, Olivia Newton John, Charlie Rich, Jethro Tull, Statler Brothers, Merle Haggard, Andrea Crouch, Waylon Jennings, America, John Denver, Sha Na Na, Allman Brothers, Moody Blues, Singers Unlimited, and Loggins and Messina.

**Q.** What do you do for recreation, the one thing you do just for the fun of it?

**A.** Swimming tied with motorcycle for first place with 9% each. Those named by 6% were: tennis, riding horses, basketball, water skiing, sports, and hunting. Others named at least once were: long walks, work on car, camping, bowling, work, eat Chinese food, bicycling, fishing, read, movies, play guitar, play pool, rope calves, jog, relax at home, and wrestle with pigs.

**Q.** Do you own a car?

**A.** Yes, 83%. No 17%. Of those owning cars, 62% said they earned the money to pay for it. One lucky state president revealed the car he drives "was a gift from my state officers as their 'carless' leader."

**Q.** Did you ever play a musical instrument?

**A.** Yes, 77%. No, 23%. Of those who played a musical instrument, 30% said they still play.

**Q.** What is one thing you would like to see changed in the FFA?

**A.** Here are their comments, condensed to conserve space:

How can you have a big enough project to get the American Farmer degree and leave it for a year to become a National Officer?

Return importance of FFA, wear the jacket proudly.

More emphasis placed on leadership and citizenship.

Student exchange programs of intrastate and interstate chapters.

More cooperation among advisors.

Better cooperation between boys and girls.

Minimum requirements for all degrees updated.

Public relations need improvement.

Reapportionment for delegates to National Convention. Members should take advantage of opportunities offered.

State officers should help chapters more.

Change official dress, different colors for boys and girls.

National Convention stay in October. Remove striped tie from catalog.

Resist change. Ag production and agribusiness receive equal opportunity to all activities.

More recipients of American Farmer degree.

Update FFA creed to read agriculture instead of farming.

Ag teachers and administrators understand the integral role of FFA. Don't emphasize win so much, stress participate.

Established method of procedure in the organization.

Attitude of some members, take advantage of opportunities.

Better information to FFA members on contests and participation.

Change dress code; advisors have leadership conferences.

More advertising of FFA to increase membership.

Creativity contests, i.e., flower arranging, gardening, etc.

Stereotype of FFA being "dumb farmers."

More members.





## Use, But No Abuse

The patience of this member goes a long way in developing the abilities of a working horse.

By Ronald Miller

**K**IM Colvin of the Conway, Arkansas, FFA Chapter, is fast becoming a respected horse trainer. In fact, the 1974 vocational agriculture graduate trained 17 horses while in high school. Word of his ability soon got around, and now he spends full-time training and showing horses as well as giving lessons to other horse owners.

Kim got his first horse—an Appaloosa-Arabian crossed gelding named Jubilee—as a birthday present when he was nine years old. He continued to gain interest in horses by riding Jubilee in square dance routines, drill team performances and endurance races. Today he owns several registered Appaloosas and Quarter Horses.

Most of Kim's weekends from March through September are spent exhibiting his horses at statewide shows. At the present time Kim is training five horses and giving riding lessons to youngsters, ages nine through 19.

"As a trainer of both halter and performance horses, I believe in a lot of use and no abuse," says Kim, a recipient of the Arkansas State FFA degree. "It takes a combination of good nutrition and many wet saddle blankets to develop the ability of a working horse."

The young horse trainer provides colts with foal feed so they get all the vitamins necessary for full growth. On the average he feeds a colt two quarts a day. He credits his Vocational Agriculture Instructor Dale Thompson and his local feed dealer for much of his knowledge about feeding horses. "Oftentimes, people bring in skinny horses, but they are real pleased when they get back a well-conditioned animal."

Each day Kim spends six to eight hours grooming, riding and training horses, many times working till after

dark. During the training period of a horse he rides each animal five days per week and brushes them every day. It takes Kim about six weeks to "green break" a horse and instruct the rider in using the right cues.

Kim's facilities include a five-stall barn, a 40-foot square breaking pen and a number of corrals. His charges for training a horse are based on his time, plus feed, veterinary, bedding and horseshoe costs. Horse owners are evidently pleased with Kim's work as many are repeat customers.

Because of his activities with horses, Kim was listed in *Who's Who Among American High School Students*. He has a roomful of trophies won in competi-

tions sponsored by the Arkansas Valley Horse Show Association, the Arkansas Quarter Horse and Cutting Associations and the Appaloosa Club. He competed regularly in boys cutting at the Annual Arkansas Championship High School Rodeo and held the office of president in the Conway 4-H Wranglers Horse Club where Kim now serves as a co-leader.

The young Arkansas horse trainer recently earned a diploma upon completion of training at the Oklahoma Farriers College in Sperry. With this background Kim will be able to expand the services available at his growing horse stable. (Reprinted from *Checkerboard Newsletter*)

Grooming and conditioning are an important part of Kim's horse training program.









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**T**HIS year during FFA WEEK the McDonald County FFA from Anderson, Missouri, held a field day for 1,000 people, 360 hogs, 130 lambs, and 336 heifers and steers. If that sounds more like a livestock show than a field day, you're right, it is. It's the Four States Livestock Show sponsored by the McDonald County FFA Chapter.

But the show, today attended by FFA'ers from Missouri, Oklahoma, Arkansas and Kansas had its beginnings four years ago in 1971 as a chapter field day. At that event, less than 50 head of heifers were shown in the open pasture of a local farmer. Yet the happening was enough to catch the imagination of FFA members and residents.

The next year a livestock show was organized and held in the school bus parking lot as a one-day heifer and steer show. The lack of facilities for the entries was a recognizable problem, so in preparation for the following year's show a 60 feet by 100 feet livestock exhibition barn was built on the school property. The structure was built completely by donations from the community with the help of the McDonald County R-1 School District. The show has been held there since.

In 1973 the show began accepting sheep exhibits and attracted approximately 60 head that year. And in 1974 the show again expanded by adding a hog show and lengthening the event to two days. The FFA chapter assisted in erecting two tents used to house cattle from commercial exhibitors in the area. The hog show was held at the National Guard Armory in Anderson.

Also for the first time, in 1974, the FFA chapter sponsored a livestock judging contest. The contest is run under the direction of Jary Douglas, the livestock judging team coach from North Eastern Oklahoma A&M, a nearby junior college and his NEO Aggies.

This year the contest drew over 900 student judges from the four states, according to vo-ag instructor and FFA Advisor Mr. John Hobbs.

Just as in the preceding four years, major improvements were again made



This year's livestock judging contest drew over 900 competitors from four states.

## How a Show Can Grow

"They come from as far as Kansas City and Oklahoma City."

for the show in 1975. All livestock entries were located on the show grounds thanks to the addition of three new buildings. According to Hobbs, "one is a \$20,000 steel structure and the others are wooden truss buildings. Financing came from the local school district, donations through the Four State Show Committee, which is the planning and organizing body for the show, and from the stall fee which is charged each exhibitor."

Since the show started four years ago the members of the McDonald County FFA Chapter have played a major role in running the show. Chapter members act as hosts and assist in show arrangements. Members build, paint and set up livestock pens (last year 400 new panels were constructed). Chores such as spreading sawdust for the arena, setting

up the show ring, and setting up bleachers are important tasks just as are finding judges for the show and setting up the registration.

Selected chapter members act as assistant superintendents for the livestock barns and about 40 of the members serve on the show's "courtesy corps," patrolling the grounds and assisting show participants and spectators.

The reason the show seems to have achieved such significant success and phenomenal growth in the last four years is the community support and the unique geographic location of the show. Local businessmen who make up the Four States Show Committee along with Advisors Hobbs and Mr. Glenn Cole are largely responsible for the show's continued expansion.

Anderson, Missouri, itself is located in the southwest corner of the state and borders Arkansas, Oklahoma, and Kansas. Since the show just precedes the spring shows of that area, exhibitors use the event to "test their stock" before entering other major shows. "This year approximately 600 exhibitors were from Oklahoma, 300 from Missouri, and the rest from Kansas and Arkansas," says Hobbs. "They came from as far North as Kansas City and West to Western Oklahoma."

The show itself is open to any youth exhibitor under 19 years of age. Adult exhibitors also bring their stock for public viewing although they do not compete for placing. (Submitted by Lori Thomas and Kitty Mitchell)

Outdoor display of livestock has been eliminated with show buildings.





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# Charged Up

Curiosity was the spark that led this FFA award winner to his current career in electrification.

**"T**WAS one of those types of kids who had to tear everything apart to see how it worked and could never get it back together again. It seemed like I was always getting into trouble for it, but it sure aroused my curiosity in mechanics and electricity."

The energetic spokesman is Curtis Maughan, from Wellsville, Utah, the National FFA Proficiency Award winner in Agricultural Electrification. The award, sponsored by the Electric Energy Association is annually given to recognize the FFA member who best demonstrates his or her technical skill and ability in installation and repair of electrical systems on the farm and in the home.

Maughan who is now 20, still likes to tinker but claims he now has a little better success in getting things back together. He's put his childhood curiosity to use and has become an accomplished mechanic and electrician. Since graduating from high school his major source of income is from the wiring jobs he does around the local community and from the motorcycle and small engine repair he does in the family's shop. He says now he'll probably stay in the business for good.

The training Curt received is a good deal self taught but at least part professional. Much credit is given the training he received in high school vocational agriculture and shop classes. The Skyview FFA Chapter to which he belongs is well known around Utah for its consistent winnings in FFA and its strong vocational agriculture program. FFA chapter advisor Mr. Winston Larsen persuaded Curt to start early to work for the FFA award.

The first big chance for him to do major electrical work came when he was chosen to supervise the wiring and installation of electrical appliances in a house annually constructed by the advanced-woods class. "It was this experience that gave me the desire to look into the electrical profession after high school," says Maughan. Another boost towards an electrical career was serving as chairman of the high school's lighting and electricity crew for school plays, concerts and assemblies. Those

activities were in addition to serving as FFA chapter vice-president and helping on the family farm.

Following graduation, Curtis found summer employment with the Del Monte Corporation at Smithfield, Utah. As part of that job he helped run close to 1,400 feet of rigid conduit and 20,000 feet of wire. By the end of the summer employment he had become the company's chief electrician.

His former employer says "Curtis had some basic knowledge of electrical work when he came. He learned fast and progressed to the point by September that we would have liked very much to have kept him on the staff."

But recognizing the importance of further education Curtis decided that he should attend college. His goal now is to graduate from trade school with a degree in electrification plus a degree in agricultural mechanics. The training in those areas would give him the skills needed to set up his own electrical and small machine repair shop that he hopes to build. Such a business on his farm close to Smithfield would allow easy access to the good hunting and fishing nearby. As a member in good standing



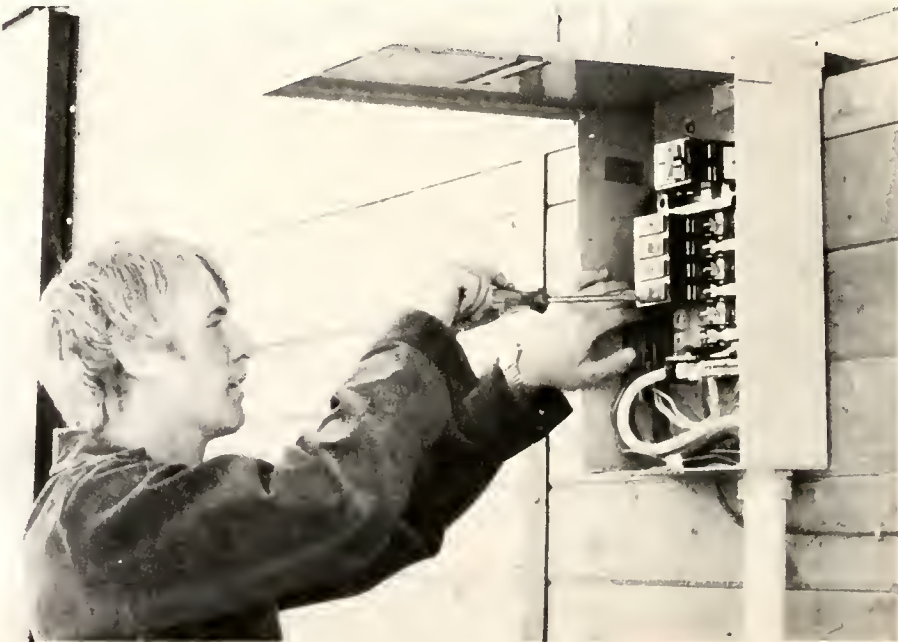
A spare moment is used for studying the National Electrical Code book.

of a local "mountain man" organization which tries to preserve the pioneer ways of yesteryear, Curt feels a particular tie to the rugged Utah mountains.

Reflecting on his national award, the friendly young electrician suggests to prospective applicants that a good familiarization with the National Electrical Code is most essential. He even hints that his knowledge of the code was a decided advantage in the contest interviews for the national award. "The code is the most important thing that a man can learn to use when wiring. I've studied it and use it whenever I do a wiring job," he says.

From those observations and the successes Maughan has had it seems the young "charged up" electrician has taken advantage of every source available in learning how to get things back together the right way.

Experience at home and school gave Curt skills needed to tackle bigger projects.





Give a couple of  
Colorado farm boys  
the time, the tools, and  
the training and . . .

## Home Sweet Home

(Will Never Be The Same)



Don (on right) and Duane often rely on their father's advice to plan their home and farm improvements. The workbench is part of project.

**W**HEN Don and Duane Brown of Yuma, Colorado, first enrolled in the vocational agriculture program in 1969 and 1970 they faced a unique situation at home. Their family had moved from a previous residence to the farm their father had just purchased. According to the brothers the place was in need of some major improvements.

"It needed revamping bad," says Don, of the now well-groomed farmstead. Don, at the age of 20, is the older of the two brothers and past state FFA president from Colorado.

"The main buildings were in pretty good shape and that was it," adds 18-year old Duane in agreement. "It really wasn't a working farm."

So the two boys guided by their father, mother and vo-ag instructor Mr. Glen Sowder decided to go to work on the place. What resulted from their efforts were three regional FFA Proficiency awards. Don won the Home and Farmstead Improvement award in 1973 and the Agricultural Mechanics award in 1974. Duane, following his brother's example, won the same home improvement award in 1974.

But just as important as the awards to the two brothers were the resultant facilities that they now have in which to work. Since they both plan to return home after college to establish themselves as full-time farmers, the additions and improvements they have made will be used for many years to come.

A look at the list of projects they have completed themselves or assisted with helps you to understand what it took to win the national awards. A new farm shop completed in 1972 stands out as the most valuable addition to the farm.

The quonset structure stretches 103 feet long by 51 feet wide. One-half of it used for a shop while the other half serves as a machinery storage area. Almost all of the design and construction of the shop's interior as well as some of the electrical wiring was done by Don and his younger brother. The facility is now equipped with work benches, welding cabinets, paint and lubrication storage room and grease pit.

Additional construction resulted in the building of grain storage bins that hold a total of 43,500 bushels of corn which is the farm's main cash crop. There is also 6 miles of barbed wire fence and 1,200 feet of rod corrals. Two wind breaks were built measuring 100 feet long by 7 feet high. And a calving shed 48 feet long was designed and constructed. The shed offers shelter for calving out the 160 brood cows for their cattle operation that usually numbers some 400 beef animals.

While most of the working farm projects were headed by Don, Duane stuck closer to home, so to speak, with the planting of 400 square feet of lawn, 115 Chinese Elm trees, 8 fruit trees and the construction of strawberry and flower beds. Construction in and around the house produced 100 feet of picket fencing, a fireplace and a newly remodeled kitchen with twice the former working area.

"Usually the projects we did were done as a family effort," says Don. "In fact, even on our award applications a lot of our projects overlapped."

Despite all the time the young Browns put in making their home a nicer place to live and work, both found time for plenty of school, church and FFA ac-

tivities, (maybe in an effort to leave some of the work behind for a breather).

Don served last year as state FFA president and received his American Farmer degree at the National Convention. He is now attending Northeastern Colorado Junior College majoring in agricultural education.

Duane was just as highly involved serving as chapter reporter and district sentinel while being an honor roll student. He is now attending Colorado State University.

According to Glen Sowder, Yuma's FFA advisor, Duane and Don played a major role in convincing the school board and area residents that the community was in need of a new vocational facility. Construction is now under way on that school building. "They even made suggestions on how it should be constructed," notes Sowder.

Both young Browns manage to commute home most weekends to assist their father and mother, Mr. and Mrs. Cleo Brown, in the operation of the 3,800-acre farm.

But if you think the two young men are through with their efforts in improving their farm, just mention future plans and the ideas start pouring out.

"We'd like to extend our quonset at least another 60 feet to make room for more of the machinery," says Don thoughtfully, "then we need an elevator leg for speeding up the grain storing process. And if we get permission from the water board we can combine two sprinkler units and double the size of that irrigation operation, and... (and as the list continues it seems that home, sweet home may never be the same again.)





Tom's advisor makes visit to his machinery business.

## A Truckin' Business

**A small fleet of trucks is necessary to keep this machinery business running in high gear.**

*By Gary Beck*

**"O**UR whole business depends on trucks," says Tom Theesfeld, a member of the Cissna Park FFA Chapter, Cissna Park, Illinois. Tom and his father Ed operate a wholesale used machinery repair and brokerage business.

They purchase used equipment from

farmers at auctions in Illinois, Indiana and Wisconsin. Most of the equipment is hauled to Cissna Park on one of their three trucks where it is repaired by Tom and his father.

Tom's father began their operation eight years ago when he was injured in a farm accident. As the business ex-

panded more trucks were added. Last year they repaired and sold 53 corn pickers and 50 planters.

"Tom really likes this type of work," says Ron Bork, his FFA advisor, "it gives him a chance to work with both people and machinery." Tom, a senior at Cissna Park High School, is president of his FFA chapter and is reporter for section ten of the Illinois FFA Association.

The pride of their small fleet is a 1970 International cab-over with a 28-foot tilt bed. This truck carries everything from corn planters to manure spreaders and corn pickers to Cissna Park for repairs and then delivers the repaired equipment to buyers throughout the Midwest. Theesfelds have also hauled equipment as far as Canada and Mexico with this truck.

For shorter trips they use a 1964 one-ton Ford with a flat bed. According to Tom, smaller equipment such as discs and mounted corn pickers can be easily hauled with this vehicle. "We use the third truck, our 1969 one-ton Chevrolet with the utility bed in repairing the equipment we buy," says Tom. The rig is equipped with an acetylene torch, an air compressor, a generator and various hand and electrical tools.

The smaller unit also hauls small equipment and fence posts. Last year for example, Tom sold 10,000 steel posts and 2,000 wood posts, most of which were hauled to southern states.

For loading and moving equipment in the lot they use a 1942 Army truck with booms and a power winch. According to Tom the truck has not been out of the lot in the past eight years and he would be lost without it.

When asked about the future of the business, Tom said proudly, "We plan to keep on truckin'."

On the spot repairs are possible with the one-ton truck fully equipped with tools, acetylene torch and compressor.



Keeping the trucks ready to roll is an important part of the job. Business takes them into several midwest states.





# THE TREND TO DIESELS

By Melvin E. Long

**D**IESEL-powered farm tractors first became commercially available just over 30 years ago. And for most of those 30 years, diesels have been considered suitable for larger tractors, but gasoline-powered tractors have dominated the field among the smaller, lower horsepower tractors.

Now however, diesels have also moved into the smaller models, and seem to be moving rapidly toward taking over this area. In fact one major tractor manufacturer, who only a few years ago offered tractors with four different types of engines, now offers only diesel-engine tractors.

Another major manufacturer that introduced a new line of small tractors early this year, offers gasoline engines in only two of the four models. At the present time, most of the other tractor manufacturers do offer the choice of diesel or gasoline powered tractors in their smaller size models. However, whether the gasoline models will be continued when new models are introduced seems questionable.

Surprisingly enough, the trend away from gasoline is not the result of any major—or even minor—technological breakthrough. Instead, it seems to be the result of the interaction of several factors, no one of which would necessarily set this trend in motion. However, taken together they appear to be having a definite effect.

Before exploring these influencing factors, let's consider some of the pertinent mechanical differences between gasoline and diesel engines.

Contrary to the belief of many, diesel engines are *not* more powerful than gasoline engines. In fact, diesels produce less power per cubic inch displacement than do gasoline engines. Thus, to obtain comparable power in a given model tractor, most manufacturers include slightly greater displacement in the diesel-engine version than in the gasoline-engine version of the tractor.

The mistaken belief that diesels are more powerful probably results from the fact that diesel engines were used initially only in the larger, more powerful tractors.

However, diesels do produce more power from each gallon of fuel consumed. A review of Nebraska Tractor Test data for comparable gasoline and diesel versions of the same model tractor show that in all cases the diesel version produces more horsepower hours per gallon of fuel than does the gasoline engine counterpart. However, the superiority of the diesel varies wide-

## Agri-Emphasis: Machinery

ly among different tractors, ranging from as little as 10 percent to as much as 49 percent.

Diesel engines produce more power from the fuel they use because they operate at a higher compression ratio. Currently, the compression ratio for diesels is about twice that for their gasoline engine counterparts. However, these higher compression ratios, along with other inherent characteristics of the diesel-engine operating cycle produce stresses that are higher in diesel engines than in gasoline engines. Thus, the various working parts of the engine must be designed to withstand these higher stress levels. Since diesels operate on the compression-ignition principle, the need for a spark-ignition system is eliminated. However, the components required to pressurize and inject diesel fuel into the individual cylinders includes expensive precision devices.

Thus, the need for sturdier construction to withstand the higher stresses, and the need for an expensive fuel-injection system make the diesel engine more expensive than its gasoline counterpart in first cost.

In view of all these considerations why is the diesel engine continuing to gain in popularity for small tractors?

Obviously the choice is based on considerations other than purely economic justification. The increased first cost of the diesel engine is not offset by savings in fuel cost even by the most efficient diesels. And, the least efficient ones offer even less justification.

The primary reason appears to be operator convenience, or at least convenience of machinery management. In general, maintenance costs tend to be some lower for diesel engines. Although the injection equipment is a precision sys-

tem, if the fuel filtration system is properly maintained to help ensure that only clean fuel enters the injection systems, these systems tend to be relatively trouble free. In contrast, the spark-ignition engine tends to be very sensitive to carburetor and ignition maintenance and adjustment. Thus, from a practical standpoint, a typical operator feels, "There just aren't as many things that go wrong with diesels."

In addition, many operators of these small tractors use them in conjunction with a larger tractor that is, of course, diesel powered. Thus, if the small tractor is diesel powered only one fuel storage and dispensing system is required, eliminating the inconvenience of two systems. In addition, if two fuel systems are required, there's always the possibility that the wrong fuel would be put in either the diesel or gasoline tractor. In either case, the use of the opposite fuel can cause highly undesirable results.

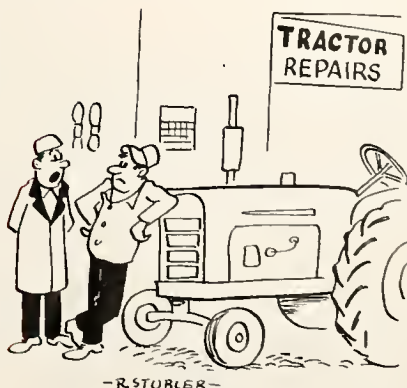
Finally, diesel fuel is used in so few automobiles it is not nearly as attractive a target for pilferage as is gasoline.

For the tractor manufacturers also, the trend to diesels has some attractive features. For example, it reduces the inventory requirement both in complete vehicles and in the spare parts that must be supplied for them. For the dealers, it reduces the requirements for facilities and servicing skills.

At the present time, engine-manufacturing facilities are not adequate for meeting the existing demands for tractor engines. Thus, if the manufacturer has facilities for producing only one engine, he usually elects to concentrate on the production of the diesel versions and omit production of the gasoline version.

In some instances, U.S. manufacturers produce at least some of the smaller models in European manufacturing facilities. Because of the traditional market requirements in Europe, most of these facilities are equipped for the production of diesel engines only. Thus, these manufacturers in effect, have no means of producing gasoline-engine tractors.

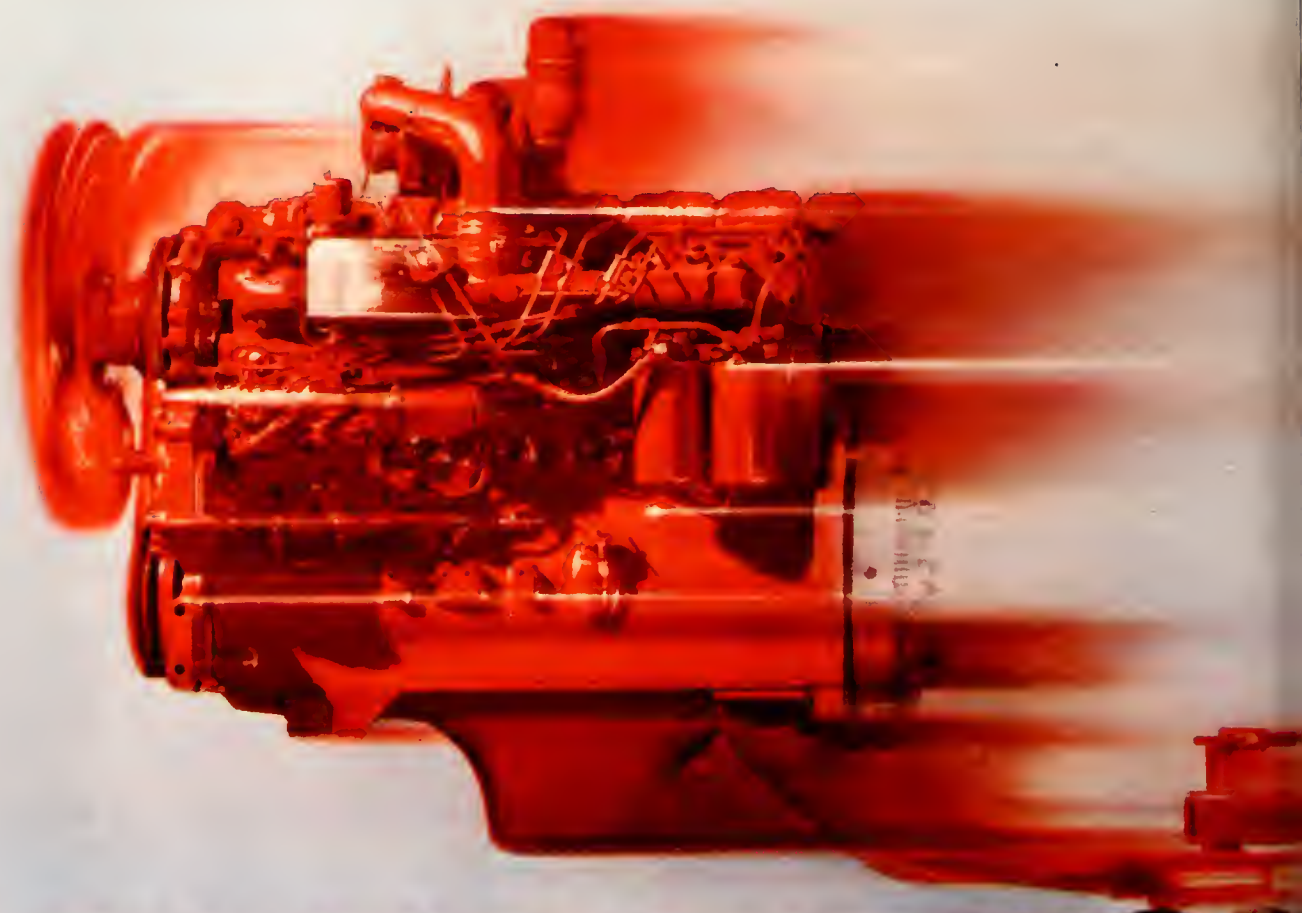
Admittedly, future increases in the supply of tractors in the relation to demand may encourage some manufacturers to again offer gasoline versions of their tractors to be more competitive in the marketplace. However, customer preference will probably tend to make the small diesel tractors an even more dominant factor in the years ahead.



*"The man who gives our estimates is in the hospital with a broken jaw!"*



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what you really buy  
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lbs. pull (lugging ability) over rated hp and rpm. Competition? From 8.7% to 22% at maximum.

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4. We rate our engines conservatively. No tacked-on coolers. No over-tuning.

With new models, styling and gimmicks appearing almost daily, it's easy to take engines for granted. But don't.

That's what you really buy a tractor for.



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66 pto hp

**766**

85 pto hp

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**1066**

125 pto hp

**1466**

145 pto hp

**1566**

160 pto hp

**4166**

175 engine hp

**4366**

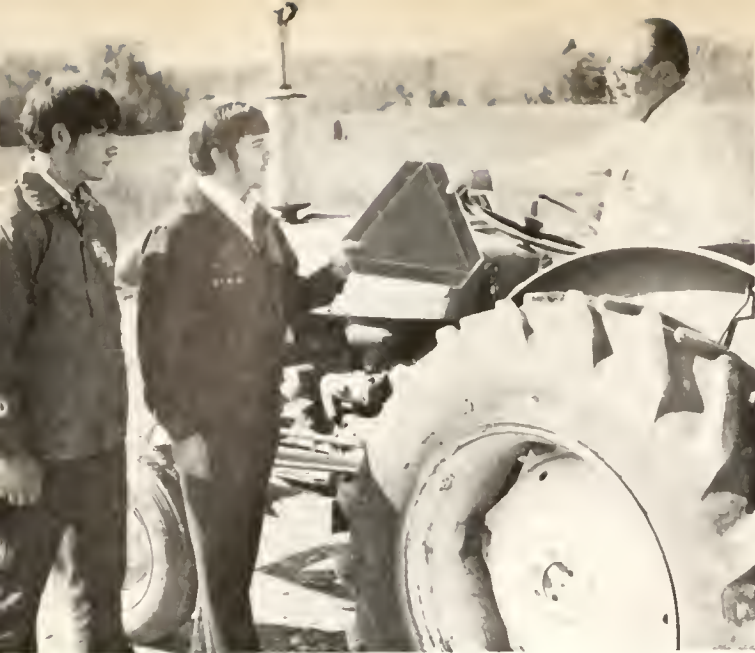
225 engine hp



# I Harvester

We build better machines for the business of farming





# Play It Safe

... as work moves into high gear.

**M**ANY FFA members will be among the farmers and ranchers who are taking to public roads in droves this summer to transport farm equipment and haul production supplies.

This means a traffic mix of slow and fast moving vehicles than can lead to rural road tragedy, says the National Safety Council.

Farm equipment was involved in about 20,000 accidents on public roads in 1973 (the latest year for which estimates are available), 170 of which were fatal. Many persons were injured and property damage ran into the millions of dollars.

About half of these mishaps involved collisions with motor vehicles, and most of the time those killed or seriously injured were on the farm vehicles.

A primary rule for the safe transport of a farm vehicle on the road, is that the operator be able to see and be seen. If your tractor has a cab, clean off the windows and check wipers before starting out.

Your state may require you to display a slow-moving vehicle emblem when on public roads. Make certain it is mounted where it can be easily seen by traffic coming up from the rear. Keep it clean. If its color is fading, replace or reface it.

Be sure all lights and reflectors are clean and operative before entering the roadway. Replace burned out bulbs and broken lenses. Use your flashing lights any time you drive on public roads, and switch on regular lights in bad weather or during dark, gloomy days. For night travel, properly aimed head lights and readily visible taillights are an absolute necessity.

Maintain good sight lines at your driveway and access lanes. Clear away growth blocking your view and avoid planting tall crops where they could impair vision.

Only licensed drivers should take farm machinery out on a public road. Many young people are strong enough and able to operate machinery in the field, but they may not have the knowledge, judgement and experience to safely deal with the traffic and special hazards of the road and obey laws.

You can haul almost anything on a farm vehicle except

## Agri-Emphasis: Machinery

an extra rider, particularly a child. Many young riders are senselessly killed or maimed in falls from farm machinery each year. Keep younger brothers and sisters or friends off and away from your equipment.

Obviously, when you enter a public road, you must safely cope with other traffic and obey the rules on the road. But, as a driver of a farm vehicle, or a long or wide implement, you have additional things to manage.

Be aware of the time it takes to get fully onto or across a road or highway from a dead stop. A big tractor and wagon need about ten seconds; an auto going 55 mph would travel about 800 feet during this time. Thus, it's safer to stay put at the end of your driveway or an intersection if oncoming traffic is closer than a fifth of a mile.

Know your vehicle width. Try to keep it all within your lane or at least on your side of the center line. Pull over to let others pass when possible. Watch out for soft shoulders, ditches, culverts, posts and other roadside hazards.

You must contend with weight. The combination of a big tractor towing a loaded wagon which weighs many tons puts terrific demands on brakes. A semi-trailer has brakes on both the tractor and the trailer, but most farm tractors lug multi-ton wheeled (but brakeless equipment) at transport speeds, relying on the tractor's brakes and engine compression to slow or stop the rig. Also, wheel weights and ballast add extra burden. Shift to a lower gear when going down hills. Never coast. Don't haul a load too big for your tractor to stop and control—it could overwhelm the tractor on a down-grade and cause a jack-knife. Equip wagons with brakes if you often haul heavy loads, especially in hilly country.

Another concern with trailing equipment is keeping track of what is happening behind and at the same time watching the road ahead. Limit the duration of backward glances. Extendable rear-view mirrors can help you monitor traffic following you and the behavior of trailing equipment without having to constantly turn your head around. Also, the mirrors give you a needed rear view of traffic which otherwise would be blocked by a large trailing vehicle or load.

The risk of injury in case of roadway mishap is reduced if your tractor cab provides good roll-over protection. Many farm vehicle accidents on public roads involve upsets—the tractor runs off the road into a ditch or is struck by another vehicle for example. Operators using safety belts in such cabs could emerge from a majority of such overturns with little injury.

This summer avoid becoming a statistic. Drive carefully. Your future in farming could depend on it.

### OTHER REMINDERS

Obey all stop signs and slow down or stop at country road intersections without signs.

When road and load conditions are normal, drive at full road speed to reduce the difference between your speed and that of following traffic.

Slow down if roads are slippery or rough, or your tractor becomes hard to handle due to wheel hop, shimmy, unbalanced or shifting ballast, swaying or a bulky load.

Slow down for turns and signal them if possible.

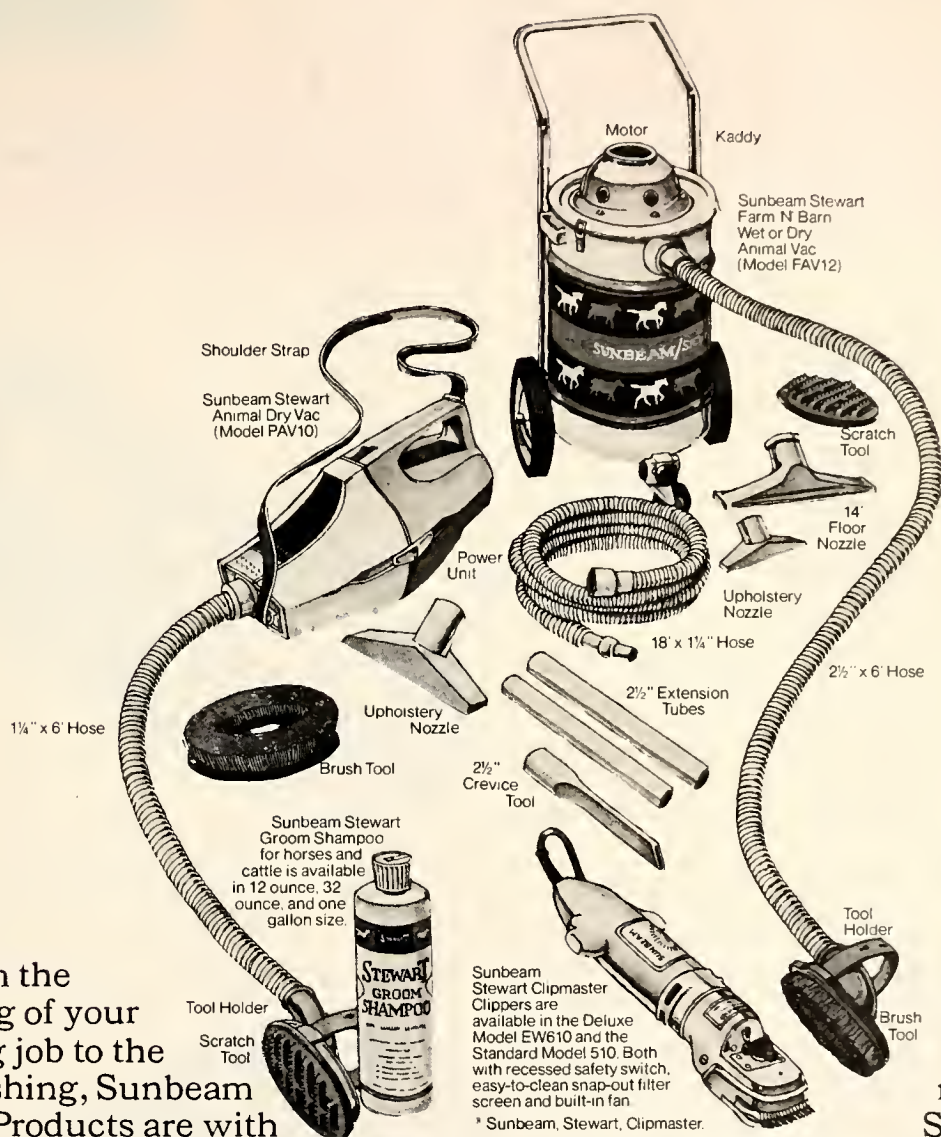
When turning right don't swerve into the opposing lane and before turning left, check to make sure no one is trying to pass you.

Avoid sudden, erratic or unexpected maneuvers.

If something goes wrong pull off the road; set up flares as a warning.



# Now Sunbeam Stewart Products give you the full grooming treatment.



From the beginning of your grooming job to the final brushing, Sunbeam Stewart Products are with you all the way. Because we've added three new products to our already popular-selling Sunbeam Stewart Clipmaster Clippers.

First, two new animal vacs. The Sunbeam Stewart Dry Animal Vac, which is also a blower. And the Sunbeam Stewart Farm 'N' Barn Wet or Dry Animal Vac. Both come with multiple attachments that can help you do everything from scratch and vacuum out dirt to dry and brush in beauty. And they can be used around your home for

other cleaning chores as well. Our third new addition is Sunbeam

Stewart Groom Shampoo. It cleans and conditions the animal's coat while helping control dandruff.

So now Sunbeam Stewart Products is a team that can make grooming easy for you. And give your animal the look of a winner.

All Sunbeam Stewart grooming products are available in tack shops, farm store suppliers, and co-ops.

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Built with integrity—backed by service.

Tm. Farm 'N' Barn, Groom  
Sunbeam Stewart Products Division, Sunbeam Corporation © 1975 Sunbeam Corporation



# Machinery in the '80's

What will farm machinery be like: Here is a look ahead.



**W**HAT will farm machinery be like in the next decade when the Future Farmers of today enter the industry of agriculture to produce food and fiber for a rapidly expanding population? Many real predictions can be made. To do this, of course, we must consider what farming will be like then. For the fact is that farmers will decide the main course of farm machinery development in the next 10 to 15 years.

Several significant trends affecting farm machinery are apparent as pointed out by Don L. Douglass, Vice President Marketing, Massey-Ferguson, Inc. According to Douglass one of the biggest adjustments will be the changeover from the English system of measurements to the international metric system. Instead of plowing 160 acres, you will plow 64.8 or roughly 65 hectares. You may still measure corn in bushels, but the elevator will likely weigh it in kilograms rather than pounds.

Your farm shop will need to be updated. No longer will you be able to rummage through that old box of bolts and come up with a replacement. The new bolt may have a thread with a new metric diameter or pitch.

Mr. Douglass predicts that the present trend to larger tractors will continue with the end of the spectrum in sight for conventional two-wheel models, at probably 175-200 hp upper limit. The four-wheel drive tractor will grow in popularity and become more sophisticated.

Achieving higher horsepower will be a major challenge. As horsepower goes up, it will take bigger jumps of 50 to 75 horsepower to justify the cost.

With costs of power plants doubling or tripling as horsepower increases, tractor costs will go up accordingly. This may be accepted in the construction machinery business where a machine is used constantly and the contracts are in millions of dollars. But how many farmers are ready to pay \$250,000 for a farm tractor?

Commenting on built-in reliability, Mr. Douglass says, "We will also see stronger emphasis on training of owners and operators to handle and service the more sophisticated machines. They will necessarily have to assume more responsibility. There is also a pronounced trend toward maintenance-free machinery. Everything possible will be done to remove the human element except for fuel, water, oil, air in the tires, and other expendables."

With our deluxe noise-proof, dust-free, heated or air conditioned cabs, we can expect more monitoring systems on larger tractors and combines. But putting the operator in a protected cocoon creates its own problems. He becomes desensitized to noise and vibration. Not only is he lulled into a false sense of security, he may also tend to punish the machine without knowing it.

To solve this problem, the future machine will have a control center like today's jet airplanes where red warning lights and other indicators will replace the old "feel" for how the machine is performing. For some of the same reasons, remote control of many farming operations does not appear feasible in the foreseeable future.

More emphasis on hydraulics, with electronic components replacing hydraulics and mechanical linkages for controls,

and lighter, stronger, construction materials are ahead. As for engines, the diesel, with improvements, will probably remain first choice for major agricultural and industrial machinery for at least the next 15 years.

Efforts will be stepped up, however, to develop alternate propulsion methods deriving energy from sources other than petroleum. Atomic energy and solar batteries are possible sources being explored.

Greater interest in optimum tillage, machines that will "pretill" the soil and incorporate crop residues, and combination front-and-rear-mounted or trailing implements are other future possibilities. More complicated and novel mechanisms will be required to allow transport of larger implements from field to field, especially over public roads.

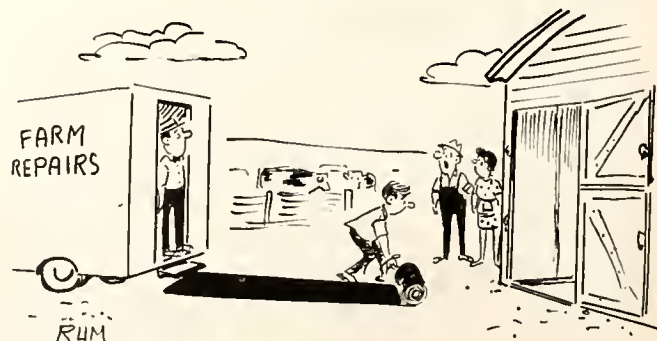
According to Douglass, combines with larger engines, or even two engines, to provide greater power to move across the field and to perform the cutting and threshing operations are on the way. A lower profile will put the machine closer to the ground, ease of transport will receive more attention, grain tanks will be larger, and unloading will be faster. Ground-sensing electronics will control header height.

Farming in the 1980's will hinge to a great extent on demand for farm products. "We recognize the uncertainty of today's cost-price relationships, but we also must be aware that population experts say that in ten years there will be a billion more stomachs in the world to be fed," Douglass notes.

Estimates by the U.S. Department of Agriculture point out that with existing technologies American farmers could be producing 50 percent more beef animals. New advances in science and technology will permit even greater gains.

There could also be more land in crop production. If prices stay high enough to encourage expansion, crop acres harvested could be up to 350 million by 1985, compared with an estimated 322 million acres today.

If you accept the challenge to produce food—and if the incentives are provided by our economic system of the 1980's—you will probably be using larger, more sophisticated and complex machines. Manufacturers, dealers, and farmers will have to work closely to successfully design, engineer, produce, deliver, service and operate that machinery.



*"I'm afraid the Yellow Pages gave us an expensive repairman."*



# The good ol' boys just turned your .22 into a shotgun.



They call it, clever devils that they are, the Mini-Mag Shot-shell. (Also available in .22 WMR.)

For you technical types, it might be of interest to note that this new cartridge has 165

#12 pellets nestled in the plastic capsule, all of which scoot out of a handgun at 1,000 feet per second, to form a tight 12" pattern at 15' away.

But instead of thinking of the statistics, think of the possibilities.

Close-in tin can blasting.

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Or skeet-plinking at airborne dirt clods.

With no one-mile range to worry about.

Like the good ol' boys' other .22 ammo,

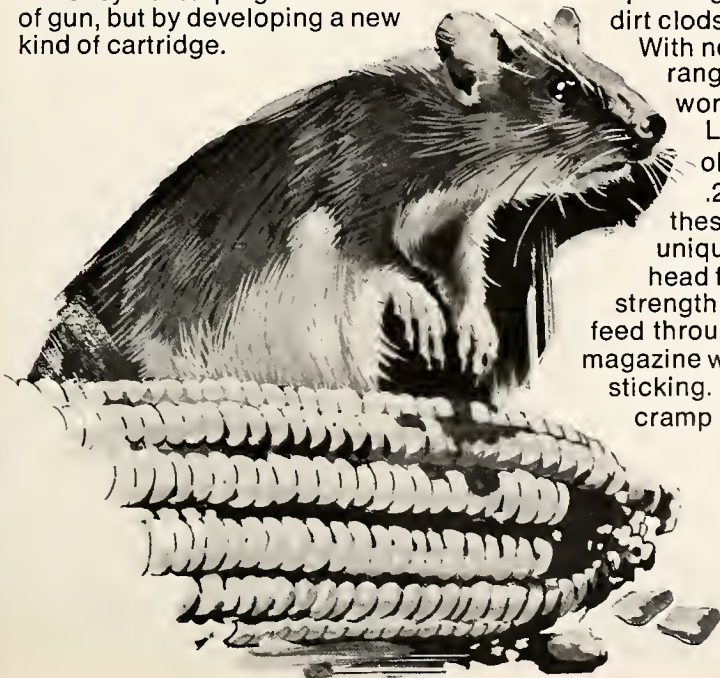
these have the unique reinforced head for added strength and they'll

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You read right, a shotgun.

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For plinking, for pests, for fun. For just \$1.49, suggested retail.


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**Look up. Be looked up to.**

**Air Force**



**Landing a good  
civilian job  
is part of your  
Air Force training.**





A giant tubular steel space frame designed to shade and provide frost shelter for young evergreen trees earned a Citation for Excellence in Design for Space Age Industries, Inc. The steel frame is a third of a mile long and spans 220 feet.

## Agri-Emphasis: Machinery

# Something New

What you see on this page are new products that have just been announced as winners in the 1974-75 Design in Steel Award Program. The program sponsored by American Iron and Steel Institute gives recognition to designers,

architects, engineers and artists for their imaginative uses of steel. The current program attracted more than 1,000 entries in 13 categories. Among the winners were six entries from the agricultural equipment field.



A steel silo built from carbon steel panels and coated with .002 inches of chromium to resist corrosion won a citation for Clayton & Lambert Mfg.



A double winner, the John Deere Company, received the coveted Award for Best Design of Agricultural Equipment for its 8430 and 8630 Four-Wheel Drive Tractors. Unlike traditional tractors they are packaged as compact as possible.

A Citation for Excellence in Engineering went to the John Deere Company for this 50 Series Row Crop Head. The Head reduces losses by 10 percent over traditional harvesting.



The Award for Best Engineering went to Sperry New Holland for an automatic bale wagon which can pick up, load, haul, and stack an average of 1,656 bales of hay per day.



A family of two-wheel drive tractors earned a Citation of Excellence in Engineering for the Allis-Chalmers Company. The tractors feature cabs with exceptional noise control.



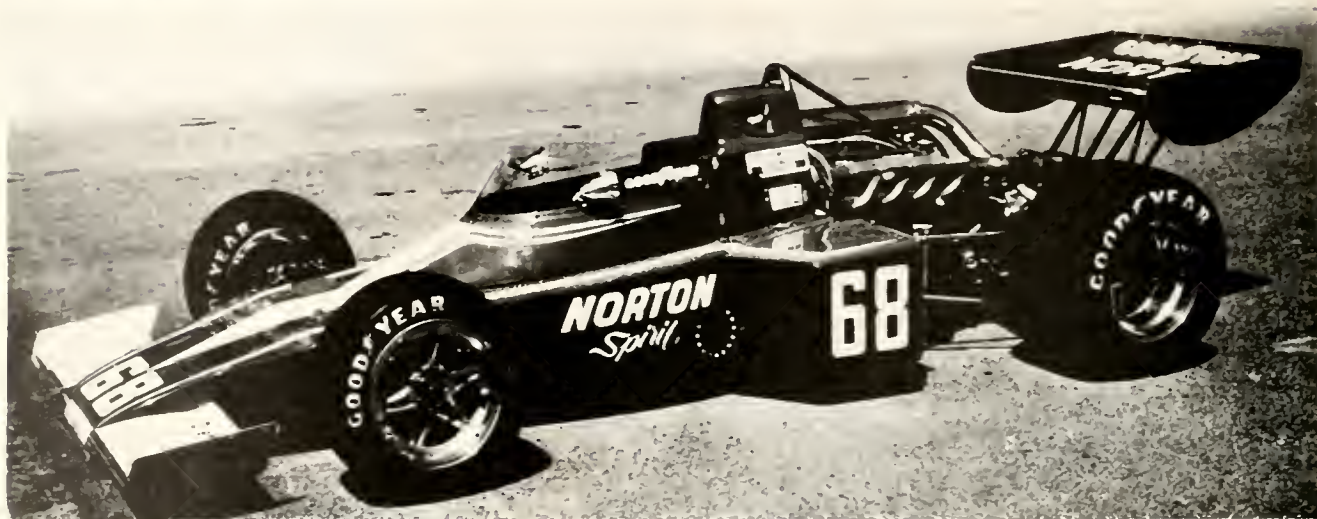




# The Principal Is a Speedster

Being sent to the principal's office at Lamont Junior High meant meeting up with one of today's best race car drivers . . .

*By Gary Bye*



**W**HAT'S that? A junior high principal roaring around an oval track chasing the likes of A. J. Foyt and Johnny Rutherford?

That's right. Tom Sneva, 26-year-old former junior high principal from Sprague, Washington, is at home whether it's in the open cockpit of a turbo-charged Offenhauser or scribbling algebraic formulas on the blackboard in front of a group of junior high scholars.

And he's proving that the two characters are truly compatible. For three years Tom taught math in a four-room schoolhouse in the peaceful little farm town of Lamont, Washington (population—111), while making the best use of his weekends and summers to build a reputation as one of the Northwest's best drivers. Then the attraction of racing and its demands on his time dictated an early retirement from teaching.

This year Sneva is living up to the claim made by Jackie Stewart of ABC's Wide World of Sports that he is prob-

ably the finest young driver in USAC (United States Auto Club) racing today. In his first three races on the championship circuit he has finished no lower than sixth place and is challenging the veterans in the overall standings.

Part of the early season success can be attributed to his signing with the Roger Penske team. It was a Penske car driven by Mark Donahue that won at Indianapolis two years ago.

"Things are looking good," says Sneva, "and the car is just fantastic!" His excitement over the machine is understandable. Eight years ago he started his first race as a teenager with a '38 Chevy coupe worth around \$200. The hobby soon became a way of life.

A year after turning his first lap as a stock car driver in 1967, Tom moved up to open-wheel competition, driving super modifieds. In just his first year in the class, he won the Canadian-American Modified Racing Championship with a four-wheel drive rear engine

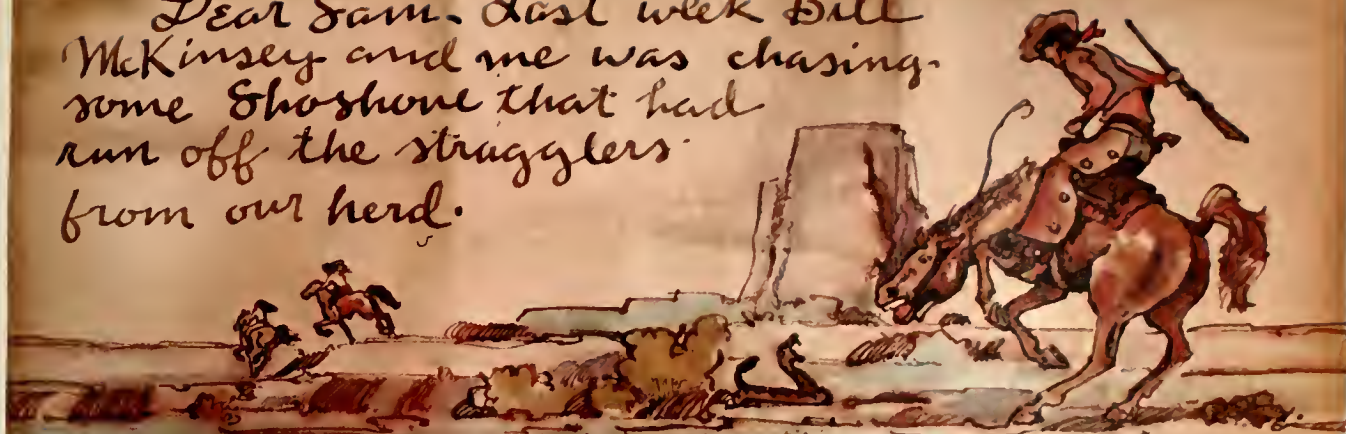
sprint car. Then in 1971, he decided to try United States Auto Club racing with an Indy-type car. His success was constantly hampered by inferior equipment and a shoestring budget. But he did pass his rookie driver's test for the Indianapolis 500 in 1973 and although he didn't make a qualification attempt, he continued to drive Indy cars during the remainder of that season. His consistent finishes earned him USAC's Rookie of the Year award.

It was following that season that Sneva made the decision to give up the classroom for a fast track. As if to prove that he had made the right choice, he competed in all 12 championship races last year and at Indianapolis qualified as the fastest first time driver.

Then came the contract with Penske, who has a knack for recognizing young talent. "It's the best thing that's happened to me so far," says Sneva. "A lot of guys work all their lives trying to get  
(Continued on Page 43)



Dear Sam. Last week Bill McKinsey and me was chasing some Shoshone that had run off the stragglers from our herd.



Well, damn if my horse didn't shy at a rattler and pitch me into the biggest prickley pear west of Kansas City. Didn't know which to shoot first—the horse or the snake. I mostly eat standing up now. but anyhow McKinsey says the yell

I let out must have made them Injuns skedaddle cause he come upon the beeves, grazing party as you please just west of Taylor's butte. Enough for now. I'll git another letter off as soon as we git these critters to Caldwell.



Best Regards,  
Charlie

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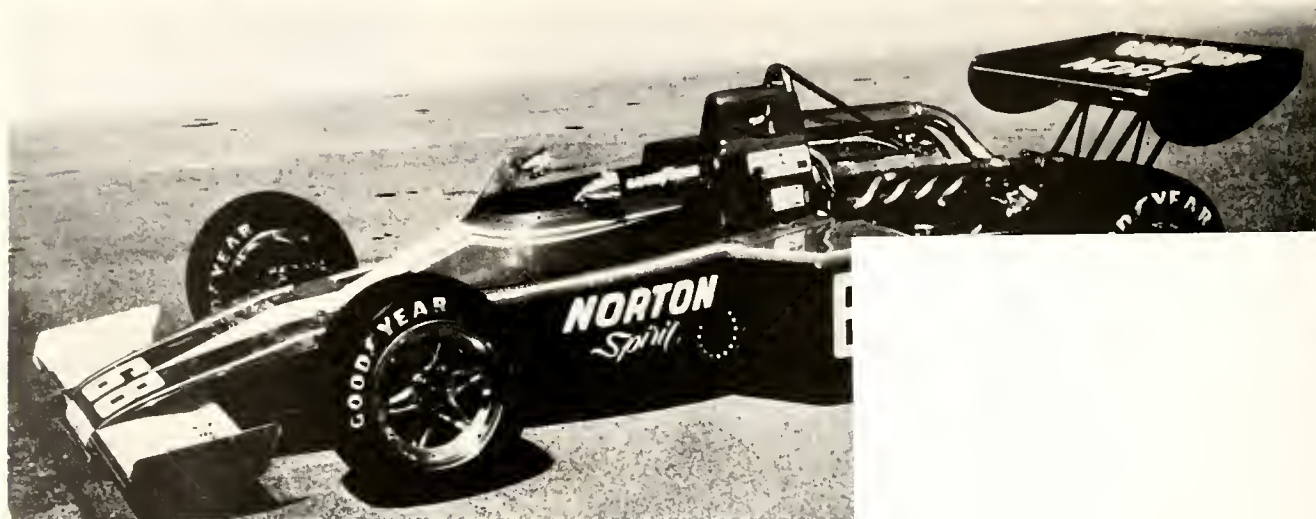




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That's right. Tom Sneva, 26-year-old former junior high principal from Sprague, Washington, is at home whether it's in the open cockpit of a turbo-charged Offenhauser or scribbling algebraic formulas on the blackboard in front of a group of junior high scholars.

And he's proving that the two characters are truly compatible. For three years Tom taught math in a four-room schoolhouse in the peaceful little farm town of Lamont, Washington (population—111), while making the best use of his weekends and summers to build a reputation as one of the Northwest's best drivers. Then the attraction of racing and its demands on his time dictated an early retirement from teaching.

This year Sneva is living up to the claim made by Jackie Stewart of ABC's Wide World of Sports that he is prob-

ably the finest young driver in USA (United States Auto Club) racing today. In his first three races on the championship circuit he has finished no lower than sixth place and is challenging the veterans in the overall standings.

Part of the early season success can be attributed to his signing with the Roger Penske team. It was a Penske car driven by Mark Donahue that won Indianapolis two years ago.

"Things are looking good," says Sneva, "and the car is just fantastic. His excitement over the machine is understandable. Eight years ago he started his first race as a teenager with a '62 Chevy coupe worth around \$200. The hobby soon became a way of life.

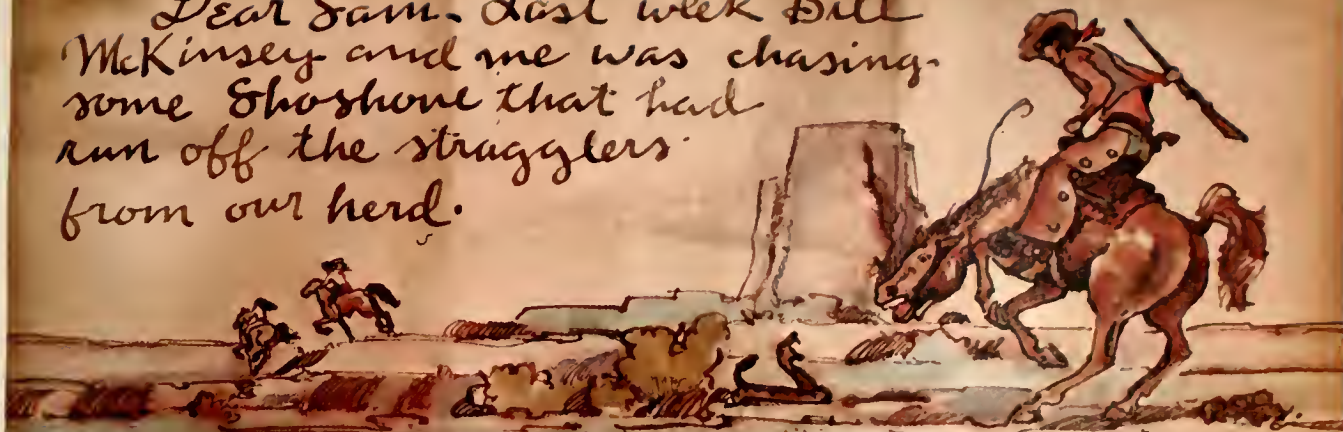
A year after turning his first lap as a stock car driver in 1967, Tom moved up to open-wheel competition, driving super modifieds. In just his first year in the class, he won the Canadian-American Modified Racing Championship with a four-wheel drive rear engine

competitor in an 12 championship races last year and at Indianapolis qualified as the fastest first time driver.

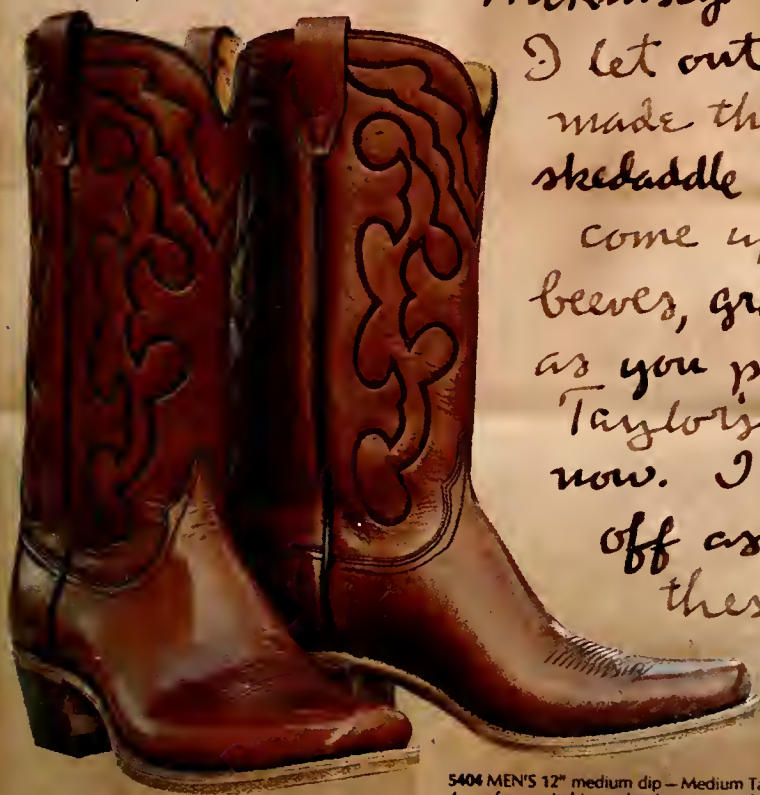
Then came the contract with Penske, who has a knack for recognizing young talent. "It's the best thing that's happened to me so far," says Sneva. "A lot of guys work all their lives trying to get  
(Continued on Page 43)



Dear Sam. Last week Bill McKinsey and me was chasing some Shoshone that had run off the stragglers from our herd.



Well, damn if my horse didn't shy at a rattler and pitch me into the biggest prickley pear west of Kansas City. Didn't know which to shoot first—the horse or the snake. I mostly eat standing up now, but anyhow McKinsey says the yell



I let out must have made them Dujuns skedaddle cause he come upon the beeves, grazing party as you please just west of Taylor's butte. Enough for now. I'll git another letter off as soon as we git these critters to Caldwell.



Best Regards,  
Charlie

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# Putting the Agricultural Energy Picture into Focus



Photo by Ron Miller

**How much energy is required for agriculture? Can we cut this use without creating a food shortage? Here are some of the answers.**

*By L. F. Nelson and W. C. Burrows*

**T**HE United States is almost totally dependent upon fossil fuels for its energy. Currently about 93 percent of the U.S. energy comes from fossil fuels. The remaining seven percent of our energy comes from other sources including nuclear, hydroelectric and a very small portion is geothermal. The average annual rate of growth of energy consumption has been about four percent.

In 1970 the U.S. used energy equivalent to 33 million barrels of oil per day. About one-fourth of this went into the production of electricity. The electric utilities operate at an efficiency of 33 percent. They distribute the energy they generate to other sectors of the economy. The industrial sector is the largest energy user requiring about one-third of the nation's total energy. Next is the transportation sector which requires about one-fourth of the nation's total energy. Residential and commercial

energy consumption taken together require another one-fourth of the nation's total. Agriculture uses only about one-fortieth of the total.

Coal is the biggest source of energy for the generation of electricity and also plays a very significant role in supplying energy to industry. The main use for natural gas is in industry. However, it also plays a very significant role in electrical generation and in supplying energy needs for the residential sector. Oil supplies nearly all of the energy for transportation and also supplies a sizeable portion of the energy used by industry and residences. When the energy sources for all sectors of the economy are added together, it is seen that oil produces 42 percent of the nation's total energy supply, natural gas supplies 30 percent and coal 21 percent. Oil, coal and natural gas add up to the 93 percent of the nation's energy that is supplied by fossil fuel.

The 14 million barrels of oil per day used by the U.S. in 1970 was broken into several different fractions at the refineries. By far the largest fraction was gasoline which represents about one-third of the total U.S. oil usage. The second largest fraction, middle distillates, represents about one-fifth of the total oil usage. These two fuels, gasoline and middle distillates, are the primary sources for motor fuels.

## **Highway Use**

Highway use of gasoline in automobiles represents more than half the

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*This article was condensed with permission from material originally presented in a paper before the annual meeting of the American Society of Agricultural Engineers. Mr. L. F. Nelson is Manager of Systems Planning; and Mr. W. C. Burrows is Senior Staff Scientist, Technical Center, Deere and Company.*



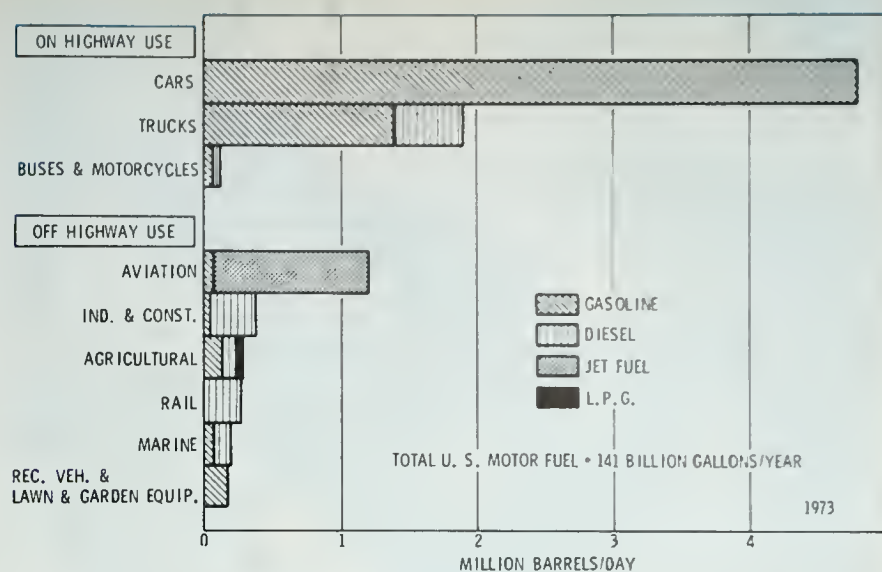
total U.S. motor fuel usage. Trucks using both gasoline and diesel fuels add another 20 percent to the highway use of motor fuels. Buses and motorcycles are almost insignificant in their contribution to motor fuel consumption. Although there is a sizeable number of motorcycles in the U.S., their total fuel consumption is low. The fuel consumption by buses is low because of their small number. There are about 250 times as many automobiles in the U.S. as there are buses. Adding fuel consumption for cars, trucks, motorcycles and buses together, highway use of motor fuels accounts for about three-fourths of the motor fuel consumption. This leaves about one-fourth of the motor fuel for off-highway uses.

### Off-Highway Use

In 1973, air, rail and marine transportation used 13 percent, 3 percent and 2 percent respectively of the total U.S. motor fuel. Recreational vehicles and lawn and garden equipment combined used less than 2 percent of the total U.S. motor fuel. Industrial and construction equipment accounted for about 4 percent and off-highway agricultural consumption accounted for about 3 percent of the total motor fuel. *In fact, reducing the highway speed limit to 55 mph will save more motor fuel than is used for all off-highway agricultural purposes.*

### The U.S. Agricultural Energy Picture

The energy picture for agriculture is complex. Energy sources and points of application are widely varied. On-highway vehicles used in agriculture con-



The U.S. motor fuel use. Gasoline in automobiles represents more than half.

sume an amount of fuel almost equal to the off-highway vehicles. The off-highway vehicle fuel is only one-half gasoline. The other half is diesel with a small portion being liquified petroleum gas. For off-highway vehicles the proportion of diesel fuel consumed is increasing rapidly.

Another major energy input to agriculture is chemicals manufacture. This requires about the same amount of energy as on-highway vehicles or off-highway vehicles. However, the manufacture of chemicals, mostly nitrogen fertilizer, primarily uses natural gas.

Crop drying and irrigation are also energy inputs to agriculture, each requiring about the same amount of energy. Corn is the main crop that is dried. Most corn drying is done on the farm

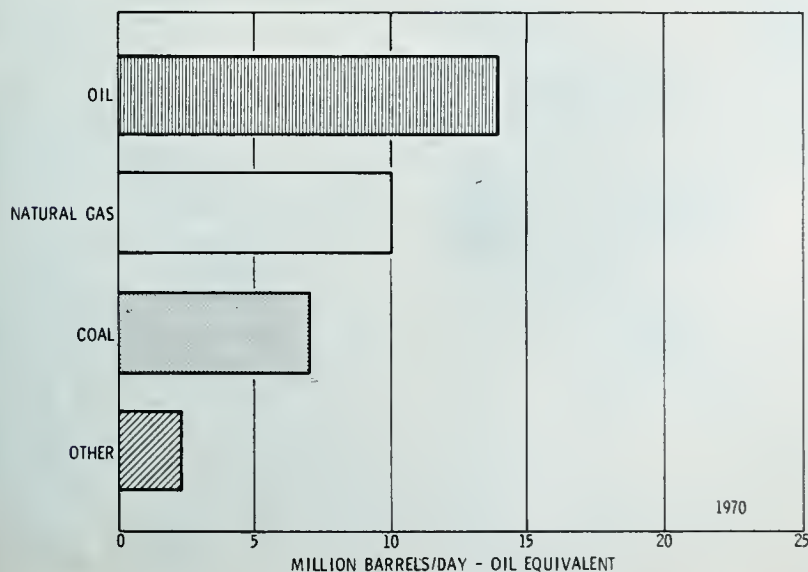
using LPG. However, some is also dried off the farm using either LPG or natural gas. Irrigation has a wide variety of energy inputs. Some irrigation requires no direct energy input at all if the irrigation water comes from reservoirs. However, much of the irrigation water is pumped from wells using gasoline, diesel, LPG, natural gas or electricity as the energy source. These rank in increasing importance from gasoline, which is almost insignificant, to electricity. Nearly 60 percent of the irrigation pumping units are electric.

The manufacture of farm equipment is another input to agriculture. Farm equipment manufacture alone, not including raw materials or OEM suppliers, requires the equivalent of about 22,000 barrels of oil per day. When all agricultural energy inputs are added together, the total is about 2½ percent of the nation's total energy input.

### Reducing Energy Input

Of the major U.S. crops, corn has the highest energy input per acre. This is because of the high energy inputs for drying and fertilizer. Cotton is lower in terms of energy use per acre although energy for field operations in cotton production is high. Energy requirements for wheat production vary considerably mainly because of the need for fallow in some areas and not in others. But wheat requires less energy per acre than cotton. The total energy requirement per acre for soybeans is the lowest of any of these four crops. This is because soybeans do not require nitrogen fertilizer, nor is drying usually used.

(Continued on Page 42)



This chart shows the U.S. energy sources: oil, natural gas, coal and other.



# Energy into Focus

(Continued from Page 41)

Except for corn, few substantial energy saving alternatives can be proposed for crop production. There has been a great deal of interest in reduced or minimum tillage systems for corn. Major advantages of lower cost and environmental protection are cited. Major disadvantages are greater management skill is required and lower yields result. Since about 90 percent of the U.S. corn is produced using conventional tillage systems, farmers must have concluded that the disadvantages outweigh the advantages. This is especially true where little, if any, environmental effects can be shown; i.e., where erosion is not a problem. But energy conservation is a concern of all corn producers. Reduced tillage systems are a way to use less energy. This necessitates a look at the effects of widespread adoption of reduced tillage as an energy conservation measure.

We have made comparisons of the energy requirement per acre for corn production using various cultural practices. Using low fertilizer application rate with any of the cultural practices will not produce enough corn to meet U.S. domestic needs. The medium fertilizer rate will not meet domestic needs if no-till cultural practices are widely used. However, domestic demands for corn might be marginally met with conventional tillage, shallow plowing or disk and plant methods using the medium fertilizer rate. Using the no-till field practices on all U.S. corn acreage, even with normal fertilizer level, would result in corn production that does not meet domestic needs. The only way domestic needs for corn can be met adequately, leaving some margin for export, is by maintaining near normal fertilizer application rates and using conventional, shallow plowing or disk and plant tillage methods.

## Reducing Fuel Use

There are several ways that fuel consumption for field operations can be reduced without affecting production. When a large tractor is used for light drawbar loads, significant fuel savings are attainable. By shifting to a higher gear and reducing engine speed, significant fuel savings can be achieved. For current large John Deere tractors these fuel savings range from 12 to 33 percent. However, even greater fuel savings could be achieved if, instead of shifting

up and throttling back the big tractor, a smaller tractor, closely matched to the load were used for light drawbar loads. These methods of fuel savings are particularly appropriate for shallow plowing and no-till.

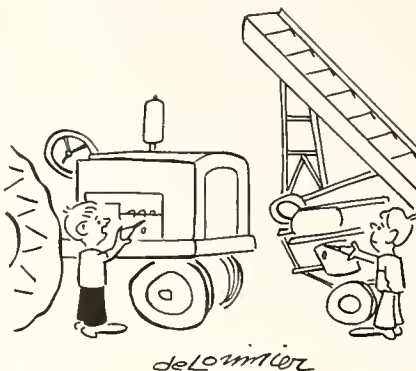
Another significant fuel saving could be realized by accelerating the trend to diesel engines. The diesel engine's fuel economy is about 33 percent higher than a gasoline engine on an energy basis (hp-hr per Btu). But on a gallon basis, it is about 50 percent higher. This increased fuel economy is primarily due to the diesel engine's higher compres-

sion ratio and the supply of excess air available for the combustion process which guarantees full fuel utilization.

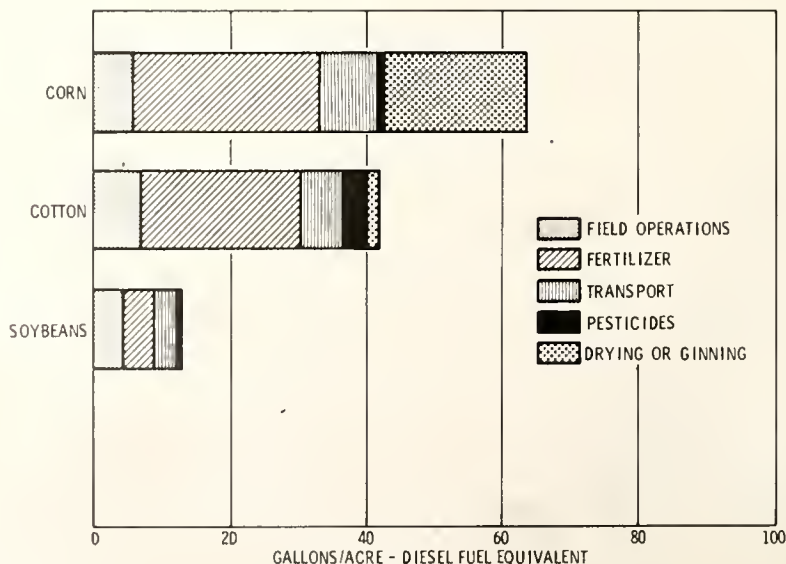
Engine tune-ups have received a great deal of publicity as a fuel saving measure and are particularly appropriate for gasoline engines. While tune-ups will enable any engine to more nearly reach its basic efficiency, they do not represent nearly as big a potential increase in efficiency as conversion to diesel power.

## Conclusion

It is essential that agricultural energy needs and the effects of altering these needs be fully understood by all concerned—especially the policy makers in our society. As we have pointed out, there are ways for our food producers to contribute to the conservation of energy on a nationwide scale. However, if any measure adopted can lead to a reduction in food production, a potentially dangerous situation will exist. The search for ways to conserve without compromising production must continue. But at the same time, the search for new or non-conventional energy sources must be accelerated if we are to have sufficient food in the future. In 1957, Brown, Bonner and Weir said: "...although the age of fossil fuels has barely begun, we can already see its end. We must soon learn to utilize other, more permanent sources of energy, and we must recognize that once our petroleum and coal have been consumed, as far as the human species is concerned, they will have disappeared forever."



"Oil the tractor. Oil the combine.  
Oil this. Oil that. Whatever  
happened to the oil shortage?"



Energy use. Corn has the highest energy input of any major U.S. crop.



## Speedster

(Continued from Page 38)

an opportunity like I've got with Penske. You can't get any better as far as equipment, facilities, and crew and I'm still young by racing standards."

The car Tom drives for Penske has a McLaren chassis with an Offenhauser engine. "It's sort of surprising for people to find out that the engine has only four cylinders and 160 cubic inches," quips Sneva, "but it's turbocharged and that allows us to produce 1,000 horsepower."

When compared to the Chevy coupe he started with, the vehicle could be considered the high-priced spread. "When you talk about the car and engine you're talking about close to \$80,000. One engine costs about \$40,000 and it takes four or five of them to run through the season."

Sneva was also a coach while teaching and says, "Athletic conditioning is as important to auto racing as to any sport. You've got to be in shape to run 500 miles at the speed that we run. You also need the timing, the reflexes, and the coordination that goes with it."

Championship cars average close to 200 mph as they scream around the track, but Tom says the reward is not in going fast. "It's really no fun for me to go out there and run 200 mph all by myself," he confides. "But if I go out there and run at 150 or 170 and have to use my ability to get around five or six other guys, that's what makes it enjoyable. Competitiveness makes other sports fun and it's the same with racing."

Although he is now a long way from the classroom, the aspiring young driver still enjoys working with youth. For the past two years he has worked with a program sponsored by Champion spark-plugs to promote driver safety. Two months of each year he travels from high school to high school meeting with students.

"What we do is relate racing safety to safety on the highway," Sneva explained. "Since we're race drivers the students seem to listen better. We tell them how most accidents are due to carelessness and letting your emotions take over at the wheel. Smart driving is the key to survival on and off the track."

So the one time school teacher, principal and coach who started in 1967 with a \$200 stock car and who once even used the local vo-ag shop after school to construct a racing chassis, is today competing with the best in the business. And though it's a little more elite crowd than the junior high sports league he was once coached in, it's still the sense of athletic involvement and competition that gives him the greatest sense of satisfaction.

June-July, 1975



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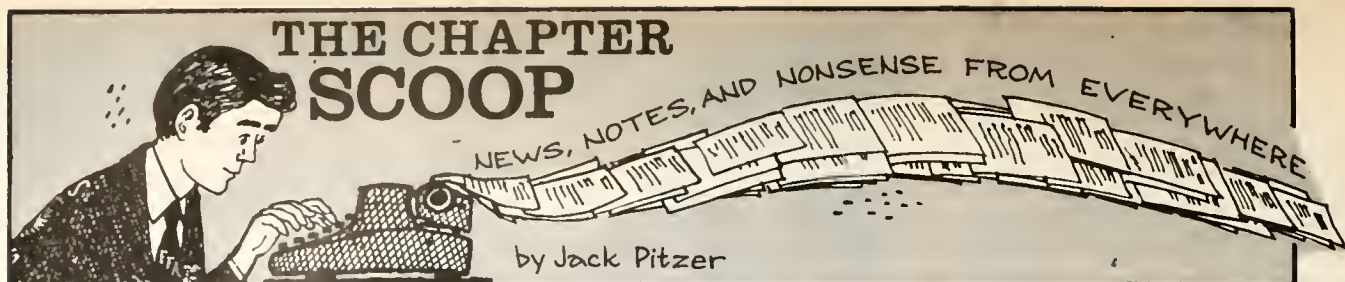
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by Jack Pitzer

Five FFA'ers were among the first ever Youth Achievement Winners recognized by Brown Swiss association. **Barry Schaeffer**, Maryland; **Stanley Smith**, Georgia; **John Korth**, Illinois; **Suzanne Reuter**, Oregon; **Arnold Rothlin**, California.

**Amphitheater FFA** in Arizona obtained permission to bale all of the experimental hay grown by Soil Conservation Service. Baled and then sold 770 bales of Lehman lovegrass, Sudan, Panic and Buffel grasses.



**Zephyrhills**, Florida, recreational activity "was highlighted by the presence of two state officers." Sounds like an inside joke to me.

Advisor **Navarth** is proud that all four class presidents for next year at **Burns**, Wyoming, are FFA'ers.

When the **Davies Vo-Tech** Chapter in Rhode Island lost their greenhouse in a spring storm, **Chariho** and **North Kingston** Chapters offered space in their greenhouses to save the plants.

Massachusetts Alumni Association sponsoring a job placement referral service to help FFA members get jobs.

Hot contest at **Indian River Central FFA** in New York was between actives and alumni in a chapter meeting contest. Prepared for upcoming contest.

A 210-pound crossbred hog owned by **Gary Beck**, **Salinas**, California, won grand champion at the Junior Livestock Expo in the Cow Palace.

**Reitz**, Indiana, has adopted a park.

"We plan to use our FFA Calendar sales commission to sponsor our skater in a Cerebral Palsy 'Skate-a-thon.'" **Mount Zion**, Illinois.

Too bad. **Hampshire**, Illinois, FFA'ers made wrong turn in Chicago traffic and missed TV debut during FFA WEEK.

**Christi Cofer**, reporter of **Kingman**, Arizona, Chapter says they really made money on a beef raffle.

In annual state event, **Jerry Hostutler**, **Hundred**, West Virginia, sold a cured ham for \$11,971.00. (That's \$826 per 14½ pounds.)

And **Gary Cadle**, **Shady Spring**, West Virginia, sold a dozen eggs for \$1,005.00.

**Litchfield**, Minnesota, Chapter officers and advisor took care of 30 milk cows twice a day when owner was sick.

Part of **Frost**, Texas, BOAC project was painting and rebuilding welcome signs throughout town.

**Lapel**, Indiana, Chapter presents each mother a rose and each father a litter-bag filled with goodies at their banquet.

FFA and FHA in **Montezuma**, Iowa, held an officers training school for organizations in school and community.

**Bigfork**, Montana, took a field trip to learn about tree thinning from a state forester. Then chapter bought a post cutting permit and cut 2,000 posts.

"We sponsored a watermelon feed for the whole school. Ate a thousand pounds of melons." **Stoney Point**, Iowa.

**Clarkton**, North Carolina, members built a storage cabine for rescue squad.

FFA in **Westerville**, Ohio, helped Red Cross distribute 500 family first aid books in town.

Winter project of **Winthrop**, Minnesota, remove snow from fire hydrants.

**Las Vegas**, New Mexico, painted 20 barrels with FFA lettering on them for city trash collecting.

**Sandpoint**, Idaho, Chapter sent three members to visit a school in Canada and tell them about vo-ag and FFA.

A mother's club of **Carrier**, Oklahoma, Chapter gave enough money to buy a new camper.

Fair exhibitors of **Atlantic**, Iowa, were sold FFA T-shirts at a chapter meeting to wear at the fair.

After the annual family picnic for **Parkersburg**, Iowa, FFA they reserved the town's pool for everyone.

**Apple Valley** and **Victor Valley** Chapters in California have a 6-year tradition of playing a ballgame during FFA WEEK.

**Bridget Crawford** didn't think much of green dyed hands for Greenhand initiation at **New Caney**, Texas. What do you think of the old custom of Greenhand initiations?

The American Medical Association honored **Walkersville**, Maryland, FFA for farm safety week.

**Mount Whitney FFA** put 3,000 flyers "Happy Holidays. Please drive carefully." in **Visalia**, California.

An idea born at a **Sarasota**, Florida, meeting ended in a published directory of chapter members. Titled "The Blue and Gold of Sarasota." Ads paid for printing.

When **Kelso**, Washington, hosted a contest jamboree (shop, parliamentary, Creed, forestry, hort and speaking contests) they arranged for school's swimming pool to be available for the free times during day's events.

At a **Bowling Green**, Ohio, Chapter meeting members voted to throw any officer who didn't know his part of the ceremony into the school pond. Wonder if it worked?



At a **Winner**, South Dakota, meeting they squeezed grapefruit and had a grapefruit juice drinking contest.

Got the first "ag" hat for my "Hats Off To America's Agriculture Collection." It's typical baseball style cap—yellow with special FFA lettering. How many different agribusiness firms have hats available? It ought to make quite a collection by National Convention time. Send 'em to Scoop.

While you're on vacation and have lots of free time, jot down the Scoop from your chapter and send it in.



# Today At Garden Spot

By Pete Mekeel



Agriculture students at Garden Spot, Pennsylvania, found themselves the subject for a national television program for millions of people during FFA WEEK.

**F**OURTEEN sets of eyes were zeroed on Robert Woods. The vo-ag instructor had a rough time remembering the last class that had rendered such rapt attention to his every word, his every gesture, his every syllable.

Undoubtedly, it had something to do with the blinding Kleig light mounted in the corner of Room 602 at Garden Spot High School, New Holland, Pennsylvania.

And it had something to do with the wire that started at a microphone in Woods' breast pocket underneath his sweater, wound down his pants' leg where it was fastened with masking tape at his calf and followed him all around the room like a skinny snake.

But most of all it was because a strange man kept crawling around whispering things like "don't look at the camera" and "keep your eyes on him" in the ears of the fidgeting ninth-grade students.

## On 'Today' Show

Robert Woods' most memorable moment in teaching came when a four-man film crew from the NBC-TV Today Show recorded his every blink and utterance for a nationwide audience.

Woods and his class were to be viewed by millions of people between 7 a.m. and 9 a.m., the Today Show's viewing hours.

The electrician, soundman, cameraman and field producer went through the motions with professional calm and relative indifference—at least relative to the wide-eyed youths being filmed in the Garden Spot High School class in New Holland.

Officials at the school had been told only at 3:30 the preceding Thursday

afternoon, that the film crew would be coming 18 hours later.

## FFA Week

The filming was being done in conjunction with national Future Farmers of America week, and the folks at NBC's studios in New York City's Rockefeller Center phoned the national FFA office and asked to be put in touch with a certain type of high school—a high school with strong courses in agriculture.

"We had this idea for a certain type of spot," field producer Karl Hoffenberger said during a break in the filming.

"For many, many years there's been a problem in which many youngsters who grew up on farms do not stay on the farms...they go somewhere else to do something else."

While watching the lights being placed in another spot in the classroom, he continued.

## A Life Of Farming

"This piece is to call attention to one of the finest examples of a new emphasis, an evolution if you will, in which schools like this one are trying to show their students there's more to farming and agriculture than just getting your hands dirty.

"It's agriculture as a business," he said with a pointed finger for impact, "as a science. It's got a technology all its own and classes like this are going to be the backbone of tomorrow's farms."

Of course, there was something the folks at Garden Spot didn't want to tell the TV crew from NBC too loudly. It might be a new twist some places, but there's been an agriculture department at this high school since 1958.

But what matter. The crew was there to do a film report on a top-notch high school vocational-agriculture class and that's what it got.

In fact, Donald Robinson, spokesman for the nine instructors in the department, says he believes it's one of the most comprehensive, elementary-through-adult class of its type in the nation.

## Followed by Crew

For about five hours the crew—three of them were from Philadelphia; Hoffenberger flew in from New York—followed Garden Spot agriculture students around. Followed is the key word, Hoffenberger said.

"We're not staging or having them do anything they wouldn't normally, we're merely following along," he explained.

"We're acting as a mirror to the classroom. There's nothing artificial or phony about this. It's genuine."

Hoffenberger said he'd do the "reporting" but that Today Show co-host Jim Hartz would do the actual narration, or voice-over, on the film.

## Other Scenes

Besides Woods' talk on land use management that they filmed in the school, the crew also filmed a former student (Lynn Groff) surviving in the world of agribusiness at Victor F. Weaver, Inc., poultry processors, near the school and a class on a field trip to the John Weaver farm, New Holland.

And once the cameras, light and crew were back in Philadelphia, only one question was left floating: Who was going to be at school on time Monday morning? (*Reprinted from The New Era*)





Photos by Author

**T**HE single engine Cessna droned steadily up the high mountain valley. While the pilot and his two young passengers talked farming, this editor excitedly took in the vastness of the western scenery.

"That's our feedlot right over by those steel buildings," said one of the students with a gesture.

The pilot, FFA Advisor Mr. Buster High, nodded acknowledgement and winged the plane into a 30-degree bank turn giving the students the optimum bird's eye view. The young men were

# Flying High In Nevada

By Gary Bye

**Vo-ag instructor Buster High's airplane isn't the only thing that's off the ground in Mason Valley.**

Tanya Pummill, a former state FFA Sweetheart, serves as chapter president.



Chapter Advisor, Mr. Buster High is recognized as top vocational teacher.



Rod Pellegrini, chapter vice president, won top honors in welding contest.





FFA members from the Mason Valley Chapter in Yerington, Nevada. The state is known for its limited population. Less than 500,000 people share the 111,000 square miles of mostly arid desert.

"This land without irrigation can only support one cow/calf per every 160 acres," noted High as the watered crops below gave way to stretches of sagebrush and sand.

For High who is Nevada's outstanding vocational teacher of the year and looks like he might have ridden out of some Marlboro commercial, the plane is a natural and sometimes necessary means of getting around. "It's just a way of life out here," he says.

On occasions, like this one, he makes project visits with his "bird." And a chat with his students revealed that other flights to out-of-the-way FFA contests or to pick up needed supplies for agriculture classes are not unusual.

But while the high-flying ag teacher may spend a great deal of time airborne—he also stays "up in the air" so to speak, just trying to keep up with his students.

Rod Pellegrini, chapter vice-president, for example, was last year's winner of the National Lincoln Arc Welding Contest in the Agricultural Division (a contest that Mr. High himself had won as an agricultural student). The honor helped Rod pocket \$500 in prize money and over \$300 for the sale of the winning horse trailer he built. He has already reinvested his winnings into his project entry for this year. "I really got interested in ag mechanics as a freshman helping Mr. High with his airplane," he says.

Tanya Pummill, chapter president, served as Nevada's State FFA Sweetheart last year and was first runner up for American Royal Queen at Kansas City last October. She had earlier placed third in the state public speaking contest.

And Mike Stewart, another of High's students, is currently serving as state reporter for the FFA. Just recently he secured a Farmers Home Administration loan to purchase a \$20,000 bale loader for custom hay hauling and stacking. He says he is depending largely on the acquaintances he has made through the FFA program for his first customers. And of course one of his immediate goals is the degree of American Farmer.

The chapter itself has proved to be a competitor in state and national activities. A bronze award in the National BOAC contest was received by the chapter for its efforts in construction of live-

stock quarters at the county fair grounds. This year the chapter is landscaping the school campus.

A new activity sponsored by the FFA is a machinery operation and safety course. Older students instruct the younger members in proper handling of large farm machinery which is loaned by a local dealer. The finale of the day's class is a timed event through an obstacle course with a baler, tractor and trailer and swather. The training has met favor with students and farmers alike.

As a result of the new program the chapter placed first in this year's chapter safety award program and will represent the state in national competition. In addition the chapter's agriculture mechanics team won first place in state competition and will compete at the national contest.

One of the biggest lessons the students claim they have learned from High is that public relations in the community, school and state is essential to be a strong chapter.

"We help the community out any way we can," says Rod, "like we heard the bowling alley needed a bike rack so we built it for them and set it up. And every time anyone helps us we try to recognize them for it."

A number of local businesses display with pride plaques on their office or store walls that the FFA has made for them. Banks, restaurants, and businesses are all supporters. Last year financing for chapter delegates to the National

Convention was largely contributed by local businessmen.

A quick glance at the upcoming banquet list is further evidence that the chapter's efforts have not gone unnoticed. The list of members, faculty, businessmen and farmers is headed by the state's governor who has notified the chapter that their banquet is circled in red on his calendar.

While their big city cousins may think living in the expanse of Nevada may offer some disadvantages, the Mason Valley members don't see it that way.

"You get to know each other better, that's for sure," says president Tanya, "you can just go around and shake hands with everybody and call them by their first names." Then she adds, "Sometimes the competition is not as stiff and the reward isn't quite as impressive as it might be in some of the bigger states, but I'm glad it's small."

Optimism for growth in the local FFA is displayed by the members. Freshmen are recruited by invitation to meetings and the banquet and some recruiting is even done by telephone.

"The FFA is important," notes Tanya. "It's one group that's united together all across the country and the world too. That's what we need, especially the young people because we're tomorrow's leaders and we can't be scattered apart."

To even the casual bystander it's obvious that the students, even with their lofty activities have their feet planted firmly on the ground.

High's airplane gives him and his students an eagle-eye view of local farm.





# FFA in Action



Governor Carroll helped Kentucky FFA kick off the tree project. From left, are State Executive Secretary Cox, officer Mike Easley, the Governor, officer Richard White, and state forestry division head plus ladies for state historical group.

## Tree Time

The month of April has been declared Bicentennial Month in Kentucky with an Arbor Day Program being one of the first activities. FFA chapters in each county are cooperating with the Bicentennial Commission and the Division of Forestry and Department of Fish and Wildlife Resources in the planting of 12,000 tree seedlings in Kentucky. The program "200 Years of Progress—Watch Us Grow" calls for planting trees in each county.

Local chapters will plant the tree seedlings with the assistance from the Division of Forestry, if needed.

The tree seedlings packet contains Chinese Chestnut, Scotch Pine, Yellow Poplar, White Ash, Black Locust, Autumn Olive, White Pine, Loblolly Pine, Shortleaf Pine, and Virginia Pine. With the exception of White and Scotch Pines, which are two years old, all seedlings are one year old.

This project is part of the Kentucky Historical Events Celebration Commission's participation in the national Johnny Horne's Program to "Clean Up America for our 200th Birthday."

## An Ag Museum

In 1970, fifty members of the LaPorte City, Iowa, FFA opened the doors of an FFA sponsored ag museum. It

started in a room of 20 feet by 30 feet with about 150 articles donated by ag members and interested citizens.

They had gotten the idea for the museum after visiting the Ag Hall of Fame on their way to the National Convention in Kansas City. Prime mover for the project was Jim Hoyt, chapter president then and later state president.

Then in 1974 the building was put up for sale and a plea was put out for community help. The community responded tremendously with over 1,000 man hours of work and over \$5,600 worth of donations. This money came from individuals and organizations who sponsored activities solely for the purpose of the ag museum.

Since then this project was adopted by the American Revolution Bicentennial Committee who also matched local funds with a grant of \$5,000. "With this money we have purchased the building and remodeled the inside completely with the help of over 100 people from our small community of 2,000."

During a special program at LaPorte City during FFA Ag Museum Day, August 3, 1974, Mr. Frank Harrington, regional director of the Bicentennial Commission from Kansas City, presented an American Bicentennial flag to the FFA.

Mayor Sonia Johannsen presented an American flag, which had flown for a

day over the U.S. Capitol, to LaPorte City FFA member Neil Mullen.

"We have yet to restore the outside of the building to its original state as it was in 1876 as a fire station and the city hall. In 1911 a jail was added on which is now refinished, carpeted, and serves as our reception room.

"Since last summer we have had over 2,000 visitors from 38 states and 6 foreign countries. We are open every Saturday and Sunday from April to November and all year 'round for special groups by appointment.

"The downstairs of our museum is divided into sections of dairy, poultry, horse and small machinery. Upstairs we have a barber shop, doctor's office, school, country store, kitchen, church and we are developing an armed forces section."

Most of these artifacts were donated locally and the doctor's office is completely from a man who practiced medicine in LaPorte City for over 50 years.

This has been one of the biggest and most successful projects the LaPorte City FFA has even undertaken. It has involved not only an FFA chapter but senior citizens and the community. (Karen Lund, Co-Chairman, LaPorte City Bicentennial Committee)

## Take Out the Principal

At a June, 1974, Cedar Crest FFA Lebanon, Pennsylvania, executive meeting, it was suggested to undertake some project to better acquaint school admin-

Senator Culver's wife visits with FFA co-chairman Karen Lund in the museum.







Principals and superintendents really enjoyed witnessing the work of FFA'ers.

istrators with the activities of vo-ag students and agriculture in general. This reasoning was based on the fact that none of the administrators were familiar with farming and all were recently promoted or hired to their respective positions.

The chapter president suggested a tour on members' farms and all agreed that it was a good idea. Farms were selected to cover a broad spectrum in agriculture. One farm was primarily dairy; one, cash crops; one, father-son partnership; and one, purchased by FFA member from father.

Jeff Heisey arranged for a picnic on his farm with the FFA paying the entire cost.

School administrators were happy to keep August 9 free and participate. The fathers and sons did a tremendous job of explaining their farming enterprises. A special effort was made to see that all student projects were visited and they were proud to show off their work.

Plans are to make the tour an annual affair and the responsibility will be handled by the community service committee. Next time the chapter plans to invite all the school board members and try to visit one or two FFA members employed in agribusiness.

The administrator-guests on tour were: the school superintendent, vice-superintendent, high school principal, two high school vice-principals, and vocational guidance counselor. (Richard D. Moore, Advisor)

### Big Givers

The Dell Rapids, South Dakota, Chapter gave \$1,000 to kick off their Community Ambulance Fund drive.

(Continued on Page 52)

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FFA President Steve Munk, center, handed over \$1,000 to set the pace for the fund raising drive in the area.



The 21 chapters in Los Angeles City Schools elected an executive committee for the FFA section they comprise.

## FFA in Action

(Continued from Page 51)

"This money was earned through the cooperation of the community during our various activities and promotions. So the chapter feels it should go back to the community as an investment. We feel the community ambulance is indeed a worthy cause."

The 68 FFA members earn most of the money from a 15-acre chapter farm and by selling citrus.

In addition to this community support they have built a concession stand for the school and will soon complete a basketball court in city park.

### Poster Publicity

The BOAC project of the Big Walnut, Ohio, FFA is participating in a nationwide clean-up program to prepare our environment for the nation's two-hundredth birthday. The overall program features "Johnny Horizon" and is directed by the Department of the Interior.

A committee of chapter members is heading the local program which is already underway. A poster contest was held in the elementary schools with these posters used in the campaign to get the community involved in the program. Members have been giving numerous presentations to groups such as

the Lions Club, 4-H groups, Cub Scouts, and other civic organizations as well as the schools. Local newspapers, radio stations and television stations are also involved.

In the initial big phase of the program—the elementary school poster contest—over 300 students made entries. Trophies were presented to the top two entries and special "Johnny Horizon" certificates were presented to all those students who contributed a poster. Thirty students were recognized as honorable mention winners.

Another phase of the program is the restoration and renovation of the Berkshire Cemetery. Stones are being raised, leveled, and reset as well as the grounds being renovated where needed. The chapter members have been busy carrying out this work. (Ruth Page, Reporter)

### Thanks Again

Outstanding service to the New York State FFA was hailed recently when the State President Susan Mullikin presented a medallion to Paul Taber, vice president, public relations for Agway, Inc.

Taber has long been a supporter of FFA activities and particularly has served six years as a trustee of the New York FFA Leadership Training Foundation.

Susan visited Agway's headquarters in Syracuse in February to present the

award. She was accompanied by Allyn Tubbs, state reporter, and Kevin Carhart, district vice-president.

Mr. Taber has been recipient of many agriculture-related awards during his long tenure with Agway. He was named an Honorary State Farmer by the New Jersey FFA in 1956 and by the New York FFA in 1958. He was chosen Honorary American Farmer by the National FFA in 1969. Earlier this year, he was the recipient of a special recognition award of the New York State Agricultural Society for his 41 years of service to agriculture in the Empire State.

### City Section

Delegates from 21 chapters of the Future Farmers of America in the Los Angeles City Schools met at the Board of Education offices for the purposes of improving activities at the local chapter level and the forming of a Los Angeles Section of the FFA. This was the fifth such leadership conference held in the section.

One hundred and twenty-eight students, along with their advisors and guests, participated in the day-long activities which highlighted a model banquet to introduce the elected officers for the newly formed section.

After the registration of chapter delegates at 8:30 a.m., the conference was called to order by John Weiszbrod of Chico, president of the California Asso-

FFA has generated civic participation in a Johnny Horizon cleanup campaign.

Mr. Paul Taber is honored by New York President Sue Mullikin and officers.

A banker and a rancher gave the cash for a new heifer chain to the advisor.







It's a family affair at Black River Falls, Wisconsin. Left to right: Dave Olson, vice president; sister Julie, president; David Peasley, reporter; and sister Patty Peasley, secretary of the chapter.

ciation, assisted by state officers Mark Scheiber, Vice-President; Charlene Anderson, Secretary; Dennis Johnson, Treasurer; Cy Hawkins, Reporter; and Dave Holm, Sentinel.

Morning sessions were techniques on "How to be an effective speaker," organization of the Los Angeles Section of the FFA, adoption of a constitution for the section, and election of officers.

The noon banquet, for the dual purpose of installing new sectional officers and demonstrating the conduct of a parent-member banquet, was handled by the officers of the Narbonne High School chapter. New sectional officers are: President, Kai Giffin, Gardena Chapter; Vice-President, Calvin Lewis, Locke Chapter; Secretary, Stephanie Soter, Cleveland Chapter; Treasurer, Mike Schumacher, Monroe Chapter; Reporter, Cindy Feinstein, Van Nuys Chapter; and Sentinel, Huber Bongolan, Bell Chapter.

The afternoon sessions elaborated the functions and responsibilities of the respective officers at the chapter and sectional levels. In addition to being an educational activity, the conference was meaningful in fostering fellowship among the chapters.

The section has grown over the past seven years from six to 21 chapters. (Ronald Regan, Supervisor, Agricultural and Environmental Education)

### Bank Partners

Daniel Boone Chapter in Jonesboro, Tennessee, has a partner—the Hamilton Bank at Gray. The management of this bank, Mr. Allen Rhea and Mr. Glenn Davis, demonstrated their confidence in the members and the future of farming with the purchase of a registered Angus female for the chapter.

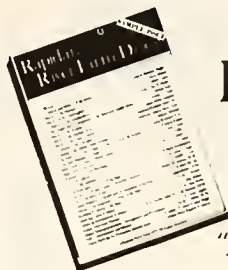
In the selection of the animal to give to the FFA, Hamilton Bank also found a partner in the process. Mr. D. L. Stansberry of Stansberry Angus Farm was willing to match the bank's gift with the donation of another bred heifer.

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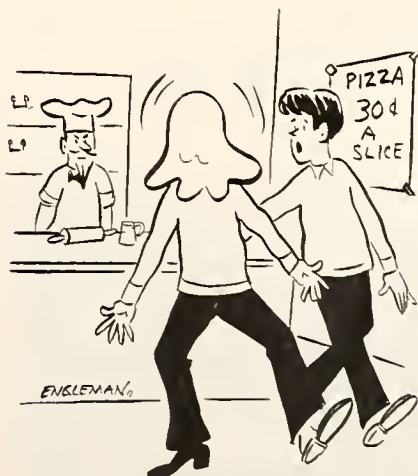
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Members must return a heifer calf to the FFA and afterwards the cow becomes their possession.

Other contributors to the establishment of the heifer chain program were area farmers Mr. Clifford Boyd and Mr. George St. John.

(Continued on Page 55)



"You shouldn't have complained about his pizza crust!"

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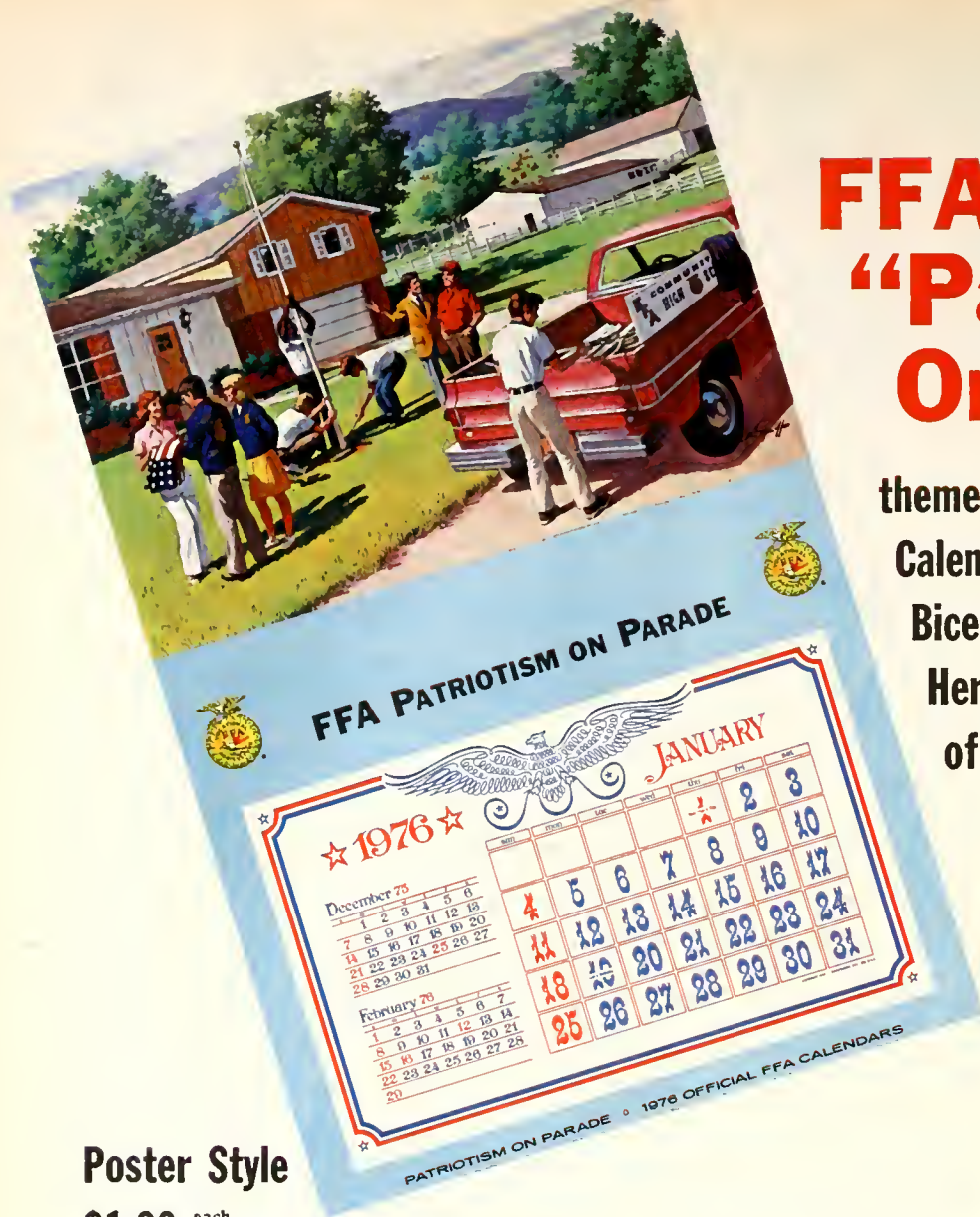
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FFA shared the "learning by doing" idea with the business education students.

## FFA in Action

(Continued from Page 53)

### Cooperating Classrooms

The Ainsworth, Nebraska, FFA hosted the District 4 Livestock Judging Contest in January. The unusual aspect of this contest was the cooperation shown between the community, the business departments, and the vo-ag department.

The vocational agriculture students were responsible for the organization and framework of the contest. This included arranging for the livestock consisting of beef, swine and sheep from local producers. The owner of a local training arena and a supplier agreed to provide the arena, pens, food and water. A public address system gave students an opportunity to direct the contestants and participants.

The business education students were given an opportunity to put into practice learned skills under genuine business pressures. Using calculators and typewriters, they had an opportunity to record, score and tabulate results for students, schools and teams.

Thirteen schools provided 22 judging teams and 42 individuals for a total of 130 participants in the judging of the three kinds of animals shown. Students were from Hartington, Norfolk, Ewing, West Holt, Rock County, Bloomfield, Battle Creek, Plainview, Randolph, Newman Grove, Spencer, and Elgin. Ainsworth won the contest, too.

Dr. Keith Gilster, extension livestock specialist from the University of Nebraska-Lincoln put the official placing on each class. He also presented type and procedure demonstration on judging before each class.

### Corn Collectors

One day's work netted \$4,360.42 for a "Living to Serve" project of the Montevideo, Minnesota, FFA Chapter. It was their annual FFA Corn Drive for Camp Courage.

Camp Courage is a special camp in Minnesota for handicapped children. There are special facilities for educa-

tion and recreation. The money collected goes for camperships to Camp Courage, and also helps build new and better facilities for the campers.

On the Saturday of the drive, co-chairmen Dave Olson and Tim Sletten sent out teams to every farm in the school district. The teams of FFA'ers asked for donations of corn or cash. When each team had a full load, they came back to school and unloaded the corn into trucks. Several truckloads went into the elevator for sales that day. Farmers in the area know Camp Courage is a good cause and gave readily, even though 1974 was not a great year for them.

This year FFA donated the first \$500 toward a hearing device for Janell Bunn. The FFA support has solved the problem of helping little Janell fit into nearly-normal school situations. It bought a body hearing aid, more powerful than a regular one, which is like an FM radio and has its own frequency band. Janell wears the aid and her teachers wear the transmitter. Through the aid, sound is amplified clearly and loudly enough so Janell can hear sound without lip-reading.

"Our FFA chapter is very enthusiastic about our corn drive. In the last five years we have collected \$11,668.20 from our rural community for "Living to Serve" projects. We have raised more money for Camp Courage in 1973 and 1974 than any other FFA chapter in Minnesota." (Ron Larson, Public Relations Chairman)

Corn co-chairman Tim Sletten, on left, and Dave Olson tell Janell about FFA.



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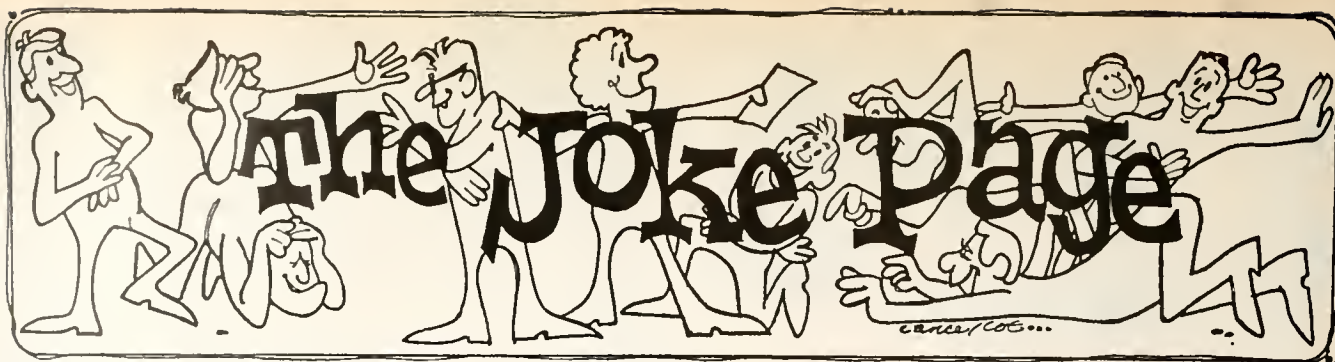
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The minister was called to the home of an elderly old maid. When he arrived she handed him the arrangements that she wanted fulfilled at the time of her death. The minister looked it over very carefully and said, "I notice you have listed here all female pallbearers. Why is that?" She replied, "The men never took me out while I was alive, they don't need to take me out after I'm dead."

Dennis Ray Knaust  
Mt. Vernon, Missouri



ENGLEMAN  
"It says I'm stranded on an island and can't get back to civilization, please recycle this bottle for me!"

"I'm not impressed," announced the old hunter, "with any of these stories about people hitting game from a trifling 300 or 400 yards. Why, one day I was a-slouchin' along the trail when these old telescope eyes spotted a nice buck. I rammed a charge down the gun barrel, then some wadding and a couple of ounces of salt on top of that. Then I let 'er fly—Bang—and that old buck dropped."

"That's very interesting," an old crony remarked, "but why put salt in your gun?"

"Shucks, that deer was so far off I had to do something to keep the meat from spoilin' before I could get there."

Robert Deraas  
Bottineau, North Dakota

Two little kids recently went into a car lot pretending to buy a car. While "test" driving one, the first asked the second to look out the window and see if the signal light worked. Puzzled, the second one replied, "Yes, No, Yes, No..."

James Farmer  
Caddo Mills, Texas

The coach walked up on the second string quarterback and said he was going to let him play in the last game of the season. The coach said, "What would you do in a situation like this: 4 and goal to go on the 2- yard line?" The player replied, "I'd get on the end of the bench so I could see better."

Tim Grisham  
Vian, Oklahoma

Eve: "How big was the town that you came from, Al?"

Al: "BIG? My town was so small our sanitation department was a goat..."

Jeff Schroll  
Rawson, Ohio

Can you improve the taste of salt? Sprinkle it lightly over a hamburger.

Danny Hindel  
Glenille, North Carolina

A notice in a university cafeteria stated: "Shoes are required to eat in cafeteria." Someone wrote below "Socks can eat wherever they want."

Marie Hansen  
Esmond, North Dakota

Older man: "How did you come to fall through the ice?"

Young boy: "I didn't come to fall in, I came to ice skate."

Keith Nussbaum  
Garretson, South Dakota

My husband sleeps like a baby despite the cattle markets. He sleeps 2 hours, then wakes up and cries for 30 minutes.

M. Rowdy Lind  
Donnellson, Iowa

A newlywed tried to console his crying bride. "Darling," he implored, "believe me, I never said you were a terrible cook. I merely pointed out that our garbage disposal has developed an ulcer."

Harold Benson  
Mocksville, North Carolina

Ray: "Did you know that Roger is a magician?"

Ron: "No, I didn't. What does he do?"

Ray: "Every time it comes to work he does his disappearing act."

Robert S. Reynolds  
Bedford, Virginia

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from the patient sufferance of these colonies; and such as are the necessities which constrain them to alter more gradual expressions of government. — The necessity of no longer being a passive world. — He has refused his Governors to pass laws of immediate and pressing importance, unless suspended in their operation till his Assent should be obtained; and when suspended, he has strictly regulated to extend to them. — He has refused to pass other laws for the accommodation of large districts of people, unless those people would relinquish the right of Representation in the Legislature, a right inalienable to them and formidable to tyrants only. — He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their public Records, for the sole purpose of fatiguing them into compliance with his measures. — He has dissolved Representative Houses repeatedly, for opposing with manly firmness his invasions on the rights of the people. — He has refused for a long time, after each dissolution, to cause others to be elected; whereby the Legislative powers, vested in the People at large, have returned to the King's hands, the most dangerous of all the dangers of invasion from without, and convulsions within. — He has endeavored to prevent the Population of these States, for that purpose obstructing the laws for Naturalization of Strangers; refusing to pass others to encourage their migrations hither, and raising the conditions of new Appropriations of Lands. — He has obstructed the Administration of Justice, by refusing his Assent to laws for establishing Judiciary powers. — He has made Judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries. — He has erected a multitude of New Offices, and sent hither swarms of Officers to harass our people, and eat out their substance. — He has kept among us, in times of peace, Standing Armies without the Consent of our Legislature. — He has affected to render the Military independent of and superior to the Civil power. — He has combined with others to subject us to a jurisdiction foreign to our Constitution, and unacknowledged by our laws; giving his Assent to their Acts of pretended Legislation: — For quartering large bodies of armed troops among us: — For protecting them, by a mock Trial, from Punishment for any Murders which they should commit on the Inhabitants of these States: — For cutting off our Trade with all parts of the world: — For imposing Taxes on us without our Consent: — For depriving us in many cases, of the benefits of Trial by Jury: — For transporting us beyond seas to be tried for pretended offences: — For abolishing the free System of English Laws in a neighbouring Province, establishing therein an Arbitrary government, and enlarging its Boundaries so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies: — For taking away our Charters, abolishing our most valuable Laws, and altering fundamentally the Forms of our Governments: — For suspending our own Legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever. — He has abdicated Government here, by declaring us out of his Protection and waging War against us. — He has plundered our seas, ravaged our Coasts, burnt our towns, and destroyed the lives of our people. — He is at this time transporting large Armies of foreign Mercenaries to complete the works of death, desolation and tyranny, already begun with circumstances of cruelty & perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the Head of a civilized nation. — He has constrained our fellow Citizens taken Captive on the high seas to bear Arms against their Country, to become the executioners of their friends and Brethren, or to fall themselves by their Hands. — He has excited domestic insurrections amongst us, and has endeavored to bring on the Inhabitants of one Part, the merciless Indian Savages, whose known rule of warfare, is an undistinguished destruction of all ages, sexes and conditions. — In every stage of these Oppressions We have Petitioned for Redress in the most humble terms: — Our repeated Petitions have been answered by repeated injury. — A Prince, whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people. — Nor have We been wanting in attention to our British brethren. We have warned them from time to time of attempts by their Legislatures to enact an unwise and oppressive measure over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have urged them by the ties of our common kindred to disavow these usurpations, which would interrupt our connections and correspondence. They too have been deaf to the voice of justice and of conjuncture. — We must, therefore, acquiesce in the necessity, which denounces our separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

We, therefore, the Representatives of the united States of America, in General Congress, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by Authority of the good People of these Colonies, solemnly publish and declare, That these United Colonies are, and of Right ought to be Free and Independent States; that they are absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain, is and ought to be totally dissolved; and that as Free and Independent States, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which Independent States may of right do. — And for the support of this Declaration, with a firm reliance on the Protection of Divine Providence, we mutually pledge to each other our Lives, our Fortunes and our sacred Honor.

John Hancock

John Hancock

Joseph Hewes

John Penn

Edward Rutledge

Thomas Mifflin

Arthur Middleton

George Wythe

Richard Henry Lee

Th: Jefferson

Peter Harrison

John Adams

Samuel Adams

Charles Bradlee

Samuel Adams

Wm. Brewster

Thos. Stone

George Washington

George Wythe

Richard Henry Lee

Th: Jefferson

Peter Harrison

John Adams

Samuel Adams

Charles Bradlee

John Adams

Benjamin Rush

Benjamin Franklin

John Morton

George Wythe

Th: Jefferson

Peter Harrison

John Adams

Samuel Adams

Charles Bradlee

George Wythe

Richard Henry Lee

Th: Jefferson

Peter Harrison

John Adams

Samuel Adams

Charles Bradlee

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