Abstracts of Extension Programs presented at Annual Professional Improvement Meetings of the

Florida Association of Extension Professionals

Larry Halsey (Jefferson County), Editor

EPSILON SIGMA PHI
FLORIDA ASSOCIATION OF EXTENSION 4-H AGENTS - FAE4-HA
FLORIDA ASSOCIATION OF COUNTY AGRICULTURAL AGENTS - FACAA
FLORIDA EXTENSION ASSOCIATION OF FAMILY AND CONSUMER SCIENCES - FEAFCs

Ten Years of Professional Development Presentations of Extension Program Abstracts

1987-1996
Florida Associations of Extension Professionals - FAEP - (including ESP, FEA4HA, FACAA, FAEFCS and Sea Grant agents) in 1987, initiated peer-reviewed presentation of extension programs at their annual meetings, with a published series of abstracts of those programs. This re-publication of the first ten years of Abstracted Program presentations is published in digital form. Digital re-publishing of the annual abstract collection has many advantages over the traditional ink-on-paper method. A wide range of peer-reviewed program ideas, methods results and analyses spanning a decade can be quickly accessed and used by new-hire professionals in Florida as well as professionals in other states. Additionally, the collection provides a concise and accountable documentation of the Florida Extension programs that could assist UF/IFAS and FCES. Contributions of editors and association chairs over the ten years is indicated in Table 1.

Printed copies of abstracts were scanned into word processor form, consolidated by author, by year, by association. The resulting collection was formatted and reproduced as a word processor file (WordPerfect 6.0 and ASCII). The file was reproduced on disk for distribution to each county. The file is being tagged in HTML for mounting on the FAEP world wide web internet site as it is developed. During the decade, 431 abstracts were published, representing 669 contributors, with 317 individuals, omitting duplication. Participation peaked in the second year, with 61 abstracts. FAEFCS sponsored 144 presentations, the largest among the four associations, but has experienced a marked decline in the past five years. 30-40 programs are presented annually. Data of presentations is presented in Table 2.
### Presentation and Abstract Chairs for FAEP and Associations, 1987-97

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<tr>
<th>Year</th>
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<td>1994</td>
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* Sea Grant abstracts combined with ESP  ** Alice Kersey, publisher in 1994

### Participation in Abstract Presentations, 1987-97

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* ESP count includes Sea Grant abstracts in 1989 and 1990
Florida 4-H Marine Ecology Program  (89)
S. ANDREE, Leon County
The primary goal of the Florida 4-H Marine Ecology Program is to create, or enhance, in youth a knowledge of coastal animals and plants, an understanding of the ecological roles of those organisms, and an appreciation of coastal environments. Objectives: 1) Provide educational instruction for 4-H youth and leaders; 2) Provide a forum for 4-H youth to demonstrate their knowledge and 3) Increase participation in county, district and state 4-H programs. Methods: 1) Organized leader and agent training, 2) Developed an instructional resource notebook and 3) Developed county, regional and statewide Marine 4-H judging events. Results: In the Big Bend region of Florida, enrollment directly related to this program rose from 85 (FY 83) to a peak of 529 (FY 87). The number of leaders also increased from 7 (FY 83) to 52 (FY 88). Conclusion: More 4-H participation in the marine science area has lead to more marine clubs, demonstrations and project books. These participants have become more aware and knowledgeable of their coastal and marine resources, which will benefit Florida in the future.

Finding Uses for a Smelly Problem  (90)
S. ANDREE, Leon County, D. BENNETT, Wakulla County, C. OLSON, Taylor County and B. MAHAN, Brevard County
The objective of this project was to evaluate available methods of seafood processing waste utilization and demonstrate feasible alternatives. Meetings were organized to collectively examine the potential uses of seafood wastes, primarily blue crab and calico scallop by-products. Secondly, funds were obtained via the 1988 Solid Waste Management Act to conduct demonstrations of potential alternatives. Proposals were requested and demonstrations conducted on several methods, e.g. composting, land application, compacting, extruding and methanation. Solutions to the problem are becoming clear. Composting leads the way, generating high quality soil amendment material in 2-4 months and has a good potential market. Positive results are expected in land application as both a plant nutrient and nematicide. In conclusion, this type of problem couldn't have been tackle successfully, without a cooperative effort coordinated by county extension support.

Stress Management Strategies Workshop for Putnam County Employees  (92)
S. ARNOLD, Putnam County
Objectives: 1) Develop county employees knowledge of the stress process, including what stress is, how to recognize it, what causes stress and the resources that enable a person to prevent or cope with stress. 2) Increase visibility of the Cooperative Extension Service. Methodology: Working with the county personnel office, a proposal was presented to the County Administrator and commissioners on teaching a five week stress management workshop to all interested county employees. Once approved, employees were given one hour of work time each week to attend the classes. Four sessions were taught each of the five weeks in order to meet scheduling needs of departments. Materials used were "Stress Management Strategies" developed by Suzanna Smith. Pre and post tests were given. Results: 84 people (25% of county employees) completed this program. The county contribution of this program was $2,533 in employee work time. Ninety-eight percent (98%) of participants increased their knowledge in stress prevention and coping skills. Participants indicated they will practice on a regular basis: listening skills (95%); communication and conflict resolution skills (94%); health practice (90%); and relaxation exercises (87%). Eighty percent (80%) of participants increased their knowledge on services offered through the Putnam County Extension Service. Plans are being made to offer additional educational programs.

Securing Grants and Aids From the Legislature  (92)
D. BENNETT, Wakulla County
The objective of this project was to secure funds from the legislature to renovate and expand the Wakulla County Agriculture Multi-Purpose Center. In 1989 and 1990, the Wakulla County Overall Extension Advisory Committee used the following steps to secure monies from the legislature: 1.) Gained support of grass-roots citizens; 2.) Obtained resolutions of support from local governmental bodies, organizations, etc.; 3.) Obtained architect; 4.) Develop position paper; 5.) Had State Dept. of Ag. include project in their budget; 6.) Gained support of local legislative delegation; 7.) Met with the Governor's Office; 8.) Had citizens write letters and make phone calls; 9.) Had citizens visit legislature in session and lobby legislators; and 10.) Follow-up, follow-up..... In 1990 the legislature appropriated $165,000 for phase one of the project. The citizens are presently seeking an additional $350,000 to complete the project. In conclusion, this type of project could not of been tackled successfully without the grass-root support of the citizens.

Orange County Extension Homemaker (E.H.) International Outreach: Results and Program Implications  (88)
E. B. BOLTON, Home Economics and D. H. WILKINS, Orange County
E.H. members participated in a three-year international outreach program that resulted in benefits to individuals and to the local E.H. organization. Objective: to increase E.H. members' awareness of and appreciation for the educational benefits of the E.H. organization. Methodology: From 1985-1988, Orange County E.H. members demonstrated that the educational model could be successfully applied to women's organizations in a developing country and that this could produce benefits to local participants. Result: In a focus group interview, participants noted outcomes which included greater appreciation of the of E.H. organization as a means of acquiring new knowledge and information and providing educational opportunities through group projects. Implications for County Programs: (a) Adult learners in local associations sustained a long-term involvement in programs that involved issues that impacted their lives and communities. (b) Issue oriented programs that offer a diversity of learning experiences can be a means of public policy education.
Hillsborough County 4-H Ag in the Classroom  (88)
S. R. BOND, Hillsborough County
Youth are unaware of the whole agricultural arena. As leaders of tomorrow, youth need knowledge about agriculture to make decisions and to understand their world. **Objective:** Third grade youth to become aware of the source of our food and fiber and learn of the importance of agriculture. **Methodology:** A committee made up of representatives from the school systems, fairs, commodity groups, and County Extension Agriculture and 4-H Agents was organized to plan the pilot program. Almost 700 third grade youth from 3 schools participated in programs held at the State and County Fairs. A variety of teaching techniques were used. Program topics: Dairy, Poultry, Strawberry Production, Florida Vegetables, Beef, Swine, and Ag in Space. Follow-up discussion guides were provided for teachers to use with their students. **Result:** Teacher evaluations indicated that the program was effective in providing learn-by-doing experiences for youth. They all indicated that they would like to do the program next year. Student evaluations showed that the students learned the basic concepts presented. **Conclusion:** Youth can learn the importance of agriculture to society by participating in awareness programs.

Use of Editorial Department Desktop Computer Graphics Support by IFAS Faculty and Staff  (89)
M. H. BREEZE, Editorial
Desktop computer graphics technology is potentially a powerful tool for Extension information delivery. **Objective:** To create a desktop graphics support capability for Extension and other IFAS programs. **Methodology:** A high-resolution "film recorder" for making slides from computer graphics files was installed. Service availability was announced IFAS-wide in April 1989. Seminars were conducted on use of Harvard Graphics, a widely-used desktop graphics program. **Results:** About 200 staff and faculty members have attended seminars as of 6-30-89. More than 1,000 files created by 36 individuals have been rendered as 35 mm slides. Average volume is now just over 300 slides per month. An early user survey indicates high satisfaction with the software, the support service and the quality of the resulting slides. **Conclusion:** Extension and other IFAS faculty and staff are adopting desktop computer graphics. Training and support should be continued and enhanced.

Extension Video Series: "For Sale" Distribution Improves Information Delivery  (88)
M. H. BREEZE and C. BREEDEN, Editorial
As of July 1, 1988, selected instructional videos produced by IFAS Editorial will be available for sale through the Extension incidental account. **Objective:** To make better use of video technology by enabling information users to have their own personal copies of video tapes I produced in cooperation with Extension subject-matter specialists. **Methodology:** Commercial quality copies will be available through the IFAS publications distribution office. Distribution approval is the same as for -publications. A nominal charge of $10 per tape will cover costs. Availability will be promoted through newsletters and other appropriate media. **Result:** Six video tapes have been selected for the initial offering. In cases where productions were planned to meet expressed industry needs, there is significant early demand for copies. **Conclusion:** "For Sale" distribution of video tapes will make timely Extension information more accessible to the audiences we serve through our programs.

Comparison of Audience Response to Different Media Formats  (87)
M. H. BREEZE, C. W. BREEDEN and R. J. BLACK, Editorial
There is increased interest in the use of video in Extension on the basis of its presumed superiority to other media for information delivery. **Objective:** Identify differences in audience response to video. **Methodology:** Home horticulture presentation with identical content were produced in each media format. Participants at the 1987 Garden Club Short Course were randomly assigned to three treatment groups. Each group saw one of the three presentations. Subjects completed a questionnaire on presentation quality, information value and level of interest. **Results:** Few statistically significant differences were observed. Subjects judged all three presentations as very effective. Slide-tape on video was rated below the other two media overall, but the differences were too small to be of practical importance. **Conclusion:** Video was not shown to have inherent superiority in communication effectiveness over the other audio-visual media formats compared.

Office Record Keeping System Eases Pain of Reports Polk  (90)
J.S. BRENNEMAN, J.S. HOLMAN, J.A. STRICKER, S.L. SUMNER and S. CROWL, Polk County
The multitude of reports required for various levels of government and clientele groups make accumulation and reporting of extension program efforts and contacts a truly rigorous and time consuming task. **Objective:** To find a way to simplify record keeping and make program and clientele contact data available in a variety of reports to different groups and improve faculty outlook on the task. **Methodology:** dBase was used to create a data base file for agents' program efforts with fields for data, activity type, program title, program area, media type, county major program code, state major program code and contacts by race and sex. **Results:** Using the data base various reports can be produced based on need. Agents spend a few minutes each week filling out one input sheet. Attitude has improved because agents no longer have to deal with such a myriad of reports. **Conclusion:** Agents realize that the data is available for uses such as reports of accomplishments and promotion/permanent status reports. Finally, accountability has been enhanced by the ready availability of the data being reported.

Private Pesticide Applicators’ Update - An Example of Multi-County Cooperation Through Programming  (94)
J. W. BREMAN, Union County, M. SWEAT, Baker County, S. EUBANKS, Columbia County and B. TAYLOR, Bradford County
When agricultural producers farm in several contiguous small counties, agents need to provide the same information and recommendations to Extension customers efficiently. **Objective:** 1) Baker, Bradford, Columbia (fringe areas) and
Union counties to coordinate a single yearly Private Pesticide Applicators’ Update. **Methods:** 1) Develop multi-county working nucleus. 2) Develop agreement. 3) Define potential Extension customers. 4) Request Advisory Committee and industry support. 5) Develop agenda. 6) Customer evaluations. **Results:** 1) Attendance increased from initial 25 to 90 actual producers. 2) Customers, industry and regulatory agencies now request date so they can attend, sponsor or be on Update agenda. 3) Program evaluations.

**Soil Survey and the Extension Service**  (88)  
R. B. BROWN, Soil Science  
As a cooperating agency in the National Cooperative Soil Survey, and as educational arm of both USDA and the land grant universities, Extension has major responsibility for educational programming in soil survey. Because we tend to lack expertise in the resource inventory known as soil survey, we need to rely on our colleagues in the Soil Conservation Service and other organizations to provide technical input to programs and activities in this area. **Objective:** Two successful educational packages that are ramrodded by Extension, but supported technically by others are (1) soils training for septic system practitioners, and (2) the 4-H/FFA land judging program for youth and their leaders. The former training occurs ad hoc or as part of a state sanctioning program for septic system installers and health officials. **Methodology:** Teaching techniques include pre- and post tests and outdoor, hands-on experiences guided by soil scientists. The latter involves local and state contests in land judging and homesite evaluation. **Conclusion:** County faculty have been involved in both types of programs, but as an agency we need to do more to carry our part of the load in soil survey education.

**4-H Spring Chautauqua**  (87)  
L. CHRISTENBERRY, E. ROBERTSON, M. GRIGGS, M. MOORE, P. ALLEN, S. DOBBS, K. BROWN and B. JONES, Escambia County  
With 2227 enrolled 4-H’ers and 153 volunteers, support funds and financial needs of 4-H were limiting the growth of the total youth program. The Extension staff and 4-H Advisory Committee developed a 4-H Chautauqua program to generate funds and promote continued growth of the local 4-H programs. **Objectives:** To plan a program to increase awareness and knowledge of 4-H in Escambia County. To use the County’s 4-H facility to present educational programs and recreational activities to raise money to support the 4-H program. **Methodology:** A steering committee was established consisting of community leaders, Advisory Council members and agents. From this group, an information packet explaining concept, goals and 4-H programs was developed. 4-H’ers, leaders, agriculture associations and civic clubs were presented opportunities to participate to help meet established goals. **Conclusion:** Between 2500 and 3000 people attended the 4-H Chautauqua. Eighty-five hundred dollars was raised to support the coming year’s 4-H program.

**Recycling and Landscaping for Energy Savings**  (90)  
E. COURTNEY and G. EDMONDSON, Okaloosa County  
The opening of the Okaloosa Science Center created an opportunity for Extension Service to reach a new audience. The Science Center is one of approximately 240 “hands on” museums in the U.S. which features intergenerational exhibits designed to make science and technology more accessible to the public. **Objective:** 1) To create an awareness of recycling and landscaping to conserve energy. 2) For Extension Service to be involved in the community in a positive and unique way. **Methodology:** Grants were prepared and received (Energy Extension Office and Board of County Commissioners) to design and build an educational exhibit. Working with other agencies, information and resources were compiled by the home economist and agricultural agent. The exhibit developed by the agents includes a bicycle with generator to demonstrate the production of energy; a photovoltaic cell display to demonstrate Solar Energy; informational panels; computer and programs to present information on recycling and landscaping to conserve energy. **Results:** $12,200 were obtained by the agents for the project. More people are aware of the Extension Service and its resources. Approximately 25,000 persons annually tour the museum. A written evaluation of knowledge by participants will be conducted during the next year. **Benefits:** The positive image of Extension Service, plus practical information people will receive will benefit all who visit the museum.

**Community Organizations Targeted to Extend Solid Waste Recycling Education Program**  (90)  
J. FREEMAN, J. HOLMAN, A. KERSEY and A. RYE, Polk County  
**Objective:** Train and encourage community organization leaders to deliver an educational program on solid waste management. **Methodology:** A 3-hour workshop on the solid waste problem, Florida statute reduction mandates and how to recycle was designed and provided. The workshop ended with how to teach this lesson. A recruitment brochure was mailed to organized groups in addition to media publicity. **Results:** 239 individuals attended. 79% of participants represented organizations (businesses, civic groups, churches, city/county/state governments, community/neighborhood groups, educational groups and service groups). They reported a “membership” totaling 107,282. Twenty-seven percent of the participants stated they would plan and coordinate an educational program on solid waste and recycling in the next 6 months. **Significance:** Many of these “teachers” will be good role models, for they are already recycling (newspapers 67%, aluminum 57%, glass 44% and office paper 17%). Fifty-one percent recycle for environmental concerns, 23% recycle for environmental concerns and profit. Many indicated recycling profits would benefit local charities.

**CHOICES ... Charting a Positive Future for Teen Parents**  (93)  
R. N. HACKLER, L. COOK, L. BOBOFF, N. TORRES, M. HARRISON, G.WARREN, Home Economics, and J. CANTRELL, 4-H and Other Youth
**Objectives** are for teen parents to have access to adequate prenatal care; reduce the number of low birth weight babies; improve parenting skills; have adequate nutrition/food for mother, fetus and baby; improve management of resources and to gain skills in entering the workplace. The first year of this three year curriculum is inter-disciplinary and focuses on a broad range of teen parent needs. The curriculum has been designed to be experiential with multiple learning activities for each concept. It is a flexible curriculum and the teacher/leader can pick and choose the activities to be used based on needs, interests, and resources. This year's curriculum included sections on Focus On Teens: Self-Esteem, Coping Skills, Charting Your Future; Nutrition: Prenatal, Young Infant, Infants and Toddlers, Feeding Young Children; Resource Management: Managing Resources, Clothing for Mom and Baby, Consumer Choices/Safety; and Parenting: Child Development, Child Care, Parenting. The audience focus is on young pregnant teens, ages 13-16. Training was held May 1993 on the first year's curriculum. The overall evaluations indicated a 4.07 rating on a 5 point scale in relation to the usefulness and quality of materials and presentations. The experiential model of Do-Reflect-Apply was very positively received.

**Communicating Technical Knowledge Through The Arts**  
J. G. HALUSKY, St. Johns County

Often, technical information is presented to the public in a form difficult to understand. The rigid writing style required by scientific writers does not encourage "entertaining" reading, or conveying insights through humor, cartoons or song. **Objective:** Show how the Arts can be used to convey technical knowledge to the public. **Methodology:** N.E. Florida Sea Grant Extension Program has involved "volunteer artists;" and the public in artistic programs about coastal ecology, issues and marine science. These include poetry and song concerts and workshops, "Marine Gang" skits and a workshop in Coastal Topics for Creative Writers. **Conclusion:** Audience reaction to artistically based program, examples of spontaneous creative expression by participants and increasing involvement from the artistic community, in coastal topics indicate the success of this educational delivery system. This is especially true for "awareness" programs and education projects requiring understanding of complex issues.

**Scuba: A Useful Tool for Extension Programs**  
J. G. HALUSKY, St. Johns County

The use of self-contained underwater breathing apparatus (SCuba) diving is a powerful tool for extension agents & specialists who work in and around water environments. **Objectives:** To demonstrate how Sea Grant Agents can increase their ability to assist clientele with problems and educational activities through the use of SCUBA Diving. **Methodology:** Since 1980, the north east Florida Sea Grant Extension Program has employed SCUBA Diving as a tool for training adult volunteers and 4-H youth. Extension programs were designed to train volunteers to document offshore artificial reefs, and 4-H teens to practice leadership in situations having real risk. In other parts of the state, marine agents used SCUBA Diving to study sponge harvesting methods, and the use of artificial habitats for improving the Stone Crab fishery. IFAS Editorial's Florida File Program and the commercial TV media have made use of underwater video photography by Sea Grant agents and their clientele for increasing public awareness about Florida's ocean environments. **Conclusion:** Effective extension education requires that the agent be able to observe, first hand, the resources, the environments and the clientele. Since Florida is a state so totally dominated by marine resources, some effective "Sea Grant" extension work requires that the field agent or specialist use the capabilities offered by SCUBA diving to experience and even accompany his clientele into this marine world.

**Environmental Ethics - an Underlying Subject for Extension Programs**  
J. G. HALUSKY, St. Johns County

**Objective:** To explore environmental ethics (E-Ethics) as an underlying subject in programs. **Methods:** Ethics concepts are discussed, then related to Extension's role as change agent. Examples of E-Ethics programs with new audiences, are presented, with sample subject matter and reference lists. **Results:** Evaluation of E-Ethics programs clarifies Extension's role in helping clientele form a personal E-Ethic, by connecting research findings with the client's personal experience in their own social and theological contexts. **Conclusion:** Programs which deal with water, energy, agriculture, fisheries & wildlife habitat, horticulture, the home, waste management and youth can provide information needed to help a community define an appropriate E-Ethic. Including E-Ethics concepts fulfills the Worldwatch Institutes conclusion that "The fundamental changes (needed) in energy, forestry, agriculture, and other physical systems cannot occur without corresponding shifts in the social, economic and moral character of human societies."

**Managing Household Waste**  
M. S. HAMMER, Home Economics

Approximately 45% of all household hazardous waste in the state of Florida is generated by households and small business. Much of the 120,000 tons of household hazardous waste (HHW) generated every year in Florida is mismanaged. Typically HHW waste is thrown in the garbage, poured down the drain, stored out in the yard or on the shelf. Use of these chemicals can pose a threat to your health. Long term problems include contamination of drain fields/septic systems/surface and groundwater. **Objective:** To help Florida residents to become aware of the magnitude of the problem/ways to manage HHW. **Methodology:** To reach households with a variety of methods that increase awareness of the problem and present strategies for managing waste. Consumers can make informed decisions about the selection, use, storage and disposal of products to decrease health hazards/pollution from household hazardous materials. **Result:** Contingent on people becoming aware and concerned about the household hazardous waste being generated in Florida and the threat to people/environment. **Conclusion:** Through Extension's programming network, media, and campaigns such as
the Alachua County Extension Homemakers recycling program called "Cash for Trash", can help to promote alternatives to using hazardous products, and ways to manage HHW.

**Dumpster Overload** (89)
M. S. HAMMER, Home Economics

Twelve million Floridians each produce 2000 lbs. of solid waste a year. Add to this staggering amount of waste generated by part-time residents and 35 million tourists/visitors a year. The volume of solid/hazardous waste continues to increase with more over-packaged and disposable products. Alas, in 1988 Senate Bill 1192 was passed and provides incentives/punitive measures for counties to devise ways to decrease the waste stream by 30% by 1994. **Objective:** For Extension Home Economics Programs to be a viable educational force in helping people to decrease the solid/hazardous waste generated in their homes. **Methodology:** Extension to be a catalyst in an educations thrust utilizing a multi-disciplinary programming approach to focus on the issue of waste management. **Conclusion:** Educational programs directed to waste management will help to minimize the generation of waste, highlight Home Economics programming strengths and energize the Cooperative Extension Service.

**Waste Management - A New National Extension Initiative** (90)
M. S. HAMMER, Home Economics

To provide and update on the expanding scope of waste management programming as the National Initiative and Florida Major Program continue to develop. **Methodology:** A solid waste major program is being developed to provide assistance to the public and private sectors throughout Florida to assist in complying with Solid Waste Management Act by reducing, reusing and recycling. **Significant Results:** Counties are providing expertise in the development of county comprehensive solid waste management plans, fifteen counties have received grants to plan/implement education programs in tandem with county waste management plans and fifty-five counties are planning to incorporate reduce, reuse and recycle in ongoing Extension education programs. **Conclusion:** The Solid Waste issue effects every citizen in the state of Florida. Education is a vital and necessary component of the issue. Extension has a network in place and is providing an interdisciplinary approach to programming in this area.

**Source Reduction and Waste Management** (91)
M. S. HAMMER, Home Economics

The first level of the EPA hierarchy of waste management options for municipalities is source reduction; reduction in the amount and/or toxicity of waste. Everyone can participate in source reduction; manufacturers can reduce toxicity by eliminating or finding benign substitutes for substances that pose risks when they are used or discarded. They can reduce quantity by changing to less packaging, reducing product size and designing reusable or recyclable packages. Consumers can reduce both toxicity and quantity by buying products with these qualities, buying less and/or reusing an item. Extension household hazardous waste, enviroshopping and composting programs help consumers to prevent the generation of waste. Extension can target waste reduction/prevention programs through public awareness and long term education programs. Consumer motivation programs are strengths of Extension in dealing with the solid waste management issue and within the scope of our programming. Local CES faculty can also draw on research and technical assistance from the land grant system to provide aid to local governments in waste management operations.

**Florida Cattlemen's Institute: An Effective Program to Reach Florida Cattlemen** (90)
J. HEBERT, Orange County

**Situation:** During the Institutes first six years, participation was discouraging. Charlie Williams, it's founder, felt it should equal or surpass other well known Institutes (i.e. Citrus, Poultry, etc.). **Objective:** Increase attendance by involving the Florida Cattlemen's Association (F.C.A.), the Allied Trade Committee of F.C.A., and Extension Agents throughout the state. **Methodology:** Develop a program with input from the leadership of F.C.A., Extension and the Allied Trade Industry. Develop a "P.R." program to reach the target audiences. **Results:** A major concern to cattlemen (The Florida Heifer) was the program focus. F.C.A. agreed to co-sponsor the Institute. Individual letters were mailed to 4,200 members of F.C.A. County Extension Agents sent the same letter with their signatures. F.C.A.'s Cattlemen's Magazine publicized the Institute for 3 months. **Conclusion:** Over 450 cattlemen (more than 10% of F.C.A.'s membership) attended and participated in the 7th Annual Institute. The President of F.C.A. said it was the most successful, to his knowledge, of any program for cattlemen. Extension Agents involved felt a sense of accomplishment.

**Partners in Progress: Extension Becomes a Critical Member of the County Government Team** (88)
S. L. HEDGE, Lee County

The knowledge base of Cooperative Extension can meet many needs of urban county government. **Objective:** Lee County Extension Service would serve as a resource to county government as it attempts to solve problems in a rapidly urbanizing county. **Methodology:** Agents identified areas of concern for county government which fell within their specific field of expertise. Comprehensive and regional plans were reviewed. Agents began working with other county departments and on special "teams" to bring about changes and solutions to problems critical to county government. **Result:** Extension agents have had input into the Comprehensive Plan, provided employee assistance programs, become active in disaster preparedness activities, and the Extension Service is identified in major plan documents as the agency to carry out certain goals. **Conclusion:** Working with county government is an effective way to carry out Extension programs as well as increasing its visibility.

**Strategy and Mission Development for the County Extension Office** (94)
S. HEDGE, Lee County
In the winter of 1993 the Lee County Extension Advisory Committee and staff began a long range planning effort. **Objective** of this project was to determine the direction of this organization utilizing a “business plan model”. **Methods** included: a. Developing a historical and current profile of Lee County Extension Service including products and services. b. Describing the scope and common characteristics of those products. c. Developing a profile of current users and their common characteristics. d. Describing the nature of the organization's successes and failures of those programs which resulted in high level of participation and behavioral changes. The next step was to determine a driving force by testing strategies commonly applied to businesses: “product or service-driven”, “market/user-driven”, and “technology or know-how driven”. **Results** showed that because research was the only common thread between our products, the “technology or know-how-driven strategy” would mean that we should constantly seek to serve new markets and opportunities to develop new products/services completely different from present offerings. Each driving force carries with it some requirements that, if present, keep the strategy strong. These are called the areas of excellence and, in the case of a know-how driven organization, include research and applications marketing. As the research is, for the most part, handled at the University level, the second area -- applications marketing - becomes most critical on the county level. Applications marketing is the never-ending pursuit of new markets and development of new products from existing know-how. We must become expert at applications marketing, finding both new audiences and new uses for our know-how.

**Using Computer Graphics to Enhance Agriculture Awareness Programs** (89)
L. B. HODYSS, Palm Beach County

Informing urban citizens of the importance of local agriculture necessitates timely, accurate information and a method to present that information. **Objective:** To inform Palm Beach County citizens and elected officials of the importance of agriculture. **Methodology:** Graphics packages allow individualization of the presentation with precision and swiftness not possible with other methods. **Results:** Programs have been presented to five groups using the same basic information but personalizing it to fit the basic situation. **Conclusion:** Having access to computer technology improves Extension's capability and expertise as educators.

**Florida House Conservation Learning Center Employee Innovative Techniques** (92)
M. J. HOLSINGER, Sarasota County

**Objectives:** Current methods to educate citizens comprehensively on resource conservation tend to be oriented traditionally in classroom settings. In order to stimulate significant practice changes, innovative demonstration-oriented delivery techniques need to be developed. **Methodology:** The Florida House project was conceived by the Extension Director as a method for creating a unique education facility consisting of two model homes and grounds to show the latest methods for conservation of water, energy, building materials and recyclables. In order for this to be a community-driven program, a non-profit organization. The Florida House Foundation was established. It is an unusual coalition of diverse interests focused on a common goal. The learning center is to be staffed by Extension employees and trained volunteers. **Results:** Nearly $100,000.00 in grants and $150,000.00 in commitments for in-kind services have been obtained. Designs for the homes are complete. Construction started this month and should be completed in the first quarter of calendar year 1993. **Conclusion:** This partnership project is the first of its kind in Florida and perhaps the Nation. It has the potential to be replicated elsewhere to stimulate the consumer demand needed to provide for meaningful progress in resource conservation and ultimately a more sustainable future.

**Youth Experience "Future-friendly" 4-H Camp** (87)
A. P. KERSEY, Polk County

Youth of 4-H age need experiences which will help them develop positive images of themselves and in control as they step into a future of technology and people. **Objective:** 4-H camp participants gain experience in technology, communication, and self-discovery. **Methodology:** Approximately 80 4-H youth: built and launched rockets; experienced computers as aides to decision-making through simulation activities; produced their own videos; attended workshops on interpersonal communication and futuring as well as participating in traditional 4-H camping experiences. **Results:** Video tape analysis reveals the positive attitudes and skills displayed by youth participants. The coupling of technology and human creativity is clearly and visually displayed. **Conclusion:** Youth are interested in, and respond positively to, experientially designed educational activities which help them feel "in tune" with a future designed with technology and people.

**Technology Conference Prepares Extension Faculty for Change** (88)
A. P. KERSEY, Polk County

Becoming an effective educator in an information age requires that Extension faculty expand or update their skills in electronic communication technologies. **Objective:** The purpose of the National Extension Technology Conference is to share ideas, thoughts, activities, and results concerning applications of technology to the mission of the Extension Service. **Methodology:** Demonstrations, workshops, exhibits, discussion groups, and prepared presentations. **Result:** Over 200 Extension faculty from all regions, levels of expertise and subject areas exchanged questions, techniques, concepts, and research results related to applications of technology. **Conclusion:** Extension faculty can become involved in improving their knowledge of, and contacts for, emerging technologies relevant to Extension.

**Extension's Collaborative Role in Polk County's Ag in the Classroom Committee** (89)
A. P. KERSEY, Polk County

Individuals and organizations involved with agriculture are increasingly concerned about the industry's public image. Polk County is a rapidly urbanizing area as well as one of the nation's leading agricultural producing counties.
Objective: To enhance students' knowledge of agriculture's role in society. Methodology: Extension Agents collaborated with eight other agencies to plan, provide and evaluate learning experiences to improve the agricultural literacy of elementary students through an experientially-rich 4th grade curriculum. Over six-hundred students and teachers participated in classroom activities and an off-campus one day event called Agri-fest. Results: Analysis of pre- and post-test data showed up to a 70% gain in students' knowledge of the local agricultural economy. Other surveys demonstrated a high level of acceptance of the program among teachers. Conclusion: Solving complex problems collaboratively with other agencies can be strengthened when Extension provides leadership for defining clear-cut educational objectives and measurable results.

Networking, Coalitions and Partnerships: A Community-based Perspective (91)
A. P. KERSEY, Polk County
Objective: Enhance program delivery through joint ventures with community agencies and groups. Methods: Using a variety of approaches and roles, the agent used Extension resources to enhance educational efforts in Polk County. Partners and collaborators included: the county school district; public utilities; environmental agencies; county government; and private industry. Results: Over the past two years, the agent has made observations about benefits and pitfalls related to Extension's roles in cooperative ventures. These efforts to increase outreach have expanded the agent's targeted audience to over 100,000 citizens, not including mass media audiences. One outcome of this experience has been a list of questions county faculty might ask themselves prior to and during cooperative program efforts. Conclusions: Benefits to communities, organizations, and professionals can result from creative networks, coalitions and partnerships while audience contacts expand considerably. Effectiveness is closely keyed to shaping decisions strategically.

Developing a Strategy for Budget Reductions Through Citizen Involvement (90)
M. F. MCKINNEY, Hillsborough County
As county governments pledge no new taxes, they're also scrutinizing for all non-essential services. Objective: To make sure Cooperative Extension education is recognized as being an essential service to the residents of the county. Methodology: 1. Develop an "Adopt An Official Program" where each member of the Overall Extension Advisory Council serves as a liaison between Cooperative Extension Service/IFAS and elected officials at all levels. 2. Involve citizen input in the county budget process. Result: An un-official lobby was organized (without staff involvement) that included 300 citizens and program participants. Letters, presentations and one-on-one visits with elected officials documented the educational need for Extension in Hillsborough County. Those individuals serving as Liaisons have also developed their leadership skills and have become positive ambassadors for Cooperative Extension Service/IFAS. Conclusion: The Extension Service lost only one position rather than three that was mandated and took a 1% cut rather than a 5% reduction in the overall budget. The Extension Service now has a direct link with each elected official in County, State and Federal Government.

Creating Community Sustainability: A Public Policy Issue (92)
J. MEADOWS, Sarasota County
Objective: For county decision makers and citizens to learn factors affecting community sustainability and skills to help them make communities more sustainable and self-sufficient. Method: CES has provided leadership in community sustainability in Sarasota County for two years and served as facilitator to present alternative solutions for many local concerns. Educational programs on alternative choices that effect community sustainability have been presented through two large conferences, speeches to groups, demonstration projects and interaction with community groups and decision makers. These issues have included: managing community growth, maintaining traditional neighborhoods, transportation systems, bicycle/pedestrian paths, local food production, preserving agricultural lands, green space and wildlife habitats, and sustainable economic development. Results: Citizen and governmental interest has been great and varied. These programs have brought adverse groups together to consider alternative solutions in a rational way. Sarasota was invited by U.S. HUD to participate through a HUD initiative as a national pilot community for sustainability. This invitation was accepted and a citizens' group organized as S.U.R.E. - Sustainable Urban Rural Enterprises. They are actively involved in educating the community, bringing groups together and undertaking sustainable projects. One seat on the new county Economic Development Board was specified for a SURE representative. Conclusions: CES has been the catalyst for many community and governmental groups to consider sustainability. It has helped to open communications among citizens and government.

Seeing Reporters as a Clientele Group (89)
D. MEEKER, Editorial and J. BRASHER, Administration
Extension professionals use news media to inform clientele groups, but often feel maintaining the necessary contacts is a thankless task. Objective: To gain control and continuity in dealings with journalists who write about extension-related topics by treating them as clientele. Methodology: To combine administrative and media relations expertise to develop a way to apply standard extension plan-of-work format and standard clientele group practices to make media relations programmatic. Results: Extension professionals can treat news media as a clientele like any other by: 1) working with them to identify their needs; 2) taking a programmatic approach, providing technical support, linkages and training; 3) including them in advisory groups; 4) including them in plans of work; and, perhaps, 5) joining one of their professional associations. Conclusion: A programmatic approach to news media may help other programs be more successful and media relations be more professionally gratifying.

Developing New Audiences - Making it Happen for the Restaurant Energy Program (91)
K. MILLER, Hillsborough County
Extension is exploring the impact of working with new audiences and subject matters. **Objective:** To establish credibility and develop the trust of a completely new clientele group. **Methodology:** Methods developed over the years by extension professionals are extremely effective in breaking into new clientele groups. The basics are: Know your stuff, use your name recognition, establish cooperators, find out who the players are, establish who the innovators are, learn all you can about your target group, such as expected educational levels and available time frames for learning, and target information appropriately. Above all, be prepared to listen and learn from them. You need them and what they know. **Results:** The restaurant energy program was able to get off to a fast start. We have been asked by all types of restaurants for energy information as well as to help organize a recycling program targeted for 60 restaurants. In addition, we have been asked by utility companies, a national trade publication, and a professional association for restaurant energy/resource management information. **Conclusions:** Traditional Extension principles can serve as guidelines for developing high impact programs as we look to get involved with new audiences.

**International Agriculture - A World of Opportunity** *(92)*

W. M. ODEGAARD, Hernando County

The specialized skills & knowledge of agriculturalists are in demand by International employers. **Objective:** To provide information to Extension agents interested in and/or seeking short term and long term international employment. **Methodology:** Information regarding career opportunities in international agriculture was obtained from a variety of sources: i.e. recruitment brochures, listings in international journals and direct contact with agencies and organizations while working in Africa, Central America and the Caribbean. Career opportunities are grouped in nine different categories. **Results:** This report does not attempt to provide direct employment information. Rather an effort is made to call attention to career opportunities and inventory a group of selected entities employing university trained agricultural specialists in international positions. **Conclusion:** Increasing food production is critical to the survival of many developing countries. This report discusses international employment areas where Extension expertise is in demand.

**Water: Living Within Our Limits in Hernando County** *(94)*

W. ODEGAARD, Hernando County

Water is one of Hernando County’s most valuable resources. Increasing growth and a shortage of rain has placed tremendous strains on our water supply. **Objective:** To work as a team to deliver water quality and conservation information to our audiences. **Method:** Each agent implements one or more water education programs in his or her area of specialty, i.e. horticulture, home economics, 4-H and agriculture. Existing state major programs were the focal point for educational efforts. **Results:** There is a better understanding of the importance of conserving and protecting our water supply in Hernando County. Approximately 650 individuals have participated in one or more Extension water related programs. **Conclusion:** There is a need for agents to deliver appropriate water related educational programs to the audiences they serve. Working as a team, we are better able to address this issue.

**Has The Fun Gone Out Of Extension?** *(91)*

A. W. PARRAMORE, Leon County

Our rapid paced society and continuous budget reduction make it increasingly difficult for conducting educational Extension Programs. **Objectives:** To develop Cooperative Extension Programs that are recognized as an essential service and rewarding to Extension faculty members and clientele. **Methodology:** Networking with other agents, organizations and advisory committees has resulted in fulfilling programs that are recognized as valuable by clientele and public officials. **Results:** Through both professional and personal experiences agent has developed methods and techniques to reduce stress, increase friends, produce satisfying educational programs and have fun along the way.

**Overhead Transparencies: Simple Techniques Improve the Effectiveness of Extension Education.** *(87)*

A. W. PARRAMORE, J. SHUFORD-LAW, Leon County and S. T. CLARK, Gadsden County

**Objective:** To produce visuals of high quality and minimize time and storage space. **Methodology:** Visuals are important because students appear to remember 20% of what is heard, 30% of what is seen and 50% of what is seen and heard. Overhead transparencies seemed ideal because the visuals could be transported and stored easily. However, clear transparencies with black type from pages of books are often used by speakers. The print is too small and dull making the visual totally ineffective and unprofessional. Therefore, over the past 4 years agents have explored and developed techniques for producing visuals for a series of 9 nutrition and health classes. **Results:** Through both professional and personal experiences agent has developed methods and techniques to reduce stress, increase friends, produce satisfying educational programs and have fun along the way.

**Work - Family Stress Management Program for Extension Agents** *(89)*

J. J. PERGOLA, Tampa Bay Area

Previous studies have shown that Extension Agents experience work - family stress because of the demands of role overload. Stress levels varied based on subject matter responsibilities, age of agent, and length of service. **Objective:** To reduce work - family stress of 74 Florida Extension Agents in Districts IV and V through use of stress reduction strategies. **Methodology:** A 6-hour workshop was conducted in both Districts IV and V focusing on the priority work - family concerns previously identified by participants. **Results:** Pre - post data currently being analyzed to assess stress levels and life satisfaction (final results will be available at time of presentation). **Conclusion:** Extension Agents can learn to reduce work - family stress and increase life satisfaction through use of individual stress management strategies.
Conflict Management In The Workplace (90)
J. J. PERGOLA, Tampa Bay Area
Conflict is an inevitable part of the working environment which can result in destructive working relationships or can motivate creative and innovative problem-solving. Conflict management skills among supervisory personnel varies with training and experience. Objective: Train supervisors in conflict management skills which can be applied to the work situation. Methodology: Two half-day workshops were conducted for recently hired supervisory personnel in St. Lucie County government. Results: Evaluations from 103 participants indicated that 7.8% did not find the information helpful, but 56.7% did find the information especially useful to their work situation. Communication skills and problem-solving strategies were considered particularly helpful. Conclusion: Supervisory personnel can learn conflict management skills to apply to their work environment, thus promoting more positive solutions to conflict situations.

Couples Communication Video Training (93)
J. PERGOLA, Tampa Bay Area
Misunderstanding and conflict can be result of different ways that men and women communicate. These differences must be overcome if we are to enjoy a satisfying work and family life. Objectives: 1) agents increase awareness of the differences in men/women communication styles, 2) identify improved communication skills, 3) provide in-service training based on interactive instructional videotape. Methodology: 47 minute video developed for agent training. The video includes dramatized scenarios of couples in conversation, expert analyses, and recommendations for improved communication practices. A facilitator leads the group through discussion and practice of communication skills. Telephone Q & A session with specialists. Results: 12 agents participating in the 3-hour in-service training sessions were able to identify gender communication differences and improved communication skills through this training format. Conclusion: Agents indicated that the combination of the visual scenarios, discussion, analysis, exercises, written materials and access to specialists while remaining close to their county was a viable format for agent training.

Consideration for Producing Extension Video Programs Through Contractors (89)
D. W. PYBAS, Dade County
Video programming has experienced a very rapid period of growth in just a very few years. Advent of the consumer-end video recording and playback technology has provided another outlet for current and potential extension audiences. No longer do extension have to attract clientele to meetings to provide the learning experience. Pre-recorded informational programs can and are being developed in almost any subject area related to extension programming. Many county level and/or university based extension oriented educational and informational programs are being produced "in-house" by specialists and county faculty with expertise in the specific subject matter areas. These in-house video productions are sometimes perceived low-cost or inexpensive ways of producing a video program. When one examines in detail overhead costs and other factors, such as manpower limitations, travel fund availability to schedule and shoot the footage necessary to complete the planned program the budget costs may be beyond the available fiscal resources of the in-house video facility. Alternatives to the limitation would be extracurricular funding through grants, donations, and joint-ventures with outside organizations and the contracting with a video production company to produce the desired educational video program. This presentation will address the evaluation criteria that should be considered when selecting a qualified video production company. Factors such as, quality of the company and its personnel, previous work, creativity and level of production, experience with the general subject area, and being able to stay within an established budget will be reviewed along with additional insight an working with the contractor prior and during production.

Water Quality Database Program (92)
A. STRICKER and A. P. KERSEY, Polk County
At least four federal agencies, four Florida agencies and local governments have complex programs that attempt to protect water quality. The average citizen is usually confused about where to go and what to do to solve water problems. Frequently people are referred from office to office before they find who can deal with their problem or question. Objective: To develop a computerized database containing information about water issues and agencies/organizations responsible to help people quickly find who will answer questions or solve problems. To make the database available to the public through agencies/organizations that deal with water issues. To write a users guide for the program. Methodology: A database program called Hyperwriter was purchased with a grant from the Florida Phosphate Council. An outline of information to include was developed and information gathered with help from agencies on advisory committee. A grant from IFAS Center for Natural Resources permitted hiring a temporary worker to input information into the program. Hyperwriter files say be copied to floppy disks, transferred to other computers and used but not modified. Files will be distributed to other agencies and organizations to help them serve the public. Results: The program is being reviewed by a number of agencies and organizations who deal with water problems in the County. Reception has been enthusiastic. A follow-up survey will be sent to users to see how the program is being used and what improvements are needed. Conclusion: Combining information about water into a database and making that database available to the community is a way to improve knowledge about water quality issues. The database will need to be updated regularly.

Producing Low-Cost Educational Videos (89)
D. E. SWEAT, Pinellas County
The Tampa Bay area has over 2 1/2 million people. Much of this population is new to Florida and has little or no knowledge of the coastal zone, its plants or animals. Objectives: Reach large numbers of inhabitants on the
mid-west Florida coast with marine and coastal information through the medium of television. **Methodology:** Produce in-house educational videos for local cable and broadcast TV stations. **Results:** Over the past 3 years, 20 educational videos have been produced and aired over 750 times on 3 cable stations and 1 broadcast station. Coverage is over 16 counties and possible audience has been estimated at 1 million persons. **Conclusion:** Based upon increased phone response to programming over the 3-year period, the population is watching these educational videos in increasing numbers.

**Involving the Entire Family in On-Farm Research and Extension** (87)  
**M. E. SWISHER, Small Farm and M. C. TAYLOR, Suwannee County**  
Survey data of north Florida show the principal farm operator also works off-farm, leaving farm responsibilities to a woman. **Objective:** To analyze this increased stress on the farm wife which has forced changes in the roles played by all family members. **Methodology:** The farm wife contends with the stress of role conflict through four coping mechanisms: a melding of farm and home work; a supportive husband; economic cooperation; and lowering living expenses. She continues to serve as the pillar of a community support system. As family roles change, so must roles played by Extension faculty. **Results:** Integrated approaches include appointees to advisory committees, newsletters, and joint home visits. **Conclusion:** Greater program integration is needed in (1) women's access to production information; (2) faculty expertise; (3) public discussion; (4) management for the entire family; and (5) community leader involvement.

**Preparation of Professionals for Contemporary Home Economics Roles Development in Cameroon** (88)  
**B. TAYLOR and D. TICHENOR, Home Economics**  
A critical mass of trained Home Economics professionals are needed in developing countries to bring families along in economic progress. **Objective:** This study evaluated the feasibility of a curriculum in home economics at the University Center Of Dschang that would improve family education and include the family in the benefits of agricultural progress in Cameroon. **Methodology:** 52 on-site interviews were conducted in Cameroon with administrators and faculty of UCD, representatives from USAID, ministries of government, home economists, and Peace Corps. **Findings:** The importance of education in women in improving quality of life for rural people and enhancing overall economic development was identified by all interviewed. Lack of knowledge in home food production, processing, storage and preparation, nutrition, and maternal and child health were problems identified that home economics could address. However, there are only a few degreed home economists in Cameroon and all were trained outside the country. **Recommendation** was made to establish a Home Economics Department at UCD with integrated agriculture and home economics courses to prepare students for work with families.

**Course Builds Financial Knowledge & Confidence for Decision-Making** (92)  
**D. TAYLOR and D. BOULWARE, Lake County**  
**Objective:** Mid-life & senior adults to gain financial knowledge & confidence in making consumer decisions. **Method:** Sessions in 8-week course featured presentation by financial professionals & small group discussions led by trained facilitators. Coalition of 9 non-profit groups planned details. Topics were: organization & recordkeeping; spending plan/leaks; bank services; credit; insurance; Social Security; investments; legal services & estate planning; housing; & financial aspects of remarriage. As a cosponsor, AARP provided workbooks. Joint Extension/AARP publicity legitimized strict non-commercial purposes. EH leadership materials helped in training facilitators. **Results:** 237 enrolled in 3 sections, with 74% attendance level. Presentations rated "very good" or "excellent" by 83%. On the post test, percentages of responses in the "much" or "very much" categories (top 2 of 5) were: increased my level of financial knowledge 85%; helped in setting goals & building skills 86%; developed confidence in financial decision-making 74%; & helped gain control of money 69%. **Conclusion:** Due to very positive response, course will be repeated for 5 more groups in coming year.

**Getting Together In The Kitchen, Holiday Bake Off** (87)  
**J. THIGPEN, Madison County**  
**Objective:** Youth and adults will spend time together while learning and sharing principles of food preparation. **Methodology:** "Getting Together In The Kitchen", is designed to encourage youth and parents or an adult friend to spend time together during the holiday season. The program is open to team entries only. All teams are made up of one adult and one youth. The adult may enter with more than one youth. Entries are presented and set up by the team. Judging is completed as participants attend a Holiday demonstration. Cash awards are presented and a taste-testing party follows. **Results:** Thirty-six teams participated in this activity the first year. Mothers and Fathers and Grandmothers made up the adult half of the teams. Youth and adult members got great satisfaction from working and playing together. Adults shared ideas and taught food preparation skills, youth learned to prepare fun foods while each team member gave and received "Special time". **Conclusion:** Program that promotes family involvement is a powerful educational tool which can be used to strengthen families.

**New Putnam County Agricultural Center** (87)  
**A. TILTON, Putnam County**  
The Putnam County Extension staff has always been housed separately with the Home Economics Agent and secretary in a different location. Facilities for Extension programs were inadequate. The Overall Advisory Committee (OAC) identified the long-term goal of housing the Extension staff in one location that would also contain office space for FmHA, SCS, ASCS and the County Forester. **Objective:** To make county commissioners aware of space needs and to convince them to build an agricultural center. **Methodology:** The CED met with the OAC numerous times during 1984-85 to solicit input, gather support and develop plans. Meetings were also held with
USDA agencies. The CED made presentations to the Board of County Commissioners, County Finance Committee, and County Administrator. Results: Putnam County completed construction of the agricultural center containing 12,000 sq. ft. in June, 1986. The Extension staff and USDA agencies share office space, a conference room and large auditorium. Conclusion: The new Putnam County Agricultural Center provides an excellent focal point for Extension educational programs. This facility also offers "one-stop" agricultural service to Putnam clientele.


J. J. VANSICKLE and T. I. STEVENS, FRED

Due to their volatile nature agricultural markets require timely, accurate, and accessible information if they are to function competitively and efficiently. Through the use of powerful yet inexpensive computer and communications technology significant improvements can and have been achieved toward this end. A dial-up market information retrieval system has been developed on the IFAS computer network to facilitate the timely distribution of agricultural market news to state and county research and extension faculty. Over 1000 USDA-AMS market news reports and selected USDA-NASS crop and weather reports can be accessed within minutes of their release times on the IFAS-VAX-MIS system. New faculty have established programs to advance this information to clientele in their areas. An evaluation indicates that faculty have found value in this service. Usage of MIS increased from 851 interactive sessions during the 1986/87 season to 1,382 during the 1987/88 season, or 62.4%.

Developing a Comprehensive Extension Newsletter

M. S. WILLIAMS, Nassau County

Small County Extension offices often find resources severely strained when trying to maintain communications in several different program areas. Newsletters to various clientele groups often are duplicated. Clients may often be unfamiliar with the total scope of Extension programming. Objectives: To improve communications and eliminate duplication of effort in producing 3 different newsletters. Methodology: "The Resource" consolidates program areas into one comprehensive tabloid-style newspaper. Published bimonthly, 2000 copies of "The Resource" are circulated with each issue. Features include agriculture, 4-H and home economics news, program announcements and results, educational articles and other related items. Special issues have featured the 75th Anniversary, National Nutrition Month and a grant-sponsored issue about waste management was delivered to every postal patron in Nassau County. Results: Over 19,000 households received the sponsored issue Of "The Resource". Over 600 people have added their names to our mailing list since the first issue was printed. The cost of printing the tabloid is balanced by the reduction of duplication of effort. Conclusions: "The Resource" has been highly successful, reaching new audiences at a reduced cost in time, effort and money and presents a more unified program and image for Extension. The tabloid style is attractive and professional.

Professional Values and the Florida Cooperative Extension Service: Developing a Foundation for Strategic Planning

M. WILLIAMS, Nassau County

Objectives: This qualitative study was undertaken to determine the organizational values shared by the professional employees of the Florida Cooperative Extension Service. Related topics that contributed to the literature review included human and organizational values, organizational culture, strategic planning, and the philosophical foundations of the Cooperative Extension Service. Methods: Focus group interviews were conducted in each of the five administrative districts and on the University of Florida campus. A total of 40 individuals took part in the group interviews. Transcripts of the interviews were read, coded, and sorted by themes to develop a list of twelve categories of values shared by the professionals interviewed. Coded sections of the transcripts were transferred to a descriptive matrix in order to reduce and simplify the analysis. Results: Three groupings of values emerged from the data and were described as "communities" of values. The three communities were personal, mission related, and structural values. Personal values were rewards, relationships, and personal history. Mission-related values were organizational history, research based information, relevance, comprehensiveness, life-long education, diversity, and service. Structural values were shared ownership and system linkages. These three communities were depicted in figures that described the relationships of the values to one another. Conclusions: The final discussion described the inter-relatedness of the three communities in the overall organizational structure. Recommendations were made for further study and program development for the Florida Cooperative Extension Service.

Dramatic Ways to Create Marine-Aware Citizens

M. S. WILLIAMS, Nassau County and J. HALUSKY, St. Johns County

Rapid growth and development means added stress to our already fragile coastal environment. Humans create problems not only for themselves but for the land, the oceans and the fish and wildlife dependent on these sensitive ecosystems. Objective: To impress upon a very young target audience and their parents that coastal pollution problems are the product of human insensitivity to nature; and that only humans can solve these problems. Methodology: Volunteers wrote, produced and performed a 20 minute play entitled "All at Sea" using Extension resources and technical expertise in development of topics and themes for the script. The play traveled to every elementary school in Nassau County. Other audiences included area preschools and the tourist crowd of Amelia Island "Shrimp Festival". A list of suggested teaching activities that lead to general 4-H programs was sent to every classroom in Nassau County to follow-up and reinforce the message. Result: Nearly 5000 youngsters and their teachers saw "All at Sea". Post play discussions indicate that youngsters learned that humans cause the problems for fish and wildlife and that only humans can address the problems that pollution and litter cause to our coastal ecosystem. Conclusion: These based drama is an effective teaching tool for volunteer based extension program. Complex concepts can be presented to even the youngest audiences through the use of a dramatic
Objective: N. ARNY, L. BARBER, C. MILLER and M. SIMMONS
4-H Energy Encounters
Dixie County, Florida is the second leading producer of oysters in Florida, with over 400,000 lbs. landed each year.

S. ANDREE, Multicounty Marine (Leon County)
Dixie 4-Her’s Learn Shellfish Culture Techniques

Objective: To determine which methods have effectively extended information to urban clientele and to gather data on how a caller learned about the C.E.S. Methodology: incoming phone calls were surveyed during two six-week periods in consecutive years. Callers were asked (1) if this was their first phone call to this office, and (2) what had stimulated their first phone call to P.C.C.E.S. The total number of calls surveyed during the 24-week period represented 25,867 persons. Result: The two reasons given most often by first time and non-first time callers were “word of mouth” (30%) and “newspaper articles” (20%). Also receiving higher ratings were “cable television,” “information number in phone book,” “used in another state” and “educational system.” Conclusion: Knowledge of how clientele learn about an Urban Extension office can help decision makers in determining a focus for efforts to direct or re-direct attempts to market local C.E.S. programs.

Trained Volunteers vs Agents Teach Cancer Risk Reduction Nutrition Program
M. ZABOR, Marion County
Control group of volunteers was trained to teach Cancer Risk Reduction through diet originally developed by Dr. L. Bobroff. Materials were designed by this agent to meet teaching needs of volunteers. The two objectives were:

1.) to compare results of agent vs. volunteer teaching and student retention and 2.) to compare retention and practice changes on 30 minutes vs. 1 hour programs. 20 hours were devoted to train 6 volunteers to teach this program. 2 test sites were used to teach 4 different groups of 30 minute and hour programs. 62 participants were evaluated on retention, knowledge gained and practice changes with 3-month follow-up. 6 medical related groups donated over $2,500 to this project. Results gained will help determine future programs, advisory committee direction and use of volunteer empowerment for themselves and extension programming. Results showed retention & practice change very close with Agent slightly higher. 30 minutes sessions appear best in retained knowledge & time away from job.

FLORIDA ASSOCIATION OF EXTENSION 4-H AGENTS - FAE4-HA

4-H Livestock Camp
S. ANDREASEN, Jackson County, J. MULLINS, Escambia County, R. PARKER, Walton County and R. CARTER, Gulf County
Objective: To provide 4-H’ers in a large geographical area who are involved in Animal Science/Dairy Science Programs hands-on instruction from renowned individuals in the Tri-State area. Method: Planning sessions identified District I 4-H Livestock Program needs, areas of interest, and personnel available as resources. Costs for the camp site, materials, equipment and travel costs were estimated and set. Result: The camp schedule was built around a core curriculum program modeled after the State 4-H Camping Program. A 4 day camp was decided upon. Core programs were assigned in sheep, beef, dairy, swine, poultry and marketing. Programs requiring greater length and more difficult presentation abilities were put into longer segments for the camp group. The skills assessment method was chosen as a means of evaluation and entitled the “Panhandle Roundup”. Camper skills were evaluated in round-robin form with incentives for excellence including trophies and certificates. Conclusion: The camp was attended by 28 campers in 1992 and 60 campers in 1993.

Dixie 4-Her's Learn Shellfish Culture Techniques
S. ANDREE, Multicounty Marine (Leon County)
Dixie County, Florida is the second leading producer of oysters in Florida, with over 400,000 lbs. landed each year. Deteriorating water quality and increasing fishing pressure have reduced local harvests. Aquaculture is one means of increasing production explored by the Dixie County 4-H clubs. The objectives of this project were: 1) to educate youth, adult leaders, fishermen and county officials methods pertaining to oyster and clam culture, and 2) establish and maintain a demonstration aquaculture lease off Suwannee, FL. Funds were acquired, an advisory committee was established and an experimental management area was obtained for the demonstration. Flexible belt culture techniques, developed by Harbor Branch Oceanographic Institute, were used for oysters and clams. 500,000 clam seed and 80,000 oyster seed were issued to 85 4-Hers from five community clubs in Dixie County. Training seminars, hands-on experience using the gear and field trips to Harbor Branch were conducted. Oysters seed perished due to high salinity. However, clams had 60% survival over a two year period. The first harvest is expected in July, 1991. At current market prices, the 4-Her's could realize a $50-55,000 profit (20% to go into marine 4-H activities), demonstrating the potential future of aquaculture.

4-H Energy Encounters
N. ARNY, L. BARBER, C. MILLER and M. SIMMONS
Objective: Development of educational materials and activities for youth ages 8-12 on energy and the environment. Methodology: The development process included: i.) writing/design team of county extension agents, youth and energy extension specialist and energy education professionals to research and develop experiential learning activities. ii.) pilot testing of materials at summer day camps in Santa Rosa and Levy counties and 4-H Camp Timpoochee iii.) evaluation by instructors to insure age and content appropriateness. iv.) evaluations of story performance. More thorough teaching and evaluation tools are needed to make "All at Sea" a complete teaching package for the very young audience.

Marketing Extension in an Urban County
J. YATES, Pinellas County
Effective utilization of resources to extend information from and about the C.E.S. in urban county can be critical to successful local marketing programs. Objective: To determine which methods have effectively extended information to urban clientele and to gather data on how a caller learned about the C.E.S. Methodology: incoming phone calls were surveyed during two six-week periods in consecutive years. Callers were asked (1) if this was their first phone call to this office, and (2) what had stimulated their first phone call to P.C.C.E.S. The total number of calls surveyed during the 24-week period represented 25,867 persons. Result: The two reasons given most often by first time and non-first time callers were “word of mouth” (30%) and “newspaper articles” (20%). Also receiving higher ratings were “cable television,” “information number in phone book,” “used in another state” and “educational system.” Conclusion: Knowledge of how clientele learn about an Urban Extension office can help decision makers in determining a focus for efforts to direct or re-direct attempts to market local C.E.S. programs.

Trained Volunteers vs Agents Teach Cancer Risk Reduction Nutrition Program
M. ZABOR, Marion County
Control group of volunteers was trained to teach Cancer Risk Reduction through diet originally developed by Dr. L. Bobroff. Materials were designed by this agent to meet teaching needs of volunteers. The two objectives were:

1.) to compare results of agent vs. volunteer teaching and student retention and 2.) to compare retention and practice changes on 30 minutes vs. 1 hour programs. 20 hours were devoted to train 6 volunteers to teach this program. 2 test sites were used to teach 4 different groups of 30 minute and hour programs. 62 participants were evaluated on retention, knowledge gained and practice changes with 3-month follow-up. 6 medical related groups donated over $2,500 to this project. Results gained will help determine length of future programs, advisory committee direction and use of volunteer empowerment for themselves and extension programming. Results showed retention & practice change very close with Agent slightly higher. 30 minutes sessions appear best in retained knowledge & time away from job.
participants to determine knowledge gained and practice change. v.) rewriting and repackaging materials to include: Teacher/Volunteer Leader's guide, Youth guide, and 3 Energy Encounters teaching kits. Results: (incomplete) Youth are expected to gain an understanding of energy sources, energy conservation, and the relationships of natural resources and the environment to energy as well as change behaviors related to energy use. Instructor and youth evaluations will guide design team in redeveloping and editing educational materials. Conclusion: A pilot tested, experiential learning program on energy and the environment will be available for statewide usage.

Computer Aids 4-H Camp Programming (88) A. B. AYERS, Lake County
Campers who are allowed to select their own camp activities attend them better and are generally happy. A computer database manager program makes it possible to offer more choices. Objective: To teach decision making and ranking of choices through offering a wide variety of subject matter activities and to have a good atmosphere throughout the week. Methodology: In 1986 campers were offered 28 special interest topics, from which they chose 12 and ended up with six. About 85% of the assignments were made by computer with 15% done manually, to be sure every camper had a full schedule of activities. Activity assignments were printed on nametag labels. The computer printed lists of class enrollments and cabin occupants. Result: All campers got some of their top choices. The fact that campers were involved in subjects of their own choosing helped the atmosphere of camp. Conclusion: 4-H camp can be a fun and educational experience with several small group activities rather than fewer large group activities. Happy campers will return the next year.

Lake County 4-H Plant Science Program (91) A. AYERS, Lake County
The program objective is to have 4th and 5th graders acquire skills and knowledge in plant science by planting, caring for, and exhibiting radishes and cherry tomatoes. Methodology/Teaching activities: Radish seeds and tomato plants, video tape instructions, delivered to 24 schools by MG volunteers. Classroom teachers conduct the project, some having students grow plants at school, but most at home. Students may exhibit their radishes and tomatoes at the Lake County Fair. MG volunteers collect exhibits at schools and deliver to Fair. Ribbons & premiums awarded all exhibits. Results: All public schools & several private schools participated, 3781 youth, 144 teachers. More than 150 exhibits of radishes and 120 exhibits of tomatoes were judged at the Fair and were on exhibit for 3 days. Many students submitted written reports & some posters. Conclusions: One student expressed well the feeling I expected from hundreds of them. "This gave me the experience of nurturing something of my own and watching it grow." Hundreds of families were able to add radishes & tomatoes to their meals at very little cost. Some parents were inspired to start vegetable gardens.

Computers Utilized in Teaching Agriculture Awareness (89) L. B. BARBER, Santa Rosa County
With each passing generation, our young people become more removed from the farm. Agriculture awareness programs can help youth to recognize the importance of our proud farming heritage. Objectives: Assist teachers in learning ways to incorporate agriculture into the school curriculum. Methodology: Fourteen 4th grade teachers were trained how to utilize the "Farm and Food Bytes" computer software in the classroom. The local Farm Bureau worked with 4-H to provide the training to the teachers and to provide the software to those who attended the training. Additional copies were provided until all 13 elementary schools in the county had access to the program. 4th grade teachers were targeted because they participate in the annual 4-H Farm Tour. Conclusion: Evaluations received indicated that the software is being utilized in the classrooms in a variety of ways, and is a creative way of introducing agriculture to the students. According to one teacher, "They say it's fun, 'challenging', has 'new words' and 'different' information. It has a game-like quality, yet provides true educationally valid activity."

Rhodes/4-H Serve America Grant (93) L. B. BARBER, Santa Rosa County
Students in Rhodes Elementary School drop-out prevention class learned the value of community service and improved science grades through participation in 4-H. A Department of Education grant for $5,000 was secured for the project. Students became peer teachers of the Recycling Adventures Puppet show and presented to 947 other students. Field trips to 4-H Camp and the county landfill contributed to classroom participation. Science grades of 29 out of 47 students improved or stayed the same; attendance of 29 out of 47 students increased or stayed the same; and 945.5 hours of community service were conducted in the puppet show, trash pick-ups, peer teaching, baby sitting, aluminum can recycling, Reading Buddies, and yard work. Thirty-one of 47 students used ideas presented by 4-H for science fair topics. Several students will attend summer 4-H camp. Students were excited and looked forward to the 4-H programs. Another grant will be submitted for next year. Fourth grade students from this year's program will give leadership next year.

Step One Leadership Program (92) L. B. BARBER and L. K. BOWMAN, Santa Rosa County
The Junior Woman's Club of Milton developed the STEP ONE Youth Leadership Program to identify middle school students who are potential future community leaders and prepare them for leadership roles. The objectives were: 1) To develop enhance leadership skills of selected youth in middle schools in. 2) To demonstrate to participants the basic issues, challenges and opportunities In Santa Rosa County for its leaders and 3) to
Objective: First Coast Volunteer Update

As more women enter the work force, there is an increased responsibility for food shopping and preparation among youth. "Calcium for Teens" and "Vegetables: Appetizers to Desserts" were conducted for high school youth. The other programs were held for elementary age youth. Results: Pre/Post test results showed that youth increased their knowledge by 20%. Conclusion: 4-H can provide relevant and effective "learn-by-doing" experiences for youth to help them learn self-care skills.

First Coast Volunteer Update

Objective: To increase knowledge of youth issues, 4-H curriculum and programs among 4-H leaders, parents and other individuals and agencies who serve youth. Methodology: A committee of 4-H agents, paraprofessionals and volunteers from 4-H District IV combined efforts for the planning and presentation of this educational program. The training consisted of a keynote address, three workshops, and a luncheon featuring a panel discussion. Concurrent workshop topics included: effective club meetings, SPACES, Talking with TJ, Marine Science, Clothing and Foods. The topic of the panel discussion was "How Does Violence in the Home, School and Community Impact Youth and Youth Organizations?" Panelists included a 4-H teen and a representative from youth programs.

4-H Agriculture Awareness

L. B. BARBER, M. DONAHOE, E. PHELPS and J. ATKINS, Santa Rosa County
Youth today, even in rural counties, have a very limited understanding of agriculture and its importance to the economy. Objective: Increase awareness of agriculture to youth in the 4th grade and introduce them to 4-H. Methodology: A 4-H Farm Tour was offered to all 4th grade students in the county. Over 1,000 students, teachers, parents, and 4-H volunteers visited a cotton gin, catfish farm, horse ranch, Christmas tree farm, and peanut cooperative. Educational materials provided for classroom use by Agriculture in the Classroom, Florida Peanut Producers, Dairy Farmers, inc., and National Cotton Council contributed to the success of the program. Local farmers rode each school bus to explain points of interest and answer questions about farming. Conclusion: Of those teachers returning the evaluation, 100% want to make the tour an annual event and found the trip an excellent way to teach their social studies unit on farming. Media coverage added to the impact of the event as well as emphasizing 4-H in a positive way. The students increased their awareness of agriculture and 4-H.

Hillsborough County 4-H Youth Learn Home Water Conservation

S. R. BOND, Hillsborough County
Conservation of natural resources is a growing concern in the county. Youth are unaware of the volume of water used in and around the home and why it is important to conserve. Objective: Youth 8 to 12 years of age were made aware of the need for home water conservation. Methodology: A 4-H day camping program was held at 6 different County Recreation Centers with 13 groups of youth. The week-long program reached 300 youth. A variety of teaching techniques were used, including puppet shows, games, experiments, songs, and project workbook. The highlight of each week was a water carnival, which reinforced the basic concepts taught. Result: Pre/post test results showed that youth increased their knowledge by 35%. All 6 recreation centers provided positive feedback on the 4-H Water Conservation Program. Conclusion: 4-H can provide relevant and effective "learn-by-doing" experiences for youth which encourages them to learn the importance of water.

Hillsborough County 4-H Youth Learn Self-Care

S. R. BOND, Hillsborough County
The number of youth in Self-Care is a growing concern in the county. Many youth do not have the knowledge and skills to assume self-care responsibilities. Objective: Self-Care youth 8-12 years of age became aware of how to deal with situations that could occur when they are home alone. Methodology: 4-H self-care day camps were held for 207 youth. A variety of teaching techniques were used including puppet shows, games, food preparation, role playing and a project workbook. After school programs were conducted for 100 youth. Program topics included telephone and stranger safety, feelings, and nutrition. Exhibits and fact sheets were on display at Safety Fairs. The 4-H Agent produced a television program on Determining Your Child's Readiness for Self Care. Results: Pre/Post test results showed that youth increased their knowledge by 29%. Conclusion: 4-H can provide relevant and effective "learn-by-doing" experiences for youth to help them learn self-care skills.

Hillsborough County 4-H Youth Learn Nutrition

S. R. BOND, Hillsborough County
As more women enter the work force, there is an increased responsibility for food shopping and preparation among youth. Youth have little awareness of nutritional quality. Objective: Youth will learn nutrition facts so make wise choices when selecting foods for snacks or meals. Methodology: 4-H nutrition programs were held for 315 youth in 13 groups. A variety of teaching techniques were used including puppet shows, games, food preparation, puzzles, exhibits, fact sheets and transparencies. Program topics included: "Calcium for Teens" and "Vegetables: Appetizers for Desserts", "Ice Cream: History Preparation and Nutrition", "Snack Attack", and "Vitamin A and C". "Calcium for Teens" and "Vegetables: Appetizers to Desserts" were conducted for high school youth. The other programs were held for elementary age youth. Results: Pre/Post test results showed that youth increased their knowledge by 22.4%. Conclusion: 4-H can provide relevant and effective "learn-by-doing" experiences for youth to help them learn basic nutrition facts.
Recognition is an essential part of any volunteer management program. Sincere and thoughtful appreciation and acknowledgment of a “job well done” leads to an increase in volunteer satisfaction and retention. **Objective:** To promote volunteerism in Extension programs and encourage, motivate and recognize outstanding Extension volunteers. Currently, there are over 1,600 enrolled volunteers in Duval County, over 1,300 of which are 4-H volunteers. **Methods:** An annual Extension Volunteer Recognition Program is held in Duval County with the full cooperation and cooperation of the entire Extension staff. 1,995 marked the 10th anniversary of this event. The program is co-sponsored by Extension, the City of Jacksonville, and the Overall Duval County Extension Advisory Committee. Awards are given to “Friends of Extension” which include recognition of an area business and elected official. Outstanding individuals in each program area are also honored. The evening begins with a dinner in honor of the award recipients. Biographies are written on each winner which are published in a program and distributed. 7 to 10 slides of each award recipient are shown accompanied by narration highlighting his or her volunteer work and accomplishments. A plaque is also presented. **Results:** 13 volunteers were recognized this year including an adult 4-H leader and two 4-H teen leaders. **Conclusions:** This program is one of the highlights of the year in Duval County for both salaried and volunteer staff. It is an excellent recognition tool for volunteers and also serves as a promotional activity for Extension programs and services.

**Duval County Volunteer Recognition Program (95)**
T. BROWARD, Duval County

Volunteer 4-H Leaders want and need training to better perform their leadership roles. The individual agent has limited time and knowledge base with which to “cover the wide breadth” of needs. 4-H leaders need practical, usable ideas and information for club operation and project meetings. **Methodology:** The one day multi-subject training workshop was planned by a committee of volunteer leaders and agents. Selection of topics was based on leaders needs as expressed on a survey. The workshop was conducted with over 20 resource people presenting 18 classes covering 14 different topics. **Evaluation:** Using a 5-point scale, participants were asked to rate their classes and then rate the day overall. The day rated. 4.8 as valuable, the information presented rated 4.8 as usable, and over 90% said they would attend again and would bring another leader. **Conclusion:** Participants and organizers felt the workshop was valuable and will positively impact on 4-H programs. Multi-county workshops provide a way to maximize resources to address the wide range of training needs of a successful 4-H program.

**Multi-County 4-H Volunteer Leader Training for High Impact Utilization of Resources (88)**
R. L. BUCHELE, Bradford County

Volunteer 4-H Leaders want and need training to better perform their leadership roles. The individual agent has limited time and knowledge base with which to “cover the wide breadth” of needs. 4-H leaders need practical, usable ideas and information for club operation and project meetings. **Methodology:** The one day multi-subject training workshop was planned by a committee of volunteer leaders and agents. Selection of topics was based on leaders needs as expressed on a survey. The workshop was conducted with over 20 resource people presenting 18 classes covering 14 different topics. **Evaluation:** Using a 5-point scale, participants were asked to rate their classes and then rate the day overall. The day rated. 4.8 as valuable, the information presented rated 4.8 as usable, and over 90% said they would attend again and would bring another leader. **Conclusion:** Participants and organizers felt the workshop was valuable and will positively impact on 4-H programs. Multi-county workshops provide a way to maximize resources to address the wide range of training needs of a successful 4-H program.

**4-H CARES: Chemical Abuse Resistance Education Series, School Enrichment (89)**
R. L. BUCHELE, Bradford County

American youth have the highest rate of alcohol and drug abuse of young people in any Industrialized country in the world. This is a substantial problem. Research indicates that the earlier young people are reached with prevention programs, the more effective they are in delaying or preventing chemical experimentation and abuse. **Objectives:** Youth: to learn decision making skills, to learn effects of drugs, to recognize peer pressure and develop positive self esteem. **Methodology:** A 4-H School Enrichment program was developed using the 4-H CARES curriculum. The program was piloted in three fifth grade and two seventh grade Classrooms. Three fifth grade, teachers and one guidance counselor served as volunteer leaders. **Results:** Youth increased awareness of effects of drugs. Youth learned a decision making process and were able to correctly order the steps on the post test. Youth were able to recognize peer pressure. Youth gained in self esteem. Based on youth gains from the pretest to the post test and on the teacher evaluations the 4-H CARES Curriculum will be implemented in all 5th grade classes in Bradford County in the fall of 1989. **Conclusion:** The 4-H School Enrichment program is an effect vehicle for delivering Information and experiences that can influence youth to delay or avoid chemical experimentation and abuse.

**Community Systemwide Response (CSR) (92)**
R. BUCHELE, Bradford County and K. GARY, DeSoto County

There is broad community agreement on the need to reduce substance abuse and its adverse health and social consequence in the community. Alcohol related accidents are a major cause of teen death and injury. **Conclusions:** In a coordinated effort to reduce youth substance abuse and impaired driving. Florida is a second level pilot state of this jointly developed program (office of Juvenile Justice and Delinquency Prevention (OJJDP), National Highway Traffic Safety Administration (NHTSA) and Pacific Institute of Research and Evaluation (PIRE). **Objectives:** Local communities to develop their own plan of action to reduce the incidence of youth substance abuse and impaired driving. **Methodology:** CSR mobilizes juvenile court judges, extension professionals, educators, other social agencies, parents and primary care giver to. 1. Identify and analyze specific problems. 2. Assess resources related to these problems. 3. Determine un-met needs. 4. Develop an action plan with concrete objectives, tasks and responsibilities. CSR relies on information sharing by all participants, coordination of efforts, and establishment of priorities and procedures for targeted action.
Youth need to interact with the business world in order to formulate concrete career goals and be shown how their
Exploring Your Horizons Through A 4-H Career Model

As the structure of the families change, so do the needs of youth. As more families have both parents working and with

J. BUTTERFIELD, Clay County

Self Care Education in Clay County

The Effects of Experiential Educational Activities on the Learning Habits and Attitudes of Limited Income Youth

Financial Planning For Teen Parents

Teen parents need to have an understanding of concrete financial management skills in order to formulate financial goals
for their future education and for their children's well-being. Objective: To educate teen parents of the importance of financial planning for the future. Methodology: Working with the home economics teacher at the Alternative School and using the High School Financial Planning Program as a basis, a financial management program was developed for 63 teen parents. A variety of teaching techniques were used including puzzles, outside speakers, transparencies and worksheets. Six, two-hour sessions were held discussing such topics as; establishing goals, planning a budget, how income effects your goals, check writing, managing income and credit, and learning to distinguish between wants and needs. Speakers were brought in to discuss car and life insurance and opening up savings and checking accounts. Results: As a direct result of this program 43 teens have either opened a checking or savings account, and over half of the students said they were trying very hard to work within a budget. Conclusion: In-depth financial management programming helped teen-parents manage their resources for future needs.

J. BUTTERFIELD, Clay County

The Effects of Experiential Educational Activities on the Learning Habits and Attitudes of Limited Income Youth

J. BUTTERFIELD, Duval County

Objective: This study was undertaken to determine whether providing students with a variety of educational experiences
will improve their interest in school and, indirectly, their academic achievement. Methods: An experimental and a
control group of first graders were established at a Duval County elementary school. The experimental group used the 4-H Fun with Foods Curriculum and related activities. In addition, each student in this group was provided take home activity sheets to complete with an adult at home. The control group used the story "Stone Soup" for their nutrition unit. A total of 42 students in both classrooms were administered pre and post test on food and nutrition content as well as a self-esteem inventory scale. Quantitative and qualitative data was collected from both experimental and control groups and analyzed for changes in learning habits, attitudes and subject matter knowledge. A Matched t-test design was used to compare the results of the pre and post instruments as well as the findings of the focus group discussions. Results: Using the 4-H Fun with Foods curriculum indicated youth had a broader understanding of the food pyramid and the concept of "energy" foods. Focus group discussions revealed positive behaviors and attitudes concerning nutrition habits and school that were not evidenced through quantitative data. Conclusions: It was determined youth in the experimental group responded more positively to experiential activities than to traditional curriculum. Recommendations were made to incorporate the collection of qualitative data in evaluative measures with 4-H curricula.

Exploring Your Horizons Through A 4-H Career Model

J. BUTTERFIELD, Clay County

Home Economics

Youth need to interact with the business world in order to formulate concrete career goals and be shown how their
education directly relates to their future. This educational program incorporated the national initiatives "youth-at-risk" and "developing human capital". Objective: in order for teens to explore their horizons, a 4-H career model was developed. Methodology: A committee of youth and Extension professionals planned and organized the program. The program was advertised to all teens in a tri-county area. Monthly sessions were held in various locations which enabled youth to interact with both educators as well as professionals from the clothing and textiles business sector. Youth attended oral presentations, business tours, internships and fashion shows. Through these interactive experiences teens gained first hand knowledge and experience in the field. Results: Twenty-two teens expanded their horizons through four workshops and a four day trip. Pre and Post tests and

Results: Team Spirit, (a community based youth leadership program to prevent the abuse of alcohol and other
drugs) track, conducted at State 4-H Congress. Team action plans developed by each team attending. Local
Team Spirit activities conducted at Bradford County High School. Thirty Middle School Youth At-Risk (YAR) completed a specifically designed challenge adventure program. Youth worked together more effectively as a result of the program. DeSoto County CSR coalition has applied for a $100,000 after school YAR program grant. Conclusion: CSR is an effective model for community coalition building and should be implemented in more Florida Counties

J. BUTTERFIELD, Clay County

Self Care Education in Clay County

As the structure of the families change, so do the needs of youth. As more families have both parents working and with

the increase of single parent households, more children are being left on their own. Elementary school children
need to learn self-care practices in order to stay home alone safely. Objectives: To increase community awareness of the positive aspects of self-care and to help children develop skills to safety and constructively manage their time when away from adult supervision. Methodology: The YMCA, and Coordinator of Student Services for the Clay County Schools were contacted about their possible involvement in this program. Presentations were given to elementary school guidance counselors, and social workers from Clay Community Services explaining the educational benefits of this program. Results: Through the collaborative of these community agencies, fourteen elementary counselors, five YMCA site directors, twelve social workers, and twelve fourth grade teachers have been trained to teach this program to their respective groups. 344 elementary students have successfully completed this program and reported their parents felt safer leaving them alone periodically. Conclusion: Community awareness increased as to the importance of effective self-care education.

J. BUTTERFIELD, Clay County

Conclusion:

Community awareness increased as to the importance of effective self-care education.
Objective: W. CREWS, Bay County
Wise use of leisure time and recreational hobbies were targeted as priorities by the Okaloosa 4-H Advisory Committee.

Four-H Super Summer Provides Opportunities for Okaloosa Youth

K. COLDICOTT, Palm Beach County

Twenty-nine new 4-H Community Club leaders were recruited and trained during the 1994-95 4-H year. Objective of this process is to recruit adults with a sincere interest in volunteering with youth and to provide training as related to their volunteer position. Screening is done to help ensure that potential volunteers have the youth's best interest in mind. Training is provided in an effort to give adults the wherewithal to perform their volunteer role with fewer frustrations and more accomplishments. Methods include recruitment advertisements in five local newspapers, an application and history disclosure form including references, reference checks performed by middle management volunteers, a personal interview, and six hours of orientation. Results: Approximately 60 inquiries about becoming a 4-H volunteer were received between September 1, 1994 and August 1995. Thirty of these adults followed through with completing a volunteer application and a personal interview. Upon completion of the personal interviews, 29 adults attended and completed the six-hour orientation. New volunteers reported gaining valuable information during the personal interview and orientation phases of this process. Conclusion: With reports of child abuse in other youth serving organizations in Palm Beach County and the need for information about developing a 4-H club by potential volunteers, this process of recruitment, screening, and training was implemented in September 1994. During the first year of implementation, 13 new 4-H Community Clubs were formed with two clubs dissolving within six months of formation.

New Leader Recruitment, Screening, and Orientation In Palm Beach County

K. COLDICOTT and A. NORMAN, Palm Beach County

Approximately 60 inquiries about becoming a 4-H volunteer were received between September 1, 1994 and August 1995. Thirty of these adults followed through with completing a volunteer application and a personal interview. Upon completion of the personal interviews, 29 adults attended and completed the six-hour orientation. New volunteers reported gaining valuable information during the personal interview and orientation phases of this process. Conclusion: With reports of child abuse in other youth serving organizations in Palm Beach County and the need for information about developing a 4-H club by potential volunteers, this process of recruitment, screening, and training was implemented in September 1994. During the first year of implementation, 13 new 4-H Community Clubs were formed with two clubs dissolving within six months of formation.

Taking Care of Me

K. COLDICOTT and A. NORMAN, Palm Beach County

Objectives: To provide youth with opportunities to learn ways to take care of their health through proper nutrition and exercise, to provide youth with opportunities to learn positive communication skills with peers and adult, to encourage youth to share the knowledge gained with parents. Methods: A series of five lessons were conducted during the after school hours with a selected group of fifth grade youth. Activities related to nutrition, wellness/exercise, conflict resolution, stress reduction, and appreciation for diversity were presented. Each lesson incorporated opportunities for youth to make decisions and communicate with peers and adults. Take home parent letters and recipes were sent with the youth after each session in an effort to transfer the knowledge from the classroom to the child's family. The take home recipes represented snacks that youth prepared during each lesson. The concept of exercise as part of overall well-being is reiterated during each lesson. Results: A total of 52 youth participated in the Taking Care of Me pilot projects. Evaluations were completed by 41 youth participants (79%). The evaluations indicate that participants did gain knowledge and they did change behavior as a result of the lessons. Fifty percent of the participants, indicated that they did use the take home recipes to make snacks at home, 100% of the respondents could identify healthy food choices, and 71% are practicing positive exercise and stress management techniques. Conclusions: Fifty-two youth, observed to be at risk for poor health by School Public Health Services, gained knowledge and practiced behavior changes as a result of the Taking Care of Me pilot projects.

Four-H Super Summer Provides Opportunities for Okaloosa Youth

E. A. COURTNEY, Okaloosa County

Wise use of leisure time and recreational hobbies were targeted as priorities by the Okaloosa 4-H Advisory Committee. Objective: 4-H Super Summer exposes youth to 4-H programs and provides the opportunity to participate in fun, educational activities promoting wise use of leisure time. Methodology: Ideas for special interest "learn by doing" classes were compiled and volunteers and resources were identified. Registration, enrollment and publicity materials were developed. The publicity package for "Super Summer" included numerous methods of reaching clientele. Thirteen to sixteen different classes are offered each summer in two locations. Result: Since 1986, enrollment has steadily increased (447 youth enrolled in 44 classes taught by 53 volunteers). Observations, verbal and written evaluations indicate youth and volunteers enjoyed their participation, gained new knowledge and skills and became more familiar with 4-H. Conclusion: Special interest 4-H programs are a successful means of reaching youth and recruiting volunteers. A varied 4-H program in the summer meets community needs and benefits youth and adults.

Tropicana Public Speaking Contest

W. CREWS, Bay County

Objective: To increase the knowledge and speaking ability of youth based upon popular topics of relevant interest to the speaker. To expand the local 4-H program to include previously unreached audiences. Methods: An in-service education program was conducted for the 4th, 5th, and 6th grade teachers in Bay County to introduce the Tropicana 4-H Public Speaking Contest. The teachers in attendance reviewed school year calendars and a date was selected for the county contest. School classroom visits were planned and conducted by the 4-H agent and the program assistant. The video was shown and created a quick and heightened interest in the contest by the students. Results: As each classroom held a contest and winners were picked, students began to realize how fun and important this contest was. Each school contest was attended by many excited parents and friends. When the time finally arrived more than 1,200 students had met the objectives of the Tropicana 4-H Public Speaking contest. Teachers, students and parents surveyed agreed that the contest was a success and should be conducted on a yearly basis. Schools that chose not to participate indicated a strong interest in doing so, the next opportunity available. Conclusion: The public speaking contest is important because the ability to communicate well is one of the virtues of a strong leader. The contest offered parents and youth an opportunity
Water Quality has been identified by the Extension System as one of the national priority initiatives. There is a need for Water Quality Programming for Youth Audiences (88).

Objectives:

- D. A. DINKINS, Leon County
  - Leon County 4-H Ecology Camp for Youth at Risk

Research has shown that paraprofessionals are effective in delivering programs to low income audiences. J. C. EDWARDS, FA&MU

Objective: Paraprofessionals and Their Supervisors

Methods Used: A questionnaire was developed which included 38 tasks identified as relevant to the work of paraprofessionals. Supervising agents and paraprofessionals completed questionnaires via mail. The t-test was used to determine differences between supervising agents and paraprofessionals on actual and ideal performance of proactive, reactive and administrative tasks. Result: There were differences between perception and expectations of supervising professionals and paraprofessionals on two proactive, two reactive and four administrative actual tasks; and on two reactive and seven administrative ideal tasks. Overall there was more agreement than disagreement on actual and ideal performance of these tasks. Conclusion: There was considerable consensus between the two groups on actual and ideal performance tasks. However, instances where differences were found the research concluded that there was conflict between the groups.

Conclusion: 4-H can offer relevant programming for youth at risk and obtain resources required to provide a quality program.

The Role of Paraprofessionals in Florida Extension Programs for Low-Income Rural Residents as Perceived by Paraprofessionals and Their Supervisors (88)

J. C. EDWARDS, FA&MU

Research has shown that paraprofessionals are effective in delivering programs to low income audiences. Objective: To determine if there were differences in perceptions and expectations of paraprofessionals and supervising professionals on how tasks and responsibilities are actually and ideally performed by paraprofessionals in working with low-income rural residents. Methodology: A questionnaire was developed which included 38 tasks identified as relevant to the work of paraprofessionals. Supervising agents and paraprofessionals completed questionnaires via mail. The t-test was used to determine differences between supervising agents and paraprofessionals on actual and ideal performance of proactive, reactive and administrative tasks. Result: There were differences between perception and expectations of supervising professionals and paraprofessionals on two proactive, two reactive and four administrative actual tasks; and on two reactive and seven administrative ideal tasks. Overall there was more agreement than disagreement on actual and ideal performance of these tasks. Conclusion: There was considerable consensus between the two groups on actual and ideal performance tasks. However, instances where differences were found the research concluded that there was conflict between the groups.

Water Quality Programming for Youth Audiences (88)

E. S. FARRELL, Sarasota County

Water Quality has been identified by the Extension System as one of the national priority initiatives. There is a need for educational programs on the importance of high quality water, on the need to use water resources wisely, on the impact of chemicals on water quality and on methods of water conservation. Objective: To develop resources for youth programming in Water Quality. Methodology: During a six month internship with USDA in Washington, DC working with the National Water Quality Team, contacts were made nationwide to locate youth educational materials and programs being conducted and to select those appropriate for Extension and youth programs. Result: The package includes an outline to suggest possible content of youth programs, a collection of experiential activities to demonstrate outline topics and description of model programs showing how the information is being used in select situations. Conclusion: Resources are available to help agents conduct effective youth water quality programs.

Youth Experience Agricultural Science and Career Options Through “4-H Mentors in Science” (89)

S. G. FISHER, 4-H Youth and W. R. HELTEMES, Alachua County

There is an inadequate supply of youth committed to solving agricultural problems. Youth, families and teachers are
unaware of the science competencies required in agriculture. **Objective:** "4-H Mentors in Science" provide youth with agricultural science experiences in laboratories and field locations. Parents and teachers join youth in learning about career options. Tenth, 11th or 12th graders are matched with a UF faculty mentor. Academic credit is awarded when the student successfully completes a 30-40 hour project. Project reports are given at CAREER DAYS which parents also attend. **Results:** The 4-H department with three counties, seven other IFAS departments, Dean for Resident Instruction, a USDA grant and agribusiness financial support successfully completed a test of this program model. **Conclusion:** New delivery and recruitment strategies can be designed and used to successfully introduce new audiences to science-based agricultural careers.

### 4-H Targets Special Education Classes for Horticulture, Foods and Nutrition (89)

S. K. FRY, Okeechobee County

Many 4-H projects are designed for the child with normal abilities. In order to make projects available to children with special needs, it becomes necessary to revise current materials. These materials are becoming more readily available because of the increased demand for materials for special needs groups. **Objective:** To develop horticulture and foods and nutrition projects suitable for teachable mentally handicapped and profoundly mentally handicapped students that would: increase motor skills through the use of large and small gardening tools; nurture a knowledge base for the care and maintenance of a plant system; and create an awareness of good nutrition by growing good things to eat. **Methodology:** The students would prepare a garden site at the school and plant a variety of vegetables and flowers. Assistance for the garden was provided by the Extension Agents and master gardeners. Food and nutrition instruction was provided by the classroom teacher and a record book was provided for each participant. **Results:** Eighteen students participated in the garden program, ten completed the record book.

### H20 Encounter - Okeechobee 4-H Day Camp (91)

S. K. FRY, Okeechobee County

H20 Encounter is a day camp designed to teach youth 8-18 years of age environmental effects water influences. It involves both fresh and salt water activities. Two grants were obtained for the 1991 camps. A $1000 grant to provide opportunities for low income at risk youth and a $6904 grant to employ teachers initiate the use of teen counselors, develop curriculum and purchase equipment and supplies. Nine paid instructors, 13 teen counselors and 160 youth were involved in the implementation of the camp. Teaching activities included field trips (deep sea fishing, Jonathan Dickinson State Park, sewage treatment plant, Epcot Sea Immersion Program) and hands on activities (used Aquatic Project Wild water testing for lake and tap water, seining). A notebook of the activities was provided for each participant. Participants were pre and post tested. Comparison of test scores showed a greater improvement among younger participant.

### Agricultural Literacy for Workforce Preparation (96)

S. FRY, Palm Beach County

Global competition has affected the American way of life. Youth development must be more scientific and technologically oriented. **Objective:** To research the utilization of technological agricultural education in kindergarten through high school grades to teach basic skills necessary for the transition of the student into the workforce. To identify indicators for evaluation of 4-H youth development. **Method:** This research was initiated through a grant with the Leadership/Mentoring Project through the Affirmative Action Office. Research involved attendance at the National 4-H Workforce Preparedness Symposium in Washington, D.C., attendance at the workshop on Academic Management and attendance at a workshop, "Organizational Learning". It also involved research through books and articles related to learning and youth development and interviews with teachers and volunteers in youth development. **Results:** Use of hands-on technological agricultural activities in the classroom have benefited students who generally do not do well in the academic classes. These activities can be used in a holistic approach to education showing improvement in grades and/or participation in the classroom. The benefits of this student involvement in agriculture is the introduction to the broad spectrum of agriculture related jobs, involving advanced science technology. **Conclusions:** It is anticipated that this exposure to agriculture will decrease percentages of school dropouts, increase percentage of students continuing post-high school education and entrepreneurship. An in-depth study and tracking of students is necessary to provide accurate documentation.

### Treasure Coast Environmental In-Service (94)

S. FRY, St. Lucie County and L. HARRIS, Martin County

Forty-six educators from six counties participated in a week long environmental in-service that was co-sponsored by UF/IFAS and Florida Power and Light. **Objective** of this in-service was to create an awareness of our role in preserving the environment. **Methods** included organization of daily presentations for a five day in-service. Presentations included: tours of the Barley Barber Swamp; training in Project Wild and Project Aquatic Wild; FPL's Energy Encounter, marine touch tank, beach mangrove walk and the lobster research project; introduction to 4-H curriculum including Water Wise Guys, Recycling Adventures, Earth Connections, Magic of Electricity and 4-H Fun With Foods; and Florida life. **Results** were participation of 46 educators with the potential of reaching thousands of Florida youth through the formal and non-formal educational settings. Each day was evaluated with very favorable results. **Conclusion:** There is a growing need for the training of educators to present environmental programs to the youth of the state. This in-service provided necessary in-service credit for those educators needing minimum credits in the science area. This in-service was nominated for the 1994 Governor's Environmental Awards Program and finished in the top five. It will be offered for the second time during August 1995.

### 4-H'ers Promote Good Sight (88)

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C. J. GOODMAN, St. Johns County
St. Johns County elementary aged youth who regularly visit an eye doctor is far below the national average. The eye safety practices and eye care programs in youth K-3rd grades. Methodology: County Council 4-Hers wrote, directed, produced, and financed (through grants) a play promoting eye care. 4-Hers assisted the local Lions’ Club at a health fair and eye care fund raiser. Result: Over 1200 youth and adults were reached with the play. A 5% increase was noted in youth reporting eye concerns to teachers and school nurses. The Lions’ Club raised $5,000 for eye care with 4-H’s advertising. During the health fair 240 persons were screened for glaucoma and 152 persons participated in the eye test. Conclusion: Elementary youth are aware of good eye care practices and are observing them as a result of the 4-H eye care program.

4-H Expedition Management (87)
M. HALUSKY, Duval County and J. HALUSKY, St. Johns County (Sea Grant)
Leadership is learned through actual experience in real situations. Objective: To provide progressive experiences for teens to learn leadership skills in controlled situations having some risk for failure. Methodology: An expedition is a small group field exercise having a specific goal, time frame, and end product. Examples include: canoe trip, backpacking, or underwater research producing a slide set, travelogue, science project or publication. A series of workshops provides teens with basic skills needed for an expedition. Expedition leaders are appointed by the trainer to organize and conduct the expedition. During the trip youth make all decisions: adults intervene only to prevent accidents or for safety and to conduct a daily debriefing. Each teen contributes to discussions related to the trip’s progress. Results: Six expeditions provided 36 leadership positions involving 105 teens. Carry over of the skills learned is evident as teens assume teen volunteer roles supporting county 4-H programs. Conclusion: Expedition training is an effective way for teens to learn planning, risk management and practice leadership skills in real situations.

4-H Expeditions: Experiential Model for Increasing Knowledge and Developing Leadership (96)
M. HALUSKY, Duval County and J. HALUSKY, St. Johns County (Sea Grant)
An experiential model that teaches teens to investigate eco-tourism, sustainable development and cultures while learning leadership skills is developed. Objectives: To provide a model for experiential training for teens that enables them to conduct an immersive expedition to a different culture and report their findings. Methods: The seventeen teens selected as their mission: "To investigate how Costa Rica is managing natural resource, tourism and agriculture development in such a way that natural ecosystems, historic sites, and current human culture are sustained". They received fifty hours of training in fund-raising, subject-matter, leadership and team-building prior to traveling. They were organized into leadership roles including: expedition leader; logistics; agriculture, natural resource and human culture team leaders; archivists; photographers; journalists and editors. During the expedition, sixteen Costa Rican professionals provided economic, environmental and cultural information. Results: The knowledge gained was demonstrated through published articles, slide scripts and exhibits the teens developed to report their findings. Conclusions: Through the combined efforts of Extension faculty in partnership with travel consultants, volunteers, and Costa Rican professionals, teens experienced a different culture, gained an appreciation of sustainable practices in a global environment and improved leadership skills in challenging situations. The expedition model originally designed for backpacking, canoeing, and scuba-diving is developed and refined for educational programs involving inter-state and international travel.

Use of the 4-H Professional Research and Knowledge Taxonomy for Professional and Volunteer Staff Development (88)
M. J. HALUSKY, Duval County and A. HILLIKER, 4-H Youth
4-H Extension professionals have various backgrounds (e.g. agriculture, home economics, or education). Often they need current research data in social sciences that pertains to youth development, communications, volunteerism, program design and management. Objective: To increase the understanding and expertise of Extension professionals and volunteer adults in one or more of the five areas of competency needed to be effective youth development educators. Methodology: To acquaint selected 4-H agents and volunteers with the PRK Taxonomy and involve them in understanding how a specific area of expertise can increase their competency. Result and Conclusion: The taxonomy is a useful tool in clarifying the 4-H professionals’ and volunteer adults’ understanding of their role in youth development. taxonomy and database allows the professionals and volunteers access to the most recent research pertaining to 4-H in a central location.

FLUTTER BYES: a Middle School Butterfly Gardening and Entomology Curriculum (96)
L. HARRIS, Martin County and S. FRY, Palm Beach County
Butterfly gardening has become a popular way for educators, Master Gardeners and even big businesses to participate in a positive way with the environment. There is a need to present follow up curriculum for the participants to get the most out of this “hands on” learning activity. Objectives: The objectives of this curriculum are to present a fun, educational way for middle school youth to learn about entomology, butterfly gardening, the beneficial aspects of organic gardening, and to help educators supplement their state mandated curriculum. Method: The methods of education vary within the curriculum. There are "hands-on" methods, there are also games and worksheets. Also included are color posters (butterfly posters, wildflower posters), a butterfly video (“Butterflies” by Dr. Craig Hugle-Pinellas CES), and a set of Butterfly molds (exclusively Florida Butterflies to be used with plaster of Paris). Used in conjunction with one another it becomes a fun, colorful way to learn about insects and gardening. Results:
Although the curriculum is still in experimental stages it has been utilized by both teachers and club leaders. The results have been 100% positive. Both leaders and teachers have submitted exercises to be included within the finished curriculum. Although it can be used as a package, parts of the curriculum can also be utilized separately. Over 500 youth and leaders have so far utilized this curriculum. Conclusion: The curriculum could use more activities and is presently being examined by other University Specialists to include their input and expertise.

4-H Newsletter is Fun and Educational  (87)
J. F. HART, Lafayette County
4-Hers receive a monthly newsletter but this does not mean that they read and absorb the information in it. Objective: A decision was made to write newsletters that would capture the 4-Hers attention and encourage them to read. Methodology: The summer newsletters were written with a call-in game included. The 4-Hers were encouraged to read the newsletter, find four-leaf clovers hidden in the articles and call the Extension Office as soon as possible. The first five callers won cash, and other callers received consolation prizes (pens, buttons, etc.) Results: During the summer months the Extension Office received over 60 calls from 4-Hers responding to the contest. Conclusion: Providing participation and rewards through a 4-H newsletter encourages the 4-Her to read and respond.

Annual 4-H Project Record Book  (91)
W. R. HELTEMES, Alachua County
In 1990, with the help of a group of adult and teen leaders, I reviewed the project record book system being used. There had been much concern regarding inconsistency from one project to the next in relation to learning objectives and reporting criteria. The quality of completed books was also decreasing. There was a lack of standards and criteria for judging completed records. A draft of an annual project record and an annual achievement record was presented to the leaders. The draft was reviewed and finalized in this way. The final product is an annual project record and an annual achievement record for each of three age groups: grades 3-5, 6-8 and 9-12. Record judging forms were then developed for each group according to subject matter: beef, dairy, goat, horse, poultry, swine, rabbits and non livestock projects. The records and judging system were introduced by club leaders at club meetings after a club leader training. As a result of these changes 29 achievement records were completed and 246 record books in other projects were completed. 106 project pins were awarded. This is an increase of 69% in record books from the previous year and a doubling of members completing books. 50% of club members completed a project record book.

Celebrate Children '95 Teaches Health and Nutrition Education  (95)
T. HENDERSON and E. COURTNEY, Okaloosa County
Objectives: Provide preventative health and nutrition education to second and third graders. Methods: Celebrate Children '95 was a two day health and safety fair, developed in collaboration with American Diabetes Association and the Department of Health and Rehabilitative Services. Other agencies and individuals were recruited to participate in the program. Funding for transportation was provided by the school district. Six elementary schools were invited to participate. Teachers' packets were provided with copies of all material presented and with follow up activities. Results: 1,117 students and 47 teachers participated in the program. 100% of the teachers evaluated the program as either 'Fantastic' or "Great". 89% said the program resulted in an increase in the children's awareness of nutrition. Extension's visibility in the community was increased through interagency communication and collaboration as new partnerships were formed. Celebrate Children '96 is already being planned.

Super Summer Series  (95)
C. HIGGINS, Columbia County
Lack of summer day camp participation in Columbia County forced agent to look at other alternatives. Objective: To increase participation in 4-H educational summer day camp programs in Columbia County. Methods: An interest survey with possible workshops was developed and submitted to 4 clubs and the County Council. Youth were asked to "vote" on workshops they would be interested in attending. The top 7 workshops were then offered to County 4-H members and the 4-H Super Summer Series was born. Educational mini workshops were designed to increase knowledge and skills in various 4-H project areas. Workshops offered in 1994 included: Food and Fun, Cake Decorating, Life in the Sea, Super Sitters, Crafts Made Easy, Love a Horse, and Teen Adventures. Programs were held during both days and evenings to allow children and working parents to participate. In 1995, programs were expanded to include the following: Food and Fun, Bugs-Bugs-Bugs, Let's Go Fishing, Super Sitters, Jams and Jellies I and II, Hog Fun Day, Quilting, and Orienteering. Results: In 1993, the two traditional day camps that were held had a total enrollment of 18 youth. In 1994, enrollment for the Super Summer Series was 85, and in 1995 enrollment for Super Summer Series 11 was approximately 202. Parents indicated that the two-day commitment was more appealing, that youth enjoyed the programs presented and increased their knowledge and skills in program areas. Conclusion: As time becomes more precious to families, we need to adapt. The Super Summer Series allows youth to participate in educational experiences, interesting to them, with the week-long commitment of a traditional day camp.

4-H Family Camp: Spending Quality Time Together  (96)
C. HIGGINS, Columbia County

Columbia County 4-H Program promoting quality family time in a beautiful, peaceful setting. **Objectives:** Provide 4-H families with the opportunity to spend "quality" time with each other at 4-H Camp Cherry Lake with little or no interruptions (phones, televisions, computers, etc) for a weekend each spring. **Methods:** A 4-H Family Camp Committee was formed from 4-H volunteers and youth. Family Camp Committee met several times during the year to plan all aspects of Family Camp. Funding was secured by agent from various sources to help offset the cost of the weekend. Cost ranged from $10 per family to a maximum of $25 per family (included all food and activities). All activities were planned for the entire family, and each family was housed together by cabins. Family Camp was advertised in the family newsletter and all families were encouraged to attend. **Results:** In 1995, eight families attended family camp. All families indicated what a tremendous, positive experience family camp had been. In 1996, eleven families attended family camp. Again, all families indicated that 4-H Family Camp was one of the best activities available in 4-H. Because of the success of 4-H Family Camp, the committee has recommended that the third annual 4-H Family Camp will be a Friday through Sunday Camp (two nights) instead of just Saturday through Sunday (one night). Each family camp committee member would be charged with recruiting at least two new families to participate in 4-H family for next year to reach our goal of 20 plus families. **Conclusion:** Through participation in family camp, families are learning new and different things about each other as well as spending "quality" time together.

**Strengthen 4-H Summer Camp Through Use of MADD Counselors** (87)

W. E. HILL, JR., Hernando County

Each summer Citrus, Hernando and Sumter Counties start their camping program by having a three-day counselor training camp to prepare senior 4-H members for their role with the tri-county camping program. **Objective:** To Motivate, stimulate good Attitude, Determination and Dedication to summer camp and total 4-H program. **Methodology:** Counselors start the program by first selecting the topic in which they want to teach or assist. Then they prepare a lesson plan for teaching which is critiqued by agents. The teens are given a set of camp rules and regulations. The camp coordinator addresses each rule, giving examples as we go. **Results:** The 4-H youth summer camp program for the three counties had a total of 150 youth and 4 volunteers attending 4-H camp. **Conclusion:** Counselor Training is an effective way for teens to become Motivated, stimulate good Attitude, develop strong Determination and to become Dedicated to 4-H programming. They also learn how to plan and deliver a program.

**4-H Chevron Community Pride Program: A Valued Partnership For Our Communities** (88)

D. L. HOLLOWAY, Liberty County

"Giving Something Back To Our Communities," has been the motto of 4-H'ers and adults as they seek different ways to do a Community Pride Project. **Objective:** 4-H youth and adults are provided opportunities to develop and strengthen their fact finding and community problem solving skills. **Methodology:** 4-H'ers and adults are able to seek ways to give back to their community through several well planned committee meetings sessions and through making contact and working with the governing bodies of the county, city and communities in which they live. Seed money is granted through the proposal method with the intent of other funds being generated through the efforts of the youth and adults. Projects are to be completed during the year funds are received. **Result:** In five years, over eighty youth and twenty adults have worked on twelve different community pride projects and received over $2,500.00 from Chevron, Inc. as seed money and over $10,000.00 in materials and donated time to the projects. **Conclusion:** 4-H Community Pride Projects allows for excellent public relations and high visibility within the community.

**4-H Natural Resources & Agriculture Program in Liberty County** (91)

D. L. HOLLOWAY, Liberty County

**Objective:** 4-H youth and adults are provided opportunities to explore the Natural Resources and Agricultural Resources in this rural county. **Methodology:** Through workshops, field trips, special activities and one-on-one contacts, the youth and adults learn about nature and how it affects them. Contact was made through the schools, 4-H club, newsletter and newspapers about different activities offered. **Results:** Over 175 youth were taught about the different endangered species located in the county. 181 youth (pre-school-8th grade) were introduced to backyard animals through an Old Fashion Farm Day. 150 youth were involved with 4-H judging activities which included poultry, soil, forestry, horse and etc. In all over 1159 youth and adults were contacted with classes and fund raising which brought over $5,000 to be used in future educational classes. **Conclusion:** The 4-H natural resources and agriculture program allows for the youth and adults to be involved with nature in a very close and real manner.

**4-H Embryology Project: Egg in the Classroom** (90)

R. JACOBS, Pinellas County

The need exists for hands-on biological science curriculum for elementary youth. **Objective:** To help students and teachers develop a better understanding of life and the embryo through the use of a chicken embryo. To enable teachers to "make-and-take" an incubator that can be continually used for the curriculum. **Method:** Teachers constructed their own incubators and maintained all the materials necessary for the successful hatching of several avian embryos. Utilizing the 4-H Embryology Project Book, a 20 unit slide set, transparencies and video teachers explored the science of embryology. **Results:** Of those teachers who participated in the embryology workshops, 100% will continue the program during the next school year. Pre/post tests showed that the teachers average a 75% increase in knowledge. The pinellas County School Board will continue funding the program. **Conclusion:** Elementary science teachers are exploring new curricula that provide hands-on experiences for their students. Agriculture is an excellent tool for teaching science and also provides a much needed awareness of its
Objectives:
Youth Experience County Government

Oral communication skills are expected to be among the top marketplace skills for workers of the 1990's and beyond. Traditional educational curricula, however, has emphasized the development of written communication skills over speaking skills. **Objective:** The 4-H Tropicana Public Speaking Program provides pre-adolescent youth with opportunities to develop or strengthen their oral communication skills. **Methodology:** A 4-H school enrichment program was established which networks the Human Resources Department of a major corporation with the youth development expertise of 4-H. Fourth grade teachers and other volunteers implement the program with 5,000 youth, each of whom organized and delivered a 2-3 minute speech on a topic of their choice. **Results:** In a survey designed to measure the effectiveness of the program, teachers indicated high levels of youth achievement. **Conclusion:** Through the cooperative involvement of a committee corporate partner, 4-H can provide relevant and effective "learn-by-doing" experiences for youth which encourages creativity and supports excellence in a school setting.

RESOURCE 2020: A Partnership Program That Helps Students Discover Natural Resources from a Futures Perspective

A. P. KERSEY, Polk County

Population growth and the rapid urbanization of Polk County are presenting complex challenges for citizens and decision-makers. Both Extension and the city of Lakeland are concerned with helping prepare today's youth to live productive and meaningful lives in spite of "doing more with less". **Objectives:** Participating sixth-grade students will demonstrate their ability to solve scientific problem and invent options for managing energy and water in the future. **Methodology:** A partnership was formed involving 4-H, Lakeland, and County Schools. A budget was developed and funded by $8,000 in grant funds. Resource materials and supplies for classrooms included experiments, featuring exercises and six videos transferred to a single tape. **Results:** Twenty-five schools, fifty-two teachers and 1500 6th grade students participated in RESOURCES 2020. Eighteen department chairmen received a half-day of in-service training in using the program components. Videographic evidence displays program rich potential for learning. **Conclusion:** Youth enjoy the challenge of seeing themselves cooperatively "in control" of their futures.

A Leadership Development Process Begins Waste Management Education for Kids

A. P. KERSEY, Polk County

**Objectives:** Bring waste management education to the children and youth of Polk County. **Methods:** Strategic planning with education and community leaders; networking with other agencies and organizations; developing teacher-trainer cadres; providing curriculum support; and presenting educational activities to staff and students. **Results:** A design team of school district leaders studied problems and opportunities related to waste management education in the school system. A strategic plan and a budget were developed. Fifty teacher-trainers were recruited, trained and debriefed and a curriculum support package was developed and delivered in grades pre-K through 8. The curriculum package included a notebook of interdisciplinary learning activities; a video; a poster; and stickers. The content was adjusted for three grade levels. By spring, over 1500 educators were supplied with the curriculum package and one-third had been supported by a member of the leadership cadre. **Conclusion:** Extension provided leadership for effective implementation of waste management education to Polk's 100,000 children and youth.

Youth Experience County Government

A. P. KERSEY, Polk County

**Objectives:** To design a leadership development experience for outstanding high school youth that uses county government operations as its learning environment. **Methodology:** County Administrators wanted to improve students' knowledge about county government and suggested that the agent prepare a proposal. The agent developed a proposed program in a fellowship format. Several outstanding students at each of Polk's high schools were named "Leadership Tomorrow Fellows". **Results:** Thirty teen leaders spent 25 hours of "hands-on" time visiting county departments and engaging in a variety of leadership development sessions. Funding was secured from two grants - one from the Board and another from the Florida League of Cities. **Conclusions:** Extension can respond effectively to requests to develop model leadership programs with a force on the community needs and resources that are closest to them.

Adventures in Today and Tomorrow: A Creative 4-H Career Exploration Activity

A. KERSEY and J. BRENNEMAN, Polk County

Early adolescents are often overlooked in career exploration programming, yet they are at an age when the matching process between personal interests/abilities and job market begins. Youth who fail to develop positive self-images about their futures are at risk for many destructive behaviors. **Objective:** To provide a series of activities for early adolescents that provides hands-on experiences in career exploration. **Methods:** Site visits were made in five types of industries and the roles of changing technology and educational preparation were integrated into the thirty-plus jobs illustrated. In addition, career exploration software encouraged selfdiscovery. Video skits featured groups of participants role-playing "businesses-of-the-future". Lifestyle choices and an emphasis on Central Florida as an international community were integrated into the program. **Results:** Twenty-eight early adolescent youth participated in thirty-two hours of career exploration activities. **Conclusion:** Pilot program demonstrated youth and volunteers can be successfully involved in intensive career exploration activities leading to personal growth.
Our Voices Are Being Heard, Finally (The Jefferson County 4-H Listening Project)  (96)
J. LILLY, Jefferson County

Through the 4-H Listening Projects (JCLPs), individuals who are concerned about a pressing issue in their community develop a community survey, receive training in conflict resolution and communication skills and carry out this survey. Objectives: To create more activities in the County for young people. To encourage more young people to do more positive activities in the county. To help raise young people's awareness that they can create change. To help increase positive, supportive relationship between adults and young people in the county. Methods: 4-Hers from the Jefferson County 4-H County Council developed a survey. Surveys worked in teams of two people, with one person asking the questions and the other recording the responses. Many JCLPs were conducted door to door in identified communities. Over 150 youth were interviewed. Once the interviews were completed the results were compiled by the 4-Hers and put into binder. The final results were presented to the Monticello City Council, Jefferson County Commissioners, and the Jefferson County School Board District. Results: As a result of the Jefferson County Listening Project, the youth were able to: 1) identify and develop community-based participation and leadership; 2) clarify community needs while building a foundation for action; 3) increase understanding between groups in conflict; 4) empowered all participants to work together toward effective solutions. Conclusion: Using the questionnaire developed by the coordinating committee, over 150 young people were interviewed by other young people. One simply replied, "I'd try to provide positive activities so that they wouldn't turn to violence".

Improving Youth Employability Skills  (94)
J. LILLY and P. KENNEDY, Jefferson County

There are few job opportunities in Jefferson County for youth. They must settle for dead-end service jobs or seek employment elsewhere. However, they are not prepared to compete in the job market. Objective: to present an effective career education program that would prepare youth for today's job market. 2) to encourage high school students to continue their schooling into higher education. 3) to teach youth how to seek higher income jobs. Methodology: Eight 50-minute workshops were held for the teen-age parents during school hours. Two trips to nearby technical schools and a trip to Florida A & M University were provided during school hours. Results: Eighteen teenagers improved their skills in writing cover letters and completing job and college entrance applications, and increased their knowledge on characteristics employers look for, personal appearance and career possibilities through higher education. Four students completed practice job interviews. Conclusion: 4-H can be effective in teaching employability skills to high school students. In addition to what was taught, teen-age parents need more in-depth help in building self-esteem.

Focus on the Future: Enhancing Literacy and Technological Literacy  (95)
J. LILLY, P. KENNEDY, S. McMULLEN and L. HALSEY, Jefferson County

The County 4-H program was awarded the USDA Youth-at-Risk grant in 1991. About 400 second, third, fourth and fifth graders and over 100 teen mentors have participated in after school projects and an additional 600 in the summer. Objective: The project was designed to give early intervention with low reading skills children, using computer and CD-ROM as an attractive teaching tool. Actions leading to internalized locus of control and elevated self-esteem and methods using one-to-one mentoring were desirable. Methods: Over 1 00 children with multiple risk factors including below-norm scores on California Achievement Test (Reading) are enrolled each fall. 1 8-24 youth attend each afternoon, with activities targeting improved reading ability. 30-35 teen mentors assist two grant-funded staff, in carrying out project. Many varied software and print materials supplement 4-H curriculum. Special activities augment lab instruction: field trips, participation incentives, family interactions. Parallel parenting education is conducted. Results: CAT reading scores for 50% of project youngsters in FY93/94 rose by an average 1 2 percentile points against national norm. 23% of scores remained constant. Evaluation indicates a rise in self-esteem and internal locus of control by most participants. Attendance measures 88% for voluntary enrollment by at-risk youth. Conclusions: Validity of intervention methodology with multiple-risk youth has been confirmed and sustained over four years. Funding from federal sources ends March, 1996. Extension is seeking local funding to sustain project at termination of grant.

County Clustering: What Do Agents Think?  (96)
C. LITTLE, Clay County

Objectives: (1) To describe the status of county Extension staff/faculty perceptions about clustering. (2) To develop a profile of the different clusters. (3) Determine necessary changes to help clusters operate at a high level of efficiency. Methods: Focus group interviews were conducted with Ohio Extension Agents involved in the cluster staffing pattern. All agents known by administration to be operating in a cluster unit for a minimum of one year were interviewed and tape recorded for transcription. Results: Data indicated agents were very positive toward the clustering concept. Agents indicated that support from fellow agents was a major benefit to clustering. However, 4-H agents experienced difficulties in specializing. Many valid suggestions by agents were given as to the development of the clustering concept. Conclusions: Agents gave relatively few comments as to the barriers and road blocks of clustering. For clustering to be implemented in most scenarios, agents specialize and complement each other specifically in areas within a geographic area. Team working conditions and evaluation systems must be developed for agents. Agents felt they needed few directives from administration as to the organization of their cluster units, but financial support would help.

Extension/Youth Organization Networking to Provide School Enrichment Opportunities  (91)
R. H. PARKER, Walton County

There are four private day care centers housed in Walton County to accommodate 4300 school age youth, 51% of whom
Two Hundred Forty Youth, ages 8 to 12, attended week-long summer day camps in four minority neighborhoods. **Objective:** Provide enrichment activity for grades K-8 after school, on teacher planning days, during summer and some vacation days. **Methodology:** A planning committee for SPICE program (community education) including an agent from OWCC, Extension Service, HRS, Parent Groups, Girl Scouts, County Educators, and County Library. Activities such as: arts, crafts, homework assistance, physical, music, citizenship, computer, field trips, environmental education and health and nutrition were identified. The program, governed by Community Education Dept., would operate within Project Independence and Title XX. PIC, Senior Employment, and OWCC students were used as sources for job applicants. **Results:** Over 100 youth were enrolled in SPICE. Ten youth were in Project Independence and 15 were in Title XX. Fees were supplemented for 50 youth by SPICE. **Conclusion:** A successful school enrichment program can be founded by networking of youth related agencies who work together for the benefit of the program.

### 4-H Sheriff Department Day Camps Success in Sumter County (95)

D. PEACOCK, Sumter County

Two Hundred Forty Youth, ages 8 to 12, attended week-long summer day camps in four minority neighborhoods. Participation was limited to youth living in those neighborhoods. **Objectives** were to provide camping experiences for youth who normally would not attend camps, and to improve self esteem which would ultimately lead to safer neighborhoods. Low self esteem is related to drug and alcohol abuse, teen pregnancy and juvenile crime. **Methods** included partnering with the Sheriff's Department to plan and implement the program, holding neighborhood meetings to scout support and sites, working with the School System to secure buses for field trips, and setting up a summer food program at each site. The 4-H Department received funding of $1,200 through the Juvenile Justice System. Seventeen youth at each camp and the four counselors were identified as "Youth at Risk" as specified in the grant. The four counselors had arrest records. The theme of the camps was Safety and Conservation. A deputy and the 4-H Agent conducted eight hours of formal counselor training besides hours of on-the-job training. **Results:** Two Hundred Forty youth learned while having fun fun fun activities. Neighborhood meetings sparked discussion of youth issues and concerns as well as support for day camps. Over 1200 nutritious lunches were served. **Conclusion:** In rural communities, Extension, partnering with other community organizations can impact greatly on neighborhoods with limited resources. "At Risk Youth," given leadership opportunities, can achieve success and become role models.

### 4-H Addresses the Issue of Homelessness (90)

D. PEACOCK and J. YATES, Pinellas County

Parents with children make up the largest block of the countable homeless population. This segment is growing at increasing rates. Many homeless are school aged children who may be the object of scorn and ridicule from their classmates or are too embarrassed by their situation to let teachers know that their home life is undergoing difficulties. **Objectives:** 1) Enhance homeless and non-homeless children's understanding of the causes and results of homelessness and 2) sensitize and motivate teachers and children to get involved in accepting/assisting homeless children. **Methodology:** 4-H gave leadership to KIDSTART: Kids Can Care, a community education project that addresses the issues of homelessness. Fourteen private and community agencies provided support to the project. A curriculum and video were developed for use by the school system, 4-H clubs and church and civic youth groups. A food drive involved 50,000 students in a community service project. **Results:** 208 public and parochial teachers and almost 6,000 third grade students participated in the program during 1990. Evaluation results were very positive.

### 4-H Adult Horsemanship Schools Train and Recruit Horse Program Volunteers (90)

D. L. PITZER, Putnam County; E. L. JOHNSON, Animal Science and J. C. NORTHROP, 4-H Youth

**Objective:** Adult participants will become more familiar with the 4-H Horse Program increase their riding and teaching skills and increase their level of involvement in county 4-H programs. **Methodology:** A 6-member advisory committee organized two 4 day Horsemanship Schools for adults. Volunteers and professional instructors conducted programs on riding skills, wound management, hoof care and nutrition. Other topics were 4-H Horse Judging and Quiz Bowl contests, determining needs and providing incentives for 4-H youth. A post-evaluation was given to measure perceived knowledge gain. **Results:** One hundred-sixteen adults from 26 counties participated in one or both schools. Of these 40% were 4-H parents or volunteers. Of the remaining participants, approximately 85% felt they had greatly increased their knowledge of the 4-H program. Approximately 55% indicated that they would like to become more involved in county 4-H activities. Evaluations reflected an increase in horsemanship knowledge and skills on the part of all participants. **Conclusions:** Participants in the 4-H Adult Horsemanship School increased their knowledge and skills in Horsemanship and knowledge of 4-H programs.

### 4-H Natural Resources/Shooting Sports Program: Aiming For Success (87)

N. PYWELL, Forestry

This program has been piloted in ten counties this year. **Objective:** To introduce safe gun handling skills and natural resource information through a developmental program. **Methodology:** A team of seven agents, specialists and volunteers attended regional training where they learned skills and teaching techniques and developed a plan for Florida. Ten counties were selected to participate in the pilot program, based on geographical location and population makeup. Leaders were trained by the State NR/SS Team and returned to their counties to develop individualized programs within the constraints set by the state plan. **Results:** As county strategies varied there has been a wide range of results. County leaders report no accidents or near accidents, increased enthusiasm for outdoor programming, feelings of accomplishment in both leaders and 4-Hers and new involvement of homemaker in 4-H programming. **Conclusion:** A need has been seen to develop additional support materials for this program including: a formalized advancement program including; a formalized advancement program, record book and leader's guide. Additional leader training is needed as well. The program will be opened to additional...
While oral communication skills are among the skills most commonly associated with productive living, they are not as widely emphasized in our schools as writing, reading and computing. **Objectives:** To acquire the ability to speak convincingly in public, expressing ideas effectively, and to develop poise and confidence. **Methods:** The 4-H/Tropicana Public Speaking Program has become a very important and effective tool to help enhance oral communication skills for 4th, 5th, and 6th graders in the State of Florida. In 1986 Leon County became the first north Florida county to participate in the 4-H/Tropicana Public Speaking Program. The program has met with great success and support from the school system. To manage a program of this size information must be timely and thorough, and the felt needs of the students, parents, teachers, and administrators must be sought and addressed. Materials, delivery methods and creative additions have been developed and added over the years making this program one of the most outstanding “Excellence” programs for students in Leon County. To meet the objectives of the program in-service training, written materials, workshops, and evaluation instruments have been developed. **Results:** This past year, our eleventh, 6803 Leon County students from 38 schools and home school participated in this program. 250 teachers served as 4-H Public Speaking Project Leaders. The impact of this program has been significant as it correlates with Florida Writes and Blueprint 2000. **Conclusions:** This program gives youth an opportunity to develop communication skills and increase their poise and self-confidence for future endeavors.

**4-H Camp Counselor Training (92)**

E. SHOOK, Leon County, T. R. JONES, D. BENNETT and V. HARVEY, Wakulla County

**Objective:** To increase awareness and improve knowledge and skills of interested teen 4-Hers in the areas of: counselor roles and responsibilities, campfires, leading songs, flag raising, communication, cooperation, etc. **Method:** Potential camp counselors receive 1 to 2 days of training which involves resource persons and a variety of activities to cover topics necessary for a competent camp counselor. Each youth receives a manual which is reviewed as topics are covered. Youth are also given an opportunity to sign up for leadership responsibilities to complete while they are at camp. In addition to the initial training, a “refresher” for camp counselors is held usually 1 week prior to going to camp. All responsibilities and topics are reviewed. Counselors also receive their t-shirts, cabin assignments and camp programs. While at camp, counselor meetings are held once a day to discuss successes, help needed, etc. **Results:** Camp counselor training has become an established part of our program with 24 teens participating this year. **Conclusion:** This program adds to the success of our camp and we are finding that the goal of many of our campers now is to become a counselor and take on the leadership role.

**Community Computer Center Provides Equal Access and Training (89)**

E. L. STEPHENS and B. CANTY, Duval County

Research revealed that certain individuals do not have equal access to computers because of income, limited resources,
crowded classrooms work schedules, age, and cultural differences. **Objective:** To provide a community based learning environment for educating youth and adults. Also, to form linkages with other organizations. **Methodology:** Grants were written to the American Association for the Advancement of Science (AAAS), Apple Corporation, Radio Shack, and the local HUD office. **Results:** The Zeta Community Computer Center was established in July 1988 through a grant received from AAAS and the Apple Computer Corporation. The two-year grant consists of eight (8) Apple Computer Systems (hardware) and one week of training for Extension Agents in Washington D.C. The grant amounts to $20,000. Furniture and software for the center was made possible through a grant of $7,000 from the HUD office. The Zeta Community Center has trained 100 adults as volunteers. Forty (40) pregnant teens, twenty (20) Title 20 day care youth, seventy-four (74) students and twenty (20) teachers have used the center since November 1988. Linkages have been formed with eight (8) agencies for computer training.

**Training Needs of Organizational Leaders as Perceived by Florida 4-H Agents and Organizational Leaders** (87)

J. THIGPEN, Madison County

**Objective:** Identify training needs of Organizational Leaders. **Methodology:** Questionnaires were sent to 4-H Agents and a random sample of Organizational Leaders in Florida. Section I contained a list of training needs of Organizational Leaders. The Leader was asked to indicate the degree of training needed on each item. The Agent was asked to indicate the degree he/she thought new and experienced leaders need training on each item. Section II collected demographic data. Training need level mean scores were obtained for each item for each group and priority training items were identified. Training needs were compared with years of experience of the Agent and leader and the Agent's educational background. **Results:** Significant differences were found between the priority training needs of leaders and Agents and between the Agents perceived training needs of new and experienced Organizational Leaders. **Conclusions:** 4-H Agents have a different perception of training needs for Organizational Leaders than do the Leaders themselves.

**Recycling with Doodis and Sparkie** (94)

P. THOMPSON, Flagler County

This program consists of a 3-segment video, corresponding activity book, leader's guide, order form, evaluation instrument, and child's sticker. **Objectives:** to teach young children how to correctly recycle at home, how to reduce waste and how to re-use throw-away items. As young children become involved, their families usually follow suit. **Methodology:** Grant funds were obtained from the Flagler Solid Waste Recycling Program. This agent worked with a local clown troupe, printer, artist, and video production firm to help write, edit and produce a clown skit, activity book and stickers. Local preschools were contacted and live presentations were made by the clown troupe utilizing the activity book. The teaching package included a video of the clown skit. The activity book was published as camera-ready, and stickers were added. These steps will allow the package to be used repeatedly by schools without requiring additional grant funding, except for the price of stickers. This agent then developed a leader's guide, order form, evaluation instrument and coordinating package envelope. **Results:** Over 437 preschool age children in 13 county preschools participated in the live programs. 80% of parents responding to evaluation surveys had made practice changes as a result of their child's participation. This video package was piloted during the summer of 1994. Preliminary results from two preschools (60 children) indicate a 68% increase in the number of children practicing recycling at home, and a 71% increase in the number of children who responded they were more excited about recycling.

**Mystery Voyage: An Alternative Reward for 4-H Youth** (95)

A. TOELLE, Nassau County

4-H Agents are always looking for methods of rewarding youth. Mystery Voyage is a fun, educational activity that gives agents an alternative to traditional reward systems. The **objective** of the Mystery Voyage is to reward 4-H'ers for participating in the various county events and activities. Mystery Voyage is offered as an incentive for 4-H'ers to participate in these events. **Methods** included initial contacts with the destination to insure that it would meet the group needs. The needs were that the event be fun, educational, appealing to all ages and easily accessible. Okefenokee Swamp Park met this criteria. Only participants in county events and activities were permitted to attend. Transportation was provided by the Nassau County 4-H bus. Participants are not told the destination, they simply get on the bus and we go! Costs for this event included entry fees, gas, and lunch. The Nassau County Foundation underwrote this event. The **results** were that 15 children and three adult chaperons attended. The children thoroughly enjoyed themselves. They then pledged to return to their clubs to encourage further event participation so more kids can go. **Conclusion:** The Mystery Voyage offered a successful alternative to
traditional rewards. Mystery Voyage gives agents a Win/Win situation to reward 4-H'ers for participation. This agent expects participation to increase in the years to come.

4-H Challenge (96)
A. TOELLE, M. WILLIAMS and W. FAVORs, Nassau County

Objectives: To teach groups teamwork, cooperation, and goal setting. Method: 4-H Challenge is a learning experience utilizing games and activities which involve creative thinking, teamwork, cooperation, and goal setting. Agents and staff provide intensive 4-H Challenge workshops to club and school leadership groups. These workshops are also offered to high risk youth populations in day-camp settings. 4-H Challenge activities have been used in adult groups as well. Results: One hundred and forty youth and thirty adults have completed the challenge program. Feedback from the participants have expressed a gain in knowledge in working as teams and the need for cooperation. When the 4-H Challenge program was used in a high risk school setting, the teacher reported an increase in teamwork, cooperation and a "can do" attitude from the youth that participated. Conclusion: 4-H Challenge programs increase participants knowledge and behavior in teamwork, cooperation and goal setting.

Developing a 4-H Exchange Program (87)
R. WARREN, Suwannee County

A method for keeping teens actively involved in 4-H programs is a concern for extension agents. Objective: To involve teens and adults in leadership and citizenship roles by organizing a 4-H exchange club. Methodology: Completed an assessment of potential adult and teen participants. An adult leader was recruited and trained. She recruited and trained two adult leaders to work with her. A host county in Colorado was secured. Members were recruited through local news media, 4-H newsletters and personal contacts. A tentative budget was determined and fund raising activities planned and carried out. Results: Eleven exchange club members and twelve adult leaders spent a week in the homes of Colorado 4-H'ers in the summer of 1987, twenty-three Colorado members and seven adults visited Suwannee County, staying with 4-H families and learning about our culture. Also, local exchange club members and adults have improved their public speaking, citizenship and fund raising skills. Conclusion: Four-H exchange programs encourage active teen and adult 4-H participation. They provide community awareness for the 4-H program.

Developing a 4-H Recycling Education Program (90)
M. R. WARREN, Suwannee County

The State of Florida has mandated that counties reduce the amount of garbage, going to landfills, by 30%, by 1991. Objectives: To educate youths in the three R's of solid waste management and to make them aware of what to put in the bins for the new voluntary recycling program. Methodology: Planned educational program and budget. Secured funding from federal grant. Recruited and trained adult and teen volunteer leaders. Planned marketing strategies. Developed and distributed promotional materials. Five different outdoor classroom activities (day camps) were planned to be held in four locations. Educational activities included videos, lectures, crafts (using recycled item), nature hikes, and tours to the landfill, recycling center, a supermarket and a fast food restaurant. Results: Forty youths, six teen leaders and four adult volunteers have participated in two day camps, called RAP Encounters. Thirty-two youths learned the four R's and how to apply that knowledge. Twenty-nine reported that they are recycling at home. Conclusion: Youth recycling education programs are an excellent way to educate families about the importance of recycling.

Increasing Consumer Skills of Florida Youth (88)
S. R. WILKENS, B. HUGHES-GREGG, Seminole County and M. B. SALISBURY, Osceola County

Florida youth spend an average of $57.00 per month. In order for today's youth to be tomorrow's wise consumers, they must develop good buying skills. Consumer Choices provides that opportunity. Objective: To design a consumer choices program for Florida youth to offer the opportunity to increase consumer buying skills. Methodology: A proposal was written and submitted to the Central Florida Fair in order to implement the first Consumer Choices Contest as part of 4-H Day activities. IFAS specialists in Agriculture, Home Economics, and Horticulture were recruited to develop training resources and judging situations. Results: A total of 277 4-H youth on 80 teams and 60 volunteers have participated in consumer choices training and competed in Consumer Judging Contest at the Central Florida Fair Contest. 13 different counties have participated in the contest. Conclusion: Based on the survey of participants, results indicate consumer choices is a viable tool to teach consumer buying skills.

4-H Clothing Encounter Camp (92)
S. WILKENS, H. S. SALISBURY, B. FAULS, S. FRY, E. SHOOK, M. SIMMONS, N. HACKLER and J. CANTRELL

4-H enrollment in Home Economics was on the decline. 4-H and Home Economics agents felt a camp targeting clothing and textiles would increase interest and enrollment. Objective: To create an awareness and interest in clothing and textiles by: providing an overview of clothing and textiles; improving construction skills and nurturing self esteem. Method: A 3 year curriculum for juniors and seniors was developed. 5 days of camp, using laboratory sessions for constructing garments and rotating sessions for selection, care, presentation of self, consumer education, demonstrations, record keeping, careers, clothing construction and fashion presentation. Lesson plans included workshop topics, suggested age level, materials needed, discussion questions, resources and objectives. 28 companies made in-kind donations totaling $18,104, in order to keep the cost of the camp at a minimum. Results: A 6 month follow up of the juniors indicated they: have sharpened their skills, are feeling more confident; taught their family who taught others and mend the family's clothes. Seniors indicated they saw other sides of the clothing program; organized their clothing; felt better prepared to help others and that the family has made articles together and it has bonded them. Conclusion: The program appear to be a success!
Staff Training for Day Care Providers in Nassau County (94)
M. WILLIAMS and L. HARRELSON-BENNETT, Nassau County

Objectives of this program were to: provide in-service training on developmental needs of children; introduce other youth serving agencies to the resources of the 4-H program; and increase enrollments of youth and volunteers in the county 4-H program. Methods included initial contacts with YMCA summer camp directors, city recreation center summer staff, and other day care providers. Nassau County Extension staff provided the complete training program for the City of Fernandina Beach recreation center and YMCA summer camp employees. Workshops were held for these 2 groups to teach developmental needs of children, positive guidance techniques, orientation to 4-H programs and philosophy, and games and activities for children. Age-appropriate curricula suitable for camping situations were introduced and were utilized by the summer employees in their day camps. Additionally, arrangements were made for these groups to use our 4-H bus for field trips. Results included enrollment of 18 volunteers & over 150 children in day camp programs using 4-H curricula. 18 professionals and young adults received training on developmental needs of children and designed age appropriate day camp activities based on Extension resources. 2 major youth serving agencies became full partners with 4-H in expanded efforts to serve the young people of our community. Conclusions: Other youth agencies should not be viewed as threats to 4-H participation. 4-H enrollment can expand by partnering with these agencies to provide well-grounded programs that meet the needs of children and families.

4-H Dairy Days - Food, Nutrition, & Fun (93)
S. H. WILSON, Washington County

Dairy Days was designed to introduce youth to the physiology of lactation, production, processing, distribution of milk/milk products as well as how milk/milk products are part of a healthy lifestyle. The program was offered as a week-long day camp. Teaching materials are from the National Dairy Council, 4-H/EFNEP, workshop and dairy science handbook. The first day was an introduction to different breed of dairy cows, how cows produce milk and the dairy operation. A milk parlor demonstration board provided by DeLaval was used to show the milking equipment in a dairy. Day two covered different dairy products and the different processing. Day three was a field trip to a local dairy. The dairy tour included the calf barn, forage production, manure dryer/recycler, parlor and holding tanks. Day four dairy foods and diet, including introduction to the food pyramid. Day five was an ice cream party. Hand-crank and electric machines were used and ice cream was compared. Also, an experiment was done comparing the use of salt/no salt on the ice and how fast the ice cream froze. Other activities included making yogurt, cottage cheese, and soft cheese; team demonstrations; and dairy posters. Pre and post-test were given and showed an increased knowledge in different dairy products, production of milk/milk products, and milk quality controls.

Ag In The Classroom - Where's The Beef? (95)
S. WILSON, Washington County

Washington County Extension Service, through partnerships with the local Cattlemen's Association, Farm Bureau, Florida Game & Fresh Water Fish Commission, IFAS Beef Research Unit, and County School Boards taught fifth grade students (500 youth) from Washington and Holmes Counties' six elementary schools about beef production in Florida. Objective of the program is to provide students an in-depth understanding of Florida beef production including career opportunities, financial impact, use of conservation practices, and beef quality. Methods include curriculum Caretakers All from National Livestock and Meat Board, video Why Cows Eat Grass from University of Kentucky's Gee Whiz in Agriculture, and hands-on activities at IFAS Beef Research Unit in Chipley. Farm Bureau provides transportation to the Research Unit. At the Research Unit youth are divided into four groups which rotate through ten-minute sessions on cattle breeds, beef cuts, and products made from beef by-products; cattle health, welfare, and importance of the animal industry in Florida; ranchers and the environment; what cattle eat and forage production. Sessions are taught by extension professionals and area wildlife biologist. Local cattlemen cook and serve a hamburger lunch. Results: Questionnaires from the students indicate they learned the importance of the beef industry in Florida, that cattle do not compete with humans for food, and were amazed at products made from beef by-products. Conclusion: The curriculum supplement and video prepared students for the field trip and participation in the learning experience increased the knowledge retained.

Fire Safety: A Burning Issue (88)
B. E. YOUNG, Walton County

Local fire departments estimate that one-third to one-half of reported fires are started by youth. Since the state has mandated that fire safety be taught in the school system, area schools are an excellent vehicle for meeting the need for educating our youth in fire safety. Objective: To reach county sixth graders with basic information on the prevention and control of home fires. Methodology: A school enrichment program was established with sixth grade science teachers. Volunteer firefighters were used to teach lessons and do demonstrations from the 4-H fire safety project; the 4-H agent introduced the program to students and gave pre- and post tests. Result: Evaluation of pre- and post tests showed an increase in scores from an average of 50% to 80% or greater. Survey portion of the post test also indicated that up to half of the students were talking to parents about obtaining smoke detectors and fire extinguishers, developing a fire escape plan and doing hazard checks. Conclusion: The school enrichment fire safety program is a viable method for teaching youth and increasing awareness of the 4-H program.
Extension Water School for Public Officials and Community Leaders (87)

R. M. AALBERG, Manatee County

Objective: Provide a basic and comprehensive overview of Manatee County's water resource and relevant state-wide factors (legal, institutional, regulatory, hydrologic and policy related) which impinge upon Manatee County.

Methodology: Planned and implemented a 15-hour, 12-topic Water School held on six consecutive Thursday evenings in September-October 1986, plus an all-day bus tour. Results: Over 40 School enrolles, exceeding minimum needed by 100%. Clientele targeting goals (elected and appointed government officials; business, agricultural, environmental and community leaders) were met. Post-test showed a 61% increase in information transfer compared to pre-test. Many positive spin-offs due to Water School networking process. School gave localextension office positive visibility with key local decision makers. School received excellent evaluation from enrolles (8 on 1-10 scale). Conclusion: Extension sponsored water school offers high impact and high profile program for any county where water issues are important.

Agricultural Water Use: Continuing to Grow With Less (89)

R. M. AALBERG, Manatee County

Agriculture has received negative publicity due to alleged overuse of the groundwater resource. Agriculture's position must be communicated to decision-makers and to the public. Objective: To communicate agriculture's legitimate water use needs and continuing progress in water conservation to public officials and to the general public.

Methodology: Agent moderated agriculture portion of the program and presented overview of agricultural water use. Extension Service, IFAS experiment station, Soil Conservation Service and Soil and Water Conservation District. Agent moderated agriculture portion of the program and presented overview of agricultural water use. Results: Nearly 150 key citizens and decision-makers participated. Media coverage reached large numbers of the general public and reflected a positive image of agriculture. Conclusions: Agricultural input into water conservation programs is beneficial to the industry and should be encouraged by Extension staff.

Extension Water School (91)

R. M. AALBERG, Manatee County

Wise public policy decision-making on water issues will benefit all citizens. Objectives: To provide sound, accurate, research-based information to public officials and community leaders to enhance the quality of public policy decision-making on water issues. Methodology: Plan and implement a Manatee County Extension Water School, involving seven weekly, afternoon, two-hour sessions plus one full-day bus tour. Several key topics covered, with major focus on local issues but also regional and state issues. Topics included water quality, quantity, use, policy, conservation, re-use; School covered agriculture, public supply and industry categories plus regulatory programs and issues. Bus tour included key local water-related facilities. Variety of instructional methods and instructors, including both Extension and outside experts. Results: Enrollment goal was met as was goal of involving elected officials, including County Commissioners and legislative candidates. Significant increase in enrolles knowledge based on pre and post tests. Conclusion: School was highly successful and timely. Gave Extension high visibility among community decision-makers. Water high local priority. School met important local need.

Water Policy Education (92)

R. M. AALBERG, Manatee County

Wise public policy decision-making on water issues will benefit all citizens. Objectives: To provide sound, accurate, research-based information to public officials and community leaders to enhance the quality of public policy decision-making on water issues. Methodology: Plan and implement a Manatee County Extension Water School, involving eight weekly, evening, two-hour sessions plus one full-day bus tour. Several topics covered, with major focus on local issues but also regional and state issues. Topics included water quality, quantity, use, policy, conservation, re-use; School covered agriculture, public supply and industry categories plus regulatory programs and issues. Bus tour included key local water-related facilities. Variety of instructional methods and instructors, including both Extension and outside experts. Results: Enrollment and target audience goals were met. Significant increase in enrolles knowledge based on pre and post tests. School received high evaluation. Conclusion: School was successful and timely. Gave Extension high visibility among community decision-makers. Water high local priority. School met important local need.

Water Policy Citizen Interest Group (93)

R. M. AALBERG, Manatee County

Objective: To establish a locally based water policy interest group with three major goals: education and public awareness, enhancement of mutual understanding among competing interests (conflict avoidance) and policy guidance for public policy decision making. Methodology: A ten member steering committee (advisory committee) was established. Goals and procedures were formulated. A new citizen-based, public interest organization, ADVOCATES FOR SOUND WATER POLICY (ASWP), was established. Membership was solicited through media and individual mailings. Results: Over 250 ASWP members enrolled to date. Officers named, budget established, objectives and operational procedures determined. ASWP recognized as key local water group. Five educational meetings held with average attendance of 75. Educational programs have included SWFWMD Needs and Sources Study, SWFWMD proposed new water regulations, National Estuary Program (Sarasota Bay and Tampa Bay), Water Reuse and Agricultural Water Use. Conclusion: ASWP provides a new and strong local interest in water issues. Extension can play an important educational and organizational role in meeting community needs.

Water Education/1994 Water School (94)
R. M. AALBERG, Manatee County

Wise public policy decision-making on water issues will benefit all citizens. **Objective** of this program was to provide sound, accurate, research-based information to public officials (both elected and appointed) and community leaders to enhance the quality of public policy decision-making on water issues. **Methods** included planning and implementing a Manatee County Extension Water School, involving eight weekly, evening, two-hour sessions plus one full-day bus tour. Several topics were covered, with major focus on local issues but also regional and state issues. Topics included water quality, quantity, use, policy, conservation and re-use. School covered agriculture, public supply and industry categories plus regulatory programs and issues. Bus tour included key local water-related facilities in Manatee County. A variety of instructional methods and instructors, including both IFAS/Extension and outside experts, was used. **Results:** The 1994 School was the most successful to date with nearly 60 enrolles. Target audience goals were met and were also significant: 32% of enrolles were government professionals, 14% were elected officials, 18% interested citizens, 16% agriculture and 20% representing private consultants, attorneys, real estate, development and industry. Enrolles's knowledge increased significantly based on a pre and post test. School received nearly a 9.0 evaluation on 10 point scale. **Conclusion:** School was successful and timely. Gave Extension high visibility among community decision-makers. Water high local priority. School met important local need.

Retained Ownership (92)
A. ANDREASEN, Jackson County

**Objectives:** Familiarize beef producers with retained ownership as a marketing alternative and to investigate its profitability. Obtain carcass data on locally produced cattle. **Methods:** Met with producers to discuss retained ownership. Secured guest speaker from Hereford, Texas to explain how retained ownership works and how carcass data could be obtained for producers. Met with interested producers to develop and implement preconditioning program before shipping to feedlot. Weighed cattle to be shipped and recorded weight and price of cattle sold to the same week through local markets. Records were maintained to evaluate expenses and receipts to determine the degree of profitability from retained ownership. **Results:** Several producers showed interest in retained ownership. A load of steers from Bar L Ranch was fed through the fall and marketed March 16, 1992. Carcass data was obtained through cooperation with the Beef Carcass Research Center, Canyon, Texas. Economic data revealed an increased return of $76.26 per calf over traditional methods of sales before opportunity costs and a $55.77 per calf increased return after opportunity costs. **Conclusions:** Retained ownership can provide increased returns to the producer by eliminating the order buyer and associated costs by traditional marketing methods. Retained ownership should prove an even more attractive practice as the price margin between feeder calves and slaughter steers narrows. One should note that when prices fluctuate, producers retaining ownership must assume the risks as well as the profits.

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4-H Livestock Camp (92)
S. ANDREASEN, Jackson County, J. MULLINS, Escambia County, R. H. PARKER, Walton County and R. CARTER, Gulf County

**Objective:** To provide 4-H’ers in a large geographical area who are involved in Animal Science/Dairy Science Programs hands-on instruction from renowned individuals in the Tri-State area. **Method:** Planning sessions identified District 1 4-H Livestock Program needs, areas of interest, and personnel available as resources. Costs for the Timpoochee Camp site, materials, equipment and travel costs were estimated and set. **Result:** The camp schedule was built around a core curriculum program modeled after the State 4-H Camping Program. A 5 day camp was decided upon. Morning core programs were assigned - sheep, livestock judging and poultry. Progams requiring greater length and more difficult presentation were put into longer segments for the camp group as a whole. Beef cattle, feeds and feeding, dairy cattle and swine classes were presented in this manner. As a means of evaluation, the skills assessment method was chosen and entitled the "Panhandle Roundup". Camper skills were evaluated in round-robin form with incentives for excellence including trophies and certificates. **Conclusion:** The camp was attended by 28 campers including Escambia through Gulf Counties.

Peanut Nematicide Demonstration (87)
J. A. BALDWIN, Levy County
A survey of peanut producers showed that 30% of producers use no nematicide on peanut acreage. Also another 30% treated acreage at both planting and pegging. All producers surveyed maintained a 3 year or more rotation between peanut plantings. **Objective:** Was to demonstrate to producers the economic value of treating for nematodes even through desirable rotations are maintained. **Methodology:** During 1986 2 on-farm demonstrations were conducted to compare no-nematicide with the use of approved materials at both planting, pegging, or planting and pegging. **Results:** Yields were increased approximately 700 pounds per acre over the control with an increased value per acre of $600.00 for the best treatment. **Conclusion:** Even with long rotations nematode control in peanuts can be profitable and help to produce high quality and high yielding peanuts.

**Water Conservation in the Home Landscape (88)**

J. P. BRADSHAW, Pinellas County

Over 124.5 million gallons of water are used daily by homes and businesses in Pinellas County. Recent studies indicate 39% of metered water is used for irrigating the landscape. **Objective:** The goals of water conservation in the home landscape program are: to instill public awareness of the importance of water conservation in the home landscape and to demonstrate methods of conserving it. **Methodology:** A multi-media approach was implemented to reach the greatest population. This attempt included newsletters, television programs, and the presentation of a water conservation demonstration project. **Result:** Last year 49 seminars were attended by 1,843 residents. 8,000 received newsletters and a potential audience of 192,000 viewed a 30-minute television broadcast on "Water Conservation in the Home Landscape." In a follow-up study of residents, over 80% indicated they found water to be a serious issue and planned to implement water conservation methods. **Conclusion:** Through a multi-media approach, water issues can be addressed and conservation measures can be demonstrated to a large population.

**Reduce/ Reuse/ Recycle Yard Waste in Pinellas County (90)**

J. BRADSHAW, Pinellas County

**Situation:** In 1988, the Florida Legislature passed the Solid Waste Management Act mandating each county to reduce the amount of solid waste generated by 30% by the year 1994. In maintaining home landscapes, residents of Pinellas County produce enough yard waste during tilling growing season to account for a significant amount of the daily sanitation pick up. This can be extrapolated to a total or 219,030 tons of yard waste per year county-wide. **Objectives:** (1) To create public awareness of the problem of solid waste disposal and how recycling of yard waste can reduce pressure on the local landfill. (2) To educate the public on methods of reducing/reusing/recycling yard waste. (3) To plan and implement a county-wide demonstration yard waste recycling project. **Methodology:** To reach the greatest number of Pinellas residents, multimedia approach was utilized addressing the concepts of reducing/reusing/recycling yard wastes. Some methods of dissemination of information were: formal educational programs, brochures, newspaper inserts, displays, demonstrations and video/television productions. **Evaluations:** Baseline data is being collected on the volume and consistency of the MWS by way of four seasonal waste composition/weight studies. An attitude and knowledge survey is also being conducted on a random sample of Pinellas County residents. A follow-up study will transpire in one year to determine practice and attitude change.

**Training 4-H Adult Volunteers and Youth in Rabbit and Vegetable Projects in the Commonwealth of Dominica (91)**

J. W. BREMAN, Union County

**Objective:** 1) Train 4-H leaders and youth in rabbit-rearing and vegetable production. 2) Develop simple record books. 3) Establish the Florida Association of Voluntary Agencies for Caribbean Action (FAVA/CA) mission in the Commonwealth of Dominica. 4) Revitalize the agent’s professional development leave can revitalize an agent's productivity through the learning that occurs in a new environment with creative challenges.

**Limpograss - An Environmentally Friendly and Sustainable Forage for Beef Cattle Producers on Wet Flatwoods Soils (94)**

J. W. BREMAN, Union County

For environmental and economic reasons beef cattle producers need to grow forages requiring less fertilizer on flatwood soils. **Objectives:** 1) To make producers aware of benefits. 2) To demonstrate management. 3) To encourage use. **Methods:** 1) County Director established ‘Floralta’ Limpograss nursery at Florida State Prison through P.R.I.D.E. 2) Multi-county field day demonstrating planting, fertilizer savings, weed control and free planting material. 3) Multi-county field day demonstrating anhydrous ammonification of Limpograss residue. **Results:** 1) Over 120 acres planted in Union county. 2) Over 20 acres Limpograss planted in Putnam county. 3) Nurseries established in Nassau and Baker counties. 4) D.O.C. planting 600 acres in Duval and Bradford counties. 5) P.R.I.D.E. sells planting material. **Conclusion:** Farmers will adopt environmentally sustainable technology if it's economical.

**Farm Financial Analysis Pilot Project (88)**

J. BRENNEMAN, Polk County

Many producers do not have a good set of financial records or, at least, do not use them for making management decisions. **Objective:** To implement a farm records project with producers cooperating to provide information to
be compiled and analyzed using coordinated financial statements and summary compiled indicating trends in the business as well as the potential for implementation of an Extension sponsored computerized financial records and analysis program. 

**Methodology:** Beginning in January 1986 eight producers began providing financial information on their farming operations. Producers were introduced to Coordinated Financial Statements and given reports periodically with follow-up including ratios measuring liquidity, solvency, profitability, and efficiency. 

**Result:** The project was carried out with two complete years' data collected and analyzed. There were occasional problems with software, scheduling, and data input; however, during the project 5 of the 8 cooperators either bought new computers or began using one for keeping financial records themselves. 

**Conclusion:** There is real potential for producers of any size to use the microcomputer for financial recordkeeping and analysis with Extension providing programming and assistance in understanding and analyzing the information.

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**The Canned Approach to Farm Management Programming**

J. S. BRENNEMAN, Polk County and S. A. FORD, FRED

Results of a survey completed with agricultural clientele in Polk County indicate a need to provide educational programming in farm business management. 

**Objective:** To provide a business management series with emphasis on strategic planning, goal setting, financial statements, whole and partial farm budgeting. 

**Methodology:** Material prepared by USDA Extension Service and Farm Credit Service entitled Business Management in Agriculture was used to present an eight hour course. Producers were given the course work book with questions and case studies to work through and participated in classroom presentations and discussions focused on strategic planning, goal setting, financial statements and budgeting. 

**Results:** Eighteen producers completed the course with followup questionnaires indicating that the program had helped them become better equipped managers of their farm. The work book and presentations met many of the needs the producers had for management information. 

**Conclusion:** The use of prepared material can assist agents with farm management related presentations and save much of the time required for good program development.

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**Polk Fourth Graders Experience the Ag. Side of Life**

J. S. BRENNEMAN, J. M. FREEMAN, A. P. KERSEY, R. A. MILLER, T. W. OSWALT and J. S. STRICKER, Polk County

**Objective:** To teach fourth graders the source of agricultural commodities and agricultural impact on the economy. 

**Methodology:** The Agri-Fest program was a collaborative effort of Extension, other agricultural agency professionals, and representatives of various agricultural industry/commodity groups. Topics presented include specific industry presentations for commodities (including phosphate) produced in Polk County along with agricultural careers. The hands on approach was used. 

**Results:** Over 2700 fourth graders have participated in the program over the last two years. Teacher evaluations along with pre and post test for students indicate that the program is not only well received by classroom teachers but also makes young people more knowledgeable about sources of food and how our agricultural commodities impact the economy of our county. The program received special statewide recognition for excellence in social studies programming. 

**Conclusion:** This approach is a good way to teach young people about the agricultural sector and its impact on the local economy.

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**Polk County Feeder Cattle Basis Study**

J. S. BRENNEMAN and S. L. SUMNER, Polk County

Beef cattle producers can reduce price risk by using futures and options contracts. To properly use contracts producers must have a marketing plan, production costs and an accurate estimate of price basis. 

**Objective:** To gather data on basis for Polk County and provide that information to producers. 

**Method:** Data was gathered on the prices for MF I and MF 2 steers weighing from 200 to 700 pounds marketed at the Lakeland Livestock Market during the peak marketing months - July, August and September. Basis was calculated Using Chicago Mercantile Exchange Feeder Cattle Futures Contract Settlement Prices on the day corresponding to market day. Futures contract for delivery month following month of cash sale was used. Data was collected for years 1980-1988. 

**Results:** Over the period investigated there were dramatic swings in the market and consequently the basis showed considerable change. As weight increases basis tends to decrease with MF 1 200 to 300 lb. steers having an average basis of 24.47 over the nine years while MF 1 500 to 600 lb. steers had an average basis of -4.22. The standard deviation tends to decrease as weight increases to 500 pounds. 

**Conclusion:** Opportunities exist for cattlemen to use futures and options contracts to market price risk. Basis data is available for Polk County producers to use in market planning.

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**Mini-Tours Educate Local Decision Makers**

R. L. BROWN, Collier County

In light of increasing urban expansion into agriculture areas, local agriculture entrepreneurs and members of the Chamber of Commerce Agriculture Committee expressed the concern that local decision makers and business leaders are not fully aware of the economic contribution that agriculture related businesses make to Collier County's economy. 

**Objective:** To reach business leaders in the urban community with this information, a series of mini-tours was set up to show participants the scope of the industry and the financial investment required. 

**Methodology:** The 3 tours (citrus, vegetable, and horticulture) were self supporting and began with a round table discussion by industry representatives dealing with financial investment. This was followed by tours of actual fields, packing houses, and operations to show the scope of the business and ended with a barbecue lunch. 

**Results:** 30 key business and financial leaders are more aware of the problems and economic impact of agriculture and can competently make decisions that impact on agriculture's future. These tours will be continued for 3 years to educate 30 different leaders each year.

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**Growers Test Disease Detection Kits**

G. J. CASHION, Manatee County
A test panel of ornamental growers was developed for the purpose of evaluating on-site plant disease detection kits under nursery conditions. Agent research product, instructed participants in the use of the kits through individual demonstrations, and coordinated the program implementation. Eight nursery growers were invited to participate for one year by using the newly-developed 10-minute tests for three types of fungi that commonly infect ornamental crops: Pythium, Phytophthora and Rhizoctonia. A continuous supply of the disease detection kits, which are based on a biotechnology similar to AIDS or pregnancy testing, was made available to participants as needed. 210 diagnoses were reported by participants, 7 of whom indicated that they found the kits to be a helpful tool in disease management. The kits show potential as a monitoring tool for integrated pest management programs.

**Green House Demonstration of Experimental Electrostatic Spray Systems (90)**
G. J. CASHION, Manatee County
The objective of this project was to familiarize producers of greenhouse ornamentals with a potential method for improved control of sweetpotato whitefly. Control of this insect, a serious pest of many ornamental crops, is complicated in greenhouses by the density of the plant canopies. Since all stages of the insect's life cycle are present on the underside of leaves, spray coverage of this site is critical. A field day was selected as the activity for communicating information on electrostatic, or electrically charged, spray to ornamental producers. Agent's literature search led to a live demonstration of three different types of equipment in a greenhouse. Moisture-sensitive papers were utilized to permit evaluation of spray coverage both with and without electrical charge. Recent experimental data was distributed during the subsequent panel discussion. Electrostatic spray was observed to give superior coverage compared to uncharged spray. 92% of participants indicated that the information conveyed was completely new and all found it extremely helpful conceptually and practically. Three producers arranged for equipment trials in their greenhouses where whitefly control would be evaluated.

**Neighborhood Wildflower Project (93)**
G. J. CASHION, Manatee County
Wildflower varieties, sources and planting methods were researched by agent to aid in the development and implementation of a neighborhood wildflower garden which is in its third year. Cooperating in the program are the Manatee County Department of Parks and Recreation and a group of interested volunteers. A method for growing wildflower sod was tested with collected and purchased seed. The results of these trials led to the decision to use containerized plants for a large-scale planting. Agent designed a 3,000 square foot planting area at the entry to G. T. Bray Park, Bradenton. 58 volunteers assisted in planting 875 containerized wildflowers and native shrubs which are being maintained by a neighborhood core committee of 8-10 persons. Supplemental irrigation was provided for 45 days after planting. Dune Sunflower, Butterfly Weed and Gaillardia are the top survivors to date, with 80%, 66% and 50% survival respectively. Commercially produced wildflower sod is being installed and evaluated at the site during summer and fall of 1993. Survival data will be utilized in developing other wildflower plantings.

**Commercial Vegetable Production Efficiency (88)**
B. F. CASTRO, Gadsden County
Employment opportunities and the overall economy of Gadsden County can benefit from the increased profitability and stability of the vegetable production industry. **Objective:** To improve profitability and stability in commercial vegetable production. **Methodology:** Programs were designed to communicate new technology integrated pest management, compatible diversification, fertilization efficiency, irrigation management, and proper post-harvest handling procedures. Education meetings, on-farm demonstrations, farm tours, individual consultations, and newsletters were used to present this information. **Results:** In 1988, three years after program implementation, 35% of tomato growers are diversifying by adding other vegetables to their production scheme. Farm demonstrations of the newly released tomato cultivar “Solar Set” from the U.F. Vegetable Crop Department has boosted Fall acreage 100%. **Conclusion:** Diversification away from a single monocrop situation has helped producers cope with volatile markets and improved resource utilization has reduced costs.

**Telogia Creek Irrigation Energy Conservation Demonstration on Mulched Staked Tomatoes (92)**
B. CASTRO and B. DURDEN, Gadsden County
**Situation:** Telogia Creek Watershed in Gadsden County is a designated area of “critical concern” by NW FL Water Management Dist. 2,000 acres of tomatoes using drip irrigation are grown in this area. Water for irrigation is limited. **Objectives:** 1) To determine water use. 2) Reduce energy cost. **Methodology:** The project was a collaborative effort of Extension and the Soil Conservation Service. A grant was obtained from the Governor’s Energy Office. Information was recorded from six growers on rainfall, irrigation water applied, tensiometer readings and fertilizer applied. **Results:** Growers applied 14.4 inches of irrigation per acre to produce a crop in the Fall of 1991. Growers applying the heaviest fertilizer rates were also using the most irrigation water. **Conclusion:** Actual water use has been recorded for tomato growers. This is information that was previously unavailable for growers and Water Management officials. This program has made farmers aware and conscious of using their water resources wisely.

**Cool Season Production of ‘Callide’ Rhodesgrass (Chloris gayana Kunth.) under several Fertility Treatments in DeSoto County (85)**
C. CHAMBISKI, Agronomy and J. SELPH, DeSoto County
‘Callide’ Rhodesgrass is a new warm season perennial grass that is being widely adopted by Beef Cattle Producers in DeSoto county and much of Central & South Florida. **Objective** of this Forage Project was to determine the cool season production of ‘Callide’ Rhodesgrass under several fertility treatments. **Methods** began with a field of
Exotic plant pests are a well known problem in South Florida. How to deal with this problem and then disseminating this information to the needed individuals is a problem in itself. **Objectives:** Construct a seminar that educates field crews in the control of exotic plant pests. **Methods:** A seminar of critical topics was organized. A database of agencies and companies controlling exotic species was prepared to announce this seminar and to disseminate future information. Using University of Florida publications as guide, a field day on control methods was conducted. To further the educational effort, video duplicating the field day was prepared. This is available for future usage by interested parties. **Results and Conclusions:** Written evaluations showed 100% of those attending would recommend the program to others and attend again. Ninety-five percent improved knowledge of subject which demonstrates program success.

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Soil pH Management for Sugarcane Grown on Sandy Soil

F. C. Coale and T. J. Schueneman, Palm Beach County

Ninety percent of the Florida sugarcane crop is currently grown on Histosols which are subsiding and will eventually be too shallow for sugarcane production. Production will necessarily increase on adjacent sandy soils. Many of these sandy soils currently have pH<5. A 3X4X2 factorial field experiment was conducted to evaluate the growth and yield response of sugarcane to soil pH, CaCO₃, CaMgCO₃, CaSO₄·2H₂O and S. Amendment soil equilibration approached completion within 30 days. Soil chemistry was monitored 0-.15, .15-.30, and .30-.60 m depths. Surface soil (0-.15 m) pH increased linearly with increasing rates of CaCO₃ and CaMgCO₃. CaSO₄·2H₂O amendments did not affect soil pH but supplied necessary Ca. Cane and sugar yields were directly correlated to soil pH and the yield from CaMgCO₃ amended plots was greater than corresponding CaCO₃ amended plots. Leaf tissue analyses reflected the enhanced Mg nutrition from CaMgCO₃ amendments.

Writing a Compliance Publication That's Correct and Useful!

L. S. Charbo, Palm Beach County

Agricultural activities generate wastes. These wastes come in many sizes, shapes and forms. In order to be good stewards of the environment, growers must dispose of these wastes properly. In many cases there are strict rules for disposal and for others there are few. **Objective:** Prepare a publication to assist growers in determining the correct disposal methods for various agricultural waste products that are both environmentally and legally sound. **Methods:** A publication was written which discussed how to dispose of 18 agricultural wastes; highlighted the agencies concerned with waste disposal; and listed commercial waste handlers. After careful review by all agencies, a direct mailing to agricultural clientele was made. **Results and Conclusions:** Personal contacts for evaluation purposes were extremely favorable. One grower said, "It's the most useful guide I've ever gotten". Growers now have a helpful and correct disposal publication.

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Living in Florida Seminars and Correspondence Course

D. Culbert, Indian River County

Each January the county Extension Staff in Okeechobee, Martin, Saint Lucie, and Indian River counties provide public seminars for new residents. A learn-by-mail program is also available. **Objective:** These programs provide Florida survival skills in home environment and E.L.M. that save time, financial and energy resources. Additionally, new residents become acquainted with Extension resources. **Methods:** Seminar - Free seminars were held in each county on four consecutive days. Local agents presented their topics in their home county; cross county expertise was utilized where appropriate. Audiovisual presentations were followed by question and answer sessions. A break included a tropical fruit tasting table. Home study course - participants desiring more in-depth instruction could register for an eight-unit series of lessons conducted by mail. A program fee of $7 covered costs. Each four to eight-page lesson included a self-evaluation. **Results:** Ninety-five persons attended the four seminars in January 1996. Highest attendance occurred at a program held at a public library. Poor attendance occurred at mall locations. Attendance was highly dependent on local mass media promotion. High participation in correspondence course resulted from county employee newsletter and newspaper stories. Nine percent of the learn-by-mail participants were from out of state addresses. More than half of the participants planned to use the information presented in the home study course. **Conclusion:** New residents need information on their new environment. Combining seminars with learn-by-mail lessons can forestall many questions and gain a future Market-share for Extension.
provide citrus programs for Desoto, Hardee and Manatee Counties. Administratively responsible to the District Extension Director, the Agent coordinates programs with the respective County Extension Directors and advisory committees. **Objective:** Utilizing the resources of the Center, the Agent would develop and implement in-depth educational counties. **Methodology:** To initiate the program, a series of basic and in-depth citrus production classes were offered and taught by the Agent. In addition, field research-demonstrations were established. Center Research and Extension Specialists were involved as appropriate. **Results:** Since 1982, 474 growers have participated in 7 courses and 4 demonstrations have been initiated and/or completed. Survey conducted indicate grower support and satisfaction with the program. **Conclusion:** Evidence to date indicates this approach is valid and cost efficient.

**Grower Sales and Visibility Improved by Local Horticultural Trade Show (87)**

**T. B. DELVALLE and H. C. JONES, Duval County**

The Duval County Horticultural Advisory Committee identified marketing as a top priority. Local businesses frequently purchase plants from growers outside of the northeast Florida area because they are unaware of local sources. **Objective:** A Northeast Florida Horticultural Trade Show was held to help local growers increase sales and visibility in the local market. **Methodology:** Twenty-three wholesale businesses participated in a 1-day, 8-hour trade show. The show was advertised to area landscape architects, landscape maintenance companies, golf course superintendents and retail nurseries. **Results:** Over 200 people attended the trade show. Survey responses indicated that 87% of the exhibitors met new business representatives and 58% of the exhibitors met new business representatives and 58% increased sales as a direct result of the trade show. Sales increased ranged from $800 to $2,000 with an average of $1,200. **Conclusion:** The trade show increased visibility of local businesses and increased sales for over 50% of those attending.

**St. Johns County Potato Festival (87)**

**J. D. DILBECK, St. Johns County**

St. Johns County is the potato capital of Florida. The County Extension Overall Advisory Committee identified the lack of agricultural awareness by the urban residents of the county. **Objective:** Increase agricultural awareness in St. Johns County. **Methodology:** During 1986, the first Potato Festival was planned and conducted. **Results:** A two day festival was held in St. Augustine with the support of the entire county. Over 5,000 people attended. **Conclusion:** Due to the success of the festival plans are to make it an annual event.

**New St. Johns County Agricultural Center (88)**

**J. DILBECK, St. Johns County**

The St. Johns County Extension staff was housed in a store front in downtown St. Augustine. Facilities and parking for Extension programs were inadequate. The Overall Advisory Committee (OAC) identified the long term goal of an agricultural center for St. Johns County to house the Extension Staff and other agricultural offices. **Objective:** To make county commissioners aware of space needs and to convince them to build an agricultural center. **Methodology:** The CED met with the Agricultural Center Committee numerous times to solicit input, gather support, develop plans and made presentations to the Board of County Commissioners, civic clubs and agricultural or organizations. **Result:** St. Johns County completed construction of a 1 million dollar agricultural center containing 15,000 sq. ft. in January, 1988. The center was dedicated March 21, 1988, national Agricultural Day. **Conclusion:** The new St. Johns County Agricultural Center provides excellent facilities for Extension educational programs and is a point of pride for agricultural interests in the county.

**Vegetable Gardening Project (89)**

**J. DILBECK, St. Johns County and J. M. STEPHENS, Vegetable Crops**

A vegetable gardening program was initiated in 1980 to increase vegetable gardening participation. **Objectives:** Increase the number of vegetable gardens grown and improve the productivity of vegetable gardening in St. Johns County. **Methodology:** A vegetable gardening program was initiated in 1980 including seminars, exhibits and a garden contest. **Results:** From 1980-89, 300 gardeners entered the garden contest. Each year the gardens were judged and an awards program was held where the gardens were critiqued. In 1989 a record number of gardeners entered the garden contest - 47 total. **Conclusion:** More productive gardens with improved quality due to improved practices such as better varieties has resulted from this gardening project.

**Designing a Space Saving Vegetable Demonstration Program for Urban Gardeners (88)**

**S. H. DOBBS, Escambia County**

Home Gardeners are generally not aware of the potential for producing vegetables in an urban setting and are led to believe gardening requires a large space. **Objective:** To increase awareness of space saving gardening techniques to urban residents. **Methodology:** Educational efforts began with the construction of a demonstration garden consisting of four raised beds. Twenty-seven space saving vegetable varieties were planted and replicated. Records on cost, production, and variety adaptability were maintained. A program and tour was conducted for the general public at the demonstration site. Six other programs on space saving vegetable gardening were also presented throughout urban areas. **Result:** Two-hundred and thirty-two gardening enthusiasts participated, of which 76% were considered urban residents. A phone survey conducted one year after the program indicated 60% of the participants had implemented different gardening techniques as a result of the program; 16% of these were first time gardeners. **Conclusion:** Through the efficient use of space and proper varieties, gardeners can produce vegetables in an urban environment.

**Nitrogen Movement in Santa Rosa County Soils (93)**

**M. DONAHoe and D. MULLINS, Santa Rosa County**
Growers and homeowners often overfertilize. This is costly and can contribute to groundwater contamination. A study/demonstration was carried out to determine the nitrate nitrogen leaching rate and speed through various soil profiles. Five cotton fields and five urban landscapes were involved in this project. Standard fertilizer rates were applied and the downward movement of nitrate nitrogen was monitored by periodic sampling. Samples were taken at six inch increments to a depth of three feet. The objective of this study was: 1) to determine the amount of nitrogen being leached following standard fertilization applications to local soils; 2) determine the accuracy of the Cardy Portable Nitrate Meter when compared to University analysis. Fifty-three percent of the nitrate nitrogen leached below the 18 inch level in the urban landscapes after 37 days. In the cotton environment sixty-eight percent of the nitrate nitrogen had leached below the eighteen inch level after 120 days. The Cardy Meter compared favorably to the IFAS Soils lab in the Urban landscape analysis. More variability existed in the cotton testing, which is believed due to sampling and lab techniques. Based upon this work, it is evident that on sandy coastal sites, nitrate nitrogen is extremely unstable and moves rapidly downward. Growers and homeowners should become more sensitive to the need for proper fertilization practices and follow recommendations based upon soil testing.

**Gadsden Nursery Production Expands** (88)
B. R. DURDEN, Gadsden County

Gadsden County has 15 commercial nurseries with sales totalling over $20 million annually. New producers continue to enter the business with little or no knowledge in producing woody ornamental plants. Objective: Increase the nursery grower's knowledge of plants, related nursery growing methodologies and management for maximum profits. Methodology: A mail survey was conducted to determine producer needs. A series of three workshops were held to meet these needs covering: status of the nursery industry, potting media, fertilization, irrigation, pest control, and business analysis. A research plot tour and seminar was conducted on heat stress in container grown plants. Conclusion: Sixty-seven growers attended the workshops representing all the major nurseries within the county. Five new nurseries and their employees received information to successfully establish them in the business. All the major nursery people were brought together for the first time for educational training.

**One Extension Office for Gadsden County** (88)
B. R. DURDEN, Gadsden County

Gadsden County Extension Service lived with a unique office situation for many years. The agricultural offices were located on the East side of Quincy in the State Crop and Livestock Pavilion and the home economics and 4-H offices were located on the West side of Quincy in the State Crops and Livestock Pavilion. This separation caused many problems from lack of communication and daily contact. Objective: Convince local and state government to provide office space and meeting facilities for the total Extension program. Methodology: The CED met numerous times with advisory committees, county commissioners, local legislators and other federal agencies (FHA, ASCS & SCS) housed at the livestock pavilion to gain support for the project. Conclusion: The total county Extension staff is now housed in a newly built annex. Now for the first time all Extension and agricultural services are housed at the same location. Some $339,000 in funds from state and county sources were provided to accomplish this.

**Computerized Soil Testing Program Improves Homeowner Recommendations** (88)
J. E. DURRANCE and M. J. HOLSINGER, Sarasota

Responding to urban clientele soil testing requests is very time-consuming. A DECmate 11 computer offered the chance to respond in a more precise, professional manner in less time. Objective: To standardize and enhance soil test recommendations while reducing agent time input. Methodology: The client fills out a form and pays $3.00 per sample. The program assistant runs the test and records the pH and soluble salts on the form. The agent reviews the data and enters 2-letter codes for the desired recommendation on the form. A secretary enters the data into the computer which prints a detailed, personalized letter of results and recommendations tailored to specific situations. The agent signs the letter and it is mailed. Result: 500 tests had been run in previous years. Current numbers of tests requested is up significantly in 1988, which indicates positive client feedback. The agent's time requirement has been reduced by 80%. Conclusion: The computer is an effective tool in improving information dissemination and allows agents to more effectively utilize their time.

**Using Portable Computers for Technology Transfer in Extension Programming** (87)
G. E. FITZPATRICK and S. D. VERKADE, AREC-Ft. Lauderdale

The stationary characteristic of traditional personal computers has limited their usefulness in utilizing software for the solution of practical horticultural problems in the field and in the ability of the extension agent to transfer computer technology. Objective: To evaluate available computer equipment for use in extension programming. Methodology: Stationary and portable computers were evaluated on the basis of memory, ease of use, and effectiveness in technology transfer. Results: New portable computers enable the extension agent to carry computer technology to the industry site to facilitate the generation of information and the transfer of technology. This equipment has very low energy consumption, can be battery-powered, utilizes liquid-crystal display (LCD), and is very light weight. Conclusion: Portable LCD computers facilitate technology transfer in extension programming.

**Increasing Hay Quality by Using Anhydrous Ammonia** (87)
J. FLETCHER, Madison County and J. BREMAN, Union County

Farmers in Madison County have traditionally relied on rye as the main winter feed source. Over the past 5 years, mainly due to weather influences, rye production per acre was not adequate to meet a cow's nutritional needs. A need was identified for an economical feeding alternative. Objective: To introduce farmers to anhydrous ammoniated hay to economically increase both protein and energy values of hay. Methodology: From 1985-86, 4 farm
Schools in Osceola County have few if any shade trees. E. C. FOERSTE, Osceola County

You'll Have It Made In The Shade When You Adopt A Tree

The homeowner faces a confusing array of over 300 Extension publications on care of home fruits, vegetables, landscapes, lawns and house plants. The Advisory Committee saw the need to summarize the information into timely recommendations. Objective: Develop a gardening calendar to benefit Central Florida homeowners, landscapers, grounds maintenance personnel and garden center employees. Methodology: Master Gardeners researched Extension horticulture publications and sorted the timely information by months. State Extension specialists reviewed the information before it went to print. Local businesses paid to advertise in the calendar which offset printing costs. Calendars were sold through plant clinics, garden centers and participating advertisers. Result: Most of the 1000 copies have been distributed. Sales and advertising netted over $1600 toward the development of a video loan project. Conclusion: The calendar has provided a needed service, been an opportunity for volunteers to work together and has been a good public relations tool. There has been such a positive response that the volunteers are working on an expanded version for 1989.

Central Florida Gardening Calendar Provides Needed Timely Tips (88)
E. C. FOERSTE, Osceola County

The Florida vegetable industry has approximately 100,000 acres of plastic-mulched production. The mulched acreage, however, is heavily concentrated in the central and southern part of the state. Vegetables produced in rural North Florida were not grown with plastic mulch or drip irrigation until the mid 1980's. With the help of the plasticulture industry suppliers, the Florida Cooperative Extension Service began a major effort in the late 1980's introducing the technology to farmers in the Suwannee Valley area of Florida via on-farm demonstrations. Equipment and personnel was available through the Suwannee Valley Agricultural Research and Education Center and supplies were often solicited from area suppliers. The county extension agents provided for the leadership with the farmer to prepare the site for the demonstration. Approximately 15 sites across 7 counties were set up as demonstrations annually from 1987-1994. The increase in mulched and drip irrigated acreage in the program area has been boosted by this extension program to approximately 2,000 acres.

Indian River Rootstock Survey and Workshop (88)
S. H. FUTCH and J. W. HEBB, St. Lucie County

With the increasing presence of tristeza and blight in the Indian River area, survey and workshop data can determine current and future trends of management decisions by the Indian River grower industry. Objective: To determine from input of data, tabulated results, and grower workshops, production management decisions for rootstocks on young citrus tree plantings or reset groves. Methodology: A survey was sent to growers managing approximately 80,354 various acreages in Indian River, St. Lucie, and Martin counties. Growers responded basically in three areas: (1) percentages of acreage used or replanted to various rootstocks, (2) advantages or disadvantages attributed to each rootstock, (3) environmental and cultural circumstances or conditions applicable to each rootstock chosen. Surveyed growers then participated in a roundtable discussion and workshop with IFAS, U.S.D.A., and D.P.I. professional personnel for results. Conclusion: General consensus of growers and professional personnel was two fold for the Indian River area. First, in the Indian River area there is no single rootstock best suited for all conditions of the fresh fruit industry. Second, growers are encouraging research facilities to speed up additional rootstocks for the future as a high priority item. Quality is a higher priority to yield in the Indian River area for some specific cases of production in fresh fruit. Conclusively, therefore, basic grower decisions on rootstocks today are, by far, on a limited basis.

Energy Efficient Landscaping: A Self-Guided Tour (94)
P. GRACE, Putnam County

The Putnam County Horticulture Advisory Committee and Master Gardeners and Pat Grace, Extension Horticulture Agent
A yard waste reduction project was conducted in Deland from December 1993 through May 1994 with cooperation from "My Yard Doesn't Grow Trash". Objectives: To describe the teaching methods and instructional materials used by Extension Agents teaching ELM programs. To compare rates of adoption of ELM practices to teaching methods and instructional materials used to determine if differing methods affected the level of adoption. Method: Data regarding rates of adoption of ELM practices was obtained from the Program Evaluation Office in Gainesville. Counties studied were Hillsborough, Hernando, Manatee/Sarasota, Leon and N.E. Florida (Baker, Clay, Duval, St. John's, Nassau and Putnam Counties). A questionnaire was sent to agents to obtain data regarding teaching methods and instructional materials. Rates of adoption were then compared to teaching methods and instructional materials used.

Results: Extension agents teaching ELM programs utilize a variety of teaching techniques. However, they rely heavily on lecture. Instructional materials used were primarily slides and handouts. Leon County achieved the highest overall rate of adoption of practices. They used the Discussion technique with the same frequency they used the Lecture technique. Extension agents in the four other ELM programs relied most heavily on the lecture.

Conclusions: The literature on adult education indicates that adults who are actively involved in the teaching/learning process learn better. It is possible that the frequent utilization of an active learning technique, Discussion, in Leon County allowed program participants to learn better and thus adopt more ELM practices. Extension agents should be given the opportunity to learn more about adult education and the importance of utilizing more active and varied teaching techniques in programming.

Brazilian Pepper Control in St. Lucie and Indian River Counties

K. GIOELI, St. Lucie County

Environmentalists, government employees, general homeowners, and other land managers received training detailing the most effective methods of controlling the invasive Brazilian Pepper Tree. Objective of this new program is to certify land managers as "Brazilian Pepper Busters" after completing a Brazilian Pepper Control training program. In an effort to conserve Florida's native habitat, the invasive Brazilian Pepper must be properly controlled. To date, Brazilian Peppers have overtaken more than one million acres of native Florida habitat. Methods included completion of a training program offered as a joint venture between the Extension Services in St. Lucie and Indian River Counties and the Florida Medical Entomology Lab. The training program included sections explaining why there is a need to control Brazilian Peppers and visualization of demonstration plots illustrating cultural and herbicidal control methods. For land managers unable to partake in a formal training seminar, a locally-produced Brazilian Pepper Control Training video can be obtained from either the St. Lucie or Indian River County Extensions.

Results: Of the sixty land managers that participated in the initial training seminar, all have reported that they have integrated proper methods of controlling Brazilian Peppers in their land management practices.

Conclusion: Land managers utilizing proper control methods can control Brazilian Peppers on their property; thus, conserving Florida's native habitat. Because of the vast resources at our disposal, the Extension Service is in an ideal position to offer such a program.

"My Yard Doesn't Grow Trash" (95)

D. GRIFFIS, Volusia County. G. KIDDER, Soil & Water Science

A yard waste reduction project was conducted in Deland from December 1993 through May 1994 with cooperation from the City and the city's waste management contractor. A section of the city consisting of 180 residences was selected for its history of heavy contribution to the yard waste stream. The Objectives were: (1) to test the effectiveness of an educational campaign to reduce the amount of yard waste placed at curbside, and (2) to test the feasibility of curbside grinding of yard waste as a means of reducing energy consumed in hauling, processing, and disposing of such materials. It was felt that shredding the material at curbside would reduce the bushy and woody material to small pieces that the resident could use as mulch in compost piles. Methods: Residents were provided several feet of flagging tape and instructed to tie the tape to a branch if they wanted the material shredded and left at curbside. The City of Deland provided an 18-horsepower shredder. A large, open-ended sock-like device was fit over the shredder chute to direct the shredded material into residents' trash cans or into a pile on the ground. The number of residences requesting shredding or removal was 43 and 40, respectively.

However, three times as much material was shredded and remained on site as was hauled away. Conclusions: A) Educational campaigns on yard waste reduction can reduce the quantities set out for collection. B) Curbside shredding would decrease the amount of yard debris that enters the waste stream. A monthly service as an alternative to pick-up may present a minimum of logistical difficulties. C) Decreasing the frequency of yard debris
collection will accomplish greater energy and cost savings than simply decreasing the amount of material collected.

**Using BMPs to Conserve Energy in Florida Crop Production** (95)

K. GRIFFITH, Jackson County, T. HEWITT, FRED

The concept that Best Management Practices (BMPs) used to protect water resources from agricultural pollutants may also help conserve energy has not been thoroughly explored. **Objective:** The purposes of this project are to use the Florida Agricultural Energy Consumption Model (FAECM) to demonstrate to farmers that primary energy inputs for peanuts, cotton, corn, watermelons, and tomatoes can be reduced by using BMPs in crop production, and to prove that BMPs have economic as well as environmental benefits. **Methods:** IFAS publications and panels of IFAS specialists were consulted to determine BMPs that would result in energy savings. This information was used to develop crop budgets that were analyzed by FAECM to compare energy use when BMPs were employed and when they were not. Fact sheets for each of the crops are being prepared, and findings have been presented at field days. **Results:** Five major agricultural commodities produced in Florida were analyzed by FAECM and were shown to use less energy and to result in increased revenues when BMPs were employed. **Conclusions:** By changing production practices Florida agricultural producers can reduce energy inputs and reduce costs. Information gleaned from this projects shows that the introduction of BMPs into Florida farming operations will result in agriculture that is economically viable and environmentally sound.

**Successful Presentation of Aquatic Weed Control and Identification** (90)

D. W. HALL, Herbarium and K. A. LANGELODAND, Center for Aquatic Plants

Weed identification and control presentations can be fun and educational. To increase audience involvement samples can be collected in sufficient numbers so that each participant can examine a specimen while the identification characteristics and control methods are being taught. Having the specimens in hands of the participants serves to insure that they can see every characteristic mentioned. It is crucial to positively identify target species correctly. Florida has many similar plants among the nearly 4,000 species in the state. Often participants discover that they have made mistakes in plants that they thought they knew well. Plant samples need to be placed in convenient groupings so that similar plants can be compared. About 2 hours are required for control strategies and identification for 10 to 12 plants. If a general presentation of control methods is given first, control of specific groups of plants can be discussed as they are presented.

**Pocket Notebook Is In-Field Reference and Record** (90)

L. A. HALSEY, Jefferson County

Sound farm management principles call for well-kept, contemporaneous records. Florida statutes mandate accurate, timely records of restricted pesticide use. Extension provides limited recordkeeping tools for farmers. The agent developed a records format, published as an IFAS Circular. The Farm Pocket Notebook fits in a shirt pocket for in-field use. Reference materials in the notebook are appropriate for North Florida row-crop and cattle operations. It provides field, pesticide and herd records. It includes information on crop production, pest management and scouting, sprayer calibration, climatology, livestock production and available IFAS services. A survey of agents six months after distribution measured the suitability and effectiveness of the method. 33% of counties responded. Survey results indicated the notebook is a useful farm recordkeeping device. Based on agent response, it is an effective format for delivering IFAS information that compares favorably to other methods. South Florida agents find the booklet inappropriate for the region and for vegetable crop record requirements. 10,000 copies were printed in 1988-89, based on county orders.

**Pesticide Regulations, Rules and Rules-of-Thumb** (95)

L. HALSEY, Jefferson County

An estimated 35-40% of an extension agent's time in commercial agriculture programming is related directly or indirectly to regulatory compliance functions. Pesticide use regulations are increasingly complex. Extension is assigned the educational role in compliance by regulatory agencies such as Environmental Protection Agency. Worker Protection Standard (WPS) became effective January, 1 995. **Objective:** Project objective was to provide farmers, nursery and dairy producers and ranchers with concise guidelines for compliance with federal, state, local pesticide use regulations and data to base pesticide selection. **Methods:** A thirty-two page manual of checklists of pesticide use and decisions aids were created for farm use. A database of about 600 pesticides was created. Data on applicator safety, human health thresholds, environmental characteristics was compiled. Labels were reviewed to narrow the database to those with current Florida registration, resulting in a list of 285 formulations included as tables in the manual. Data relating pesticide leach and runoff potential were localized with keys to county soils, and included. **Results:** The manual was mimeographed for distribution at a water quality field day and mailed to 125 other county pesticide application license holders. The limited-run mimeographing allows frequent update and revision as labels and registrations change. Copies of word processor and database files will be made available for adaptation and localization to agents throughout north Florida. **Conclusion:** Agency and farmer reactions to the manual and the method of presentation of the information has been overwhelmingly favorable.

**Extension Implements County Geographic Information System (GIS)** (95)

L. HALSEY, Jefferson County

County planners and resource management agencies use a Geographic Information System located in the Extension Service office and implemented by the extension director culminating a seven-year effort. **Objective:** The project required selection of hardware and software, assembling datasets and making spatial analysis available to end
users/clients in the county while supporting Comprehensive Plan implementation and monitoring. Budget constraints dictated minimum expenditures and little additional staffing. Education and marshaling support for the project was essential to its success. **Objective:** In 1989, Extension, Soil and Water Conservation District and USDA-NRCS identified advantages of automated mapping and spatial analysis capabilities of GIS to facilitate conservation, planning and farm management tasks. In 1994, building permit revenues allowed the Planning Administrator and Board of County Commissioners to commit $24,000 for purchase and implementation of GIS. **Results:** The Extension director was designated as coordinator of the project. System software (Windows AutoCAD, ArcCAD, Arc View) and hardware (Pentium 90, large capacity drives, digitizer) were purchased. Vendor was contracted to digitize property parcels; datasets (hydrology, soil survey, DLG roads, USGS topography, etc) were secured from Suwannee River Water Management District. Data files of tax rolls were secured from the Property Appraiser's contractor and linked to digital parcel maps. **Conclusions:** By mid-year, 1995, Jefferson County had a fully functioning GIS system, apparently the first in the nation housed and coordinated by the Extension Service, to meet spatial information needs of public and private decision makers.

The Global County: Agents in an International Arena (95)

L. HALSEY, Jefferson County

Eighteen extension agents, mostly mid-career from agriculture, youth, home economics and marine assignments, participated in an introduction to opportunities and processes for agents in international projects. **Objective:** The workshop was developed to increase agents’ awareness of opportunities, trans-cultural conditions, and benefits to individual and his/her county program from international projects and service. **Methods:** With a wide range of experiences in Latin America, Africa, Asia, Middle East and Eastern Europe, an ad hoc group of four state and county faculty developed, gave leadership to and participated in instruction in a two-day workshop. Committee developed curriculum involving IFAS state and county faculty and outside resources (staff of voluntary organizations, USDA-FES International Programs and consulting firms). Training was offered as a Professional Development option for county extension agents. Pre-workshop ‘homework’ assignments were made. Discussions, panel presentations and written materials supplemented speakers relating overseas experiences. Committee coordinated participation of 23 speakers and assembled, edited background materials and conducted an evaluation. **Results:** Of 16 agents attending entire session, 15 completed evaluations. Six reported the training as best of their Extension career, six as better than most and three as typical of agent training. Evaluation indicated that participating agents felt better prepared to serve in an international project as a result of the training. **Conclusion:** Participants express desire for increased involvement of county faculty in foreign projects. Agents desire additional training, particularly language (Spanish) and cross-cultural.

Introducing Geographic Information System (GIS) (96)

L. HALSEY, Jefferson County

The County Extension service is implementing the county’s Geographic Information System. The agent is training others in use of GIS and related spatial technologies such as Global Positioning Satellites and Remote Sensing. **Objective:** The purpose of GIS is to provide education and information to community groups, businesses and decision makers’ policy leaders for county economic growth and development while preserving natural resource, environmental quality, cultural identity and quality of life. GIS serves to analyze development projects and resource management plans. It provides support for site specific, precision agriculture. To implement this goal, it is essential to educate and train users. Educating potential users in the power of the GIS as an analytical tool and a management aid is critical. Education provides the benefit of marshaling continued support for the project. **Methods:** Workshops, seminars and hands-on training sessions were planned and carried out with the development of written materials. Among the training events were: GPS Field Day (185 participants); two Florida Association of Counties presentations (48 participants); Agriculture Environmental Seminars (FFB/FFVA, 145 participants); 3-day Agent In-Service Training (24 participants). **Results:** In the past year, over 650 potential users of GIS have received direct, formal training in GIS concepts and use. The program will be presented at the 1996 NACAA meeting (poster session, discussion group and communications). Twelve additional county extension offices will add GIS capability, site license software and complete datasets. **Conclusions:** The county system continues to develop. GIS use as an effective extension tool is accepted. The GIS is being used for Growth Management planning. A database sufficient for implementing site specific agriculture practices is in place as early uses begins.

Training Volunteer Divers to Research and Document Artificial Reefs for Their Community (87)

J. G. HALUSKY, St. Johns County

**Objective:** To train volunteers in artificial reef construction, underwater monitoring and reef documentation methods. In Florida, with the exception of a few counties, there is little or no direct reef construction or monitoring by government agencies. Reef builders need feedback information about their reefs so that more effective reefs can be built. **Methodology:** This program outlines the basic philosophy and strategy for a series of seven, two to three day workshops, training volunteer sport divers so that they can design their own reef documentation and monitoring projects. **Results:** Volunteer divers in N.E. Florida communicated their observations to the reef builders, their community and the scientific community in a credible manner. This has improved relations between divers and sport fishermen and increased local knowledge of reef location and performance. **Conclusion:** Properly trained volunteer divers can fulfill this need by establishing their own reef research, monitoring and documentation projects.
The Use of Pesticide Management Workshops to Create and Disseminate Grower Information (88)
J. W. HEBERT, St. Lucie County
Objective: To increase grower knowledge and information of changing regulations. To increase grower awareness of pesticide monitoring methods and levels, hazardous waste disposal, ground water protection methods, toxic materials handling and storage, and pesticide regulations enforcement. Methodology: Growers in the ornamental, vegetable, turfgrass, and citrus industry were asked to respond to questions of pesticidal importance. Upon dissemination of the responses received, a grower information workshop was conceived by support of the St. Lucie county Farm Bureau and respective advisory committees of the Extension Service. Result: In the first workshop presented this past year, St. Lucie county had 84 participants from the various agricultural interests, received five education units from the Department of Agriculture, and entertained the press. The local press used much of the information received in a special report to the public about IFAS and agri-industries participation and concern for the future. Conclusion: In the near future, IFAS Extension personnel will become the important link of disseminating changing information and regulations to the agri-business community. Workshops and CEU credits sessions should become an integral part of the educational process of Extension.

Monitoring Salinity Levels in Relation to Water Quality in Agriculture Production (89)
J. W. HEBERT and B. J. BOMAN, St. Lucie County
Florida agriculture operations are facing a unique dilemma with water quality in their production practices. Monitoring surveys can often lead to awareness and changes in production practices for the grower. Objective: To determine the detrimental salinity levels of various types of soil locations in the coastal areas of the Indian River area. Methodology: Achievement of dissemination by publication of survey results, experimentation with various levels of salinized water, grower meetings and seminars. Results: Since its inception, the survey has indicated an increased level of salinity in suspected sites. Conclusion: The survey is an ongoing process to objectively determine possible renovations concerning grower production practices with salinity.

PROJECT PUP - Pets Uplifting People: An Effective Community Resource Development Program for the Elderly (88)
J. HEBERT, Orange County
For the first time in the history of our Nation, there are more citizens over the age of 65 than those under 25. Florida is one of the nation's leaders in geriatric care. Pet facilitated therapy has been shown to be an effective program for the health and happiness of the elderly. Objective: Project PUP - Pets Uplifting People is a program that brings pet owners who would like to share their pet's "unconditional love" with the elderly in nursing homes/life care facilities. Methodology: Volunteers and their pets go through a screening process, an orientation program, pets are given a health examinations twice a year, and assigned to a facility. Result: Over 130 volunteer pet owners are participating in 15 facilities. Fourteen (14) additional facilities have heard about the Project PUP program and would like to participate in this very successful program. Conclusion: Program is expanding to the point where volunteer "pet" organizations (i.e., dog clubs, humane societies, etc.) should "take-over" the management of Project PUP. Extension should continue to give leadership and direction to the program.

Florida Cattlemen's Institute: An Effective Program to Reach Florida Cattlemen (90)
J. HEBERT, Orange County
Situation: During the Institutes first six years, participation was discouraging. Charlie Williams, it's founder, felt it should exceed or surpass all well known Institutes (i.e. Citrus, Poultry, etc.). Objective: Increase attendance by involving the Florida Cattlemen's Association (F.C.A.), the Allied Trade Committee of F.C.A. and Extension Agents throughout the state. Methodology: Develop a program with input from the leadership of F.C.A., Extension and the Allied Trade Industry. Develop a "P.R." program to reach the target audience. Result: A major concern to cattlemen (The Florida Heifer) was the program focus. F.C.A. agreed to co-sponsor the Institute. Individual letters were mailed to 4,200 members of F.C.A. County Extension Agents sent the same letter with their signatures. F.C.A.'s Cattlemen's Magazine publicized the Institute for 3 months. Conclusion: Over 450 cattlemen (more than 10% of F.C.A.'s membership) attended and participated in the 7th Annual Institute. The President of F.C.A. said it was the most successful, to his knowledge, of any program for cattlemen. Extension Agents involved felt a sense of accomplishment.

Maximizing Program Diffusion by Leveraging Funds (91)
H. HELIKSON and G. COOK, Energy ES
Objective: This presentation discussed how minigrant funding from the Energy Extension Service, FL70, can be leveraged to create projects with multi-source funding to enhance the diffusion potential of a program. Methodology: The Energy Extension Service, FL70, awards minigrant funding to projects in extension which demonstrate energy efficiency within a program area. This money often provides the initial resources which extension field faculty require to build the framework of a program. When other organizations with funding see that the groundwork for a program has already been established, they are more inclined to "join the bandwagon". These supplemental funds improve the extension potential of a program. Results: Examples of Energy Extension minigrant leveraging--S. Behnke, Broward County, Energy and Recycling; P. Allen, Escambia County, Energy and 4-H. Conclusion: Energy Extension Service minigrants can be the start of a project which can be leveraged into an extension program with far-reaching results.

Canola (Brassica Napus) And Crop Production Systems (91)
R. H. HINKLE, Jackson County
Research data showing the efficacy of canola as compared to wheat in terms of yield, pests and tillage practices. A one acre field was divided into four quarter acre plots. Half of the test are disk in and the other was deep plowed using a mold board plow. Canola and wheat crops were planted and lightly disk to improve seed soil contact. Routine field visits were conducted to determine pest problems. No preplant fertilizer was used. However, a 60 pound ammonium nitrate (32%) winter application was made in February. Weeds infested the area and competed for light, space, moisture and nutrients. At harvest, four 20 x 19 inch plots were sampled to determine yields and moisture content. The deep tillage canola and wheat yielded on the average 50 and 33 bushels each respectfully. The disk canola and wheat plots yielded on the average 33 and 26 bushels each respectfully. Harvest problems with canola consisted of excess moisture, green immature pods, weeds and shattering of pods.

**Recycling Of Plastic Pesticide Containers** (93)
R. HINKLE, Jackson County
Recycling of plastic pesticide containers helps reduce the risk of pesticides contaminating our soils and our surface and ground waters. The goals of this program were to: Demonstrate recycling of plastic pesticide containers using currently available technology. Determine the feasibility of collecting, processing and recycling plastic pesticide containers in Florida. Determine the levels of pesticide residues that occur in pesticide containers offered for recycling. Develop instructional materials on the proper way to pressure rinse containers and how to handle the containers for recycling. To successfully recycle HDPE containers, containers had to be: properly cleaned, stored out of rain, collected and granulated and processed for recycling. Over 2000 pesticide applicators received educational training and support equipment for the program. Over 8000 containers have been granulated into 6000 lbs. of HDPE flake within the state. About 3000 lbs. of plastic flake has been sent to a processing center in Birmingham, Alabama. Cost analysis indicates that recycling of plastic pesticide containers is not cost efficient.

**Comprehensive Survey of Palm Beach County's Nursery Industry** (92)
L. B. HODYSS, Palm Beach County
Survey was mailed to 551 certified nurseries in Palm Beach County to gain information on: years in business, gross sales, labor trends, irrigation, computer use, marketing costs, type of plant material grown, shipping destination and diagnostic procedures. Two hundred seventy-nine surveys were returned. Results show an industry with most nurseries in business for 6-10 years, with gross annual sales in 1990 of $100,000 to $250,000, and with 5.5 employees. About half of Palm Beach County's nurseries are using computer, mostly for accounting purposes.

**Improved Weather Forecasting For Agricultural Areas** (90)
D. B. HOLMES, Dade County
**Objective:** Improve accuracy of minimum low temperature forecasts for agriculture areas. **Methodology:** Agent worked with National Weather Service personnel to identify appropriate instrumentation to achieve objective. Funds to purchase equipment were obtained from various agricultural organizations. **Results:** Sites identified for location of equipment. Funds collected and equipment on order. **Significance:** Anticipate greater accuracy in projecting minimum low temperatures for growers resulting in better management decisions and potential savings in millions of dollars.

**Developing A National Framework for Urban Extension Programs** (95)
D. HOLMES, Dade County
The author has served on an ECOP sub-committee that was commissioned to prepare a framework which will provide direction for Cooperative Extension programs in urban areas throughout the United States and it's territories. **Objective** of this sub-committee was to prepare the following framework items: vision statement, mission statement, identification of values, and outcome, operational and contextual goals for urban programs in Cooperative Extension. The framework itself will be used to create awareness and market Cooperative Extension programs, influence decision makers and influence policy decisions. **Methods** included sharing programs that are already in place and compilation of a data base of these programs, meeting as a national task force to identify the framework items and to develop appropriate wording, meeting with federal agency heads for fact finding and awareness, and development of two national conferences, one in 1994 and one in 1995, to introduce these concepts to County and State faculty throughout the nation. **Results:** A national framework has been developed and awaits adoption at the second national meeting, which will be held in August, 1995. One full time position, which will represent the interests and needs of Cooperative Extension Programs at the federal level, has been created and filled within the U.S. Department of Agriculture. The stage has been set for Cooperative Extension to network with Urban Universities throughout the country. **Conclusion:** Urban settings will play a major part in assuring a future for the Cooperative Extension Service. As competition for federal, state and local dollars continues to increase, Cooperative Extension must seek ways to collaborate with other agencies in the delivery of programs, while not losing identity for the contributions it makes. Comparing work that is done in different parts of the country, adopting successful programs from one city to the next and jointly reporting on the successes of these programs will result in better services for citizens and greater awareness and appreciation of the importance of Extension programs by decision makers. The net result will be continued funding for Cooperative Extension programs.

**Use of a Landscape Maintenance Services Directory as a Marketing Device** (89)
M. J. HOLZINGER, Sarasota County
Plant locators have been used for several years by Florida ornamental plant growers to draw customers and stimulate sales. However, similar efforts for commercial landscape maintenance are not evident. A novel new approach involving a directory of services offered through the Florida Landscape Maintenance Association (LMA) is presented. **Objective:** to market services of landscape maintenance practitioners and stimulate increased
landscaping business. **Methodology:** Members provided details for individual listings. Advertising was solicited to defray production costs. The Directory also included information on the LMA professional standards and cultural checklist. **Results and Conclusion:** The directory has been distributed to nearly 2000 potential customers. It greatly increased exposure for listed members, added clients, and promoted a professional image. The cultural calendar checklist is also a teaching tool for proper maintenance practices.

**Sarasota County Establishes Innovative New Urban I.P.M. Program** (91)

**M. J. HOLINGER, Sarasota County**

**Objectives:** To stimulate significantly greater knowledge and adoption of Integrated Pest Management Practices by Sarasota County.

**Methodology:** The Extension Director led a special county staff - citizen - industry task group which developed and presented a plan to convert all interior and exterior pest management at County Government facilities to I.P.M. This included formation of a unique new board-based citizen Environmental Pest Management Advisory Board. Its priorities include: developing user training and public education materials, research needs determinations and evaluation of new I.P.M. proposals to stimulate greater use of least toxic pest management practices plus reduce unnecessary use of pesticides. **Results:** The program was approved by the Board of County Commissioners on April 2, 1991, as the first of its kind in the state. Positive news media coverage was obtained nationally and in all Florida metropolitan areas. **Conclusion:** Similar I.P.M. programs are replicable and should be adopted for other urban areas. This program should have a significant long term beneficial impact on the environment and pest control operations.

**HELPMOBILE - Sarasota County's New Mobile Outreach Office on Wheels** (92)

**M. J. HOLINGER, Sarasota County**

**Objective:** Provide educational information to citizens in South Sarasota County and Longboat Key which are distant from the home office. These areas do not justify a fixed satellite office. **Methodology:** A unique prototype vehicle was designed in-house to provide the service. It is a 16-foot trailer with cabinets, file storage, sink, refrigerator, stove, fresh and wastewater storage, microwave, exhaust fans and lighting all operated by a solar voltaic system. Like a bookmobile it stops at high visibility locations for one day in Venice, and one half day in Englewood, Northport and Longboat Key. Advice on agriculture, home horticulture, pest management, conservation, recycling, and other extension programs is offered. When not on the schedule, the helpmobile is used for other community events. **Results:** The new outreach service has been enthusiastically received. Attendance has averaged 40-50 per day. Widespread positive publicity has occurred. It was a featured presentation at Florida Innovation Group's Technology Day in Tampa in June 1992. **Conclusion:** In terms of citizen service in outlying areas, it offers a cost effective alternative to establishing permanently manned facilities. Visibility and flexibility in use at community events is superior. Use of the vehicle itself to educate on energy conservation is unique.

**Urban Wildlife: A New Concept in Extension Programming** (87)

**C. HUEGEL, Pinellas County, F. MAZOTTI, Broward County and J. SCHAEFER, Alachua County**

Florida is one of the fastest growing states in the nation and one of the most urbanized. Florida also has the third most diverse wildlife fauna in the nation; many of which live in urban or urbanizing areas. **Objective:** To develop a program to increase urban residents' involvement in enhancing and preserving urban wildlife populations and their habitats. **Methodology:** A series of meetings with personnel of various agencies was held to identify issues important to urban wildlife. **Results:** A strategic plan has been developed that should guide this program in reaching its objectives. **Conclusion:** Urban wildlife can be an effective and useful extension program.

**4-H Support Not Just Fund Raising** (87)

**J. T. HURNE, Highlands County**

4-H has benefitted from a fund raising dinner. Over the past 4 years approximately $26,000 has been raised to make major improvements in our Youth Livestock Show Facility. The **method** used was an annual Fund Raising Dinner where those attending pay $100 per couple for an "all you can eat" seafood and sirloin dinner. Those attending in addition to a good meal enjoyed and evening of prize drawings where the ultimate prize was a trip to Europe, Hawaii or Alaska. An auction is another highlight of the evening where participants can bid on anything from a redwood table to a Bugatta Roadster Sports Car. **Results** are 250 people who have had a great time, won a prize, had a good meal and are pleased at what they have done for 4-H and what 4-H has done for them. Also between $6000 and $7000 are netted to support projects of the 4-H Club Foundation. **Conclusion:** 4-H with all the budget constraints of today's government cannot rely on traditional support.

**Building Extension Support with Home Horticulture Clientele** (87)

**C. E. HUTCHESON, Palm Beach County**

The home horticulture clientele in Palm Beach County is large and demands considerable program time. Establishment of a botanical garden and strong ties to amateur horticulture organizations have resulted in a cohesive Extension support group. **Objective:** To better serve the home horticulture population, especially new residents, with plant selection and care options. **Methodology:** In 1978 land was set aside adjacent to the Extension office to develop a display of plants that grow in South Florida and to involve horticultural groups in the display development. **Results:** A botanical garden has grown out of this effort with 15 horticultural groups intimately involved in support and development. Over 40,000 persons use the facility annually. This support has resulted in a new $1.7 million 18,000 ft.² Extension office building to be started on site in September 1987 giving a total of 26,000 ft.² of Extension office space on site. **Conclusion:** A diverse and seemingly unstructured clientele group can be effectively used to successful reach program goals.
By the end of 1988, about 80% of the laying hens in Central Florida will be housed in evaporative cooled, closed housing.

Temperature Variability In Hi-Rise Closed Poultry Housing

There was a need to quantify local needs to be referenced in grant applications and to give a uniform base of information to guide Union County decision-makers. Objectives: To identify and quantify Union County citizens’ opinions on major economic development and community relations issues. To educate decision-makers about citizen opinions. Methods: Survey instrument developed by committee representing cross-section of agencies, industry and management in the county; guided by Extension Specialist. Trained and supervised volunteers collected data, using coded interview forms to preserve anonymity. Database established with volunteer labor. Preliminary results summarized for decision-makers, presented at Chamber of Commerce banquet; followed by a bound publication of results to be referenced. Results: Union County Redevelopment Agency, Inc. formed using survey results. City of Lake Butler authorized consultant application for $500,000 grant using survey results. County Commissioners, Tax Appraiser, Tax Collector, Sheriff and Superintendent of Schools have used survey results in dealing with public issues. Conclusion: Citizens’ survey of local needs can be used as an Extension education tool to organize volunteers and empower local decision-makers.

Training Landscape Maintenance Personnel for a Fee

C. HUTCHESON, Palm Beach County

Providing ongoing training for professional landscape maintenance personnel meets industry, environmental, and landscape maintenance clientele needs. Objectives: To provide a quality training program developed with industry input, to enhance their image and credibility, delivered at a satisfactory time and location, at a fee that generates some income to Extension for continued programming. Methods: An industry advisory group met with an Extension Agent to outline the needs the course should meet. Topics were identified, 20 speakers arranged for and a fee set. Advertisement went to industry personnel, supply outlets and Extension mailings. An evaluation instrument, the commercial ELM survey, was selected and used as a pre-course survey. At the end of the course a follow-up evaluation meeting was held to determine the usefulness of the 13 week course and its future. Results: Twenty-four persons attended the course and graduated. The written course evaluations indicated the course was on target and graduates would recommend it to their industry peers. The 13 full days of training were adequate although more information was desired on certain subjects. Conclusion: The course will be offered in 1997 and the fee of $250 per person will remain in place. The industry would like to see the course have the same status for commercial personnel as the Master Gardener course has for the amateur horticulturist. The post survey will be conducted in November 1996 to evaluate changes.

Empowering Rural Development Through Volunteer Quantification of Local Needs: Using a Citizens’ Survey of Local Needs

G. ISRAEL, PEO and J. BREMAN, Union County

There was a need to quantify local needs to be referenced in grant applications and to give a uniform base of information to guide Union County decision-makers. Objectives: To provide a quality training program developed with industry input, to enhance their image and credibility, delivered at a satisfactory time and location, at a fee that generates some income to Extension for continued programming. Methods: An industry advisory group met with an Extension Agent to outline the needs the course should meet. Topics were identified, 20 speakers arranged for and a fee set. Advertisement went to industry personnel, supply outlets and Extension mailings. An evaluation instrument, the commercial ELM survey, was selected and used as a pre-course survey. At the end of the course a follow-up evaluation meeting was held to determine the usefulness of the 13 week course and its future. Results: Twenty-four persons attended the course and graduated. The written course evaluations indicated the course was on target and graduates would recommend it to their industry peers. The 13 full days of training were adequate although more information was desired on certain subjects. Conclusion: The course will be offered in 1997 and the fee of $250 per person will remain in place. The industry would like to see the course have the same status for commercial personnel as the Master Gardener course has for the amateur horticulturist. The post survey will be conducted in November 1996 to evaluate changes.

Temperature Variability In Hi-Rise Closed Poultry Housing

R. D. JACOBS, Multi-County

By the end of 1988, about 80% of the laying hens in Central Florida will be housed in evaporative cooled, closed housing. This type of housing is characterized by air temperature variability inside the houses, especially during the summer months. Objective: To measure how great these temperatures are and determine what effects these temperature differences have on egg production parameters. Methodology: The study was conducted in July and August 1987, using 2 trials of 7 days each. Twenty-four cages of hens were located near evaporative coolers (cool end) and 24 cages were located near exhaust fans (warm end). After the first trial, one-half of the birds in both ends were switched to the opposite end and allowed to become acclimated for 9 days. Result: The 7-day 24 air temperature differences in Trial 1 averaged 9.36 degrees and 6.44 degrees F in Trial 2. These temperature differences affected all productions parameters observed. Conclusion: the variability in air temperatures in closed housing have a very negative effect on egg production parameters.

DHI Dairymen Improve Profits Through On-Farm Computer Records Program

M. G. KELLY, Duval County

Dairy profits can be improved through more effective management of production information. Adequate information is needed daily by dairymen to make effective decisions regarding milk production, nutrition, reproduction, genetics, herd health and replacements. Objectives: Increase milk production efficiency and profits through effective use of the DHI “DART” on-farm computer records program. Methodology: Since 1983, dairymen have received instruction on principles of production information management, operation of micro-computers and application of the DART program through educational meetings, workshops, seminars, on-farm demonstrations, farmer consultations and written materials. Results: In 1986, 16 Northeast Florida dairy farmers, or 73% of Duval DHIA dairymen, utilized the DART on-farm records program. From 1983 to 1986, milk production per cow increased 10% from 13,396 lbs. to 14,685 lbs.. Milk income over feed cost increased 21% from $6.61 per cwt. milk to $7.97. Conclusion: Milk production efficiency and profitability increased through the effective use of the DHI “DART” on-farm computer records program.

Save Energy, Resources, and Money with IFAS Bahiagrass Pasture Fertilization Recommendations

G. KIDDER, Soil & Water Science, M. RAMSEY and E. JENNINGS, Pasco County

Objectives: To inform agricultural producers of revised fertilizer recommendations for bahiagrass pastures. Methodology: A team of County Extension Agents and IFAS Specialists conducted three year on-farm demonstrations in a nine-county area in south-central Florida. Information on the resulting revised recommendations was disseminated via tours and printed materials. An Energy Extension Service grant
was secured and used to produce a 20 minute video to further enhance information dispersal. **Results:** Over 1000 publications have been distributed statewide. The video has been shown at the Florida Fertilizer and Agrichemical Association's annual meeting, the Beef Cattle Short Course, the Florida Cattlemen's Association convention, and locally through County Extension Agents. **Significance:** By reducing the amounts of phosphorus and potassium used, producers report cutting costs by 50% without lowering production. Finite natural resources and energy are saved and chances of negative environmental impact from over-fertilization are reduced.

**Crop Nutrient Management Demonstration Project** (93)
M. J. KISTLER, Sarasota County

**Objective:** To reduce fertilizer usage through improved management practices. **Methodology:** A local celery grower was targeted. Soil samples were collected and submitted to the Extension Soil Testing Laboratory to be analyzed for the standard soil fertility test, micronutrient, and electrical conductivity. Fields were fertilized based on UF/IFAS recommendations. Irrigation monitoring wells were installed on several fields to aid in fertilizer and water management. **Results:** Soil tests indicated enough P and K to satisfy the crop nutrient requirement. Based on these results, grower reluctantly fertilized with a split application of 200 lb N/acre. Micronutrient were at levels where they could be phytotoxic. Grower discontinued yearly micronutrient application due to these results. Monitoring wells helped maintain the water table in the beds to prevent nutrient leaching. Grower found no difference in yield and quality compared with previous practices. Grower saved approximately $61.00 per acre on fertilizer input costs alone. **Conclusion:** Growers can save thousands of dollars per year by fertilizing according to the crop nutrient requirement based on soil test results.

**Increasing Pesticide Safety Awareness at the Miami International Airport** (89)
M. LAMBERTS, Dade County

The landscape and grounds maintenance crew at the Miami international Airport (MIA) comprises some 70 employees from 2 Metro-Dade departments. Most are from Aviation, the remainder from Public Works. Agricultural pesticides are used in the landscape, on rights of way, along runways, and on canal banks. The Dade-IFAS Cooperative Extension Service has recently expanded its interactions with the grounds maintenance crew to include pesticide safety training for all workers who may be exposed to pesticides. An initial 1 hour session for all employees covered basic principles of pesticide safety, with a lengthy discussion of how specific current practices at MIA could be modified for greater safety. A second session for 15 supervisors covered mixer-loader safety precautions, strategies for developing an effective MSDS training program specific to the needs of MIA, and how supervisors could best train new employees. This program has been supplemented with one in which all supervisors are becoming licensed in the appropriate categories.

**A New and Rapid Educational Approach to Induce Ornamental Products to Grow Alternative Crops** (87)
L. LANDRUM, Volusia County and B. TJIA, Ornamental Hort

Foreign competition means cheaper conventional florist crops are entering the US markets forcing Florida Growers to seek alternative crops. Crops traditionally grown by Florida Growers such as chrysanthemums are decreasing in acreage and the number of growers growing them. Those that are still growing either diversified into other florist crops such as bedding plants, foliage or other cut flowers. Many growers are still seeking alternative crops that they can grow even on a limited basis for local consumption. A unique and rapid approach to induce growers to try alternative crops on a limited basis was tried. First a marketing survey of a particular crop is undertaken. The results of one such survey were very positive and the potential was presented to a local group of growers. An educational program was organized with 32 local growers participating. Participants were mostly small growers. The educational program involved actual production of the crop using restricted amounts of the plant material to familiarize them on how to grow and handle the crop. The initial program was conducted in October 1983 and growers are given monthly instructions as the crops grew and matured. This fall (1987) 15 growers in Volusia county will experiment with forcing Kangaroo Paws for cut flowers. It will be the first time this crop will be grown in Florida.

**Demonstrating an Alternative Market Opportunity for Small Catfish Farms** (96)
A. LAZUR, Mitchell Aquaculture Farm

The majority of Florida Catfish farms are small with less than 10 acres of production. Because of their small size, production costs are high and selling fish at the traditional market, an established processor, at wholesale prices is at best a break-even situation. **Objectives:** To evaluate and demonstrate whether farmers could improve the profit potential by processing their own fish and selling to local retail markets. **Methods:** Necessary state permits were researched and an on-farm processing facility capable of processing 500 pounds of fish per day was constructed at the Mitchell Aquaculture Demonstration Farm to serve as a model facility. A local catfish farmer participated in trials of actual processing to determine real costs and efficiencies. **Results:** Total cost to construct and equip the facility was $9,500. Labor requirements to process 500 pounds of small catfish (5 pound live weight) and facility cleaning totaled 20 man hours. Total water use was 185 gallons per day. Actual processing cost per pound was $ 0.37 and break-even price per pound of processed fish was estimated at $2.23. **Conclusions:** The local price for small dressed catfish varies from $2.50 -2.75. Therefore, a break-even price of $2.23 by utilizing an on-farm facility, provides for a profit of $0.27 - 0.52 per processed pound or $0.14 -0.28 per pound live weight, minus any delivery costs. Facility design criteria are simple with permit requirements easily met. In addition, the on-farm processing concept provides greater market opportunities for small catfish farmers located in areas where processing facilities are not established.
**Demonstration of Baitfish as an Alternative Aquaculture Species (96)**

A. LAZUR, Mitchell Aquaculture Farm and D. ZIMET, NFREC-Quincy

Florida’s freshwater fishing is estimated to be worth one billion dollars annually. Sales of live baitfish, primarily golden shiners, contribute significantly to this industry. Yet virtually all golden shiners are imported from Arkansas and neighboring states. **Objectives:** To evaluate the feasibility of golden shiner production in Florida. **Methods:** A two-year production demonstration study was conducted in 0.4 acre ponds at the Mitchell Aquaculture Farm. Standard baitfish production management practices were utilized. In addition, an economic feasibility analysis using actual production data was conducted. **Results:** Average production for the two-year study was 2,140 pounds per acre. At October harvest, approximately 50% were marketable as either crappie or bass bait with the remaining 50% requiring further growout into early Spring. The economic study provided information on investment and operating costs, an enterprise budget, cashflow and sensitivity considerations for two sizes of farms, five and twenty acres of production. **Conclusions:** Production volume achieved in the small ponds used in this study averaged 260% greater than average production rates in the primary bait producing states which typically use 8-20 acre ponds. The economic analysis demonstrated that the five and twenty-acre operation generated a net return per acre of $463 and $1,058, respectively. Positive cumulative cashflows were obtained in year nine and five for a new five and twenty-acre operation respectively, and in year three for existing fish farms with ponds and other equipment. This analysis showed golden shiner production to be a potentially more profitable enterprise than catfish for Florida’s small farms.

**Brevard County Water Issues Conference (92)**

J. L. LOADHOLTZ, Brevard County

Water and Environmental issues are paramount in Brevard County. **Objective:** 1) Provide citizens, governmental leaders, landowners and educators an opportunity to broaden their understanding and knowledge of water systems. 2) Promote effective management of water resources. 3) Build leadership among participants addressing water issues. **Methodology:** Draw on the resources of Extension and water related agencies to plan, develop and conduct an educational conference. **Results:** A steering committee of 20 county and state agencies was formed. The Extension Service coordinated the program. Six task force committees were appointed and identified conference topics. One evening session and six concurrent daytime sessions were conducted by 62 speakers at Brevard Community College. Twelve commercial and governmental agencies displayed exhibits. **Conclusion:** Formal evaluation reflects 90% felt the conference met their expectations and urged a repeat conference for 1993.

**Landscape Design Needs to Be Higher Extension Priority (87)**

D. W. MARSHALL, Leon County

The purpose of residential landscape design is to make the land around the home as functional as the house itself. Many plant selection, maintenance, pest and even water conservation problems, stem from homeowners' lack of understanding of basic landscape design principles. **Objective:** To give homeowners a greater understanding of the concept of landscape design. **Methodology:** During the winter of 1987, an eight-week landscape design course was offered to the public. This course was supplemented with newspaper columns and radio shows on landscape design. **Results:** Response to the class was overwhelming and a waiting list for future classes had to be established. The majority of homeowners completing the course demonstrated increased knowledge of landscape design through their homework and their final project of drawing a landscape plan to scale for their own home. **Conclusion:** Participants in the course made obvious improvements in their own landscapes, indicating a need that more emphasis be placed on landscape design training in urban Extension horticulture programs.

**Developing a "Women In Agriculture" Program (88)**

M. F. MCKINNEY, Hillsborough County and J. A STRICKER, Polk County

Research has shown that as men are leaving the farm for off-farm employment; women are taking a greater responsibility for all phases of farm and agricultural work. **Objective:** To design a multi-county program with clientele input, that would: (1) focus attention on the contribution women are making in agriculture, (2) provide meaningful educational pro rams for this audience, (3) assist specialists in research data collection and (4) mainstream audience into other IFAS/Extension programs. **Methodology:** (1) Multi-County Advisory Committee was organized, (2) Major seminar was conducted, (3) Promotional video is in production, and (4) Twenty-five interviews were conducted to supply specialists with research data. **Result:** One hundred and twenty-five participants enrolled in the first educational seminar, educational video is being utilized on public broadcasting and cable network, results from follow-up seminar evaluation will assist the Advisory Committee and Agents in future planning. **Conclusion:** The "Women in Agriculture" program is proving itself to be a viable agricultural program that encourages this Extension audience to utilize other IFAS/Extension resources.

**Developing an Extension Agriculture Policy Advisory Committee (Ag-Pac) (89)**

M. F. MCKINNEY, Hillsborough County

The agricultural community In Hillsborough County, was extremely fragmented, very diversified and had a negative image problem. **Objective:** Organize a representative group that would: 1. Study various agricultural issues confronting the farming community. 2. Advise the Extension faculty in developing an Ag-Policy education program. 3. Learn how to be effective when representing agricultural concerns. 4. Support Agriculture and Cooperative Extension (IFAS) at workshops, hearings and meetings as the need arises. 5. Report committee happenings back to parent organization. **Methodology:** Bi-monthly dinner meetings were conducted to address the above objectives. The agent-advisor and IFAS specialists conducted educational programs in Public Policy education. **Results:** Attendance at the called meetings is running at 95%, the committee is planning a county-wide 1 Ag-Policy Workshop, they produced a promotional Video to support agricultural issues and they are actively supporting the...
The adoption of water conservation practices by agriculturists will be essential to Florida's farming future. Vegetable R. L. MITCHELL, Hillsborough County

Field demonstrations yield success and frustration: an example involving drip irrigation management of copper fungicides (most commonly cupric hydroxide) are used by Florida tomato growers for the control of 'bacterial spot', an economically severe disease of tomatoes grown in humid climates. Copper levels exceeding county regulatory standards (0.5 mg/l, total) were found in 5 south Dade County tomato packhouses' dump tank effluent discharged to sewer or to ground during the 1988-1989 winter vegetable season. Industry measures for achieving compliance took 2 forms: a) reduction of copper residues on fruit entering the packinghouse by the utilization of low analysis copper fungicides (copper ammonium carbonate) together with more rigorous management of application events and b) retro-fitting tomato packaging houses with wastewater treatment facilities utilizing pH adjustment, particle flocculation and filtration to remove copper and provide optically clean water for potential recycling.

The Florida House Learning Center Demonstration Landscaping (95) F. MELTON, Sarasota County
The Florida House Landscape is designated by the Sarasota Bay National Estuary Program as a Florida Yard Program Demonstration Landscape. The goals are to reduce pollution in Sarasota Bay which is similar to those of Environmental Landscape Management: reduce water, fertilizer, pesticides, recycle yard waste, and in addition, reduce stormwater runoff. The landscape is a sustainable one which has positive impact on the environment. It was designed to display plants that can survive and be healthy, at a low maintenance level. Site analysis was considered in plant selection, and the majority of plants have low water requirements. Fertilizer use is sufficient to keep plants healthy but not excessive, and integrated pest management is practiced to reduce the risk of polluting stormwater runoff. No solid paved surfaces are present, so stormwater soaks into the ground. Micro-irrigation and cisterns maximize irrigation efficiency and reduce supplemental water requirements. Composters are displayed to encourage residents to recycle yard waste. The landscape and house is open to the public four afternoons per week, so they may see what they can do with their landscapes. It is a valuable tool for Master Gardener/Florida Yard Advisor Training. Volunteers can see how to have an environmentally friendly landscape and show Florida yard program participants how to have a Florida Yard. Master Gardeners/Florida Yard Advisors are landscape tour guides and perform most of the maintenance. Approximately twenty-five thousand visitors have viewed the landscape since it opened in April, 1994.

Alternative Use for Christmas Trees (95) K. MICKLER, Bay County
Objective: The purpose of this program is to help Bay County residents understand the importance of recycling. By recycling Christmas trees into a useable mulch, a start is made towards reducing the volume of yard waste entering our landfills. Other forms of recycling such as mulching and composting of Christmas trees allow individual citizens or the whole family to have a hand in solid waste reduction. Methods: University of Florida, Bay County Cooperative Extension Service, Bay County Solid Waste Division, Bay County Fair Association, Master Gardeners, and volunteers combined efforts for planning and implementing the one day Christmas tree recycling program at the Bay County fair grounds on Saturday, January 7, 1995 from 8:00 A.M. to 12:00 P.M.. Christmas trees were collected from December 25, 1995 up to the last minute the chipper was operating. Mulching equipment was donated by the Bay County Solid Waste Division along with 2 qualified personnel to run the chipper and help distribute the Christmas tree mulch back to the public. Results: More than 1,500 citizens participated in the Christmas tree recycling program with participants ranging from senior citizens to little children. Local business participated also. Approximately 2000 Christmas trees were recycled generating about 50 cubic yards of mulch to be used in the home garden or landscape. Conclusion: There is a growing need for training of citizens to recycle yard waste. Remember, it is not waste until it is wasted, and there is no reason to throw away what can be recycled.

Field demonstrations yield success and frustration: an example involving drip irrigation management of tomatoes (87) R. L. MITCHELL, Hillsborough County
The adoption of water conservation practices by agriculturists will be essential to Florida's farming future. Vegetable growers are interested in switching to drip irrigation, but need an abundance of new information to accomplish this. Objective: To demonstrate and evaluate various management regimes and water conservation practices for drip irrigated tomatoes. Methodology: A 5 acre demonstration was established on a commercial farm to demonstrate various fertilizer and water management combinations as well as state of the art technologies and equipment. Results: A demonstration field day was held with over 110 people in attendance. Both IFAS and the agricultural community received valuable information. Acreage of drip irrigated vegetables in Hillsborough County is expected to increase by over 20%. Some yield information and other types of data were lost when the plots were inadvertently harvested by the growers field crew. Conclusion: Field demonstrations can provide a successful and convincing means for presenting information, but are often high risk projects.

Growers evaluate ornamental herbicides at Lake County Field Day (89) C. A. NEAL, Lake County
Several new herbicides for use in landscape plant production have recently become available. Screening trials to evaluate weed control efficacy and crop phytotoxicity were needed to assist growers in selecting herbicides for
commercial nursery use. **Objective:** To compare herbicide treatments in a replicated field trial and to involve local growers in evaluating the results. **Methodology:** Nineteen herbicide treatments were applied to 16 species of container-grown plants in a replicated research trial at a local nursery. A result-demonstration field day was held at which growers were asked to rate the degree of weed control in each plot before the plots were labelled with herbicide names. The research results have also been used in publications, newsletters and local Extension recommendations. **Result:** Eighty people attended the field day. Grower ratings were highly correlated with dry weed weights and researchers' ratings. Forty percent of the growers intended to try a new herbicide based on the result demonstration. **Conclusion:** Applied research conducted at the local level can serve the needs of researchers, educators and commercial clientele.

**Comparing Water Use and Efficiency of Greenhouse Irrigation Systems** (92)
C. A. NEAL, Lake County and R. W. HENLEY, CFREC-Apopka

**Objective:** Quantify and demonstrate the water and energy savings potentials of greenhouse irrigation system alternatives. **Methods:** A demonstration greenhouse at the Lake Co. Agriculture Center was retrofitted with four types of irrigation systems and benchtop modules which allowed for recovery of waste water. The four systems were overhead sprinklers, drip, capillary mat and ebb and flow. Two crops of Dieffenbachia maculata were produced. Flow meters were used to record water applied at each irrigation, runoff was measured after drainage and application efficiencies calculated. **Results:** The application efficiency of overhead sprinklers in this demonstration was only 9%, compared to 50-60% for drip and capillary mats, and 75% for ebb and flow. Reducing the amount of water applied also limited leaching of nutrients, resulting in lower fertilizer requirements. **Conclusion:** Potential water and energy savings of 75 to 90% can be achieved by selection and management of efficient irrigation systems. Results have been conveyed to producers in seminars, tours and publications.

**An Economic Analysis of Veal Production** (92)
W. M. ODEGAARD, Hernando County

**Objective:** To identify and promote an alternative enterprise that would serve as a source of income and employment. **Methods:** An ag advisory committee was formed to identify a new alternative which was compatible with local agricultural resources. Veal production, as a by-product of the dairy industry, was singled out as a possible profitable alternative enterprise. Applied research efforts determined the economic feasibility of producing veal in Fla. Research was funded by the local Chamber of Commerce. **Results:** Findings determined that veal production is not a "get rich quick" business but has the potential to provide a dedicated manager with reasonable rewards. Results were made available to the target audience. **Conclusion:** Following this study, two veal operations were established in north Fla.. Industry growth has been hampered because the animal rights movement has identified veal production as inhumane husbandry. Program emphasis has now shifted to a veal program that does not require calves to be raised in crates and fed on iron free diets.

**Ag Tours Plant Seeds of Awareness** (93)
W. M. ODEGAARD, Hernando County

**Objective:** Hernando is the second fastest growing county in Fla. Between 1982 & 1992, the county experienced a 127% increase in population. Consequently, children in the county growing up in an urban environment have little knowledge of agriculture. **Methods:** The Co. Extension Director organized an ad hoc committee to address this problem. Committee members helped plan an educational program that would teach young people about local agriculture. Ag tours were selected as an interesting way of accomplishing this task. **Results:** Approximately 1400 fifth grade students and teachers participated in this program. Tours were held intermittently between November and January. Local agriculture business organizers contributed $1500 to support the cost of buses and drivers who transported the students. **Conclusion:** Evaluation forms were mailed to all teachers who indicated that students gained a greater understanding and appreciation of ag as a result of the tours. 100% of the teachers expressed a desire to participate in this program next year. Teachers stated that their students were now aware of the crops and livestock raised in the county and gained an insight into the economic importance of agriculture.

**Assisting Small Farmers in Hernando County** (94)
W. ODEGAARD, Hernando County

A majority of local farmers are classified as "small farmers" by U. S. Dept. of Agriculture standards. These individuals are experiencing difficulties because of the rising cost of technology, marginal profits, land costs and the loss of agricultural land to development in Hernando County. **Objective:** To identify new income alternatives, particularly those which are compatible with agriculturally oriented resources and skills found in the county. **Methods:** Conducted a small farmer survey to obtain benchmark data. Assisted small farmers in identifying, producing and marketing alternative sources of income. **Results:** A small farmer survey identified key characteristics and needs of small farmers. A goat producer's association and rabbit marketing association was organized. **Conclusion:** (1) Small farmers are in need of new income alternatives. (2) A survey helped to provide detailed information about small farm operators and to develop relevant programs. (3) Goat and rabbit production may offer profitable alternatives for approximately 60 producers who have participated in Extension sponsored educational programs.

**Rabbit Production - An Alternative Enterprise for Small Farmers** (96)
W. ODEGAARD, Hernando County

**Objectives:** To provide training and technical assistance to small and part-time farmers looking at rabbit production as an alternative source of income. **Methods:** The agent provided prospective rabbit raisers with up-to-date production and marketing information. A one day rabbit conference included Florida rabbit producers and an internationally recognized rabbit specialist as speakers. Three fact sheets were written to disseminate production and marketing information. A fifteen minute rabbit production video was developed. Efforts were made to organize local rabbit
Pine Fertilization with Broiler Litter and Layer Manure

Utilization of low value hardwoods in North Florida to produce Shiitake mushrooms was an extension initiative in 1987. C. OLSON, Taylor County

Shiitake Mushroom Cultivation: Small Farms Expand to Commercial Size Through Extension/Research Efforts

Objective: To demonstrate perennial peanut's value as forage and its establishment, production and management procedures as well as its alternative uses. Methodology: 12 demonstration areas were established in the county from 1982 to 1985 with a field day held in June, 1985. An exhibit with a slide/tape set was developed for use at N. Florida and Tampa State Fairs summarizing research results, depicting hay quality, use as silage, green chop, pellets, meal and ornamental uses. Results: There are currently 50 acres in Taylor County. A non-profit Perennial Peanut Producers Association has been formed encompassing growers from S. Georgia to Central Florida. An IR-4 herbicide labeling process is currently underway with screening areas in this county, Gainesville and Brooksville. Conclusion: Perennial peanut is the only cultivated perennial warm season legume productive under Florida conditions. It is nematode resistant, free of significant foliage feeders, well adapted to sandy soils, has good haying characteristics and requires no nitrogen fertilizer. Present findings confirm its tremendous potential as a forage and other uses.

Brazilian Legume for Cash - Perennial Peanut - An Alternative with Multiple Uses (87)

C. OLSON, Taylor County

Objective: To demonstrate perennial peanut's value as forage and its establishment, production and management procedures as well as its alternative uses.

Methodology: 12 demonstration areas were established in the county from 1982 to 1985 with a field day held in June, 1985. An exhibit with a slide/tape set was developed for use at N. Florida and Tampa State Fairs summarizing research results, depicting hay quality, use as silage, green chop, pellets, meal and ornamental uses. Results: There are currently 50 acres in Taylor County. A non-profit Perennial Peanut Producers Association has been formed encompassing growers from S. Georgia to Central Florida. An IR-4 herbicide labeling process is currently underway with screening areas in this county, Gainesville and Brooksville. Conclusion: Perennial peanut is the only cultivated perennial warm season legume productive under Florida conditions. It is nematode resistant, free of significant foliage feeders, well adapted to sandy soils, has good haying characteristics and requires no nitrogen fertilizer. Present findings confirm its tremendous potential as a forage and other uses.

Shiitake Cultivation: An Alternative for North Florida Small Farm Systems (88)

C. OLSON, Taylor County

Small farms can achieve economic stability by utilizing low value hardwoods to produce Shiitake mushrooms. Small acreages could return $2500/acre/year from these hardwoods. Production information regarding hardwood species, moisture variables, spawn variety, inoculation procedures, log care and yield data is needed under Florida growing conditions.

Objective: To provide a demonstration area in Taylor County for educational transfer of Shiitake mushroom production methodology.

Methodology: 300 logs were inoculated using 3 species of hardwood, 2 strains of Shiitake and 2 inoculation site sealants. Logs were placed in a 2000 ft(2) shadehouse with watering and log soaking systems.

Results: Logs inoculated 3/87 yielded 0-1.25 lbs mushrooms per log.

Conclusion: Shiitake mushroom production could return substantial profits from low grade hardwoods making this an attractive alternative for North Florida small farm systems.

Perennial Peanut Education (89)

C. B. OLSON, Taylor County

A survey of 100 horse owners in Ocala, made to determine current marketing environment for perennial peanut hay, showed 66% had never heard of perennial forage and were unaware of its value as a forage crop. Objective: to provide a means/vehicle to educate producers/consumers about perennial peanut value as a crop.

Methodology: to incorporate a small producer group into a formal association and compile a reference/production manual addressing updated establishment techniques, production methodology, animal research results and marketing.

Results: We have currently 65 dues paying members from around the state and southeast that are actively producing and promoting perennial peanut.

Conclusion: With a perennial peanut producers association formed a reference production manual was written and compiled. Interested producers can make contact and receive updated information and current status under one cover. This group is providing a multi-state leadership role in the development and use of perennial peanut in various livestock production regimes.

Shiitake Mushroom Cultivation: Small Farms Expand to Commercial Size Through Extension/Research Efforts (94)

C. OLSON, Taylor County

Utilization of low value hardwoods in North Florida to produce Shiitake mushrooms was an extension initiative in 1987. Small acreage of these hardwoods could return $2500/acre/year. Initial work has provided valuable information on preferable stain of Shiitake, log management, marketing, yield data, irrigation management, etc. Objectives: Provide a demonstration area in Taylor County of "commercial" size and scope to be able to make recommendations for commercial interests.

Methodology: 2,000 logs inoculated with three strains of Shiitake managed to produce under irrigation only. Logs were placed in 3600 ft2 greenhouse frame covered with clear poly and 80% shade and zone irrigation with maxijet 40 heads, 6 ft. apart.

Results: Through several years of trial and error, water oak logs, 60" long, 4-6" diameter, inoculated with 3 strains selected to produce under irrigation produced 2,000 lbs. from October 1993-April 1994. This work has been presented at workshops/seminars statewide and nationally. The Taylor County Extension Office continues to serve the state and region as an educational resource for Shiitake mushroom production on logs.

Conclusion: Shiitake mushroom production continues to be of interest and demand is continuing to outstrip supply. This method of production is returning profits to those with cost effective methodology of resource acquisition and marketing abilities necessary to enter specialty produce marketing area.

Pine Fertilization with Broiler Litter and Layer Manure (94)

M. OUART, Dairy & Poultry Sciences, G. KIDDER, Soil & Water Science D. DINKINS,Bradford County and M. GOODCHILD, FDACS-DoF
Proximity of large acreage of pines to poultry operations in the Southeastern U.S. and that crop's need for nutrients makes planted pine a prime candidate for environmentally sound utilization of manure. **Objectives:** A demonstration involving private industry and state agencies was established in Nassau County, Florida to determine tree performance and water quality following fertilization with broiler or layer manure or commercial fertilizer. **Methods:** Application rates were calculated to supply 250 lbs N/acre. Treatment plots of 0.44 acres were established in a 9-yr old stand of slash pine located on sandy soil having high water tables and level topography. **Results:** Two years later, increases in tree diameter were 59%, 73%, and 63% and increases in wood volume of standing trees were 19%, 28%, and 36% higher than control for broiler litter, layer manure, and commercial fertilizer treatments, respectively. Fertilization also increased tree needle production. There were no differences in wood volume per acre because fertilization accelerated loss of diseased trees in fertilized treatments, and expected temporary effect which should be overcome by the end of this 5-year study. Nitrate in the shallow groundwater was little affected by treatments. Fertilization with poultry manure had no effect on incidence of Fusiform rust or pitch canker diseases. **Conclusion:** Data suggest fertilization of trees with poultry manure is an environmentally and economically sound practice.

**Recycle Your Clippings (93)**

**N. A. RECHCIGL, Manatee County**

Many Florida residents are not aware of the environmental and economic benefits of recycling yard waste back into the landscape. **Objective:** A grass clipping recycling program was initiated in the Spring of 1991 to demonstrate this concept and gain acceptance of this practice by the community and landscape maintenance professionals. **Methodology:** The cooperators included Homeowners Association of Arbor Oaks, a landscape maintenance professional, a Master Gardener and the Environmental Horticulture Agent. Grass clippings were recycled at 39 residences and were collected at 36. The landscapes were monitored bi-weekly by the Master Gardener and Agent to collect information on the general appearance of the landscape and the incidence of disease or insect problems. **Results:** Clippings dispersed well and were not objectionable to the residents. Disease and pest problems were minimal. Recycling clippings reduced mowing time by 20 minutes which allowed more time to scout and correct problems. This resulted in improved service by the maintenance professional. **Conclusion:** The board and residents of Arbor Oaks evaluated this program in June 1992 and voted to continue recycling yard waste at their homes.

**A Practical Computer System to Manage Publications and Reference Files in County Extension Office (88)**

**L. L. ROZAR, JR., Sarasota County**

Managing IFAS publications is vital to efficient Extension Office operation. Maintaining adequate supplies of publications is very helpful information. **Objective:** Improve staff support by providing better management of publications and reference files through a computerized record system. **Methodology:** Since 1975, Sarasota County had maintained its reference and publications, using manual card files, coded by key word (AGDEX System) and by location. In 1985, PRO-350 and DECMATE II & 111 computers, using IT:OS & WPS-8 software were used to computerize the records for Agriculture, Home Economics, 4-H, Marine and Energy. Annual Inventory and orders received provided numbers for use in future ordering (keyed directly to POW). **Result:** In 1988, all publication records are computerized. They provide: annual inventories; monthly receiving reports; publications lists. **Conclusion:** The planned educational program is better served by having needed publications available. Inventories of publications have been reduced and are more in line with planned use.

**Green Threads: People-Plant Interactions and Youth (96)**

**K. RUPPERT, Environmental Horticulture**

Horticulture agents are becoming more and more involved in activities involving youth and plants. What is going on in the classroom with regard to plants and youth? What are youth, in most schools, learning about with regard to plants? **Objectives:** To determine what is being taught to children and youth with regard to plants. To develop some prototype materials that provide children and youth with opportunities to work with and understand plants. To develop and design materials to show that horticulture is part of their every day lives and how this relates to their environment. **Methods:** Following a review of literature, grants were obtained to develop materials on trees in the landscape for 4-6th and 7-9th graders. **Results:** Educational materials will be available to nurseries, schools and to youth through horticulture agents or their designees. **Conclusions:** Experiential learning materials will be made available on trees in the landscape through horticulture agents to children and youth and their teachers to show how horticulture can be intertwined with every day life experiences and opportunities.

**Designing a Meaningful, Season-Long Grower Education Program (90)**

**T. J. SCHUENEMAN and L. S. CHARBO, Palm Beach County**

Responding to the needs of Palm Beach County's billion dollar agriculture industry is an immense challenge. The diversity of crops and grower skill levels and the sheer size of the county, taxes our limited resources. **Objective:** Develop and implement a grower-education program that is contemporary, interesting, cuts across commodity groups and draws the attendance necessary to justify the effort. **Methodology:** Advisory Committees were asked for subject areas needing attention. Traditionally expected programs such as "Pesticide Update" were added. Program plans from neighboring agriculture Extension agents were included in order to efficiently use Specialists. From this list, tentative topics and dates were set for the months of August - April. Advisory Committee members, agents, and agricultural industry leaders reviewed the proposed schedule and changes were made to better meet the needs of the participants and topic. CEUs toward renewal of restricted-use licenses were requested where appropriate. Visits were made to over 75% of the growers encouraging participation in these seminars. **Results:** Over 98% of the growers responding to a recent survey reported very high or high satisfaction with the agriculture Extension program. Grower attendance at the seminars increased and individual
Potential for Crayfish-Rice Intercropping  (91)
T. J. SCHUENEMAN, Palm Beach County
An alternative crop, in order to be a viable option for established farming operations, must mesh with established cultural practices. With the expansion of the rice industry in Florida, questions of possible crayfish intercropping with rice are often raised. **Objective:** To gather and present biological, cultural, and marketing information on the indigenous crayfish species to potential producers that would facilitate valid economic production decisions. **Methodology:** A special half day seminar was conducted that included a crayfish gumbo lunch and speakers from the Florida Game and Fresh Water Fish Commission, Seagrant Extension, and the Everglades Research and Education Center. **Results:** Thirty growers learned that "Everglades crawfish", *Procambarus alleni*, can be grown to market size in south Florida, but necessary cultural conditions would extend by 2 months the time the land must be dedicated to crayfish-rice. **Conclusion:** Since rice is grown in rotation with sugarcane, the longer season required for the crayfish-rice inter-crop, eliminates its rotation with sugarcane.

Available Chemical Aids For Sugarcane, 1993  (93)
T. J. SCHUENEMAN, Palm Beach County
Sugarcane in Florida is a minor crop and pest-management aids are relatively few and often obscure. **Objective:** Compile a booklet containing all chemical aids labeled for cane production. **Methodology:** The 1992 edition of "Crop Protection Chemicals Reference" (Wiley), "Insect Control Guides" (Uoff) and a current label book from every chemical manufacturer, were examined for any reference to sugarcane chemicals. **Results:** A 19 page booklet was prepared containing information on trade names and companies; weed, insect and disease controls; ripeners; desiccants; spray additives; and rodent control. A bonus was finding a product labeled for cane rust control, a disease now controlled by cultivar resistance which is usually lost after several years of field cultivation. **Conclusion:** For the first time sugarcane growers have all the available chemical aids listed in one, concise source. Also, chemical control of rust has the potential increase annual cane yields by a million tons.

The Role of BMP Education in the EAA Regulatory Effort  (94)
T. J. SCHUENEMAN, Palm Beach County
**Background:** As a result of the Everglades Protection Act of 1991 and the subsequent Rule making process (Chapter 40E-63, F.A.C.) by the South Florida Water Management District (SFWMD), water discharged from the Everglades Agricultural Area (EAA) basin is subject to a phosphorous (P) reduction goal. **Objective:** The overall Everglades Restoration goal is to reduce total P by 80% compared to the baseline years 1978-88. Twenty five percent of this reduction is required through on-farm best-management practices (BMPs) by May 1, 1996. **Methods:** To obtain the required permit to discharge water from a production area to works-of-the-district, each permittee had to install water quality sampling and flow-measuring devices, and implement a BMP plan. BMP categories included water management, fertility, and sediment control. Permit compliance carried a requirement to participate in educational programs designed to improve efficacy of the BMPs selected. Two seminars were planned and conducted with the approval of the SFWMD; responsibilities once you had your permit, and improved techniques for fertilizer applications. Attendance was 104 and 85 respectively. Three more seminars are planned. **Results:** Eighty-one permits were issued covering approximately 310 privately owned drainage discharge structures draining 505,000 acres. This is one hundred percent of the EAA basin. Basin-wide P-loading reductions are 3-5 years ahead of schedule. Basin-wide P-loading has been reduced by more than 40%, which is 60% greater than the regulatory program goal. **Conclusions:** Only through a strong educational effort on the part of the University of Florida Cooperative Extension Service, the Florida Sugar Cane League and the SFWMD and a proactive and conscientious effort on the part of the agriculture industry to reduce P input, were the above results achieved.

Beef Cattle Reproductive Management Schools, 1984-1993  (92)
J. P. SELPH, DeSoto County
Since the Fall of 1984, the South Fla. Beef Forage Program has conducted a series of reproductive management schools for cattlemen. The need for this program surfaced in 1982 surveys of beef and forage practices in the region. The goal is to increase calf crop percentages and raise weaning weights through stronger reproductive management programs. The schools use technical seminars and laboratories dealing with reproductive management of the cow herd. The schools do not make participants proficient in, pregnancy diagnosis. The goal is an improved understanding of the broad subject of breeding herd management. Topics are: Herd health, pregnancy testing, dystocia, genetic management, estrus sync., nutrition, records, heat detection and AI, bull breeding soundness, condition scoring and health products management. Through April 1992, the Reproductive Management School taught 190 participants, at nine different schools. At the end of each school, participants complete a written, a hands-on examination and school evaluation. Modifications and improvements to enhance the program have been made from evaluations and examinations.

Pursuing Pesticide Labels for Chinese Vegetables Through IR-4  (89)
K. D. SHULER, Palm Beach County
Florida growers harvest over 5,000 acres of Chinese vegetables valued at $12.8 million. There are only a few pesticides approved for use on these crops. Damage from aphids, leafminers, armyworms, diamondback moth, *Altamura*...
and downy mildew, if left uncontrolled, can result in total unmarketability of these crops. **Objectives:** Obtain residue, efficacy, and phytotoxicity information needed by IR-4 and pursue labels for napa, bok choy, Chinese mustard, and Chinese broccoli. **Methodology:** Since 1985, 18 replicated field tests have been completed and reports prepared to support labels for 13 pesticides. Seven field days were held for growers and pesticide reps. Tours have been conducted for EPA officials and staff of the U.S. Senate Ag Committee to become acquainted with the crop and pest problems. Extension is assisting the newly formed Minor Crop Growers Assoc. of Florida with pursuing pesticide labels. **Results:** Three products have been labeled on two crops and work has been completed for 10 pesticide/crop uses. **Conclusion:** Growers of Chinese vegetables are better able to remain in compliance with EPA regulations while controlling pests more effectively.

**Market Development: Goat Meat (90)**

J. SIMPSON, FRED

This approach to meat goat marketing could not be done without the direction of an extension agent. In a production situation, the emphasis is too often placed on supply side thinking when the producer actually needs to be thinking markets. With this type of approach, it took 6 months to develop the demand side, and to work out the problems of a new marketing strategy. The main focus of the strategy was first to involve one restaurant in presenting goat meat to customers and later to hold a tasting at that restaurant for other restaurateurs, chefs, purveyors and the media to expose them to goat meat in a restaurant setting. The producers were active participants in preparation for the event and presentation of the product. The follow-up then involves contact of prospective customers who have already expressed an interest in purchasing the product as a result of the tasting. A cost-return computer program plays an important role in this strategy by helping the producer to determine the fair market price of the product. The extension agent is critical through this dual phase process as a guide to the producer in shifting his thinking into a marketing mode.

**Expanding Youth Knowledge and Self-Confidence through Dairy Quiz Bowl (96)**

M. SOWERBY, Hillsborough, Hardee, Pasco and Polk Counties

Dairy Quiz Bowl is a youth program designed to help participants improve knowledge, build self-esteem, increase decision-making abilities, and improve ability to speak well in public and under pressure. **Objectives:** 1. Increase Dairy Quiz bowl participation in more counties with more dairy leader involvement; 2. Move away from memorizing questions and answers to teaching youth through experience and reading; and 3. Make Quiz Bowl a year-round project. **Methods:** 1. Since March 1995 counties have been assigned to submit 30 questions on a predetermined topic to be sent to all participating counties; 2. Dairy Quiz Bowl Camp has provided a 3-4 day intensive learning and practice session for participating youth; 3. Advanced youth have been invited to "Practice and Learn Days" at UF; and 4. More statewide competitions have been held throughout the year. **Results:** 1. In 1995 the most teams ever participated in the State 4-H Dairy Quiz Bowl (5 junior and 10 senior teams - 35 total youth); 2. Twelve counties have submitted written monthly Quiz Bowl Questions; 3. QB Camp and "Learn and Practice Days" have given youth experience and knowledge; and 4. Contests added in December and March have given youth more opportunity to retain and expand their knowledge. **Conclusions:** Redefining Dairy Quiz Bowl from a memorizing to a learning endeavor has led to more participants gaining a greater understanding of the science and business of dairy management and improved communication ability.

**Spent Mushroom Compost Trials in Northwest Florida (89)**

J. M. STEPHENS, Vegetable Crops, B.F. CÁSTRO, Gadsden County, G. C. HENRY, Leon County and D. L. BENNETT, Wakulla County

Tons of spent compost are accumulating at a large mushroom farm near Quincy. Home gardeners in the area may be able to utilize this waste material as a soil amendment and organic fertilizer. **Objectives:** Dispose of a waste farm product by fertilizing gardens with it. **Methodology:** In 1988-1989, County Agents in three Northwest Florida counties grew vegetable gardens and compared the mushroom compost with standard fertilizer practices. **Results:** Tomatoes, squash, bean and collards grown in the composted plots produced equally to or better than those grown with standard dry chemical fertilizer. **Conclusion:** Spent mushroom compost has excellent potential as a soil amendment and organic fertilizer for Florida gardens, thus helping to dispose of this waste farm product.

**Mined Lands Program Launched by Cooperative Effort (87)**


Phosphate mining has been a major industry in Polk Co. for the past 100 years. Reserves will be depleted in 15-20 years leaving almost 200,000 acres of mined land plus approximately 10,000 jobs and $2.5 million in ad valorem taxes. Today most reclaimed land is in low intensity uses like forestry, wildlife and pasture even though much of the land has greater potential. **Objective:** To develop and fund a research program to discover the knowledge needed to produce high value crops on reclaimed land and transfer knowledge to potential producers. **Methodology:** Worked with IFAS Research Faculty and Administration, Polk County BOC, Soil and Water Conservation District, Florida Phosphate Council, Phosphate Co.’s and other groups to develop a research program and gain community support. **Results:** After 2 years of effort the Florida Institute for Phosphate Research approved a first year grant of $750,000 with concept approval for a 1 year start up and ten year research program. The Polk County BOC appropriated $180,000 for physical facilities and project manager. **Conclusion:** The project is into its second year with a $650,000 grant from the Institute. A number of successful studies confirm there is a real potential for production of high value crops on reclaimed land.

**Energy Crop Production with Municipal Sludge on Phosphatic Clay - Demonstration (92)**
Demand for ethanol is expected to increase because of the Federal Clean Air Act. Technologies are emerging to convert whole plant biomass to ethanol. Selected energy crops, sugarcane and elephantgrass accessions yield from 20 to 25 tons of DM per acre on phosphatic clay. Whole plant conversion could produce 2000 to 2500 Gal. of ethanol per acre. Municipal sewage sludge presents a disposal problem. Use of sludge as a nitrogen Source could save 30 Gal. diesel fuel equivalent/acre in energy. Objectives: To demonstrate production of high yielding energy crops on phosphatic clay w/o irrigation and with sludge as nitrogen source. To demonstrate economic feasibility of growing energy crops on phosphatic clay for fuel alcohol production. Methodology: With a grant from the Energy Extension Service, accessions of three energycrops, three sugarcane, one elephantgrass and one sweet sorghum were planted in .2 acre plots in February 1992. Municipal sludge was spread on the plots at the rate of 6,500 lb. DM per acre to provide about 200 lbs. of N to the crop. Plots were irrigated after planting but after plants began to emerge irrigation was removed. Results: Plants are developing normally. Publications and field day planned for Nov. Recent announcement from the U.S. Dept. of Energy expressed interest in funding the establishment of a dedicated feedstock supply system for ethanol production tied to a conversion facility. Conclusion: Producers will see that energy crops can be grown successfully on phosphatic clay with low energy input. This demonstration positions the project well to compete for grant funds from D.O.E. or other funding sources for continued development of commercial biomass production.

Using Reclaimed Sewage Effluent for Irrigation Improves Surface Water (89)
J. A. STRICKER, S. L. SUMNER and T. W. OSWALT, Polk County
The Polk County water supply is from ground water. A significant reduction in rainfall since 1960, a reduction in the potentiometric level of the Aquifer and a reduction in the surficial water table has been observed. Twenty seven sewage plants are permitted to discharge to lakes and stream. Objective: Improve surface water quality by eliminating discharge of effluent to lakes and streams and save fresh water by substituting reclaimed water for irrigation. Methodology: Advisory Committee with reps. from public util., Health Dept., SWFWMD, DER, Water Resource Dept. and Ag prod. was organized. Committee actively supported concept and developed a situation statement on water reuse. Educational activities and one on one consultations were hold with Adv. Committee, growers and local government util. depts. Results: City of Winter Haven plans to divert 1,000,000 GPD from a lake to irrigate a golf course and citrus groves. Worked with Haines City and landowner to utilize 1,200,000 GPD on 300+ acres of pasture & forage. Polk Util. Dept. purchased a 77 acre grove to receive effluent from a planned regional wastewater plant. We are working with the Co. to develop this grove into a demo. project. Seven municipalities and Polk Co. either wrote letters or contacted the Extension Office to tell us they plan to incorporate water reuse in their comprehensive plan after receiving a copy of the water reuse situation statement. Conclusion: Significant progress is being made toward the goal of having 10,000,000 CPD of fresh water and zero discharge to lakes and streams by 1995.

Multi-County Beef Forage Program (87)
S. L. SUMNER, Polk County
In 1982 extension agents, specialists and administrators met to discuss the beef cattle industry in a multi-county area of South Florida. A survey was distributed to producers in the area to assess problems so that extension programs could be targeted to improve profitability, and to collect benchmark data for evaluation. The survey indicated that nutrition and reproductive efficiency were major problems. Programs were developed in two broad areas - forages and reproduction management. Tours and field days showed producers new forage varieties and better methods of storage and utilization. Demonstration plots showed how forages performed under different conditions. An intensive 2-3 day school gave producers in-depth training in reproduction management. An Annual Industry Representatives Conference helped salesmen and agents be more consistent in their recommendations. In 1986 a second survey was conducted to reassess the situation and identify future program needs. It indicated the Program is helping. More producers are adopting recommended practices. There are more high quality legumes in pastures and the percentage of beef producers who turn to the Extension Service for information has increased significantly.

Utilization of the “Information Super Highway” as an Extension Delivery Method (95)
S. SWANSON and K. HILL, Collier County
A home page on the World Wide Web (internet) was developed to showcase the Collier County Extension Service. Objective: To utilize the emerging electronic medium of the internet to transfer classic extension information. Methods: Graphics, photos, and text were used to identify clientele, staff, educational programs, and information services available to the public. The educational partnership with the University of Florida was stressed, conveying the Extension Service as a knowledge source for science based programs in farm, ranch, and nursery management, 4-H youth and adult leadership, home management and family well-being, and environmental awareness. Results: The information that can be found on the Collier County Home Page continues to increase. Newsletters, publications, announcements and “hotlinks”, which take the customer to other internet sites containing pertinent information, are just some of the aspects of this electronic medium that makes it a powerful method of information dissemination. How many customers visit the home page (and where they come from) is electronically tabulated automatically by the computer in Gainesville and these numbers can be used for reporting purposes. Conclusion: The internet provides a unique approach to transferring information. If the Extension Agencies do not take advantage of this electronic forum, they risk slipping behind as one of this country's premiere information providers.

Reforesting Private, Non-Industrial Forest Land in Putnam County (87)
A. TILTON, Putnam County
Private Non-Industrial Forest Land (PNIFL) owners hold 285,000 acres or 70% of Putnam’s forest land. The average growth rate of pine timber on PNIFL is only 50 cu. ft. per acre per year. The County Extension Forestry Advisory Committee identified the lack of reforestation as the major cause of low timber production. **Objective:** To introduce reforestation and other management techniques that will increase timber growth to 70 cu. ft. per acre per year on PNIFL. **Methodology:** The forestry Extension program was begun in Putnam County in 1980. During 1986 the following educational activities were held: a four-night forestry production clinic; a tree farmers’ appreciation day; tree farm tour; and four newsletters mailed. **Results:** The forestry committee obtained $10,000 through private sources to buy seedlings. To date 11,700 acres have been reforested. The additional growth of 20 cu. ft. annually has increased the value of these reforested PNIFL by $202,000. **Conclusion:** PNIFL owners increased timber production and economic value as a result of Extension education programs.

**Potato - Fertilizer Demonstration** (88)
A. TILTON, Putnam County, J. DILBECK, St. Johns County, D. SCHRADER, Flagler County
Irish potatoes are grown on 27,500, acres in the Hastings area. The average yield is 230 cwt. per acre. A survey indicated that growers use 267-96-284 pounds per acre of N-P-K respectively. The maximum amounts of fertilizer recommended by IFAS for irrigated mineral soils is 210-115-165. **Objective:** To determine the optimum rates of N-P-K for maximum yield. **Methodology:** Potato fertilizer demonstration plots were established at three farms and at Hastings AREC. Each plot had six different treatments, replicated four times, using different amounts of N-P-K. Time of application and number of side dressings were also compared. **Result:** Analysis of data revealed that grower treatments using higher rate of N gave highest yield. Two thirds of N applied at planting and one third at 40 days gave highest yield. With no added K, yields were reduced. K, above recommended amount did not increase yields. **Conclusion:** The first year of this four-year potato fertilizer study indicated that the basic recommendation for N may be too low. More N supplementation is needed following leaching rains. The K recommendation appears to be adequate.

**North Florida Potato Growers Increase Profits Through a Marketing Cooperative** (89)
A. TILTON, Putnam County, J. DILBECK, St. Johns County and D. SCHRADER, Flagler County
Contract Prices paid for potatoes have been less than crop costs for the last two years in the Hastings area. Adequate cost of production and marketing information are essential for grower survival. **Objectives:** Develop timely budgets for crop production costs, increase potato contract prices, and help re-activate the North Florida Growers Exchange (NFGE). **Methodology:** Since 1986 Extension has provided cost of production budgets during harvest. Extension helped form a growers’ committee to revive the NFGE. Sixteen weekly meetings were held at the Putnam County Agricultural Center involving growers, Extension, FDACS, and FFVA. **Results:** In 1989 potato contract prices were increased from $5 to $6 per cwt. Over 90% of the growers and acreage joined the NFGE. A standard contract was developed and prices for open market potatoes were established weekly. **Conclusion:** Extension can provide information and leadership to help growers negotiate contracts and market cooperatively. This joint marketing effort increased income from contracted potatoes by $6,000,000. In addition, prices paid for open market potatoes were the highest ever.

**The Birth of Northeast Florida Beef and Forage Group** (96)
P. TOMLINSON, Columbia County, P. JOYCE, Duval County, E. LORD, Alachua County, M. SWEAT, Baker County, D. DINKINS, Bradford County, C. LITTLE, Clay County, M. GOODCHILD, Nassau County, D. JESSEMAN, St. Johns County and J. BREMAN, Union County
Agents are working together bringing quality programs to beef/forage producers in northeast Florida. **Objectives:** To enhance the quality of Beef/Forage Extension Programming by optimizing each Professional’s time, talent, and other resources. **Methods:** Initially, five counties (Baker, Bradford, Columbia, Duval, and Union), now nine (adding Alachua, Clay, Nassau and St. Johns), joined to present topics in cattle and forage management. Through a Natural Resources Grant we purchased herbicide and signs, 2 displaying the Northeast Florida Beef and Forage Group logo. The logo is to establish an identity that producers will recognize and associate a quality program with. In order to maximize our producers’ opportunity to attend, we have offered programs in multiple locations. Also at each meeting a booklet is put together covering the meeting agenda in depth and surveys are conducted, results tabulated and then the next program topic is decided. **Results:** Our programs cover information that is basic for those just starting, yet in depth enough to be beneficial for the most experienced producer. Currently, we have just finished one year of programming (229 individuals having attended meetings covering 3 topics and 5 locations) and are looking to our next endeavors; forming an advisory committee, an allied industry support group, our next meeting (3 locations). **Conclusion:** The Extension faculty involved are dedicated to quality programs for producers, and now we work together to bring more of those programs into the communities where they are needed.

**Marion County's Basics of Equine Technology Course** (90)
C. S. VAUGHAN, Marion County
The Marion County Equine industry has a total economic impact of $702.77 million annually. The equine industry employs over 12,000 persons directly in paid positions and generates an additional 21,600 jobs, indirectly. With this much employment and economic impact, the Extension Service in Marion County sought for a way to assist the Equine Industry through Extension education. The greatest need expressed by the horse farms and local Breed Associations was competent labor. Joint efforts were expended by the Marion County Extension Service, other IFAS faculty, local farm managers, Central Fl. Community College, Fl. Thoroughbred Breeders Association and many others to plan, implement and teach a nine week course, “Basics of Equine Technology”. This course has been offered twice and has had excellent results. A total of 55 students have completed all phases of the course and have received their certificates. Twelve students have acquired new jobs or have
received advancements because of this Extension program being offered. An intermediate and advanced level course is in the planning process.

Application of Digital Technology in the Horticultural Agent's Field Kit (88)
S. D. VERKADE and G. E. FITZPATRICK, AREC-Fort Lauderdale
Advances in digital technology have significantly increased the availability of low-cost, portable scientific equipment. This equipment is battery-powered, light weight and well suited for field use by horticultural Extension agents.

Objective: To evaluate the accuracy and application of readily available, low-cost, and portable scientific equipment. This equipment includes pH meters, dissolved solids meters, solid state tensiometers, and programmable calculators. Methodology: Low-cost digital scientific equipment was evaluated on the basis of accuracy, ease of use, and potential field application. Result: Low-cost digital scientific equipment had reasonable and predictable accuracy, was easy to use, and is well adapted for field use by horticultural Extension agents. Conclusion: Use of low-cost digital analytical tools can enable the agent to increase effectiveness by providing fast and accurate chemical and physical determinations in the field.

Providing Accurate and Timely Market News (91)
B. WARD, Walton County
Picking the right time to market an agricultural commodity is one income variable that can mean the difference between comfortable profit and substantial loss to a farmer or rancher. Most of the marketing decisions are based on some form of market information. Objectives: To provide farmers and ranchers with accurate and timely market news. Giving the producer access to the latest prices in markets that affect local prices. To help the producer understand that knowing what constitutes a good or poor price for a commodity requires that the seller of the commodity have accurate and timely market news. Methodology: This program is a unique approach to getting price information to grain, soybean, cotton, vegetable, cattle and swine producers. About 11:30 AM each weekday office personnel spend about 20 minutes collecting the latest market information from the local elevator, futures prices for grains, soybeans, cotton and livestock via satellite, and vegetable, cattle and hog prices from market news on the IFAS VAX. The Agricultural Market Price Report airs daily at 12:20 PM. Results: This program offers the most accurate and up to the minute agricultural commodity price information available anywhere in Northwest Florida.

Improving the Production, Efficiency and Marketability of Beef Cattle in Walton County (96)
B. WARD and H. SEIGLER, Walton County
Objective: To convince the producer that an integrated management approach with all aspects of production from breeding to point of sale and performance and reputation after sale is the best and most profitable system of production. Methods: Six monthly seminars were scheduled covering topics of: Winter Forage Management; Beef Production Management; Traits of Different Beef Breeds; Ration Mixing; Pasture Management and Rotational Grazing; Health Maintenance; Marketing. Various specialists were used as presenters on many of these topics. A newsletter preceded each seminar and has continued on an every other month basis. This newsletter contains information on current beef cattle issues. Results: An average of twenty-five producers attended each session. A mailing list of 80 beef cattle producers was compiled. Conclusion: The seminars provided access to valuable information that prepared the producer for making more informed economic choices about their beef production future.

Advisory Committee Members - Why They Join and Leave (90)
B. E. WILLIAMS, M. B. MCGHEE, and W. R. SUMMERHILL, Ag/Ext Ed
Members of extension advisory committees (AG, HE, 4-H, Overall) in 10 Florida counties were surveyed about what motivated them to join and/or stay/leave the committee. 147 “stayers” and 176 “leavers” responded to the survey. A “motive index” was calculated for each of the various “reason for the joining/staying/leaving” statements in the survey instruments. Stayers reasons for joining tended to be equally divided among the categories of affiliation, achievement and power. Likewise, leavers, joined for the same reasons. 4-H and agriculture committee members tended to join for reasons related to the affiliation motive, while home economics committee members joined because they “liked” the agent. Members continued to serve because they enjoyed associating with the committee, but members left because they felt they “were not fulfilling their responsibilities to others” The results of this research should be studied by agents and administrators in order to better identify potential advisory committee members and to plan action programs to keep the members in “full-term” service.

The Use of Solar Power for Livestock Watering (92)
C. A. WILLIAMS, Osceola County and H. HELIKSON WHIFFEN, Energy ES
Installation of power lines for electric pumping is expensive. Extended droughts make traditional water sources unreliable. Windmills in Florida are unreliable. Environmental regulators have questioned access of livestock to waterways. Objective: To provide technical and reliable information to ranchers concerning the use of solar energy for livestock watering. Methodology: Grants amounting to $9,300 were provided by South Florida Water Management District, the Florida Energy Extension Service and the Osceola County Commission. The rancher/cooperator provided $1,500 labor, materials and demonstration site. Photovoltaic and solar-thermal pumping systems were installed. Data collecting equipment was installed on the photovoltaic system. Results: Both solar pumping systems have replaced windmills and are pumping adequate supplies of fresh water for cattle. Conclusion: Solar pumping is a reliable method of providing livestock with clean water.

Choices We Can Make to Reduce Marine Debris and Solid Waste (90)
S. WOOD, Escambia County
One of the major issues along our coasts is that of marine debris and solid waste. I have developed a timeline that illustrates the length of time it takes various materials to break down in the marine environment. The timeline is 25 ft. long and stretches from zero to infinity. The materials range from a paper towel, which takes 2-4 wks. to break down, to an aluminum can which takes 300-400 yrs., to monofilament fishing line which can take up to 600 years. Each participant receives a smaller copy of the timeline. I share the results of our annual coastal clear-ups - the different materials we find, how much of each we find and the source of certain kinds of debris. After I walk through the marine debris timeline with participants, I discuss choices they can make in their own lives and lifestyle to reduce the amount of debris that ends up in the ocean. I stress that they should particularly reduce the amount of plastic that is discarded, because it is such a killer of wildlife. Thousands of marine mammals, birds, turtles and fish ingest or are entangled in plastic and other persistent debris each year. This program has worked successfully with teachers, environmental and civic groups, 4-H'rs and extension agents.

Transplant Survivability of Landscape Plants (87)

V. YADAV, Seminole County and D. INGRAM, Ornamental Hort

The fabric containers have revolutionized tree production in Florida. However, the landscapers have been apprehensive about the transplant survivability of these plants in commercial landscapers. **Objective:** To determine transplant survivability of Field-Grow container plants.

**Methodology:** After one year of growth Sycamores and Crape Myrtles grown in 14” Field-Grow containers and Live Oak, Photonia & E. Palatka holder grown in 16” Field-Grow containers were hand dug. The fabric was removed and trees transplanted in an unamended soil in early spring, early summer and late summer under simulated landscape situations.

**Results:** All species survived the transplanting in early spring and early summer. Crape Myrtles lost considerable leaves in August due to water stress. Oaks and Sycamores also exhibited stress in late summer. A few oaks, Sycamores and Photonia from August transplanting blew over due to high winds. Photonia and E. Palatka holder survived transplanting well.

**Conclusion:** A year is not adequate time for Live oak to develop sufficient roots, whereas Photonia and Palatka can. Summer is not ideal for transplanting. Initial “hardening” availability of irrigation and staking plants would increase survival rate.

Profile of Panhandle Landowners Considering Broiler Production as an Alternative (88)

D. J. ZIMET and T. D. HEWITT, FRED/NFREC

A contract broiler industry has been viewed as a good alternative in the Florida Panhandle to improve rural incomes and to diversify agricultural activities. **Objective:** Evaluate the production potential of landowners interested in broiler production.

**Methodology:** One hundred and three questionnaires were returned by landowners interested in broiler production in five rural counties in the Florida Panhandle.

**Result:** Eighty five percent of the respondents had high school graduates and 48% had high school education. Many had farm experience; only 10% had less than six years’ experience. Approximately 75% indicated they were willing to invest $130,000 to build two poultry houses. Seventy percent of the heads of household had off-farm employment and 45% of their spouses did too.

**Conclusion:** The decision to invest in a poultry operation was viewed positively by those who depended more heavily on off-farm work. The small, part-time farmers were less willing to devote the requisite time to operate two poultry houses than any other group.

Revitalizing Downtown Quincy (95)

D. ZIMET, NFREC-Quincy and G. ISRAEL, Agricultural Education & Communication.

Twenty Shanks High School students conducted a telephone consumer survey of Gadsden County residents to learn residents’ shopping habits and preferences and of residents’ opinions about downtown Quincy. The survey was conducted in support of the Main Street Quincy program (MSQ) and the Downtown Quincy Merchants Association (DOMA).

**Objectives:**
- Research effort had several goals and objectives.
- The first goal was to strengthen the tie between the Florida Main Street Program and the Florida CES.
- The second goal was to assist MSQ in its efforts to revitalize downtown Quincy in the face of competition from Wal-Mart in Quincy and of shopping in nearby Tallahassee.

**Methods:** The MSQ Economic Restructuring Committee asked the extension economist at NFREC/Quincy to conduct a consumer survey of Gadsden County residents. The economist requested assistance from the communications specialist/sociologist to train students to conduct survey and to edit the questionnaire the economist developed. Twenty members of the Shanks High Student Advisory Committee conducted the telephone survey. The telephone company contributed telephone lines so that evening calls could be made from the school board office.

**Results:** Four hundred people were interviewed. Results concerning parking, lighting and security were presented to the city commission. Results concerning commercial trade and business opportunities were presented to the DOMA.

**Conclusions:** With proper programming and support students can be viewed as valued community resources, not just nuisances or consumers. It is planned to conduct similar programs throughout the state.

FLORIDA EXTENSION ASSOCIATION FAMILY & CONSUMER SCIENCES - FEAFC (until 1996, Florida Association of Extension Home Economics Agents - FAEHEA)

Homeless Families - Nutritionally At Risk (90)

J. M. ALLEN, Hillsborough County

Changes in society have brought about a new situation - homeless families with children. Many of these families are at risk nutritionally. **Objective:** To increase knowledge of sound nutrition and food purchase practices among homeless families residing in shelters.

**Methodology:** In cooperation with local homeless shelters, EFNEP Program Assistants conduct a series of group meetings (about 8 lessons) at homeless shelters and prenatal...
This descriptive study takes a historical perspective on how Home Economics in Columbia County has been responsive to local needs. Some of the responses have included Food Production, Food Technology, Homemaker Organization and Needs of the Aging. An analysis is made on how those needs also reflect the changing social trends. Objective: To develop a descriptive study of changing local needs and the Extension Services response to meet those needs. Methodology: A literature search of historical needs and trends, both nationally and locally was made. This included locating, reviewing and securing historical documents describing local, state and national development of the Extension Service. Results: Since 1912 we have had 26 Extension Home Economics Agents. They have met the ever changing needs of local families and have been innovators in local programs. Conclusion: We, as Home Economists, present a balance of ideas and interest that will continue to reflect the diversity, flexibiltiy and strengths of the county we serve. The success of our program is that the

**Write a Grant Proposal for Program Enhancement** (91)
J. M. ALLEN, Hillsborough County

With normal state and local monies becoming more and more difficult to obtain, Extension professionals must look to other sources for enhancement of programs. One way to secure these funds is through grants. Objectives: To provide basic guidelines of proposal writing. Methodology: Took a graduate course in "Grantsmanship" to become better acquainted with the techniques and terminology as well as criteria used by those granting funding. Possible sources of funding were also explored. Results: After taking this course and using the principles taught, monies were applied for and granted through RFP process. Conclusion: Using a format very similar to Extension Plan of Work and Reports of Accomplishment, agents are able to apply for and secure grant funding for many parts of Extension Programming.

**Good Nutrition Starts BEFORE Birth for the Healthiest Babies** (92)
J. M. ALLEN, Hillsborough County

One of the causes of low birth weight is poor nutrition during pregnancy. Objective: To decrease the incidence of low birth weight among at-risk pregnant EFNEP participants. Methodology: As a result of grant funding, laptop computers were purchased to afford on-site dietary analysis. Each participant can find out immediately what dietary deficiencies exist and the EFNEP Program Assistants can gear their teaching to existing situations. Birth weights of these babies are compared to those receiving instruction but not on-site analysis. Results: This project is just beginning but so far, those participants who receive on-site analysis show both better food recalls at graduation from the program and have had a smaller percentage of babies born under 5.5 pounds. In the Tampa Bay Area, the average cost for 45 days of care for low birth weight babies is $107,500. Each at-risk pregnancy that results in a 5.5 pound baby not only saves money but gives the baby a better start.

**Hillsborough County Hunger Briefing** (94)
J. ALLEN, M. MCKINNEY and H. WEBB, Hillsborough County

Agency representatives and community leaders participated in an area-wide informational program to develop awareness of Hunger and Food Security needs in Hillsborough County. Objective was to heighten awareness and lay groundwork to establish a county-wide network and coalition on Hunger issues. Methods included exhibits by area provider organizations, speakers on Hunger in Hillsborough--its cultural implications, and effect on health. Participants also interacted in a $12 a day menu planning exercise. This called attention to the difficulty a family of four would encounter when purchasing and planning a day's menus to meet the Daily Value Requirements. Results: 97% of the participants indicated a heightened awareness of Hunger as a local issue in need of collaborative solutions. 98% of the participants indicated interest in forming a county-wide Hunger Coalition. Conclusions: A follow-up organizational meeting to form a Hillsborough Hunger Coalition with cooperating agencies is planned to extend resources and solutions. To date over 50 responses indicate interest by agencies, legislators, and service providers.

**Hunger in Hillsborough: A Forum** (91)
J. M. ALLEN and H. P. WEBB, Hillsborough County

According to the most recent national survey (conducted locally by Florida IMPACT), one in eight American children are hungry. This affects school performance and learning ability. Objectives: To explore hunger in Hillsborough County--who is hungry; why are people hungry; what is currently being done; what can we do? Methodology: Sponsor a Hunger Forum with a keynote speaker addressing strategies to reduce hunger. A panel of ten local representatives of local agencies serving community food needs also gave presentations. Results: 55 evaluations returned by forum participants indicated hunger to be a major issue. There are further indicated a willingness and need to work together to develop a Community Food Coalition with Cooperative Extension serving as facilitator for the group. Conclusion: Through continued networking and cooperative effort and programming, community awareness of hunger as an issue will lead to empowerment of the hungry as well as of interested community members.

**History of Extension Responding to Local Needs** (87)
M. E. ANDERSON, Columbia County

This descriptive study takes a historical perspective on how Home Economics in Columbia County has been responsive to local needs. Each lesson has been adapted to the homeless situation. Entry and Exit Food Recalls evaluate knowledge gained. Over a 2 month period of time, 11 group series have been held with 80 participants at 4 different sites. Results: All of the graduating participants showed an increase in nutritional knowledge as evidenced by Food Recall data. 83% showed perfect exit knowledge of the Recommended Daily Dietary Allowances as compared with 5% at entry to the program. Conclusion: With added knowledge homeless families are able to choose more nutritious foods with limited resources.
Research has shown the worksite, lunch time program method to be most popular for those individuals who are employed.

**Parenting Education for Teen Parents in Putnam County** (92)

S. ArnolD, Putnam County

**Objectives:** 1) improve parenting knowledge and skills of teen parents; 2) improve nutritional status of pregnant teens and children of teen parents. **Methodology:** The program was coordinated with personnel at three county high schools. Funding was obtained through a March of Dimes grant in the amount of $2,120 to support the program. Forty-five parenting classes were conducted for 55 pregnant teen and teen parents at three high schools. The classes addressed these subject areas: 1) safety; 2) nutrition; 3) child development; 4) reading; 5) play; 6) discipline and guidance; 7) infant and toddler stimulation; 8) self-esteem; 9) parent-child interaction; and 10) stress and coping strategies. Teaching methods included hands-on workshops, interaction with infants and toddlers in the day care center, and a monthly parenting newsletter. Pre and post tests on nutrition were administered to pregnant teens. An evaluation instrument on parenting skills was administered to all participants. **Results:** Ninety percent (90%) of teen parents indicated an increase in parenting skills and knowledge in ten different subject areas. Ten percent (10%) of teen parents indicated an increase in parenting skills and knowledge in six to nine subject areas. Pregnant teens scored an average of 75 on the nutrition pre-test. Post-tests scores increased to an average of 86.

**Clients Reduce Credit Crisis Through Development of Basic Money Skills** (88)

P. S. Barber, Alachua County

Credit problems can be a source of severe stress. Problems develop because clients have never learned or practiced basic money skills. **Objective:** To offer a credit counseling service with intensive educational programs designed to develop basic money skills. **Methodology:** A one-one-one credit counseling program was established. An acceptable reduce repayment program for creditors was developed. Reinforcement included mandatory attendance at a seven week basic money skills seminar, monthly credit newsletter and a learn-by-mail after 12 counseling sessions were complete. Demand was so great that 15 volunteers were trained to assist with individual counseling. **Result:** In 1987, 58 clients actively participated in the Credit Counseling program. Thirty-four completed and returned evaluations showing a 22% decline in the number of creditors. Before participation, 17 did not have a savings account. After participation, 26 have savings accounts and 22 contribute regularly. Savings total $7,615.06. **Conclusion:** Extension can effectively reach and teach clients with severe money problems. During a time of severe credit crisis, clients are at a "teachable" moment and can develop basic money skills to lessen future money problems.

**Occupational Stressors and Work Behavior Types of Cooperative Extension Service Mid-Managers** (90)

P. S. Barber, Alachua County

The problem of this research was to determine occupational stressors, work behavior types and the relationship between the two constructs for Cooperative Extension Service (CES) Mid-Managers. A sample of 124 participants were randomly selected from a nationwide population of 220 mid-managers. The Occupational Stress Inventory (OSI) was administered to determine stress levels and the Marcus Paul Placement Profile (MPPP) was administered to determine work behavior type. The relationship between each OSI stress scale and the MPPP's work behavior types was examined. The results of the study showed a significant difference between CES mid-managers and the normal population. Participants were more evenly divided among the four work behavior types in the study than in previous studies. Implications for CES mid-managers include the use of occupational stress levels and work behavior type for job placement, educational training, promotion and effective team building.

**Worksite Weight Management Program for Government Employees** (87)

S. L. Behnke, Broward County

Research has shown the worksite, lunch time program method to be most popular for those individuals who are employed outside the home and in many cases, not available for evening programs. **Objective:** To design a worksite program showing the relationships of lifestyle choices to weight management for 5,000 Broward County Government employees. **Methodology:** Two methods selected for instruction were, 1) a bi-monthly news column, and 2) 13 worksite, lunch time programs. A 3-part series on weight management was conducted and 10 support group meetings were established for the purpose of losing 10 pounds. **Results:** Twenty-five percent of the participants lost 10 or more pounds. **Conclusion:** Worksite, lunch time programing is an effective method for hard-to-reach audiences and should be considered when designing future weight management Extension programs.

**Preschool Training Corps: A Unique Approach to Educate Child Care Providers** (88)

S. L. Behnke, Broward County

Research confirms that well-trained child care givers provide a range of benefits to themselves, to children, and families. **Objective:** The author developed the Preschool Training Corps in cooperation with The Child Care connection, a non-profit agency which administers full time care for 5,000 preschool children. **Methodology:** The 10 monthly, 2-hour trainings, were conducted at lunch-time for key program staff. Topics focused on professional and child development. The staff involved were required to train other staff and parents at their centers. **Result:** Twenty-one completed the Corps program. Evaluations indicated the Corps program provided the 8 hours of training for State recertification; new networking opportunities; increased knowledge; and a more positive attitude about themselves and their role as Child Care Providers. **Conclusion:** Through increased knowledge, the competent care giver exhibits a higher level of self-esteem and job satisfaction, and the children served reap the benefit of quality care.
Teaching Preschool Nutrition Using South Florida Tropical Fruits and Vegetables  (89)
S. L. BEHNKE, Broward County
Florida is the winter vegetable basket for much of N.A. The area has a subtropical climate which produces exotic fruits and vegetables. Avocados, bonitos, mangos, carambolas, papayas and chayotes are some of the more popular varieties. **Objective:** Child care providers receiving in-service hours were trained to incorporate tropical fruit and vegetable activities into their nutrition curriculum. **Methodology:** A hands-on program was developed and implemented for two child care conferences which had been structured around three key preschool nutrition concepts. **Results:** Sixty child care providers from Palm Beach and Broward Counties reaching over 4000 preschool children reported learning new knowledge and nutrition activities about South Florida's agricultural industry. **Conclusion:** Preschool children must be taught how to make nutritious choices from available foods. South Florida's agricultural industry provides the child care profession an opportunity to bring nutrition education into the preschool classroom by utilizing local tropical fruits and vegetables.

Using Advisory Groups to Plan Worksite Wellness Programs  (90)
S. L. BEHNKE, Broward County
Most serious health problems are a reflection of deliberate choices we make. Wellness program interventions at the worksite have the potential to create health-enhancing behaviors among large numbers of employees and to extend those behaviors to influence other family members. **Objective:** An interdivisional advisory committee from Broward County's Department of Mass Transit worked with the author to plan and implement a worksite wellness program for 700 employees. **Results:** Of the 700 questionnaires distributed 352 were returned indicating that smoking cessation, CPR, weight management and cancer risk reduction topics were their top priorities. Networking with community organizations, six programs have been implemented at no cost to employer or participant. Grant monies were used to build a 1/2 mile Fitness trail at the worksite. In addition, a bi-weekly newsletter has been created to communicate health concepts and future program dates, plus vending machine cuisine has been improved to reflect better health choices. **Conclusion:** More detailed costs and benefits to employees will be available once the project has been implemented for 12 months.

Building a Coalition to Enhance the Program Impact on Young Children  (91)
S. L. BEHNKE, Broward County
It is imperative now that youth-serving agencies, with the help of local governments, collaborate efforts that address the interrelated issues affecting our young children. Broward Cares for Children Coalition was created by the Broward Home Economics Advisory Committee to network community advocates and their resources in order to make educational services for families more effective. During the "Week of the Young Child", April 8-13, a variety of large-scale programs were hosted by the Coalition. A "Parenting Resource Directory" was created and 700 copies distributed to parents attending an educational conference. In addition, a "Rainbow Week" booklet was created which incorporated special themes for each day of the week. Copies were distributed to over 500 child care centers for programming during that week. Topics included: Say Yes to Me - No to Drugs (red); Florida the Sunshine State (orange); The Environment (green); Living in a Peaceful World (yellow); and Water Safety (blue). **Results** indicated that through collaboration, goals can be achieved that cannot be obtained singly. Broward Cares for Children Coalition is now a recognized group of advocates committed to provide families resources and support systems.

Healthy Start Coalition Addresses Infant Mortality and Low Birth Weight  (93)
S. L. BEHNKE, Broward County
**Objective** of the Study: The Broward Healthy Start Coalition, Inc. was created under Florida's Healthy Start Act of 1991. The interagency Coalition is designed to assure access to prenatal and infant care for all under served women and infants. **Methods Used:** In order to accomplish the principle objective, the following activities were implemented: 1) Perform an assessment of the prenatal and infant health care needs; 2) Develop a comprehensive resource of services available for residents; 3) Identify priority target groups for receiving prenatal and infant health care services; 4) Develop a prenatal and infant health care services delivery plan; 5) Determine how funds will be allocated to local providers; 6) Conduct an ongoing fetal and infant mortality review. **Results:** A needs assessment has been completed of the prenatal and infant care; target groups have been identified from census tract data; a resource inventory is available; and the service delivery plan will be completed by Feb. 1994. **Conclusion:** The over-all infant mortality and low-birth weight rates have improved, however the nonwhite rate continues to be high.

Recycling Adventures: An Educational Enrichment Kit  (91)
S. BEHNKE, Broward County, S. BRUBAKER and P. STEWART, Palm Beach County
Senate bill 1192 became Florida law in 1988 with a mission to reduce the waste stream by 30% in 1994. Grant monies provide for development of 150 Educational Enrichment Kits to teach preschool through fifth grade students about major waste management concepts. The kit contains a 3-ring notebook and support materials was piloted with over 100 public school teachers in 3 workshops. The kit provides youth the opportunity to explore the problems of solid waste management through several "Adventures" ranging from an interactive puppet show (Adventure 1) to the origins of trash, weight of trash, recycling, being a "litter quitter", precycling or environmental shopping and understanding landfills. This information and education supports and reinforces state mandated programs in environmental education. The teachers' request also supports results of the 1990 Precycling Survey which indicated that a significant number of respondents want to learn what they can do to change their behavior in favor of the environment (96%). To facilitate these needs, Recycling Adventures offers educators an exciting and
informative compilation of waste management facts and activities designed to stimulate learning in young children.

**Seatbelt Usage Increases With Education (87)**
B. G. BENNETT, Manatee County

5th Graders in 20 Manatee County Public Schools indicated increase in use of seatbelts. **Objective:** To determine the impact of education in changing attitudes, knowledge and practice of 5th graders in regards to safety belts. **Methodology:** Pre and post tests were given to each 5th grader participating in the program. Training was provided by the Agent for teachers. Money for materials and printing not available through IFAS were obtained through a grant. Students were given lessons as part of their health curriculum. The number of lessons varied as determined by the teacher. **Results:** Of those students tested 45 increased their personal use of safety belts, 62% increased their knowledge of seatbelt safety, and 11% changed their attitudes toward using safety belts. **Conclusion:** Education plays a major role in developing healthy practices and attitudes as well as increasing knowledge.

**Realizing Leadership Potential of Extension Homemakers (87)**
B. G. BENNETT, Manatee County

Extension Homemakers have the ability to learn, teach and extend information. The challenge is to get them to believe in their abilities. **Objective:** Extension Homemakers will plan, implement and evaluate a recruiting day activity. **Methodology:** Subject matter trainings emphasizing teaching techniques were presented to leaders each month by the Agent. A committee was organized to provide leadership for the day's activity. Training was given to committee members on components required for successful meetings. Materials were provided to support these lessons. **Results:** Extension Homemakers planned a successful educational program. Most presenters were Extension Homemakers. Publicity was handled by Club members. The program was followed with an evaluation that indicated the success of program given by Extension Homemakers. Approximately 75% of the nonmembers present joined Extension Homemakers the day of the rally. **Conclusion:** Realizing leadership in volunteers benefits all who participate in the Extension program. These benefits include increased self esteem, pride and recruiting of new members.

**Profiling Young Extension Homemakers (88)**
B. G. BENNETT, Manatee County

Survival of the Extension Homemaker organization is dependent upon the recruitment and retention of young members. **Objective:** To design an Extension Homemaker program that appeals to young members. **Methodology:** An interest survey was mailed to mothers of young children currently receiving "cradle crier" newsletter. **Result:** The survey indicated that both working parents and parents not working outside of the home are interested in learning Home Economics subject matter. Young parents are willing to give their time for education. **Conclusion:** To survive the Extension Homemakers organization must offer educational programming that meets the needs of a younger audience and be flexible in meeting times to accommodate those in the work force.

**Wellness In the Workplace (88)**
B. G. BENNETT, Manatee County

Corporate research has shown a direct relationship between wellness of employees and productivity. **Objective:** to establish a Wellness program for 1200 Manatee County government employees. **Methodology:** A committee was formed representing employees of all levels and occupations within the system. The Committee split into sub-committees to develop a specific component of the Wellness program. **Result:** Manatee County government has a working Wellness program offered to employees as a benefit. Eighteen months after the initial committee meeting the Board of County Commissioners has employed a Wellness Coordinator to provide leadership to the program. The planning committee now serves in advisory capacity. **Conclusion:** Health and Wellness issues are important to employees. Having employees plan the program speeds up the acceptance by other employees, thus insuring success.

**Survival Skills for Young Homemakers (89)**
B. G. BENNETT, Manatee County

Programming must reflect the needs and interests of the potential audience to recruit young members into the Extension Homemakers organization. **Objective:** To design an educational program for Extension Homemakers that will meet the needs of young members and serve as a recruiting tool for membership. **Methodology:** Workshops were held on topics selected through a needs assessment. Program times and day of the week varied. Special considerations were handled - family participation, baby sitters and food. **Results:** Sound programming plus logistical consideration result in participation of target audience.

**Identifying Educational Needs of Family Day Care Providers in Manatee County (91)**
B. G. BENNETT, Manatee County

Education for family day care providers makes a difference in the quality of child care; the personal growth of the provider and improved self esteem of the provider. **Objective:** To develop an educational program addressing the needs of Family Day Care Providers. **Methodology:** Survey was mailed to Manatee County Family Day Care Providers requesting interest and demographic information. **Results:** Manatee County Extension Home Economics program is working with other agencies to assist Family Day Care Providers in receiving education in areas they need at convenient times as identified in this study. **Conclusion:** Family Day Care Providers are interested in improving their skills through education. The Florida Cooperative Extension Service has expertise in the areas identified as well as the flexibility to provide educational programs when and where the need is.
4-H Caring Relationships For Wakulla's Youth (93)
D. L. BENNETT, V. M. HARVEY and A. BROWN, Wakulla County

Situation: Wakulla County suffers economic problems as well as limiting conditions within Wakulla's families that compound the stresses that contribute to less than positive educational and recreational environments for the youth. Objective: To increase leadership among our 4-H members by teaching them the skills of planning, arranging and leading of various educational and recreational activities in a positive environment for the youth of the county. Methodology: With assistance from a 4-H leader and the program assistant, two new 4-H clubs were formed that provided educational programs on teen pregnancy, relationships, aids, teen marriages, patriotism, education, and drugs/alcohol. Also, weekly tutoring sessions were conducted in community centers where the basics of reading, writing and math were taught by volunteers. Concluding these programs we held monthly recreational rewards for the youth including dances, family fun activities, and special-events. Results: 1.) There was an 18% increase in 4-H enrollment with a 162% increase in senior enrollment; 2.) 892 youth (53% of total enrollment) increased their knowledge of relationships, teen pregnancy, teen marriage, AIDS, education, patriotism, and drugs/alcohol; and 3.) with tutoring assistance, two 4-H'ers were promoted to the next grade. Conclusion: This program gave new life to our 4-H program showing that 4-H can make a difference in the community and more youth have shown an interest in the 4-H program.

Four Videotapes Address Needs of Pregnant and Parenting Teens (95)
L. BOBROFF and L. COOK, Home Economics Department

Teen pregnancy and teen parenthood are serious problems facing communities across the nation. In response to a survey of county Extension educators, a multidisciplinary curriculum focusing on nutrition for the pregnant teen, infant, and young child; parenting; employability; resource management; and self esteem is being developed in three phases using the experiential learning model. As part of the third phase of program development, a series of four videotapes is being produced to enhance and support the curriculum. The videotapes cover the topics of prenatal aerobics, introducing solid foods, developmental activities for infants and young children, and coping strategies for pregnant and parenting teens. Pregnant teens representing Florida's diverse population are being featured in the videos to provide role models and motivate program participants. The videotapes are being designed to stimulate interest and entertain the teens, as well as to promote healthy lifestyles and relationships. An advisory group consisting of county extension faculty, a district extension director, and regional and state extension specialists are providing input at each step of development. Copies of the videotapes will be sent to Extension services in all states and territories, and will be available for purchase by other interested agencies, organizations, and educators working with this audience.

Reaching Urban Audiences: The Housing Authority Resident Leadership Initiative (93)
E. B. BOLTON, Home Economics, M. CHERNESKY, Hillsborough County, D. DAVIS, Brevard County, W. HILL, Hernando County, N. JENSEN, Pinellas County A NORMAN, Palm Beach County, M. MCKINNEY, Hillsborough County and B. VERNON, Volusia County

The population of housing authority residents in Florida is estimated to be in excess of 4,000,000 persons. The majority of these residents are female head of household with at least one child at home. The objective of this FL 53 program is to develop the leadership skills of these low income residents to start and maintain nonprofit organizations that will enable them to control their neighborhoods. The methods included: (a) building institutional partnerships with a federal agency, a statewide organization, and the Cooperative Extension Service; (b) specialized curriculum and delivery for the target audience; and (c) linkages with county Extension programs. The impacts were assessed using a post conference questionnaire, observations by county faculty and a participant survey. The target audience had positive reactions to the program and the survey indicated materials and concepts are being used. The implications of this program for Cooperative Extension are in reaching out to urban audiences through partners with common goals. This population is increasing and Cooperative Extension must accept the challenge to reaching urban low income audiences.

Hillsborough County 4-H Youth Learn How to Alter Muffin Mixes for Health (93)
S. R. BOND, Hillsborough County

Youth are unaware of how they can alter recipes to make convenience foods more nutritious. Objective: Youth 8 to 12 years of age will learn how to alter muffin mixes for health and the importance of the breads and cereals food groups. Methodology: Two workshops were held for 29 4-H members and leaders and 38 middle school home economics students. A variety of teaching techniques were used, including demonstrations, experiments, games and a County Bake Off Competition. Results: Pre/post test results showed that youth increased their knowledge by 20%. Thirteen youth entered 18 altered muffin recipes and products for the bake off competition. Three of the 4-H leaders conducted the same workshop with their 4-Hers on a club level. The Home Economics teachers used the 4-H Muffin Mania Manual to do follow-up with their students. Conclusion: 4-H can provide relevant and effective “learn by doing” experiences for youth which encourages them to be able to alter quick bread mixes to make them more nutritious while maintaining a high quality final product.

Training NET's Results: Nutrition Education Training for Title XX Day Care Centers (87)
D. R. BOULWARE and D. M. TAYLOR, Lake County

Childhood Development Services (CDS), Ocala, administers Title XX programs in Lake County CDS wanted to improve nutrition and foods teaching at day care centers where too much emphasis was on holiday and empty-calorie foods. Objective: On-site training for employees to increase nutrition and foods educational experiences for their children. Methodology: Agents taught a series of 8 monthly lessons adapted from the NET Preschool Education Curriculum at 7 centers to an average of 38 employees per month. Information was reorganized into activities for
Adult Clothing Camp (95)
L. BOWMAN, Santa Rosa, E. COURTNEY, Okaloosa, N. HACKLER, Home Economics, M. MOORE, Escambia and B. YOUNG, Walton

Objectives of this activity were for participants to be exposed to the latest in fabrics, notions and equipment for clothing construction and to learn techniques which will improve the quality of finished products, expand use of equipment and increase the productivity of the home sewer. Method was a three-day, overnight camp. Participants chose one of three intensive classes in which a garment or outfit was completed. Other short classes and demonstrations were held for making accessories, home furnishings and seeing the latest products on the market. Instructors were Extension faculty and area resource persons. Results: Forty-one persons attended the camp and completed at least one garment. Savings on the garments made ranged from about 25 to 75%. Conclusions: Written evaluations were completed by 95% of participants; they indicated that 100% of participants learned something new and the information was clear and useful. 86% felt the camp was of much value and 14% said it was of some value to them. 94% felt they could teach the information to others. Comments also showed that the participants wanted the camp to be an annual event.

Eating Savvy For Busy People - A Juggling Act (89)
L. BOWMAN, Santa Rosa County, E. COURTNEY, Okaloosa County, M. MOORE, Escambia County and B. YOUNG, Walton County

Research indicates families are consuming more convenience and fast foods and eating away from home more often. Although nutrition is a concern, these habits make it difficult to manage food resources for a balanced diet. Objectives: Design a program for busy people to gain knowledge and skills needed to make wise food choices based on time, money, nutrition and lifestyle. Methodology: Two hour seminars were held in four counties (8 sessions). Topics included: Food Choices For Healthier Lifestyle; Inside Story of Convenience Foods: Savvy Choices When Eating Out; Cooking Fast And Easy. Participants received a packet of material and a follow up six month newsletter. Additional sessions were held in all counties. Results: 135 attended one of the eight sessions. Additional programs reached 962. In a six month evaluation 95% indicated an increased knowledge in nutrition. Conclusion: Active people indicated a desire for additional programs: multi county and worksite programs need to be continued and expanded.

Training Financial Management Counselors (91)
L. BOWMAN, Santa Rosa County, E. COURTNEY, Okaloosa County and B. YOUNG, Walton County

Financial problems are a leading cause of personal stress and family dysfunction. An increase in the caseloads of area military financial counselors initiated a request to Extension for assistance in training more counselors. Objectives: To teach volunteer and professional financial management counselors the knowledge and counseling techniques needed to help clients develop workable financial plans, understand credit, consumer laws, debt repayment plans and to develop good consumer skills. Methodology: A two-day multi-county seminar was conducted in a central location. A notebook held resource materials for each subject taught and a financial management planning calendar was developed. Specialists and other resource persons assisted in teaching the seminar. Results: Thirty counselors from military bases, banks, HRS, etc. attended. Eighty percent rated the program as excellent. Twenty one of the twenty two completing pre and post tests showed an increase in knowledge. A second seminar is planned for August, 1991.

Home Economics Contributes to Aquaculture Development (89)
M. L. BRINKLEY, Calhoun County

With the anticipated increase of catfish in the marketplace, consumers need to become aware of the nutritive value of farm-raised catfish. North Florida has a great potential for the development of a catfish industry. Objective: To make people aware of the Northwest Florida Aquaculture Farm located in Calhoun County, and to promote the nutritive value of fresh fish and nutritional methods of preparation. Methodology: Working with the Florida Department of Agriculture and Consumer Services, the Calhoun County Chamber of Commerce, the home economist coordinated her second Florida Farm-Raised Catfish Cookoff. News releases were circulated in all 67 counties in Florida. Presentations were also given to the District Women's Farm Bureau Conference and at a District Extension Homemakers Meeting. Results: Residents are aware of the nutritive value of catfish and are equipped with 5 finalists nutritional delicious recipes for using farm-raised catfish. Conclusion: Business, political, civic and community leaders felt this program was a major development toward the further growth and emphasis of aquaculture in North Florida.

Building Bodies and Minds Through Summer 4-H Program (89)
M. L. BRINKLEY, Calhoun County

During the summer months many children are not able to receive nutritious meals. Proper nutrition for children is critically important. Objective: To provide children who are enrolled in the Summer 4-H program a free nutritionally balanced diet and allow children to learn through educational information the importance of a balanced diet. Methodology: A food service program was established from the Florida Department of Education which provided free lunches to all children who were enrolled in the 4-H summer program. The series of 4-H publications, "Eating Right, Feeling Well", were used in order that children may learn the importance of proper nutrition. Results: $14,
The Florida State Legislature mandated that each county must reduce the solid waste stream by 30% by 1994.

**Solid Waste Education: A Cooperative Effort Between Home Economics and Environmental Horticulture (90)**
A. C. BUCKINGHAM, Highlands County

The Florida State Legislature mandated that each county must reduce the solid waste stream by 30% by 1994. Home Economics and Environmental Horticulture agents can work cooperatively to educate households to reduce, reuse, recycle. **Objective:** To develop a cooperative strategy to reach households in Highlands County in order to disseminate educational information regarding solid waste. **Methodology:** 1. Recruit and train master volunteers in recycling yard waste (master composters) and household trash (home ecology) to conduct educational programs. 2. Write weekly news column. 3. Produce two solid waste newsletters. **Results:** 1. Master gardeners were recruited and trained as master composters. Three people completed training as home ecology master volunteers. Master volunteers were used at the County Fair, plant clinics and various civic organizations to conduct educational programs. 2. Agents shared responsibility of weekly news column, writing on related solid waste and environmental issues inside and outside of the home. 3. Produced two newsletters that were sent to 20,000 households. **Conclusion:** By working together agents can more effectively reach their shared target audiences.

**Improvement of Child Care in Rural Low Income Counties (95)**
M. BRINKLEY, Calhoun County, P. KENNEDY, Jefferson County and S. CLARK, Gadsden County

Agents are improving quality of child care through linkages with other organizations. **Objectives:** To provide training and technical assistance to child care workers in licensed child care centers to become credentialed, to prepare centers for national accreditation, to prepare providers to serve children with handicapping conditions and to involve the community. **Methods:** Each agent provided 80 hours of Child Development Associate training and recruited centers to participate in the accreditation process. These centers were given the necessary assistance in order to begin the process. The HRS 10-hour "Mainstreaming Works" was taught to child care providers. Child care forums were formed in each county with representatives from the business community, local governmental officials, school personnel and civic and religious leaders. **Results:** Thirty-seven child care providers received the Florida Equivalency Child Development Associate credential. Three others are scheduled to be assessed for the national credential. Six centers in the three counties are completing applications for accreditation. Three centers in Gadsden have been accredited. Thirty-seven providers completed "Mainstreaming Works" module. Topics are being addressed by the forums: parenting education/support, male role models, teen pregnancy prevention, high quality accessible child care, grant writing, activities for youth and community awareness and involvement. **Conclusion:** Through expertise of Extension faculty, cooperation with other organizations and involvement of the community, the quality of child care is improved.

**Voluntary Recycling Survey (91)**
A. C. BUCKINGHAM, Highlands County

Extension has been active in Solid/Hazardous Waste Education for two years. **Objective:** To ascertain success of Extension's education program in relation to citizens voluntary recycling activity. **Methodology:** A survey consisting of five questions was sent out with a newsletter to 19,738 property owners in Highlands County.

**Palm Beach Do-It-Yourselfers (DIY) Recycle Used Oil (89)**
S. E. BRUBAKER, Palm Beach County

When someone pours used oil into the trash or a canal, no sirens ring or lights flash. The damage can be more insidious than a direct oil spill by contaminating soil and, subsequently, groundwater. An estimated 10 million gallons of used oil is generated annually by Florida DIY'S, but a scarcity of used oil collection centers forces many People to dispose of it improperly. **Objective:** To promote disposal of used oil and to establish collection centers for small-scale generators. **Methodology:** Coordinated 7 agency Used Oil Task Force, surveyed former collection centers, approved centers through chemical handling program and developed and distributed promotional flyers through grant from Task Force members. **Results:** Established 64 collection sites at service stations, municipal garages and transfer stations. Volunteers and Task Force members distributed 4,000 flyers at fairs, exhibits, mail stuffers and personal contact. Shared methodology with Extension professionals and South Florida Regional Council. **Conclusion:** Networking is the key to establishing, promoting and maintaining used oil collection centers.

**Recruiting and Retaining Master Volunteers to Teach Clothing Construction (90)**
A. C. BUCKINGHAM, Highlands County

Research has shown an increased interest in home sewing. Extension agents are not able to personally respond to the demand for clothing construction programs. **Objective:** To recruit, train and retain volunteers to teach basic clothing construction to interested adults and youth in Highlands County. **Methodology:** Volunteers were recruited through the agent's news column. The training program consisted of six sessions following IFAS handbook, Teaching Volunteers to Teach Clothing Construction. Retention of volunteers requires making them feel important. Special badges were designed and awarded. Field trips and special trainings were used as incentives. **Results:** Twelve people responded to the call for volunteers. Eight volunteers completed the training program. Five volunteers have taught classes to adults and 4-H youth. Three volunteers were not able to teach due to personal illness, but remain supportive in other ways. **Conclusions:** Volunteers are viable resource for Extension. People are willing to work/teach without financial benefit when they receive special recognition.

**Conclusion:**

Networking is the key to establishing, promoting and maintaining used oil collection centers.

000 (grants and contributions) were used in order to carry out this program. Approx. 225 children were served a sandwich, fruit cup, fruit juice, and milk each day. They learned the 6 nutrients the body needs, sources of the nutrients and the importance of eating a balanced diet. 32 adults and teen leaders helped to conduct the program.
Results: Of the 1,556 households that responded, voluntary recycling has steadily increased: 1988 - 56%; 1989 - 73%; 1990 - 87%; 1991 - 88%. Less than a fourth of the respondents participated in Amnesty Days. Horticulture efforts are successful; 69% leave grass clippings on the lawn; 40% presently are composting. Conclusions: Citizens participation in voluntary recycling has increased over the past four years. More education is needed for Amnesty Days. Horticulture efforts have been successful.

Tax Tips (89)
I. CAMPBELL, Hillsborough County
Income Tax preparation time can be less stressful to families through knowledge of how to prepare the various required tax forms. Adequate information is needed by families to establish a system of record keeping for receipts to support tax forms. Objective: Families will know what receipts to keep to support various tax forms and how to fill out the tax forms needed to file their tax return, saving the family budget the income tax preparation fee. Methodology: In 1987 and 1988, 939 Hillsborough County families received instruction on income tax preparation through educational meetings, workshops and educational cable TV. Results: During the 1988 income tax season 89% of the families participating in the program report they now fill out their own tax forms.

Estate Planning: A Family Affair (89)
I. CAMPBELL, Hillsborough County
Estate planning can be improved through more effective family communications, eliminating probate, paying a minimum of taxes and estate settlement expenses. Adequate current information is needed by families to make effective decisions regarding the transfer of family assets both during life time and at death. Objectives: To increase family estate planning skills through knowledge obtained on how to avoid probate and how to minimize estate taxes while simultaneously establishing an estate plan that will not result in family controversy. Methodology: Since 1987, Hillsborough County families have received instruction on estate planning principles that allow family assets to be transferred in the manner the family desires with a minimum of tax and fees, through educational meetings, seminars, individual consultations and written program materials. Results: In 1988 170 families utilized this program. From 1987 to 1988 out of the 170 families participating in the program 96% now have a will or trust they did not have before the program. Conclusion: Families will communicate and work together to realize Family Estate Planning Goals through effective use of program.

Planning For Change-The Financial Side (90)
I. CAMPBELL, Hillsborough County
Financial change directly impacts our personal stability. Adequate information is needed to make effective decisions regarding financial management. Objective: To motivate individuals to review their current financial situation, develop and use a written financial spending plan, understand the concept of savings growth through compound interest and systematic saving, of interest and inflation rates effects on current and future purchasing power, need to protect assets through insurance. Methodology: Individuals received one learning module at each class session composed of a lecture and discussion study. Results: Based on a random sample, 35% of the participants moved some funds from a 5% passbook savings account to higher yielding CDs and money market accounts and reviewed and updated their insurance coverage. 15% are now using a budget to record expenditures. 80% say they now understand the financial concepts of time value of money, rate of return, compound interest, and systematic savings, to reach financial goals. Conclusion: This learning module is an effective way to teach savings skills needed to reach goals for family financial stability.

Hispanic Homemakers: A Follow-UP Study of Graduates from EFNEP (88)
S. I. CANALES, Dade County
The EFNEP Hispanic Unit helps low-income families improve diets and stretch food dollars. Objective: Follow-up graduated Hispanic Homemakers to investigate the long-term effects of the EFNEP program. Methodology: A random sample of fifty-five Hispanic homemakers that graduated from the program in 1986 were selected for the study. The instrument utilized for the study was adapted from the evaluation tools of the program. Result: Data collected for homemakers reporting an Adequate Diet (2 servings from Milk & Meat group, 4 servings from Fruit & Vegetable and Bread & Cereal group) shows an average increase of 50% from program entry to Graduation and an average, decrease of 19% from graduation to two years after graduation. However, this was an average increase of 3% from program entry to two years after graduation. The percentage of homemakers reporting behavior related to management of food dollars showed an average increase of 93% from program entry to graduation and an average decrease of 27% from graduation to two years after graduation. However, this was an average increase of 65% from program entry to two years after graduation. Conclusion: Families participating are benefitting from program.

Boost 4-H Clothing and Textile Enrollment with Clothing Encounters Camp (91)
J. CANTRELL, 4-H Youth, B. FAULS, D. FRANZEN, S. FRY, N. HACKLER, M. SALISBURY and J. WAKEFIELD
Enrollment in 4-H Clothing & Textile areas is dropping. Districts III, IV and V agents felt a camp targeting these areas would increase interest and enrollment. Objectives: To introduce youth to new fabrics & construction techniques. To address the areas of grooming, self-esteem, modeling, care of clothing, construction and to explore possible career choices. Methodology: A 5 day camp was developed and executed for youths ages 10-18. 53 lesson plans were developed by the committee and presented. Companies were contacted for donations to help defray costs. Participants received all lesson plans to facilitate their further use in county programs. Results: A total of 48 youth and 7 volunteers participated. 38 companies donated materials, notions and equipment valued at over $5,000. Two companies sent representatives to the camp. Written assessments indicated that the youths felt challenged and would recommend it to others in their county as a worthwhile learning experience. Conclusion:
Growth and development of toddlers and pre-school children are greatly damaged if their nutritional needs are lacking during the first two years of their life. **Objectives:** To improve the physical health and mental development of toddlers and preschool children through educating CCC personnel and parents about the benefits of good nutrition. **Methodology:** In 1984 training on: Nutrition and it's relationship to health and mental development was begun with CCC personnel. Annually workshops, seminars, conferences, educational materials and menus were used to accomplish goals. **Results:** Two thirds of the 357 CCC Personnel and all 157 home child care providers have had the training on good or inadequate nutrition and its effect on growth and development of pre-school children. **Conclusion:** All centers receive menus, The Booklet: "Mixes Made at Home", education kits and materials for teachers’ use in teaching children about nutrition. Child Care Centers' personnel used this training toward State Certification. They are feeding their children more nutritionally, using less salt and modified fats, thereby, greatly improving their health and development.

**A Food Preservation Model To Increase Household Self-Sufficiency** (88)
M. E. CHERNESKY, Hillsborough County
A variety and quantity of free fruits and vegetables are available to field workers in season. Preserving for time of need helps stretch dollars. **Objective:** Teach low-income families recommended food preservation and storage methods and acquaint them with community agencies and services. **Methodology:** Extension Agent taught classes conducted at Community Cannery. Classes emphasized various aspects of Food Preservation. Participants took recipes and some preserved food home to use with families. **Result:** 15 Head Start homemakers are using the cannery to preserve foods on an ongoing basis. They share information with friends and have developed confidence working with specialized equipment. **Conclusion:** This inter-agency program allows each agency to use their expertise. Head Start - To recruit, transport, provide supplies and day care. Extension Teaching expertise, recommended procedures, handouts. Community Cannery Facility, equipment and staff member. The results will be long lasting as participants continue to utilize knowledge, skills and the cannery to help stretch food dollars. This model was presented at the National Head Start Association Meeting.

**Basic Housekeeping for Public Housing Residents** (89)
M. E. CHERNESKY, Hillsborough County
The Hillsborough County Housing Authority has concluded that many residents are very poor housekeepers and living conditions are substandard. They need to be taught basic housekeeping and learn to maintain a home they can be proud of. **Objective:** Show clients how easy it is to implement their individual cleaning schedule and help them develop pride in the care of their own homes. **Methodology:** At the request of Tampa Housing Authority a 2 hour housekeeping course has been implemented including: 1. Home Invaders (EFNEP lesson on Kitchen cleanliness). 2. Planning a house cleaning schedule. 3. Household cleaners for pennies. 4. How to teach other family members to do their share. 5. How to clean walls, floors, plumbing fixtures, stove, refrigerator. Residents are notified by the Housing Authority and required to attend. The Home Economist has presented the course 11 times in 4 different projects to 127 residents. **Results:** Residents indicated that they are using the homemade cleaners, they are involving other family members and their homes are cleaner. **Conclusion:** An impartial educator can convey information the housing project staff cannot present. The classes also provide an opportunity to introduce EFNEP and extension service to the residents.

**Reduce, Recycle, Reuse an Educational Campaign** (90)
M. E. CHERNESKY, Hillsborough County
An overall educational campaign to help families change habits & attitudes & begin to reduce, recycle & reuse. **Objective:** Help families change habits which influence their production of solid waste and have an impact on the reduction of the amount of solid waste generated. **Methodology:** develop 2 pamphlets, 3 displays, presentations for organized groups, columns in monthly newsletters, a TV feature for 4 channels & live call-in TV show. 4 volunteers were trained to staff exhibits & present to groups. **Results:** 21 organized groups with 1339 persons were reached, 5139 one to one contacts were made at displays. Of those surveyed 79% have begun to recycle, 86% are paying more attention to products impact on the environment, 64% are promoting recycling in other groups, 70% have cleaned closets and donated unused items & 90% have shared information received with others. **Conclusion:** As a result of this & other information available the county curbside recycling program will go county-wide by October 1, 1991 instead of 1994 as previously planned. The Hillsborough County Solid Waste Department is funding a grant to provide in excess of $50,000 toward further publications, displays and TV features.
A commonly held assumption is that building low income housing is a waste since it will soon be a slum. Our country is currently grappling with issues of the homeless and low-income housing. Extension Home Economics is in a unique position to contribute. Objective: New public housing residents will learn how to live in a housing complex with rules and regulations and satisfactorily maintain their homes. Methodology: A series of 6 topics entitled "Make This a Nice Place to Live" was developed. Topics are taught in home visits by program aides for 419 organized groups with 1,093 persons were reached. Of those surveyed 93% use recyclables rather than disposables, 62% buy concentrates and mix cleaners, 68% consider products packaging when buying, 56% purchase items with least packaging, 81% purchase recycled products when available, 94% recycle products being collected in their community, 100% have shared some of the information with others. Conclusion: As a result of this and information available from other sources there is a growing consciousness about how individual choices have an impact on the total picture. Hillsborough County Solid Waste Department has already committed funding of $50,000 for FY92 to support additional displays, publications and a program assistant.

**Buy-Recycled In-Store Tours (92)**

M. E. CHERNESKY, Hillsborough County

A portion of the Overall Educational campaign to help families change habits and attitudes to reduce the amount of solid waste generated. Objective: teach family members to purchase and use recyclable, recycled, nontoxic materials. Methods Used: using grocery stores as classrooms staff and trained volunteers worked with Kash 'N Karry Stores and the City of Tampa Solid Waste Department to conduct one hour store tours focusing on recycled items, product packaging and non-toxic products during Earth Week. Results: 2 tours were conducted in each of 5 different grocery stores. 84 persons participated and all were so involved that they did not want to conclude the tours at the end of the designated time. Conclusion: Requests have been received from organized groups and day care facilities for tours for their clients. Other store managers have requested tours in their stores. Plans are being made to video tape the tour (for training volunteers and use at group programs). A Leader's Guide and script have been developed for others to use. Store tours bring shoppers to the market place and show actual items that are best for the environment.

**Child Development Associate Credential Preparation (92)**

S. CLARK, Gadsden County, P. KENNEDY, Jefferson County and A. MULLIS, 4-H Youth

Florida legislature mandated that by July 1, 1995 one child care provider for every 20 children in a licensed child care facility must have a CDA Credential or an equivalent. Child care providers in the two counties asked for help from the agents in obtaining their credentials. Objectives: 1) To provide training and technical assistance to child care workers in local licensed child care centers, to become credentialed. 2) To improve early childhood care and education programs in these centers. Methodology: Nine workshops totaling 22 hours in each county involving lecture, demonstration, hands-on, video, readings, group activity, one-on-one mentoring; meeting with candidate's parent representatives and advisors; reviewing and advising on candidate’s portfolios. Results: The 11 participating centers are using a more developmentally appropriate curriculum; self-esteem of child care providers has improved. Of the 34 participants working on a CDA, 10 have been credentialed and 19 are scheduled for an assessment. Conclusion: Comprehensive Extension programs can improve the quality of care being given children in child care centers through assisting in the training of competent child care workers.

**Seniors Look To The Future (88)**

S. T. CLARK, Gadsden County, A. W. PARRAMORE, J. SHUFORD-LAW, M. WASHINGTON, Leon County and N. SMITH, Wakulla County

Results from a needs assessment showed that human relationships, including the mental and physical health maintenance for older adults is a significant community problem. They have a strong desire to remain independent, but, limited and fixed income, physical limitation and special health and diet needs influence their capabilities. Objective: For participants to increase their awareness of the importance of a positive outlook on life and acquire knowledge and skills for this change in attitude and behavior. Methodology: A one day seminar was held with presenters such as nutrition & fitness, exercise, wildlife, insurance needs and consumer affairs; exhibits on local services available to senior citizens; and packets of education material. Result: 85% of the participants indicated interest in attending similar seminars. One participant said: "I would like very much to have all the topics repeated that I missed, I think this should be a yearly event.” Conclusion: Ad hoc advisory committee felt the program was successful and should be continued.

**Learn to Lead (87)**

D. L. COLEMAN, Collier County

Immokalee is an unincorporated, agricultural community of 15,000 (40% Hispanic, 20% Black, and 40% White). Season from October to May adds 10,000 Hispanic and Haitian farmworkers. In contrast, the county seat of Naples 40 miles away is a resort of affluent, white retirees. Objective: Develop a coordinated leadership network to design and implement a plan of action for community needs. Methodology: Forums on Barriers to Leadership, Crime, and Growth launched a 3-phase series of Learn to Lead programs where theories were supplemented with practical application. Results: In the 3 forums, 177 local and 22 key county people "learned by doing" a POW for 19 community needs. Learn to Lead was completed by 58 participants with the support from 37 government, ad hoc advisory and established leader facilitators. 184 participants were polled on leadership indicators improving to 30% good from 45% poor. Efforts in housing, community image, and drug prevention continues. Conclusion: Trained leaders can work together across ethnic, racial, socioeconomic and geographic lines.

**Building Human Capital to Compliment Housing Capital (88)**

D. L. COLEMAN, Collier County

A commonly held assumption is that building low income housing is a waste since it will soon be a slum. Our country is currently grappling with issues of the homeless, and low-income housing. Extension Home Economics is in a unique position to contribute. Objective: New public housing residents will learn how to live in a housing complex with rules and regulations and satisfactorily maintain their homes. Methodology: A series of 6 topics entitled "Make This a Nice Place to Live" was developed. Topics are taught in home visits by program aides for 419 participants.
farmworker families. Aides also contract with housing authorities. Under contract are 30 new homes for Seminole Indians and 40 rental units for farmworkers. **Result:** From 123 evaluation interviews, 95% reported improving home maintenance skills and saving time, money, and personal energy. This was the first Extension program for 93%. **Conclusion:** Extension Home Economics can and has made a difference. Too often we get carried away by hardware and forget about the peopleware that make a house a home -- a critical mistake.

**Credit Management For Families At Risk** (92)
D. L. COLEMAN, Collier County

**Objectives:** Families will be able to reduce stress caused by unresolved financial difficulties, prevent personal bankruptcy and obtain skills in budgeting that will enable them to handle their financial affairs and avoid financial crisis in the future. **Method:** Organize board of prominent community citizens who contributed time, in kind services, and fund raising efforts to develop a Consumer Credit Counseling Service. Prepared applications for certification to National Federation of CCCS. Prepared United Way grants, hired staff, secured office space, solicited funding from banking and employer community. Organized media efforts, presented Extension educational materials for counselor training and family education. **Results:** A new community service is functioning. An average of 40 counseling sessions takes place monthly. 144 families are now participating in program to avoid bankruptcy. A proactive program has been presented for two years to 300 high school students. **Significance:** Families can now work their way out of debt while learning to avoid future crises.

**Educatting Prison Moms** (94)
D. CONVERSE-MIRES, Hillsborough County

**Objectives** of the in-jail parenting education program include: reduce stress, improve parent/child relationship through communication, increase self esteem, discipline effectively and understand child development. **Methods:** Agent developed an eight-lesson series for incarcerated mothers, which included: child development and safety, stress management and anger control, communication and child development. Weekly programs are conducted in the jail. A certificate of graduation is awarded when a participant completes six hours of training. Lesson format includes group discussion, lecture, video, worksheets and homework. **Results:** Since beginning the program in February 1994, 160 inmates have been enrolled, 63 (40%) have completed all requirements for a certificate. Pre and post tests were conducted, as was an evaluation survey. Responses showed that inmates learned ways to deal with their anger and stress, felt better about themselves as mothers, learned how to increase their child's self esteem, learned more effective discipline techniques, learned communication skills and learned how to make their home environment a better place for their children to grow up in. **Conclusion:** Weekly parenting classes are expected to continue, as inmates and jail personnel are reporting high levels of satisfaction. Nearly 500 inmates are expected to be enrolled by the end of the year.

**S.M.A.R.T. - Saving Money and Resources Today, a Newsletter With an Energy Focus** (90)
A. COOPER, Dade County

America is facing an energy crisis. We are only beginning to feel the effects of our consuming, disposable and self-oriented society. What steps are needed to bring forth our environmental awareness? In response to this need, a newsletter was developed to help people become part of the solution, not part of the problem. SMART is the joint effort of Home Economists in 4 South FL counties. SMART's 5 issues focus on energy issues of a broad scope, including recycling, water conservation, decreasing food waste, hurricane preparedness and others. The project was funded by a grant from the Governor's Energy Office, and the U. of Florida. SMART has been warmly received in all 4 counties by the general population and by those involved in energy. SMART's target population has indicated that they are making changes in their lifestyle as an environment we all can address: our homes and community. Over 60,000 copies of SMART have been disseminated in the 4 counties. In addition, numerous photo-ready copies are mailed to industry and energy-focused organizations. These groups have indicated that they copy and use SMART in their municipalities.

**Nutrition for Health and Fitness Learn-By-Mail Series** (91)
A. S. COOPER, Dade County

Time, family and geographic constraints in a large urban county often restrict a working adult's ability to attend a series of educational programs. **Objective:** To provide middle aged working adults with accurate, unbiased information on current nutrition and health topics in a "by-mail" educational series format. **Methodology:** A six-part nutrition learn-by-mail series was developed, focusing on the following topics: U.S. Dietary Guidelines; Sodium; Fiber; Sugar; Fats and Cholesterol; and Making Fitness a Part of Your Life. Information on avoiding health fraud was also included in the last module, upon request of participants from the pre-tests. Nutrition and health publications from IFAS as well as the USDA, American Cancer Society, American Heart Association and other reliable sources were included in the monthly packets. The series commenced in April 1990 with a pre-test, designed to measure the participant's basic nutrition knowledge, educational needs, and attitudes about nutrition and health myths. The identical test was used at the conclusion of the series as a post-test. Of the 200 respondents to newspaper announcements, seventy enrolled in and completed this $12 program. Of the 70 participants, the average age was 54, 31% were males, and 86% had never heard of extension. **Results:** The average score of the pre-test was 80%, with a majority of participants answering the basic nutrition questions correctly. However, pre-test identified several common misunderstandings about nutrition and health, such as: the types of dietary fiber and the effect on cholesterol levels; the nutritional values of honey vs. sugar; safe weight reduction methods; and clarification of information on the effect of cholesterol; the nutritional values of honey vs. sugar; safe weight reduction methods; and clarification of information on the effect of cholesterol; and the effect of cholesterol levels; the nutritional values of honey vs. sugar; safe weight reduction methods; and clarification of information on the effect of cholesterol levels. **Conclusions:** Post and test scores yielded average scores of 90%. A follow-up survey was sent 6 months after the post-test, and results indicated that 83% of all participants have made one of the following diet or lifestyle modifications: reduced the fat in their diet, increased exercise, lost weight sensibly and gradually, or reduced their intake of salt by using herbs and spices. All of the
participants responded favorably to the program, and suggested topics for future programs, including: nutritious restaurant eating, brown bag lunches, and modifying recipes.

**Teaching Budgeting: Skills to Families Experiencing Domestic Violence (95)**

J. CORBUS, Washington County

Some individuals convicted of domestic violence in Washington and Holmes Counties are court-ordered to attend an 8-week class series on domestic violence-related issues in lieu of incarceration. The classes are part of the Salvation Army's P.A.V.E. (Providing Alternatives to Violence through Education) program. The Washington County Extension Service teaches a class on Budgeting-Economic Partnership. *Objective of P.A.V.E. is to teach persons problem-solving alternatives to violence. The budgeting class teaches participants how to communicate about financial matters and establish a spending plan. Methods include worksheets to determine personal values as they relate to money, factsheets, and step-by-step instruction on establishing a spending plan. Emphasis is placed on setting mutual goals, keeping careful records, and nuclear-family involvement in the budgeting process. Results: Forty-nine persons have completed the budgeting class. Forty-three percent were using a spending plan prior to class; four persons have since established a spending plan and four plan to do so. Fifty-three percent indicated the class would make a difference in the way they handled family problems. Conclusion: The Extension Service is filling a local need by providing budgeting education in an interagency effort to help families avoid domestic violence. Persons sometimes use violence to deal with problems because they do not know another way. Educating persons in more positive ways to handle problems is the first step in eliminating domestic violence.*

**The Northeast Florida Master Food Volunteer Program (95)**

D. DORSCHEL, Duval County. M. WILLIAMS, Nassau County, S. TAYLOR, St Johns County, T. BRITTON, Duval County, R. SALMON, Bradford County, S. LYLON, Baker County, M. TURNER, Clay County and M. TAMPLIN, Home Economics

Northeast Florida agents saw a need for volunteer assistance to strengthen the scope of educational activities in the area of food and nutrition. *Objective: To recruit and train a volunteer force to provide preservation/nutrition/food preparation and safety educational assistance to Extension clients. Methods: Participants receive 50 hours of intensive education in nutrition, food preservation, preparation and safety and agree to return 50 hours of volunteer service to Extension. Volunteers are tested with both oral and written exams to cover subject matter. Advanced training is given on a quarterly basis. Results: Sixty-five volunteers have graduated since April, 1994. Participants showed a 60% increase in basic subject matter knowledge and an 82% confidence score in their ability to use the information to assist the public with food and nutrition information. Extension has received 180 man days at a value of $16,010 in the first year of the program.*

**Jackson County Affordable Housing for Low Income (94)**

J. P. ELMORE, Jackson County

Florida's State Housing Initiatives Partnership program is opening the door to home ownership for low-income families who can afford house payments, but have difficulty saving for a down payment. Current homeowner fixed-income families are being helped with SHIP funds to catch up with costly home repairs. Jackson County Extension has been awarded $10,000 to provide educational programs to assist these people. *Objective: To enable low-income families (qualify for home loans or become home owners) to improve their money management skills and home owner skills in maintaining home property value. Methodology: Three 1-hour classes pertaining to Home Buying, Money Management, and Home Care and Maintenance were offered to potential participants in the SHIP program. Support materials for program include a resource notebook and bimonthly homeowner newsletters. Optional spending plan materials and services were offered. Results: Of the 113 people who signed up for the classes 73 completed the series. There were 75 Non SHIP participants that also attended the counseling classes. Conclusion: With money support from SHIP and the education program by Extension, low and very-low income families in Jackson County are becoming informed and responsible home owners.*

**Parenting Series for Hispanic Parents (87)**

M. FERRER, Orange County

The growth of the hispanic population moving into Orange County has increased tremendously in recent years. In an effort to aid their hispanic parents, the bilingual special education program and migrant education program approached the University of Florida, Cooperative Extension Service to request help in parenting classes. *Objective: Parenting workshops were developed in Spanish to help parents improve communication skills and learn skills to guide and discipline their children. Methodology: Two series were given in different locations in Orange County. Each series consisted of three two hour workshops. All materials used for these workshops were translated into Spanish. Topics covered were: (1) Implications of Culture Shock and How to Communicate With Your Children; (2) Alternatives to Punishment; (3) Building A Positive Self-Concept in Your Children. Results: Findings from a pre and post test revealed that 95% of the parents had experienced changes in their rearing practices. Conclusion: The need to reach Spanish speaking parents with parenting classes or educational materials is evident as Florida continues to increase in its hispanic population.*

**Being On Your Own and OK (88)**

M. FERRER, Orange County

*Participants responded favorably to the program and suggested topics for future programs, including nutritious restaurant eating, brown bag lunches, and modifying recipes.*
USA Today (1986) reported that more than 7.5 million children, 11 and younger are latchkey kids. It has been found that 1 out of 3 latchkey children are afraid, bored or lonely when home alone. Crime Commission, Inc., found that a total of 53% of 111,338 students enrolled in Orange County Schools are left home alone at some time. **Objective:** To increase ability of school age children to care for themselves while unsupervised. **Methodology:** A three lesson curriculum accompanied by a leader's guide was developed for 4th graders. Volunteers were recruited to take the lessons into the classroom. **Result:** Nine hundred and ten school age children were reached. 10% return rate was accomplished in the evaluations. Children rated each lesson by putting an X by the face that best described it. For lessons one, two and three students marked the smiling or neutral face by 96%, 94%, and 88%, respectively. The majority of students wrote at least one thing they learned from each lesson. **Conclusion:** To increase and promote the safety of latchkey children, educational program are needed in self-care. Orange County Extension Service has taken a lead in offering this type of program.

**Television Preferred Effective, Efficient, 1-1 Teaching Tool for Greater Change in More People Using Less $ and Agent FTE (87)**

R. A. FOWLER, Hillsborough County

Fast growing Mega-City Urban Area challenges Extension to keep pace with clientele demands for information and how-to-skills delivery. **Objective:** Agent to reach more clientele with more info-how-to-skills to bring about more change with less $. time, Tampa Bay Area, 12 counties. **Methodology:** Agent Fowler produced, hosted, instructed weekly 30 minute program, 13 week series, Can Do Clinic, TV 3, WEDU, Tampa, 10 years, writes instruction book for each series, available upon request. Station provides studio, crew, $, 2 second. **Results:** Rated Most watched Sat. daytime TV show 9 times, potential audience 475,000 households, average 46,480/show, 1450 instruction books/series, .25 FTE/year vs equiv. of 3.0 FTE, 12 X $, 12 agents, for same program undertaken by local sponsor, annual value $.04,400,000. 10th largest media market USA. 98% viewers surveyed pref. receiving info. via TV rather than other traditional methods, 80% felt info. more useful than info. received from other sources, perceived level of knowledge understanding, skill level increased by 74% for all topics in all series viewed. **Conclusion:** Use TV extensively for program delivery.

**Making It On Their Own-Haitian Center Home-Based Business (91)**

D. C. FRANZEN, St. Lucie County

The Catholic Haitian Center in Ft. Pierce was searching for new ways to assist their clients in finding work. A home-based business centered on constructing hand-sewn embroidered shirts was established. **Objective:** To provide profit, support and expert subject matter advice in planning and implementing a home-based business. **Methods:** Working with identified Haitian leaders and Center Staff, the sewing business concept became a reality. The agent assisted them in planning the concept, materials and equipment, purchasing and making patterns. A creole radio program was utilized to recruit seamstresses. Various programs discussed sewing methods, and standards. Seed money came from another Catholic order and community donations. **Results:** Although the business is in its infancy stage and there have been set-backs, the shirts have attracted attention and 66 were sold in a two-month period. Marketing is main concern. **Conclusion:** The Haitian immigrants are eager to work and this business utilizes present skills, while they earn money, keep up their self-worth and become acclimated to a new culture and country.

**Self Instruction Creates Self-Confident Kids (89)**

D. C. FRANZEN and S. J. MUNYAN, St. Lucie County

Statistics show that with rapid county growth and 64.9% of women with children between the ages of 6-17 working, it is probable many children are left home to care for themselves. **Objective:** Of the participants in-class instruction for 300 third graders, in the 3 elementary schools which are highest on St. Lucie County School Board's deprivation list, 75% will demonstrate increased confidence and personal safety skills when they are home alone. **Methodology:** Two instruction methods were selected: 1) The county-developed in-class curriculum includes 6 one-hour lessons on topics emphasizing personal safety, self-esteem and family communication. 2) A parenting newsletter, Balloon Dispatch, to reach all the children (1600) in grades 2 through 5, the targeted self-care age group, in the identified schools, (4, including pilot school). **Results:** Survey results (from classroom instruction) indicate 78% of third-grade participants were comfortable handling stated situations when at home by themselves. **Conclusion:** Self-care programming helps create more confident children who may sometimes stay home unsupervised by an adult. Program support was indicated by county school administration.

**Homegrown Florida - Food and Nutrition Fair (91)**

S. K. FRY, Okeechobee County

Homegrown Florida - Food and Nutrition Fair is an annual event for all second and fifth graders in Okeechobee County. The objectives of the fair are to introduce youth to Florida agriculture and to provide the nutritional background for these commodities. Approximately 18 exhibitors provide a 5-10 minute talk on their product and many provide a sample food product. Exhibitors are local and state affiliations. Approximately 1000 youth and 100-150 professional and paraprofessionals attend. An assortment of educational materials is provided for each classroom and each student receives a bag of items such as pencils, cow erasers, coloring books and 4-H promotional materials. The value of the food samples, materials, novelty items and volunteer time is estimated to be well over $5000.00. The fair is held at the junior high school. Junior high and high school 4-H members assist in a leadership position to see that all classes visit each booth. In addition to the fair, in-depth nutrition education provided for one elementary 5th grade involving 120 students. The educational material used was "The Secrets of Success" provided by the Dairy Council. The students were pre and post tested. **Results** showed that greater than 50% increased their knowledge of the four food groups and serving size. The significance of the program is to reinforce the nutrition education provided at the second and fifth grade level as well as increase awareness of...
the importance of Florida's agriculture.

Farm City Tour (92)
S. K. FRY, Okeechobee County
Okeechobee County Extension Service has sponsored a Farm-City Tour for the county's sixth grade population for the past five years. The Tour was originally started as a 4-H promotion during Farm City Week in November. Objective for the tour have over-flowed into the Home Economics department with students contests geared toward nutrition of Okeechobee's major agricultural commodities. A mini-grant was awarded for the program by the Florida Fruit and Vegetable Association. The mini-grant funded awards for a vegetable product label. Approximately 550 students participated in the tour and 100 students participated in the contest. The tour included a citrus grove, a beef cattle operation and a potato farm. The emphasis on a commodity from a nutrition standpoint rotates each year. The program is supported locally by Farm Bureau, Inc., Okeechobee Agricultural Council and the Home Economics Advisory Committee.

Peanut Better - Powerhouse of Nutrition For Youth (92)
N. GAL, Marion County
"Peanut Better" is a Home Economics/4-H Nutrition Education program. The target audience was 5th grade students. The objectives were: 1) to increase awareness of Extension Home Economics; 2) to increase knowledge of nutrition; and 3) to increase 4-H membership. The methodology included: illustrated talks, videotape presentations, sensory evaluation, student participation, pre-post tests, display posters, handouts, computer generated crossword puzzle, and recipe contest with custom designed t-shirts. Results were as follows: 1) increased awareness - a total of 1449 people participated in this program; 2) increased nutrition knowledge - approximately 75% of the participating students identified the peanut as a legume, named Vitamin B and protein as two nutrients peanuts supply, identified the six major food groups, and named a nutritious peanut snack; and 3) increased 4-H membership by recruiting 18 new members. The significance of this program has been to stimulate interest in maintaining good health and well-being through proper nutrition. The end results are to motivate youth to adopt eating practices which are healthy as well as compatible with existing food preferences for a lifetime of good health.

Visually Impaired People Improve Quality of Life Through Available Resources (88)
E. G. HARPER, Clay County
Braille booklets and talking tapes available through Extension in food preparation and pickling. Funds are needed. Objective: To create a desire for good nutrition through tailored information by use of available materials. Methodology: Worked through blind Extension Homemaker, Division of Blind Services, and Jewish Center. Materials were translated into braille and taped for talking library. Result: Two braille sets of Homemaker's Cookbook (14 volumes), 4 copies for talking library on food preparation, freezing, and pickling, (36) monthly newsletters taped by volunteers. Conclusion: Visually impaired gained knowledge, confidence, and improved basic life skills to help cope with their surroundings and way of life. Met nutritional needs through information tailored to fit this target audience.

Providing Extension Homemakers an Opportunity for Learning and Understanding Cultural Differences Within Florida (92)
S. L. HEDGE, Lee County
The major objective of this program was to provide Extension Homemakers with an opportunity to understand their communities or other groups of people living in Florida through the utilization of a model for cultural exploration. A model for looking at the culture of a group of people was developed and taught to the Extension Homemaker educational chairmen at the first of three state meetings. The Seminole Culture was used as an example. Participants in that meeting returned to their counties and carried out a survey of cultural opportunities in respective communities. They also identified a significant cultural group and explored it using the cultural model as a guide. The second year participants shared with the group what they had discovered about their area. In addition, participants were encouraged to understand the terminology and philosophy related to culture and therefore better understand the goals of the cultural arts program area as it is carried out in the Extension Homemaker organization. Results of the survey carried out have been published in a Cultural Opportunities Directory and distributed to all counties in Florida. Requests are now coming in for additional copies to be placed in local libraries. Extension Homemaker participants who implemented this program were able to carry out activities which they have traditionally enjoyed and at the same time gained a more thorough knowledge and appreciation of Florida cultures.

Partnership, Making a Family Supervised Visitation Program Happen (96)
S. HEDGE, Lee County
When families are split apart by abuse, violence or divorce, there is a need to provide opportunities for those families to reunite under safe conditions. Florida House Bill 347 directs UF/IFAS to establish supervised visitation projects. Objective: To provide a safe, neutral, homelike, therapeutic environment for visitation by families who have been separated by divorce, abuse, neglect or other circumstances. Methods: A "supervised visitation program" exists where there is contact between a noncustodial parent and one or more children in the presence of a third person responsible for observing and ensuring the safety of those involved. Supervised visitation programs may include exchange monitoring of children who are participating in court-ordered programs where there has been mutual consent between parties. The Bill directed that one representative from UF/IFAS be appointed to serve on the Florida Family Visitation Task Force although membership is voluntary. IFAS may establish supervised visitation projects in partnership with the community. IFAS is to develop and provide relevant educational activities as a
Healthy Babies, Happy Homes (96)

C. HILL, Lee County

There was also an alarming increase in the rate of food borne illnesses reported for infants and small children. **Objective:** To reach low income families with young children through established health facilities with a nutrition education and food safety program. **Method:** In April 1995, Lee County Extension Service submitted a grant to the US Department of Health and Human Services, Office of Community Services, Administration for Children and Families for $50,000. Extension had received repeated requests from WIC, Women, Infants, and Children, for assistance with nutrition education for their clientele and had been unable to provide it due to a shortage of staff. The department approved "Healthy Babies, Happy Homes" for 1995 and funded the grant again in 1996 for a total of $96,000. This was the first direct federal grant received by this Extension office and only the second time Lee County had received a grant directly from the federal government. We hired a program assistant to provide a series of nutrition, food buying and safe food handling lessons to the clientele in the WIC clinics. We also hired a registered dietitian under contract to oversee the program and to develop additional programs. During the second year of the program, we recruited and trained volunteers to lead additional small groups in neighborhoods. Lessons were in both Spanish and English. **Results:** Of the 392 individuals enrolled the first year 26% were of Hispanic origin. As of March 1996, an additional 210 individuals have enrolled for a grand total of 602 participating in the program. At the end of the first year 93% of the participants improved in one or more and 40% improved in four or more nutrition practices (i.e. plans meals, makes healthy food choices, prepares food without adding salt, reads nutrition labels for fat and sodium, has children eat breakfast and feel the food and nutrition needs of their families are being met). Also, at the end of the first year we discovered that the number of cases of food borne illnesses for infants and children were dropping. In 1992 there was a total of 94 cases reported for children less than 15 years of age in Lee County. In 1995 this was reduced to 76. **Conclusions:** Experience in grant writing, grant administration and nutrition education have been extremely positive in Lee County.

Florida House: A New Solution to Old Problems (91)

C. B. HILL, S. L. HEDGE and R. A. BRANDT, Lee County

Residents of Southwest Florida live in a unique and fragile environment. Responding to years of client requests for home environment information prompted plans for a teaching/demonstration facility. **Objective:** The Florida House Home Environment and Horticulture Education Center (Florida House) provides clients current research and trends to be utilized for an improved home environment. **Methodology:** The Florida House combines the expertise of Extension Faculty, private industry and local businesses. This vast network provides current research and information that is disseminated to the homeowner via display, demonstration, lecture, and hands-on activities. **Results:** The public, business and industry has responded favorably to the Florida House concept. Over 300 individuals toured the facility the first 25 days of June. In addition, over 100 people called for information. Business and industry has provided over $35,500 dollars of display material and equipment donations. Having a historic house for the Florida House has doubled the appeal of the project and drawn in history enthusiasts with the knowledge seekers.

Behavior Change from EFNEP Learn-By-Mail Lessons (92)

J. S. HOLMAN, Polk County

**Objective:** To evaluate the dietary and behavior change of low-income homemakers receiving a series of learn-by-mail lessons. **Method Used:** 328 WIC Clients received a 12 lesson learn-by-mail series on nutrition and food shopping. One four page lesson was sent every two weeks for six months. 107 Entry and Exit food recalls and questions on food budgeting and skills were obtained over the telephone. **Results:** Participants Improved consumption of milk, meat, fruits/vegetables, recommended servings, breakfast, meat alternates and nutritious snacks. All food budgeting skills improved. Consumption of breads/cereals decreased 1%. Savings averaged $7.11 per week. The dietary and skills changes are less than comparable EFNEP homemakers taught individually or in groups. The cost per participant was $4.50-$5.00. The cost for a homemaker taught individually or in a small group by a Program Assistant in 1991 was $186. **Conclusion:** Mall nutrition lessons may be cost efficient teaching method when paraprofessionals are not available but dietary and behavior change are less.

Food Irradiation: Changing Attitudes (93)

J. S. HOLMAN, Polk County

**Objective:** To increase knowledge and change attitudes about food irradiation. **Teaching Activities:** Polk County is the site of the only food irradiation plant in Florida and it has been very controversial. A program and learn-and-return kit were developed. Contents are a presenter's guide, posters, transparencies, inedible irradiated products, fact sheet, and evaluation. The program was presented to 37 FCE members and the kit has been borrowed by one
EFNEP 25th Anniversary (94)
J. HOLMAN, Polk County, and J. ALLEN, Hillsborough County
Hillsborough and Polk County EFNEP held a program and luncheon to recognize EFNEP achievements over the past twenty-five years (1969-1994). **Objective:** To review the accomplishments of the past 25 years and look at the future of EFNEP. **Methods:** Current and former county and state staff received a formal invitation to the program and luncheon on April 21st. The Dean for Extension and Home Economics Program Director reviewed EFNEP's place in Home Economics and Extension programming over the past twenty-five years. Polk and Hillsborough EFNEP Supervisors remembered the past with key words: green folders, progression model, PEPPY, Tricks for Treats, etc. Florida's EFNEP Coordinator discussed the future. Six historical exhibits on adult and youth phases illustrated changes in curriculum, teaching materials, and reporting methods from 1969 to the present. The only three “original” program assistants hired in 1969 and still working with EFNEP in Hillsborough and Polk Counties were recognized. All attending were presented with EFNEP mugs. **Results:** Since EFNEP’s beginning 29,523 homemakers (112,551 family members) in Polk and Hillsborough Counties have been enrolled in Adult EFNEP and 28,629 youth have participated in 4-H EFNEP. The staff who made these results possible celebrated program accomplishments. **Conclusion:** EFNEP began as a temporary year to year program but it's success made it a model for many other programs with limited resource audiences throughout the state and nation.

Meeting the Food Safety Needs of Bilingual Youth (95)
T. HOOVER, A. COOPER, M. TAMPLIN, J. OSMOND and K. EDGELL
One hundred thirty-two Hispanic youths in grades 4-6 participated in a study to determine the effectiveness of a food safety educational curriculum and a Spanish video. **Objective:** To address the food safety and handling needs of Hispanic youth. This project adapted the Mystery of the Poison Panther Picnic youth educational materials, five-lesson unit and video on safe food handling developed by Purdue University for bilingual youth. The Poison Panther Picnic video script was translated into Spanish and shared with individuals representing various cultural backgrounds. Appropriate modifications were made to reflect cultural language differences and a Spanish version of the video was developed. **Methods:** In order to determine the effectiveness of the curriculum four treatment groups were developed: a control group, English video group, Spanish video group and a group who were taught the five-lesson unit. **Results:** Youth who were taught the five lesson unit, completed recommended activities, and viewed the video scored the highest on food safety and handling. Those youths who served as the control group scored the lowest. **Significance to Clientele:** Youths who participated in the group that scored the highest on food safety/handling shared safe food handling practices with parents/guardians. Parents sent letters to the teacher noting their child's increased awareness in food safety and handling.

Keys for Keeping Latchkey Kids Safe and Happy (89)
A. HOMRICH, M. FERRER and T. FLOYD Orange County
Latchkey kids - children who go home alone after school - is a growing concern in our country. Estimates indicate that 25% of elementary school-age children go home to an empty house. Female headed households, dual working parents and limited and expensive child-care are some of the major causes. Findings show that 1 out of 3 latchkey children are unsafe, afraid, bored and lonely when home alone. **Objectives:** To increase community awareness of the needs of families with latchkey children; to enhance existing school-age child care programs; and to teach self-care skills to children for increased safety and self-esteem. **Methodology:** A multi-faceted educational effort of eight separate programs was designed to address this issue in Orange County. **Results:** A total of 2,431 individuals participated in workshops, trainings and hands-on experience activities.

Better Business Basics in Seminole County (88)
B. HUGHES/GREGG, Seminole County
Our county is one of the fastest growing small business areas in the country. This situation combined with the fact that no seminars have been offered showed a need in our county. **Objective:** With the help of a Business Advisory Committee, plan and develop a one-day workshop that would address the needs of individuals who started or were thinking about starting, a small business. Give potential entrepreneurs a chance to evaluate their wants and needs and then relate these to qualities and knowledge necessary to start a successful small business. **Methodology:** 13 different workshops were planned and instructors from business and education were secured. **Result:** Seminole Community College, University of Central Florida, Chambers of Commerce and Small Business Administration cooperated with Extension in the seminar’s development. 53 people attended the workshop. 20 instructors planned and taught 13 different workshops. From a 6-month follow-up questionnaire, we learned that participants felt they gained knowledge in the following 33% legal aspects, taxes and finance of a small business, 50% in planning and managing a small business, 17% in marketing a small business. This workshop will be an annual event.

Workshop For Managers and Mid-Managers of Low Income Clientele (91)
B. HUGHES/GREGG, Seminole County
We have over 9.4% low income families in Seminole County. With one Home Economist, it is impossible to reach large numbers of families effectively and carry on other programs. There are many social service agencies meeting the emergency needs of these low income families, however many of these professionals have little knowledge in
consumer and family economic stability issues. A workshop was developed to reach managers and mid managers of low income clientele. Lunch was served using Master Mixes and a Resource Book was given to participants that covered: budgeting, credits and debits, commodity lesson plans and recipes etc. 27 people representing 14 different agencies have attended this workshop which has been presented twice. Post evaluation results indicate 96% use skills learned through the workshop to work with their clientele. By networking with agencies who have already a strong low income clientele base, information can more effectively be disseminated and used by a larger group of people.

Family Affair - Helping Families Help Themselves (95)
B. HUGHES/GREGG, Seminole County
It was believed that many families were not aware of all services available to them. An Advisory Committee was formed to develop this event in cooperation with the local fair. Objective: 1. Develop a coalition to act in the capacity of an advisory committee. 2. Showcase agencies, churches, organizations, businesses offering services designed to help parents and children at little or no cost. 3. Strengthen family contacts with agencies who promote family health and well being. 4. Target low income families. Methods: Poster and essay contests were held in Middle and High Schools with the theme: My Special Family*. The winning poster was printed on event t-shirts, newspapers printed winning essays. Agencies handed out invitations. A special committee was set up with information regarding the event in English and Spanish. Over 2,000 people received invitations. Families had a 'passport to fun' that had to be signed by 20 agencies indicating they had visited booths and gleaned information. They took the passport to the Family and Community Education Volunteer Station to receive tickets for each child. Health screening, nutrition, and child protection programs were offered. Results: 38 agencies participated and reached 245 families (430 youths). 12 immunizations, 9 HIV tests, 112 blood pressure checks, 127 finger printings, 187 eye exams, WIC nutrition counseling for 193 families. $6,785 in corporate sponsorships. According to evaluations, 92% said they learned more as a direct result of this event.

Hurricane Disaster Training (96)
B. HUGHES/GREGG, Seminole County
Provided hurricane disaster that prepared grassroots people to extend knowledge to others before a hurricane and thereby better protect life and property. Objectives: Distribute Extension publications in Training Manual (65 pages) form to key community leaders. Provide training in conjunction with the County Public Safety Division to provide back up information with the publications. Recruit volunteers willing to Man the phones during a hurricane to let county officials take care of immediate and emergency situations. Methods: Five hundred organizations, homeowner associations, key volunteers, schools and churches were targeted and sent special invitations with a program agenda. Collated a Training Manual of Extension publications in English and non-English languages. Gave two (night, and afternoon) two hour workshops, (ten presentations, 15 minutes each) to help supplement the Training Manual. Results: Public Safety gave $400 for postage and printing. Seven agencies made presentations to fifty eight people that represented thirty two different organizations. Through evaluations, participants believed they could get information learned out to 5,853 people. Over 100 percent said the program met or exceeded their expectations. Manuals are in all our county libraries. Seven people signed up for further training to Man phones during an emergency. Conclusion: Networking with other agencies produces greater opportunities for program participation and impacts.

Food Preservation Seminar (89)
D. HUMPHRIES, Taylor County, M. TAYLOR, Suwannee County, D. JONES, Madison County, P. KENNEDY, Jefferson County and M. GRAVELY-TURNER, Hamilton County
Home food preservation can be an economical way to supplement the food supply of a family. Many factors are involved and consumers need information to assist them in evaluating the economics of food preservation and to learn the most current research based methods. Objectives: clientele will acquire knowledge and skills to evaluate the economics of food preservation, to select appropriate food and practice research based methods of food preservation. Methodology: a food preservation seminar utilizing team teaching techniques to represent canning, freezing safety and storage information was developed and presented in two counties. Results: fifty three current and inexperienced home food preservers increased knowledge and learned current research-based skills. Conclusion: A demonstration/seminar format is an effective teaching method to reach rural audiences and should be considered in future program planning.

Use of "Growing Children Resource Center" (88)
A. C. JONES, Palm Beach County
Objectives: to establish a network with other community agencies and increase awareness of our expertise. Methodology: Educational efforts included membership in Palm Beach Child Advocacy Organization; NET curriculum workshops; participating presenter and exhibitor at Annual Tri County Child Care Conference; presentations at young parents groups; Chats With Parents; Cradle Crier; Crib Courier newsletter distribution; 5 Head Start staff and parent training meetings and articles for Childbirth Education newsletter. Result: Palm Beach Extension programs are recognized as qualified providers for child care certification training. 6,201 received "Chats With Parents" newsletter and 200 received all issues of Cradle Crier and Crib Courier; reach 1,400 child care staff and young parents during Early Childhood Conference; 150 preschoolers and parents attended the Preschool Taste of the Tropics and Nature Walk* at the Extension Botanical Garden. Conclusion: Increasing requests from agencies, child development centers and parents indicate a growing need for parenting education, and Extension Home Economics has the resources to assist in this need.
Food Preparation Equipment: Selection, Care and Use  (88)
D. JONES, Madison County, M. TAYLOR, Suwannee County, M. GRAVELY, Hamilton County, D. HUMPHRIES, Taylor County and P. KENNEDY, Jefferson County

Today's trends of more women working outside the home, and fast paced lives have led to a need for time-saving and convenience features in food preparation. **Objective:** Increase utilization and knowledge of the selection, care, use and safety of food preparation equipment. Improve personal resource management. **Methodology:** The multi-county food resource management group planned, developed the educational program and conducted an Equipment/Cooking School in cooperation with the local newspaper. **Result:** Many of 310 participants indicated new knowledge gained about equipment use and selection, requested additional information, and plan to purchase new equipment. The visibility of the Cooperative Extension Service was greatly increased through the educational program and its pre- and post publicity. In addition 9100 were reached by the local media. **Conclusion:** The Food and Equipment School format is an efficient method to teach working women and the general public to increase their personal resource management through efficient use of food preparation equipment.

Putnam County Extension Homemakers Deliver Cancer Risk Reduction Worksite Program  (89)
M. KEANE, Putnam County and L. BOBROFF, Home Economics

Eating behavior modification programs designed to follow the Dietary Guidelines for Americans (USDA) have been proposed as possible ways to reduce risk of cancer and other diseases. **Objectives:** Volunteers trained to conduct this program will present at least two lessons of the outlined curriculum at the worksite. 50% of the worksite participants will increase fiber intake, decrease intake of high fat foods and attain/maintain desirable weight and activity pattern consistent with this goal. **Methodology:** Fifteen Extension Homemakers were trained to deliver classes at the worksite. Classes were offered between shifts on several days to make meetings convenient for workers. Worksite participants were given pre/post tests to measure knowledge gain. A dietary questionnaire, administered one year following the program will measure dietary change. **Results:** 14 of the 15 homemakers trained met their obligation of conducting classes. These 14 contributed more than 350 hours in the delivery and preparation for the classes. **Conclusion:** The Food and Equipment School format is an efficient method to teach working women and the general public to increase their personal resource management through efficient use of food preparation equipment.

Multi-County Home Furnishings Educational Series: Creative Design in the Home  (88)
M. W. KEANE, Putnam County, D. M. DORSCHEL, Duval County, S. L. TAYLOR, St. Johns County and E.G. HARPER, Clay County

The sizeable financial outlay involved with home furnishings and household equipment is climbing yearly and unwise choices are costly. **Objective:** Individuals will (1) develop greater knowledge and skills to effectively plan and select home furnishings and (2) report a savings through adapting this information to meet their needs. **Methodology:** Two comprehensive educational seminars were presented in four North Florida Counties. Agents prepared slide/script presentations and hands-on demonstrations. **Result:** 165 (46%) of participants returned a two-month follow-up evaluation; 95% indicated that they had learned at least "some" new information, 93% had been able to use the information. The total dollar savings reported by the respondents was $3915.00. **Conclusion:** Participants learned and were able to use information on home furnishings. Money was saved through new skills gained and by avoiding costly mistakes in the selection of home furnishings.

Training Partnerships: Providing CDA Training in Limited Resource Rural Areas  (93)
P. KENNEDY, Jefferson County, M. BRINKLEY, Calhoun County, S. CLARK, Gadsden County and A. MULLIS, 4-H Youth

Florida mandates licensed child care centers have one person with a Child Development Associate Credential (or equivalent) for each twenty children by 1995. Providers' problems were not being familiar with CDA and limited access to training and education. **Objective:** Assist child care providers with CDA education and training requirements. **Method:** The need for training stimulated a partnership among the Extension Service, Central Agencies, state universities, community colleges and school districts. The lead agencies were the Cooperative Extension Service and the Central Agency. With funds from the Dept. of Health and Rehabilitative Services a multi-focused project was initiated to provide training and educational opportunities. **Results:** Training programs have been established in fourteen counties and involve approximately 280 child care providers. **Conclusion:** Benefits have been the establishment of positive working relations between agencies and the spirit of cooperation and collaboration.

Volunteer In-Home Financial Counseling Service  (88)
C. A. KILBRIDGE, Martin County

Family financial records are kept in the home for easy access to information. Clients get personal and confidential assistance with an assigned counselor. **Objective:** to train volunteers in counseling techniques for financial money management in areas of: recordkeeping, budgeting, savings, credit, insurance and family goal setting. Target audiences are clients with under $25,000 income or persons requesting special assistance. **Methodology:** A 6-hour initial certification training session then 2 follow-up in-depth updates are taught yearly. A counselor is assigned to clients calling our office requesting assistance. The counselor submits a completed fact sheet relating the assistance given, client's financial status and related problems. **Results:** On the basis of our ongoing service since August 1986, 70 clients have been assisted and 48 counselors trained. Counselors are required to assist 5 client families before leaving the program. **Conclusion:** both clients and counselors have responded well to this in-home assistance program. The greatest number of our clients have needed education in the areas of credit, budgeting and medical/health related financial problems.
An Elder Education Project to Avoid Fraudulent Health and Nutrition Marketing (96)
J. LUDDEKE, Brevard County and L. ISAACS, Orange

Objectives: To increase awareness and knowledge among the elderly population concerning fraudulent health and nutrition marketing. Methods: FDA Public Affairs specialist and Brevard County extension agent trained 13 volunteers to teach in 13 SNAP sites. The projected population to be reached is 494 SNAP site participants. A teaching package was developed for each volunteer which included a lesson outline, script, evaluations, FDA fraudulent props, posters and handouts. Collaboration with the Better Business Councils of Brevard, Senior Helpline and FDA resulted in a brochure listing each as a consumer contact. Newspaper and radio coverage generated other program requests and consumer calls. Results: The project is in the beginning stages. Three SNAP sites have completed the program. The seniors and SNAP site managers rated the program excellent and timely. Currently, pre- and post-survey scores reveal a 20 point increase. Conclusions: Seniors are very receptive to the program because many of them have questions or concerns about products. Most seniors are aware they need to be careful but did not have guidelines to evaluate the marketing scheme or product. Four consumers have returned products after attending the class or reading the newspaper article.

Puppets and Ethnic Foods: Tools to Develop Cultural Awareness in the Classroom (91)
G. MASRI, Broward County

The importance for teachers and child care providers to be culturally sensitive in the classroom cannot be overemphasized, especially in Florida's melting pot. The Culture Gang Puppet Show and My Mother's Food booklets were created to use as teaching tools in the training of child care providers. The objective of this activity was to train child care providers to bring cultural awareness of the Caribbean and Central American food patterns into their classrooms. The puppet show was presented to 60 providers, who were earning in-service hours. Puppeteers presented the food culture of Jamaica, Puerto Rico, Haiti, and El Salvador relating them to the emotional security of their own mother's food. My Mother's Food booklets contain an introduction of culture and children, a discussion of the Four Food Groups as seen through the eyes of Caribbean and Central American cultures and activities to be completed in the classroom. Parental involvement activities were also suggested. Evaluations of this activity were excellent, indicating that the teaching of concepts such as culture and cultural sensitivity could be very effective when done in fun and creative ways. Puppets are being made into a Learn & Return kit.

Expanding Interagency Cooperation with EFNEP in Broward County (93)
G. MASRI, Broward County

Six Parent Educators from the Child Development Division - School Board of Education received Instructor's Training in the Expanded Food and Nutrition Education Program Curriculum in 1992. Objective of this pilot project was to find creative alternatives to increase the bilingual EFNEP teaching force. Due to budgetary restraints, the program does not have a bilingual Program Assistant who can communicate effectively with Haitian and Hispanic families. Methods included signing a Cooperative Agreement with the Florida First Start Program-Child Development Department of the Broward County School Board, to train their staff of Parent Educators in the EFNEP Curriculum. Parent Educators in this program are comprised of 1 Hispanic, 2 Haitians and 3 whites. Results: Fifty families have been enrolled and graduated with 80% success. Educators have reported significant changes in food behaviors, food safety practices, and nutrition knowledge. Conclusion: Creative ventures must be tried with cooperating agencies to increase the numbers of families benefiting from Extension programs. In Broward County, the use of multicultural Parent Educators has been very successful in teaching hard to reach audiences, which presently, are under served by our Extension programs. At the present time, 13 additional Parent Educators have finished training, expanding the EFNEP teaching force from 1 Program Assistant to a total of 17 Parent Educator volunteers.

Cooperative Agreements: An Avenue to Legitimize Extension Programs (93)
G. MASRI, Broward County

Cooperative Agreements have been successfully tried in Extension work in the past. The Purpose of utilizing Cooperative Agreements in Broward County is to legitimize the EFNEP Program to find stable audiences for enrollment and graduation in this nutrition curriculum. Methodology: Agencies providing services to low income families were contacted. The Cooperative Agreement was written, taking into consideration the purpose, time and resources available to all Agencies involved. Objectives, benefits, evaluation procedures and responsibilities of the parties were stated clearly in the Agreement. The period of Agreement varied from 12-24 months. Longer periods were discouraged. Flexibility in the implementation of the program was a major key to success. Results: Six community programs have signed agreements with the Broward County EFNEP. These six are Florida First Start, Head Start-Parent Child Center, Head Start-Home Base, Women, Infants and Children Program (WIC), Project Independence and Broward Addiction Recovery Center. At the present time, agencies and programs in Broward County are positive and receptive to Cooperative Agreements. For EFNEP in Broward, it has been a success to become a component of the educational programs of other agencies. As a result of these Agreements, one Program Assistant has been able to increase her expected full-time load from 150 families per year to 150 in six months. Conclusion: Cooperative Agreements are avenues to stable audiences, better evaluation procedures, cost efficiency, and stronger interagency cooperation.

Alternative for Retirement Living/Housing Options (87)
J. K. MASTERYANNI, Charlotte County

In Charlotte County over 50% of the total population is over 65 years of age. A number of new retirement facilities are opening in the county with a variety of services. As people grow older, they should make plans for their later years. Objective: To provide an overview of the various types of retirement facilities available in the county and
to provide information about the different types to enable consumers to make a wise selection to fit their need.

**Methodology:** An all day program was held which included panel discussions, exhibits and tours of local retirement facilities. One panel of speakers discussed the various options available and the second panel discussed the legal, financial and emotional aspects of moving into a facility. **Results:** Approximately 100 people participated. 53% of the participants returned evaluation forms. 47% thought the program was excellent. Since the program additional comments have been received from program participants in the midst of decision making. **Conclusion:** Ad hoc advisory committee felt the program was successful and should be repeated in 1988.

**Care Givers to the Homebound** (87)
J. K. MASTERYANNI, Charlotte County
In Charlotte County, over 50% of the total population is over 65 years of age. As one gets older, one often encounters impairments which make total independent living impossible. **Objective:** 25% of the adults who participated in adult sitters and/or caregivers training will learn the skills and techniques to become effective caregivers.

**Methodology:** A series of 4 days (25 hours) of intensive training was held in 1986 for adult sitters and 1987 for primary care givers. Topics included home management skills, human relation skills, physical care of the homebound person, and the role and responsibility of the caregiver. Pre and post tests, a class evaluation and a 6 month evaluation were given. **Results:** 21 adults participated in the adult sitters training. 24 adults participated in the caregiving training. 62% of the adult sitters planned to use the information for employment. 19% as a volunteer sitter, 42% to care for a relative. 76% found training in nutrition, community resources, understanding aging to be most helpful. **Conclusion:** Training caregivers was a success. Objective was achieved.

**Saving $$$ When You Don’t Have a Dime to Spare** (87)
J. K. MASTERYANNI, Charlotte County
Inflation continues to be a problem for most families. Home mortgage foreclosures have increased and many have overextended their resources by using credit. **Objective:** 25% of the individuals who participate in Extension educational programs will improve their knowledge skills and practices of managing their resources.

**Methodology:** The 18 letter financial management series developed by an Extension Home Economics specialist was adapted as a learn-by-mail series. Pre and post tests, quizzes and an evaluation were prepared. Following the series a 2 hour seminar was held. Topics discussed were: Investments, Insurance, Estate Planning, New Tax Laws. The complete program was conducted in 1986 and 1987. **Results:** In 1986, 116 people participated in the series and 53 attended the seminar. In 1987, 168 people participated in the series and 154 attended the seminar. 67% established or revised a record keeping system. 73% gained a greater control over finances. 44% established specific financial goals. 43% reduced debts. **Conclusion:** Objective was met. Participants increased knowledge and made practice change.

**Safety Program for Preschoolers** (88)
J. K. MASTERYANNI, Charlotte County
Lifestyles are changing which causes stress and strain in family relationships. Abuse and molestation of both adults and children are major social problems in the county. **Objective:** 25% of the families who participate in Extension educational programs will increase their knowledge and understanding of safety precautions. **Methodology:** “Patch the Pony” is an educational program conducted in day care centers, kindergartens, grades 1 & 2 and public libraries. The package program is distributed to teachers who instruct the children. Materials are sent to parents to inform them of the program and for them to help reinforce the teaching. **Result:** All 24 centers have participated and some every year. 270 teachers, 7574 children and their families have learned more about child abuse and molestation. **Conclusion:** According to teacher and parent evaluations, families have learned more about the subject and to take safety precautions. The home economics advisory committee recommends this to be an annual educational program.

**Master Conservationists: a Pilot Extension Program** (92)
J. MEADOWS, Sarasota County
**Objective:** For county residents to gain knowledge and put into practice ways they can help to conserve resources in and around their homes. **Method:** Master volunteers are trained in a 50-hour intensive educational program on factors affecting resource conservation. This is being done in two parts. Thirty hours of instruction have been held for the first group of volunteers. Curriculum included: global and local resource concerns; housing design and materials to conserve; energy & water conservation, home equipment, appliances & furnishings as they affect conservation; non-toxic construction and furnishing materials; air quality and moisture control; waste management; and alternative conservation sources. The remaining 20 hours of instruction will be done on site at the two education conservation model houses being built. **Results:** 19 people graduated from the 30-hour course and are volunteering in numerous ways. They are involved in the planning, preparation and construction of the conservation houses being joint-ventured by CES, the Florida House Foundation, and Sarasota County Technical Institute. They have presented exhibits and programs to groups, and will serve as tour guides upon completion of the conservation models. **Conclusions:** CES in Sarasota County have been recognized by many new individuals and groups through this conservation program and the houses. This curriculum has drawn highly qualified people - teachers, builders, engineers, planners and sociologists - to help expand Extension educational programs in conservation areas. They are eager, enthusiastic and dedicated to helping with the CES conservation programs.

**Teen Life Options: An Integration of School, Family, and Community** (96)
B. MILLER, Leon County
This primary prevention pilot program was designed by TLO partners (Capital Area Healthy Start Coalition, Leon County Schools, Junior League of Tallahassee, and Leon Cooperative Extension) to help at-risk teens. **Objectives:** To
develop socially relevant interdisciplinary curriculum. To lower incidence of risk-taking behaviors. To delay early departure from school. To increase parental involvement. To provide service learning opportunities. Methods: Extension Agent joined with school staff to develop curriculum in compliance with state performance standards, designed parenting activities to encourage increased involvement and empowerment, augmented class presentations and experiential activities, and facilitated student service learning experiences. Forty-five students were enrolled in the first year long program (funded for 3 to 5 years). Results: After three years of the program, all the parents reported increased understanding of children's behavior and symptoms associated with media-related stress. Includes an understanding of children's fears, stressors and misinterpretations and alerts parents and teachers to children's "calls for help." Communicating with children who have experienced violence (including TV, such as the March L.A. police beating) is addressed along with activities to help children understand their stress and reduce their anxiety. Treatment outcomes were documented for 94% of the participants. Conclusion: A well-received impact program that made a difference in teen lives. Program capitalized on Extension's collaborative strengths and dedication to improving the quality of life for families.

The Greening of the Tourism Industry: An Opportunity for Extension (95)

K. MILLER, Home Economics
Tourism is the state of Florida's largest economic activity. Objective: To reduce energy, water, and waste in the hospitality industry in Florida. Methods: Educational programming targeted at the hospitality industry is delivered in group settings in cooperation with the Florida Hotel and Motel Association, the Florida Restaurant Association, the Florida Attractions Association, and utility companies throughout the state. Educational programming includes one-on-one efforts with attractions, hotels/motels, and restaurants. The intent is to increase the economic and social benefits of tourism while reducing its costs. Results: Demonstration projects including hotel "enviro-rooms" with the latest low-impact technologies that saved over 49% of utility costs. A restaurant demonstration with a large chain saved 21% in the cost of energy when compared to a restaurant of standard design for this chain. This chain will build 20 restaurants in Florida next year and retrofit potentially hundreds with some of these energy improvements. Conclusion: Reducing operating costs through low-cost conservation technologies and practices, exhibiting environmentally-responsible behaviors to an environmentally-conscious consumer and the incorporation of "green" practices into business operations is a win-win situation for both the Florida tourism industry and the Florida tourist.

Educational Needs of Young Parents (90)

D. L. MIRES, Hillsborough County
One hundred parents of young children in Hillsborough County participated in a research study to determine what the educational needs of parents are and how the Extension Service can best meet those needs. The study also compared responses of employed and homemaker mothers to determine and understand potential differences in subject matter and delivery method preferences. Sixty-four program topic were listed under six home economics-related program areas, including: children, family life, finance, housing, nutrition and clothing. Programs with the highest interest shown by both groups of parents were: raising responsible children, nutrition for children, effective discipline techniques, enhancing child's self esteem, planning for child's future, healthier eating for family and stages of child development. Differences due to work status of mothers was shown in only 16 categories and included: discipline, child protection and safety, stress management, balancing work and family and estate planning. The most preferred delivery method of both groups of mothers was overwhelmingly "newsletter mailed to home" (61%). Only 26% said they would attend a public program, preferring weekday or Saturday mornings.

Teen Parenting Program Promotes Parenting With Pride (90)

D. L. MIRES, Hillsborough County
Teen mothers receiving AFDC aid from HRS in Tampa are participating in Extension parent training. Young mothers (ages 14 - 20) are taught a 6-lesson series on self esteem, discipline, safety, stress management, child development and parent/child interaction and communication. Goals include reduce stress associated with parenthood as stress has been shown to be a leading cause of abuse, understand child behaviors, provide safe care for children, feel better about being a parent, improve family communication. Video tapes, worksheets, role playing, discussion and handouts are used. Mothers are observed interacting with baby/child and are taught interaction skills. 400 teen mothers have received the training, which has increased their knowledge of parenting 60% (pre and post test). Follow-up evaluation indicates the following changes in mothers: 94% communicate more with child, 96% feel better about themselves as parents, 94% praise their child more, 92% use more effective discipline techniques, 98% say they enjoy their baby/child more, 90% made their child's environment safer, and 100% of the mothers say they understand their child's behavior better. Evaluation tool, program materials available.

Control of War-Related and Media-Related Stress in Children (91)

D. MIRES, Hillsborough County
Although the major threat of the Persian Gulf is behind us, our children will always be exposed to one crisis or another. Today's children (even preschoolers) witnessed the war and their parent's response to it and reacted to it in ways that exhibited their fears and misunderstandings. Hillsborough County has developed a program to help parents and teachers understand children's behavior and symptoms associated with media-related stress. Includes an understanding of children's fears, stressors and misinterpretations and alerts parents and teachers to childrens' "calls for help". Communicating with children who have experienced violence (including TV, such as the March L.A. police beating) is addressed along with activities to help children understand their stress and reduce their
inappropriate behaviors resulting from their stress. Special program developed for day care centers to help adults observe and react to children under stress and to conduct activities at school to benefit all children. Unfortunately, stressful events will always take place, the most we can do is to teach our children how to cope with and survive hard times, perhaps even how to grow because of them.

Children of Working Parents: How Well Do They Fare? (92)
D. L. MIRES, Hillsborough County
This program is part I of a series for employed parents called "Feeling Good About Being a Working Parent." Objectives: To reach parents through the workplace with educational lunch-and-learn programs. To attract corporations, agencies, employers to an extensive Balancing Work and Family Series. Methodology: Many employed parents (mothers especially) have a need to know that their employment, in itself, is not detrimental to their children's achievement, self-esteem, mental health or development. Yet these same parents feel that to attend a program on stress management, discipline, time management, conflict resolution or communicating (all problem-oriented) would label them as failures. Positive research on children of working mothers is presented along with detailed "how-to" information for quality parenting, productive family time and effective child-rearing. Results: Success of program evident in enrollment of employees to continue Balancing Work and Family programs. Part I also helps parents feel at ease in communicating their needs for future lunch-and-learn programs and specific programs are designed for individual groups.

Foster Teens Strive for Independent Living (89)
A. R. NORMAN, Palm Beach County
Over 50% of children in foster care in Florida are over age 12. Most teens exiting foster care go directly to the criminal justice or welfare system. Objective: To gain knowledge and survival skills in order to successfully cope with living on their own. Methodology: A ten session activity based series that provided "hands-on" life experiences, including shopping for transportation, credit, banking, housing, clothing, etc. Classes were held on used car lots, banks, grocery stores, etc. to simulate situations encountered when living independently. Results: Four of 9 participants this year have been granted "independence" by HRS, 2 have obtained consumer credit loans, 1 has graduated from high school (the Ist of 18 participants in 2 years) and is enrolled in P.B. Community College. Conclusion: Education and basic survival skills not generally available to teens in foster care is critical to their success in living independently of a government subsidized support system.

Preserving Heirloom Textiles (89)
A. R. NORMAN, Palm Beach County
Insects, sun, sand, humidity, temperature and improper care all adversely affect heirloom textiles. There is a growing interest in preserving a part of history by properly caring for heirloom textiles and in creating needleworks to be passed on to future generations. Objective: To become aware of methods of preserving textiles according to fiber content and fabric construction; to apply knowledge to practices that will extend the life of textile heirlooms in good condition. Methodology: 1) displays and lectures at juried quilt shows, American Sewing Guild Events and Extension programs. 2) development of Learn and Return loan kit 3 individual consultations. Results: 273 individuals reached through 5 presentations and individual consultations; loan kit developed for use in future programs and for loan to groups and individuals. Conclusion: Applied knowledge of fibers, fabric construction and proper storage techniques will preserve heirloom textiles in good condition thereby preserving a part of our culture and history.

Financial Fitness (89)
A. R. NORMAN, Palm Beach County
Approximately 29% of Palm Beach Co. adults are functionally illiterate in English. Most of these people are low income, employed and unaware of wise financial management practices. Objective: To increase financial management skills, i.e.: distinguish between necessities and desires, set goals and priorities, understand services available, save for goals, gain skills in financial and consumer record keeping. Methodology: Over 150 illiterate and low literate individuals participated in 2 - 5 week sessions on financial fitness. Results: Ninety percent established written goals, 92% recorded expenses for 7 days, 27% were recording expenses at the last session, 85% were able to write personal checks correctly, 72% were able to keep a check register, all were aware of some situations that cause money mismanagement and all are now aware of how to establish credit. Conclusion: Application of knowledge gained improves financial management.

Cooperative Extension Service - WIC Nutrition Initiative; WINS Women Improving Nutritional Status (95)
A. NORMAN, Palm Beach County
The WINS Program is a special project funded by USDA through the Cooperative Extension Service in cooperation with WIC (the Supplemental Food Program for Women, Infants and Children). Objective is to teach WIC clients who are at risk of delivering low birth weight babies a series of lessons with emphasis on improving nutrition, resource management and weight gain. The participating women are those entering pregnancy underweight or who are losing weight in the first trimester of pregnancy. Methods include an intensive training provided to program assistants and follow-up training presented by the Extension agent. A curriculum of five lessons was developed based on the needs of the clientele, taking into consideration relevant, cultural and economic aspects. Results: Two hundred forty-one women have participated in the program, 92 have graduated and 82 are currently enrolled. The average weight gain of women participating in all sites has been 26.3 pounds. The average birth weight outcome in all sites has been 6 pounds 12 ounces. Conclusion: At an estimation of $30,000 per low weight infant born, this calculates to a cost avoidance of $2,786,000.00. Preventive education does pay in the savings of tax dollars.
Closing Your South Florida Home  
A. R. NORMAN and S. E. BRUBAKER, Palm Beach County

Most people who call South Florida their home came from elsewhere. About 20% of county residents close their homes for at least 3 months each year; most are unaware of how to protect indoor furnishings and surfaces. **Objective:** To be aware that high temperatures and humidity levels interrelate and affect building materials, household surfaces and furnishings; to apply knowledge to reduce damage from South Florida conditions. **Methodology:** 1) presentations to the public 2) trainings for condo managers and FPL customer representatives 3) newspaper articles 4) video production for loan to individuals and groups 5) individual consultations. **Results:** 3,400 persons were reached through 9 presentations, individual consultations and Closing Your Home informational packets. Six articles published and a video produced. Participants averted thousands of dollars of mildew damage and utility bills by following recommended practices. **Conclusion:** Knowledge of how to properly close your So. Fl. home will prevent excessive, costly damage from heat, humidity and other destructive conditions.

Nutrition Day for Kids Entitled "Fun with Good Foods"  
C. L. OLSON, Hardee County

Learning about nutrition and good eating habits at an early age will provide a good foundation for the rest of one's life. **Objective:** To teach kindergarten-aged youth the four food groups and the importance of a well-balanced diet. **Methodology:** 450 kindergartners participated in a week-long nutrition program. The week began with a nutrition skit and assembly prepared by the Hardee County 4-H County Council. Four daily lesson plans, emphasizing the 4-food groups, were developed for the teachers to use in their individual classrooms. The week concluded with a county-wide Nutrition Fair. Food centers were set up for hands-on experiences of tasting and touching. Each child was given a nutrition "goody" bag to take home and share with his/her family. **Result:** Verbal evaluations were used with a 50% sampling of kindergartners showing that 180 of the 220 surveyed had learned and retained at least 3 new concepts in nutrition. **Conclusion:** To reinforce learnings at this age-level, nutrition programs need to be implemented at additional grade levels.

Whole Grains For The Health Of It  
A. W. PARRAMORE, Leon County

**Objective:** For Extension Homemaker Club (EHC) members to become more knowledgeable of various whole grains (including barley, couscous, millet and buckwheat) and incorporate them into their family meals. **Methodology:** Training was conducted for EHC leaders which included poster and/or overhead transparency presentation, video ("Wild Rice In Style"), educational handout, grains exhibit and presentation suggestions. **Result:** Fifteen leaders were trained. Five of the seven clubs utilized the program reaching 90 EHC members. **Conclusion:** An informal survey of trained leaders felt confident making the presentation to their EHC. They further indicated that members present had each used at least one new whole grain in their family meals. The information can be easily adapted for other groups, television programs and newspaper articles.

Networking Utilized For Teaching Successful Intensive Extension Educational Programs  
A. W. PARRAMORE, Leon County

Our rapid paced society makes it increasingly difficult for conducting intensive educational Extension programs. **Objectives:** To utilize agencies and organizations as a marketing tool for Extension Programming. **Methodology:** In 1989-90 a series of 7, 2 hour classes was conducted by coordinating with 7 organizations/agencies. An additional 7 organizations were utilized for facilitating nutrition/health education in Leon County. **Results:** Due to worksite related locations and times approximately 1500 people attended intensive training. Networking organizations also assisted by providing advertising, audio visual equipment and room set-up. Linkages have been formed for future programs.

Snack Smart  
A. W. PARRAMORE and J. SHUFORD-LAW, Leon County

**Objective:** For students K - 8th grade to learn about nutritious snacking and its role in eating habits and health. **Methodology:** A unit of six lessons which emphasize the dietary guidelines, Food Guide Pyramid and label reading was developed, pretested, revised and is being taught in the Leon County Florida Schools. The lessons use the energy nutrients—carbohydrates, proteins and fats to focus on the theme of snacks. The unit includes Teacher Manual (32 pg), Student Handout (32 pg), Recipe Leaflet (16 pg), Parents’ Letter, Certificate and 6 educational displays. The lessons are suitable for use in recreation centers, camps/clubs/groups and after school programs. **Results:** In the six months since introduction to the schools, 63 teachers have used the materials for 1394 students. **Conclusion:** Six 4-H EFNEP Day Camp sites participated in the pretesting with 104 limited income youth. Of the 30 matched pairs of written pre/post tests, 50% of the youth improved their nutrition knowledge. On activity sheets and educational games, the students were able to identify the food groups for snack foods. Also, there was evidence of changes in food behavior. Pre/post test results for the 1993 classrooms are not complete. Preliminary data indicate that the improvements in nutrition knowledge will be even greater than the 50% reported in the original test groups. The teachers reported having fun teaching Snack Smart. They reported students were enthusiastic about learning contemporary nutrition concepts.

Positioning the Cooperative Extension Service for the Year 2000  
S. POIRIER, Broward County

Today, no public or private organization can afford the status quo. Those that survive will thoughtfully embrace change so that they can manage it to their competitive advantage. **Objective** of this research paper was to examine how change would impact the future staff development needs of the employees of the Cooperative Extension Service.
Methods included a literature review of a variety of professional journals in order to develop a futuristic framework for staff development. Results from the literature review resulted in a formalized paper that was presented in a graduate class at Florida International University where the author is currently enrolled as a doctoral student. Conclusion: Based on the review of the literature, the author concluded that the future of the staff development training needs for the Cooperative Extension Service should be focused on enhancing skills for the long term and others toward solving problems in the short term. The agent must learn ways to act like a self-employed person, like a vendor. The focus will be on: 1) learning to see your organization as a market; 2) learning to spot customers' change-created needs; 3) learning to understand and capitalize on your own core competencies; 4) learning to differentiate and market your services as "products"; and 5) learning to run your career as a small-business venture.

Multicultural Homemakers Club in Indiantown (95)
C. PROCISE, Martin County

Design a 3-hour weekly on-going program for low income and migrants living at the local HUD Units where their Community Center is within walking distance. Objective: Teach resource management skills, nutritional choices, health/consumer information, and parenting skills. The target audience is Guatemalan, Black and Hispanic women with school going children. Educational and social children's grants totaling $9000 written by the Family and Consumer Science Agent and 4H. Agent, include provisions for sewing machines, equipment, food for demonstrations, educational toys, and a trip to Guatemala for two social workers. Subjects throughout the year include: healthy cooking, parent-child interaction, consumer buying, personal health issues, and available community services. Results: Thirty-two disadvantaged women have benefitted from this multicultural club including myself and the other support educators. Since July 1994, clients have learned sewing skills and recycled donated clothing, becoming more independent, resourceful and skilled. They can make shirts, shorts, pants, underwear, dresses, quilts, maternity/baby clothes, tote bags and curtains. This represents a savings of over $800 from store-bought items. A 75% change in personal hygiene of the participants has also been noted. The staff can now interface with these diverse people more effectively. Conclusion: This program has been successful bringing multicultural adults and children working, playing and learning together. Teamwork with these agencies has made this a well coordinated yearly educational effort: Extension FCE, HRS, Florida First Start, and Migrant Education.

Intergenerational Clothing Construction (88)
M. B. R. SALISBURY, Osceola County

Clothing construction programs, both in the schools and in 4-H enrollment in Osceola County were on the decline. Objective: To involve more youths in the 4-H Clothing Construction project. To build confidence in Extension Homemakers as clothing construction volunteers. Methodology: Accomplished sewers were recruited for a short-term project to work one-on-one with youths interested in learning to sew. Each youth received immediate help with this individual program. Result: Thirteen youths completed the program making at least one garment. Five youths went on to participate in other fashion reviews, and a new 4-H club was formed. Conclusion: Older adults have a great deal to share with youth -- sometimes they need to be encouraged to do so. This short-term project ideas should be considered by other Extension Home Economists.

Killer Cookout ... Not! (95)
M. B. SALISBURY, Osceola County, M. TAMPLIN, Home Economics

Four school sites were selected to test pilot an interactive computer program developed to teach the concepts of safe food handling. Objective - Goal of this pilot project was to test the feasibility of teaching safe food handling procedures to youths through computer games. Methods: Under the direction of Dr. Mark Tamplin the program was developed through a grant from CSREES-USDA. Sites were selected to test the program. The project team met with school administrators to obtain permission for the program and to select test sites. The county computer technician targeted the computer program for compatible computers at the test sites. Teachers received in service training. The program was pilot tested with youths aged 818 at after-school care programs, food labs and life management classes in middle and high school. Teachers observed and interviewed students. Results - The program was found to be appropriate for all age levels. One comment that surfaced repeatedly was that the youth would indicate parental mistakes in handling foods to their parents. All teachers are looking forward to using this program in their classrooms in the future. Additional results are still being compiled at this time but will be ready for the conference. Conclusion: Food safety can be successfully taught though the use of interactive computer games.

S.H.I.P. Home Buyers Training in Alachua County (94)
A. SHIVELY, Alachua County

Fifteen sessions of S.H.I.P. Home Buyer Training have been conducted under the coordination of the Extension Home Economist; 275 graduates thus far. Objective of the course is to assure that lower income first time home buyers will acquire the skills necessary to successfully purchase and maintain a home. Methods involve use of a specifically developed curriculum that covers such topics as Mortgage Payments, Negotiating For A Home, Closing Day, and Credit and Budget. Classes are held monthly with 25 participants who are prequalified by city and county officials. As coordinator the Extension Home Economist is responsible for developing curriculum, training instructors, and preparing registration and evaluation materials. Instructors for the course come from the strong Partnership that has been developed to implement S.H.I.P. in this community. Results: Of those 275 graduates 50 have purchased their first homes within the past eight months. Fifteen of these homeowners have become the founding members of the S.H.I.P. Homeowners Club which has been developed as a continuing
A partnership has been developed to increase interagency cooperation related to life skills education to reach an increased number of HRS Family Transition Program customers. Objective of CES/HRS Initiative is to, pilot and evaluate a collaborative program to assist families enrolled in the FTP. This educational intervention is designed to help customers adopt appropriate behaviors in family and home management. Methods will include use of the EFNEP model of a Home Economics Agent supervising a paraprofessional and coordinating project evaluation. A paraprofessional will be hired to be responsible for enrollment, teaching, and collecting evaluation data. They will be based at the FTP office to facilitate interaction with clients. Results: A memorandum of understanding established between CES and HRS that allows CES to offer educational opportunities to FTP customers. A paraprofessional hired to work exclusively with enrolled customers with joint support from both CES and HRS.

Conclusion: The accomplishments thus far in the CES/FTP Initiative are remarkable in light of previous unsuccessful efforts to partner with HRS. With educational efforts getting under way soon, HRS will be better able to see the valuable contributions CES makes in the lives of its customers. The impact Alachua County CES has with FTP could extend throughout Extension with replication at other HRS offices.

4-H/4-H EFNEP and Recreation Working Hand in Hand (93)
E. C. SHOOK and J. SHUFORD-LAW, Leon County

Objective: To improve Tallahassee Recreation Department (TRD) at risk youth's knowledge, skills and behavior in traditional 4-H and 4-H EFNEP subjects and to assist these youth in developing positive social, academic, confidence and life skills. Methodology: Leon County 4-H/4-H EFNEP and TRD worked cooperatively to provide educational opportunities and special learning activities to eligible and interested TRD youth. (The organizations compliment each other.) 4-H/4-H EFNEP provides training, teaching materials and support--technical, logistical and moral. TRD has the youngsters, sites and volunteer leaders. TRD volunteers lead and support 4-H/4-H EFNEP Clubs. Results: Cooperative efforts have resulted in 4-5 ongoing 4-H/4-H EFNEP Clubs (about 100 youth) at TRD Centers. TRD youngsters have completed a variety of EFNEP and traditional 4-H project books. These youngsters have participated in 4-H county, district and state activities and have won awards at all levels. Approximately 3600 youth participate in 4-H/4-H EFNEP educational activities in TRD's summer playground program and summer day camps. Conclusion: Evaluation data indicate the youth have gained knowledge and skills about food and nutrition, the environment, sewing, camping, art, animal sciences and written, visual and oral communication skills.

EFNEP & WIC Cooperate for Synergistic Nutrition Education Program (87)
J. SHUFORD-LAW, Leon County

Leon County's 1,500 WIC clients reported consuming inadequate servings of food and difficulty in stretching their resources. Objective: To improve the food and nutrition knowledge, skills and behavior of WIC clients. Methodology: The state and local EFNEP and WIC programs agreed to cooperate in an effort to provide monthly nutrition education sessions for WIC clients. Surveys were used to determine client needs and delivery methods. As a result, a series of 7 lessons, 215 posters, scripts, folders, handouts and certificates were developed. EFNEP and WIC staffs were intensely trained. Paraprofessionals presented 66 monthly group meetings to about 1,500 WIC clients. Results: Pre/post tests indicated gains (from 1% to 50%) in clients' knowledge and indicated they are consuming more nutritious foods using available resources. Conclusion: The EFNEP/WIC clients are learning food and nutrition concepts and are putting these concepts into practice through wiser purchasing and better eating.

Managing Meals For 1 or 2 (88)
J. SHUFORD-LAW, Leon County

People living alone or in pairs have more difficulty preparing and eating nutritious meals. Objective: For participants to develop planning and preparation techniques that lead to the consumption of nutritious meals. Methodology: Developed leader training its for Extension Homemaker Clubs (EHC). Leader kits included teaching plans, background information, handouts with suggestions for incorporating foods from the 4 food groups into daily meals, small quantity recipes, and posters. EHC leaders were trained and the lesson presented to club members. A coordinating visual display was also developed and rotated among senior citizen meal sites. Result: The presentations in 2 different formats reached a larger, more varied audience. Eight leaders were trained and 60 EHC members participated in club lessons. Approximately 150 senior citizens viewed this display and 200 took handouts. Conclusion: Participants gained nutrition knowledge and acquired new food by planning and preparation methods. They were also "inspired to experiment and use additional ideas in an effort to eat more wisely for good health."

EFNEP + Interns = Extension Marketing, Career Development and Enhanced Community Nutrition Education (95)
J. SHUFORD-LAW, Leon County

Objectives: 1. To network with FSU's College of Human Sciences (CHS) to market Extension and EFNEP. 2. To increase interns' knowledge of community nutrition education efforts and their potential roles. 3. To enhance Leon County adult and 4H EFNEP. Methods: To meet a portion of the community nutrition education component of the American Dietetics Association's Advanced Pre-Professional Practice Program (AP4) at FSU, Masters' level graduate students intern with EFNEP for 2 weeks each year. The students are oriented to Extension and EFNEP.
Objectives: To improve self-esteem of participants, to increase leadership skills and to provide opportunities for personal growth. Method: The 4-H I Can ... We Can challenge/adventure format was adapted to a two day retreat for members of the Association for Family and Community Education (FCE). Activities were sequenced to begin with "trust" activities, then proceed to "challenge" activities and culminate with "adventure" activities. A sequence of trust activities help participants to trust themselves and the abilities of others in the group. Participants identify strengths and weaknesses of group members and begin to compensate. Trust activities also build group cohesiveness. Once a group has mastered trust, they progress to challenge (problem solving) activities. These activities provide opportunities for the group to work together. After an activity, the group participated in "debriefing" where they applied what they learned to real life -- about self, about people, about leadership. Adventure was introduced by teaching orienteering and having the participants canoe, some overcoming fears of boats, water, and physical limitations. Results: Participants report significant gains in self-esteem. Participants report that they are more comfortable in leadership roles and are more willing to accept leadership positions.

Teaching Leadership Through Challenge/Adventure to Adult Clientele (93)
M. SIMMONS and A. FULLER, Levy County, M. HALUSKY, Duval County and A. MCMULLEN, Taylor County

Objectives: To improve self-esteem of participants, to increase leadership skills and to provide opportunities for personal growth. Method: The 4-H I Can ... We Can challenge/adventure format was adapted to a two day retreat for members of the Association for Family and Community Education (FCE). Activities were sequenced to begin with "trust" activities, then proceed to "challenge" activities and culminate with "adventure" activities. A sequence of trust activities help participants to trust themselves and the abilities of others in the group. Participants identify strengths and weaknesses of group members and begin to compensate. Trust activities also build group cohesiveness. Once a group has mastered trust, they progress to challenge (problem solving) activities. These activities provide opportunities for the group to work together. After an activity, the group participated in "debriefing" where they applied what they learned to real life -- about self, about people, about leadership. Adventure was introduced by teaching orienteering and having the participants canoe, some overcoming fears of boats, water, and physical limitations. Results: Participants report significant gains in self-esteem. Participants report that they are more comfortable in leadership roles and are more willing to accept leadership positions.

Economic Development: How to Start A Small Business (95)
G. STEPHENS, Orange County

Sixty-five aspiring business owners received training on how to start a small business. Objective: The purpose of the program was to help participants to understand the basic fundamentals of starting a business and to learn how to develop business plans and analyze business potential. Methods included establishing cooperative partnerships with other local agencies to develop a five-week short course to respond to the demand of residents seeking information on how to start a business. Evening classes were held two hours a week over a five-week period. In addition to the seminars, participants were provided an opportunity to receive one-on-one consultations upon request. Results: The program assessment revealed the following notable changes were achieved: 92% indicated that the shortcourse helped them to understand how to develop a business plan and analyze business potential; 97% received the information needed to initiate planning for a new business; and 80% were assisted in setting goals and acquired skills necessary to accomplish them. Conclusion: Small businesses lead the way in creating new markets and jobs that fuel the economic growth and prosperity. Extension has a role to play in building alliances and initiating agency collaboration, both in the public and private sector. Collaboration between agencies offers a way to discover and implement unique creative ventures, ultimately resulting in the development and delivery of more comprehensive programs to meet the information needs of existing small business owners and potential entrepreneurs.

1990 Recycling Survey (90)
P. M. STEWART, Broward County

In response to a growing environmental consciousness on the part of Broward County residents, a survey was conducted to measure respondent's knowledge and attitude toward recycling. In the Spring of 1990, nearly 500 respondents indicated that they would be willing to make a special effort to purchase grocery store products made of recycled or recyclable materials (90 percent). The indication is that the general population is ready to do what it can for the environment and that they feel strongly that, if given the correct information, they could make a positive difference in our environment (70 percent). This information was analyzed statistically using simple frequency and percent count of responses, plus a Chi-square test for associations between the responses. Note: Recycling is an important part of the recycling loop. It involves the consumer in active choice-making where the consumer understands the environmental costs of what she/he buys, insists on durable products in place of disposable products, decreases the amount of household hazardous wastes used, and makes a lifestyle change for the future and for the environment. The survey was conducted cooperatively with the Broward County Office of Environmental Services, Solid Waste Division.

Using a Survey as a Marketing Tool (91)
P. M. STEWART, Broward County

How the agent approaches complicated national issues such as solid waste management can determine the success of local programmatic efforts targeted to address this subject. One suggestion is to use a marketing tool such as a simple survey. Objectives: Through the use of an existing supermarket survey, or a self-designed survey, the agents will be better prepared to enter into and develop an issue-based program in solid waste management in their counties. Methodology: The 1991 Precycling Survey was developed from an existing survey (1990 Precycling Survey). The earlier survey was used as a model for improving the 1991 Precycling Survey. These surveys were used to develop, implement and market solid waste programs in Broward County, FL in 1990 and 1991. Results: Surveys, if reliable and valid, can be used as a powerful tool in marketing selected solid waste programs. Survey results offer the agent a bank of current, informative, and accurate information with which to...
approach county administrators, local businesses, county solid waste authorities, and educators. Because of the inherent authority of the survey, those people with whom the agent might want to collaborate and/or develop cooperative programs are receptive to programmatic and grant proposals. The survey is seen as an invaluable aid to initiating issue-based programs, and to help insure that professionals have the confidence and factual back-up they need to enter a new arena of extension.

**Water Education in Ft. Lauderdale** (93)

P. STEWART, Broward County

The objective of the study is to increase wise water-use behavior among selected residents in Broward County. A joint partnership with the county water supply division resulted in a 3-part water education series and statistical analysis. Methods included selection of two WSD employees who participated in program presentations with the agent (called the Public Information [PI] team). Implementation included presentations in selected condominiums; inclusion of an elementary school who actively promoted "Water Awareness Day"; creation of a video on lead in drinking water; and a "cut-away" house focusing on water conservation. Results have indicated that residents are very concerned with the quality and cost of their water (90%); they feel less compelled to conserve water unless there is a drought (60%). Conclusions: With education and use of retrofit devices, water is conserved and quality is increased with knowledge of lead avoidance.

**Conflict Resolution and Multicultural Diversity in Broward County** (94)

P. STEWART, Broward County

Preschool teachers receive training in conflict resolution addressing ethnic diversity. The objective is to increase the teachers' skills in handling conflict between preschool students, teachers, and parents from ethnically-diverse cultures. Methods: Three models of stress and conflict resolution are used as a basis for implementing stress management and conflict resolution skills. Skills include refraining, learning effective communication skills, learning to identify stressors, community and personal resources, assertion, communication techniques, and relaxation skills. Educational methods include role play, exercises, disclosure, use of videos and team building exercises. Results: Child care providers have indicated that they have made significant progress in addressing multicultural conflicts. Participants have graduated from workshops with 95% success in learning conflict resolution and stress reduction techniques. Conclusion: The county has seen tremendous change and growth in many cultures within the past five years. There is currently an influx of Haitians and other people from the Caribbean. These cultures often clash with other groups, particularly Black Americans, causing the need for conflict resolution. In addition, education and insight in multicultural diversity helps participants accept the diversity of other cultures and see this diversity as culturally enhancing. A systemic approach gives meaning and coherence to this critical issue.

**Educational Programs To Reduce Foodborne Illnesses Among High Risk Groups** (92)

M. L. TAMPLIN, Home Economics

Severe and life-threatening cases of foodborne illness occur for persons with immuno-compromising disease, chronic illness, the elderly, and fetuses and neonates of pregnant women. Without adequate host protection, pathogens invade tissues and cause life threatening injury. The population of high risk groups continues to increase as a result of AIDS, new medical treatments which support chronically ill patients, an increasingly elderly population, growing infant and child daycare facilities, plus new pathogens and scenarios for food contamination. Food safety educational programs are an essential procedure to reduce foodborne health risks. An extension project was developed to test the effectiveness of educational programs for high risk groups, their food handlers, and those who intervene in their care. Utilizing an interdisciplinary advisory committee and evaluation tools, educational programs were tested with selected Florida audiences. Results showed that informational tools designed for specific audiences markedly increased knowledge of safe food handling practices.

**Wise-Watching Wendy Helps Children Develop Good Television Habits** (89)

D. M. TAYLOR, Lake County

TV habits developed early in life can affect: health; values; fear; aggression (in 2-10%); and academics. Children watch TV over 25 hours/week, but experts recommend 10-20 hours. Objectives: Reduce time young children watch TV; encourage parents to monitor, view & discuss TV shows; and teach adults to influence quality of children's programs. Methods used: "Wise-Watching Wendy" conducted a 4-lesson series for children (ages 4-8) in child care centers and schools using games, songs, puzzles, etc. Wendy introduced cartoon friends who use TV wisely. EH members prepared materials and lessons. Parents received short letters and cartoonstyle booklet. A brief program for adults further emphasized parents' roles. Results: In the past year the agent worked with 26 volunteers to prepare materials and conduct 129 lessons for 40 groups, reaching 1201 homes. IFAS-PEOD unit developed an evaluation instrument (but after programs were completed). It will measure practice change as volunteers can teach children and parents to monitor the quality and quantity of TV.

**World's Greatest Baby Showers Promote Healthy Babies** (91)

D. TAYLOR and D. BOULWARE, Lake County

Objectives: Promote prenatal medical care; good nutrition; tobacco, alcohol, drug avoidance; breastfeeding; and self esteem via low-cost, attractive maternity wear. Method: "World's Greatest Baby Showers" were held at 4 sites for all Lake & Sumter Co. expectant parents. Steering committee included Extension Service, HRS agencies, hospitals and Kiwanis Clubs. Door prizes and a gift for each mom promoted attendance. A costumed stork greeted parents, who viewed 10 agency exhibits. A parental substance abuse speech was balanced by a gala maternity fashion show, an audience nutrition game, and a break with healthy snack foods. Results: Attendance
was 742, with 330 expectant moms. March of Dimes start-up grant ($1,250) generated $7932 in other funds and in-kind gifts. Sponsors included 77 businesses, 46 organizations, and 246 individuals. Plans are to repeat in '92. **Conclusions:** This was a new way for middle-aged and older adults to act locally in support of young parents, over half of whom were low income or of minority race. Pre- and post-tests showed these improvements: 7% more drinking milk; 11% with increased wardrobe satisfaction; 20% more knowing how to select clothes for breastfeeding.

**Natural Resources Education for Drop-Out Prevention Students** (93)

**Objective:** To enhance the self-esteem, intellectual curiosity, and communication skills of high school dropout prevention students by using hands-on soil and water activities as a significant part of their curriculum. **Teaching Activities:** From Sept. '92 through April '93 forty (40) youth ages 15-20 experienced learning activities designed to educate them about water, soil and other related natural resource issues through a variety of speakers, field trips and hands-on learning experiences. In May '93 for four days and three nights at 4-H Camp Cherry Lake these students rounded off their studies with an intensive week, immersed in the environment that they had been studying. **Results:** Students began a landscape project planting low maintenance plants, conservation, and experienced increased pride, unity, trust and security, as measured by their own recorded statements in their “Environmental Newsletter”. Seven (7) students in Madison COMPACT completed requirements for and received a regular high school diploma. **Significance:** Out-of-the-classroom experiential learning activities in natural resources can provide significant motivation to learning and incentive to team- and trust-building to high school dropout prevention students.

"**Everyday People:**" AIDS Education (93)

**Objective:** To provide an experiential learning activity designed to educate team members about HIV/AIDS in order to change attitudes and behavior. **Methods:** Following approval of 4-H Advisory Committee and district school principals and superintendent, Madison 4-H County Council chose AIDS education as their 1992-93 Community Pride Project. Seventeen 12-16 year olds brought in written parental permission forms 1) to educate themselves about HIV/AIDS: a) how could I get AIDS? b) how can I protect myself from getting AIDS? c) how can I relate to someone who gets AIDS? 2) to educate others (predominantly their peers) about a, b, and c above using skits, speeches and rap. **Results:** Fourteen of the 17 4-H Drama Team members remained active; learning, practicing and performing up to 5 hours weekly for 8 months (Nov.-June). They performed before 24 audiences (2,105 people) at local, county and district levels. They reported a significant increase in their knowledge about AIDS, how to protect themselves from AIDS, how to communicate about AIDS with friends, family and community and how to relate to a person who has AIDS. **Conclusion:** The community is very proud of the Drama Team's performance of "Everyday People". Team members are proud of themselves. Madison County 4-H has increased in visibility, reputation and relevance.

**Human Resource Development Majors--Ready for Jobs in Florida Extension?** (96)

**Objective:** To be competitive for county Extension Family and Consumer Sciences and 4H positions. **Objectives:** The major provides students with foundation knowledge in the following key areas: individual and family development in community and societal context; contemporary youth, family, and community problems; and organizational policies and programs to alleviate these concerns. **Course work** emphasizes the application of knowledge and includes interpersonal communication skills, program planning and evaluation, management and administration, social policy, research methods, and community-based education. **Results:** Classes began in the fall of 1994 with 32 majors. In the fall of 1996 more than 270 declared majors. In the spring and summer of 1996, the first seven graduates entered the labor force. **Conclusions:** We will describe the HRD curriculum, course content, and application in the Extension setting. We will seek input from county faculty regarding additional course work and internship opportunities students need to successfully compete for county Family and Consumer Sciences and 4H faculty positions.

**Improvement of Habitat for Humanity Nurturing Education** (96)

**Objective:** To
create a consistent format for nurturing education to insure Habitat families are adequately prepared for home ownership, to assist the local Habitat for Humanity in adopting a structured format, to provide educational programs/materials and to train volunteers to use Extension materials in nurturing programs. Methods: Habitat discussed challenges with the agent. The new chapter, having built two houses, had families making late payments and not properly maintaining the homes. The agent reviewed their educational procedures and developed proposals for a consistent educational format for use with member families. Planning meetings, and counseling sessions were held. Results: A mandatory seven-session format was adopted utilizing Extension's Home Book and Budget Box. A format was developed for identifying additional, individualized educational needs, and for documenting progress. All nurturers will be trained to use Extension materials with assigned families. Each family must create a spending plan. The committee reports they are better positioned to identify financial challenges which signal a family is not prepared for home ownership. This information will enable Nurturers to work closely with the Selection Committee to prevent defaults. Conclusion: Through the efforts and materials of Extension, the organizational and educational structure of Habitat has been organized and strengthened which improves their ability to help limited resource families in Flagler County.

**Improving Parenting Practices of Families in Putnam County** (94)

S. TREEN, Putnam County

The target audience is parents enrolled in the Family Builders Program through Children's Home Society and parents referred by HRS. Objectives: Parents will: (1) substitute nurturing parent-child interactions for dysfunctional ones; (2) understand appropriate discipline, punishment and reward techniques; and (3) increase knowledge of child development stages. Methods: Collaborative efforts were established with Children's Home Society to teach a 12-week series of parenting classes. The curriculum used for the classes is the Nurturing Program. Each parent received a parenting handbook. Lessons were taught from the handbook and supplemented with videos, role playing and group discussion. Three 12-week series of classes have been taught by the agent. The weekly 2-hour classes have been attended by 59 parents. Results: Twenty-seven (27) of the parents successfully completed the series of classes. Successful completion was determined by number of classes attended, participation in group discussions, completion of assignments, scores on pre and post tests, and attitude towards learning. Pre and post tests were used to measure an increase in parenting knowledge. Pre-test scores averaged 70. Post-test scores averaged 83, resulting in a 13 point increase in scores. Conclusions: As a result of completing the parenting classes and fulfilling their performance agreement, five (5) parents were reunified with eleven (11) children, twelve (12) parents with fifteen (15) children removed prior to class have reunification plans pending and ten (10) parents did not have their children removed from the home.

**Using National Family Week Celebration to Educate Families** (87)

M. M. WASHINGTON, Leon County

Building family strengths is a high priority for the 1980's and will continue to be a priority as long as the following problems exist: 1) rising divorce rates, 2) one parent families, 3) the increasing labor force participation of mothers, 4) latch key children, and 5) non-marital teenage fertility. Objective: A program was developed to make families aware of the characteristics of strong families and to become familiar with activities designed to make family life a positive life. Methodology: A program planned for family members with emphasis on the Characteristics of Strong Families was presented to 6 groups during Family Week by the Home Economics Agent. Participants did an analysis based on information received from the class to determine if they were in the category of strong families. Their findings were positive throughout the analysis. Lesson materials were developed to help improve family strengths. Results: Two months after the program, a survey indicated 50% of the 240 individuals had improved their family strengths enormously. Conclusion: Families in the program developed their strengths immensely.

**Avoid Food and Drug Interaction** (90)

H. WEBB, Hillsborough County

U.S. consumers spend $17 billion annually on prescription and over the counter drugs. Failure to take prescribed medicines safely and effectively kills an estimated 125,000 Americans yearly. This Is two and one half times more than those killed in motor accidents. Fifty percent of all medicines are taken incorrectly. Objective: Provide information about food, nutrition and drug interaction and importance to health. Many consumers aware that interactions can occur through heavy use or misuse of both over-the-counter and prescription medications. Methodology: A pre and post test Is administered to acquaint people with potential problems associated with food/drug combinations. Results: Programs have been provided to all Extension Homemaker clubs and other organizations. Post tests and verbal comments indicated 100% increased knowledge. Conclusion: People need information about giving, taking or monitoring the use of medicines. Many adults have learned poor medicine use habits from their parents. Adults need better knowledge, attitude and skills before they can set a good example for their children and elderly parents.

**Cultural Fair** (93)

H. WEBB, Hillsborough County

Objective: to explore and appreciate ethnic influences. Methodology: Nutrition training in 1992 included cultural foods and customs of Mexico, Africa and Puerto Rico. Schools regularly recognize ethnic groups. Head Start weekly menus reflect foods of many cultures. A committee of teachers, parents, advisers and consultants was established to coordinate the activities into a community Cultural Fair. Six ethnic groups were selected for special focus: African American, Latin American, Spain, Italy, Greece and American Indians. Sub-committees presented information on: costumes, food, entertainment, customs, decorations and exhibit activities. Each Head Start class was provided display material for focus information. A school specialist suggested activities to be prepared. Chosen were: Italian Mosaics; a simple African mask from foil; American Indian totem pole and sand painting.
A 5% response to the readership survey in the summer 1988 issue of The Reporter forced me to take a serious look at the national publication of Extension Home Economists. One year of being the editor of this publication has provided insight into the problems of getting articles published. Objectives: To provide editorial guidelines for submission of articles to be published and knowledge of the publishing process. Methodology: The editor provided the opportunity to learn the steps in submitting an article, routes for assuring the article will be printed, contact with the decision makers and how important the style of the article can be. This was accomplished by meeting with the publisher, obtaining cooperation of the advisory council liaison member, approval of the national president and completing all required editorial tasks. Results: Two issues of The Reporter and one issue of Communique have been distributed to the national membership. Topics of articles are timely and of general interest to the membership. Conclusion: More articles are needed for future publications and it isn't that difficult to get published. Non-referred publications lists are available. Recognition for publishing is worth the effort.

Project PUP: The Benefits to Nursing Home Residents (87)
J. YATES, Pinellas County
Research has shown that pet-facilitated therapy can have positive health benefits for populations such as those which reside in nursing homes. Objective: Project PUP (Pets Uplifting People) is a volunteer organization which brings pets to 75 local nursing homes to provide pet-facilitated therapy to approximately 7500 residents. Methodology: Volunteers are recruited, screened, trained and scheduled for regular visits in local nursing homes around the country. After the program had been in operation for one year, both the volunteers and the nursing home directors were surveyed to determine the perceived benefits of the program to residents of the participating nursing homes. Results: Respondents indicated 13 areas in which Project PUP had been beneficial. As a result of the Project PUP, residents had increased exercise, had been provided a source of affection, had a method of facilitating communication, and had been given something they could look forward to, to mention a few of the areas. Conclusion: Project PUP has helped to improve the quality of life for residents of nursing homes in Pinellas County, Florida.

A Comparison of the Cooperative Extension Service's Educational Television Programs and Newsletters: Learners' Perceptions and Agency's Production Costs (95)
As resources become scarcer, it was necessary to examine the effectiveness of Pinellas County Cooperative Extension Service's (PCCES) distance learning methods of television and newsletters. Research is lacking on PCCES's adult learners relative to preferred educational delivery methods and the cost effectiveness of those delivery methods. **Objective:** This study examined the relationships between 1) perceived level of learning attained and delivery methods of television and newsletters, and 2) differences in the highest level of education attained by PCCES's adult learners considered by preference for delivery method, age, race/ethnicity, gender, and employment. The target population was adult clientele of PCCES who had requested information delivered by newsletter or by television. **Methods:** Data were collected from 446 respondents through telephone questionnaires. **Results** showed a significant difference in the perceived level of learning attained by the two treatment groups. Respondents who viewed educational television programs perceived themselves as having gained significantly more information than those who read newsletters. **Conclusion:** Results of this study indicate a significant difference in respondents' highest level of education attained when considered by variables of employment status and gender. There was no significant difference in respondents' highest level of education attained when considered by their preference for delivery method or age. Costs associated with television productions were substantially higher than those associated with newsletters, but can be ameliorated by reuse through multiple airings, expanded uses in libraries, and group trainings.