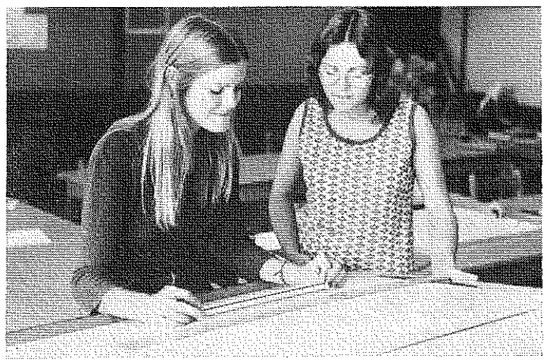
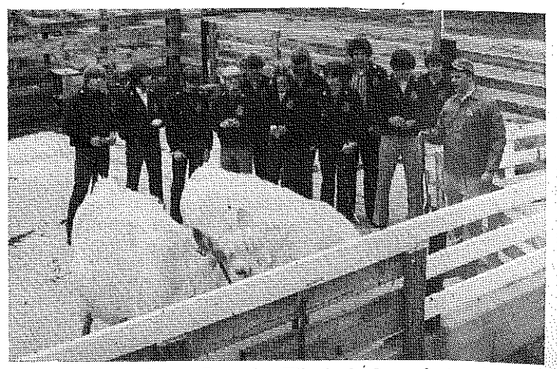
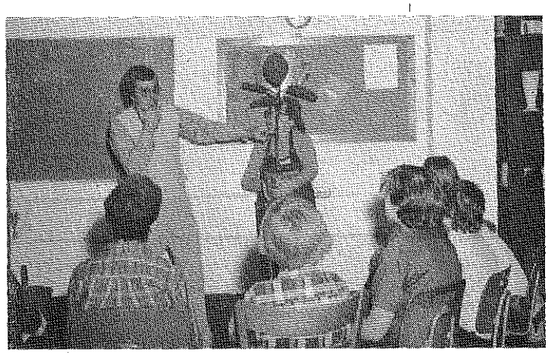


LEARNING BY DOING—Students enrolled in horticulture at Miami (Florida) Agricultural School are shown drawing a landscape plan. (Photo from H. Quentin Duff, Miami Agricultural School)



FFA Alumni member at Roanoke, Illinois, is shown instructing students in livestock judging on his farm. (Photo from Daniel Reuwee, National FFA Center)

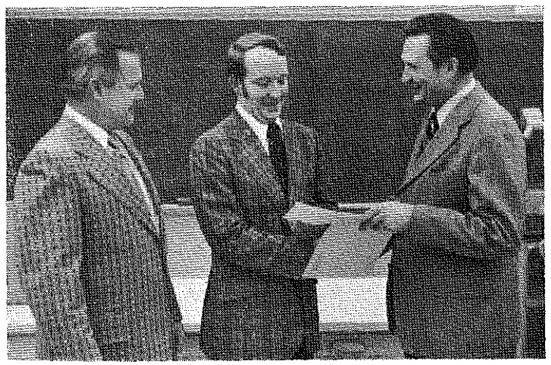
FFA ALUMNI MEMBERS ASSIST WITH INSTRUCTION—An



HORTICULTURE FOR DEAF STUDENTS—Jim Heilman, teacher at The Ohio School for the Deaf, is shown instructing fifth grade students in the cultural requirements of a rubber plant. (Photo from Larry H. Erpelding, The Ohio State University)

Stories in Pictures

by Jasper S. Lee



EXCELLENCE IN TEACHING—Larry E. Miller, Assistant Professor of Agricultural Education at Virginia Polytechnic Institute and State University, is shown receiving a citation for excellence in teaching from Carl Hereford, Dean of the College of Education at VPI & SU. Dewey Adams, Director of the Division of Vocational-Technical Education at VPI & SU, is observing the presentation. (Photo by Jasper S. Lee, Virginia)

SUPERVISING TEACHER HONORED—Harlan Veal (center), Jessamine County (Kentucky) Public Schools, is shown being presented with an engraved silver tray commemorating 25 years as a supervising teacher for the University of Kentucky Agricultural Teacher Education Program. With Veal are Jim Wilds (left), former co-teacher with Veal, and Charles Byers, Head Teacher Educator at the University of Kentucky. (Photo by M. J. Iverson, University of Kentucky)

Agricultural Education

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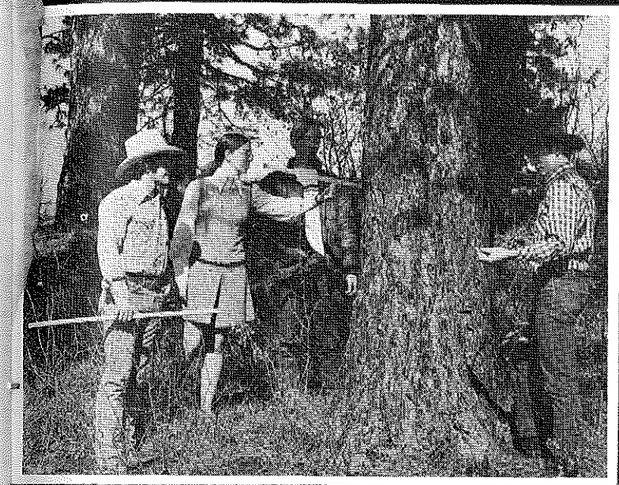

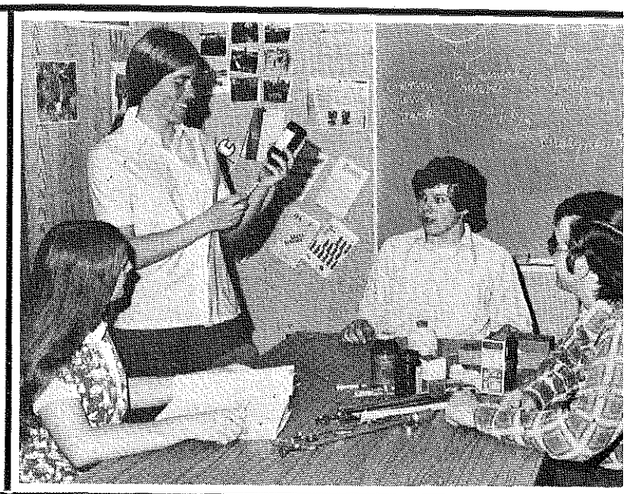

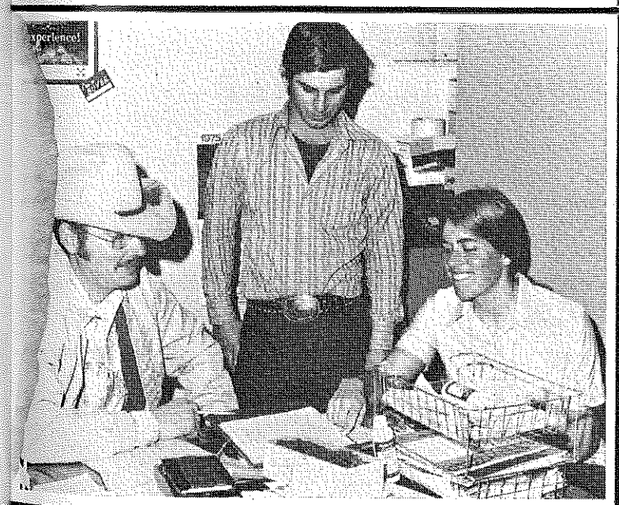

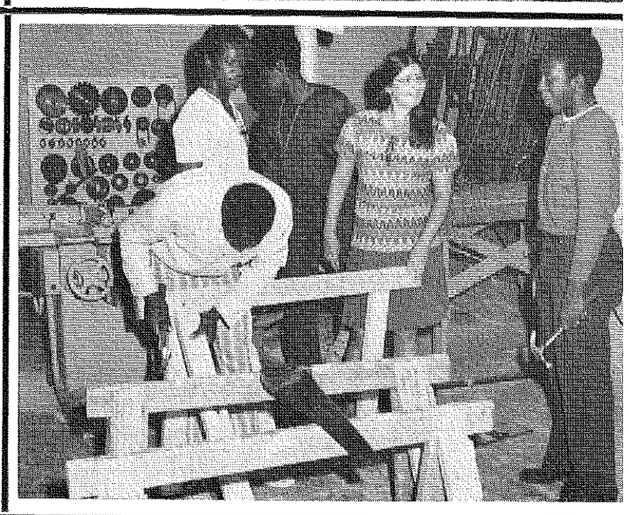

Theme—WOMEN IN AGRICULTURAL EDUCATION

The
Agricultural Education
Magazine

EDPRESS Vol. 47 June 1975 No. 12

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THEME—WOMEN IN AGRICULTURAL EDUCATION

This publication is the monthly professional journal of agricultural education. The journal is published by THE AGRICULTURAL EDUCATION MAGAZINE, INC., and is printed at the Lawhead Press, Inc., 900 East State Street, Athens, Ohio 45701.

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Send articles and pictures to the Editor or to the appropriate Special Editor.

COVER PHOTOGRAPHS

Women assume various leadership roles in agricultural education. The top left photo shows Janice Pombo, teacher at Nevada Union (California) High School, demonstrating the use of a cruising stick. The top right photo shows Gale Harper, teacher at Casa Robles (California) High School, demonstrating the proper technique of filling a syringe. In the lower left photo, Ms. Harper is reviewing a training agreement with a ranch supply store owner-manager. The lower right photo shows Aljean Young, vocational counselor for Meridian (Mississippi) City Schools, observing students in the school laboratory. (Photographs from Ken Baker, University of California, Davis, and Joe McDaniel and Milt Lawrence, Mississippi State Department of Education)

Editorials

From Your Editor . . . *WOMEN AND VOCATIONAL AGRICULTURE*

Martin B. McMillion

Girls and women are presently showing increased interest in agriculture and education in agriculture. Encouragement of this interest and a concerted effort to remove every obstacle which might discourage female persons are the obligations of all. Interest in agriculture by women as a group may be only transitory unless an effort is made to sustain it. Girls are not new in agriculture classes. In general agriculture prior to the 1917 Smith-Hughes legislation, the number of girls equaled the number of boys in many agriculture classrooms. In 1925-26, the number of girls studying *vocational* agriculture in California was reported to be 115. The interest of girls and women in agricultural education has come and gone in the past and may do so again if efforts are not made to remove obstacles and sustain their interest.

An editorial could dwell on sex-role conditioning, sex-role behavior, sex-fair guidance, stereotypes, equality of opportunity legislation, or the feminists vs the female liberationists, but I want to discuss some basic things like: Does your agriculture building have a lavatory for girls? Are there women on your advisory council? Are women attending adult classes? Do you consciously or unconsciously refer to women in terminology they do not appreciate? Do you accept women in agriculture as fellow human beings having an interest in agriculture and not as something to be wooed and pursued? Are you refraining from giving advice to girls concerning which occupations are appropriate for them?

The matter of lavatories for girls in the educational facilities which are separate from the main school building such as separate agriculture buildings, school farms, and school forests may seem insignificant, but such an "insignificant" thing is enough to alter an occupational choice.

If women have never served on your departmental advisory groups, it is time to start using them. It is especially important if there is a substantial enrollment of girls. People who know, say that a woman will not attend advisory council meetings unless there is at least one other woman on the council.

Women should be enrolled in adult agricultural educa-

(Concluded on next page)

Guest Editorial . . . *WOMEN--THE UNTAPPED RESOURCE*

Elissa Walters
Teacher of Horticulture
Pulaski, Virginia

Elissa Walters

As a female and a teacher of agriculture, I have been asked to contribute an article on women in agriculture. This required that I do some research. The facts I found left much to be desired.

It has been shown that while most women are groomed for marriage, family and the home, this occupies only a fraction of a woman's total lifetime. Children grow up and many women seek a career outside of the home. A survey study in the mid-60's indicated that 66⅔% of all working women held nonprofessional jobs such as clerk, cook, maid, waitress, etc. Fortunately, these statistics are changing as more and more women recognize their potential as members of a family and also as individuals capable of rewarding professional careers.

Women have always been in agriculture—from the first pioneer family crossing the country to find new farmland to today's modern farm wife. The ancient goddess of cultivation, Ceres (hence the word cereal), was a woman. But unfortunately women have always taken a back seat position. 4-H has done an excellent job of educating boys and girls. All too often a woman's only outlet in agriculture has been her local garden club. These are admirable groups doing a great deal of good for their members and communities. My own interest in horticulture was fostered by the Virginia Federation Garden Clubs. Their popularity is so great that there are many all male garden clubs. These avocational organizations hardly offer a professional outlet for women interested in agriculture.

Today's agriculture is truly a professional career. It is an area that involves complex machinery and equipment, advanced technology, and educated people to manage our country's greatest resource—our land. Agriculture is no longer a field unsuited for the "fairer sex."

The common prejudices of "they just get married, a woman can't do the job, a woman's place is in the home," etc. are changing. Technology has reduced the time a woman needs to spend at home. Family planning offers a couple the opportunity to have the number of children they desire and when desired. Federal legislation has done much to open up careers for minority groups. Continuing education has allowed many, women included, to become equipped for rewarding careers.

(Concluded on next page)

From Your Editor . . .

tion classes. The most common means in the past of enrolling women has been the joint enrollment of husbands and wives in classes involving farm records. If it is appropriate for girls to enroll in high school agriculture programs, it is also appropriate for women to enroll in adult agriculture programs.

"The ag teacher is a busy man" was a statement made at a recent conference sponsored by the National FFA Center. That statement is not necessarily true; at least it was not according to three women agricultural education majors in the audience. It will take a little effort for males in agricultural education to remove sexism from their writing and speaking.

When refering to each sex it is important to use parallel terms. If the males are boys, then the females are girls, not young ladies. Young men or boys and young ladies are not parallel terms. "Man" refers only to age and gender. Using "lady" adds inferences concerning character, politeness and manners, as would "gentleman."

In the professional setting, women should be just another person. If the attractiveness of other men is not a subject for comment, then the appearance and attractiveness of women need not be a subject for comment. Reference to the "lovely young ladies (usually of all ages and appearances) who grace our meeting" is bad for credibility, unacceptable to many women, and unnecessary in professional settings.

A relationship of respect in which men and women accept each other as fellow human beings first and as female or male second seems appropriate. The "sailor in port" syndrome on the part of male teachers and students negatively influences women and girls who are interested in agriculture.

Selecting chapter sweethearts has become more controversial since the advent of the women's liberation movement. Attitudes in the local community need to be your guide. I feel that chapter sweethearts, if we have them at all, should be FFA members.

Teachers should assume that boys and girls may choose any occupation they wish and leave the matter of sex-role suitability of the job to others. Agriculture teachers should refrain from advising girls or boys concerning the job-roles society approves. Such counseling fosters the continued stereotypes. A liberalization in the social acceptability of job roles for both sexes is needed. —MBM

Guest Editorial . . .

With these facts in mind, I propose that we as educators take advantage of this large untapped resource. Girls should not be discouraged from taking high school agriculture classes. Women in college of agriculture programs are still somewhat of an oddity. This should change. There is no reason why a woman should not be a fine agriculture economist, educator, agriculture mechanic, geneticist, researcher, forester, horticulturist, veterinarian, agriculture business woman, agronomist, or agriculture engineer, to name a few.

As a horticulture teacher, I have found that although most of my high school female students did not have a farm or mechanics background, they all have been able learners and are willing workers. All of my students have studied tractor safety and operation. They can all drive a tractor safely. When it comes to shoveling soil, mixing soil, etc. all participate equally. Having the women do all the "delicate" work, transplanting, potting, etc. and the men do the heavy work does not hold. All work is shared equally and done well.

My own experience as an agriculture teacher has been varied. My first annual agriculture teachers' convention gave me cause for thought. I was greeted by an older male agriculture teacher who said, "Oh, why don't you come and teach in our county. We need teachers." When I asked in what field, he replied "Home Economics." That was the response I drew as a female. On the other side of the coin, in my own school, Pulaski County High School, I have met with no such prejudices. I am accepted for what I am—a teacher trying to do a good job.

But we have a long way to go. I will be the first to admit that I lack experience and knowledge in certain areas. But I want to learn. This summer I learned how to operate a tractor so I could work on the school football field. We, as women, have the serious responsibility to be good in our fields and to be eager to master new areas of endeavor. We must make our own place and a place for future women through our own dedication, willingness to learn, and excellence.

In conclusion, I would like to say that as agriculture teachers, particularly at the high school level, we must assume the responsibility to encourage and help all students, both male and female, in recognizing their potential in agriculture. Over one-half of the population in this country is female —a great untapped resource of hands and minds that is ours to inspire and instruct. Let us make use of this great potential. ◆◆◆

Themes For Future Issues

July —	**The FFA**	**October —**	**International Agricultural Education**
August —	**Serving Out-of-School Groups**	**November —**	**Cooperative Education in Agriculture**
September —	**Guidance, Counseling and Placement**	**December —**	**Agricultural Mechanics**

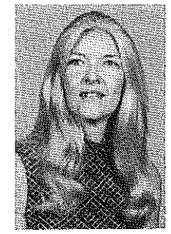
Why So Few?

Don Knotts

Don Knotts, Chairman
Department of Agricultural Education

Rose Knotts, Associate Professor
Department of Management

Prairie View A&M University



Rose Knotts

Is the lack of information available on women participation in agriculture relative to the amount of research available in other areas, indicative of agriculture's failure to become cognizant of the increasing number of women entering agricultural occupations that have been traditionally considered men's jobs? Or could this limited information be attributed to agricultural researchers' feelings that women do not belong in these occupations and ignoring the current trend is their response? Conversely, another speculation might center around the covert acceptance of women in agriculture as nothing different since women have traditionally been closely involved in agricultural occupations as wives and daughters of farmers.

Regardless of the reason for absence of research, women are pervading agriculture curriculums, programs, and occupations across the country and an awareness of prevalent factors might make this transition to coeducational agriculture easier for teachers and employers.

In the past, several factors have contributed to traditional customs and habits concerning occupational trends. They are discussed in the following paragraphs.

Early Conditioning

The concepts and images received from family and peers in early years have dictated that the majority of jobs in agriculture were for males, but a few agriculturally related jobs were for females. And, if a male or female deviated from this sex stereotyping, he or she was considered a deviate from the "norm" and at this age, peer evaluations are exceedingly important to the individual.

Also women were rarely seen at work in pictures depicting agricultural scenes, especially the posed ones, when in reality wives and sisters work along side husbands and brothers on the farm or ranch. And heaven help the poor helpless female portrayed in Western movies, who giggled, flirted, and fainted, but never plowed or fixed fences—which was also erroneous in the "Winning of the West."

Occupational Counseling

In time past, high school counselors have been condemned for neglecting agricultural counseling, alleging that counselors were not familiar with the various occupations in which agricultural students could enter. They have also been censured for promoting sex stereotyping by steering males preferring agriculture into farming, soil science, animal husbandry, etc., but females preferring agriculture into home economics. Even if the female disregarded the advice of the counselor and majored in agriculture, she was not generally given positive occupational encouragement upon graduation.[10]

Social Attitudes

It was not considered feminine by much of society for a female to major in agriculture. Though a female reared on the farm may have performed many of the same tasks as her brothers, she was expected by society to limit herself to other occupational areas in making an occupational choice.

Also, societal inhibitions connoted that certain subjects were taboo or inappropriate, particularly dehorning, animal reproduction, etc., and any female who did major in agriculture should limit herself to courses such as vegetable production, livestock judging, grasses, etc.

Institutional Limitations

Current research indicates that many policies of institutions of higher education favor male students. Admission offices of some major institutions limit the number of females admitted or pose higher scholastic requirements for females than for males.[1-6, 8-10] Financial aids offices and departmental administrators have favored males over females in the awarding of loans, fellowships, and grants.[2,5,7,8,11] Placement offices do not always give the female the same assistance in securing employment as males.[4,10] Housing offices place more stringent residential requirements on females which results in additional expenses, inconveniences, or delayed graduation.[4] And, schools of agriculture have contributed to this isolation policy by not attempting to recruit females as aggressively as males.

Attitudinal Limitation

Women themselves must also share some of the burden for lack of representation in agriculture. Their attitudes about females in non-traditional roles prohibit them from choosing agricultural fields, and their lack of aggressiveness (which is traditionally viewed by our society as a negative characteristic in females) in breaking tradition is a significant reason.

Avoidance of success is preferred by some females because they fear that they will not get married or that they will become unattractive to men. In male dominated fields, some females may feel that academic competition or employment competition with males might inhibit courtship possibilities. Or, some husbands might prefer wives to pursue more traditional occupations.

Then too, some females are too dependent and passive to consider a career outside the home because of disinterest or inferiority feelings. This is an erroneous impression that females can have because the Bureau of Labor indicates that nine of ten females will work outside the home sometime in their lives.

In light of the multitude of reasons for absence of

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Vocational Agriculture Programs--Emphasis on Female Interests

Charles Curry
Teacher Education
Virginia Polytechnic Institute and State University

Charles Curry

During the past five years, female students have entered the male realm of agriculture classes throughout the country. Their influx into this once male stereotyped program area has been received with every attitudinal level from "exceedingly great joy" to "openly expressed disgust." This wide variety of attitudes toward female students should have enabled agricultural educators to anticipate the inevitable result—a vast difference in the quality of instruction that female students receive. How do we provide high quality instruction for male and female students in programs of agricultural education (vocational agriculture)?

The primary reasons that females have begun to enter agricultural education classes are as follows: changes in the expectations that society holds for women; the women's movement; new laws which prohibit discrimination on the basis of sex; and the implementation of career education.

In the last decade, significant changes have taken place in the expectations that society holds for women. As the increased novelty of women working in traditionally male jobs wears off and becomes a part of our culture, then society will have accepted the change (Westervelt, 1973).

Equal pay for equal duties is a perfectly legitimate and democratic principle as is equal opportunity for all in the job market. The conflict lies in the fact that women, for the most part, have not been trained for skilled jobs which demand high status and economic rewards. Burton Weisbrod, professor of economics at the University of Wisconsin, recently figured the value of humans by age and sex (Hoffer, 1974). The values are based upon earning power in the labor market. His findings indicate that the average female citizen lags behind her male counterpart in the labor market at all ages. Since the biggest cause for women to move rapidly into the job market in recent years has been economic, women are becoming very outspoken about these facts and are demanding equality with their male counterparts in the labor force.

The women's movement has created a great deal of excitement and visibility for constructive change to take place in employment and education. Women's movement revolutionaries have succeeded in obtaining enough support in Congress to make almost any separation on the basis of sex illegal. In addition, they have been successful in having 1975 declared International Women's Year by the United Nations (Simpson, 1974).

Legislation has opened every closed door for female students to enter educational programs. Congress reacted to the call for educational equality in 1972 by passing Title IX of the 1972 Educational Amendments which prohibits discrimination based on sex "under any educational program or activity receiving Federal financial assistance (Kirp, 1974, p. 529). This law, of course, affects all programs of vocational education. Such practices as the following are prohibited:

1. Requiring all male or female students to take a specific class;
2. Denying admission to either boys or girls in classes traditionally reserved for one sex; and
3. Guiding students into one-sexed classes or testing practices which tend to track students into sex-related career areas.

Title VII of the 1964 Civil Rights Act (Kirp, 1974, p. 530) was amended to apply to educational institutions. This amendment prohibits discrimination based on race, color, sex, and national origin in all terms, conditions, and privileges of employment by employers, employment agencies, and labor unions. The Equal Employment Opportunity Commission administers this act. Only a few jobs require Bonafide Occupational Qualifications (BFOQ's) which limit them to employees of one sex.

There is sufficient legislation on record to prohibit separate vocational classes of any type based on sex. Not all of these laws have been litigated at present, but many are rapidly being tested in court.

One of our major concerns as agricultural educators is: do we really believe that sex role stereotypes need to be erased with regard to agricultural occupations? Society seems to think so. Legislators are requiring it. Career education leaders condone it, but what do agricultural educators think? One only needs to talk with agricultural teachers, state supervisors, and teacher educators, concerning female students, to assess the wide variety of attitudes that are prevalent. With this wide variety of attitudes toward female students, there is little doubt that instruction received by female students varies just as much.

Although we have been required to accept female students since 1972, there are still relatively few female enrollees in agricultural programs. The majority of the female students that have enrolled are in ornamental horticulture or exploratory agriculture courses.

Certain assumptions have been made with regard to female students. These assumptions include:

1. Male and female students have the same learning abilities;
2. Male and female students have the same desire to work after graduation;
3. Agricultural teachers (predominantly male) who have been teaching all male classes can adjust to and successfully teach female students without inservice training; and
4. The primary purpose of vocational education is to provide training for job entry skills at the secondary level.

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These basic assumptions have caused the development of some serious problems: (1) only a small number of female students have elected to enroll in agricultural courses; (2) subject matter is being taught instead of students; (3) teachers have developed biases toward female students; (4) a lack of understanding of female students has resulted in poor instruction; and (5) female students have become disinterested.

The basic assumptions that we have made concerning females in our programs need to be analyzed. First, do male and female students have the same learning abilities?

Although there is no difference in overall intelligence, differences do exist in both physical and mental abilities. Sociologists will argue that these differences are the result of our socialization process rather than innate sex-linked characteristics. Nevertheless, differences do exist that affect learning abilities. For example, boys and men are more proficient at mechanical tasks, including the comprehension of mechanical relationships while females are particularly skillful and deft with their hands. Finger dexterity is a trait in which women are known to excel. Soldering small electronic units is an occupation often reserved for women by industrial employers because of their superiority at this task. There are many other sex differences that affect educational achievement (Hutt, 1972).

1. Women hold more in memory for shorter periods than men.
2. Males are more exploratory, possess more intrinsic motivation, drive and ambition than females.
3. Preschool education is more important to girls because they mature earlier than boys.
4. Women have a keener sense of smell than men.
5. Women are more sensitive to touch and pain than men.
6. Males excel in spatial ability.
7. Females speak more fluently.
8. Competition between sexes is unfortunate because it aids in negative self-concept development.

Some knowledge of these sex differences in learning ability is needed by teachers to provide adequate instruction. Teachers who have been instructing only one sex may be unaware of the learning differences of the other.

Secondly, the assumption that both male and female students have the same desire to work after graduation would again be looked at differently by the sociologist and the behavioral psychologist. Studies have shown that women tend to strive for the same intrinsic rewards from work as men and that they are nearly twice as likely to express negative attitudes toward their jobs as men (Special Task Force to the Secretary of Health, Education, and Welfare).

The third assumption is probably responsible for more of the problems in accepting females into our agricultural programs than any other underlying principle. The addition of female students to agricultural programs created a new challenge for most experienced teachers. If the students fit into the existing program, then the challenge is not as great. It is easier to discourage students from enrolling than to expand our programs to meet their needs. Teacher biases are projected to male students who then exhibit behavior agreeing with the teacher's attitude, such as operating a machine for the female student or carrying an object for the girl that she could easily carry herself. In-service training in working with female students is essential and additional in-service training in areas of instruction like pet care and flower arranging are probably also needed.

Fourth, the primary purpose of vocational education is the preparation for job-entry skills on the secondary level. Vocational educators have never completely yielded to this purpose as being all inclusive. With the addition of female students to our agricultural programs, more avocational instruction is probably in order. Males will probably also be required to take on more of the household activities which will have an effect on our agricultural curriculum as well as other vocational areas.

Work has been defined as either "wage earning or wage saving activities" by the Minnesota Research Coordinating Unit in their career education project. Dr. Kenneth Hoyt, presently Commissioner of Career Education in the U.S. Office of Education, defines work this way: "Work is one's efforts aimed at the production of goods and/or services that will be beneficial to one's fellow human beings and/or to oneself." (Hoyt, 1973). These definitions would mean, for example, that home vegetable gardening would be as much vocational as the occupation of truck farming. If we follow this concept to the dual role of women in our society, we can see that wage saving in the home is as important as wage earning in the labor force. This does not mean that females enter agricultural programs entirely or for the most part, to obtain domestic skills. It does mean, however, that agricultural programs should be modified to include both preparation for occupational entry (wage earning) and avocation (wage saving) skills. The formula V=W+L (vocation equals work plus leisure) may be the most widely accepted definition for vocational education in the future (McDaniels, 1974).

The attitudes that agricultural educators have taken toward female students will have to change. Simply allowing girls to enter agriculture programs is not sufficient and indicates a lack of educational professionalism. If our programs do not attract the female interest and maintain that interest, then the programs lack relevancy.

Federal support for vocational programs is essential and programs that do not meet the needs of all students, regardless of sex, race, creed, or color, will find difficulty in justifying expenditure of Federal dollars. In order to obtain funding in the future, agricultural programs will not only have to satisfy the female interest, but, in addition, place those students in occupations that are rewarding, satisfying, and of equal status with their male counterparts.

Removing sex role stereotypes with regard to occupational goals in the Industry of Agriculture will require adjustment time as it will in the whole of society. This new emphasis requires a change in individual attitudes and traditions. As programs are planned for agricultural education, persons in positions of responsibility must look closely to see if sex biases exist. ◆◆◆

REFERENCES

Hoffer, William. "Money—Women and Children Last," *Ms.*, January, 1974, p. 100.

Hoyt Kenneth B. "What the Future Holds for the Meaning of Work," *American Vocational Journal*, January 1973, pp. 34-37.

Hutt, Corrine. Males and Females, Penguin Book, Ltd., Harmondsworth, Middlesex, England, 1972, pp. 87-105.

Kirp, David L. and Yudof, Mark G. *Educational Policy and the Law*, McCutchen Publishing Corporation, Berkeley, California, 1974, pp. 340-342 and 529-531.

McDaniels, Carl. "The Role of Leisure in Career Development for Girls and Women," *New Dimensions in the Career Development of Women*, 1974, pp. 50-58.

Simpson, Elizabeth J. "Vocational Education Can Lead Equal Rights for Women in Employment and Education," *American Vocational Journal*, Vol. 49, No. 8, 1974, pp. 36-37.

Special Task Force for the Department of Health, Education, and Welfare, *Work in America*.

Westervelt, Ester Manning, "A Tide in the Affairs of Women: The Psychological Impact of Feminism on Educated Women," *The Counseling Psychologist*, Vol. 4, No. 1, 1973, pp. 3-26.

Should We Encourage Women to Enter Ag. Ed.?

Carl Reynolds

Carl L. Reynolds
Teaching Assistant

and

Robert W. Walker
Associate Professor

Agricultural Education
University of Illinois

Robert Walker

Women are now considering occupations which traditionally have been held only by men. Affirmative action programs and legislation are reasons to expect that more occupations will be considered by women now, which were not considered before. Teacher trainers in agricultural education, school administrators, and agricultural occupations teachers should expect to see more women entering the profession of teaching agriculture. The theme of this article is to go one step further. More than simply *allowing* women to apply for teaching in agriculture if they express the desire, would it be to the advantage of agricultural education to *encourage* women to consider teaching agriculture? A look at the situation and trends will help to answer this question.

Women are showing more interest in curricula offered by colleges of agriculture. A survey of enrollments of students in the member institutions of the National Association of State Universities and Land Grant Colleges showed that women represented twenty-three percent of the total in 1974.[1] That same year, during which the institutions showed a 13.6 percent increase in enrollment, women represented over one-half of the total. In the College of Agriculture at the University of Illinois, women represent a substantial percentage of the students in several curricula. In agricultural communications, women make up 37 percent of the students. In animal science, 39 percent are women, and in dairy science, 26 percent are women. The horticulture and ornamental horticulture curriculums contain the largest percentage of women, 42 percent and 43 percent, respectively. In the core curriculum, consisting of freshmen and sophomores who have not yet declared their majors, 26 percent are women.

The employment opportunities for women in these curricula are lucrative. Women who have a practical agricultural background are in demand in such positions as agricultural journalism and advertising, quality control in food technology, and some management positions in the food industry. An increased interest in companion animals has also created a demand in such areas as small animal veterinary medicine and small animal care specialists in pet stores, grooming parlors, and kennels. Ornamental horticulture specialists in areas such as landscaping work, garden centers, flower shops, and nurseries are also in demand.

In the same study mentioned earlier, women were not represented as well in the agricultural education program. Currently, only 12 percent of the students enrolled in teacher training in agricultural occupations are women. Even though this percentage is small, it is an increase from almost none a few years earlier. One may speculate that a major reason for the small enrollment of women preparing to teach agriculture is due to the emphasis placed upon production agriculture. The interest shown by women in such areas as agricultural economics, agronomy and agricultural mechanization is low. These same curricula are of high interest to male students who specialize in production agriculture.

TRENDS

Current trends in the nature of teaching positions in agricultural occupations indicate areas of interest for women. An increasing number of agricultural occupations programs are being introduced in urban areas. Many of these programs have special emphasis in horticulture, ornamental horticulture and companion animal care. Very little content in production agriculture exists in these programs.

Successful agriculture occupations departments are expanding their programs and adding more teachers. The need for specialized teachers in such fields as ornamental horticulture and animal science exists.

As more schools implement career education programs in the elementary and junior high schools, teachers will be needed to conduct orientation and exploration programs in agricultural occupations.

Specialized programs in the area vocational centers and post-high school institutions, especially in ornamental horticulture, are still expanding. Indications are that these programs will continue to grow.

The enrollment of girls in agricultural occupations programs is increasing. A survey of agriculture teachers in Illinois indicates that the current enrollment of girls in agricultural occupations programs is approximately eight percent. In 1971, a similar survey showed that the enrollment of girls was six percent of the total.

The supply of agricultural education graduates who elect to enter teaching continues to be insufficient to meet the demand. The projected need for agricultural occupations teachers calls for more teachers than is currently being supplied.

RECOMMENDATIONS

In light of the situation and the trends in agricultural occupations programs and enrollments of women in agricultural curricula in colleges of agriculture, several reasons can be given for the encouragement of women to consider teaching agricultural occupations. First, because more women are

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SOME MYTHS ABOUT WOMEN AGRICULTURE TEACHERS

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Bureau of Agricultural Education
State Department of Education
Dennis Hampton, Teacher Trainer
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University of California, Davis

Ted Gregg

Dennis Hampton

E. M. Juergenson

Women teachers in America have long been the main force in the educational process. Historically the hand that rocked the cradle also taught the child at home and the student at school. In agriculture teaching, however, this has not been the case as the teacher of agriculture and especially in vocational agriculture, has almost without exception been a man.

Times have changed, and are constantly changing for teachers of vocational agriculture. Women teachers in agriculture are a reality and in 1975 it is obvious that they are here to stay. Many reasons may account for this shift in the teaching force, not the least of which may be the inroad girls have made into vocational agriculture classes and FFA activities. Only a decade ago just a handful of girl students were enrolled in agriculture while the thought of girls as regular FFA members, much less officers, was shocking. How different it is today when in some agriculture classes girls outnumber boys. Girls are also participating in and often winning contests traditionally dominated by boys.

With this mix of agricultural students it seems only natural that women teachers of agriculture are needed as instructors and to manage and assist with out-of-town trips and co-curricular activities so necessary in vocational classes.

While women teachers of agriculture have helped solve the problems with coeducational classes their advent has probably been coincidence. In this modern world women have entered, successfully, many fields characteristically chosen by men; so it seems inevitable that women would become teachers of agriculture regardless of the student content of vocational agriculture classes.

Another factor somewhat overlooked is that many women possess a deep rooted interest and love of animals and agriculture, and agricultural teaching is a natural outlet. Women traditionally understand, care for, and nurse livestock well. Many women, as if by some mysterious inherited trait, manage agricultural enterprises with obvious knowledge and satisfaction. Thus the entry of women into the field of teaching vocational agriculture is a natural one and their impact will become noticed more and more as time goes on.

The first woman teacher of agriculture to plan and complete the regular program of teacher preparation in California was credentialed in 1968. Charlotte Glenn, while reared in Southern California, worked on farms and ranches in rural areas during the summer to gain experience. She entered the College of Agricultural and Environmental Sciences, University of California at Davis and began a program preparing her to become a teacher of vocational agriculture which was completed in 1968. She was followed by Stephanie (Irvin) Licht in 1969 at the California State Polytechnic University, San Luis Obispo.

Today there are 24 women teachers from five institutions in California who have completed the preparation program and the five training institutions report 20 additional women presently working toward credential requirements at this time.

Seven years have passed since the first woman teacher was credentialed. What does the record show, especially in regard to the predictions and myths surrounding the achievements and performance of these persons? Many educators wondered how women could teach classes involving large animals, classes with active boys and how parents and ranchers would accept a woman teacher.

Here is what the record shows:

A survey was sent to administrators, department chairmen, and Regional Supervisors of the 20 women agriculture teachers presently teaching in California with a 60.5 percent return. The results of this survey indicated no significant difference between the three groups in their reaction to the questions on the instrument. Ten of the most common myths associated with women teachers of agriculture were included in the survey.

It is obvious that in the great majority of cases, women are doing a fine job in teaching agriculture.

At this time, all credentialed women agriculture instructors with the exception of four are currently employed and on the job. These four are not presently teaching due to either family or geographical reasons. All four indicated their desire to return to vocational agriculture teaching as soon as personal conditions permit.

It appears that women do not have any more problems in the classroom than do men and that contrary to common belief they are accepted in the community even though in most areas agriculture teaching is still considered to be a "man's" profession. According to the survey, women do not appear to have any more personal problems involving students than do men.

Other results indicate that women agriculture teachers are well accepted

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by students and why not? The results of the survey clearly indicate that those women presently in agriculture teaching are as technically and professionally competent as their male counterparts.

The strongest opinion expressed in the survey was that women agriculture teachers should *not* limit their talents to teaching ornamental horticulture and related fields. This would seem to indicate that women agriculture teachers have been very successful in other areas.

Even though all returns expressed that there were no serious problems, there were some areas of slight concern. It appears that the professional training for women teachers should include greater emphasis in several areas.

According to the survey summary there appears to be some concern regarding women handling shop classes. A possible reason may be that women do not want to teach agriculture mechanics classes and wish to devote their attention to other areas; however if women are interested in teaching agriculture mechanics, we must include them in agriculture mechanics classes as part of their preparation program.

It is also pointed out in the survey that there is a concern over women handling large animals. According to the comments on the survey, the women that have majored in animal husbandry or have experience in this area seem to be proficient in handling large animals. It would appear that those women who have majored in non-animal science areas or are not interested or familiar with large animals are most concerned about this item.

Figure 1

		% True	% Not True	% Undecided
Myth No. 1.	Women have poor classroom control	0	83	17
Myth No. 2.	Women can't handle large animals	11	61	28
Myth No. 3.	Women are not well accepted in the community	0	78	22
Myth No. 4.	Women are not well accepted in agriculture groups	5	78	17
Myth No. 5.	Women have more personal problems involving students	0	83	17
Myth No. 6.	Women can't manage shop classes	11	56	33
Myth No. 7.	Women lack acceptance by students	0	89	11
Myth No. 8.	Women won't do dirty jobs (clean up shop, etc.)	11	78	11
Myth No. 9.	Women are not strong leaders	6	83	11
Myth No. 10.	Women should limit their teaching to ornamental horticulture and related fields	0	94	6

The third area of concern seems to be that women may not always become involved in the dirty jobs. Could it be that women don't become as involved in the messy assignments because the men won't let them? Traditionally this is a man's role!

Women are becoming increasingly involved in today's agriculture, and agriculture education is no exception. Women teachers are here to stay and it appears that most adults and students are pleased with the results. ◆◆◆

(Reynolds—from page 272)

showing interest in enrolling in colleges of agriculture, teachers of agricultural occupations in the secondary schools should be encouraging more girls to enroll in the agricultural occupations program. Women in teaching positions in agriculture occupations would encourage more girls to enroll. A woman "ag teacher" would help to remove the impression that agriculture is only for boys.

Second, because more students in colleges of agriculture are coming from urban areas, agriculture occupations programs in these areas need to be expanded. Also, there is a need to encourage women to enroll in agricultural occupations programs to train for entry level skills in ornamental horticulture and companion animal care. Women, who tend to be less oriented toward production agriculture and mechanics, may well better adapt to urban agricultural occupations programs.

As departments of agriculture in secondary schools, area vocational centers and community colleges expand, the opportunities for women to "join the staff" and teach in specialized areas will be made available. The concern that may exist when considering the hiring of a woman to be the sole teacher in an agricultural department should be much less when hiring a woman in a multiple-teacher department.

As additional career orientation and exploration programs in agricultural occupations are introduced in elementary and junior high schools, teachers of agricultural occupations are needed who can best orient themselves to this age group. Women typically relate better to the younger students, as evidenced by the number of women compared to the number of men who teach in elementary and junior high schools.

CONCLUSION

Increasing the number of women in the agricultural occupations teaching profession would result in an improvement of the total agricultural occupations program in the public schools. The argument proposed does not present a threat to men entering the profession, but rather suggests that women with currently expressed interests and abilities would enhance several types of agricultural occupations in operation today and anticipated in the future.

REFERENCE

[1]Gardner, K. E. "Resident Instruction: How Male-Oriented Is Agriculture?" *Current Affairs of the College of Agriculture*. Urbana, Illinois: College of Agriculture, University of Illinois, Nov.-Dec., 1974, No. 52.

Women in Agriculture in a Two-year College

Anthony Kuznik
The University of Minnesota Technical College
Crookston, Minnesota

A rather recent phenomenon in agricultural education is the sudden emergence of significant numbers of women in agriculture. This phenomenon has been especially noted in Minnesota technical collegiate education. The University of Minnesota Technical College, Crookston, an institution in which approximately 50% of the student body majors in agriculture, is an example of this rapid increase of women in agriculture as presented in Table 1. It is appropriate to note that the related fields of business, home and family services, and hotel, restaurant and institutional management within the technical college also experienced significant increases in women majors.

Such an emergence of women in agriculture present some interesting areas of research that deserve attention. Some of these research topics are as follows:

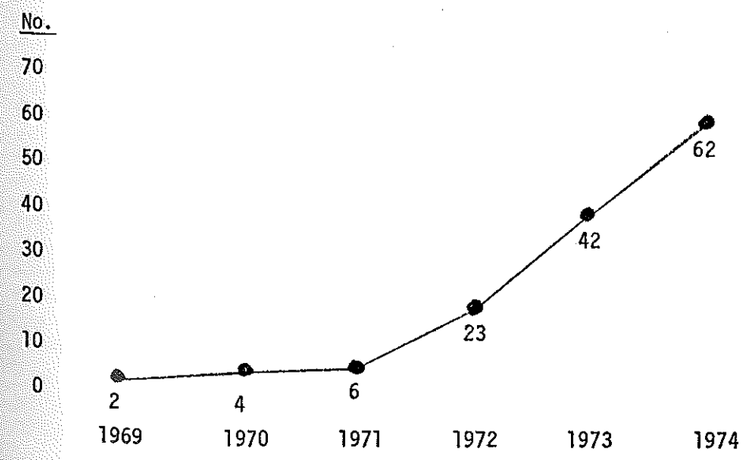
1. What areas of agriculture are women majoring in?
2. How successful are women once they are employed in the field of agriculture?
3. What would the role of advisors be in counseling prospective women agricultural majors?

Female agricultural students at the University of Minnesota Technical College major predominantly in horticulture, light horse management, and conservation. Female students were found to major in agriculture for both vocational and nonvocational reasons. Obviously the female students, as do many of the males, have several interest areas within the career clusters found in agriculture. However, the majority of the women students, like men, plan to graduate and become employed within the broad agricultural field.

The technical college, like other colleges that emphasize agricultural education, has experienced extremely favorable placement statistics for its graduates (Kuznik, 1974). In fact, many agricultural job openings have gone unanswered as there were not enough graduates to fill the demand. This situation is likely to worsen as the typical major in agriculture at the technical college is a young man who grew up on a farm or a small rural community with an agricultural economic base. With the lowered birth rate and recent migration trends out of the farming areas, there is a smaller number of "typical male agricultural majors." Yet the job possibilities are and still will be in existence. Where can we find the solution to this problem? The answer is female agricultural majors. Most likely there are as many potential female students as there are male students with a rural agricultural background. With the inclusion of the female agricultural students, the potential student base is dramatically broadened.

Women Majoring in Agriculture
University of Minnesota Technical College
Crookston, Minnesota

Table 1



Can the women do the job? Definitely. The University of Minnesota, Crookston, surveyed all of the employers of its graduates (1968-1973) who were known to have entered the job market after graduation. Employee ratings reveal that the women are rated just as highly as are males. Employed technical college graduates also compared very well to other employees according to employer ratings. In terms of quality of work, 63.5% of the graduates were rated superior or above average and 32.1% were considered average. Ratings concerning quantity of work and the employees' verbal, reading, and

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(Kuznik—from page 275)

arithmetic skills were similar and also quite high. In all three categories, less than 5% rated the graduates below average. Male and female graduates were rated very similarly.

In comparing the salary data concerning all female and male graduates, it was obvious that females got substantially less money ($150 less per month) than males upon their initial hiring from their present employer, and less money in terms of raises. However, we must note that the women students who majored in agriculture, entered traditionally minimal paying agricultural fields (horticulture, conservation, and light horse management). After two years of working, males received an average raise of $220 per month compared to $110 per month for females. Male graduates, on the average, continued to receive substantial raises after each year of employment (4 years—$330 per month, 5 years or more—$480 per month). The number of women working for their present employers after two years was too small to draw conclusions. It should be emphasized that these data do not take into account those graduates who had entered occupations in which they were their own boss, such as agricultural production or those graduates who entered the labor market after 1973.

Interestingly, although over 70% of the sample had worked for their present employer for less than 3 years, approximately 35% had been promoted since their intial hiring. More males (38%) than females (25%) had been promoted since their initial hiring.

Perhaps the most critical issue was the question posed to employers: "If you had a job available, would you hire other technical college graduates?" Ninety-eight percent of employers who had hired males responded with yes as did 100% of those who had hired females.

In summary, women face the same problems working in agriculture that they do in other career fields. What is needed now is for advisers and counselors to encourage those women who are interested in agriculture to major in some of the agricultural roles that have been traditionally male oriented. There is no doubt that women can successfully fill employment needs in fields such as agribusiness, agronomy, or animal science. Assistant managers for grain elevators and supply stores, plot technician aids, research or livestock field aids are specific job opportunities that should have more female applicants. Agriculture cannot afford to miss the talents of American women.

REFERENCES

Kuznik, Anthony. Follow-Up and Evaluation of Graduates in Minnesota Collegiate-Technical Education. *Agricultural Education*. (Vol. 47, No. 1) 1974, 17.

(Knotts—from page 269)

women in agricultural areas, the following recommendations are given to teachers, administrators, and employers to facilitate the transition in agriculture.

Recommendations

Secondary Level

1. Encourage females to participate on judging teams, in leadership contests, and FFA.
2. Establish the same rapport with parents of females as with parents of males.
3. Do not assume that female students are not as interested as males in agricultural careers. Give them as much occupational information and career guidance as male students.
4. Counsel with parents of females concerning the problems daughters may have in agriculture, and encourage them to support their daughters.
5. Recognize leadership potential in females as well as males.
6. School counselors should be given literature and information concerning the various careers and career requirements available to students interested in agriculture with suggestions that females are also to be given counseling in the area.
7. Employers seeking full-time or part-time agricultural assistance should be given names of qualified females as well as males.
8. If a female student "fails" academically or in an assigned task, do not blame it on her being female; respect her as an individual student.

Post-Secondary Level

1. If promotional literature does not depict females in brochures, redesign it so that it does. In referring to majors, avoid the use of "he"—substitute "he or she" so that females will not get the impression that only males are considered.
2. Alter your mailing list if it includes only males who receive promotional literature or announcements.
3. Announcement of fellowships, financial assistance, educational programs, etc., should be placed where females are likely to learn about them.
4. Employers of agricultural majors should be made aware of the availability of qualified female agriculturists.
5. Use females in recruiting programs.
6. In a meeting of agriculturists that includes females, do not always appoint the female to be secretary or take notes.
7. Encourage qualified females to obtain graduate education. Assist them in securing admission, financial aid, and/or fellowships.
8. Review university policies and alter any policy that (overtly or covertly) eliminates females.

While the problems in coeducational agriculture will not be solved overnight, leaders in agriculture can take steps to minimize the difficulties. Considering the responsibility placed on the United States by our government and international leaders, utilization of the talents of the "51 percent minority" might help meet the demands placed on agriculture. ◆◆◆

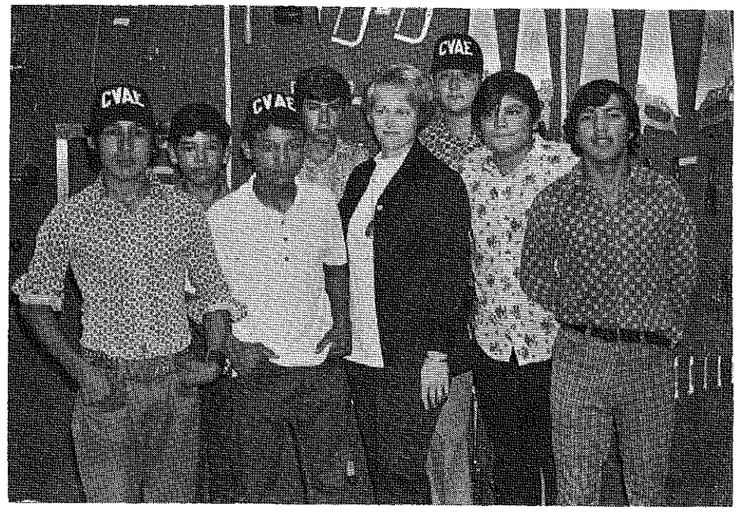
REFERENCES

1. American Council on Education. *National Norms for Entering Freshmen—Fall 1971*. Washington, 1968, 1969, 1970.
2. Berkeley, University of California at. *Report of the Subcommittee on the Status of Academic Women on the Berkeley Campus*, 1970.
3. Chicago, University of. *Women in the University of Chicago*. 1970.
4. Cross, K. P. *The Undergraduate Woman*. Research Report No. 5. Washington: American Association for Higher Education, 1971.
5. *Discrimination Against Women*. Hearings Before the Special Committee of the Committee on Education and Labor, House of Representatives, 1970, Washington: U. S. Government Printing Office, 1970. On Section 805 of H.R. 16098, 91st Cong.
6. Harvard University, Preliminary Report on the Status of Women at Harvard, March, 1970.
7. Haven, E. W. and Horch, D. H. *How College Students Finance Their Education*. New York: College Entrance Examination Board, 1972.
8. Hunter, J. S. *The Academic and Financial Status of Graduate Students*, Spring, 1965, USEO 1967.
9. Kayden, Xandra. Report on Women and Continuing Education. U. S. Office of Education, September, 1970.
10. Komarovsky, M. Women's Roles: Problems and Polemics. In S. Farber and R. Wilson's *The Challenge to Women*. New York: Basic Books, 1966.
11. Murray, P. Economic and Educational Inequality Based on Sex: An Overview, *Valparaiso University Law Review*, 1971, Volume 5, Number 2.

DON'T EXCLUDE WOMEN FROM AG TEACHING

Mrs. Mary L. Stapper
CVAE Teacher—Rio Hondo Jr. High
Rio Hondo, Texas

If anyone had asked an agricultural teacher attending the Texas Vocational Agricultural Teachers Association Convention in Houston last summer (1974) if he knew who the new women agriculture teachers were, he probably would have laughed in his face. However, Mike Stapper, Vo-Ag teacher from Rio Hondo, could have told you that his wife, Mary L. (Candy) Stapper, was going to be teaching Coordinated Vocational Academic Education (CVAE)—Farm and Ranch Mechanical Repair at Rio Hondo Jr. High School.



Mary L. Stapper, one of three women agriculture teachers in Texas, with her students in Coordinated Vocational Academic Education.

Candy Stapper is a member of the Vocational Ag Teachers Association of Texas. She attended the convention and definitely feels that she can do as well as the next person. I graduated from Texas A & I University's School of Agriculture with a Bachelor of Science Degree in August of 1971. I was the first woman initiated into the Mu Chapter of Alpha Tau Alpha, a national professional honorary fraternity for agricultural education majors.

Mary Beth Neason is a CVAE teacher at Clear Creek High School in League, Texas. She teaches horticulture.

Marcia Hedrick teaches in the correctional institute at Huntsville, Texas.

Women are no longer considered the weaker sex. They want to do their share to insure that we have well-trained people to feed, clothe, and provide shelter for the world's population in the future.

Why should women be excluded from teaching agriculture? They grow up in the same areas as men and under the same circumstances. Given the same opportunities to study vocational agriculture in junior and senior high school, any young woman can find out whether she is capable of working in a field of agriculture or if she should seek another type of vocation.

I was not allowed to take vocational agriculture in high school. It was not ladylike. Can you imagine going to college and majoring in agriculture with no formal educational background in agriculture? I not only graduated, but my peers nominated me for "Aggie of the Year" when I was a senior at Texas A & I University. Only four students were nominated. I was finally beginning to win my battle. Although no women were yet teaching agriculture, I was encouraged to come back to A & I and get my teaching certificate in Agricultural Education.

The problem today is that too many agriculture teachers stick girls on their Quiz team, or the Parliamentary Procedure team, and then turn the girls into office aides. These young women signed up for vocational agriculture classes to learn about all phases of agriculture, not to be secretaries.

I wish more ag teachers would try to educate all young minds, not just the young men. Some ag teachers are finally seeing the light. There are more and more young women participating on farm skills teams, judging teams, and being encouraged to try everything that is done in production agriculture classes and labs.

I feel that not all men or women who study agricultural education make good teachers. I taught seventh grade science, and girls' athletics for a year before going back and getting certified to teach vocational agriculture. I know that I like my job as a junior high CVAE teacher. I love working with the disadvantaged students in the shop. Ag shop is a totally new experience for most of the boys and girls. They are so eager to learn and it is a pleasure to see how much they improve in only one year.

Since there are only three women teaching agriculture in the State of Texas, it will take time to fully evaluate how successful they are. I sincerely feel that we shall succeed. After all, we have already passed the school of hard knocks. We were not as fortunate as young women today. When I was in high school, I was not allowed to join agriculture classes. I was not encouraged to study agriculture. I made it on my own, the hard way.

I am thankful that the system of education is changing to give all students (male and female) a chance to study whatever they want to. ◆◆◆

Using Horticultural Resources in Washington, D. C.

Lynda A. Walker
Ornamental Horticulture Instructor
Arlington Career Center
Arlington, Virginia

Linda Walker

Admittedly, Washington, D.C. and neighboring Arlington County, Virginia are not in the center of agricultural America, but amid the concrete and cars a high school agricultural program is growing. We have pruned our agriculture program to fit the needs of training in intensified agriculture—specifically, ornamental horticulture.

The Arlington Career Center opened its doors in September 1974 to 850 junior and senior high school students from the seven junior high schools and four high schools which serve Arlington County. Junior high students are enrolled in career exploration where they can explore six different occupational areas during the course of the school year. Senior high students may also enroll in career exploration, but the majority of them are encouraged to take occupational training in their interest area for the entire year. Adult occupational and enrichment programs began with the second semester classes in January. Eventually, the Career Center will serve all citizens of Arlington County from the elementary-age child to the senior citizen. The new Center will house eighteen occupational training areas and offer twenty-two different career exploration clusters.

We are presently operating out of two buildings pending completion of the new 4.5 million dollar facility. Ornamental horticulture was the first area to be completed. Although we are still awaiting construction of our greenhouses, we were the first to move from temporary to permanent facilities. We will have a classroom, workshop and potting area, soil laboratory, garage and greenhouses at our disposal.

Eleven active and eager students are enrolled in the career program, with a balance of both genders and abilities. Nearly three-fourths of these students are in ornamental horticulture as an enrichment program to their basic academic studies at their home high school. They have committed themselves by electing an extended day program in order to schedule all their required courses.

Eventually, hopefully as early as next year, both Ornamental Horticulture I and II will be offered. This year, an effort has been made to give the students a basic knowledge in horticultural terminology, techniques and career opportunities. In Horticulture II students will be able to select an area of specialization, such as retail florist training or greenhouse crop production and hopefully become involved in a supervised work experience situation in the greater Washington, D.C. area. This year we are working with the Smithsonian Institution in providing students as "volunteers" for their greenhouse range. Students are given training in a commercial operation. In exchange for their volunteered hours, they will accumulate a valid work experience record and immeasurable practical experience in areas such as plant propagation and bedding plant production for the grounds of the Smithsonian and related government areas.

With the bicentennial fever at a high pitch for beautification projects and inflation on the minds of everyone, backyard gardening has come to the front as a valid and rewarding pastime. The Cooperative Extension Service of Arlington has requested our assistance in organizing and implementing an elementary school gardening program. "Operation Salad Bowl" will produce a salad for each child involved before the end of the school year and plant the seed for horticultural awareness. Not

Horticulture students from the Arlington (Va.) Career Center working in propagating beds at the Smithsonian Institution greenhouses in Washington, D.C.

only will the horticulture students be practicing gardening techniques they have learned, but they will also gain experience in communicating their ideas and working with individuals of different ages. We hope to work this into a year-round horticulture awareness program within the elementary schools, with the advanced high school students providing the stimulus and leadership.

The Washington, D.C. area provides a wealth of instructional resources in the agricultural sciences. The National Arboretum serves as an outdoor classroom for plant identification, the U.S.D.A. Plant Industry Station is located in nearby Beltsville, Maryland, the U.S. Botanical Gardens are only a ten minute drive away, and we have many federally maintained horticultural areas and estate collections at our disposal. We have taken advantage of our convenient location to other horticultural collections of the East Coast by taking a successful field trip to the Philadelphia Flower and Garden Show,

(Concluded on next page)

Overcoming Prejudices

Jo Ellen Seaman
Vocational Agriculture Instructor
Spring Grove, Minnesota

There have always been women in agriculture, whether it be the farm wife or one in any other agriculture related field—but now women are entering the field of Agricultural Education. Vocational agriculture has been a predominant male profession up to now, but there are women entering into that profession.

As a woman in the field of agricultural education I have had many humorous experiences. When starting high school in Arthur, Illinois, I had to ask the principal-superintendent if I could enroll in agriculture. He said if it was all right with the agriculture instructor it was all right with him. The agriculture instructor agreed. I was in the agriculture and FFA program for four years and enjoyed every minute of it and at that particular time girls were not recognized on the state and national level in FFA. I could only participate on the chapter level and a couple of years after I graduated that rule completely changed. I always wanted to teach, but deciding what to teach took a little longer. After having agriculture and FFA in high school this was my goal.

Upon graduation from high school I decided to stay in the field of agriculture. I enrolled in the pre-agriculture program at Wabash Valley Junior College at Mt. Carmel, Illinois. I then transferred to Illinois State University at Normal and enrolled in agricultural education. The male classmates were mildly curious, to say the least! The thing that you have to do is to prove to yourself and to others that you can do it, whereas the male students do not have such a challenging and competitive position to maintain.

> **I would receive letters saying that the position had been filled, but when the opening list came out the schools were still on the vacancy list.**

Upon graduation from college, I was told that I would probably never be able to find a department of my own and that I would have to work in a two-teacher department. I set out to show them that it was different.

Finding a teaching job was an experience in itself. Applying for the job was easy. The hard part was convincing them that I could do the job. After applying for the jobs, I would receive letters saying that the position had been filled, but when the opening list came out the schools were still on the vacancy list. It is hard to overcome tradition.

When the first acceptance of a job came it was just like a dream come true. You think that you have finally made it, but that is not true. The people will question your employment because this is not the usual pattern, to have a female agriculture teacher and FFA advisor. You immediately try to show them that they made the right choice. You want the people in the community and the people in the profession to respect you as an educator and as yourself. These people are concerned and watch you. They become interested, wonder how it is going, wonder about discipline, about trips, and if she can teach with respect and authority.

Now, I am in my third year of teaching and am currently teaching vocational agriculture in Spring Grove, Minnesota. The curriculum is a modular trimester and offers fifteen different courses in agriculture throughout the school year. This situation is effective, pleasing, yet challenging for me.

Today there are more girls going into agriculture courses. I consider agriculture a course like any other. Most of these girls are farm girls and are just as interested as any other student. If they want to be in agriculture and if they are interested, I think they should be there.

The field of agriculture education is wide open. You must be interested in agriculture and enjoy working with people. If this is what you want, you must first set your goals and then achieve them one step at a time. The most important thing to remember is that you will have many traditions to overcome, but there is no better occupation than agriculture. ◆◆◆

(Walker—from page 278)

and we hope to schedule a spring visit to Longwood Gardens.

Our incomplete facilities have more or less forced us to be unconventional in our approach and flexible in our material. We do not use just one text, since most of these guides assume that all facilities are in operation. Our handbooks and guides to the various areas of specialization, i.e. retail florist operations, nursery crop production, landscape establishment and maintenance, turfgrass management and greenhouse crop production, will be used next year when we can combine practical experience in these areas with "booklearning."

We've grown much this first year, but we are still at the seedling stage of development. We are fortunate to have administrators who are committed to the value and necessity of offering horticulture in an urban situation. As the awareness and concern for the quality of life grows within the American population, horticulture offers each individual a chance to improve upon his life situation—aesthetically, nutritionally and financially. Horticultural awareness is on the move and it is up to us as agricultural educators to encourage its development on the urban scene. ◆◆◆

WOMEN AND AGRICULTURE--A TWO-YEAR COLLEGE STUDENT'S VIEW

Pat Gorman
Ag Business Student
Ag. and Tech. College
Cobleskill, New York

Pat Gorman

Agriculture has changed in a multitude of ways. If you pick up a 1957 textbook about ag occupations, you will soon realize it is mostly concerned with farm boys, interested in farming careers. Today's agriculture has come to mean more than farming to our society. This is not to say that farms (or boys!) are not important. It is a known fact that agricultural producers are the base upon which the rest of this country exists, making it possible for Americans to spend the majority of their incomes on items other than food. It is because one farm worker can provide enough food for fifty-one additional people, that other agriculturally related occupations are possible. Therefore, today's teaching programs are becoming involved with conservation, ornamental horticulture, forestry, and horse programs, to name a few. This has led to a greater demand for specialized teachers, who do not necessarily need a farm background.

In addition, farming itself has changed to meet demands of a growing population. There has been an increasing trend towards larger, more specialized farms, which require more machinery, better technology and different methods of marketing. Totally, this all adds up to more variety in the whole agricultural picture, both inside and outside the classroom. Hopefully, each teacher is relating his/her instruction so students are aware of the many opportunities available.

So, how is this involved with women as agriculture educators? First, women have been teaching from before the days of the one-room schoolhouse, so it is no surprise to find women teaching in all levels of school, able to handle discipline problems as effectively as a male teacher. But how about in the ag class, where you would quite likely have a higher proportion of boys to girls? Granted, this might bring about different discipline problems, but I can't think of any situation where a trained woman teacher couldn't handle the problem. A teacher who has the respect of her students would be fully in control of her class. Also, with the variety of ag subjects taught, the percentage of boys to girls might be the same as in academic classes.

Another argument I have heard concerns the ability of a woman to teach such subjects as small gas engines, welding, farm production and management and farm machinery. I see no reason in the world why a girl who is interested in teaching cannot learn the skills necessary to teach the course. I knew a girl in high school who took a course in welding. She had no idea what welding was, and went in eager to learn. Also in the class were some boys who had welded before, and of course knew everything about it. Her instructor told me that she was the best welder in the class.

Because you are a woman, you might have to prove to your students that you can handle a welding torch or tear down a small gas engine. If you have had the necessary training, this can be the first step in earning the respect of your students.

I have talked with a number of women who are presently teaching agriculture, in college as well as in high school. These discussions brought to light some problems of which I had not been aware. Depending on the area of agriculture you are most interested in teaching, you might be required to move to another locality. For instance, you might live in a farming area which does not need an ornamental horticulture teacher. Of course, this is also true for men. However, I think it is generally easier for a man to ask his wife to move (providing she doesn't have a job) than if you have to ask your husband to give up a job to come with you. In addition, a male teacher can have a family and career at the same time. A woman who wants to have children and raise them herself would have to leave her teaching position, possibly returning after her children have grown up.

Unfortunately, there are still instances of discrimination against women. However, I found that it can work in two directions. You can be turned down because you are a woman, or you can be employed by someone who specifically wants a woman to teach a particular course, such as floral design. Both ways, your future has been determined by your sex and not by your ability. Hopefully, with a more aware society, this attitude of sex-ascribed roles will decline.

I have tried to locate some statistics concerning women in agricultural education, and could not find any on a nationwide basis. I wrote to several northeastern universities in an attempt to get information indicating the number of women enrolled in their ag education departments.

Cornell University reports that in 1973 there were 16 males and 0 females enrolled, while in 1975 there are 35 males and 5 females. This is enrollment in a course for persons who will be student teaching the following fall. According to the *Agriculture Directory* for

(Concluded on page 282)

COURT IN SESSION

Louise Worm and Gail Sanders
Seniors in Agricultural Education
University of Minnesota, St. Paul

Case for the defense: Two women accused of entering the field of vocational agricultural education with the desire to work with young people, and a firm belief in the future of agriculture

Names: Louise Worm and Gail Sanders

Status: Seniors majoring in Agricultural Education at the University of Minnesota

Pleas: Guilty on all counts

WOULD YOU HANDLE THE CASE?

"I am a teacher of vocational agriculture by choice and not by chance," is a thought that echoes most clearly in our minds when explaining why we are in agricultural education. It is not a choice that was haphazard or quickly made. For both of us it took several years of careful consideration (including two years of college) before we entered the major. Our interests and past activities have had a dramatic influence on this decision and we hope it becomes obvious that these factors not only give a "track record" on how we got this far but also give a direct indication of the confidence we have for pursuing our *chosen* career.

Yes, today the pioneering of women into the occupation of agricultural education is very much like defending a case in court. As young women looking to the future as teachers in vo-ag., the prosecution is consistently asking such questions as: "What are you—a women's libber?", "You are a girl, how do you expect to discipline a group of senior high boys?", "What do you know about farming, anyway?", just to mention a few. Of course, these questions are valid when one considers that agricultural teachers have traditionally been male. Therefore, to answer our own question, "Would you handle the case?", yes, we certainly will, with the firm conviction that we, like many men, have similar goals and aspirations for our role in sustaining the future of agriculture.

DEFENDANT #1: GAIL

What career would combine animals, plants, outdoor activities and teaching? I asked myself this question many times while growing up in Cumberland, Rhode Island and considering my future plans. My high school did not have an agricultural program so I was not familiar with its offerings and versatility. While attending the University of Rhode Island I did my own career education exploration and all the reading I could about Agricultural Education. I decided it was what I had been searching for: the perfect career that would allow me to direct youth in the field of agriculture. It was not until transferring to the University of Minnesota that I realized the scope of Vocational Agriculture. I was just as stunned to find myself the only female in the program as my professors and fellow students were to find me there at all. When you believe in something—as I did in vocational agriculture at this point—it is not easy to back down and still live with yourself, especially when you know that you have a contribution to make to it. I took the chance, became involved and was accepted. I had extensive work experience with guiding and teaching youth in recreational programs. I felt that my experience in communicating with students was just as valuable as farm experience. I must concentrate on the agricultural or technical side of Ag. Ed. while the majority of my comrades must learn to develop the educational side more fully. From the U. of M. Meat Judging Team, to Ag. Ed. Club Sentinel, to being the first woman in the Alpha Alpha Chapter of Alpha Tau Alpha, I worked to be recognized on my own merit and had fun in the process. I became part of a close-knit group of Ag. Ed. students.

DEFENDANT #2: LOUISE

When FFA opened its door to women in 1969, no one could have been happier than I. It was like someone had handed me the key to my future in agriculture. I was a junior in high school at the time. However, the prospect of being a "late bloomer" did not inhibit my enthusiastic outlook for participating in FFA. This was the point at which I began the process of being accepted as a woman in agriculture. My first two years of college were spent as a major in Animal Science. However, that by itself was not the way to reach my personal goals. My future had to include agriculture *and* people. The best way I could do it was to major in Ag. Ed.—so I did! Ag. Ed. has continued to be a testing ground for proving "I can do it." I have found that it is necessary to get thoroughly involved in the scholastic and extracurricular activities of Ag. Ed. It was the surest way to convince my peers that I really mean this: I am going to be an Ag. teacher! So an Ag. teacher I will be, but before that can happen I look forward to completing my term as President of our Agricultural Education Club, in addition to being reporter of the Alpha Alpha Chapter of A.T.A. At this point, I face the future with warm courage and high hopes because I have only begun and hope I never stop.

CASE SUMMARY

What does it take to be a teacher of vocational agriculture? Lloyd J. Phipps feels that the first qualification to

(Concluded on next page)

(Worm—from previous page)

teach agriculture in a rural area is on-farm experience. Certainly without this experience the prospective Ag. teacher is at a major disadvantage. We are the pioneers in vocational agricultural education without many of the experiences afforded our male counterparts and are consequently at a disadvantage. We can not profit from the mistakes of those before us because there have been none. We can take pride, however, in the fact that others may learn from us and because of us. Many Ag. Ed. graduates have gone into rural communities without the necessary on-farm experience and have done exceptional jobs. Their inexperience was diminished by greater creativity, enthusiasm and dedication to their profession. This is true of women in agricultural education because we see the value of participation in professional organizations and our FFA chapter, all to gain recognition by our peers and students as sincere and dedicated to the future of vocational education.

The attitudes and behaviors of students toward the woman agriculture teacher differ from those toward the male, as may be expected. Through personal experience, we have found this difference to be both negative and positive. Students tend to be more polite, watch their language more closely and be more helpful in shop. Testing the student teacher to see how much a class can get away with is standard procedure with any group of students, whether the instructor is male or female. There is a difference in the students' readiness to accept technical knowledge from a woman, most notably in the shop and mechanics courses.

It is difficult to judge how farmers in adult classes would accept a female agriculture teacher. They look at the job being done. If an instructor is straight-forward and direct in the task, respect and acceptance will come with time, and like everything else, will have to be earned.

Louise Worm (left) and Gail Sanders, students in the Department of Agricultural Education at the University of Minnesota and the authors of this article, are reviewing FFA materials.

THE DEFENSE RESTS

"Will we be given a chance?" Would we be hired if there were a surplus of agriculture teachers? If judged frankly on our scholastic and extracurricular performances, we should be given the same chance. Women only have a developing record of performance in agricultural education so we have to continue this brief start. We hope superintendents will not be hesitant to speculate on a pioneer. Today there are 1600 young women enrolled in secondary vo-ag. programs in Minnesota alone—10% of the total vo-ag enrollment. The statistics indicate that the number of women in the field at the secondary level is increasing. As a result, it is not only our purpose to lay the foundations for women in agricultural education, but also to encourage instructors who have young women in vo-ag classes to promote continuation of their pursuits in agriculture. ◆◆◆

(Gorman—from page 280)

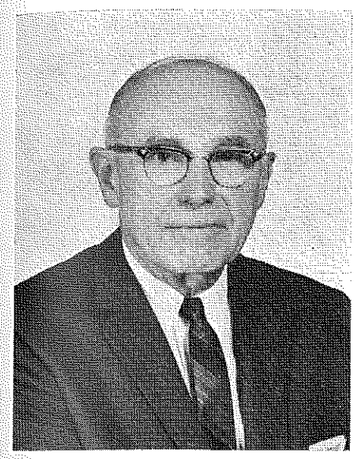
New York State, of 324 teachers, there are 19 women, primarily teaching Ornamental Horticulture. Women are employed mostly in BOCES centers, but several are in central schools.

The other colleges contacted also have a slight increase in the number of women enrolled in ag education. I think this increase will continue, especially as the number of girls in high school ag classes is also growing.

I definitely believe that women should be encouraged to train for a career in agricultural education, especially today when there is a very critical problem in our ag programs. What is this critical problem? A severe lack of ag teachers! As reported in a newsletter published by the FFA Alumni Association . . . "from 1970-73, the number of vo-ag teachers being trained actually declined by about one-hundred at a time when the number employed increased nearly 1,500." This severe shortage is occurring when students are told that there is an overabundance of teachers, and ironically, the vo-ag teachers' salary is at an all time high.

With these three factors in mind—an ever changing agriculture, more women involved in exciting jobs, and the shortage of ag teachers—I hope that any girls interested in agricultural education will be encouraged to explore this dynamic, rewarding career. ◆◆◆

Leader in Agricultural Education:



WARREN WEILER

by James Dougan

Warren G. Weiler has been recognized on a number of occasions for his outstanding leadership and contributions to the total Agricultural Education and FFA program in Ohio, as well as on the national level. From his boyhood days on the Weiler farm in the rich flatlands of Northcentral Ohio, through his 14 years as a teacher and 30 years on the State Agricultural Education Staff culminating in the position of Head State Supervisor of the Ohio Agricultural Education Service, to his present status of active retirement, Warren has always been a man with distinctive qualities. He possesses that unique quality not possessed by all, of blending an aggressive work pattern with a fine personality, and most of all, much humility.

Warren has had a most active and distinctive career. He got his start in education in a one-room country school, graduated from Fremont High School, and received a Bachelor of Science and Master's Degree from The Ohio State University. He started teaching Vocational Agriculture in his home town of Fremont, Ohio, where he organized the school's first FFA chapter and young farmer association. His fellow teachers soon recognized his good work and in 1934 elected him President of the Ohio Vocational Agriculture Teachers' Association, a position he held with great distinction. In 1937, he was appointed to the position of Assistant State Supervisor, and FFA Executive Secretary, and in 1950, he was made Head State Supervisor, a position he held until his retirement in February, 1967.

Warren has had an unusual number of honors bestowed upon him. Perhaps one he would cherish highly is the nameplate on the Founder's Memorial Plaque at Ohio FFA Camp Muskingum, Carrollton, Ohio, which indicates the great influence he had in the founding and development of the State FFA Camp. He has been honored by Alpha Zeta Fraternity with honorary membership, has received the Honorary American Farmer Degree, and the Outstanding Service Citation of the NVATA. He also has the great honor and distinction of having an FFA chapter named after him. He has served on the National Board of Directors and was quite active in National Agricultural Education and FFA programs. He has been honored by the College of Agriculture at The Ohio State University by being awarded the "Distinguished Service Award."

Retirement has not been a withdrawal from society for Warren Weiler. His ambition, personable nature, and his "knowledge and wisdom" made him a valuable person for such activities as Executive Director of the Ohio Council for Vocational Education, an active committee member of the Ohio Agricultural Council, and the Agricultural Education Alumni Organization at The Ohio State University. He has also continued his strong interest and support (both moral and financial) in the Ohio FFA Association, Ohio Young Farmers, the OVATA, and the Agricultural Education Service.

Throughout his busy professional life, Warren has always been close to his family. His lovely wife, Lila, and daughter, Jean and her husband, along with two grandsons (6′6″ and 6′8″ college basketball players) are, of course, vital to him.

If one were to select a person for a pattern of an ideal life, both professional and personal, Warren G. Weiler would receive an outstanding recommendation. ◆◆◆

James Dougan

James E. Dougan is Assistant Director of Vocational Education, State of Ohio, Department of Education, Columbus, Ohio.

Inspiration's the Solution

Debora Kren
College of Agriculture
Cornell University


Debora Kren

Reviewing the history of general education in the United States, it is brought to our attention that women educators have been the real force which influenced the child. A combination of their scholarship, social instincts, and qualities of motherhood have turned educational institutions into less rigid, more appealing centers of learning. In 1925, the United States boasted of an educational staff, the members of which were 63.8% women in high schools, and 83.1% women in public schools.[1] Teaching had become one of the accepted vocations of females at the turn of the century. Evidence of this attitude can still be seen by examining the large proportion of women teachers in the United States today. Also, a great deal of research literature is available to us concerning women's contributions to the general educational system. But women were not the guiding force in all areas of education, as we shall soon witness.

Looking back through the history of agricultural education, we see its beginnings deeply rooted in the late 1700's. The institutions of the time varied greatly in the quantity and character of instruction relating to agriculture. This instruction was later improved through the enactment of laws such as the Smith-Hughes Act of 1917. This act provided for the college training of teachers of agriculture for secondary schools. That year, 841 men and *18 women* enrolled in such courses in 40 agricultural colleges.[2]

The progress of those 18 women is today, buried in history. A review of the literature reveals very little on women's participation in the field of agricultural education. This aspect of rural, and today urban education, has been predominated by male instructors.

In this age of women's liberation, one may reach the obvious conclusion that males are discouraging females from entering the field of agriculture education. But we must look beyond the obvious to realize the true reason which underlies this finding. Traditionally, agriculture education majors have been trained to educate students in farm production management, a subject which requires a certain degree of physical strain and a great deal of mechanical skill. This may not have appealed to women as much as the more recent high school and area occupational center's programs in conservation and ornamental horticulture. The increasing number of these new programs may account for the rising percentage of females receiving certification in agricultural education in Cornell's College of Agriculture and Life Sciences.

Can we stimulate an interest among women to choose vocational agriculture instruction as a career? If so, how can we better train females, before the college level, to fulfill their expected career goal? These questions are answered if the following three points are taken into consideration:

1) Girls should be encouraged to enroll in agriculture courses at the secondary educational level. If girls are reassured that the vo-ag classes are as much an opportunity for them as they are for the fellows, progress is sure to ensue. (Even I managed to master the art of tractor driving, mixing chemical pesticides, and changing spark plugs!) Familiarity with the ag shop and its equipment, field trips, and a well planned curriculum are enough to rouse the female student's interest in agriculture.

2) Girls should join and take an active part in agriculturally related youth organizations and/or clubs. Many of the qualities a future agriculture teacher should possess can be readily obtained through leadership activities sponsored by the Future Farmers of America. Some of these qualities should include establishment of professional relationships, and abilities to plan practical work, promote activities through public relations, and keep accurate accounts and records.

3) The vo-ag instructor should stimulate a favorable attitude towards teaching agriculture. Thomas Morell (1708-1784) expressed this idea when he said, "The first gift we can bestow on others is a good example." The high school ag student often seeks guidance when choosing careers, and the satisfaction and rewards of an agriculture teacher's career should certainly be stressed.

Assuming we've greatly inspired the female ag student, what's in the future for a woman trained in agriculture education? It's the same satisfaction every past ag teacher has experienced when he trained self-reliant citizens to "continue to delight in earning their livelihood from the soil."[3]

LITERATURE CITED

1) United States Educational Bureau. Bulletins, Reports 1925.
2) True, Alfred Charles. *A History of Agricultural Education in the United States. 1785-1925.* U.S. Government Printing Office. 1929.
3) Stewart, R.M. & Getman, A.K. *Teaching Agricultural Vocations.* John Wiley & Sons, Inc. 1927.

WOMEN IN URBAN AGRIBUSINESS

Don C. Leibelt
Teacher of Agriculture
Green Bay, Wisconsin


Don Liebelt

The ever-increasing number of young women entering vocational agribusiness department courses has added an entire new dimension to teaching agribusiness. I believe that the major contributing factors to this increase of young women into agribusiness are: The admission of girls into the F.F.A.; the restructuring and addition of agribusiness courses, and the great variety of careers to choose from in the agribusiness field.

In my eleven years of teaching agribusiness, I have always had girls in my classes or within the department. Being a new instructor in 1964, I "inherited" one girl in the department where I began teaching. The first girl I had in class had a production agriculture background, and thus she had a production type occupational experience program.

In 1967, I began a new agribusiness department at Green Bay East High School. I taught several classes at Green Bay Preble High School and began the program for East High School, at Washington Junior High School. In that year the first girl enrolled in agribusiness at Preble High School.

Two girls intended to enroll in the first class ever at Washington Junior High School, but when one girl transferred to another school, the other girl evidently did not wish to be the only girl in class and she transferred to another course. Then in 1969, nine girls enrolled in the ninth grade class and several more entered the senior high class at East High School. Since that time, the number of girls enrolling has steadily increased to where we now have over fifty girls in class and close to sixty in our F.F.A. chapter, including graduates.

I have taken the basic philosophy that I treat the girls exactly like the boys in classes and the F.F.A. I am sure that the girls prefer this treatment and naturally it is the only realistic and fair method for both boys and girls.

One thing that must be pointed out is that we do not offer any mechanics courses in our agribusiness program. Our courses are in the area of animal science, soils, ornamental horticulture, conservation, and forestry. Offering mechanics courses does not alter my philosophy toward instruction of mixed classes. Mechanics courses are not offered due to a lack of facilities and to avoid duplication with industrial arts courses.

Our young women have, as a rule, been above average scholastically. They have provided excellent competition for the boys in the classroom and in the F.F.A. Generally the girls have been ahead of the boys in maturity and they have more than held their own in leadership capacities in the F.F.A. and achievement of degrees and awards. Presently three of our seven F.F.A. officers are girls. In the past three years, eight girls have held F.F.A. offices.

Out of the three areas involved in vocational agribusiness: classroom, F.F.A., and supervised occupational experience; the occupational experience area presents the greatest challenge for this instructor, with the young women. This is especially true since all of our students are urban dwellers and only a small number have an opportunity for a supervised production program. I am sure that most instructors have found that there is considerable difficulty in placing boys or girls under sixteen years of age in most job areas in agribusiness, due to O.S.H.A. regulations, labor laws, and insurance restrictions. This is even true in many areas if the students are between sixteen and eighteen years of age. Most of our students do have jobs, attend conservation camps, or have special projects and laboratory experiences. The scope of job areas for the girls is somewhat less than for boys. We have located jobs for most of our girls in veterinary clinics, lawn and garden centers, flower shops, pet centers, and retail supermarkets. This year, for the first time, the Wisconsin Department of Natural Resources is offering a special five-week Youth Conservation Camp for girls. This camp provides another opportunity for placement of young women in occupational experience programs. We also have a number of girls who own horses and/or work at boarding stables.

Many of our young women have gone on to college or technical school. At the present time one girl is enrolled in an agriculture education program and she hopes to teach in an agribusiness department. Several others have enrolled in animal science or resource programs. The demand for young women in some of these areas should be especially good due to the equal opportunity employment laws.

I sincerely enjoy working with the girls as well as the boys in our program. Young women are certainly finding new opportunities in agribusiness. Girls have become active participants in many F.F.A. chapters and they are providing leadership for others in their quest for achievement in an area relatively closed to them prior to 1963. Their addition can only serve to strengthen an already vital program in our public schools. ◆◆◆

EXTENDED SERVICE--FORGIVE US FOR WE KNOW NOT WHAT THEY DO

Gilbert S. Guiler
Teacher Education
The Ohio State University


Gilbert Guiler

During a recent school board meeting, a heated discussion centered around the extended service of three vocational agriculture teachers. The meeting was nearing adjournment and a decision appeared imminent which would eliminate all extended service to the teachers. The teachers of vocational agriculture present were asked to defend their need for extended contracts. They outlined in detail; the activities carried out, people of the community involved, professional events attended, and the agricultural advancements that took place. The board members had *not* been aware of such professional involvement, and one member responded with, "Forgive us, for we know not what they do."

How true this has been for many teachers in communities where it is *assumed* that everyone knows that a teacher of vocational agriculture is essential in the community during the summer months and other periods of extended service.

School board members are elected officials of the community, and should have all information about vocational agriculture activities and accomplishments in order to administer the expenditure of school funds for the job being done. Every school board member has the right to be informed of the needs for money and the end product purchased.

In the early years of vocational agriculture, the public was well informed of the teacher's activities in the small rural community. Since that time, school consolidation, increased population, area vocational schools and competition with other agricultural agencies have occurred. A new generation has emerged with less knowledge of the extended service needs.

In spite of all the past achievements in vocational agriculture, the public image *is not* what it should be. Those who have participated in the program and know its value are generous with their praise. A much larger percentage of the public knows little about the activities carried out or the recent advancement in vocational agriculture. They tend to formulate their opinions from what little they hear or see.

We, in agricultural education, do well in talking to our fellow teachers, but do not inform school administrators and the lay public as we should. As the present generation grows farther from the farm, it tends to lose sight of the importance in our nation's economy.

Extended service for vocational agriculture instructors has long been recognized by those in the profession as essential to the success of the program. However, the manner in which teachers use their professional time during the extended service period, whether it is the summer months or Christmas holidays, is of extreme importance. *Supervision of student occupational experience grams alone is justification for the extended service.* In addition, the summer months provide excellent opportunities for counseling with young and adult farmers, agricultural agencies, some well-planned field trips, field demonstrations, and further development of the community resources.

Vocational agriculture is a program designed to meet the occupational needs of students who have entered or are preparing to enter an agricultural occupation requiring competencies in *one* or *more* of the agricultural taxonomies. If we accept this definition, then we are answerable for providing the competencies required to enter in the chosen occupation. We must continue our dialogue with our school administrators and the local community in order to keep them informed of the ever changing need of competencies in the agricultural fields.

Classroom teaching without the occupational experience may be compared to a cocoon; vital to sustain and protect an organism in the earlier stages of its life, but may be too restricting, limiting the creature within, keeping it from breaking out. Unless a change in the measured competencies of our students emerges, we may be guilty of spinning our own cocoon in a good "general agriculture" program.

OCCUPATIONAL OBJECTIVES

It is paramount that during the extended service, a teacher of vocational agriculture establishes a set of measurable, occupational objectives in his educational program. Providing entry level job training competencies for his students may be his major objective. This cannot be accomplished adequately in the classroom alone. If placement of students is part of the objective, there must be a reasonable expectation of job opportunities available.

The skills and knowledge which the teaching should impart must become a responsibility of the agricultural community. Cooperation between the school and the agricultural agencies should partially eliminate some criticism of vocational agriculture and the unawareness of the skills required by the occupation for which the students are preparing.

To achieve total accountability, understanding, and appreciation of vocational agriculture, all school administrators, the agricultural community and students should be kept informed of accomplishments. This can only be done through participation of those concerned by way of an advisory committee, planning groups and the news media. Otherwise, we may see a continued decrease in the extended service time allowed. As the mountaineer once said, "You can't tell about a place you ain't never been to." The school administration and board members cannot be expected to endorse a program which they know so little about. Keep them informed of all educational objectives and accomplishments during the extended service period by utilizing their resources, and then they may not be inclined to say, "Forgive us, for we know not what they do." ◆◆◆


Samuel Allen

Horticulture for the Mentally Handicapped

Samuel D. Allen
Teacher of Vocational Agriculture
Manchester, N.H.

Five years ago, the New Hampshire Agriculture Consultant, Martin Mitchell, called me to see if I wanted a job teaching horticulture to handicapped students in Manchester. This was my first opportunity to teach in over a year of looking, and even though it was only a ten week special program, I decided to give it a try.

The program consisted of teaching horticulture to six classes of special students in a self-contained special education school. The facilities included a greenhouse at the city cemetery, a garden plot shared with the cemetery personnel, and anything else I could lay my hands on. The students were comprised of five classes of Educable Mentally Retarded (EMR's) and one class of Emotionally Disturbed (ED's), all aged 12-16. Later we also added a class of Trainable Mentally Retarded (TRM's).

The first problem I encountered was that there was no equipment or supplies, but students were ready to work. Fortunately, the cemetery workers came to my rescue and provided spades and rakes and an activity preparing a garden. Finally, we got seeds and plants to work with and we "were off." I soon learned that teaching these students was different than anything I had ever experienced. Planning was nearly impossible. On some days a class of 12 EMR's can do more work in two hours than anyone would expect, but on other days very little could be accomplished. With the ED's, much of the time was spent breaking up fights and finding the ones who had just sneaked off to enjoy a butt. These students quickly responded, either positively or negatively, to any attention. The experiences I had that first ten weeks were enough to convince me that this was my field, and the State Department of Education, Vocational Technical Division decided to fund the program for the next complete year.

I find that community cooperation and involvement is a necessity. For three years, the Cemetery Commission provided support by providing the greenhouse, a garden, left over plants, and a woodlot. In return, we bought trees and shrubs which the students planted in the cemetery.

The Parks and Recreation Department let me use a walk-in van to transport students from the school to the greenhouse. In return, the students grew geraniums and petunias for the park's gardens, which they also planted under close supervision of the park's gardener.

The Downtown Manchester Association provided our biggest public exposure project. They hired the students to fill seventy-five, 3-foot planters in the downtown shopping area. The students planned the project by picking varieties of petunias and ordering the seeds, and getting cuttings of German Ivy for propagation. The students grew 500 pots of ivy and 1800 petunia plants to fill the planters.

It has been the students' responsibility to make sure that we have enough plants to take care of the planters and the parks; extras are sold or taken home by the students. Their pay for this job is a luncheon given by the merchants. The students are thanked publicly by the mayor, superintendent of schools, superintendent of Parks and Recreation, and the president of the Downtown Manchester Association.

I found that the work ethic was nonexistent, and that it had to be instilled. My prime objective is to train employable students by age 16. This includes filling out Social Security applications, job applications, withholding statements, and income tax returns. Behavior modification programs are used to encourage better work habits; a good day can mean a plant to take home. A student may be allowed to do some jobs without supervision such as watering or feeding the plants. Other times a student is assigned a "crew" of two or three to supervise on a job such as taking cuttings or transplanting. Extremely bad behavior may lead to a loss of going to the greenhouse for a week — an extreme penalty, but one which is occasionally carried out.

One major problem is the short attention span most students have, sometimes as short as five minutes. I have tried to keep classroom work to a minimum, but how can I make enough work to fill some 30 to 35 student hours, five days a week in a small 18x 50′) greenhouse? Oftentimes the morning group would count and move plants from one location to another, and the afternoon group move them again. When spring comes around another problem exists, not enough time to prepare the garden, and keep the greenhouse going. The first of May, we need to plant some 5000 petunias, 750 pots of German Ivy, 200 potted geraniums, 2000 tomatoes, 500 peppers, and another 1000 bedding plants, trees and shrubs. A soccer field needs to be regraded and repaired. This is when it is necessary to have the students able to work on their own.

Last year (1973-74), we expanded to a high school program and have some 75 freshmen and sophomores. A new, larger greenhouse has been built and a classroom and shop building are being added by the building trades class. A second teacher was added this year.

Developing an Agriculture program for the mentally handicapped depends on the same things that makes a regular program go — community support, recognition of student needs and interests, and school department support, both academic teachers and administration. In addition, there must be a large amount of hands on experiences for the students. ◆◆◆

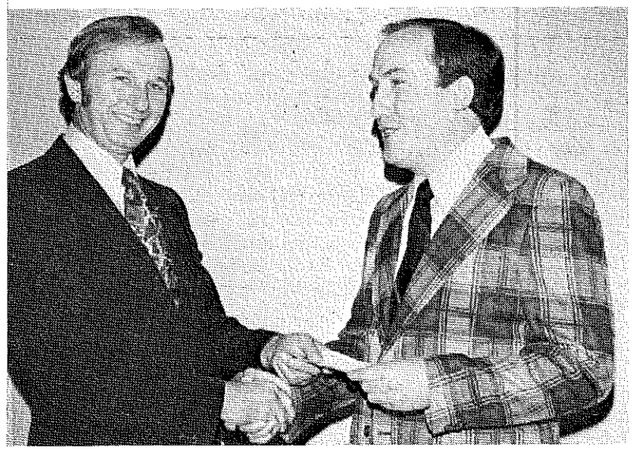
GROUP PROJECTS—Dale Larkin, horticulture teacher at North Arundel (Maryland) Vo-Tech School, supervises a group of students in constructing a terrarium. (Photo from Clifford Nelson, University of Maryland)

LABORATORY ACTIVITIES—Hope Witt, teacher at Yuba City (California) High School, supervises students who are vaccinating a lamb for enterotoxemia. (Photo from Ken Baker, University of California, Davis)

Stories in Pictures

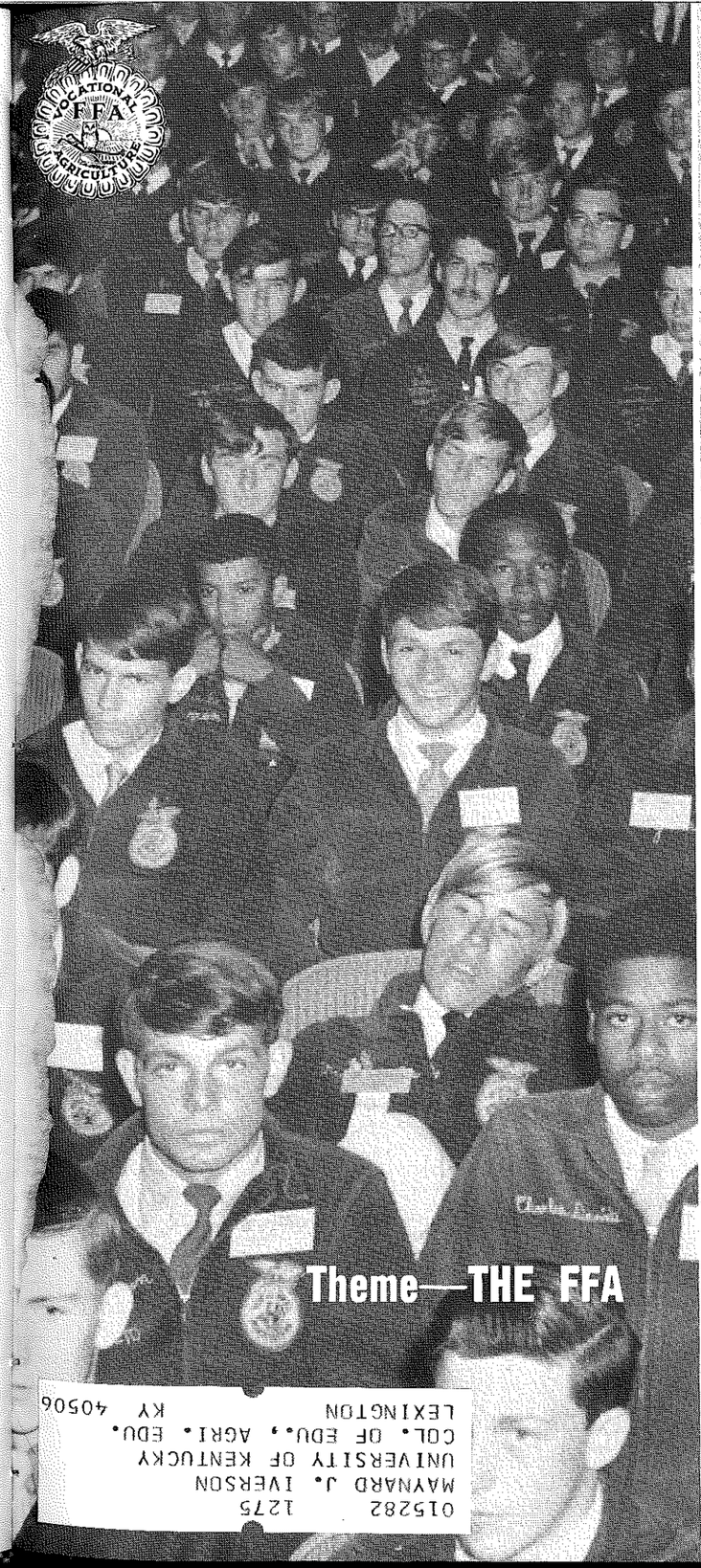
by Jasper S. Lee

PRESIDENTS INTERVIEWED—Tom Ellis, left, Mississippi State Supervisor and John Crunkilton, professor at Virginia Tech, are being interviewed at the Southern Agricultural Education Conference held in Williamsburg, Virginia, by Jim Jenkins of the Virginia Tech News Services. Ellis is the new President of the Conference and Crunkilton is the retiring President. (Photo from Virginia Tech News Services)



RECIPIENT OF AWARD—Charles Byers, right, University of Kentucky, is shown receiving the "Master Teacher Award" from Ward Crowe, President of Gamma Sigma Delta, at the University of Kentucky. (Photo from Rodney Tulloch, University of Kentucky)

TREE IMPROVEMENT PROGRAM—Shirley Himes, teacher at El Dorado County (California) Regional Occupational Program, is showing Elwood Juergenson, retired teacher educator, University of California, the trees being established in an improvement program at Camino, California. (Photo from Ken Baker, University of California, Davis)



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