

FFA

FEBRUARY-MARCH, 1990

New Horizons

OFFICIAL MAGAZINE OF THE NATIONAL FFA ORGANIZATION



Address Correction Requested

FFA-New Horizons
5632 Mt. Vernon Memorial Hwy.
Alexandria, VA 22309-0160

Nonprofit Org.
U.S. Postage
PAID
Thomaston, GA
Permit No. 21

LEARN TO PERFORM UNDER PRESSURE.



Meeting the toughest challenges. Coming through when others are counting on you. That's what life is all about. And that's what the Navy is all about.

There's no better place to prepare for all the challenges of tomorrow than in the Navy of today.

That's because we don't just

give you top-notch training in challenging fields like nuclear propulsion, electronics, and computer technology.

We give you the responsibility that goes along with it. You learn teamwork and leadership skills. You build the confidence you need to succeed in anything you do.

Talk to your Navy recruiter, or call 1-800-327-NAVY.

Start learning the lessons of a lifetime. In today's Navy.

NAVY

**You are Tomorrow.
You are the Navy.**



FFA New Horizons

OFFICIAL MAGAZINE OF THE NATIONAL FFA ORGANIZATION

February-March, 1990

Volume 38 Number 3

COVER STORY

11

College Shopping

On the cover, Lis Skelton, Kelley Brown and Veronica Davis, left to right, walk to class on the campus of Virginia Tech in Blacksburg, Virginia.

Photo by Andrew Markwart.

FFA

16

FFA Means Winning

U.S. Congressman Bill Sarpalius shares how the FFA helped him be a winner and what it can do for you.

24

Saving a State Park

Members of the Raton, New Mexico FFA Chapter make money while halting erosion of a local park.

22

Amber Waves of Grain

Some of the best crop producers in FFA talk about the challenges and opportunities of growing in the '90s.

30

The Fall of The Wall

West German and U.S. exchange students talk about being in the right place at an historic time.

AGRICULTURE

14

Agriculture's New Professionals: The Movie

Meet the seven professionals who are the focus of a new film produced by the FFA and John Deere.

20

Food for the Final Frontier

A plant production system is at the heart of a NASA project that will enable astronauts to explore space.

40

FFA Fuels Ethanol Entrepreneur

Jeff Broin was managing an ethanol plant at age 22. He says FFA skills help him on the job every day.



DEPARTMENTS

4 News in Brief

10 Looking Ahead

47 My Turn

6 Bottom Line

34 Chapter Scoop

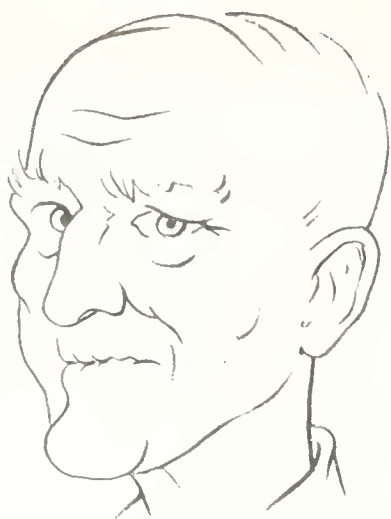
48 Joke Page

8 Mailbag

42 FFA In Action

FFA New Horizons (ISSN 0027-9315), formerly *The National FUTURE FARMER*, is published bimonthly by the National FFA Organization, 5632 Mount Vernon Memorial Highway, Alexandria, Virginia 22309-0160.

Over \$8,000 in prizes Awarded Monthly



Draw Me

You may win one of five \$1,495.00 Art Scholarships or any one of fifty \$10.00 cash prizes.

Make your drawing any size except like a tracing. Use pencil. Every qualified entrant receives a free professional estimate of his or her drawing.

Scholarship winners will receive Fundamentals of Art taught by Art Instruction Schools, one of America's leading home study art schools. Our objective is to find prospective students who appear to be properly motivated and have an appreciation and liking for art.

Your entry will be judged in the month received. Prizes awarded for best drawings of various subjects received from qualified entrants age 14 and over. One \$25 cash award for the best drawing from entrants age 12 and 13. No drawings can be returned. Our students and professional artists not eligible. Contest winners will be notified. Send your entry today.

MAIL THIS COUPON TO ENTER CONTEST

ART INSTRUCTION SCHOOLS

Studio 0F-3540
500 South Fourth Street
Minneapolis, Minnesota 55415

Please enter my drawing in your monthly contest. (PLEASE PRINT)

Name _____

Occupation _____ Age _____

Address _____ Apt _____

City _____ State _____

County _____ Zip _____

Telephone Number _____

© 1990 Art Instruction Schools



NEWS IN BRIEF

Florida Leadership Center Burns

Flames swept through the main lodge of Florida FFA Association's new FFA Leadership Center in the early hours of January 4, causing over \$1 million in damage. The lodge was the first phase of a plan to build cabins, an auditorium and other facilities at the remote 119-acre site located about 15 miles southeast of Haines City, Florida.

A local man not involved with the FFA has been arrested and charged with arson. The Florida FFA Foundation had been housed in the lodge since it opened this past June. The foundation's offices and records were completely destroyed in the blaze.

Tropical Members

For the first time in the history of the FFA, this year's membership will include members from the Federated States of Micronesia. Micronesia is a group of islands in the south Pacific, southwest of Hawaii. Although they are not states, they are U.S. territories, like Puerto Rico and the Virgin Islands, which also have active FFA chapters.

Nine members from the island of Rota are now officially FFA members. The National FFA Organization has been working with the U.S. Department of Commerce to introduce FFA to the islands.

Membership News

The Ag Sci FFA Chapter at W.B. Saul High School in Philadelphia, Pennsylvania is the largest FFA chapter in the country with 604 members, according to the final 1988-89 FFA membership report. The following are the 10 largest FFA chapters in the United States and the number of members they reported in the 1988-89 school year. California dominates the top 10 with six chapters, up from two last year.

Japan This Summer?

FFA members ages 16-18 are invited to travel to Japan for a 16-day cultural/agricultural exchange. Participants will fly to Tokyo and with the help of Future Farmers of Japan advisors, will travel by train to host family sites. About ten days will be spent with host families seeing their agriculture, working on the farm or in greenhouses, sightseeing and taking part in family activities.

On the way back to Tokyo, the members will visit Kyoto, ancient capital of Japan. Tentative dates for the Japan Summer Exchange are July 14-30. Applications must reach the National FFA Center by May 1. Contact Jack Keller at the FFA Center, 703-360-3600, for more information.

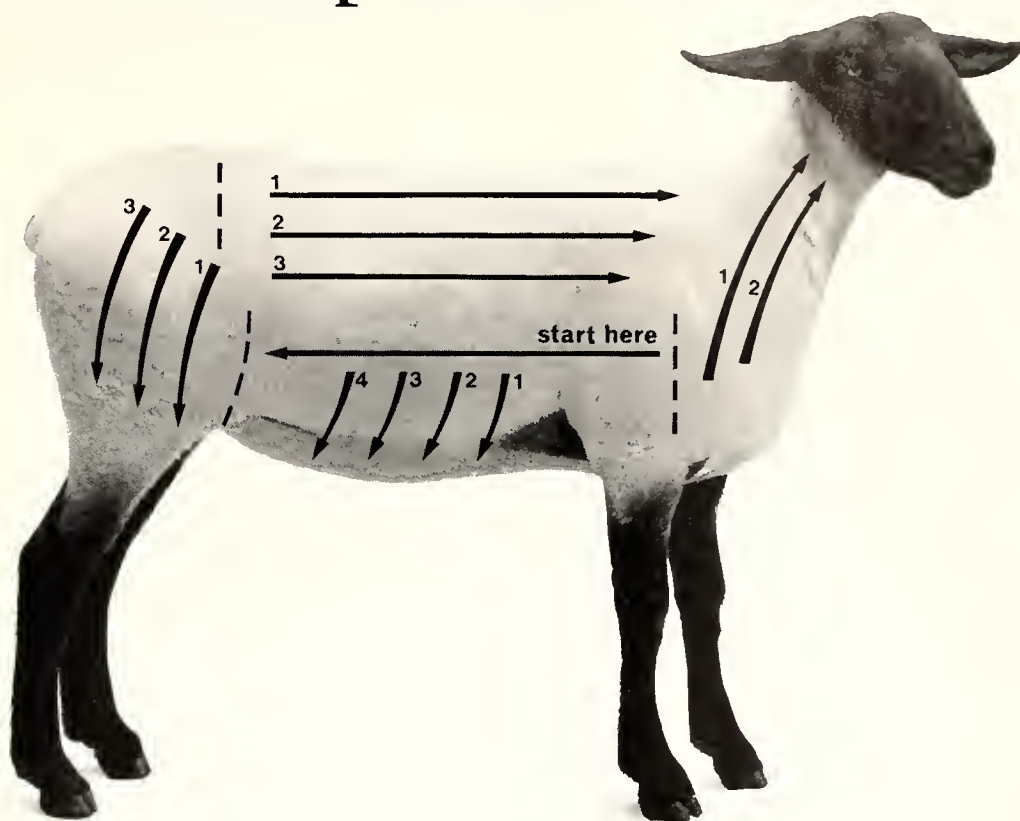
FFA Will Miss Don Erickson

Former national FFA talent director and North Dakota state supervisor Don Erickson, died November 21 in Minot, North Dakota. He was involved with the talent program at national FFA conventions for 41 years, revised the FFA Student Handbook and co-wrote the FFA Advisor's Guide to the Student Handbook with his wife, Martha. Erickson taught vocational agriculture in Rugby, N. D. for 29 years. After retirement, he was in constant demand as a banquet speaker for FFA events across the country.

Chapter Membership

W.B. Saul, Philadelphia, Pa.	604
Santa Rosa, Calif.	487
Chicago Agriscience School, Chicago, Ill.	459
Colquitt County FFA, Moultrie, Ga.	402
Red Bluff, Calif.	351
Madera, Calif.	341
Santa Maria, Calif.	326
Atwater, Calif.	315
James Wood, Winchester, Va.	283
Hanford, Calif.	283

Because Sheep Don't Look Like This,



Clip This.

If you've never groomed an animal for show before, don't worry. Stewart by Oster will help you learn how to do the job right.

Start by filling out this coupon, clipping it out, and mailing it to us. We'll send you a free illustrated booklet or wall poster showing you all the grooming strokes, plus any additional instructional materials you need.

And remember, when it comes to animal grooming clippers, Stewart by Oster is number one. Along with international sheep shearing expert Charlie Swaim, we're always ready to lend you a helping hand.

STEWART

by
Oster
Division of Sunbeam Corporation



Free Literature

Free, fully illustrated booklet or poster shows you how to improve your sheep shearing techniques.

- ☐ Booklet
- ☐ Poster: Right-handed shearing
- ☐ Poster: Left-handed shearing

Information on Educational Videotapes for Purchase

- ☐ Sheep Shearing Techniques
- ☐ Care & Maintenance of Sheep Shearing Equipment

Oster Professional Products
Route 9 Box 541
McMinnville, TN 37110

NAME

ADDRESS

CITY STATE ZIP

Magazine Staff

Editor-in-Chief, Wilson W. Carnes
Senior Editor, John M. Pitzer
Managing Editor, Andrew Markwart
Publishing Assistant, Linda Flint
Director of Advertising, Glenn D. Luedke
Advertising Assistant, Joyce Berryman
Circulation Fulfillment Manager, Dottie M. Hinkle
Assistants, Janet Magill, Harriett Fidd, Tracie Weekley-May, Nora Bartock, Veronica Ruffner

National Officers

National President, Donnell Brown, Hwy. 380 West, Box 789, Throckmorton, TX 76083; *National Secretary*, Scott Crouch, 1528 East Port Court, Cicero, IN 46034; *National Vice Presidents*, William Henricksen, Rt 3, Box 374, DeWitt, IA 52742; Casey Isom, P.O. Box 455, Fruitland, ID 83619; Bradley Lewis, Rt 1, Box 183-1A, Elkmont, AL 35620; Dan Schroer, R.R. #1, Fairground Farm, New Bremen, OH 45869.

Board of Directors

Chairman, Larry Case; *Members of the Board*, David Coffey, John Denmark, Terry Heiman, Leonard Lombardi, Donald Michael, Duane Nielsen, Les Thompson, William T. Woody

National Staff

National Advisor, Chief Executive Officer, Larry Case; *Executive Secretary*, Coleman Harris; *National Treasurer*, David A. Miller; *Administrative Director*, Wilson W. Carnes; *Manager of International Programs*, Lennie Gamage; *FFA Program Specialist (Awards)*, Robert Seefeldt; *FFA Program Specialist (Contests)*, Ted Amick; *FFA Program Specialist (Leadership)*, Tony Hoyt; *FFA Program specialist (Membership)*, Marshall Stewart; *Director of Information*, William Stagg; *Director of FFA Supply Service*, Dennis Shafer; *Executive Director FFA Alumni Association*, Robert W. Cox; *Manager of Accounting*, JoAnn Grimes

Advertising Offices

FFA New Horizons
P.O. Box 15160
Alexandria, VA 22309 703-360-3600

The Brassett Company
5150 Wilshire Boulevard
Los Angeles, CA 90036 213-934-8502

Midwestern States
Karaban / Labiner Associates, Inc.
333 North Michigan Avenue
Chicago, IL 60601 312-236-6345

Pennsylvania, Delaware, New Jersey
Karaban / Labiner Associates, Inc.
130 West 42nd Street
New York, NY 10036 212-840-0660

Peter C. Kelly, Inc.
725 South Adams Road #260
Birmingham, MI 48009 313-642-1228

Robert Flahive Company
22 Battery Street
San Francisco, CA 94111 415-398-4444

ADDRESS CHANGES: Send both old and new address to: Circulation Department, FFA New Horizons, P.O. Box 15160, Alexandria, Virginia 22309-0160.

CORRESPONDENCE: Address all correspondence to: FFA New Horizons, P.O. Box 15160, Alexandria, Virginia 22309-0160. Offices located at the National FFA Center, approximately eight miles south of Alexandria, Virginia.

SUBSCRIPTION: \$3.50 per year in U.S. and possessions

(FFA members \$1.75 paid with dues). Single copy \$1.50; five or more 75¢ each. Foreign subscriptions, \$3.50 plus \$2.00 extra for postage. Copyright © 1990 by the National FFA Organization.



THE BOTTOM LINE

We cannot help but view with excitement the changes going on in Eastern Europe. It would seem that at last the freedom envisioned by some of those who fought and died in World War II is being achieved by the people in those countries who were to be liberated from tyranny. The remarkable thing about it all is that, with the exception of Romania, this change has been accomplished without violence. If you know your history, you know that it has been tried before and failed. This time, the time was right.

The benefits of change will not be realized overnight. It takes time to change the political and economic systems in a country. One can only hope that the people in these countries will have the patience and strength to give the new systems time to work.

As FFA members, you need to know that the world you live in is rapidly changing. The total impact of what is now taking place is not known at this time but no doubt will be significant. The countries being liberated have a work force that will become more competitive in world markets as soon as sufficient capital is found for developing new industries. In order to survive economically, the United States must find where we have the greatest advantage and pursue markets in those areas.

Agriculture is one of the industries where the U.S. excels and you are a part of it, or you can be. But today's gains can be tomorrow's losses if we do not stay ahead. To do your part, you must develop your abilities to the fullest extent possible with all the education you are able to get. Agricultural Education and the FFA can help you do just that, or at least provide you with a start to be followed up with further education at a two-year or four-year college. Most agricultural colleges are reporting a declining enrollment which should spell opportunities for those who remain in agriculture.

You can also help by getting a friend to enroll in agriculture and join the FFA. Just one more member in each chapter will add over 7,000 new members in the coming year and add to the human resources in agriculture.

Wilson Carnes

WITH BIG A PRODUCTS, THE ONLY THING YOU CAN'T COUNT ON IS THE WEATHER.



It takes a lot of extra effort to keep a farm going these days. You're holding on to equipment longer. And doing a good bit of the mechanical work yourself. That's why your Big A Auto Parts Store is more important than ever.

We keep a healthy stock of the parts you need. Top quality parts like:

BIG A Big A oil, air and cab filters are the top-quality filters you need to assure that your farm equipment will run efficiently *all* year — not just during planting and harvest times.

Grote Grote lighting products: trailer lights, combination lamps and rubber utility lamps will light up your equipment so that you can see *and* be seen!

Gates Big A/Gates hydraulic hoses, made while you wait at many Big A stores, will keep your equipment working.

BIG A Big A Batteries provide complete, high-quality coverage for trucks, tractors, and agricultural equipment — as well as consistent cranking power for even the largest engines.

FEDERAL MOGUL Bower/BCA Ag Bearings are designed exclusively for heavily-loaded, extremely dirty equipment and feature the Vanguard triple-lip seal for added protection and longer life.

BIG A Big A Lighting Products feature brighter halogen lamps for farm tractors and ag equipment. Halogen gas-filled inner bulbs generate *twice* the light output of conventional lamps.

So, to keep your equipment humming and your crops coming this year, stop by Big A. You'll find we carry a lot more than just auto parts. And we want your business!

You can count on that.

BIG A
AUTO PARTS

MAILBAG

.....

Recommends New Contest

I would like to recommend to you that the National Parliamentary Law Contest be developed and recognized as a national contest in connection with the national convention.

In a manner of speaking, parliamentary procedure is a combination of public speaking, extemporaneous speaking, demonstration team, and ag forum all rolled into one team.

The amount of information that is required for these members to learn is far greater than most of your speaking contests.

We owe it to the members on the teams to show national recognition for a job well done.

Marshall L. Wondergem

Misses FFA

Please start my subscription to *FFA New Horizons*. I miss that magazine very much. I miss the FFA very much also.

I'm in the Air Force working with Weather Satellites. When I get out of the USAF and I finish my degree, I hope to start giving back to FFA all of the good experiences afforded to me. Thanks for a great organization.

*Byron Austin
AIC, USAF*

Oops!

When the national convention of the "Future Farmers of America" voted to change the name of the organization to "FFA" leaving out the word farmer, I was dismayed.

When I saw *FFA New Horizons* this month I was really dismayed. The name

change of the magazine added on to the name change of the FFA organization is too much.

Then imagine my chagrin when I turned to the "News in Brief" page (8) and found that the rising sun was missing from the newly designed emblem.

I am upset with this chain of events.

*Stanley Warren
Vocational Administrator
Pearland, Texas*

We have red faces! The sun's rays were accidentally left off the artwork of the new emblem (News in Brief, D-J, 1989-90) but rest assured they ARE definitely a part of the new emblem.—Ed.

Thanks!

I would like to take this opportunity to thank all of the sponsors that made the 62nd National Convention a reality.

This year's convention brought on a lot of proposed changes. There is a section in the *FFA New Horizons* magazine entitled, "FFA Looking Ahead." Looking ahead. That's what we as FFA members must do. Our state officers and national delegates across the country hold a vested interest in our organization and felt that these changes would be in our best interest.

The "one per 2,000" amendment was perhaps one of the most controversial issues. I can understand Texas' view on larger states deserving more representation but I also want Maryland, and other small states, to have as much "say" on an issue as a larger state.

I think the passage of this amendment was a fair and compromising solution.

There was not one session or contest that wasn't handled with a sense of dedication, professionalism, and sincerity. Thanks to the 1988-89 national officers for a job well done. Thanks to the officers and everyone involved in making the 62nd National FFA Convention a hit.

I will always remember my trip to Kansas city and the new friends I made.

*Jennifer Daugherty
Brunswick, Maryland*



27602 — Tan

- ▶ Superior Performing Ranchwear Leather
- ▶ Barnyard Acid Resistant
- ▶ Oil & Fuel Resistant Soles
- ▶ Anti-Slip Sole Pattern
- ▶ Taped Side Seams
- ▶ Full Heel Slip
- ▶ Corded & Slotted Pull Straps
- ▶ Carbo-Tec Soles Guaranteed For One Year

- 27605 — Brick
- 27662 — Tan (Steel Toe)
- 27704 — Dark Brown
- FR700 — Black
- FR702 — Tan w/Gore-Tex Bootie
- FR710 — Black (Steel Toe)

DURANGO BOOT®

Franklin, Tennessee • U.S.A.

See your favorite footwear dealer for this and other styles.

Send letters or notes with name, address and chapter to MAILBAG, *FFA New Horizons*, P.O. Box 15160, Alexandria, VA 22309. All letters are subject to editing.



FFAer makes his farm a better place to live and work.



1989 National Home and Farmstead Improvement winner Curt Cline of Albany, Ohio, spent more than 1,500 hours on building, repair and renovation projects.

Curt Cline of Albany, Ohio, knew that building a new sheep barn would test his carpentry and construction skills.

But he soon discovered that the task also challenged his persistence and patience. The experience left a lasting impression on Curt. "It was frustrating at times because little things would go wrong. But this project taught me to take time to do things right," he says. "Because the foundation was solid and the poles square, the rest of the construction was easier."



Using scrap metal, Curt designed and built this log splitter. By making it himself, he saved more than \$600 over the cost of buying a new one.

To build the barn, Curt bought all the materials with his own money, drew the plans and did 75 percent of the work. His dad, Jack, who's an experienced carpenter, and his Agricultural Education instructor supplied guidance and encouragement.

Curt's persistence and patience were tested again when he remodeled the family house, built in 1925. "I had to level and square the house before I could make improvements," Curt says. "Over 370 hours went into insulating, re-siding, installing windows, removing a porch and adding a family room."

His FFA Advisor, Don Van Nostran, says, "I've never had a student who invested as much of his own money and did so much work on his own."

During his FFA career at Alexander High School, Curt spent more than 1,500 hours making his farm more attractive, efficient and safer.

The welding, wiring, carpentry and plumbing skills he learned in Agricultural Education classes and FFA will last a lifetime. Curt also learned a valuable lesson about tackling tough jobs: "When you're faced with difficult projects, you have to set goals, plan ahead and remember that you can't do everything at once. It takes time."

Because of the skill and dedication of FFA members, like Curt, The Upjohn Company is proud to sponsor the National Home and Farmstead Improvement Award for the 14th consecutive year.



To add pasture and provide water for his sheep herd, Curt bulldozed land to build this pond, which drains a swampy area.

Upjohn
ANIMAL HEALTH

ASGROW®

The Upjohn Company
Asgrow Seed Company
Kalamazoo, Michigan 49001

LOOKING AHEAD

Gotta Wear Shades

About 15,000 eye injuries occur on American farms every year. Not only can these injuries be painful, they can result in partial or total blindness, says the American Optometric Association. But injuries can be prevented if farm workers put eye safety first. Here are some tips for avoiding eye injuries on the farm:

- Wear protective eyewear when handling agricultural chemicals, operating machinery, welding, repairing buildings, lumbering and trimming trees, or performing any other job with danger of flying pieces.

- For long periods outdoors, use tinted safety lenses that screen out 75 to 90 percent of available light and provide maximum ultraviolet protection.

- If an eye injury occurs, apply emergency care and seek treatment at a hospital or from an eye doctor. For chemical splashes, flush the eye with water for 15 minutes. For blows, apply cold compresses for 15 minutes. For cuts or punctures, bandage the area lightly and seek professional care.

Bad News for Pizza Lovers

A nationwide shortage of milk and cheese has school systems scrambling to adjust lunch menus and pizza operators paying almost twice as much for the precious commodity – if they are able to find it at all.

"We've gotten our biggest complaints over the past few months from school districts," said Bill Wendorff, Extension

dairy manufacturing specialist at the University of Wisconsin. "I've also had eight to 10 calls from pizza chains that are not able to find cheese."

Cheese and other dairy products are falling behind normal supplies due to a nationwide shortage of milk. Mozzarella, the traditional pizza cheese, is in particularly short supply because of its "lower margin of profit," Wendorff said.

AQHA Celebrates 50th Year

As part of its year-long celebration, the American Quarter Horse Association has commissioned a specially designed logo for its 50th Anniversary in 1990. Each



1990 AQHA member will receive a bonus, color window decal of the logo. It also is being featured on a line of clothing and products available through AQHA's 50th anniversary catalog.

AQHA is the official registry of the American Quarter Horse breed and the world's largest equine registry. The association was formed March 15, 1940, in Fort Worth, Texas. Now its international headquarters in Amarillo, Texas, serves 250,000 members and one million American Quarter Horse owners in the United States and 62 foreign countries.

Pesticide Concerns Increasing Among Farmers

According to a survey of 1,000 U.S. farmers conducted for Abbott Laboratories by The Gallup Organization, 49 percent said their concern about using pesticides has increased over the past three years. Only 4 percent indicated their concern has decreased.

Abbott commissioned the survey to determine farmers' attitudes and behavior regarding pesticide safety. The farmers surveyed included 100-plus acre producers of alfalfa, citrus, corn, cotton, grapes and soybeans, and 50-plus acre growers of apples and vegetables.

According to David F. Martin, director of agricultural sales and marketing for Abbott Laboratories, "This survey demonstrated that concerns about pesticides are an issue on the farm, not just a concern of consumer or environmental groups. A large number of the farmers surveyed are truly concerned about human and environmental safety, and they are discussing these issues with their families. And many of these farmers feel that they, as well as chemical manufacturers, share the responsibility for reducing the risks of using chemicals."

More than 40 percent of the farmers said their spouse or a family member had expressed concern over the farmers' pesticide use. Some 59 percent of the farmers indicated this could influence future pesticide choices.

U.S. Sends Food to Poland

The United States has signed an agreement with Poland to provide that country with \$20 million worth of U.S. agricultural commodities as part of the U.S. "Food for Peace" program. The U.S. will provide Poland with about 22,000 metric tons of vegetable oil, 16,000 tons of rice and 12,000 bales of cotton. The Polish government will sell these commodities in Poland for local currency. Funds generated from these sales will be used to support economic growth in Poland.

This is the third agreement to be entered into as part of a \$100 million food aid package to Poland. Earlier agreements provided \$10 million under the Food for Progress Program for pork bellies and \$50 million for corn and butter.



New Milk Ads...In mid-February, the American Dairy Association will unveil two 30-second commercials as part of its "Health Kick/Everybody Knows" milk advertising campaign. According to an ADA spokesman, the commercials are targeted to 18- to 49-year-olds to "make the nutritional benefits of milk more immediate and more relevant to adults."

College Shopping

With so many choices, how do you know which college is right for you?

By Andrew Markwart

When it comes time to choose what college to attend, the questions never seem to end. "College is so expensive and my family isn't exactly rich. Can I afford it? There's so many schools – which one is right for me? How do I start looking?"

On the next three pages, you will meet FFA members who attend different kinds of colleges; a 4-year university, a technical college and a 2-year college. You will also find tips on getting scholarships and how to get ready for college.

4-Year University

Julie Nicol can't make up her mind. She spent her first year at The Ohio State University studying to be a veterinarian, but after last fall term, she decided she was headed down the wrong road.

This was no quick decision. Nicol, 19, of Marysville, Ohio, had started making visits with a vet when she was in the eighth grade. She had told, almost promised, everyone she knew for over five years that she was going to be a vet and now, she doesn't know what she'll do. But that's okay with Julie.

She says one of the advantages of attending a 4-year university like Ohio State is that there are hundreds of courses to be explored and when it comes time to change your major, you don't have to change schools. "I'm testing the waters of a lot of different areas right now," says Nicol. "I'm curious to know more and more about different things."

"I've taken some introductory courses to other subjects that I'm becoming really interested in. I'm broadening my base of



Photo by R. Lynn Wells

Sherri Bentley, left and Julie Nicol first met at FFA camp when they were freshmen in high school. Now they are roommates at The Ohio State University.

knowledge." She still plans to retain her animal science major, although that may switch to landscaping. Whatever the major, she plans to minor in communications. "Broadcasting has always been in the back of my mind."

She says that some well-chosen college activities can be as important as good

grades. Nicol is a "little sister" at the Alpha Zeta Fraternity and, before a knee operation in December, she was active in many intramural sports. "My interaction with people is what is going to get me a job if I go into communications. Interviewers are going to ask, 'what kinds of activities were you involved in? Did you hold any

(Continued on Page 12)

FFA College Scholarships: Get One

Over \$420,300 in college and vocational/technical school scholarships will be awarded this year through the National FFA Organization's scholarship program. The money is donated by over 100 sponsors through the National FFA Foundation, Inc.

The 305 scholarships will be presented late this spring to members starting college as freshmen in the fall of 1990 with a few designated for members already in college.

The qualifications are simple; the applicant must have been an active FFA member, maintained a satisfactory Supervised Agricultural Experience program and received good grades in high school.

A few of the scholarships require proof of financial need. That information is provided through a Parent Financial Analysis Form included in the application.

Although the scholarships range from \$500 to \$25,000, most are awarded in the \$1,000 area. FFA members receive the

money after they have submitted their college class schedule to the scholarship committee. Deadline for the scholarship applications is March 1, 1990.

FFA members who need a scholarship application form should check with their chapter advisor. If none are available, request one from: Scholarship Office, National FFA Center, P.O. Box 15160, Alexandria, VA 22309-0610.

**All applications are
Due by March 1, 1990.**

College Shopping

(Continued from Page 12)

leadership positions?' I think that holds true whether you're in high school or college or anywhere."

A \$1,000 FFA scholarship sponsored by the Beef Industry Council helped with the finances her freshman year.

Julie's roommate, Sherri Bentley, 19, of Sabina, Ohio, says that, at first, walking onto a campus of 60,000 students is a little intimidating at first. "I was petrified," she confesses. "But living in the dorms helps you to meet people. You have a lot of activities with the people on your floor and that's how I've met a lot of people."

"Once you get settled into your classes, it's like your own little college and it's really not all that big. Most of the people you go to class with have to take the same classes to fulfill their requirements that you do, so it really gets small quick."

Like many high school graduates, Bentley was ready for a change of scenery from her hometown. "I wanted to get away from home. I love my family, but I thought I needed to get away, get out on my own and have to do things for myself. I thought that if I stayed home, it would be the same as staying in high school."

Along with a \$500 FFA scholarship sponsored by Jacques Seed Company, Bentley also landed the Waddell Scholarship offered by the county school district. It contributes \$1,000 a year for four years to easing her tuition costs. She also received a \$1,000 Scarlet and Gray scholarship offered by the university.

Bentley says the scholarships have been a great help in easing the financial load of college, it was a bank account she shares with her three sisters that has provided the money to go to a 4-year university.

The "Bentley Sisters Account" was started by their mother when they were little. "The only thing we use it for is school. We showed hogs and lambs at our county fair and the money we got from the winnings and selling those animals went into the account." Her mother would also contribute to the cause from time to time.

Bentley is a sophomore horticulture major and is considering a career in landscaping.

The two roommates first met at FFA camp her freshman year in high school and kept in touch by writing each other on and off over the years. When they heard each other was going to Ohio State, they arranged to room together.

After the initial shock of the big campus as a freshman, Bentley says she has no



Photo by Andrew Markwart

Dr. Joy McMillan, left, developed the agricultural biotechnology program at the MATC. After just two years, Robert Mickelson is ready to start his career.

reservations about her decision. "I don't think I could have gotten any better education from anywhere else."

Technical College

Robert Mickelson, 19, of Rio, Wisconsin, has chosen the express lane to his career as a biotechnology technician by enrolling in the Madison Area Technical College (MATC). That college's new "Biotechnology Laboratory Technician Program" is the most advanced in the country for a two-year school.

It is Mickelson's second year in the program, which only began in 1987.

"I wasn't sure if I wanted to go to a four-year university but I thought I should have more education than just to start working in the workplace," he recalls.

Mickelson could have had his pick of colleges since he earned "mostly" A's and B's, but he insists "I was interested in this new program. I'm interested in science and agriculture and this was a good mix of the two."

"In Wisconsin, I see a push toward biotechnology. It's an up-and-coming field and I thought it would be a good opportunity to get into it. I would rather get a 2-year degree and start work after only two years."

Mickelson worked this last summer at Agrigenetics, an agricultural biotechnology firm in Madison. His supervisor, Scott Alt, who is manager of greenhouses and fields at the firm, said that Robert "was the best worker we ever had in this area. When you asked Robert to do something, you knew it was going to get done right

the first time." Alt plans to go back to MATC to hire more students.

All students are required to take an internship at a biotechnology firm during their fourth semester according to Dr. Joy McMillan, project director of the biotechnology program at MATC. McMillan was a key figure in organizing the cutting-edge program.

She says that in her program, "you get more biotechnology in two years than you would get in four or five years at a university. We're training technicians, so we emphasize the lab work. Everybody gets to use the instruments. They get involved and they talk about it. That's learning."

McMillan says the majority of courses at a technical college are "very specific to what you plan to do." This is due to a strong tie to the local businesses and being aware of the industry's needs. In fact the biotechnology program started as a result of biotechnology researchers in the Madison area who were frustrated over the lack of qualified, trained technicians.

McMillan says the personal attention students get at a technical college is unsurpassed. "A teacher is responsible for each student that attends our school. That means they're not only the student's teacher, but also their personal counselor and the administrator." A student will usually get the same instructor for most of the classes in their program area.

Class size at MATC is small. Most don't exceed 30 people and it isn't unusual to find classes with eight students.

And MATC's dean of agribusiness/agriculture, Cletus Fontaine, says that he can't come close to filling the demand for qualified graduates in the local ag biotechnology industry.

Based on a survey taken of local laboratories, he says there is a need for 100 technicians every years. There are currently 21 full-time and 12 part-time biotechnology students at MATC.

2-year, Junior Colleges

For 1988-89 Georgia FFA President Ray Mancil, the decision to enroll at Abraham Baldwin Agricultural College (ABAC) was a natural one. ABAC is a two-year college located in Tifton, Georgia.

Mancil, 19, of Nicholls, Georgia, says the college draws a large number of FFA members because it is FFA headquarters for District I in that state. "I feel more comfortable here because I have been here before for FFA functions."

The size and location of ABAC attracted Mancil, who is a freshman this year. The college is an hour and a half drive from his home. Of the 2,138 students attending the school, 75 percent of them live within 75 miles of the school. He says it's a good place to start on a college career. Class size is usually 15-28 students and he likes the personal attention he gets from his instructors, especially in math, a class that has always been a challenge for Mancil.

But what Mancil likes most about ABAC is the sense of community he feels there. "There's a concentrated group of ag majors here who are just pumped up about agriculture!" he says. "It's a very friendly environment and the teachers understand FFA and agriculture in general."

He plans on getting his associate's degree and then move on to the University of Georgia to finish his bachelor's degree in agricultural education.

Like many high school graduates, Mancil wanted to go to college, but his financial picture was grim. His parents were not in a position to finance his education, so it was up to Ray to find the money.

After asking around and letting people know he was looking for scholarships, the answer to his financial worries came in the form of a Service Deferred Loan available to agricultural education majors in Georgia.



After landing a scholarship, Ray Mancil was sitting pretty at Abraham Baldwin Agricultural College in Tifton.

Mancil says pride should never keep anyone from getting started in college. "Don't be afraid to talk about financial aid to people at the ag college. You should be able to find a way to finance the school of your choice. The agricultural industry is looking for qualified people. Ag majors are at a premium today."

Ray says some of the most exciting words he's ever heard came from Dr. Ron Jones, head of the agriculture department at ABAC, who told him, "We'll find a way for you to get through school."

His advice to high school seniors is "get the forms turned in early so the financial situation doesn't weigh on you. Then go shop around. Go to the open houses. The schools are looking for students."

Scholars' Schedule

Here's a year-by-year guide to preparing for college:

Adapted from *Better Homes and Gardens* magazine (March, 1988)

•8th through 10th grades

Grades and test scores will tell if your child can handle college prep or honors classes. Help your youngster choose appropriate course

•11th grade: September

Sign up for the *Preliminary Scholastic Aptitude Test (PSAT)*, offered only in October.

•11th grade: February-April

Register for an SAT or ACT test coaching class, if needed. Sign up for the June SAT. Attend college-night presentations about features of individual schools. Send for several catalogs and tour campuses. Find people to write recommendations for your college applications.

•12th grade: September

Register for the October SAT if June scores were low.

October: Sign up for the *Achievement*

Test and American College Test (ACT).

November: Submit applications and letters of recommendation.

January: Apply for grant, loan, work-study, and scholarship offerings.

April: Many colleges mail acceptance letters. Check due date for return of material. Take Advanced Placement Test if needed.

May through July: Take placement tests if required by your college.

THE MOVIE

Agriculture's New Professionals

Meet seven people with vastly different careers but one common interest

By Lynn Hamilton

They're scientists, engineers, farmers, marketing specialists, environmentalists and salesmen. Though they seem to have nothing in common, these professions and many others have a common thread that weaves them into the fabric of the world's most productive industry—they all work in agriculture.

However, few people realize there are so many careers in agriculture. In order to spread the word about such opportunities, and to broaden the image of agriculture, the FFA singled out seven young professionals in agriculture—people who symbolize this exciting and dynamic industry. John Deere sponsored the film as a special project of the National FFA Foundation.

The film premiered at the 62nd National FFA Convention, and is available on free loan from Venard Films, or may be purchased on video cassette through the National FFA Supply Service for \$9.95.



Bruce Rominger
Producer/Manager
AH Rominger Sons, Inc.

Bruce Rominger is living his dream of working in the most productive and high-tech industry in the world.

Though farming the same land that his grandfather tilled, Rominger has been challenged to find new ways to grow his crops efficiently. "You have to look always for new opportunities, new approaches to old problems," he said.

"If you compare it to what my grandfather did, it's a completely different business," he said. "I need to know chemistry...I learned things in college chemistry that the entire world didn't know in the 1940s."

At harvest time, he says he finds immense satisfaction in seeing his thousands of tons of tomatoes go off to the processing plant. "I was the one who made those decisions that made it possible," he says. "And when it works out right, I'm thrilled."

Denette Connor-Ward
Senior Research Biologist
Monsanto Agricultural
Company

Denette Connor-Ward's goal is to help farmers—but in a research lab, not on a tractor.

Ward grew up on a farm in Heathsville, Virginia, where her family raised corn, soybeans, wheat and livestock. In school, she developed an interest in science. With her farm background, she found a natural career choice in agricultural research.

She encourages students to pursue a career in research. "It's the wave of the future," she said. "The 1990s will be a decade of more of a demand for scientists, and if you choose that field, you'll definitely have an upper hand."

A good background in science and math is a must, she said. "Believe it or not, a lot of the things you learn in high school you use in college, and you use everyday in biology research."

Terry Wichern
Owner/Manager
Dobsch & Wichern Equipment Co.

Terry Wichern's job is several wrapped into one. He's an accountant, an agricultural expert and a public relations person. And he does all of this while selling farm equipment.

"It's something you have to work at real hard—you get out of it what you put into it," he said. The business has been in his family since the 1930s, when his grandfather started the dealership.

To get started in agricultural sales and service, Wichern recommends getting a good background in agriculture, and a college education. "When I talk to a customer, he expects me to know about his type of operation," Wichern said.

He said the job outlook is bright in his career field. "No matter what the state of the economy, there's an opportunity out there somewhere."

John Deere Sends Film to Key People

"Agriculture's New Professionals," is receiving wide additional distribution by John Deere. Over 12,000 VHS videocassettes will be sent to all U.S. John Deere ag dealers, all agricultural education groups' state offices, major legislators on the state and federal levels, and a VIP list of agricultural leaders.



Richard Hadley
Resources Manager
National Park Service

While most of agriculture is involved with production, Richard Hadley's work is in preservation.

It is Hadley's job to restore and preserve the environment of Yosemite National Park in California. "I guess I've always known that I would be working with the environment," Hadley says. Now he is living his dream, managing the revegetation project of the tourist-trampled park.

His job has two major challenges, he says. The first is developing techniques to work with new plant species, the second is convincing people that it can be done.

"I think a small idea like restoration of Yosemite can be used as an example of just what can be done if people put their minds and efforts together, and work together to solve a problem," Hadley says.

Jody Strickland
Project Engineer
Proctor and Gamble Co.

Those who don't think that baby diapers and agriculture have something in common should talk to Jody Strickland.

Strickland is an agricultural engineer at a plant which turns tree pulp into the absorbent lining for diapers. She cites her work as an example of the diversity involved in her career choice.

"When I was going through agricultural engineering, I never thought I'd work in a pulp mill," she said. In her field, students take a wide range of courses in engineering, which prepares them for a variety of career opportunities.

"Agricultural engineering seemed to be a good fit with my interests and skills," says Strickland, a former FFA member who grew up on a farm. "You do have to work with math and science, but what you apply it to is fascinating and fun," she said.

Brian Tormey
International Sales
Blue Diamond Almonds

Some people who work in American agriculture spend more of their time outside of the country than in it.

Such is the case of Brian Tormey, who handles his company's million-dollar advertising accounts all over the world. The film crew caught up to him in West Germany, at a huge agricultural trade show. Tormey, like so many others, found his interest in agriculture after growing up in an urban setting.

Tormey worked on a farm during his summers in college. While he studied international trade, a professor advised him to choose the area that he was most interested to focus his studies. "Agriculture had the most appeal," Tormey said.

He is extremely enthusiastic about the career opportunities in agriculture. "There's nothing you can name that you can't do in agriculture," he said. "You can't say that about any other industry."

Xavier Equihua
Foreign Affairs Staff
U.S. House Agriculture
Committee

Xavier Equihua is proof that you don't have to grow up on a farm to work in agriculture.

It wasn't until college that Equihua even thought about agriculture as a career, when he took a course on agricultural policies of the third world. After stumbling into agricultural trade issues when he worked at the U.S./Mexico Chamber of Commerce, he landed a job on the staff of the Agriculture Committee of the U.S. House of Representatives.

He finds his work extremely rewarding for two reasons. "The people who work with agriculture are very genuine," he said. "And, agricultural trade is needed to feed people—for example, Mexico wouldn't be able to feed itself without foreign trade."

To be involved with agricultural trade policy, Equihua advises studying at least one foreign language. Besides English, he is fluent in both Spanish and French. He stresses that knowing the agricultural needs of the various regions of the world is extremely important. ...

The film will also be included in the John Deere Day 1990 Highlights film which will be sent to over 9,000 high school teachers and to agriculture departments in colleges and universities. The film was produced by the National FFA Organization and sponsored by John Deere as a special project through the National FFA Foundation.



Congressman Bill Sarpalius

FFA Means Winning

U.S. Congressman Shares First-Hand How the Organization Can Help You Win

By Jack Pitzer

Twenty years ago I was assigned to write the story about then Texas state president Bill Sarpalius. This is a follow up to that story.

Today Sarpalius is a member of the Congress of the United States serving the 13th District in the panhandle area of Texas.

What drove him then, drives him now. I believe it is self-determination. It is even spelled out on a beautiful, framed poster in his office in the Longworth Building in Washington, D.C. as follows:

To achieve all that is possible

We must attempt the impossible.

To be as much as we can be

We must dream of being more.

He asserted that no matter what the circumstances or what a person "seems to be," others can never know the determination that is inside the man to succeed, make it, get ahead.

My interview with the Congressman

was on the day he was heading back to Texas for Christmas. He shared many thoughts to pass on to up-and-coming FFA leaders. But his major point to them was "let FFA help you get started." Activity and involvement at the chapter level is a well-proven way to start life.

Sarpalius' background is an unusual one which he doesn't mind sharing. We wrote about it in the first article in April-May, 1969 in an article entitled "He Sprang Back." In summary, Sarpalius and his two brothers were taken to Cal Farley's Boy's Ranch on the day after Christmas in 1960. He was 12 and only in fifth grade because of polio. Their broken home was without heat and little food. The Ranch is a working ranch where boys live in homes with a set of house parents. In the ninth grade Bill discovered FFA and he hasn't stopped moving up since.

Animals attracted him to the ag department but it was the second place ribbon in the Texas FFA parliamentary procedure team contest that excited him. "It was the first time I'd won anything."

Eventually FFA friends encouraged him to run for area president even though he'd never been chapter president. He won that first election; later was elected state president. During the year as president he traveled and visited every chapter in Texas. As a delegate to the national convention, he remembers making the motion for admitting girls to FFA.

FFA elections and leadership experiences were all a starting ground for his

political career. As before, friends suggested he run for the Texas Senate. In 1980, he was elected to the State Senate where he served eight years.

Now he is a member of the House of Representatives and president of the Freshman Class of congressmen. He is also a member of the House Agriculture Committee.

After college, Mr. Sarpalius taught agriculture at Boy's Ranch where he had a chance to offer first-hand encouragement to students.

He considers leadership training, talking on your feet, developing responsibility, learning to manage money, experiencing team work, learning respect, setting goals and planning ahead as ways FFA helps its member win in life.

During the interview the Congressman pointed out his window toward the Capitol and shared that during George Bush's inauguration ceremony, his thoughts wandered and he remembered his past. "Because you can dream you can grow and change and improve and succeed."

"I'd be excited as a new Greenhand in FFA. It's different today. There are more things to get your hands onto. More opportunity."

"Changes in FFA and agricultural education have opened up the future for many members. Doors will continue to open for students in agriculture and they need to be ready to take advantage of the opportunity."

(Continued on Page 36)

A red beach umbrella stands on the left side of the frame. In the foreground, a wooden lifeguard stand is partially covered in snow. The stand has a sign that reads "LIFEGUARD". The background shows a dark, stormy sea under a cloudy sky.

NEXT SUMMER, START A JOB THAT WILL PAY LONG AFTER THE SUMMER IS OVER.

Sure, you can land a part-time job that will give you extra spending money. But there's one that pays off in more than just money—the Army Reserve.

With the Army Reserve's Alternate Training Program, you can join as early as the middle of your junior year in high school (but college students can also take advantage of this unique program).

You attend your Basic and Advanced Individual Training during two consecutive summers so you don't interrupt your education. After your training, you'll practice your new skills with a nearby Army Reserve unit. That's usually one weekend a month and two weeks a year.

When you combine your Reserve pay during a standard enlistment with money you get from the Montgomery GI Bill (if you qualify, you can earn over \$18,000 for your education. And you'll gain personal and professional skills that could help you for a lifetime.

Find the job now that pays you for more than just a summer. See your Army Reserve recruiter today. Or call 1-800-USA-ARMY.

BE ALL YOU CAN BE.®

**ARMY
RESERVE**

Food for the Final Frontier

Plant production is at the heart of a life support system that will allow humans to travel great distances through space and even live on the moon

By Dinah Jordan

To live in space for long periods of time is a lofty goal. What we take for granted here on Earth—air, water, food and other basic necessities of life—must be provided for in the vacuum of space.

In the past, the demand for food on the “short” journeys to the moon and around the Earth could be met with pre-packaged, pre-cooked meals stored onboard. But food production will be a necessity for extended periods of time in space. The National Aeronautics and Space Agency (NASA) is meeting the challenge with the Controlled Ecological Life Support System (CELSS).

The CELSS project is “NASA’s attempt to build a long-term life support system concentrating on biological systems,” said Dr. William Knott, biological sciences officer for NASA at the Kennedy Space Center in Florida.

In other words, scientists are working to develop the life support system technology necessary to enable humans to travel beyond the moon or even to live on a self-sustained space station or lunar (moon) base.

The idea for the CELSS program was born at NASA headquarters about ten years ago, with the initial research performed at several universities around the country. Early studies focused on determining the best crops for growing in space and the best methods for growing them.

Then three years ago, Kennedy Space Center became involved with actually trying to build a prototype CELSS. Knott added. The “Breadboard” facility located at Kennedy Space Center is where individual parts of the system come together. A variety of scientists look at the many variables involved in growing plants in space.

The Challenge

“Life support has to be developed if we’re going to live in space,” Knott explained. “It’s super exciting, but there are

a lot of challenges, a lot of unknowns.”

These unknowns include providing adequate environmental conditions, improving productivity of plants, choosing the best crops, and recycling wastes in the most efficient way.

Most of the current CELSS research is focusing on the plant environment, whereas future experiments will explore the human environment.

Horticultural scientists are trying to learn ways to raise plants so they grow faster and use less energy. They are also searching to discover the optimum temperature, humidity and lighting conditions for each plant.

Another factor being researched is

and lettuce, Knott explained. Other crops that have been considered, but have not been heavily researched, are rice, peanuts and sugar beets.

Waste management is a vital factor to consider in designing a long-term manned space vehicle. Human waste must be degradable into fertilizer for plants, and inedible plant parts need to be made edible or otherwise usable. The goal is to be able to recycle matter with relatively low material loss; only energy must be added.

Although CELSS is a total system of food production, recycling, and crew housing, most of the research until now has dealt with the challenges of actual plant production. Later research will concentrate on resource recovery, waste management, and living space requirements, Knott added.

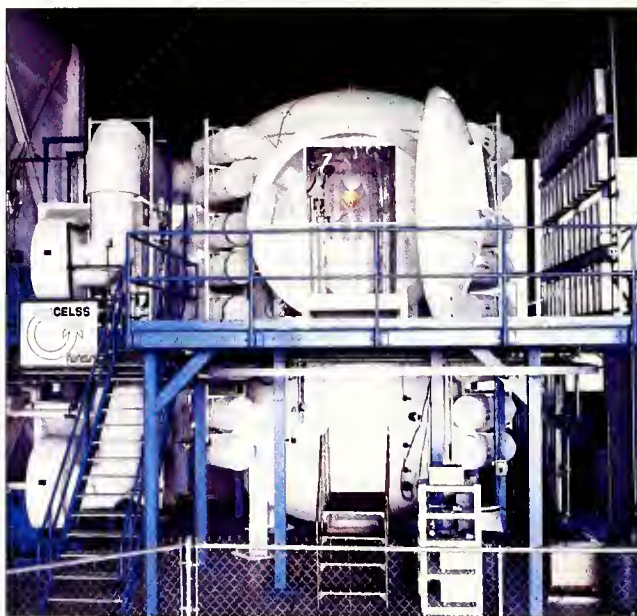
Microgravity (weightlessness) is an area that has not been studied extensively, Knott explained, because the research has encountered “enough trouble” with earth’s gravity. Also, a lunar base would probably have similar gravity to the earth’s; microgravity would only need to be considered for space travel of long duration. He added that there are plans for research into the engineering and physiological problems of microgravity.

The Researchers

The bulk of CELSS investigation is being conducted by NASA and universities. The Life Sciences Division of NASA started the program; NASA

headquarters manages the research; and Ames Research Center in Moffitt Field, California “orchestrates” the research, according to Knott. At Kennedy Space Center they are building the prototype for putting all the research together.

A number of universities are involved with crop analysis research. These include Florida Institute of Technology; Purdue University (Indiana); North Carolina State University; Tuskegee Univer-



The Controlled Ecological Life Support System (CELSS) as it currently exists at Kennedy Space Center in Florida. Researchers say it will be the late 1990s or early 2000s before it will be tested in a spacecraft.

choosing the best crops in terms of nutrition, space requirements and taste. A vegetarian diet is not always able to supply minimum nutritional requirements, so the crops must be chosen carefully. Also, the food not only needs to be nutritional, but it needs to be served in a variety of ways so the people will enjoy it.

Some crops that may find their way to a working CELSS station include wheat, soybeans, white potatoes, sweet potatoes,



Photos by NASA

This is a view inside the biomass production chamber of the CELSS project. Here, scientists are researching the best way to grow plants in space, how to recycle waste through the system and many other challenges that are unique to plant production in space.

sity (Alabama); University of California, both at Berkeley and Davis; University of Colorado; University of Florida; University of Wisconsin; and Utah State University.

NASA also has an agreement with Walt Disney World that allows EPCOT Center's The Land pavilion to display CELSS technology to the public. At The Land, research is conducted, systems are tested, and the public is allowed to see some of the action.

Some work on related technologies is also being done in aerospace corporations in the U.S. and by scientists in some foreign countries, including Japan, the Soviet Union, West Germany, and other European countries.

CELSS research is geared toward enhancing current technology on Earth as well as the future technology in space. For example, Knott said, the waste recycling technology has direct application to pollution and recycling problems of our world.

"The technology and data can be used

to understand the problems of high populations as well as an enclosed environment," he added.

The Potential

"If you think about trying to keep people alive" Knott said of the career possibilities available in CELSS research, "you realize the tremendous requirements for trained people."

Trained people are or will be needed in many fields. Among them are engineers of all types: agricultural, electrical, mechanical, sanitation, and chemical, are at the top of the list. Microbiologists will be needed to aid in the recycling technology. Computer specialists will be vital, since computers will be used to operate the majority of CELSS functions. Architects will design crew quarters.

Horticulturists and crop physiologists will investigate growing the plants. Aquaculture systems could also be used to provide meat protein in a CELSS environment. Nutritionists will help to keep diets

healthy and enjoyable, and psychologists will evaluate the crew's responses to confinement.

The Future

The timetable for a working CELSS in space stretches many years into the future. Indeed, many current researchers will not be able to see their work become reality.

Knott explained that NASA is hoping to have a "somewhat total system" working on Earth by 1992, and will incorporate the data into the system in 1993-94. During that time, they will be working out the problems that will arise during the trial period.

The projected time for testing subsystems in a spacecraft or on the moon is the late 1990s or early 2000s. A possible test on Mars could be around 2010.

"It will be about 2020 before we have a significant CELSS," Knott added. "Until that, we're just working on researching pieces."

...

Amber Waves of Change

A handful of the best crop producers in FFA talk about how they are meeting the challenges of growing in the 1990s

From the office of the secretary of agriculture to the grain elevators of the smallest towns, talk of the future in crop production seems to get back to a few key points.

As we head into the 1990s, American crop producers are going to have to be as competitive with the growers in Brazil and Germany as the neighbor down the

road. That means a lean farming operation, with a sharp manager, keeping one eye on the books and the other on new technologies that might give him an extra advantage.

If that isn't enough, producers are going to have to make sure their growing practices are in harmony with the environment. The American public shows signs

that they will settle for nothing less.

FFA New Horizons talked to some award-winning crop producers in FFA to see what they are doing to meet the unique challenges of the '90s, especially in the area of conservation.

Conserving Water

Because the United States is so large, conservation demands can differ greatly from coast to coast. On the West Coast, the concern is water.

Just 70 miles east of the Pacific Ocean lies the heart of the San Joaquin Valley in California, one of the most agriculturally diverse and productive spots in the country. The climate is mild and the soil is fertile, but the water is drying up.

To produce the huge harvests of cotton, grapes, alfalfa and other crops, growers must irrigate heavily in the valley. The water needed for the irrigation comes from reservoirs in the Sierra Nevada Mountains to the east. The past few years have been extremely dry and the water reserves are getting alarmingly low.

Judy Rezendes, 19, of Chowchilla, California, lives on a 700-cow family dairy farm in the valley. She won the National FFA Forage Production Proficiency award last November.

Five years ago she started her forage program with 28 acres of land leased from her father and has expanded it to its current size of 102 acres of corn silage and winter forage, a combination of beardless barley, beardless wheat, vetch and Montezuma oats.

Like other producers in the valley, the Rezendes family has changed their irrigation system in response to the water crunch. In the past, the family had irrigated their crops using siphon pipes. These pipes would pull water out of a main ditch that ran along the ends of the rows in the fields.

Now the Rezendes' use a "plastic line" or a large, plastic pipe that runs across the rows where the ditch used to be. Small holes, or gates, are opened to release the water and irrigate the crops. "When you use the plastic line, you conserve a lot of



National FFA forage crop proficiency winner Judy Rezendes of Chowchilla, California, helped change the irrigation system on her dairy farm to conserve water. She grows corn silage and winter forage, a combination of beardless barley, beardless wheat, vetch and Montezuma oats, for the dairy cows.

Photo by J. Wilson's Photography

water because the water doesn't sink through the ditches," says Judy. Instead, it stays in the plastic pipe until it's released on the crops, where it belongs.

The family is also starting to irrigate later in the summer and are stopping earlier than in the past to conserve water. At least for California, "water is going to be a big issue in the '90s," says Rezendes.

Lightening Up

Over the Rocky Mountains and across the plains in South Dakota, Mark Gross is trying to keep soil compaction to a minimum. Compaction is the result of the weight of today's huge machinery.

Gross, 19, of the Bridgewater FFA Chapter, is this year's Diversified Crop Production Proficiency winner.

"The equipment nowadays weighs so much that you can almost see the path of the tractor tire in the crop itself," says Gross. "It just doesn't grow as much. That's what we're trying to get away from."

"We try to go with one pass (over a field) whenever we can to cut back on compaction. We used to go over the ground more, but we've switched equipment and put the disk and field cultivator in one so it doesn't compact the ground so much. We're also using different equipment to keep the crust loose."

Some machinery manufacturers, such as Caterpillar, have introduced tractors that have tracks instead of tires to distribute the weight more evenly, but Gross says the ride is too rough for him to switch just yet. He still uses a more conventional John Deere 4-wheel-drive and front-wheel assist tractor.

Gross has also changed some growing techniques because of the drought conditions his area has suffered in the past few years. Again, he minimizes the passes he makes across the field because, "that brings up the loose ground and dries it out."

He says the key is to tread lightly. "You watch how deep you go in anything you do. When you cultivate, you go barely enough to get the weeds. Even when you plant, you're careful not to go too deep."

Uncle Sam's Hand

Mother Nature isn't the only force to be reckoned with in the '90s. Uncle Sam has his hand in crop production and some see it as too firm of a grip. Feed Grain Production Proficiency winner Blake Johnson, 20, of Holdrege, Nebraska, grows nearly 500 acres of corn every year.



National cereal grain proficiency winner Mike Karman of Denmark, Wisconsin, does all he can to protect his topsoil while growing oats and other grains.

He says that the government programs may be the right policy for the country, but they stifle his ability to manage his operation properly. "I'd like to get on a half-corn, half-soybean (crop) rotation. I could eliminate a lot of my fertilizer, herbicide, insecticide and water usage on that kind of rotation," he explains. "But the way the government program is set up right now, I would lose my corn base (the number of acres used for calculating

tions to the letter. His father, Bill, serves on the county's Agricultural Stabilization and Conservation Service (ASCS) committee which is responsible for administering and enforcing government farm programs.

Erosion Control

Like Mark Gross, Mike Karman, 18, of Denmark, Wisconsin, is keeping his trips across the field to a minimum – not to save moisture but to protect against soil erosion. Karman is the national Cereal Grain Production Proficiency winner. He grows oats, wheat, corn and barley.

He says that for the past three years he has switched to minimum tillage and has found it vital in preserving his topsoil. "In the spring we disk the fields and harrow it once, maybe twice. We try not to pulverize the soil because with any amount of wind, the topsoil will start to blow away." He also plows across hillsides to protect against water erosion.

Karman maintains grass waterways to hold soil in place when the area gets hit with heavy rains. "A few years ago, a neighbor didn't use grass waterways. About a week after they planted, we got a gully-wash of rain and we ended up with their topsoil in our waterway."

Karman quickly cleared the soil out of his waterway, but didn't return it to the neighbor. ...

"Water is going to be a big issue in the '90s," says Rezendes.

government payments) if I went that route.

In effect, the government program is encouraging Johnson to produce his crop in an inefficient way. In the 1990 Farm Bill that will be finalized later this year, he would like to see more flexibility given to the grower to manage his land better while still taking advantage of the government programs.

Whatever the outcome of the 1990 Farm Bill, Blake will follow the regula-

SAVING A STATE PARK

Members of the Raton, New Mexico FFA Chapter make money and contribute to their community by halting the erosion of nearby Sugarite State Park

By Elizabeth Morgan

I'm really impressed by this whole FFA chapter. I think you guys have a lot to be proud of and your community has a lot to be proud of, too."

With that comment, National Geographic Society producer/photographer Edward Sapp summarized his reaction to the Sugarite Canyon Mine Reclamation Project. The project was completed during the summer of 1989 by members of the Raton, New Mexico FFA Chapter.

Sapp visited Raton as the head of a two-man team sent by National Geographic to videotape the chapter's work.

The video was shown in November at the EPA's Youth Environmental awards. The Raton FFA Chapter was one of three regional winners to be visited by the Geographic team.

The mining reclamation project was conducted under the supervision of the Mining and Minerals Division (MMD) of the New Mexico Natural Resources Department.

The operation began last May with a phone call from an FFA supporter to advisor Ray Chelewski. "How would your chapter like to make \$100,000 this sum-

mer?" asked the man. Of course, Chelewski expressed interest, and the work began.

The caller explained that the state government was preparing to put a reclamation project out for bid. The area to be improved was located just seven miles away from Raton, in Sugarite State Park, a park which had been the site of much of the chapter's previous community development work.

During the early 1900's, Sugarite was mined for coal. The waste, or tailings, were dumped nearby. The waste has since



Photos by Ray Chelewski

Falling rocks were an ongoing problem for the Raton FFA Chapter members as they planted seed basins. With the terrain so loose, a wrong step could mean a small landslide. The seed basins were planted with grass and small shrubs.

begun eroding, causing stream pollution and creating a hazard for park visitors. The proposed project would stop erosion and prevent recurrences.

Chelewski contacted the state MMD about the possibility of chapter members completing the project. The state officials were intrigued by the idea and worked with Chelewski and local school administrators to develop a plan of action.

Before work could begin, a contract was written for the local school district, the state, and the members who would be working. School attorney John Davidson devoted his time to insure that the contract was legal. In addition, the school was required to obtain a bond guaranteeing that the work would be completed.

The chapter encountered problems in coordinating the project, including the federal laws which state that all workers had to be at least 16 years old and that students had to be paid a wage of \$6.54 an hour.

Once the work began, 28 students worked efficiently, digging seed basins, building rock check dams, terracing the steeper slopes, and building a diversion channel which changed the flow of a small stream. Five students served as administrative assistants, doing the bookkeeping, photography, research and other paperwork. The workers were supervised by three adults, in addition to advisor Chelewski and an MMD representative.

All of the reclamation work was done by hand. The seed basins are three feet by five feet basins planted with grass and small shrubs. Project planners hope that this experimental process will cause growth in surrounding areas. Check dams were built with available rock to prevent excessive run-off.

The work was not easy, but those involved enjoyed being a part of the project. "It was hot, it was hard work and we got really dirty," says Remy Martinez, a student participant. "But everybody helped everybody else out and we got it done."

The chapter completed the project well ahead of the deadline and with better results than expected. By late October, over ninety percent of the 1,075 seed basins were showing signs of regrowth.

"People here had never done anything like this project," says Bob Salter, an MMD official. "But the students heard the description of the work and went out there and got it done. The work was better than we often get from professional contrac-



Gorges had been cut in the park by water erosion since there was no vegetation to hold the mine tailings in place. Rock dams were built to slow the water.

tors."

Since the project was finished early, chapter leaders decided to undertake another project at Sugarite. Park Supervisor Bob Dye suggested that students tackle building a handicapped-accessible nature trail.

Again students worked quickly to finish, building a 600 foot trail with ten information stations to help educate visitors about the park. The four feet wide trail had a gentle slope so that those with wheel-chairs may enjoy it.

Students also did the research for the information signs, which were then designed and produced by members of the state Parks and Recreation Division. The signs include information about the park habitats, history and geology. One of the information stations includes a pond, which will be stocked with fish native to the park's lakes and streams.

Students who worked on the project got more than a paycheck from the experience. "I learned that I had to be on time in the morning," says Marion Granado, a sophomore. "I also learned about wildlife and nature."

Martinez adds, "It gave me self-confi-

dence. I didn't think I could do it (the physical labor), but I did. It made me proud of myself."

Students who participated in the project made about \$1,000 for their time. Many students saved the money for college, while others are using it to purchase or to improve vehicles. Still others have used the money to help finance trips with the FFA chapter.

Those involved also list a number of positive outcomes for the chapter. "The Sugarite Canyon project showed our community that youth can do as well at these types of projects as older people," states Mark Benavidez.

Chelewski lists the opportunity for public relations, the community development, and the fact that students were able to participate in an unusual SAE as the most positive outcomes for the chapter. ...

On November 15, 1989, the Raton Chapter was recognized by President Bush and EPA Administrator William Reilly as a winner in the President's Environmental Youth Awards program during ceremonies in the White House Executive Office Building.

YESTERDAY'S TRUCK ISN'T GOOD ENOUGH ANYMORE.

Ford's 3/4-ton 4x4 pickup still makes you get out to lock and unlock the front hubs.



See your Chevrolet dealer for terms of this limited warranty.
Chevrolet and the Chevrolet emblem are registered trademarks and Chevy is a
trademark of the GM Corp. © 1987 GM Corp. All Rights Reserved. Let's get it together...buckle up.



TODAY'S TRUCK IS CHEVROLET.

Chevy's 3/4-ton 4x4 has Insta-Trac so you shift
-the-fly from the cab.

Chevy's proven Insta-Trac™ is the only way to
. Because when you're on and off the road, you
n't need the hassle of getting out to switch the
bs. And of course Today's Truck has lots of other

advantages, like more leg room and shoulder room
than Ford. A two-tier load bed. And more two-
sided galvanized steel. Drive Today's
Chevy 3/4-ton. You'll see why no-
body's winning like The
Heartbeat of America.

■■■INSTA  ■■■TRAC™

THE *Heartbeat*

OF AMERICA IS WINNING  TODAY'S TRUCK IS CHEVROLET™

The Gift of Life

A treasured FFA member is gone, but his memory may save the lives of many strangers through a bone marrow donor program

There are a few families in each successful FFA chapter that, over the years, have helped make that chapter strong.

The Thell family of Willmar, Minnesota, is one of those FFA families that seems to churn out natural leaders. The sons and daughter of John and Celeste Thell are the kinds of people who get their names in the paper a lot for doing good things, mostly in the FFA.

John, Jr., 34, is a veterinarian and served as a regional FFA reporter. Susan, 31, is a home economics teacher in Willmar. Robert, 30, served as the 1978-79 Minnesota FFA president, received his American Farmer Degree and is now an education consultant for Honeywell Inc. David, 28, is an accountant at a Minneapolis bank.

Patrick, the youngest, kept the FFA family tradition by being named the 1988-89 Minnesota FFA Sentinel. But on August 4, 1989, Patrick died.

After eight months of chemotherapy treatments at the University of Minnesota Hospital in Minneapolis, Patrick lost a hard-fought battle with acute leukemia, a ruthless blood disease.

It is always sad to lose a human life. But this was a person that had a positive impact on thousands of other young people all over his state. What is worse is that Patrick may have survived by means of a medical procedure called a "bone marrow transplant," but no compatible bone marrow donor could be found.

Bone marrow is a jelly-like tissue found in the cavities of the body's bones. It produces blood components including white blood cells, the main agents of the body's immune system. Doctors now know that like whole blood, compatible types of marrow exist within the general population. Before this discovery, those in need of marrow transplant could receive it only if there was a matched donor within the family.

According to the National Marrow Donor Program (NMDP), of more than 8,000 patients transplanted with healthy marrow since 1968 in the United States, 45 to 80 percent are long-term survivors. With-



Anyone who knew Patrick Thell would say he gave much more to the FFA than he ever received.



Chances of finding a marrow donor are better within the family, but none of Patrick's brothers matched his marrow profile. Left to right are David, Robert, Patrick and John Thell.

out a transplant, the survival rate is more like zero to 15 percent.

Only about 30 percent of those who need a transplant actually get one because a compatible donor cannot be found. The NMDP says that what is needed is a pool of "typed" volunteer donors. The task of finding an unrelated donor that matches, however, is like finding a needle in a haystack. A search of a pool of 20,000

donors may be needed to find a single match.

Researchers say that if 100,000 potential donors were listed on a national computer database, anyone needing a transplant could be matched with a donor. Today there are about 68,000 donors that have been tested and registered with the national donor program.

Even though Patrick Thell knew he would not find a donor, he wanted to help save the lives of others in need of a bone marrow transplant. Since May, 1989, John and Celeste Thell have been recruiting donors and have raised over \$15,000 for the donor testing program.

Mr. Thell says that the entire community of Willmar has gotten involved in the donor program. Orscheln Farm & Home Supply, where Patrick worked as a receiving clerk for his supervised experience program, has a special offer to help the cause. Since December 1, shoppers have been dropping their receipts in a collection box in the Willmar store. On March 1, the receipts will be totaled and the Orscheln Foundation, Mobley, Missouri, will contribute 10 percent of that figure to the marrow donor campaign.

He added that many people in the community plan to do their spring shopping early to make sure their receipts count in the final tally.

As part of their Building Our American Communities program, the Willmar FFA Chapter has started an "Adopt a Donor Program." They are asking each FFA chapter in Minnesota to ask one or more people in their community to volunteer to be tested as a potential donor and then have the chapter raise \$100 per donor to pay for the testing.

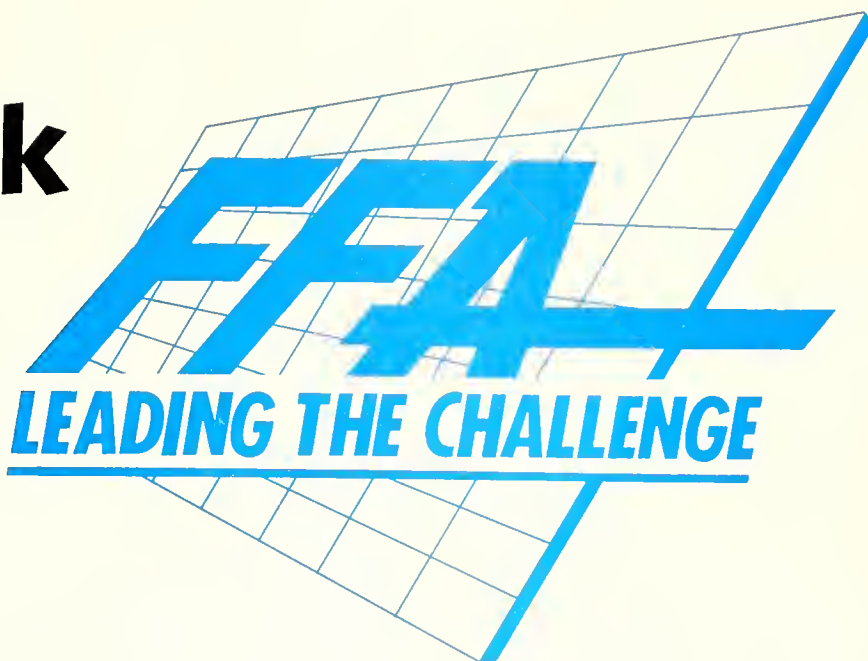
Anyone interested in knowing more about becoming a bone marrow donor, call the National Marrow Donor Program at 1-800-654-1247 or write to them at 100 South Robert Street, St. Paul, MN, 55107.

FFA members who would like to help with the Willmar BOAC Program should contact Mr. Douglas Hanson or David Damhof, FFA Advisors, Willmar FFA Chapter, Senior High School, Willmar, MN 56201

Photos by John Thell Sr.

FFA Week 1990

... it's just around
the corner



Look at your calendar. It's the first part of February, isn't it? National FFA Week starts on February 17 and runs through the 24th. Are you ready? If not, don't panic. We're here to help.

Of course, there is nothing like careful planning to insure a successful FFA Week event, but just in case the holiday season got busy and the cold snap and the snow kept you out of school, here are some ideas that can help make FFA Week a big success for your chapter.

Why Do We Do This Every Year?

FFA Week is your chapter's chance to explain what FFA is all about to your school administrators, other students and the community. You can use the week to gain valuable recognition from local newspapers, radio stations and television.

The week's activities can also include events to thank the many people who help your chapter throughout the year. Your efforts will more than likely result in increased support for your chapter from the entire community.

There are three important things to know about National FFA Week. First, it is celebrated during the week of George Washington's birthday to recognize his contributions to American agriculture. Second, there is a national theme developed each year that ties together all FFA chapters and agriculture students. This year's theme is "FFA: Leading the Challenge." And third, FFA Week is a time for FFA chapters to conduct public information programs that will explain FFA and promote agricultural education.

With that in mind, set some goals that in some way can benefit your chapter. Decide what message you want to tell this year and what audience you want to address. Do you want to inform your community about agriculture and the FFA? Create more awareness of FFA in your school? Bring your chapter closer together? Recruit members for next year?

Once that decision has been made, it's time to brainstorm. The easiest, most creative path to ideas is brainstorming. In brainstorming, *everything is a possibility*. The most original plans usually come from the craziest ideas, so reserve your judgements until later. Here are a few ideas to get you started:

- Kick-off Food For America, farm safety, crime prevention, BOAC, Red Cross CPR, chapter recruitment or other programs.
- Conduct a school assembly with FFA films or speakers.
- Present an FFA slide show to the school board.
- Conduct a food drive for needy people.
- Hold an exchange meeting with other chapters.
- Have your FFA Week Proclamation (found in the 1990 FFA Week Idea Booklet mailed to your chapter) signed by your mayor.
- Get local businesses to sponsor FFA Week radio time and newspaper space to salute FFA.

- Present complimentary subscriptions of *FFA New Horizons* to local businesses.

- Distribute official FFA calendars.
- Be sure that FFA Week is mentioned in the announcements at school.

Taking Care of Business

Now it's time to turn your ideas into an organized plan. Assign a person to be responsible for each project you chose. List all steps that must be taken to achieve the task. List any contact or resources to be used.

Be sure to get others involved in planning the projects and working on them. Delegate responsibility; it builds leadership skills in your fellow members and the work will get done faster and in most cases, better.

Once FFA Week is over, it still isn't over. Don't forget to say "thank you." No successful project is done alone and next year you will need the support of the people and groups who helped you this year. Let them know how much you appreciate what they did for you.

This article is based on information in the 1990 FFA Week Idea Booklet, sponsored by Kaiser/Estech as a special project of the National FFA Foundation. It contains more helpful suggestions and materials that will help you get the job done quickly and professionally. Your advisor should have it on hand. Ask for it.

The Fall of the Wall

By Molly Wilson

For 28 years it separated families, squelched dreams, stifled a nation, and broke the hearts of two countries. But the fall of the Berlin Wall last November breathed new hope into a world yearning for liberty.

"We were in Kansas City at the FFA convention when I learned the wall was open," says Eike Petersen, a 21-year-old German exchange student staying on a farm in Mt. Carmel, Illinois. Eike was one of 13 German exchangees who were staying in America on an FFA foreign exchange program called Congress-Bundestag, when the news broke that the Berlin wall would fall. It was an electric moment.

"The other Germans were watching TV. They came to tell me. I couldn't believe it," Eike recalls. "I sat alone in my room. I had tears in my eyes. I was so happy for the East German people."

Many FFA members may think the incredible events happening in Eastern Europe have little impact on their lives. But when a handful of German young people can travel halfway around the world only to be so deeply touched by events far away in their homeland, it becomes clear just how small the world has become.

With so many people's lives touching each other's across the sea, understand-

The Berlin Wall was built before they were born, and many expected it to be there long after they were gone. But something wonderful happened on a cold day last November...



West German exchange student Eike Petersen was at the national FFA convention when she heard that the Berlin Wall had opened. "I sat alone in my room. I had tears in my eyes," she remembers.

Photos by Molly Wilson

ing other cultures becomes a prerequisite for future leaders — especially in the global marketplace called agriculture.

The Congress-Bundestag program is designed to strengthen the ties between new generations in the United States and West Germany. The program enables the exchange students to expand their perspectives while making friendships across international boundaries by living with farm families and attending school.

"At first we couldn't believe it. We said nothing, we just sat there not believing it was happening," says Matthias Kolber, 20, from Thalmaessing, West Germany. Matthias is staying with the Darius Harms family, who operate a 2,000-acre grain farm near St. Joseph, Illinois.

The participants from West Germany met and traveled to East Berlin in May before coming to the U.S. It was a short journey in distance, but the differences in economy made East Germany seem like a different world.

"I had heard about East Germany from people who had traveled there. But it is something very different to see it with your own eyes. All of the things I had heard were true," says Eike, whose 240-

acre family farm in West Germany produces grain and hogs.

"The workers on East German state farms have no ambition—they gain nothing for themselves from working harder," observes Eike. "Their government makes this plan, tells the workers how much they have to produce and how much they'll export and import. It's not like if you work a little harder you get more."

Escape to Freedom

For almost three decades people struggled to escape the confines of the wall. Some escaped and lived to tell their story. But over the years 75 people have lost their lives trying to escape.

Adds Matthias, "When I stood there and looked at the fence (the wall) I didn't feel so good. I thought, 'How can these guards shoot people, people who are trying to be free?'"

Eike and Matthias' parents sent articles about the events from their German hometowns. Matthias was surprised at the amount of information about East Germany in the U.S. newspapers. "Here most of the news is usually about America and only a little concerns world news on a

regular basis," he says.

Both of the young Germans agree that the two Germanies will never be the same. "Last week I wrote a letter home and was going to talk about good ol' West Germany, but I had to think about it," says Eike. "In July I'll be going home to a very different Germany."

Matthias says East Germans may be in for a rude awakening if they hope to succeed in West Germany. "West Germany is not the Paradise the people in the East think it is. I expect there will be some problems," he says.

For example, he believes that if many Easterners try to settle in West Germany, unemployment and housing shortages could increase.

Eike adds, "I think the East Germans should stay in their country and fight for their rights. They worked hard to get the wall opened, and they can obtain more if they stay there and build up their own country."

An American Point of View

Cynthia Deppe, 21, was in East Berlin with her friends one week before The Wall came crashing down. "We didn't feel threatened or anything. But we understood, after we had been in the west, why



Matthias Kolber says there will be problems if too many from the East move West.

they (the East Germans) would want to get out."

Deppe, of Bellevue, Iowa, was on a six-month FFA exchange program staying with Ulrich and Marie Klope in Niedernstocken, West Germany. Deppe attends Iowa State majoring in agronomy and international agriculture. She returned to the United States in December.

"When the East Germans started coming across the border before the wall came down, it was tear-jerking," she says. "Everyone was pitching in to help in any way they could. We got a call from the Red Cross asking for clothing for the people coming on trains."

"I remember my host family would rarely watch TV, but we all were in the living room sitting around the TV all night, watching the special programming and the footage of the people. There were people jumping all over the wall. That's how come I think they say the wall 'came down,' because people were going across where they shouldn't be. It was as if it wasn't there anymore."

"It was a party atmosphere in West Berlin at that time. It was a 'Volksfest,' which means, 'people festival,'" Cynthia says.

But the lure of freedom is a potent medicine for such worries. Cynthia's host mother said she had only been to East Berlin once to visit friends two years ago. They walked to The Wall to say goodbye, as the city lights of West Berlin sparkled above.

"Their friends said, 'If only we could go with you to see what all the lights were about,'" Cynthia recalls. "Now they can."



Genuine **DEERSKIN™**



Easy Comfort.™

You'll want to own
several pair.
Ladies Deerskin styles
are also available.

Ask for Abilene Boots.



Fruit Fly Don't Bother Me

The Kohala, Hawaii FFA Chapter takes the lead in ridding the islands of this pesky—and costly—insect

By Jody E. Pollok



Fruit flies are a major problem in exporting fruit and vegetables from Hawaii. The female fruit flies are guilty of most of the damage done to the fruit. After mating with the male fly, the female goes in search of fertile ground, usually fruit, to lay her eggs. She lays about 30 eggs each time she stings the fruit. Before she is done, she will lay a total of 2,000 eggs that, once hatched, will destroy the tropical produce.

Two years ago at the Hawaii state FFA convention, delegates identified this problem as one that not only hurt their agricultural industry, but affected the state's entire economy. The first step toward a solution to the problem came in the form of a state-wide Building Our American Communities (BOAC) project.

The goal of the project is eliminating the female fruit fly of the three different species of fruit flies found on the islands. The climate of Hawaii supports the Mediterranean fruit fly which came in the early 1800s, the Oriental fruit fly which came in the late 1800s and the melon fly which also arrived in the late 1800s.

The Kohala FFA Chapter was the first to get involved with the project. "We decided to start off with the pilot project so hopefully other chapters would catch on," said chapter member Bruce Gushiken.

"We chose fruit fly eradication because Hawaii wants to have a (thriving) trade, especially in agriculture. We try to export many fruits and vegetables such as mangos and avocados, but the fruit fly stings the fruit, infects it, thus making it undesirable and unfit for exportation," said Gushiken.

The First Step

Beginning a project of this size is no easy task. "First of all we organized our chapter. We discussed undertaking the

project to see if the members were willing to give their time to the activities," Gushiken said. "We went with our chapter advisor, Mr. David Fuertes to various sessions with the University of Hawaii which has a lab on tropical agriculture."

After learning about the fruit fly, the FFA demonstration team presented the information to local groups within the community and to school classrooms. In their presentations, the Kohala FFA chapter tries to educate community members and elementary school students about the problems caused by fruit flies in Hawaii.

FFA members were surprised by the response they received from community members. "They were very inspired that the younger generation was so willing to put in their time to help out the community. They were also enthusiastic because many of our community members have their own gardens where they raise their own fruits and vegetables," added Gushiken.

Building a Better Fly Trap

Preventing the fruit from being stung by the fruit flies is challenging. FFA members from Kohala are working on traps to catch the fruit flies to limit their numbers. The traps are made of materials found around the house so that anyone can make them.

Along with constructing the traps, the Kohala FFA members empty the traps



and tally their results. "We mark the bottles before ever distributing them. We give them different marks depending upon their location. After three weeks we collect the traps and count how many flies are in them. We compare the data from different areas to figure out where the greatest concentration of fruit flies is," said Gushiken.

The chapter continues to work with the University of Hawaii at Hilo to be aware of new technologies that are being researched for eradicating the fruit flies. As

new technologies are being discovered, the chapter is working to broaden the program across the entire state.

Kohala FFA advisor, David Fuertes said, "We are hosting a workshop in which two members per chapter will attend to learn more about the project so they too can become involved. We hope to implement our pro-

gram state-wide by next year."

Once the eradication program takes hold throughout the state, there is expected to be a drastic rise in the amount of produce exported from Hawaii. "The bottom line of this fruit fly eradication program is that if something can be done, it will open up many markets for the agricultural products that we grow but cannot be exported at this time," said Terence Moniz, Ka'u FFA advisor. •••



Oriental Fruit Fly (enlarged)

Alabama Chapter Featured in National News Magazine

It was in early November when a *U.S. NEWS AND WORLD REPORT* crew came to Daleville. The crew members were armed with bulky lighting equipment, cameras and a gross of 35 mm film to record the activities of the Daleville, Alabama, FFA - one of six high school programs in the nation to be honored by the magazine and IBM for service to the community.

"IBM, in association with *U.S. NEWS*, is pleased to present the fourth in a series of six profiles from "To Give & Learn," a program designed to identify and honor outstanding teacher-directed student community-service programs across the country, in grades K to 12," the article in the December 25 week's magazine begins.

The magazine crew, headed up by Cecile Rothschild, associate art director for *U.S. NEWS*, began its shooting assignment in advisor Alan Waters' classroom at Daleville High School.

It was not a pretty day. In fact, it was the same day the tornado hit Huntsville. The temperatures were oppressive and the sky was ominous.

But that did not deter the *U.S. NEWS* crew or the intrepid FFA members. As

Waters watched his proteges with approval, they took to their new-found fame with their typical enthusiasm and good humor.

As the photographer set up his flood lights and reflective white umbrellas around the classroom, the members and the crew kibbited about the then-upcoming Auburn/Alabama game.

Coffee County Sheriff, Brice Paul, was the first local celebrity to face the cameras. He explained the Daleville FFA's rural property protection program, wherein students mark farm equipment with identification numbers. The numbers aid in the recovery of stolen farm equipment. The local FFA has marked farm property in Coffee, Dale and Geneva counties. It's one of the projects that led to the Give & Learn award. [This is the chapter's ongoing BOAC program.]

From the school, members and crew headed for city hall. The entire city council was on hand to greet them and stage a mock council meeting for the photographer.

Also on hand was Dale County Sheriff Bryant Mixon. Mixon posed with three of the FFA members as a photographer checked his lighting angles with a light

meter and gently teased the quartet into relaxing. While he did that, Rothschild passed out releases to Mayor Gene Hughes and the council for their signatures. The releases gave the magazine permission to use the photos.

A feast at McLins Kitchenette followed the stint at city hall. It was there that FFA president Chris Etheredge presented the crew with a still-warm pound cake, fresh from Alan Waters' mother's oven.

The cake was the result of an off-hand comment made by one of the *U.S. NEWS* crew. The night before the shoot, the photographer had remarked that his wife's family was from North Carolina and he always enjoyed the pound cake his mother-in-law served.

Well, he'd remembered the cake but had forgotten Southern hospitality. Waters passed along the information to his mother and before anyone could say "Y'all," a pound cake was in the making.

With bellies still aching from the feast, the crew headed for the country. They went to Martin Moates' farm, southeast of Enterprise, and shot recreated scenes of FFA putting up warning signs. Then it was on to Charles Waters' farm, where the group re-enacted their property identification project.

"In Daleville, these young people represent more than a helpful club," the *U.S. NEWS* article says. "They set an ethic of service that awes school and town officials, even those most accustomed to the neighborliness of small-town life."

The article lauds Waters for his quiet leadership. "Always in the background, finding and organizing ways for his students to be helpful, is Alan Waters, the soft-voiced dynamo advisor to the FFA chapter and agri-business teacher at the high school. Not an 8 a.m. to 3 p.m. teacher who rarely gets to know his students, Waters exerts a strong influence on all of the student in his five classes and FFA chapter...."

It was also Waters who entered his FFA chapter in the Give & Learn competition. It seems only appropriate that Waters is also Daleville High School's 1989 Teacher of the Year. ...

Reprinted from the Daleville Sun-Courier. Article and photo by Pattie Weiland, managing editor.



FFA members demonstrated their BOAC project for the magazine camera crew. Besides the magazine coverage, the school will receive a complete IBM computer network of 20 computers, four printers and software.

CHAPTER SCOOP

Members of the Drewry Mason Middle Chapter, **Ridgeway**, Virginia, constructed memo and note holders for each school staff member for Christmas.

Bingham, Utah, FFA sponsored a blood drive prior to the holiday season and had support from the student body, parents and faculty. Consequently, the drive was a big success.



Camas Valley, Oregon, FFA took part in the third annual community fun night sponsored by the parent and teacher support group. Profits from the FFA operated ring toss will be used for leadership activities.

Bon Nomme, South Dakota, FFA sponsored the annual Snow Ball dance after a home basketball game in mid-December.

Many chapters donated citrus to their communities like **Brookfield**, Missouri, who gave fruit to three nursing homes.

Three seniors in **Wakita**, Oklahoma, FFA have won the county land judging contest for the fourth year in a row. *Scot Chance* was high man, *Frank Barwick* was third, and *Kris Wire* was sixth.

Garrard County FFA in Kentucky sponsored a hunter safety certification course for all FFA members with six hours of classroom instruction and four hours on the range. They certified 107 members and 9 adults.

Members of **McLoughlin Union** FFA in Oregon earned money for the chapter by moving shoes from a shoe store to another building for a big sale.

Over the past year the **Finley**, Washington, FFA in Kennewick constructed two large sets of bleachers for the baseball, softball and football fields. Everyone helped with the followup work of setting them in place and painting.

November meeting of **Northwestern-Clark**, Ohio, FFA was a hog roast. The 80 pound donated hog was roasted at the home place of chapter member, *Chad Pencil*.

Nodaway-Holt, Missouri, FFA organized pig races and ran a watermelon stand for the sesquicentennial celebration in Graham. They also were members of the "scoop troop" that cleaned up after the parade.

Counselors, school administrators and board members of **Corcoran**, California, High School were all given a tour of local agricultural businesses. Purpose of the trip was to inform them about the modernization, technology and employment opportunities in agriculture today.



Glen Rose, Texas, FFA helped their community this year by rebuilding animal shelters located at the Agricultural Learning Center.

Ridgedale FFA members in Morral, Ohio, are looking for research ideas from other chapters that are involved with aquaculture labs or projects. (Send the ideas to Scoop and we'll pass'em along.)

New officers of **Fairfield**, Iowa, Chapter spend two days out of town preparing their program of activities. They work about an hour, then swim or relax for an hour. Then back to work.

Geoff Turner, president of **Rowland Heights**, California, FFA was chosen student of the month for his school out of 2,600 students based on his FFA achievements, including novice winner for ornamental horticulture.



Greybull, Wyoming, FFA Chapter made a model farm which is used for educational purposes at banquets, county fairs and other community locations.

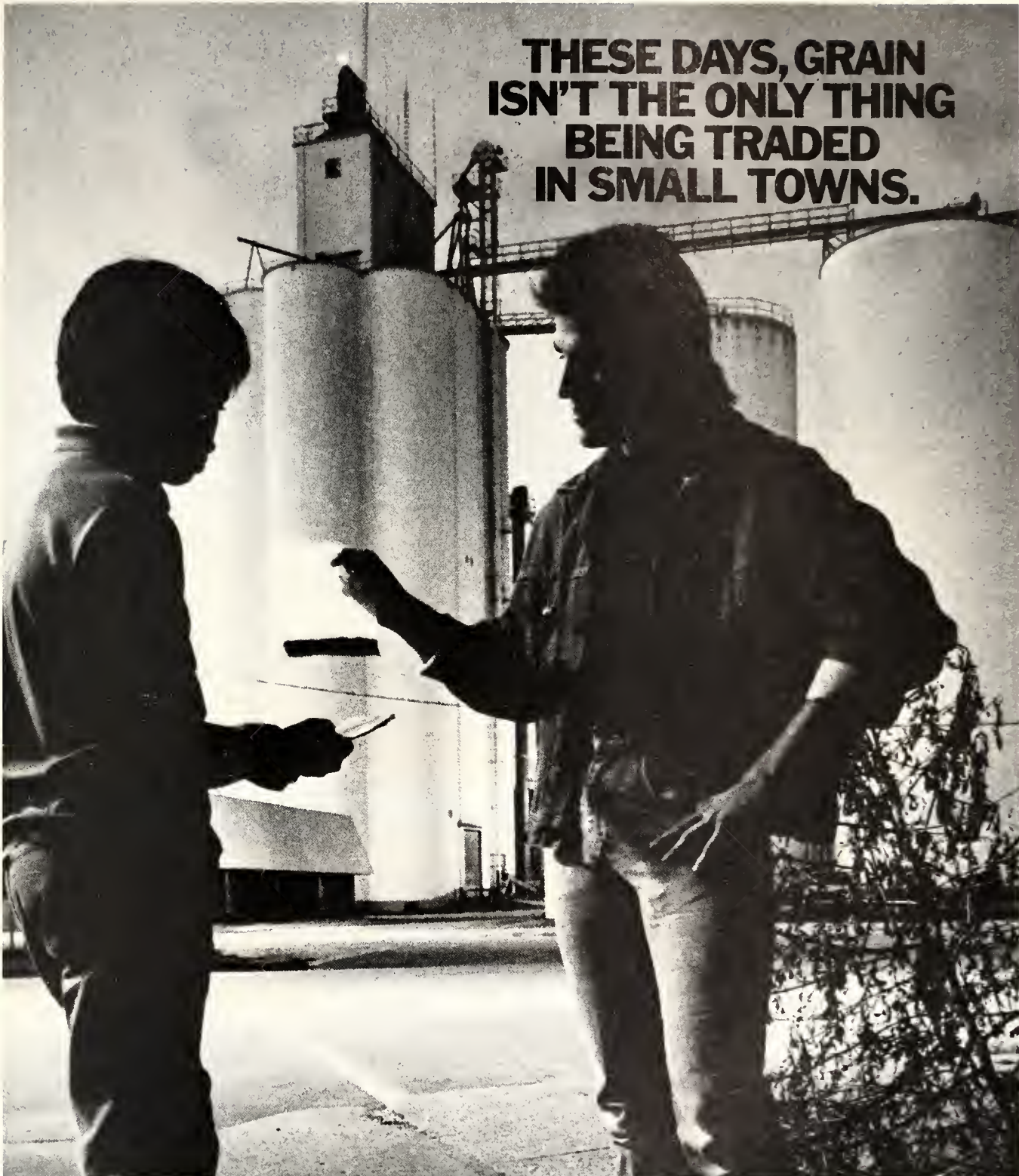
McDonald County, Missouri, chapter president, *Stephanie Akehurst*, wrote that their one-year-old Alumni affiliate is going strong and very beneficial for the FFA Chapter.

The **Madison-Mayodan**, North Carolina FFA Chapter joined the state Adopt-A-Highway Program. They adopted the highway in front of their school to help beautify.

West Fork, Arkansas, held degree ceremonies which started off with a hamburger supper, then awarded the 38 Greenhand degrees, then 9 Chapter degrees. State President *John Westerman* spoke at this new chapter's very first degree ceremony.

District FFA Vice President *Jay Shiningier* spoke at the **Anthony Wayne**, Ohio, Greenhand induction and open house. His talk was "Proper Prior Preparation Prevents Poor Performance" and it challenged members to be prepared.

Don't hesitate. Get out a sheet of paper and jot down a good idea that can be shared from your chapter to other members and chapters in the nation. Send them to Scoop, Box 15160, Alexandria, VA 22309.



**THESE DAYS, GRAIN
ISN'T THE ONLY THING
BEING TRADED
IN SMALL TOWNS.**

If you think drug deals only go down in big cities, think again.

Today, 28% Of Small Town Kids Are Into Big Town Drugs

It's true. Drugs are as big a problem here as they are in larger cities. Today, some 28% of small town kids are using drugs like marijuana, crack and cocaine. To most of them, it's no big deal.

They get it from their friends and use it wherever they are...in a car, at a dance, after a pep rally.

When it comes to drugs, no kid or town — no matter how big or how small — is immune. That's why, you need to find out everything you can about drugs. And then, you need to do everything you can to talk to your friends about them.

Remember, the most precious commodity your town has is you. So do something, before it's too late.

**Partnership
For A Drug-Free
America**

Sarpalius (Continued from Page 16)

ties." He spontaneously offered five suggestions for our readers to help be prepared:

1. Be in the right frame of mind. Don't dwell on your handicaps or lack of ability like in speaking or running. Forget "I can't."

2. Avoid negatives.

3. Stay physically and mentally sharp. Don't let yourself get lazy.

4. Develop a religious background.

5. Concentrate on doing for others - not for yourself.

FFA is a perfect teaching area for these traits. FFA "helps its members grow because it offers leadership, patriotism and a chance to achieve," he said.

There is another tie to the FFA past in the Congressman's office. During his term in the Texas Senate, the Congressman needed to expand his staff after appointment to the agriculture committee.

He was reflecting on "Who would know something about all aspects of Texas agriculture?" Right away the idea struck him, "my ag teacher, Guy Finstead."

So that is the case still today. Advisor Finstead was featured in photos in our first article. Today he is a legislative aide.

The two taught ag together for the few



Two Texas FFA officers visited with the Congressman in July. He loves visiting with FFA members and speaking at FFA events.

years Sarpalius was on staff at Boy's Ranch. Mr. Finstead was instrumental in developing the ag department at the Ranch into a complete unit which provides beef, pork, milk and fresh vegetables to feed

the children and staff.

Congressman Sarpalius' final piece of advice to current FFA'ers is to take advantage of every FFA opportunity "So you won't look back and say, 'Oh, I wish!'"

ONE PIECE OF FARM EQUIPMENT



Customer Built Tractor

New mid-size tractors on market to serve variety of uses

Case IH introduced a new line of mid-size tractors in late October. The MAXXUM tractors are for general-purpose livestock, row-crop and specialty farm work as well as roadside maintenance and other non-agricultural applications.

Three models are available: 5140 at 94 PTO hp; 5130 at 86 PTO hp; and 5120 at 77 PTO hp.

The tractors are manufactured in Europe since over two-thirds of the market for that size tractor is located outside the U.S. Another example of the global aspect of today's agriculture.

Each model offers a choice of two-wheel drive or Mechanical Front Drive (MFD), cab or open platform versions, plus a selection of axle options, transmissions and tire and wheel equipment.

Modern design dominates these tractors with a fully enclosed engine compartment providing controlled airflow over the engine and eliminating risk to the operator or bystanders from hot or moving engine parts.

These tractors are not simply the offspring of an engineer's imagination. The basic concept has been modified in response to prospective buyer feedback.

In June 1988, MAXXUM prototypes were reviewed by ten farmers, six dealers, nine agricultural product specialists and nine field service managers.

According to Dennis Schwieger, product director for Case IH, they rated 254 different design components as being of above average to good quality. The "family resemblance" to the MAGNUM series impressed them, as did the power-shift transmission and efficient engine.

"But they also identified a number of items that they felt had to be changed and we changed them. They said the PTO clutch lever should be located in front of the righthand console and that's where it is. They said the PTO clutch lever direction should be fore and aft, not side-to-side, and it is. Most felt the lever required too much effort to move, so we've corrected that."

Schwieger said changes were also made



Case IH 5100 Series MAXXUM tractor.

to the accelerator pedal, engine oil dipstick and the differential lock switch—all at the request of growers. And the evaluation process isn't over. Five MAXXUM prototypes were placed on growers' farms for continued field testing.

"We're in the business of providing our customers with the best possible value in products and services. This kind of contact with them helps us to learn what they need and expect from us." ...

WIX DOESN'T MAKE A FILTER FOR.

The fact is WIX makes heavy-duty air, oil, fuel, and coolant filters for just about every piece of farm equipment there is. And they're as easy to find as a quick trip to your local autoparts store. Plus, they're very competitively priced.

And now, until May 31, you can earn 25¢ for each WIX® filter boxtop you collect. And your chapter can win up to a \$1,000 bonus in the annual WIX/FFA Fund Raiser. For more information, just call (704) 864-6711 ext. 3306.

WIX filters. Heavy-duty, quality filters. Now a better deal than ever.

And that's no bull.



Highlights of 1989

Just before the door was swung shut on the 1980s, the FFA underwent historic changes.

National Summit on Agricultural Education

Forty-seven leaders from student organizations and all



other areas of agricultural education met in February and May to establish a unified mission and plan of action for agricultural education. Faced with declining enrollment and a continued broadening of students' career interests, the two Summit meetings held in Arlington, Virginia, focused on defining what agricultural education should be and how to make it attractive to more students. The National Council for Agricultural Education coordinated the meetings.



New Convention Delegate system

After lengthy and intense debate at the 1989 National FFA Convention, delegates voted to revamp the organization's delegate representation system. Starting in 1990, each state will send two delegates to national convention plus one delegate for every 2,000 members in the state. The new system replaces a "one delegate per 10,000 members" formula.

National Officers Visit the Orient

In January, the 1988-89 national officers visited China, including Tiananmen Square in Beijing and the Great Wall of China, only a few months before a democracy movement



was crushed by the Communist government. The officers also visited Thailand and Japan during their tour of the Orient, which was sponsored for the tenth year by Mitsui & Company.

Constitutional Changes Begin

When 18 amendments to the national FFA constitution passed in the fall of 1988, everyone knew 1989 would be a year of changes. For example,



with "agricultural education" appearing in the official emblem instead of "vocational agriculture," the National FFA Supply Service had to sell off a huge inventory of goods and retool all machines that printed, embroidered or stamped the FFA emblem.



President Bush meets with State Presidents

President George Bush spoke to over 100 state FFA officers about their leadership role in the future of American agriculture at the Old Executive Office Building, adjacent to the White House in Washington, D.C., July 27.

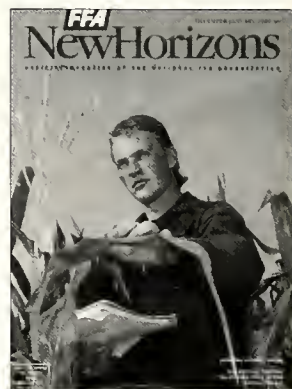


American FFA Degree Redefined

After years of discussion, the 1989 convention delegate body voted to drop the quota system from the American FFA Degree which had limited the number of degree recipients from each state. The quota system has been replaced by stiffer requirements including higher levels of money earned and invested. There is also a new formula for equating hours worked with dollars earned. All members who meet the requirements will receive the degree.

FFA New Horizons Premiered

For 37 years, *The National FUTURE FARMER* magazine served FFA members from coast to coast, covering FFA national news and featuring



stories on FFA members. Starting in December, that tradition was continued under a new title, *FFA New Horizons*. The name was changed because of the rising number of non-farm members and their broad career interests.

Foundation Raises More Money, Again

The National FFA Foundation once again broke their annual fundraising record in 1989 by raising \$3,763,578.97. That is a \$350,000 increase over 1988.

\$3,763,578



Why are we giving this rugged "Navigator"-style LCD watch...

FOR
ONLY

\$2

**[OFFER ENDS WHEN TEST
MARKETING SURVEY INVENTORY IS EXHAUSTED]**

That's right. You may order this sturdy "Navigator"-style watch for only \$2...if you mail coupon without delay.

The "Navigator"-style—rugged and masculine-looking—is one of the most popular of all watch styles for the adventurous, active man. Extremely practical in design, this watch has a fully adjustable black matte strap and a liquid crystal digital display (LCD) that tells time with long-running accuracy. It also features a handsome, printed non-functional Analog watch face as an extra touch of elegance.

Its up-to-the-minute rugged styling allows you to wear it in any and every situation particularly when you wouldn't trust the most expensive watch you already own.

**How can we make
such an incredible offer?**

This offer is possible only because we're making it as part of a test marketing survey. We are trying to learn which publications are the best for us to advertise in. The number of replies from each publication will guide us in planning a projected million-dollar advertising budget.

A GREAT GIFT IDEA!

To thank you for ordering from this ad, you may have up to four (4) more watches at the same \$2 giveaway price as gifts for your closest friends and relatives. (P.S. They'll never guess how little you paid.)

Unconditional Money-Back Guarantee

This watch will not be sold by this firm in any store. There is a limit of five (5) watches per address at this \$2 price. You must be 100% satisfied, or return the watch(es) anytime within one month from receipt for a full refund—no questions asked.

To get your watch(es), mail the coupon to The Rothchild Depository, 521 Fifth Avenue, 17th Floor, New York, NY 10175. Enclose \$2 for each watch ordered—limit, 5 watches per address—plus only \$1 postage and handling for each watch ordered.

Act now!

These watches will sell out fast.

FREE JEWELRY

This is NOT a must, but if you enter your birth date on the coupon, we'll celebrate your next birthday by sending you a FREE GIFT OF JEWELRY from our Fifth Avenue Vault. There will, of course, be no obligation on your part.

NK2RE1

**\$2 "NAVIGATOR"-style
WATCH**

THE ROTHCHILD DEPOSITORY
521 Fifth Avenue, 17th Floor
New York, N.Y. 10175

Please rush me _____ "Navigator"-style watch(es) at only \$2 each plus only \$1 postage and handling for each watch ordered. (Limit 5 watches per address.) I must be 100% satisfied, or I may return watch(es) within one month of receipt for a full refund.

**ENCLOSE FULL PAYMENT
IN CHECK OR MONEY ORDER**

Print Name _____

Address _____

City _____

State _____

Zip _____

Optional: My birth date is (Mo Day Yr) _____

Send me a FREE GIFT to celebrate my next birthday.

NOTE: Be sure to use this original coupon. No xeroxes or hand-made copies can be accepted.

(Please allow 4-6 weeks delivery.)

©1989 IRPI



Photo by Author

Former FFA member Jeff Broin has been managing an ethanol plant in Scotland, South Dakota, since he was 22.

FFA Fuels Ethanol Entrepreneur

FFA Experience Pays Dividends in Business Management

By Gil Gullickson

At a time when most 22 year-old college graduates are just entering the job market, Jeff Broin was heading a business employing 14 people.

This business—an ethanol plant with gross receipts of \$1.8 million annually—is still being managed by Broin. What's more, it is growing, showing that businesses can thrive in rural areas.

Upon graduation from the University of Wisconsin-River Falls, Broin started work as an assistant loan officer in a bank. But when he and his family purchased and ethanol plant in Scotland, South Dakota, Broin opted to move and manage it.

Now 24, Broin says the experience was initially a bit overwhelming. But he credits his FFA experience with giving him a good background for this challenge. "FFA was a very good leadership training ground," he says. "In all the things I've done here, I've had to structure my work force from the top on down. I use a lot of the same things here that I learned in FFA."

Broin attended high school in Kenyon,

Minnesota, where he was active in FFA serving as chapter vice president and earning the state farmer degree. He comes from an FFA family, as brothers Rob and Todd and father Lowell were all active chapter members during their high school years.

The Broins originally entered the ethanol business in 1985, selling ethanol from

"I think we're on the edge of a real good thing," says Broin.

"Ethanol not only reduces our dependence upon imported oil, but it helps balance trade and uses up surplus corn."

a plant built on their Wanamingo, Minnesota farm. While building and repairing that plant, they would periodically scour newspapers across the nation for ethanol plant bankruptcy auctions. This is because inexpensive parts could be pur-

chased at these auctions.

Broin's mother had noticed a bankruptcy auction notice in a newspaper for the Scotland plant. Initially, the Broins went to the auction just to buy a share of the plant equipment. But since it was so reasonably priced, they purchased the entire plant in 1987.

Prior to the auction, Broin's family asked Jeff if he would manage the plant, provided the purchase price was right. "At that time, I felt like I was on the bottom of the totem pole, being new to the banking industry," he says. "I said I'd do it. It would give me a chance to be at the top of an organization instead of being at the bottom."

But all this meant lots of learning. "I had an ag business background," says Broin. "But I hadn't had a lot of people management experience."

Broin credits his FFA background for helping him to make the transition. "I learned how to interact with other people through FFA," he says.

People skills were also honed through his participation in parliamentary proce-

dures contests. "Kenyon was always known for making it to state parliamentary procedure contests," he says. "We went to the state contest both years I was on the team."

Broin also credits FFA hog and crop production projects with giving him a good business background. "Being a financial manager at a high school age was important," he adds.

Broin credits the influence that FFA had upon him to his high school advisor, John Shelstad. "He was a tremendous advisor. He's produced a lot of successful young people."

Currently, the plant produces 1 million gallons of ethanol for the 6 million gallon South Dakota ethanol market. In doing so, they buy 400,000 bushels of corn annually from area farmers. "I think we're on the edge of a real good thing," says Broin. "Ethanol not only reduces our dependence upon imported oil, but it helps balance trade and uses up surplus corn. There is not a negative factor about it."

Nor does Broin find any negative factors about FFA. "I think every student should be in FFA, regardless of whether or not they're interested in agriculture," says Broin. "There are so many good experiences to be learned from all the different activities. They could be used in any job, ag-related or not."

American Royal Ambassadors Receive College Scholarships

Thirty finalists from 18 states competed in the 1989 American Royal Student Ambassador Program. The two winners, Shane Belohrad, Leigh, Nebraska and Bonnie Haws, Portage, Ohio, each received a \$5,000 college scholarship. Second-place winners received \$2,000 scholarships and the third-place winners each received \$1,000 scholarships.

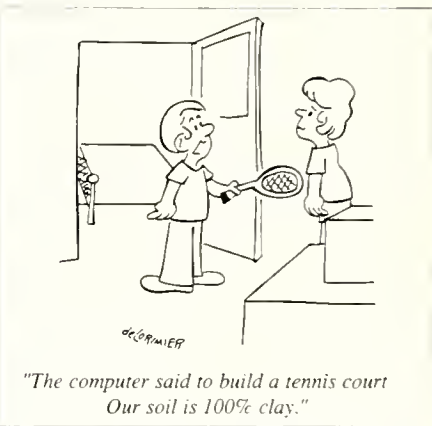
Organizers of the program are looking for even more applicants for 1990. To compete in the Ambassador program, contestants must be at least 18-years-old and be an active FFA member. They must be enrolled in or planning to enroll in an accredited college or university.

The Ambassador candidates are judged on academic achievement, public speaking, civic and extracurricular leadership, and their knowledge of the agricultural industry.

Each state may submit one male and one female candidate on or before September 1. Each state will be responsible for selecting two candidates. Each state leader will determine the procedure for

selection of state candidates.

In addition to the college scholarships, winners receive national recognition as an agricultural student leader, contacts with agricultural industry leaders, appearances at American Royal events and the national FFA convention and a number of speaking opportunities through live media interviews and civic appearances while in Kansas City.



Washington apples mean healthier sales.

America's favorite fruit is a natural for fund raising.

While many people can pass up candy, magazines or soap, few can say no to crisp, juicy apples fresh from the orchards of Washington state.

The pick of the crop is available for your club to sell right now—Red Delicious, Golden Delicious or Granny Smith.

Just call or write to the address below for a free brochure with complete details on how to make your fund-raising effort the most profitable ever.



Washington Apple Commission
Fund-Raising Division
P.O. Box 18, Wenatchee, WA 98801
Phone: (509) 663-9600

The Original Health Food.

FFA IN ACTION

.....



Everybody likes to talk to Santa and the 1989-90 national officers all climbed on his lap together in early December.

National Officers In Action

National Officers were together for their first official training sessions at the FFA Center in Alexandria, Virginia, in early December.

A large part of their time was spent learning about the operation of the national organization through departmental briefings following a reception for them to meet the entire staff. Also they met with FFA Alumni, NVATA and the FFA Foundation staff members.

On Thursday, December 14, they were invited to meet with William Bennett's staff to discuss how FFA can help in the fight against drugs. This visit will likely result in a published statement from the

national organization. It is one of the national officers' top goals for '89-'90 to be involved in drug abuse prevention.

Since they were near Washington, DC, they also spent time with government and agricultural leaders in the Capital including Secretary of Agriculture Clayton Yeutter and their congressmen.

Immediate past national secretary Jeff Johnson from Florida was part of the training team to give insights into planning their schedules, how to arrange for things at home, and how to use their time effectively.

The National Officers returned home on Friday, December 15, after the FFA Center Christmas luncheon.

Oklahoma

Fishy SOEP Story

Fins slicing through the dark water, darting up and down, racing to the surface. The water comes alive with movement as one-thousand fish come to the top of their cage to feed. No, this isn't a scene from a cheap piranha movie. Instead of piranha, they're catfish and this has been the scene in two Perkins-Tryon, Oklahoma, FFA members' ponds for the past nine months.

Beginning in late April, Chad Collum and Sherry Hielman began their FFA chapter's first aquaculture project. Their goal was to raise the catfish to weigh a pound and a half each and harvest them in the fall.

They started with two four-foot by four-foot by eight-foot cages. Each cage was surrounded by a pipe that was designed to float the upper part of the cage. The cages were then placed in both students' ponds.

The next step was to stock the cages. One-thousand catfish were placed in each cage on April 14. For the next six months Chad and Sherry fed and daily attended to their very different project. As the leaves fell and temperatures dropped the time to harvest the fish drew near. Aided by ag instructor Roger Jennings and several FFA members, Chad and Sherry removed the fish from their cages.

The fish were then shipped to Aqua Farm Processing Plant in Holdenville, Oklahoma, to be processed and packaged.

Chad and Sherry decided that instead of selling the fish to a wholesaler they would merchandise the fish locally in two and a half pound packages. (Matt Brown, Reporter)

Florida

Dog Gone Good Idea

Westridge Middle School FFA in Florida is sponsoring puppies for Canine Companions for Independence (CCI). At this time there are over 40 canine companions being raised in the Central Florida area of which a few are being raised by WMS FFA members. The project is being used as a BOAC project.

Canine Companions are special dogs being groomed for special people. The puppies will be raised until 18 months locally. They will then receive six months

FFA IN ACTION

.....

of advanced training elsewhere to prepare them for a life of assisting and befriending their future disabled masters.

The dogs allow disabled citizens to travel, shop, use elevators, go to school or work and pick up objects without the assistance of another human. Signal dogs inform deaf masters of calls, horns, cyclists and intruders. A special citizen with the aid of a CCI dog can venture back into society redeveloping self-esteem by establishing or reestablishing their civic individuality.

Doc and Cranston are beautiful full bred Golden Retrievers. Students in the agribusiness and natural resources classes work with Doc as part of their curriculum. So Doc is an FFA project for the chapter. Cranston is the individual project of Tonja Nilsson in seventh grade.

The puppies also attend school several times a week and have been to a PTA meeting.

The puppies are being trained by the

students to understand voice and sign language for "speak", "better go now," "no," "come to me" and his name. As the dogs mature they will learn more complicated signals and commands.

These students take great pride in the fact that Doc and Cranston are not being trained as "yard dogs." They are special pups being raised for special people.

Kansas

Cash For Chaff

The Clay Center, Kansas, FFA, working in cooperation with the Gilbert Grain Company, is running an experiment. They are using grain aspirations, which they get from cleaning grain, as a cheap and efficient feed source.

Our chapter has been working with the aspirator for about a month in order to clean about 50,000 bushels of grain in cooperation with the Gilbert Grain Company. Our test weights increased along

with the value of the product, due to the fact that the grain received a higher classification based on USDA grain grading standards.

We are now setting up feeding experiments to test the grain aspirations to determine their use as an efficient source of protein. Because of their digestibility, the aspirations can be used as a feed for various species of livestock.

When we conclude our project, we hope to determine the profitability of cleaning grain as well as have a low cost source of feed for producers in our county. (Tracie Volen, Reporter)

Virginia

Rising to the Occasion

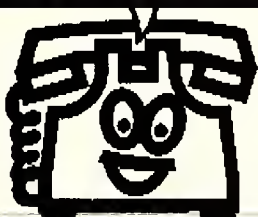
The Lee-Davis FFA Chapter, in Mechanicsville, Virginia, held its first annual "Sophomore Orientation Program." The program was designed to

(Continued on Page 44)

Do you know someone who paid their dues, but isn't getting their FFA New Horizons magazine?

We hate it when that happens.

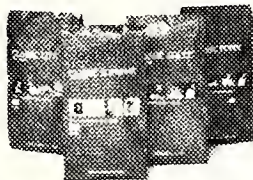
Chances are we can fix the problem quickly.



Have them call Mrs. Magill at (703) 360-3600, ext. 231 or write to Mrs. Magill, FFA New Horizons P.O. Box 15160 Alexandria, VA 22309 and she'll take care of you.

***Read the fine print...**Remember, your advisors send their dues money to the state office first, so sometimes it takes awhile for your names to get to our mailbox.

RAISING MONEY CAN BE YOUR PET PROJECTS.



Americans Helping Americans.

For your PTA, church group, scouts, FFA, 4H, and other non-profit groups, collect a minimum of 200 Proof Of Purchase coupons from 40-lb. bags of newly reformulated CLASSIC® Puppy, Adult, Lite, or Supreme. Manna Pro will donate 50¢ per returned coupon to your non-profit organization.

Put On A Show—With Manna Pro.

Manna Pro has a packet of free materials on how to set up your rules, judging forms, prizes, and other guidelines—everything you need to know to have a pet show that will be fun and profitable for your group.

Look on the back of 40-lb. CLASSIC® Dog Food bags for information about raising funds with CLASSIC® coupons. Or, for information about either of the above programs, write: Manna Pro, Pet Foods, 1 No. Walnut, Suite 125, Cleburne, TX 76031.

MannaPro

FFA IN ACTION

(Continued from Page 43)

inform rising sophomores of activities in the senior high chapter. This was done to show members benefits of retaining FFA membership between the Lee-Davis FFA Chapter, and the junior chapter, Stonewall Jackson Jr. FFA.

FFA members spoke on various topics like contests and SAE projects. Leadership activities were a strong part of the program to enhance participation.

Cash prizes were awarded to members who took part in the trivia contest. The evening was concluded with a cookout. (Jeffrey L. Ryan, Lee-Davis President)

California

Farm City Banquet Payback

The annual Farm City Awards Banquet is a big event in Merced, California. It is held by both the Merced City and Merced County Chamber of Commerce. They join together each year to get the community more involved in agriculture. The Merced FFA caters the banquet and served over 340 people at the 1989 event November 16. The Chamber of Commerce gives awards each year in categories for ag business, livestock and dairy, tree vines and ag education. Also four scholarships to students planning to major in agriculture at Merced College are awarded. FFA member Marilyn Pais received one of the \$500 Farm City Week scholarships. Advisor Mr. Gomes received the award for agriculture education.

Each year the FFA has catered the banquet. Chapter advisors assist students in organizing the meals. Students volunteer their time by serving and helping out. Shannon Chadwell was the FFA chairman. Catering these dinners has been good public relations along with being a great money raiser. This year the chapter do-

Kansas

Do-It-For-Yourself FFA Camp (Kansas Style)

The Westmoreland, Kansas, Chapter held a summer leadership seminar on August 1. The evening began with a barbecue meal served at the home of local advisor, Mr. Allen Scheer. Following the meal, chapter president Lee Parker called the meeting to order and introduced the featured speakers. Kansas FFA President John Niemann spoke to the group about the changes taking place in agricultural education and the FFA. The second speaker was Rocky Junod, northeast district sentinel. Rocky described many of the responsibilities of a district officer and discussed the upcoming district leadership seminar. The evening concluded with a swim party at a local swimming pool.

Forty people representing FFA members from four chapters, prospective Greenhand members, FFA alumni members, local school administration and advisory council members were in attendance. The seminar served many purposes for the local members and as a recruitment tool for incoming freshmen.

Texas

Do-It-Yourself FFA Camp (Texas Style)

For the last six years, the Glen Rose, Texas, Chapter has held its own summer leadership camp for members. Each year the officers put together sessions much like those in state run officer training camps to teach necessary skills in leadership and also to teach newcomers the opportunities the organization has to offer.

This past year State President Jeff Rash and Area Vice President Bill Clifton were guests of the camp. Jeff and Bill helped with group sessions which included a communications sessions, a public speaking and contest session and a session on opportunities in the FFA. Along with helping with sessions, the two enjoyed recreational events with the chapter as well. This might have helped members more than anything—actually getting to know a state officer and realizing that dreams can indeed come true.

(Continued on Page 46)

TRAIN FOR A CAREER AS A VETERINARY TECHNICIAN

Bel-Rea is the only proprietary school in the United States affiliated with a veterinarian clinic for experience for "hands-on" students.

Our 18-month course will fully prepare you for a career as a caring animal technician for either large or small animals.

Students have the opportunity to be instructed by veterinarians and our clinic affiliation affords students an abundance of surgical assisting experience.

Earn an Associates of Applied Science degree and embark on a rewarding career. For information and class schedules, call us today.

**CALL TOLL FREE:
1-800-950-8001**



Red Institute of Animal Technology
1000 North Dayton Street
Denver, Colorado 80231

American Veterinary Association and NATTS accredited
approved for veterans financial aid assistance
available

Approved and regulated by the Colorado State Board for
Community Colleges and Occupational Education



Shannon Chadwell, FFA Farm-City Banquet chairperson presented Dr. Harris a check for \$400 for the Red Cross Earthquake relief fund. Dr. Harris, president of Merced College, is also Chairman of the Red Cross.

nated one half of the proceeds from the Farm City Week Banquet to the American Red Cross Earthquake Relief Fund to help those Californians in need. (Kim Pascoe, Reporter)

MARKETPLACE

1990 CLOSING DATES FOR MAIL ORDER ADVERTISING

February/March
December 20

April/May
February 20

June/July
April 20

August/September
June 20

October/November
August 20

December/January
October 20

FOR MORE INFORMATION CONTACT:

MARVIN LABINER
FFA New Horizons
130 West 42nd Street
Suite 1804

New York, New York 10036
TELEPHONE: (212) 840-0660
FAX: (212) 944-1884

"A World Journey"

... is a 9-minute video on the international opportunities available to FFA members and alumni through the National FFA Organization. This is an excellent video to use in chapter meetings or in the classroom. The tapes can be purchased for \$8.00 each from:

International Department, National FFA Center
P. O. Box 15160, Dept. DM-5, Alexandria, VA 22309

WINNING SPEECHES

Obtain your own set of
winning speeches
from 1984 to 1988

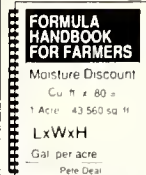
National FFA Public Speaking Contests -
Both Prepared and Extemporeous.

To receive your set - Send \$3.75 to:

The National FFA Center
P. O. Box 15160
Department DM-6
Alexandria, VA 22309

(Virginia Residents add 4.5% sales tax)

THE BOOK farmers can't afford to be without!



SAVE TIME

SAVE \$\$\$

No more searching for the right formula! They are here in one handy book.

- Prescription Fertilizer
- Micronutrients
- Plant Population
- Moisture Discounts
- Grain Shrinkage
- Volume & Capacity

Simple—User Friendly—Lots of Examples

SATISFACTION GUARANTEED
ONLY \$12.95 + \$1 S&H
P&S Farm Publications
P.O. Box 3068 Greenville, NC 27836

Custom Made

COOKBOOKS

A great fund raising project for
clubs, churches, families — any organization.
Write for a . . . **FREE KIT BOOK!**

Dept. NFF 507 Industrial Street, Waverly, Iowa 50677

REWARD \$3,000 FOR A 1943 COPPER PENNY

FOR CERTAIN COINS WE PAY UP TO. Certain	
Nickels Before 1969	\$16,000 00
Half Dollars Before 1967	\$ 5,800 00
Pennies Before 1979	\$ 3,000 00
Dimes Before 1966	\$20,900 00
Quarters Before 1967	\$ 5,000 00



New 1990 catalogue lists hundreds of coins we want to buy and gives the price range we will pay for these United States coins. Now you too can learn the rare dates and how to identify rare coins in your possession with our new 1990 catalogue. A fortune may be waiting for you. Hold on to your coins until you obtain our catalogue. Millions of dollars have been paid for rare coins. Send \$5.00 plus \$2.00 postage and handling for 1990 Coin Catalogue to: Best Value, C.M.O. Dept. D620 P.O. Box 802, E. Orange, NJ 07018
SOLD ON MONEY BACK GUARANTEE



Hatching prizewinning
chicks, ducks, turkeys,
pheasants, goslings,
guineas. Free catalog.

RIDGWAY HATCHERIES, INC.
LaRue 22, OH 43332 614-499-2163

BANTAMS, EXOTIC RARE BREEDS Fighting Games, Ducks, Turkeys, Guineas Pheasants. 100 varieties.



Shipped direct to your local post office.
Safe shipment guaranteed. Hatching
eggs, Books, Supplies, Incubators,
Medications. Send \$0c for Big Color-
ful Poultry Catalog.
CROW POULTRY & SUPPLY
Box 106-9, Windsor, Missouri 65360



Big Jim™ Halters

Scientific Marvel Controls
The Meanest Animals

Halter breaks cattle, sheep,
goats etc. in half the time.
Call or write for free catalog
of unique & exciting products.

Big Jim Halter Co. (512) 249-2480
Rt. 3, Box 3138, Boerne, TX 78006

JOKES NOTES and Quotes!

THE SPEAKER'S HANDBOOK

by Orville K. Sweet

This unique Speakers Handbook is now available from the National Pork Producers Council. Written by Orville K. Sweet, a former Executive Vice President of the American Polled Hereford Association and immediate past Executive Vice-President of the National Pork Producers, this 208 page book contains intertwined humor, philosophy and just plain common sense, making it a valuable reference for most any speaking engagement or just for an enjoyable evening of reading. To order your copy, complete and return this form along with \$10 to:

National Pork Producers Council
Speakers Handbook
P.O. Box 10383
Des Moines, IA 50306

Name _____
Address _____
City/State/Zip _____

Be A Veterinary Assistant and Animal Care Specialist!



Lab Aide, Zookeeper,
Pet Shop or Kennel Owner.

Men—Women! Train at Home in Spare Time... Rush free facts on how I can train at home to be an Animal Care Specialist! No obligation. No salesman will visit.

Name _____ Age _____

Address _____ Apt. # _____

City _____

State _____ Zip _____

Phone () _____



School of Animal Science, Dept. 2DS20
925 Oak Street, Scranton, PA 18515

A Subsidiary of National Education Corporation

FFA IN ACTION

(Continued from Page 44)



In one well-attended event a local fire department crew demonstrated how to rescue a man trapped in a grain bin.

Ohio

Chapter's Agri-Science Field Day Included College Recruiters

The 1989 Agri-Science Field Day held at Wauseon High School was a big success and the only one of its kind in northwest Ohio. About 2,200 people viewed the many displays and demonstrations that were a part of the day's activities. In recent years the field day had an emphasis on harvesting and field work, but this year a lot more emphasis was placed on the agricultural science areas.

This year there were additional exhibitions and added demonstrations which included safety demonstrations from Toledo Edison and Fulton County Fire Department with a grain rescue simulation.

Students from three schools in Wauseon and students from other schools in the surrounding district attended.

Reports of a survey taken by FFA showed that many left the event with a better understanding of what agriculture is all about.

While there were demonstrations involving electric safety, grain rescue operation and sheep shearing, there were also many displays set up from 57 different distributors of agricultural products.

New products from community busi-

nesses were displayed for public view. Veterinarians from Northwest Veterinary Hospital presented information on animal health as well.

Colleges on hand looking for students interested in entering agricultural fields included Ohio State University, Agriculture Technical Institute, Northwest Technical College and Owens Technical College. They had displays informing students of what their particular colleges offered.

The grain rescue demonstration, handled by members of the Fulton County Fire Department, was well attended. The demonstration involved rescuing a man trapped in a grain bin where the grain acts something like quicksand. Rescue team members worked a cylinder into the bin which went around the man. Then they used a machine to work some of the grain back out of the bin into a truck, enabling the man to exit the bin by climbing up the cylinder without any harm.

Toledo Edison's program on electrical safety highlighted the dangers farmers encounter while working around transformers and electrical wires.

There has been an increased interest and need for safety in agriculture, which is why these demonstrations were popular with all ages.

The FFA was happy to see community interest and support for the field day. Many senior citizens and members of the farming community mingled among the student in attendance.

The event has enjoyed great community support, with interest and attendance up from previous years. (Chad Richer, Reporter)

Oklahoma

Greenhands Win Travel Prize

Every year Liberty, Oklahoma, FFA Greenhands participate in the FFA quiz contest. The first place winner of the contest goes to the National FFA Convention in Kansas City, Missouri. The year's winners were Chris Huey with first place; Todd Martin, second place; and Jason Green, third place.

In the annual Creed Contest for the Greenhands, contestants must recite the Creed from memory. The winner of this contest goes to the National FFA Convention, too. Winners of this year's Creed Contest are Todd Martin, first place; Jason Stephens, second; and Ronnie Morrison, third. (Jeremy Atwell, Reporter)

Wisconsin

Gift Givers



Recently the Clear Lake, Wisconsin, FFA Chapter cooperated with the American Red Cross during their annual blood drive. Members helped set up and many of them also donated blood. Current FFA chapter president, Kerry Montgomery took her turn as a contributor.

MY TURN

.....

Scott E. Couch



Happy New Year!!! This year marks the beginning of the decade which will conclude with the 21st century. The 1990's promise to be an era of revolutionary change that will affect societies the world over. It is certainly an exciting time to be involved in agriculture as we prepare our nation's most vital industry for a 21st century economy.

What part will you play in agriculture's dynamic future? Will you be a biotechnologist or a genetic engineer? You could be a lawyer, a government relations specialist, or an environmental resource expert. The list of careers is as large as the agricultural spectrum, and it is high time former FFA members start filling these important positions.

If you want to be competitive for positions in agriculture during the 1990s, you must be educated beyond high school.

There are a variety of institutions that can provide you with a higher education. Four-year colleges and universities are an excellent option for individuals who want management and executive positions. Schools of agriculture across the nation are preparing young people in areas such as agricultural business economics, animal agribusiness management, international agricultural trade, and agricultural business law.

Four-year institutions are also the best option for students seeking careers in research, product design, and engineering. Schools of agriculture at many universities now offer degrees in agricultural engineering, community development, food engineering, food science, biotechnology and genetic engineering.

An alternative to the four-year university system is the two-year program offered by a junior or community college. Many of these colleges offer programs in agriculture. They are usually less expensive, a definite advantage of the two-year system. Also, in many cases these colleges are closer to home and allow students to commute.

Students who attend these institutions are usually interested in managing a production operation, whether it be livestock, crops, or small business. Students may also opt for a sales curriculum which will prepare them for a career in agricultural sales and service. Natural resources and environment management are also popular options at junior colleges. Many students at two-year colleges discover they want to continue their education and transfer to four-year schools.

For individuals who plan to enter the field of mechanics and maintenance, trade schools may be the answer. These programs usually last at least 20 weeks and educate the student on proper techniques of the trade. They also reveal what the customer expects from a craftsman.

I am a strong advocate of higher education. I realize first-hand it is expensive, but there are many scholarships available to students who take the time to complete the applications. In fact, the FFA has several scholarships available. All you have to do is apply. It is that simple.

The agriculture education programs at the high school level must face the cold reality that the job market for students with a basic high school education is quickly dwindling. Agriculture education and the FFA must initiate new programs, policies and courses that will prepare students for higher educational programs and the job market of the 1990s.

FFA members you are the future leadership of the agricultural industry. I challenge you to obtain the education necessary to meet the employment opportunities of the 21st century!

**DO YOU HAVE
WHAT IT TAKES
TO START AT
\$22,500⁰⁰**

**WITHOUT
A COLLEGE
DEGREE?**

Most Tulsa Welding School Grads do!

In one typical month - October of 1989, for example - the first paychecks for students who went to work welding ranged from a low of \$866 to a high of \$5907.44. This is a yearly salary range from \$10,392.00 to \$70,892.88. Average monthly earnings for this group was \$2511.86. Worldwide construction and manufacturing firms compete for our graduates. Get results quickly, train in 16 weeks or less. There are many jobs available throughout the U.S. Job placement assistance is available. Financial aid is available for those who qualify.

Tulsa Welding School, established for over 40 years, is recognized for the quality of its graduates throughout the world. Do well at TWS - work hard - and your income as a welder can be higher than many college graduates.

TO TAKE COMMAND OF YOUR FUTURE...

Call Toll-free: 1-800-331-2934

...OR FILL OUT AND MAIL TODAY!

Admissions Director
Tulsa Welding School
PO Box 9829
Tulsa, OK 74157

FFA0390

We'll send you a complete course catalogue, plus other important information.

Name

Address

City

State Zip

Accredited Member of National Association of
Trade and Technical Schools. Approved for Veterans

J O K E P A G E

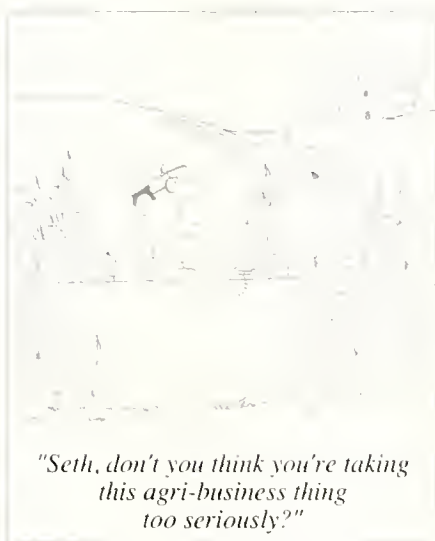
Dave brought his report card home and showed it to his parents.

"Very good," his mother said.

"What?" his father said. "He failed every subject."

"Yes," his mother said. "But with grades like these, he couldn't have been cheating."

Dedrick Sloan
Marianna, Arkansas



"Seth, don't you think you're taking this agri-business thing too seriously?"

Two men were on a parachuting team and they were diving from 40,000 feet.

When the plane reached the designated height they dove out. At 20,000 feet the first diver asked, "Should we open up yet?" The second diver said, "No, not yet."

So about 5,000 feet the first diver asked again, "Should we open yet?" and the second diver said "No, not yet."

At 500 feet he was about to ask but the second diver said no, not yet.

Ten feet from the ground the first diver said, "Now?" and the second diver said, "No, silly. Haven't you ever fallen 10 feet before?"

John Larson
Sheffield, Illinois

Q: What is the difference between a school bus driver and a cold?

A: One shows the stops and the other stops the nose.

Robbie Simpson
Cynthiana, Kentucky

Jan: Dan, did you know my father is a doctor?

Dan: So, what's that supposed to mean?

Jan: It means, I can get sick for nothing.

Dan: So, my dad's a preacher.

Jan: What's that supposed to mean?

Dan, I can be good for nothing!

Rhonda Renner
La Rue, Texas

Mary: Have you heard the Russians are going to send a satellite around the world?

Doris: No.

Mary: They're even sending cattle up—the first herd shot around the world.

Barbara George
Raphine, Virginia

Q: How do you keep cool at a ball game?

A: Sit by a fan.

Charlie Edgington
Lancaster, Kentucky

A family set out on a trip from Virginia to Oregon. It took 1 1/2 months for the trip. When they finally arrived they were asked why the trip took so long. They replied "every ten miles there was a 'clean restroom' sign and some were awful dirty.."

Brandon Spellman
Union, Oregon

Q: What is another name for a cowhand?
A: Hamburger helper.

Christine Heck
Greenwood, Wisconsin

Tom: Do you have a dog?

Brian: Yes.

Tom: What's his name?

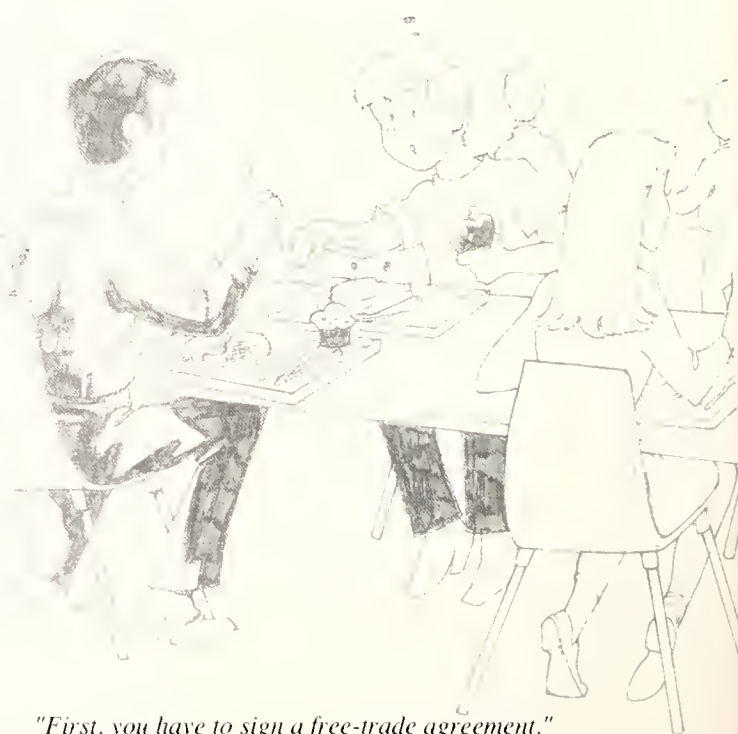
Brian: Ginger.

Tom: Does he bite?

Brian: No, Ginger snaps.

Keshia Bollins
Greensboro, Alabama

Charlie, the Greenhand



"First, you have to sign a free-trade agreement."

NOTICE:

FFA New Horizons will pay \$5.00 for each joke selected for this page. Jokes must be addressed to FFA New Horizons, P.O. Box 15160, Alexandria, VA 22309, or via Stargram on the AOL Network to FF100A. In case of duplication, payment will be for the first one received. Contributions cannot be acknowledged or returned.

FOOT FOR FOOT, POUND FOR POUND, IT OUTHAULS ANYTHING IN ITS CLASS.

THE TOUGHEST COMPETITION WE HAVE IS OURSELVES.

When it comes to hauling heavy loads, a Ford F-150 pickup is in a class all by itself. Because nothing in its class can compete with a tough Ford pickup in available maximum payload.

LONGEST, DEEPEST CARGO BOX.

The Ford F-150 also has a longer, deeper box than anything in its class, a bigger standard Six with more torque than anyone else's and standard

automatic locking hubs on its 4x4.

So if you're looking for a pickup with a bigger box plus more payload and more standard torque, there's only one pickup worth considering. Ours.

TRANSFERABLE 6/60 POWERTRAIN WARRANTY.

Covers you and future owners on major powertrain components for 6 years/60,000 miles. Ask to see a copy of this limited warranty at your Ford Dealer.

BEST-BUILT AMERICAN TRUCKS.

The best-built American trucks are built by Ford. This is based on an average of consumer-reported problems in a series of surveys of all Ford and competitive '81-'89 models designed and built in North America. At Ford, "Quality is Job 1."



FORD PICKUPS
BUILT FORD TOUGH



WORK ON SOMETHING THAT'LL BLOW THE DOORS OFF ANYTHING.



It'll crank out a generous 50,000 horsepower. (That's roughly the equivalent of 204 fully-loaded Corvettes.)

It'll go from 0 to 1,350 mph in slightly under a minute (give or take a sound barrier). And it's no slouch in the corners at any speed.

It's the F-16 Fighting Falcon. One of the most sophisticated jet fighters in the world. And it requires someone just as sophisticated to bring out the beast in it.

An Air Force mechanic.

Become one and you'll benefit from the most thorough technical training around. Even more important, you'll get plenty of opportunities to apply it. That's guaranteed.

But there's a lot more to the Air Force than high rpms.

We'll get almost any career off to a flying start. From computers and electronics to medicine and communications. Over 200 choices in all.

We'll also further your education. Pick up college credits or even an Associate of Applied Science degree in the fully-accredited Community College of the Air Force.

So if you're the kind of person who loves to make things move fast, call 1-800-423-USAF. We'll do the same for your career.

AIM HIGH.

