

DISTRICT OF COLUMBIA

COOPERATIVE EXTENSION SERVICE

AGRICULTURAL EXPERIMENT STATION

FY 2004

JOINT ANNUAL REPORT

OF

ACCOMPLISHMENTS AND RESULTS



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UNIVERSITY OF THE DISTRICT OF COLUMBIA

District of Columbia
Cooperative Extension Service and Agricultural Experiment Station
FY 2004 JOINT ANNUAL REPORT OF ACCOMPLISHMENT AND RESULTS

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**District of Columbia
Cooperative Extension Service and Agricultural Experiment Station**

FY 2004 JOINT ANNUAL REPORT OF ACCOMPLISHMENT AND RESULTS

INTRODUCTION

The University of the District of Columbia's Agricultural Experiment Station (AES) addresses problems of overall national priorities which include issues unique to urban environments. The DC Agricultural Experiment Station has the responsibility to address issues consistent with the needs of the District of Columbia. Through research, investigative activities, teaching, education and engagement, our urban agricultural actions seek to assist residents in producing sustainable, healthy environs and communities, thus, enhancing their quality of life. AES's research investigative initiatives and experiments have been focused on, but not limited to, community and environmental concerns, social and economic issues, human health and nutrition, urban areas drug "hot spots", stress intervention techniques, youth violence intervention strategies, math, environmental education and reading/literacy programs, in addition to urban gardening, crop production technology, water quality, soil and resource conservation, teacher training in environmental studies and creating a healthy society and environment. In trying to give the land grant community the best service possible, the Agricultural Experiment Station makes every effort to reach out and form alliances with youth and urban community groups, other experiment stations and extension services, local and federal agencies, the District of Columbia Public School System, university faculty and business groups. This has resulted in an increase in communication between AES management, researchers, and the UDC administrators/community to develop additional partnerships with for collaborative research and investigative initiatives; to identify key urban issues not currently being investigated that might be considered for new projects; and continuing to develop the Muirkirk Research and Educational Farm site. Thus, the scope of the DC Agricultural Experiment Station is varied and broad.

The Cooperative Extension Service continues to provide innovative educational services to our various ethnic and cultural customers for the enhancement of the quality of life for all. The CES Community Resource and Economic Development unit has instituted valuable economic and resource opportunities through our business cooperative and small business education ventures for our DC metropolitan customers. Interdisciplinary collaborations between the CES Units of Environment & Natural Resources, Family & Consumer Sciences and Housing and Environment have resulted in an environmental hazards and asthma prevention project to assist with this resulting health & environment issue facing the District and many of our at-risk populations. All CES units have forged strong partnerships with private and public, local and regional agencies, organizations and businesses, enabling us to provide collaborative creative and pertinent educational opportunities for our customers. The Environment and Natural Resources unit provided special programming services for DC elementary teachers and school-aged youth under our Ag in the Classroom program coordinator via our partnership with Cornell University's Connecting Kids to the Food System Initiative. These program projects, "Kids Growing Food" and the "Wellness Learner," have enriched the knowledge and skills of all participants. The hands-on project of the most prestigious District Restaurant Chefs' "Days of Taste," was initiated in September, and is sponsored by the American Institute of Wine and Food, was a resounding success for all adults and youth involved. We have expanded all of our programs with the hiring of committed professionals and strong

resource assistance to support family and community development, consumer and financial knowledge and skills, nutrition and health, youth development, horticulture, and reading literacy.

A. FY 2004 ACCOMPLISHMENTS AND RESULTS

GOAL I: AN AGRICULTURAL SYSTEM THAT IS HIGHLY COMPETITIVE IN THE GLOBAL ECONOMY

Overview

DC Extension and the DC Research are unique in the land-grant system; they exist and operate in an urban area only. Agriculture in the District of Columbia is best characterized as addressing urban needs that are unique to an urban environment. DC Extension addresses some of the urban agriculture needs by providing Home Lawn and Gardening Services to the residents of the District. A high-demand Home Lawn and Gardening Assessment Program was expanded to increase service capacity, thus increasing the service impact on District residents.

Building on the findings of Urban Gardening researchers at the DC Research Station, hundreds of residents cultivating home and public gardens have impacted thousands with increased produce through sustainable agricultural methods. We have also expanded our Master Gardener and Junior Master Gardener program and participation for the enhancement of our urban agricultural services for our customers, and cultivated a corporate relationship with WAMATA to provide advanced landscape training to their current and future grounds keepers.

Smith-Lever Act Funds, Matching and Private Funds and other Federal Grant Funds were expended on this goal at the cost of \$71,608. A full-time equivalent of 1.0 personnel was utilized to support this goal.

Key Theme: Urban Gardening

a. Description: The Master Gardener Program and The Junior Master Gardener Program exposes adults and youth to principles of horticulture to increase awareness and educational opportunities through the study of agriculture. The Junior Master Gardener Program provided inner-city youth with hands-on horticultural skills training and environmental experiences that instilled a sense of empowerment and accomplishment. The overall objective for the Master Gardener Program is to train Washington, D.C. citizens to be resources in their communities for gardening expertise. UDC trained Master Gardeners in the community to increase the outreach of cooperative extension, provides a level of valuable horticultural education for individuals, and to provide a foundation for beautification of the District of Columbia.

In partnership with University of Maryland, Virginia Tech University and the Washington Metropolitan Transit Authority (WMATA), UDC Cooperative Extension Service coordinated and facilitated a three week Advanced Landscape Training for the WMATA employees. The curriculum included the following topics: pesticide training, basic plant taxonomy and root uptake, plant I.D., turf grass management, pruning, B&B and container installation methods, and tree and shrub fertilization and care of material for first year of planting.

b. Impact: Five hundred and ten Junior Master Gardeners had their own outdoor vegetable garden plots to plant, maintain, and harvest. The garden harvests were shared with family, as well

with the DC Central Kitchen, where the homeless shelters in the District of Columbia received their food. One new registered Junior Master Group was formed in partnership with The Washington Architectural Foundation and Leckie Elementary School in Southwest Washington, D.C. The school has a formal September 11 Memorial Garden for the teacher, students and parents that died in the American Airlines flight that crashed into the Pentagon. The Leckie Garden Club plants and maintains this memorial garden. Fifty-one Master Gardeners were trained at UDC. Master Gardeners provided 1,500 hours of horticultural expertise to the District of Columbia. Sixty landscape employees of the Washington Metropolitan Transit Authority (WMATA) were trained. The training is mandatory for employees who wish to be promoted. WMATA maintains 3,000 acres of land in the Washington Metropolitan Area. Master Gardeners completed a final exam and 50 hours of volunteer hours. Approximately five WMATA employees were promoted after the mandatory training. Because of the impact of this training the UDC CES Horticulturalist has been contracted on an annual basis by the WMATA to provide their employees with Advanced Landscape training.

c. **Funding:** Smith-Lever/State Matching Funds/Fee Based Training/Registration Fees

d. **Scope:** State Specific

Key Theme: Home Lawn and Gardening

a. **Description.** The lawns and gardens of District residents are exposed to a variety of environmental substances and conditions that have affected the residents' quality of life. This program provided technical assistance to homeowners and some renters, as well to neighborhood associations seeking advice on the beautification of the public spaces within their neighborhoods.

b. **Impact:** Direct technical assistance and instruction were provided through residential and commercial site assessment visits, soil testing, telephone consultations (710 phone calls) and other educational methods. Twelve (12) soil samples were tested for the District residents. Twenty-five (25) site assessments provided assistance to area public and private facilities to determine disease and/or the conditions of lawns, trees, plants and shrubs, yielding recommendations for treatment, pruning, removal, and transplanting, as well as suggestions for alternative landscape design plans to beautify and save the environmental welfare of the areas. It is estimated by the Director Toxic Substance Division DC Department of Health that this program impacted two hundred thousand residents and transients traveling on the streets within the treated sites. Qualitative assessment indicates that the impact of these improvements was evident through the personal and community pride reflected by residents, neighbors, and the community volunteers who undertook the work by contributing in excess of 1,500 hours.

c. **Funding:** Smith-Lever Funds/State Matching Funds

d. **Scope:** State Specific

GOAL II: A SAFE SECURE FOOD AND FEEDER SYSTEM

Overview:

The Howard University Community Association (HUCA) Project Connecting Howard and Neighborhoods for Growth and Empowerment (C.H.A.N.G.E.) **Volunteer Recruitment Project**, and the UDC Cooperative Extension Service, Center for Nutrition, Diet and Health has a partnership designed to recruit and train volunteers from local Universities to assist the Cooperative Extension Service, Center for Nutrition, Diet and Health to extend its research and education

programs within the community. The Extension trained volunteers use technology to deliver food safety and nutrition education to community residents. This was done by the use of CD-ROMs on food safety and nutrition to do review sessions with community residents. Template information on assessing the agency was placed on disk and used by the volunteer to collect on-site information from the agency; then the agency emailed the information back to the CNDH. The program provides for a lead volunteer who recruits a cadre of volunteers who provide assistance to the CNDH. The volunteers add value and increase the number of customers served by the Center. The service goal is in the areas of health. There's no limit on the number of volunteers nurtured through this process.

This **District of Columbia Food Handler Certification Program Model Project** is in its fourth year of operation. It is designed to conduct research and training to determine the appropriate educational level and methodologies needed to develop a food sanitation certification program. The program is designed to provide training for low literacy and hard-to-reach food handlers in the District of Columbia to gain national certification as food protection handlers/managers. This certification program allows the local Department of Health to comply with the 2001 Federal Food Code, which recommends standards for regulations of the District's food service operations. The project is also designed to develop a model program for the District of Columbia and national-wide replication. Improvement of food handler's behaviors and food handling practices that directly relate to food-borne illnesses will serve to deter the incidence of this critical health threat. It will also improve the confidence of stakeholders and consumers, and ensure the health of an international audience of customers coming and going in the Nation's Capital as well as residents in the metropolitan Washington area.

Smith-Lever Act Funds, Matching and Private Funds and other Federal Grant Funds were expended on this goal at the cost of \$47,145. A full-time equivalent of .75 personnel was utilized to support this goal.

Key Theme: Food Resource Management

- a. Description:** The Project C.H.A.N.G.E. volunteers are working with the DC Food Handler Certification Program Model project. The volunteers are recruited and managed by the Center. The volunteers help with gathering information from, and getting information to hard-to-reach small non-commercial service agencies, complete assessment data for future certification through the program, assist with community assessments, coding of data, and follow-up telephone calls to agencies. The primary focus for this reporting period was childcare agencies. The Center provided the students with an opportunity to volunteer.
- b. Impact:** The program has currently recruited 10 volunteers who are college students. Assessments have been completed on 194 small, non-commercial service agencies (child care centers). Impacts include assisting the Center to reach a larger number of community residents. The actual cost benefits of having the students will be evaluated at the end of the project.
- c. Funding:** USDA/CSREES Grant and Howard University Community Association Project C.H.A.N.G.E.
- d. Scope:** State Specific

Key Theme: Food Handling

a. Description: This **District of Columbia Food Handler Certification Model Program Combined Research and Education Project** is in its fourth year of operation. The project is designed to assist the local Department of Health to comply with the 2001 Federal Food Code, which recommends standards for regulations of the District's food service operations. The project assessed the food handler needs and developed a preparatory Extension education program to increase the incidence and success of low-literacy and hard-to-reach food handlers in passing the national food protection manager and limited food protection manager certification examination. This was achieved through the testing of four teaching methodologies (self study in groups, individualized CD-ROM, traditional classroom/lecture, and focus groups). Second-level food handlers participated in the study. The last component of the project, Focus Groups, will be conducted during this Fiscal Year. All study participants received all of the training needed to sit for the national examination. Continuing Education Units (CEU) are available to project participants.

b. Impact: Needs assessments have been completed on 210 agencies, and 312 food handlers have received the preparatory training from 194 community based organizations and agencies; 283 food handlers have taken the national certification examination. 223 second-level food-handlers passed on the first sitting of the national examination who had not previously received food sanitation certification training. The passing rate for the re-takers is pending completion of the project. Focus group scheduling is currently underway; however, complete impact data will be reported during fiscal year 2005.

Impact data on the results to date include the following: Responses to the question asking if food should be packaged in a private home showed 34.3% answered correctly on the pretest and 52.9% on the posttest. In addition, participant responses to reheating temperatures of poultry, stuffed pork, or beef showed 24% answered correctly on the posttest and 59.3% answered correctly on the posttest. Knowledge for hot holding temperature of food during service showed 33.3% answered showed that 27.9% answered correctly on the pretest and 57.1% answered correctly on the posttest.

c. Funding: United States Department of Agriculture CSREES grant project

d. Scope: State Specific

Goal III: A HEALTHY, WELL-NOURISHED POPULATION

Overview:

UDC Cooperative Extension Service's "Nutrition on Demand" Program is designed to provide 'need specific' nutrition programs to the community. The growing problem of Adult and Childhood obesity has given rise to a number of chronic diseases such as Diabetes, Hypertension, Cardiac disease etc. The growing cost of healthcare is a direct result of these chronic diseases, not to mention, the psychological impact on adults and children. Addressing the health concerns of the community using research-based information to help bridge the knowledge gap with practical solutions, is the goal of this program. This program aims to translate research outcomes to health outcomes. Unity Health Care Inc. continues to be a strong partner who has helped us reach the Hispanic, African-American and the East African communities.

The Center for Nutrition, Diet and Health (CNDH) is reporting on the following research and education programs under goal 3 as follows: Determinants of Childhood Obesity, Food Stamp Nutrition Education Program, District of Columbia Drinking Water Blind Tasting Testing Project, Cultural, Psychological, and Environmental Barriers to Maintaining a Healthy Diet in Inner City African Americans.

The Food Stamp Nutrition Education Program is designed to improve the health and well being of District residents. The Program collaborators include the DC Departments of Social Services, Income Maintenance Administration; D.C. Department of Health, Nutrition Programs Administration; The UDC Cooperative Extension Service, Center for Nutrition, Diet and Health; and the United States Department of Agriculture, Food and Consumer Services. The overall goal of the program is to provide nutrition education to food stamp recipients and food stamp eligible recipients in the District of Columbia. Evidence and science-based nutrition education to improve dietary behavior is expected to improve health and help reduce the tremendous cost of health care in the District of Columbia. The core elements of the Program are: Dietary Quality, Shopping Behavior/Food Resource Management, Food Security, and Food Safety. The Dietary Quality includes nutrition education in health and disease; Shopping Behavior/ Food Resource Management includes thrifty shopping, reading labels, nutritional value, menu planning, and basic cooking; Food Security includes access to an adequate supply of nutritious and safe foods; and Food Safety includes how food is handled, hand washing, refrigeration, storage temperatures, and cooking food properly.

Water is an important constituent of the body. The human body is approximately 60-70% water and 30% solids. Water is one of the six key nutrients. Water provides an aqueous medium for cellular metabolism, transports materials to and from cells, acts as a solvent, regulates body temperature, maintains vascular blood volume, aids in the digestion of food, maintains the chemical and physical constancy of intracellular and extra-cellular fluids, and aids in the excretion of waste from the body.

About two third of Americans are overweight or obese; 14% of all deaths from cancer in men and 20% of those in women are associated with/attribution to obesity (Calle et al., 2003). In addition, many studies have shown relationships between intakes of specific food constituents, such as visible fats from animal proteins and micronutrients found in fruits and vegetables, and cancer risk at specific sites (WCRF data). Therefore, diet change has the potential as a cancer prevention tool.

African Americans, especially African American men, have the highest overall cancer incidence and mortality rates than other ethnic minorities in the U.S. (ACS 2004 Facts and Figures). African American women have the highest colorectal cancer incidence and breast cancer mortality rates, and African American men have the highest incidence and mortality rates for colorectal and prostate cancers. Among the five most common cancers for African Americans, colorectal, prostate, and breast cancers have been linked to weight control and/or diet (Vainio et al., 2002; Putnam et al., 2000; Irani et al., 2003; Hsing et al, 2000). However, this population has shown to have poor dietary intakes and a high percentage of overweight/obesity. According to the National Cancer Institute, eight percent of cancers can be prevented and /or controlled.

Smith-Lever Act Funds, Matching and Private Funds, Multistate Research Funds and other Federal Grant Funds were expended on this goal at the cost of \$278,216. A full-time equivalent of 4.0 personnel was utilized to support this goal.

Key Theme: Human Health

a. Description. DC is home to a large variety of ethnic people, who are faced with the same health challenges as Americans, but with added issues such as language, transportation and affordable housing barriers. This program, in partnership with Unity Health Care Inc. and the Diabetes Wellness Foundation has set up diabetes education programs at five community clinics.

The five sites are Upper Cardoza Clinic, Hunt Place Clinic, Woodridge Clinic, Good Hope Clinic and the Center for Creative Non-Violence. Nutrition education has been provided to seniors via field trips, seminars and cooking demonstrations. DC Public Schools and charter schools have requested and received nutrition education services. Partnerships have been formed with and services provided to agencies such as the Bureau of Labor Statistics, DC Asthma Coalition, DC Department of Health, CSOSA, Project WISH, DC Cancer Coalition, DC Public Schools, UDC Institute of Gerontology.

Nutrition activities such as participating in Health Fairs, conducting various cooking demonstrations in the areas of ethnic foods, high fiber foods, low fat foods, etc.; conducting training on the reading of food labels, Food Pyramid, consuming the rainbow, diabetes and nutrition, etc., which take place at various sites such as the DC Public Schools, Senior Citizen Congregation sites, DC Charter Schools, Churches, DC Agencies, Unity Health Care Clinics, etc. Youth and young adults have been served via the 4-H and LifeSmarts summer camp projects.

Methods of teaching include hands on activities, Train-the-Trainer programs, Field trips, Seminars, In-service training, cooking demonstrations, etc.

b. Impact: The total number of participants in this program numbered 957 adults and 325 children. 70% of the participants in the diabetes education program decreased their blood sugars between 30 and 50 points, exercise in this group increased by 35%, 60% of the participants increased consumption of fruits and vegetables and 35% of the participants increased consumption of whole grains. The Senior Nutrition Program focused on healthy meals, herbs, fiber and whole grains, meal planning and meal preparation. Analysis of the surveys indicated that whole grain consumption had gone up by 55%, 30% more meals were being consumed at home, 35% of the participants were using herbs instead of salt to flavor meals and salads and consumption of fresh fruits and vegetables had increased by 45%. Students of the DC Public school system were taught to read and decipher food labels. A 3 month follow up indicated that 28% of the students were bringing fruit for snack, 35% of the students were consuming candy twice a week instead of 8-10 times a week, 80% of the students were reading the food labels in the store prior to purchasing an item, and milk and dairy consumption had increased by 30% as soda consumption had decreased by 50%.

c. Funding: Smith-Lever Funds/State Matching Funds

d. Scope: State Specific

Key Theme: Human Nutrition

a. Description: The research grant is designed to provide the research team with funds to fully develop the "**Determinants to Childhood Obesity Research Project** proposal for funding; to

develop partnerships with other universities skilled in childhood obesity research in minority populations; to recruit leading scientists in the field of childhood obesity to join the research team; to develop written letters of agreements with scientists and appropriate agencies where the work will be conducted; and to allow the research team to gain additional expertise in childhood obesity through attendance at conferences, externships, collecting, etc. This project is in its fourth year of operation. The purpose of the grant is to assist the research team in receiving training in obesity methodology and programs, and develop collaboration with other institutions for the development of a research proposal to study obesity in minority populations. The proposal is scheduled to be developed and submitted for funding during the next funding cycle.

b. Impact: No impact data will be generated from this project. A proposal will be developed for funding. This was a planning grant from which we expect to win a research grant..

c. Source of Funding: USDA/CSREES, Initiative for Future Agriculture and Food Systems, \$75,000.00

d. Scope: State Specific

Key Theme: Human Nutrition/ Human Health

a. Description: The **Food Stamp Nutrition Education Program** is designed to help recipients make healthy food choices for meals purchased with food stamp dollars and WIC vouchers consistent with the most recent dietary advice as reflected in the Dietary Guidelines for Americans and the Food Guide Pyramid. Other related objectives include assessments, studies, and education on the provision for adequate food security, food safety, shopping behavior, food resource management, diabetes, hypertension, obesity, dietary quality, system and environmental change, and dissemination of science-based, behaviorally focused nutrition and lifestyle messages to a large diverse population, using state-of-the-art techniques such as social marketing.

b. Impact: This program is the first full year of operation; no impacts have been generated.

c. Program Funding: The program requires a 50/50 match; grant funds were requested from the United State Department of Agriculture, Food and Consumer Services Regional Office, and the non-Federal match for this fiscal year is being provided by the DC Department of Health (DC/DOH), Nutrition Programs Office (NPO) for the Department of Health, and the United Planning Organization (UPO) Head Start and Day Care Programs on behalf of the Center for Nutrition, Diet and Health. The non-Federal dollars and In-kind match provided by UPO was ~\$200,000.00 for CES/CNDH in order for the Center to receive \$200,000.00 in Federal funds for Fiscal year 2005. The District of Columbia Office on Aging provided an additional match letter for CNDH in the amount of ~1.8 million dollars. The appropriate supporting documents are being generated in order for the Center to apply for the additional funding.

d. Scope: State Specific

Key Theme: Human Nutrition/ Human Health

a. Description: The **District of Columbia Double Blind Drinking Water Taste Testing Research Project** is designed to determine the comfort level, water intakes, and types of water consumed by residents and employees of the District of Columbia. The water taste samples consist of several different drinking waters. The project is conducted at sites throughout the city.

b. Impact: To date 218 individuals have participated in the project. This is the first year of the projects. Data have not been analyzed, and no impacts are available at this time.

- c. **Source of Funding:** University of the District of Columbia, Water Research Resources Institute in the amount of \$15,000.00.
- d. **Scope:** State Specific

Key Theme: Human Nutrition/Nutrition Health

- a. **Description:** In this qualitative research study, **Cultural Psychological, and Environmental Barriers to Maintaining a Healthy Diet in Inner City African Americans Research Project**, 12 community-based focus groups, each consisting of 6-8 African American adult men or women who are residents of District of Columbia (DC), will discuss their barriers to a healthy diet and preferences for dietary interventions. The specific aims of this study are to: 1) Describe social, cultural, knowledge, and environmental barriers to adopting a healthy diet that is high in fruits and vegetables and low in fats in African Americans, and 2) Identify community-based educational strategies that are likely to increase African Americans' knowledge and skills about healthy food choice and to motivate them to improve their dietary patterns. The overall goals of this project are to describe African Americans' barriers to adopting a healthy diet and explore African American's preferred dietary educational programs. To accomplish this goal, we will recruit 72-96 adult African American men and women 25-55 years of age from communities in District of Columbia (DC) to participate in 12 focus groups (each consisting of 6-8 people). Focus group assignment will be based on age (25-40 vs. 41-55 years old) and gender; three focus groups will be conducted in each of the four age-gender strata. The PRECEDE framework and the Social Cognitive Theory will be used to guide the design of focus group questions and the analyses of focus group data.
- b. **Impact:** This is the first year of this collaborative project between the University of the District of Columbia and Georgetown University. No impact data are available.
- c. **Funding:** The U56 Cancer Partnership Award, NIH in the amount of \$40,040.00 with \$20,040.00 to UDC and \$20,000.00 to Georgetown University.
- d. **Scope:** State Specific

Goal: IV. GREATER HARMONY BETWEEN AGRICULTURE AND THE ENVIRONMENT

Overview

From 1999 to Feb. 2003, with the exception of a few months in 2002, the PSEP position was vacant. The primary task of this Unit was to re-establish the Integrated Pest Management program and credibility among the pesticide applicators in the greater Washington DC area. The demand for pesticide applicator training in the District of Columbia was relatively low during this fiscal year. It appeared that the majority of pesticide applicators working in the District were individuals originally trained and licensed in Maryland and Virginia and had obtained their licenses in the District via reciprocity. The first phase of the credibility project was to provide applicators with up-to-date study manuals for licensing exams. The short-term solution was to get permission to photocopy other states' training manuals, under the cover of UDC Cooperative Extension.

Public health as it relates to pest management continues to be an important issue. Asthma is a growing health problem in urban areas. Nutrition, Housing Environment and Entomology are

collaborating on a project to reduce roach and rodent infestations and reduce the roach and rodent allergens in low-income homes with asthma incidence.

This past year has been a watershed year for DC Agriculture in the classroom. By affiliating with two existing food systems programs via a formal partnership with Cornell University's Connecting Kids to the Food System Initiative, UDC CES DC Agriculture in the Classroom program engaged hundreds more Washington, D.C. students and dozens of more teachers in significant hands-on food systems activities. In alignment with its goals to raise agricultural and nutritional awareness while strengthening academic achievement, DC Agriculture in the Classroom (DC AITC) implemented the two new programs in 2004 – Kids Growing Food and The Wellness Learner – primarily at schools where teachers previously had undergone UDC/CES' DC AITC training. In addition, DC AITC served new school audiences and formed new partnerships within the local and national food systems community.

The AES research project “Influence of Bradyrhizobium Isolated from Soils and Treated with Biosolids” evaluated the relationship between bradyrhizobia genotypes, nitrogen fixation, and yield in cowpea. Previous studies indicated that the bradyrhizobia population was changed by the addition of biosolids compost to soil. Further, the biosolids compost amendment introduced strains of bradyrhizobia, not previously found in the soil, that formed symbiosis with both cowpea and soybean (Bradyrhizobium genotypes IV or V).

“The Effect of Bradyrhizobial Genotypes on Nodulation in *Vigna unguiculata* and *Glycine max*” is a comparative study of the molecular pattern of two Bradyrhizobium species isolates that nodulate cowpea and soybean to determine the genes that relate to the shared nodulation phenotype. The two Bradyrhizobium isolates obtained from biosolids amended soil at the University of the District of Columbia Muirkirk Research Farm in Beltsville, Maryland, had not been previously reported in the literatures. The isolates were named according to the concentration of biosolids applied to the soil and the isolate obtained from numbered cultures of all Bradyrhizobium nodules for treatment.

The two major waterways of the District of Columbia that exhibit pollutionas problems are the Anacostia and Potomac rivers. An AES project “Speciation of Triorganotin Compounds and Their Interactions with Anacostia and Potomac River Sediments” investigated the effect of anti-foulant pollutants in these two waterways. The majority of activities on the two major waterways in the District of Columbia involve boating and fishing. Anti-foulant compounds tributyl- and triphenyltins are hazardous compounds found in marine paints to inhibit the attachment of barnacles, sea grass, hydroids and other marine organisms on the bottom of boats and ships. If it is not possible to free rivers of hazardous chemicals and /or agents detrimental to the aquatic biota, then it is imperative to know what hazardous species are present and their interactions and/or relationships with the aquatic biota. The results of this project indicated that water pollutants such as tributyltin and triphenyltin compounds (anti-foulants found in boat paints) interact with the sediments and are converted to their respective hydrated cations, i.e., the tributyltin cation and triphenyltin cation which are toxic to various marine organisms.

Smith-Lever Act Funds, Matching and Private Funds, Multistate Research Funds and other Federal Grant Funds were expended on this goal at the cost of \$519,948. A full-time equivalent of 6.84 personnel was utilized to support this goal.

Key Theme: Training Pesticide Applicators

- a. Description:** DC law requires only that residents of DC be trained and tested in the District. Of the three local jurisdictions, DC is the only municipality that requires a practical examination in addition to the core and category exams. Given the previous lack of up-to-date training materials and the belief that DC has the toughest examinations in the area, many candidates have obtained certification in their home state and apply to DC for reciprocity.
- b. Impact:** During the last two years the impact measuring has been “hit and miss,” at best. We have made changes in the source of manuals and tried various training avenues.

Since the District of Columbia is no larger than the surrounding counties in area and population we have concluded that it is not cost effective to maintain an inventory of UDC training manuals in all 17 pesticide applicator categories. We will only provide the EPA core manual along with a copy of the DC pesticide regulations. Applicators are now given the same ordering information as Maryland applicators. Most of the manuals that Maryland and DC use are published by Cornell University CES.

No one registered for the Pesticide Use and Safety course that was to be offered in 2004. Perhaps this was due to inadequate marketing. In 2005 we will offer 4- day short courses to correspond with the semi-monthly DC applicators license exam dates. We will measure the change in the passing rate of the applicators exam. Currently, it is at 10% per the DC Department of Health Division of Toxic Substances data. We should also be able to track those individuals who received job promotions as a result of obtaining their license. Program activity is evaluated in two ways. (1). What is the passing rate on the applicators exam and (2), Speaker Evaluations.

- c. Funding:** EPA pass-through grant/Smith-Lever/State matching/fee based.
- d. Scope:** State specific

Key Theme: Pest Management and Public Health

- a. Description:** This program was initiated at the end of FY 2003, but is being strengthened through our 3-Unit CES interdisciplinary team and public/private collaborations developed and continued to be refined with the roach and rodent IPM Program. Since roaches and rodents are known asthma triggers, our goal is to help (teach) those with asthma in their homes to reduce pest populations to sustainable levels by using three components of IPM: sanitation, exclusion and judicious use of non-volatile pesticides and traps. Originally, the program was to be run through a program in collaboration with the DC Asthma Coalition. However, although we will continue to work with the DCAC, we are finding that we can run the environmental project more efficiently ourselves. Details will appear in the 2005 FY report.
- b. Impact:** The project officially started when ENR received a phone call from a Ms. Scott in NW DC. She was referred by someone one at Washington State Univ. We visited her home and showed her how to make the minor repairs necessary to reduce her homes accessibility by rodents and roaches. We also placed baits and traps to reduce resident pest populations. We are measuring the reduction of specific asthma triggers in the home in evaluating this program. Since then Ms. Scott’s neighbors have requested assistance, which will continue into FY 2005.
- c. Funding:** Smith-Lever Funds/State Match
- d. Scope:** State Specific

Key Theme: Sustainable Agriculture/ AITC

a. Description: In 2004, as part of DC AITC's Kids Growing Food program, students from ten Washington, D.C. schools (see appendix A), grew fruits, herbs, grains, and vegetables in their own gardens on school grounds as a way to understand where food comes from and how it grows. They also participated in additional food systems lessons with new or renewed DC Agriculture in the Classroom partners, including, but not limited to the following activities: setting aside part of the garden to grow crops for the hungry and donating that local produce to local food pantries and soup kitchens, especially Martha's table, via the Plant-a-Row for the hungry program administered by the Garden writers of America; exchanging food growing data and information with students in Ghana who also are growing food at school, via the Internet through the United Nations Food and Agriculture Organization's Growing Connections/EarthBox project. Collaborative plans were made to provide activities that would allow students to prepare garden-grown and fresh-market foods by hands-on demonstrations from renowned Washington, D.C. chefs, as part of the "Days of Taste", sponsored by Institute of Wine and Food. This activity will be implemented during the fall of FY '05.

b. Impact: Approximately 30 teachers and school personnel servicing 1000 plus students, participated in DC Agriculture in the Classroom and Kids Growing Food (DC AITC&KGF) have received professional development training along with gardening and educational materials through the following venues: At workshops teachers received books, posters, activity sheets, videos, seeds, plants, window boxes, rain barrels, EarthBoxes and more. All schools received \$500 from Cornell University as "seed money" to help get the garden started. Plans were made to include each of the ten 2004 DC AITC/KGF schools to take part in the United Nation's Food and Agriculture Organization's The Growing Connection international agriculture program and will receive as many as 3 EarthBox container gardens in FY'05.

It is noteworthy that some of the Washington, D.C. schools involved with Kids Growing Food and the Wellness Learner programs, have been listed as "schools that are in need of improvement" as per the No Child Left Behind Act (<http://www.washingtonpost.com/wp-dyn/articles/A35380-2004Aug2.html>). Both Connecting Kids to the Food System Initiative programs via DC Agriculture in the Classroom offer activities aimed at improving academic improvement. Teachers use the KGF garden as an additional classroom, weaving interdisciplinary curriculum lessons with garden themes. Young students at Seaton Elementary School for example, designed and measured raised beds as a math lesson. Teachers at St. Augustine created school-wide vocabulary lessons with gardening and cooking terms. The science coordinator at the Community Academy Public Charter School taught garden based science lessons.

Fourth-grade students taking part in the Wellness Learner's pilot program at two Washington, DC schools this year, also engaged in both hands-on and academic activities. Prior to a culminating activity that involves students shopping for food in a grocery store, the wellness learner program provides students, teachers and parents with comprehensive lessons in nutrition and food economics – how and why to buy the most nutritious food within a budget. Resources include a Wellness Learner manual and the latest USDA Food Pyramid and Nutrition charts. Additionally, students receive food vocabulary and learn to read (processed) food labels.

Later, students applied that knowledge by grocery shopping for a hypothetical family of four with a budget of \$100 (see Appendix B). In this year's Wellness Learner pilot program, involving a total of 75 students, teams of two to three students competed to buy the most nutritious food for the least amount of money. Two local Giant Foods supermarkets generously donated use of their stores, personnel and grocery items to give students an authentic shopping experience. Importantly, all students participated in a thorough post-shopping event interview as part of the Wellness Learner pilot evaluation (see Appendix B).

In summary, in 2004, DC Agriculture in the Classroom continued to broaden UDC/CES's scope of agricultural and food systems outreach education, serve exiting audiences, reach new audiences and involve new partners. Importantly, DC Agriculture in the Classroom directly impacted more Washington, D.C., K- 12 teachers and students than ever before (at least 30 teachers and school personnel; at least 1,000 students), this furthering a stronger understanding of our local, national and global food and fiber systems within the DC urban community that is served by the University of the District of Columbia/Cooperative Extension Service.

APPENDIX A

DC Agriculture in the Classroom/Kids growing Food 2004 School garden Sites

All participating teachers took part in at least 1 Kids Growing food workshop or event.
Most attended 2 or 3.

- | | |
|--|---|
| 1) (J. Q.) Adams Elementary School
2020 19 th street, NW (W1)
Washington, D.C. 20009-1308 | 6) Hine Junior High School
333 8 th Street, SE (W6)
Washington, DC 20003-2110 |
| 2) Bowen Elementary School
101 M Street, SW (W2)
Washington, D.C. 20024-3600 | 7) Rudolph Elementary School
5200 2 nd Street, NW (W4)
Washington, DC 20011-6622 |
| 3) Browne Junior High School
850 26 th Street, NE (W5)
Washington, D.C. 20002-3262 | 8) St. Augustine Catholic School
1405 V Street, NW (W4)
Washington, DC 20009 |
| 4) John Burroughs Elementary School
1820 Monroe Street, NE (W5)
Washington, D.C. 20018-2736 | 9) Seaton Elementary School
1503 10 th Street, NW (W2)
Washington, DC 20001 |
| 5) Community Academy Public Charter School
1300 Allison Street, NW (W4)
Washington, D.C. 20011 | 10) Wilson Senior High School
3050 Chesapeake Street, NW (W3)
Washington, DC 20016-1858 |

APPENDIX B

The Wellness Learner Program Culminating activity: Grocery shopping Experience at a Giant Foods Store

Following comprehensive nutrition and food economic lessons for students, teachers and parents participating in the Wellness Learner program at two Washington, D.C. schools, students applied that knowledge by grocery shopping for a hypothetical family of four. Working in teams of two or three, students worked with a budget of \$100. Teams competed to buy the most nutritious foods for the least amount of money.

Post-grocery shopping interviews with students indicated a greater level of knowledge about food, nutrition and food shopping economics than prior to the lessons and shopping events. Students also quizzed about careers they saw represented at the grocery store and those behind-the-scene jobs connected to grocery store products and operations.

The Wellness Learner Grocery Shopping Event June 8, 2004

Giant Food/376 O. Street Market (store assistant: Paulette Thompson)
1414 8th Street, NW
Washington, D.C. 20001

Seaton Elementary School

Two 4th Grades: 50 students
Teachers:
Althea Smith
Sam Spraggins

- c. **Source of Funding: Smith-Lever/State Matching Fund**
- d. **Scope: State Specific**

Key Theme: Sustainable Agriculture

a. Description: Two Bradyrhizobium isolates were identified and obtained from biosolids amended soils at the University of the District of Columbia Muirkirk Research Farm in Beltsville, Maryland. Seven genotypes were identified in this study with very different genetic fingerprints from those observed on the type strains Bradyrhizobium sp., which had been identified in the literature. These isolates were significant because they nodulated both *Vigna unquiculata* and *Glycine max*. not uncommon to find bacteria strains that are standard for nodulating *G. max* and will also nodulate *V. unquiculata*, but the opposite has not been seen. Bacterial strains that routinely nodulate *V. unquiculata* will not nodulate *G. max*. This study is a continuation of the previous work and proposes to isolate the gene or genes that relate to this shared nodulation phenotype.

b. Impact: While using biosolids as a fertilizer on cowpea and soybeans, two previously unknown strains of bacterium Bradyrhizobium were found. This finding implied that biosolids compost treatment altered the genotype composition of the Bradyrhizobium population in the soil at Muirkirk Research Farm. Although it has been observed on many occasions that bacterial species that normally nodulate soybean will also nodulate cowpea, the reverse has never been observed until this study. The reverse meaning that bacterial species that normally nodulate cowpea will not nodulate soybean. This information may help to determine the mechanism that allows the bacteria to be effective in the nodulation process of both cowpea and soybeans. It will also be valuable to

future research in determining whether biosolids cause DNA changes that effect nodulation and plant yield in cowpeas and soybeans.

- c. **Funding:** Match
- d. **Scope:** State Specific

Key Theme: Sustainable Agriculture

a. **Description:** Field studies were conducted at the University of the District of Columbia Muirkirk Research Farm in Beltsville, Maryland to evaluate the relationship between Bradyrhizobia genotypes, nitrogen fixation, and yield in cowpea. Biosolids compost amendment introduced strains of not previously found in the soil, that formed symbiosis with both cowpea and soybean (Bradyrhizobium genotypes IV or V). Seeds of the cowpea *Vigna unquiculata* cv California Blackeye No.5 were surface sterilized with acidified 0.1% (w/v) HgCl₂ and washed with sterile distilled water. They were inoculated before planting with the following Bradyrhizobium bacteria: Bradyrhizobium 3384, Bradyrhizobium 3456, Bradyrhizobium 73-3 and Bradyrhizobium 73-28 or no inoculation occurred (control) Cowpea Bradyrhizobium strains (USDA 3384 and USDA 3456) are the normal cowpea inoculants used by farmers. Significant differences occurred when the plants were treated with Bradyrhizobium strains. The plants lost significant amounts of water in drying. Also, the highest plant yield (dry plant weight) was found in the 73-28 strains (362 grams), which was the new Bradyrhizobium strain discovered in the biosolids treated soils. The 73-3 and the 73-28 produced the highest plant yield (324 grams and 362 grams, respectively). In most cases the seeds inoculated with Bradyrhizobium produced higher yields than the control. Again, the 73-28 strain produced the highest seeds (93 grams), leaves (96 grams) and roots (26grams). In all cases except the stems the yield was greater in the Bradyrhizobium treated plants than the control. More seeds were produced by the Bradyrhizobium treated plants than in the control. However, the greatest number were not produced ins, but by the Bradyrhizobium 3456 (639). The 73-28 produced the second largest numbers (578)

b. **Impact:** Biosolids recycling save rapidly diminishing landfill space by promoting sustainable agriculture; enhancing gardening by supplying nutrient rich organic fertilizer; preventing soil erosion; increasing water retention; and lowering production costs. The two new strains of Bradyrhizobium (73-3 and 73-28) were effective in increasing the yield of cowpea plants. They produced larger plants than the control and Bradyrhizobium 3456 and Bradyrhizobium 3384. These new strains have shown that they can be used as inoculants for the cowpea and increase the yield for a higher production of plants.

- c. **Funding:** Match
- d. **Scope:** State Specific

Key Theme: Water Quality

a. **Description:** This research project investigated the environmental speciation of triorganotin compounds that were leached into aerobic and anaerobic sediments of the Anacostia and Potomac rivers as a function of pH and salinity. Tributyl- and triphenyltins are common antifoulant compounds incorporated into marine paints to inhibit the attachment of barnacles, sea grass, hydroids and other marine organisms to the bottom of ships and other submerged marine structures. Anaerobic and aerobic sediments from the Anacostia and Potomac rivers were tested. The

organotin species that were produced in various sediments were determined by the Mossbauer spectroscopy. This method allowed for the direct examination of the organotin species in the sediments.

b. **Impact:** The study of the speciation of triorganotins in the sediments of the Anacostia and Potomac rivers as a function of pH and salinity as well as an evaluation of their interactions with the sediments were essential for the understanding of the effects of triorganotins on the aquatic environment. The triorganotins compounds were shown to be toxic to various marine organisms as well as targeted species. The results from this study will alert those responsible for water quality to the long term impact of these hazardous chemicals and, therefore, allow them to plan accordingly.

c. **Funding:** Match

d. **Scope:** State Specific

Goal V: TO ENHANCE ECONOMIC OPPORTUNITIES AND THE QUALITY OF LIFE AMONG FAMILIES AND COMMUNITIES

Overview:

A majority percentage of the CES Units programming falls under Goal V provided through Community Resources and Economic Development, Family and Consumer Sciences, Housing and Environment Program, and 4-H and Youth Development. Our Youth Development programs were provided by four of the CES Units – Family and Consumer Sciences, Community Resource and Economic Development, Environment and Natural Resources, and the 4-H and Youth Development Program.

There were approximately 3,484 youth in the District of Columbia engaged in 4-H and youth activities over the past year. Three-thousand, three-hundred twenty-four 4-H youth participated in school-based 4-H clubs while the remaining balance of club members belonged to community or after-school clubs in the Nation's Capital. Thirty-two hundred youth participated in instructional TV or video projects. Twelve-hundred fifty youth participated in citizenship and civic education, 420 in communications and expressive arts, 60 in family and consumer sciences, 631 in healthy lifestyle education, more than 1,000 in plant and animal science education, while other areas of 4-H participation included environmental education and earth sciences. Service learning and community service projects delivered through the 4-H program were in the following subject matter areas: sewing and fashion design, entrepreneurship, public speaking, media production, print and broadcast journalism, poetry and performing arts, and science and technology. The skills gained by youth between the ages of 7 and 18, who participated in 4-H during this program year enabled them to improve their academic performance, increase their self-esteem and their ability to contribute to their communities and schools in creative ways previously unexplored. Using the 4-H program and its teachings, youth developed the skills to give their voices to the social and political machine of District of Columbia governmental policies by testifying before the City Council on behalf of their peers. As a result of this and other program efforts, youth were able to broaden their skills in communication, public speaking and in lobbying for social and political change in their communities, schools, and in city government.

DC Reads is the University of the District of Columbia Cooperative Extension Service literacy program created to break the chain of illiteracy that ties people to poverty. DC Reads tutors

(primarily college students) are hired and trained to work with youth identified through testing as being in need of assistance to read and comprehend reading material better.

The Housing Environment Program in collaboration with District of Columbia, Housing Finance Agency, University Legal Service, Institute of Gerontology, District of Columbia Department of Recreation, and Assembly of Petworth, introduced the Basic Home Repair Program to 8,500 District residents with 3,250 actually signing up for workshops to receive hands-on instruction in such topics as; wall repair, toilet tank repair, leaky faucet repair, and basic electricity. The Housing Environment Program also introduced the Working Homeowner Program to 1,000. One hundred (100) District residents actually used information received in hands-on workshops in such topics as; installing door locks, installing a sink, changing light fixtures, installing a toilet, installing ceramic tile, painting, and installing a garbage disposal. The Housing Environment Program and collaborators provided 2,873 residents with information about indoor air problems such as, radon secondhand smoke, mold, mildew, and carbon monoxide. The District of Columbia Housing Finance Agency(DCHFA) was established in 1979 to stimulate and expand homeownership and rental housing opportunity in Washington, D.C. DCHFA accomplishes its mission by issuing tax-exempt Mortgage Revenue Bonds that both lower the cost of financing single-family housing and cost of acquiring and constructing rental housing. The housing Environment Program in collaboration with DCHFA provided 175 District residents with information and training on how to purchase a home.

The Center for Cooperatives and the C.H. Kirkman, Jr. Resource Library for Cooperatives:

The purpose of the Community Economic Development Program (CEDP) and the Cooperative Education Program (CEP) is to equip District residents, interested in business, career and community development, with the skills needed to perform their roles as developers, business owners/managers in an effective and efficient manner through improved business techniques, and to promote revitalization of low to moderate income neighborhoods through cooperative education and development, and to gain employment or pursue a career path.

Our objectives were to make available at least 30 articles on business trends, best practices for small businesses, and human-interest stories; to provide direct training to 650 persons in business, career and community development, as well as to collaborate with 240 individuals, organizations and agencies to provide information, training and technical assistance to 20,000 residents in the areas of leadership/organizational and financial planning, cooperative education and development and entrepreneurship; to enlist the support of 35 volunteers from stake-holders and interested parties to work with the Community Resource & Economic Development unit. To collaborate with youth-serving organizations to reach 1,000 youth, ages nine to 19. To expand the C.H. Kirkman, Jr. Resource Library for the Study of Cooperatives.

The Water Environment In Schools (WESS) Teacher Training Institute (TTI) served to (1) train teachers in water environment using the Anacostia River as the focal point; and (2) support these teachers who will, in turn, teach their students community service through environmental education during the school year. In-depth and innovative mathematics, science and technology formed a strong academic base for WESS. In addition, the WESS program responded to the need for (1) Environmental education in the schools, (2) Teachers Schools [DCPS] standards, and (3) Innovative practices to improve math and science teaching and learning. WESS provided (1) training for the teachers in math, science, technology, art and humanities of water environmental

studies; (2) involvement of students in the same discipline areas for the restoration and conservation of the Anacostia River and its flora and fauna; and (3) The development of a plan that engages the total community in the conservation of the Anacostia Watershed.

The Adopt-A-Block program partnership between Keep Washington Beautiful Incorporated (KWB, Inc.) and the DC Agricultural Experiment Station launched a continuation of its environmental education program in ten schools in the District of Columbia. The program was designed to expand curricula activities centered around Environmental Education Topics; to work closely with the Science Supervisor of the District of Columbia Public Schools to integrate the Waste In Place Curriculum into the districts standards of Environmental Education; to increase professional development and training opportunities for all instructors through collaborative partnerships with UDC, DC Public Schools and Department of Public Works; to integrate the use of parents and community members as tutors, mentors, chaperones, where appropriate, at each school site; and to encourage use of technology for use by teachers and student aids in all research in Environmental Education and Life Sciences.

Does Space Matter: The Neighborhood Context of Drug Market Activity was a study of spatial analysis of the difference between neighborhoods with and without drug market activity in the District of Columbia. The relationship between social, economic variables and built environment factors were examined in twenty-eight (28) randomly selected neighborhood street blocks. This research examined both qualitative and quantitative components. The qualitative component focused on a survey of the selected neighborhood street blocks to assess physical conditions of neighborhoods with and without drug market activity. The quantitative included the statistical analysis of data from the Washington, DC Metropolitan Police Department, and U.S. Bureau of Census.

A germane issue that has affected many urban areas is the homeless population. The Agricultural Experiment Station in partnership with the 14th and U Main Street Initiative, Inc., and the Coalition for the Homeless, Inc. conducted a Beautification and Maintenance Program that covered a total 26 blocks within the 14th and U Streets, N.W. corridor. This program was composed of homeless persons residing in shelters located in the 14th and U Streets area. They were known as the “Green Team.” This project aimed to maintain a good community relationship and offered the homeless opportunities for employment. The project also combined creating jobs for at-risk homeless individuals that enabled them to qualify for housing and provided advance training through the “Ambassador” project coordinated by Cultural Tourism DC. The Ambassador Program instructed the team in hospitality training, the heritage and the story of the community and business mix.

To promote the development of psychologically empowered individuals and psychologically empowered communities, psychologists have increasingly focused on religion and spirituality as a potential resource within our communities. Community psychologists in particular are studying religion and spirituality from the perspectives of empowerment. The last two decades have witnessed a shifting away from psychology’s medical model to focus on pathology, victimology and mental illness to a competence promotion paradigm focused on strengths, empowerment, and positive psychological development. The wellness movement, including new Positive Psychology, has introduced practitioners to new roles, new worldviews of “patient and problem,” new populations of well individuals and new intervention strategies.

Smith-Lever Act Funds, Matching and Private Funds were expended on this goal at the cost of \$1,713,977. A full-time equivalent of 26.07 personnel was utilized to support this goal.

Key Theme: 4-H and Youth Development

a. Description: As a truly urban program, UDC 4-H/Youth Development has as its programmatic thrust to serve the residents of the District of Columbia (and their families) in ways that are useful to urban dwellers. The ultimate goal of any program efforts is to improve the lifestyle quality of the District citizenry between the ages of 5 and 19. Therefore as we seek to impart the 4-H mission and value set to youth, we make all attempts to draw upon the information and utilize the talents and skills of the expert pool of researchers and educators within the university, extension, and public school systems. We do that to address problems and concerns of urban youth. The Metropolitan Washington area is plagued with youth violence, poverty, poor educational facilities, and an education system that does not fully reach those in need, teen pregnancy and other lifestyle and health problems such as childhood obesity and its attendant diseases. Other urban challenges are linked to the family structure and stability of that family. Many youth face having to fend for themselves because of absentee parents or parents over burdened with making ends meet. Therefore, this program year we sought to improve youth's skills in the following areas: entrepreneurship, science and technology, nutrition, health, and fitness, public speaking, mass communication, and animal husbandry.

Banner Programs:

1. Sewing Entrepreneurship After school Program (SEP) and Summer Day Camp:

The UDC SEP teaches youth, between the ages of 7 and 17, basic sewing, design, and re-designs skills with the goal of starting a new business. This year participating youth took the charge seriously and developed what is now known as the UDC 4-H Vintage Jeans Project (VJP), where they design, construct, and market vintage jeans and denim accessories. The VJP creates more than designers, but also teaches youth marketing, presentation, and public speaking skills using computer software, improves self-esteem, and teaches youth self-sufficiency through the notion of owning their own businesses.

b. Impact: As a result of 4-H student participation in programs such as the UDC 4-H Sewing Entrepreneurship After –School Program and Summer Day Camp, youth built their self-esteem. Parents, teachers, and other adults from their communities wrote: "...I never knew I had an extrovert living in my house. The boost in self-esteem this program has given my child, is priceless!" Others remarked that as a result of their child or student's participation in the UDC SEP (Sewing Entrepreneurship Program) they noticed a difference in the youth's self-assuredness, grooming, and self-awareness. Youth enrolled in the UDC SEP, not only improved their lives as a result of their participation, but contributed to the improvement of the lives of others by donating gifts of hats and scarves to less fortunate homeless children during the Christmas holiday season. The major impact of this small program is found in the 30 youth who now sew and design garments but who had no such skills before. Additionally, these entrepreneurs were able to jointly raise over \$300 in sales of their designs within 3 months of participating in the program. Three youth now manage their own businesses: one a jewelry and vintage jeans business, owned by 12 year old Miya Brown, calls her company "Designs by Miya B". Miya makes custom earrings, necklaces, and

wristlets as well as denim hand bags and products. During the SEP Day Camp, she netted \$200 in sales of jewelry alone. Another, 11 year old, Bianca, makes and sells custom jeans designs and denim handbags. And 11 year old Joanna Kramer makes tops, jeans, handbags, and hats all fashioned of her denim creations. The goal is to teach other volunteer leaders to implement the program in an effort to extend it to each of the 8 wards in the Nation's Capital.

2. Cyber Camp (Summer Day Camp):

Cyber Day Camp teaches youth, ages 7-12 basic computer programs using the Microsoft Office Suite. During the camp, youth learn to discern credible sources of information, using the internet in order to complete class assignments as well as explore worlds of science, technology, fitness, health and nutrition. As childhood obesity is a growing problem within this population, the camp includes a nutrition hour provided by CES-staff nutritionists and a half-hour of fitness (power-walking and light calisthenics).

b 2. Impact: For the second consecutive year, the camp improved 30 camper's presentation and public speaking skills. Youth were required to complete power point presentations, which they presented before camp counselors and their peers. The power point presentations were developed to showcase camper's business ideas or promotional ideas for their 4-H clubs or projects. Five campers learned to edit and produce their own music videos, using computer technology and presented them before an audience of 100 adults and youth. Thirty campers prepared a power point presentation which presented their work during summer camp and the work of SEP (Sewing Entrepreneurship Camp) for a culminating fashion and cyber show. As a result of their cyber camp experience, 30 campers contributed to the development and design of the UDC 4-H Website. Cyber Camp is taught by young adult camp counselors who are college students. The mission of the youth-adult partnership concept was demonstrated through hiring college and high school students as camp counselors. Two of the five counselors were 4-Hers while one high school counselor continues to participate in the 4-H program. Cyber Camp was held during two, 2-week sessions and its success has led to the development of a 4-week program to begin in the summer of 2005.

3. Embryology Program: The John Eaton 4-H Club, dubbed the John Eaton Party Animals, has for the third year in a row been the only small animal club in the District's 4-H Program. In it they raise baby chicks hatched from eggs kept in an incubator in the class room. The Party Animal 4-H Club's focus is animal husbandry and to date they have raised over 60 baby chicks, 4 guineas, and continue to keep hamsters, guinea pigs, a parrot, an aquarium of pet fish, and each Spring, they care for 2 dwarf goats, loaned to them by a local farm.

b 3. Impact: Through participating in the Embryology Program, 15, 4th grade 4-Hers gained an increased awareness of the nutritional and care requirements of chickens. They also improved their understanding of how food goes from its natural state on the farm, in the ground, and otherwise to its place in the local grocery store and to their dinner tables. They further understand the health, nutrition, and care needs of the dwarf goats and pivotal roles they and the other animals play in the safe keeping of the environment.

4. Rough Rider Communications Club:

Through their participation in the Communications 4-H Club whose focus is print and broadcast journalism, high school 4-Hers testified before City Council demonstrating their lobbying

skills to more than 80,000 households. Youth also served on their school newspaper where they contributed monthly articles on 4-H projects and activities and completed and distributed a quarterly newsletter The Clover Word, which promoted the program to other members of the faculty and student body.

b 4. Impact: Thirty-two hundred youth were exposed to television and video production through the projects completed by this club. Over 80,000 households were exposed to the 4-H Youth Development Program on television as they watched six 4-H members of this club testify before the City Council on the benefits of the education they receive from Roosevelt Senior High School, the faculty and specifically the Communications Academy to which they belong.

The methods used to evaluate the 4-H/Youth Development Program include but are not limited to: surveys, verbal input, pre- and post-tests. The use of the information gleaned from the instruments has helped provided insight to how we plan for the future. For example after the first two weeks of Cyber Camp in the previous year, we learned from exit surveys taken from camp participants that the work was not challenging enough and that they preferred having more detailed and fun activities to perform. We also learned that as we piloted the curriculum developed for the camp that lectures did not work as we had tried to impart some of the information using guest lecturers. This program year, we were able to change the focus and delivery of the camp to more fun projects such as engaging the camper's creative talents to make his or her own music video. This exercise met with excitement and full participation. We also made other lessons in the curriculum including nutrition and fitness, more interactive, so that even the most "boring" scientific concepts were not only understood, but we got students "buy-in". As a result of the interactive participation in nutrition lessons, students now report that they eat more fruits and vegetables, fewer burgers and fries, and drink more juice than soda.

c. Funding: Smith Lever/State Match/DCPS/Donations

d. Scope: State Specific

Key Theme: Parenting

a. Description. Parenthood and parenting go hand in hand, but as the joys of parenthood give way to the challenges of parenting, UDC-CES, is gearing to address the issues facing the citizens of the District of Columbia. Single parent families are on the rise, as are blended families, bringing with them issues of time management, discipline, family meals work and school responsibilities. Grandparents raising their grand children are also on the increase, again with a different set of needs and problems.

The Parenting Program is planned to help provide information that caregivers need to successfully fulfill their role. The program focuses on the challenges of parenting and how to effectively address them. A curriculum guide has been developed emphasizing 'Kinship Care' especially as it relates to grandparents. Across the United States, children are being raised in households headed by grandparents and other relatives as parents struggle with substance abuse, mental illness, incarceration, divorce, and other serious problems.

b. Impact: A multi module curriculum is nearing completion to address these issues and provide training to families. A marketing brochure has also been developed. Presently, a survey is being conducted to determine sites and locations for training.

c. Funding: Smith-Lever Funds/State Matching Funds

- d. **Scope:** State Specific

Key Theme: Literacy – DC READS

- a. **Description:** DC Reads program hired and trained tutors (primarily college students), to work with youth identified through testing as being in need of assistance to read and comprehend reading material better. Prior to entering the program, youth are tested to determine potential reading problems. Tutors travel to assigned schools or after-school programs Monday through Friday to work with assigned students in a variety of interactive and fun activities designed to improve reading skills. Proven structured and repetitive training processes help to ensure individual success no matter at what level the students enter the program. Prior to program completion, students are retested to determine how much their reading skills have improved. Last year all of the children in the program exhibited gains as indicated by post-testing scores. In addition to our three program sites located in North West Washington, we opened a new site in North East Washington through a partnership with the Randall Memorial United Methodist Church.
- b. **Impact:** Forty-six children were served at this new program site. Sixty-four children received one-on-one tutoring through the other DC Reads sites. Forty-eight tutors were trained to provide specific services to our children.

Channel 19 televised an interview with reading specialist, Cheryl Fellenz, and DC Reads program coordinator, Rebecca Bankhead. The primary focus of the interview was to inform the public about the program and invite the community to volunteer. The interview was viewed by an estimated 4,000 viewers.

When children enter the program in late September we use the Slosson Oral Reading Exam to test their reading abilities. At the end of each semester we re-administer the test to gauge their progress. Senior training tutors visited the sites twice weekly to evaluate the performance of tutors. During our weekly meetings they shared observations that might improve the program. Because they are peers of the tutors they are able to be more effective and positive. After tutor training was completed they were given training evaluation sheets to share their concerns. Weekly meetings were held with site coordinators to discuss any concerns they had about the program, with solutions sort.

- c. **Funding:** Smith-Lever/State Matching Funds
- d. **Scope:** State Specific

Key Theme: Workforce Preparation: Youth & Adult

- a. **Description:** LifeSmarts is an exciting National Consumer Education program for youth. The Cooperative Extension Service of the University of the District of Columbia sponsors the local LifeSmarts program. LifeSmarts is a creative way for young people to learn about consumer and marketplace issues. Using a game-show format, LifeSmarts provides an opportunity for today's youth to learn information related to personal finance, the environment, technology, consumer rights and responsibilities, and health and safety.
- b. **Impact:** Last year two teams of five members each advanced to the LifeSmarts State competition. A summer camp program was held with 67 participants to better prepare the students

for competition. Workshop presenters from various consumer organizations from around the Washington, DC community made presentations for five weeks to educate our youth. The topics covered related to the five subject areas specific to LifeSmarts. Through the LifeSmarts summer camp program for 1,375 units of service were provided to youth from ethnic groups, which included Asian, Hispanic and African youth. Sixty seven children participated in the summer camp Monday through Friday for five weeks. Twenty five different programs were presented.

College students have been working with individual teams at their schools preparing them for the online competition which qualifies teams to compete in the state competition. Channel 19 televised an interview with former DC State LifeSmarts Team Champions informing the public about the program. An estimated 22,000 viewers saw the LifeSmarts program interview on channel 19. The interview aired nine times throughout the year.

c. Funding: State Smith-Lever/State Matching Funds-In-kind & Donor Support

LIFESMARTS COMMUNITY PARTNERS:

Johnson Jr. High School
1400 Bruce Place, South East.
Washington, D. C. 20020

Kevin Naiker
UDC Upward Bound Program

Barrington Honesty, Counselor
Ms. Tonya Dark Berry, Director
The GEAR UP Program

Tonya Dark Berry
GEAR UP Program

Browne Jr. High School
850 26th Street NE

Preston Gilmore
United State Department of Agriculture

Garnett Patterson Middle School
2001 10th Street NW

David Maitland
UDC Community Outreach & Extension
Services

Lincoln Middle School
1800 Perry Street, NE

Rovenia Brock, UDC CES
Gordon White, UDC CES

Jerome A. Duval, MSW
Director of Outreach

Terri Williams, Austisan

National Consumers League
1701 K Street NW

Stephanie Browne
UDC David A. Clark Law School
William Hare
UDC Water Resources Program

Jerry Monk
North American Securities Administrator
Association, Inc.

c. Funding: Smith-Lever/State Match Funding

d. Scope: State Specific

Key Theme : Promoting Housing Programs

a. Description : The goal of the UDC CES Housing Environment Program is collaboration with the D.C. Housing Finance Agency, University Legal Service, Institute of Gerontology, D.C. Recreation, and Assembly of Petworth is to provide housing programs that will enhance the quality of life among families and communities through skills development and knowledge of basic home repairs, advance home repairs, and home indoor air quality. The Basic Home Repair Program provides District residents with basic knowledge and skills needed to make minor repairs in and around their home. The Working Homeowner program provides residents with advance knowledge/skills to perform more advance repairs in and around their home. Healthy Indoor Air Program provides District residents with information on how to reduce indoor air pollutants that can affect their family.

b. Impact: Participants are evaluated during the basic/advance hands-on workshops and participation in all demonstrations. Each participant completes an evaluation instrument after each workshop series. After a period of three months, participants received a letter asking them to respond if they have applied any skills, they have learned.

Eight thousand five hundred (8,500) District residents were introduced to the Basic Home Repair Program. In FY'04 the Housing Environment Program (HEP) collaborated with the DC Housing Finance Agency, University Legal Service, Assembly of Petworth, UDC Institute of Gerontology, and Ft. Stevens Recreation Center, participating in community activities such as "Community Resource Day" at New Commandment Baptist Church, "Career Day" at Assembly of Petworth, and "Home Expo Day" at DC Housing Finance Agency. These organizations assisted the Housing Environment Program in advertising program information and also provided space to conduct workshops. Housing Environment Program staff also developed and distributed the HEP newsletter to District residents. Three thousand two hundred fifty (3,250) residents participated in workshops, of the 3,250 residents that participated in workshops, eighty-nine percent (2893) actually used the information and skill learned in workshop to make basic repairs around their home, which resulted in an approximated net savings of \$195.00 per household (total estimated savings of (\$564,135). More than twenty eight hundred (2,800) District residents were introduced to the Working Homeowner Program, fifty (50) residents participated in workshops, one hundred percent (50) actually used skills learned to repair or replace items around their homes, which resulted in approximate saving of \$450-500 per household in repair cost (total estimated savings of \$22,500). These numbers are a collaborative effort of all the organizations mentioned above. Each organization provided HEP staff with necessary information for reporting. The net savings of each household was obtained from "Home Tech Remodeling & Renovation Cost Estimator." The Housing Environment Program in collaboration with District of Columbia Housing Finance Agency was able to provide 175 District residents (non-homeowners) with information and training on how to purchase a home. Eighty-five (85) District residents used information, and became qualified to select and purchase a home in the District of Columbia (average cost of \$130,000).

Success Stories :

- The Basic Home Repair Program was offered to seniors at Fort Steven Recreation Center. After completing workshops on Basic Electricity, some seniors wanted to have workshop on

how to repair lamps. The group brought in 58 lamps. The lamps needed cords, male plugs and sockets. The project was a success with 90% of the lamps repaired, saving the seniors an estimate of \$1800.00 in repair costs. During the spring of 2004, the seniors at Fort Stevens hosted a fish fry. The event was the brainchild of a CES employee who suggested it as a way to raise funds for the center's participants. The project was a success, raising \$ 900.00 for the center.

- Mrs. Barton participates in the Basic Home Repair Program. Her water bill for one quarter was for \$376.00. The knowledge she received while in the class enabled her to stop the overflow of her toilet. She replaced the ballcock unit with a new fluid master unit. During the next quarter, her water bill reduction was \$41.00. Because of the workshop, she saved \$335.00 by doing the repairs herself.
 - Ms. Scott obtained information about the Healthy Indoor Air Quality Program, Ms. Scott wanted to know how she could check her home to see if there were "asthma triggers". She also stated that her daughter (15 years old) suffers with asthma, and she had a problem with mice. The Housing Environment Program Specialist, and the Environment and Natural Resources Program Specialist visited Ms. Scott's house and performed a Home Audit to see if any asthma triggers existed. The audit showed several asthma triggers such as mice droppings, dust mites, etc. The HEP and ENR specialists were able to assist Ms. Scott in correcting the problems. After a month, Ms. Scott reported that the air quality in her home was much better, there were no sign of mice, and her daughter was sleeping better than ever.
- c. **Funding:** Smith-Lever/State Matching Funds
- d. **Scope:** State Specific

Key Theme: Promoting Business Programs

a. **Description:** In collaboration with the UDC School of Business and Public administration's Institute for Entrepreneurship, and the DC Office of Local Small and Disadvantaged Businesses, the unit provided 60 sessions of training in small business development, launched 16 start-up businesses (that produced over two million new dollars in revenue this fiscal period), referred four (4) business plans to the UDC-DC Small Business Center for \$5,000.00 Micro-Enterprise Loans, referred 2 business persons for internships a the MD/DC Minorities Development Supplies Council, assisted two businesses apply for loans (one loan approved for \$90,000), and secured 50 articles on business development, best practices and human interest stories and made them available to a wide range of DC residents.

b. **Impact:** The impact of these collaborations forged relationships with the public/private sectors, which has allowed CRED to expand the field of services to meet the critical needs of small and disadvantaged businesses in the District of Columbia. The CRED team used the internal collaboration method, collaborating with over two hundreds & forty agencies, organizations and Key Individuals.

From this collaborative effort the CRED team:

- Added 120 items (books, tapes, periodicals) to C.H. Kirkman, Jr. Resource Library for Cooperatives, held two youth tours with 30 youth to the Library, and included 200 certified

listings of housing co-ops in DC to our mailing list (approximately 20,000 persons) and participated in 5 local coop events;

- Introduced a new financial literacy program which includes budgeting, debt management, credit, predatory lending, homebuyers and high school financial planning and supported ten training sessions for more than 100 persons
- Provided direct income tax preparation and counseling to 100 persons in homeless shelters and other disadvantaged service centers; (the service raised over \$20,000.00 dollars for the clients)
- Developed three non-profit organizations, whose mission is to work with the DC Reentry population and their families
- Assisted DC Government/Latino Day by participating on the planning committee, preparing drafts of the proclamations and resolutions, setting up an information table, assisting with the event and speaking on behalf of the Cooperative Extension Service (15,000 persons attended the festival)
- Collaborated with the credit union leagues to expand the field of membership for low income DC residents, to provide support services and training to small credit unions and to bring a credit union branch East of the River (SE Washington).

Community Economic Development Program Advisory Committee

Herb Cooper
Special Assistant to the
President, Communication
A Phillip Randolph Institute

Kwame R. Brown
President/CEO-Maryland/DC
Minority Supplier Development Council

Terrence Boykin
Executive Sales Associate

Samuel L. Newman Associates
Management and Training

George D. Williams, Realtor
Murrell Inc.

Endura Goven, Executive Director
B.A.D. Kids Inc.

Mr. Ronald Austin, Director Constituent
Services
Council of the District of Columbia
Council Member Fenty

Mr. Jerome B. Lee, Case Manager
SOME/SE Center
Washington D.C. 20019
202 581-8000, fax 202-581-5749

Ms. Jeri Washington, Specialist
DHCD-Grants Management

Ms. Alfreda C. Mauuso, ANC/4C01

Mr. Larry Brown
Brown's International Enterprises, Inc.

c. **Funding:** Smith-Lever/State Match

d. **Scope:** State Specific

Key Theme: **Leadership/Training and Development**

a. Description: With the addition of a full time extension agent to sure up the Community Economic Development Program and a part-time research associate to support the development of the C.H. Kirkman, Jr. Resource Library for Cooperatives, CRED was able to expand its offerings through collaborations internally (CES/COES and the University) and externally to the city. In compliance with USDA's community participation requirements, CRED coordinated with other CES units to establish and convene 3 quarterly CES Advisory Council Meetings, provided proceedings and feed back from a survey of their interest, ideas and program needs for their communities, and maintained a 40 member list for contact. The membership represents the 5 programs and one research unit of CES and at-large persons from the District of Columbia.

b. Impact: The impact is in two areas. The ability of the Unit to offer high quality training in leadership/organizational development and the various groups having taken the training, improved their ability to govern their agencies. Various partnerships with government agencies, nonprofits, and small business groups have been formed under CRED. The organizations are as follows: (1) Court Services and Offender Supervision Agency (CSOSA) with regards to Basic Financial Planning and Entrepreneurship Opportunities for ex-offenders. (2)The Capitol Area Food Bank is helping us to promote entrepreneurship opportunities and basic financial planning to Washington, D.C. residents. (3) The DC Banking & Financial Institutions and AARP assisted CRED to promote the dangers of predatory lending with regards to the senior population. (4) The Community Harvest and Capitol Area Food bank assisted CRED to promote outreach efforts for various food, hunger and food security issues. Moreover, twenty five more agencies and key individuals were recruited in order to expand the impact of our services and add value to programs such as, predatory lending, business development and Basic Financial Planning all of the partnerships are external.

In-addition CRED:

- Trained and installed 9 members of the Board of Directors, graduated 50 shareholders in coop principles and practices at Southern Homes and Garden Cooperatives;
- Joined five community advisory boards and committee (Community Forklift, Community Harvest, the DC Environmental Planning commission, the Delancy Street Replication Project, the Alliance for Affordable Housing, and IDEA Public Chartered School Community Advisory Committee);
- Structured a process to develop a board of directors and an advisory committee for Israel CME Church and the Refreshing Rock Church;

Over twenty thousand persons have been reached by our collaborative outreach efforts; the C.H. Kirkman, Jr. Resource Library for Cooperatives web page is frequently visited because of the Center for Cooperatives memberships in local and national coop organizations, \$20,000.00 has been raised and service have been expanded to disadvantaged individuals

CENTER FOR COOPERATIVES AND THE C.H. KIRKMAN JR. RESOURCE LIBRARY FOR COOPERATIVES

ADVISORY COMMITTEE

Linda Leaks, Executive Director
Washington Inter-City Self-Help

Renee Jakobs

NCB Development Corp.
 Richard J. Dines, Director
 Coop Business Development
 Nat'l Cooperative Business Association

Mr. Joseph Jackson, General Manager
 Enterprising Staffing Service

Sarah Turner, Director of Education
 D.C. Credit Union League

Jeannie Kenny, Education Services
 Nat'l Cooperative Business Association

Mr. John Holdsclaw, Director
 Policy Development
 Corp of the NCB Development Corporation

James E. Haskell,
 Assistant Deputy Administrator
 Rural Business-Cooperative Service

Leroy Hooper, Associate Professor
 UDC Media Services
 Learning Resources Division

James R. Baarda, Economist
 USDA-Rural Business Cooperative Services
 Maurice Roberts,

Community Economic Development
 Specialist
 International Consultant Services

Lora Fletcher, President
 Potomac Association of Housing
 Cooperatives

Bob Pohlman, Executive Director
 Coalition for Nonprofit Housing & Economic
 Development

Douglas M. Kleine, CAE
 Executive Director
 Nat'l Association of Housing Cooperatives

Regina Drake, Executive Director
 Community Harvest
 Josephine Butler Parks Center

Karl Johnson, President
 Southern Homes and Gardens
 Cooperatives, Inc.

Adrienne D. Munroe
 Economic Development Specialist
 National Credit Union Administration

Norman G. Kurland, President
 Center for Economic and Social Justice

- c. **Funding:** Smith-Lever/State Match
- d. **Scope:** State Specific

Key Theme: Youth Development/4-H

- a. **Description:** The team served a minimum of 654 school age youth directly and 2,000 youth overall. Key activities included:
 - A youth entrepreneurship program for James Weldon Johnson Center for the Arts that included three activities with the students of Webb Elementary School for 307 students;
 - Two entrepreneurship workshops for the B.A.D. Youth Entrepreneurship Project for 25 students;
 - One tour, one award's program and one Christmas program for the Congress of National Black Churches Project Spirit After School Program for 125,

- Assisted with the Incorporated the Stanford Technology Institute and served as the master of ceremony for the graduation of 155 students in computer technology
 - A session in career development at the Maryland Youth Technology Institute for 600 DC metro students in a mass audience and 42 students in a direct presentation.
- b. **Impact:** Through evaluations provided by the groups involved, the students increased their academic ability by one full grade due to the training and educational support.
- c. **Funding:** Smith-Lever/State Match
- d. **Scope:** State Specific

Key Theme: Community Development / Adopt a Block

- a. **Description:** Using established goals as a guide, resources were expanded to support instruction by reaching out to new partners. Partners were either able to conduct workshops, i.e. Living Classrooms, Recycling in school buildings – Taylor Trash and Hauling; donate computers to classroom (DPW); provide manpower for large rescaping of school properties – AT&T Wireless and Keep America Beautiful. A lot of emphasis was placed on providing our instructors with quality staff development opportunities to share lesson plans, ideas and hands-on activities for students. Site fieldtrips were also conducted to local environmental sites that could serve as a learning experience for our teachers as well as our students. Additionally, a poster contest was sponsored that required students to write an essay fully describing their artwork. This approach allowed reviewers to clearly understand what the students’ artwork represented and the impact the instruction had on their understanding the environment. The Department of Public Works aided us by donating 40 terminals to be used at our participating school sites.
- b. **Impact:** This program allowed us to serve the academic needs of over 1,100 students and thirty instructors located in Wards 7 and 8 in the District of Columbia. It also served as a continuation of teaching student skills centered on the topical concepts of Waste Management, Recycling and Natural Resources. Keep Washington Beautiful created new lesson plans and identified new learning resources for use by all the school sites that participated in this program.
- c. **Funding:** Hatch
- d. **Scope:** State specific

Key Theme: Community Development / WESS TTI

- a. **Description:** WESS TTI provided training for Junior High and Middle School teachers in two ten-day Institutes. These Institutes engaged teachers in extensive training in water quality assessment and conservation, hands on restoration activities and integration of information and materials into the total curriculum. The Institute workshops covered a variety of teaching techniques for the teacher participants including lectures, field and classroom hands-on experiences, and development of learning activities that match with the DCPS Performance Objectives. The WESS TTI also provided teachers with a suggested year-long plan for student involvement in the local environment. Additionally, the Institute experience empowered teachers to conduct in-school student-centered follow-up activities that included: 1) water quality assessment; 2) wetland studies; 3) development of actual water quality improvement and conservation projects, i.e. rain gardens, schoolyard habitats, wetland nursery ponds, etc.; 4) formation of community support; and 5) development of collaborative partnerships for the preservation of the Anacostia River Watershed.

b. Impact: The WESS TTI imparted knowledge and skills to teachers that enabled them to use math and science in interesting and innovative ways. It also provided a basic curriculum model for environmental education. Teachers were able to obtain information that could be applied throughout their teaching years. The study also found that students tended to become totally involved in the open methods used to bring the environment into the classroom. All discipline areas had a role in the studies. The students believed that using environment as the context for study opened many avenues for learning. 93% of the teachers used the inquiry-based instruction and 90% found student conduct improved significantly. This type of teaching/learning forced the students to work in more heterogeneous groups and expand their personal involvement with all types of students.

c. Funding: Match

d. Scope: State Specific

Key Theme: Community Development / Drug Market Hotspots

a. Description: This was a spatial analysis study of the differences between neighborhoods with and without drug market activity in the District of Columbia. The relationship between social, economic variables, and built environmental factors were examined in twenty eight (28) randomly selected neighborhood blocks. In an effort to understand the social and economic conditions of the drug market locations, social and economic variables such as absolute poverty (percentage of families that fall below the poverty threshold), percent of people under 18, type of housing (owned), unemployment rates (general population), violent crime, and property crime were examined. Review of the qualitative and quantitative findings suggested that social and economic factors may play more of an important role in the connection between crime and place than the physical nuance of the built environment. The logistic analysis findings revealed that certain social and economic variables (poverty, female headed households, violent crime, and property crime) were able to predict the presence or absence of drug market hot spots. These factors seemed to be associated with attracting drug market activity more likely than the physical features of the neighborhood because they impact the social capital of the community.

b. Impact: This study contributed to addressing the gap knowledge regarding drug market activity in communities by examining social, economic, and built environmental factors. Its research findings were useful in developing theoretical and policy formulation regarding the presence of drug market activities at the neighborhood level. The project also provided valuable research training, utilization of Geographic Information Systems (GIS) to several undergraduate students who conducted surveys and participated in the analyses as well as provided them the opportunity to link their textbook knowledge of research with real world experience of scientific inquiry.

c. Funding: Match

d. Scope: State Specific

Key Theme: Workforce Preparation –Youth and Adults/The Green Team

a. Description: The Green Team program was the first major program developed and implemented by the 14th and U Main Street Initiative. The objective of this program was to provide quality maintenance and upkeep through ongoing services to support cleanliness for a 26 Block Corridor, 8th to 16th Streets on “U” Street and from “U” Street to Thomas Circle on 14th Street. The

project also aimed to maintain good community relationships. It also combined creating jobs for at-risk homeless individuals that enabled them to qualify for housing and providing advanced training through the “Ambassador” project coordinated by Cultural Tourism DC. Personal interviews were conducted with the Green Team members. All team members were African-American. Each member elaborated on what their life was like before employment with The Green Team and how things had positively changed since their involvement with the program.

b. Impact: Prior to the program, all were either homeless or in transitional homes. Some were recovering from substance abuse. Eight of them own their own homes or are either renting an apartment or room. There were two seeking housing. Other program impacts were: restored pride in the community, encouraged self improvement, enhanced cultural tourism and the positive experience with residents and visitors. Anecdotally, businesses noticed the tremendous change in the community. This Beautification project also afforded the workers the opportunity for additional training in the areas of landscaping, tourism (assisting tourists who visited the area), and the use of equipment, i.e., weed cutters and snow blowers. This program positively affected all community stakeholders, i.e., visitors, residents, city government, businesses, homeless individuals, social service agencies, and churches.

c. Funding: Hatch; Match

d. Scope: State specific

Key Theme: Community Development/ Promoting Stress Resistance and Psychological Empowerment

a. Description: In community interventions aimed at fostering healthy individuals and healthy communities, psychological empowerment and resilience have emerged as key constructs. Increasingly, independent practitioners have opportunities to become engaged in helping people gain a sense of personal control over their lives, helping them become resilient in coping with adversity and helping them develop inner peace and harmony as fundamental steps toward better psychological adjustment. This study designed and conducted a pilot study which consisted of key-informant interviews and focus group interviews with a sample of 55 practicing Buddhists that identified (1) the personal growth members have attained through their Buddhist practice and (2) the specific aspects of the philosophy and practice believed to be responsible for their personal growth. These factors form the basis for the development of culturally valid measures to be used in the next empirical stage of the research. Focus group data was entered in the Concept Systems software for data analysis and preliminary coding/analysis has been completed. Data analysis will be completed in May. Results will be presented to the community being studied, to the professional community, and published in the professional literature. The empirical study will be designed in the Summer 2005 semester and conducted in the Fall 2005.

b. Impact: Several impacts have emerged from this pilot ethnographic phase of the study. Primarily they involve impacts on the community being studied and on the researchers who by design are becoming more culturally competent from the ethnographic phase of the study.

1. The research has been well received and has had positive impact on the research setting. Specifically, the focus group interviews reportedly have had positive impact on the participants by making them more aware of the psychological effects of practicing Buddhism and making them more aware of the specific aspects of the Buddhist practice that

foster personal growth in practitioners. Feedback from participants to organizational leaders has inspired them to examine in greater depth the very issues this research is raising.

2. Preliminary analyses of focus groups data has enhanced the researchers' knowledge of additional factors that need to be considered in designing the main study. For example, we learned that aspects of the practice that foster growth are not static within a single individual across time, or across age cohort groups, where generational and age-group differences exist.
3. Impacts on the professional knowledge base and on the citizens of the DC community are expected from the results of the empirical phase of the study.
4. Two proposals approved to present preliminary results in a poster session and a symposium entitled Promoting Psychological Empowerment, Resilience, Spiritual Well-Being: A Buddhist Approach, at the American Psychological Association, August 2005, Washington, DC, along with all research assistants as co-authors of the poster session.

Helping people gain a sense of personal control over their lives and helping them become hardy and resilient in the face of the stressors endemic to urban life is key and has been associated with better psychological and physical adjustment. These approaches are especially relevant for the District of Columbia with its high proportion of people of color, living in poverty, feeling disempowered, and at-risk of a host of stress and social ills.

c. **Funding:** Match

d. **Scope:** State Specific

B. Stakeholder Input Process

The UDC Cooperative Extension Service has cultivated and trained a highly involved stakeholder group in FY 2004, **the UDC Extension Advisory Council (EAC)**. This group is led by our acting chair, Les Butler, CEO BeHealthyLifestyles Group, Inc, to ascertain the desires, issues and concerns of our District customers. For our upcoming fiscal year the EAC led by Mr. Butler are undertaking the development and implementation of a marketing and outreach plan to inform our current customers and extend programming to our potential customers. The program units' stakeholders committees meet at various intervals, such as the 4-H Advisory Committee, which meets 2-4 times per year. We continue to strive to provide programs and activities that are customer driven, some to a greater degree than others, as our Nutrition on Demand program. Through the various program advisory committees, program colleagues and agency collaborators, we have enhanced and expanded our program efforts and offerings. A Parent Education advisory committee is in the process of being established. On completion, the training manual will be circulated for peer review and recommendations will be taken under advisement. CES programs are customer driven with the collaboration of various organizations.

The following list includes organizations, businesses and individuals who have been instrumental in fostering the CES programs by donating their time, expertise, funds and in-kind gifts.

American Horticultural Society

Blue Sky Press, an imprint of Scholastic Inc.
 Children’s author, Lynne Cherry – donated signed copies of her book “How Groundhogs Garden Drew”
 DC Master Gardeners – participated in the orientation for KGF teachers
 EarthBoxes – provided training for teachers and students
 Giant Foods – The nutritionist worked at one of the stations while students visited the supermarket.
 National Gardening Association
 Plant a Row for the Hungry Program
 Seedway Seeds – provided seeds to the participating schools
 United Nation Food and Agriculture Association – provided training for teachers
 USDA, Agricultural Research Service- provided training and agricultural resources.
 USDA, Cooperative State Research, Education and Extension Service – provided training via in-kind service,
 materials and resources
 Whole Foods Markets – provided the food for “Sharing and Caring KGF Extravaganza”
 United States National Arboretum – provided training and lunch at the Arboretum
 DC Master Gardeners
 Unity Health System serving the city-wide needs of Hispanics, Asians and persons of African decent, Howard University Community Association Advisory
 DC Department of Health
 HEADS UP, TEAM After-School Board
 DOH Division of Toxic Substances
 DC LifeSmarts Advisory Committee and National Consumers League
 DC Public, Charter and Private School Principals and Professional Staff
 UDC CES Center for Cooperatives Advisory Committee
 DC Housing and Finance, DC Energy Office, DC Housing Authority, and the National Housing Alliance
 DC Department of Recreation, DC Asthma Coalition
 Assembly of Petworth
 DC Metro Green Industry
 R.E.A.C.H. INC.
 The American Reality Association
 Community Harvest, and various other public/private agencies and organizations

DC READS PROGRAMS PARTNERS: (Many provided the site, food, and children to be served.)

Robert Blaine, PhD Director, TEAM Afterschool Programs	Cheryl Fellenz, Reading Specialist
Albright TEAM Center	Carol Parks UDC Work Study Specialist
Emory United Methodist Church Team Afterschool Program	Americorp NCCC Aziekwe Chandler
Mrs. Philoma Logan, Program Director Randall Cares Afterschool Program	Col. Norman N. Johnson, Director

Randall's After school Program

Idea Public Charter School

An AES Stakeholders Survey was analyzed and overall it showed that residents were concerned about creating and sustaining safer, secure and healthy neighborhoods; educating the youth and communities in urban environmental preservation; providing after school community-based and youth oriented programs; and health and nutritional intervention strategies for the elderly. The participants stated that the survey (one and a half page) was too long and that it should be reduced to no more than one page. Survey items were developed based on the following priorities: (1) Strengthening Children, Youth, Families, and Elders; (2) Building Sustainable Neighborhoods; and (3) Promoting Economic Development, (4) Urban Environmental Education. The survey has been redesigned as a one pager and is now being distributed at our workshops, conferences, and educational summits (especially those held in Wards 7 and 8). The surveys will be reviewed for additional research, investigations as well as integrated research and extension activities that focused on germane urban issues. Stakeholders' input is also provided by way of informal contacts with individuals through personal interviews, e-mail, by telephone or visiting with them in group meetings.

C. Program Review Process

Extension

The UDC Cooperative Extension, along with our CES Advisory Council and the Program Advisory Committees, has developed various formal and informal, qualitative and quantitative means to evaluate programs which include:

- Formal/informal Advisory Member Interviews
- Pre-test and post-test
- Volunteer recruitment and retention
- Agency/individual assessments
- Increased participant enrollment
- DC/National Certifications received by participants
- Partner/Collaborators evaluations
- Increased product demand
- Self-administered questionnaires
- Surveys
- Demonstrated Skills acquired by participants
- Proposals Funded
- Health Assessments
- Health Professionals and Participant Feedback
- Written/Oral Evaluations
- Behavioral/Attitudinal Changes
- Observations

- Reading Grade-level Achieved
- Staff Performance Appraisals
- Professional Development/Association Involvement
- Proposal Committee
- Conference Calls, Telephone and Email contacts were also made.
- Feedback from DC Public School Principals and Professional Staff
- Flyers are displayed at the site of programs, at libraries and various other public locations.
- Capital Area Food bank Advocacy Update Newsletter

Research

There have been no changes in the AES's Program Review Process. Several faculty members have expressed an interest in submitting a proposal. It is expected that one or two of the proposals submitted will be funded.

Each year the Director reviews the progress of each research project to ensure that researchers are accomplishing their objectives. Modifications were made to move in the direction of implementing research and integrated activities based on issues germane to an urban environment. The Peer Review has expanded to include not only representatives from the Department of Biological and Environmental Sciences, the Department of Chemistry, the Department of Physics, the Cooperative Extension Service, the community, state, and local government, but also the Departments of Sociology, Urban Affairs, Criminal Justice, Psychology, and the Water Resources Research Institute. The Peer Review criteria remains, but limited to:

- Knowledge base of the research
- Adequacy of procedures and experiment to meet the objectives
- Feasibility of accomplishing the objectives
- Scientific merit of the proposed research
- Familiarity with work of others related to the proposal
- Appropriate budget for proposed research
- Budget justification

The Review Panel will continue make the following recommendations: Approved; Approved with Comment; Conditionally Approved; and Deferred or Rejected.

D. Evaluation of the Success of Multi and Joint Activities

1. The DC Experiment Station and the DC Extension Service continue to work together on joint projects and focus on issues that are critical to our urban environment. In addition, the stakeholders serving on the AES/CES Leadership Advisory Council continue to assist us in determining which areas can address and be effectively supported by AES and CES. Our programs address the needs of the underserved and underrepresented, particularly African-Americans.
2. AES/CES are committed to providing continuous quality improvement in our multistate and joint programs. Our programs continue to address the needs of the under-served and

- under-represented population, which included Asians, Hispanics, Native Americans, African Americans, the elderly, handicapped and the disadvantaged.
3. AES and CES continue to address the needs of the underserved and underrepresented, particularly African-Americans.

The expected outcomes and impact of the projects and programs are found in each of the Key Themes listed under **Section F. Integrated Research and Extension Activities.**

The following are some examples of our program effectiveness and/or efficiency as found under the Impact Statements of our FY 2004 Annual Report:

1. implementing urban environmental education training for DC Public School teachers and students;
2. request for more after school programs utilizing environmental education for literacy, math, science and critical thinking skills;
3. wards 7 and 8 community involvement in establishing and maintaining sustainable communities;
4. more workforce skills development the underrepresented population;
5. community intervention health and nutrition programs families
6. promoting sustainable neighborhoods and healthy urban environments

E. Multistate Extension Activities

UDC CES participated in 2 multi-state partnership projects: (1) The multi-state project with Cornell University has expanded into two additional program opportunities for DC teachers, schools and youth under the coordination of our DC AITC component; and (2) the Landscape and Pesticide Training project with the regional EPA and Washington Area Metropolitan Transit Authority.

GOAL I: AN AGRICULTURAL SYSTEM THAT IS HIGHLY COMPETITIVE IN THE GLOBAL ECONOMY

Key Theme: Urban Gardening

- a. Description:** In partnership with University of Maryland, Virginia Tech University and the Washington Metropolitan Transit Authority (WMATA), UDC Cooperative Extension Service coordinated and facilitated a three week Advanced Landscape Training for the WMATA employees. The curriculum included the following topics: pesticide training, basic plant taxonomy and root uptake, plant I.D. turfgrass management, pruning, B & B and container installation methods, and tree and shrub fertilization and care of material for first year of planting.
- b. Impact:** Sixty landscape employees of the Washington Metropolitan Transit Authority WMATA were trained. The training is mandatory for employees who wish to be promoted. WMATA maintains 3,000 acres of land in the Washington Metropolitan area. Master Gardeners completed a final exam and 50 hours of volunteer hours. As an outcome from this last session, 5 of the trainees were promoted to supervisors after receiving certification completion of their 3 week landscape training at WMATA conducted by the UDC CES ENR program. Because of the impact of this training the UDC CES Horticulturalist has been contracted on an annual basis by the WMATA to provide their employees with Advanced Landscape training.
- c. Funding:** Smith-Lever/State Matching Funds/Fee Based Training/Registration Fees

d. **Scope:** State Specific

GOAL IV: GREATER HARMONY BETWEEN AGRICULTURE AND THE ENVIRONMENT

Key Theme: Sustainable Agriculture/AITC

a. Description: In 2004, as part of DC AITC's Kids Growing Food program, students from ten Washington, D.C. schools (see appendix A), grew fruits, herbs, grains, and vegetables in their own gardens on school grounds as a way to understand where food comes from and how it grows. They also participated in additional food systems lessons with new or renewed DC Agriculture in the Classroom partners, including, but not limited to the following activities: setting aside part of the garden to grow crops for the hungry and donating that local produce to local food pantries and soup kitchens, especially Martha's table, via the Plant-a-Row for the hungry program administered by the Garden writers of America; exchanging food growing data and information with students in Ghana who also are growing food at school, via the Internet through the United Nations Food and Agriculture Organization's Growing Connections/EarthBox project. Collaborative plans were made to provide activities that would allow students to prepare garden-grown and fresh-market foods by hands-on demonstrations from renowned Washington, D.C. chefs, as part of the "Days of Taste", sponsored by Institute of Wine and Food. This activity will be implemented during the fall of FY '05.

b. Impact: Approximately 30 teachers and school personnel servicing 1000 plus students, participated in DC Agriculture in the Classroom and Kids Growing Food (DC AITC&KGF) have received professional development training along with gardening and educational materials through the following venues: At workshops teachers received books, posters, activity sheets, videos, seeds, plants, window boxes, rain barrels, EarthBoxes and more. All schools received \$500 from Cornell University as "seed money" to help get the garden started. Plans were made to include each of the ten 2004 DC AITC/KGF schools to take part in the United Nation's Food and Agriculture Organization's The Growing Connection international agriculture program and will receive as many as 3 EarthBox container gardens in FY'05.

It is noteworthy that some of the Washington, D.C. schools involved with Kids Growing Food and the Wellness Learner programs, have been listed as "schools that are in need of improvement" as per the No Child Left Behind Act (<http://www.washingtonpost.com/wp-dyn/articles/A35380-2004Aug2.html>). Both Connecting Kids to the Food System Initiative programs via DC Agriculture in the Classroom offer activities aimed at improving academic improvement. Teachers use the KGF garden as an additional classroom, weaving interdisciplinary curriculum lessons with garden themes. Young students at Seaton Elementary School for example, designed and measured raised beds as a math lesson. Teachers at St. Augustine created school-wide vocabulary lessons with gardening and cooking terms. The science coordinator at the Community Academy Public Charter School taught garden based science lessons.

Fourth-grade students taking part in the Wellness Learner's pilot program at two Washington, DC schools this year, also engaged in both hands-on and academic activities. Prior to a culminating activity that involves students shopping for food in a grocery store, the wellness learner program provides students, teachers and parents with comprehensive lessons in nutrition and

food economics – how and why to buy the most nutritious food within a budget. Resources include a Wellness Learner manual and the latest USDA Food Pyramid and Nutrition charts. Additionally, students receive food vocabulary and learn to read (processed) food labels.

Later, students applied that knowledge by grocery shopping for a hypothetical family of four with a budget of \$100 (see Appendix B). In this year’s Wellness Learner pilot program, involving a total of 75 students, teams of two to three students competed to buy the most nutritious food for the least amount of money. Two local Giant Foods supermarkets generously donated use of their stores, personnel and grocery items to give students an authentic shopping experience. Importantly, all students participated in a thorough post-shopping event interview as part of the Wellness Learner pilot evaluation (see Appendix B).

In summary, in 2004, DC Agriculture in the Classroom continued to broaden UDC/CES’s scope of agricultural and food systems outreach education, serve exiting audiences, reach new audiences and involve new partners. Importantly, DC Agriculture in the Classroom directly impacted more Washington, D.C., K- 12 teachers and students than ever before (at least 30 teachers and school personnel; at least 1,000 students), this furthering a stronger understanding of our local, national and global food and fiber systems within the DC urban community that is served by the University of the District of Columbia/Cooperative Extension Service.

c. Funding: Smith-Lever and Federal/State Grants

d. Scope: State Specific

F. Integrated Research and Extension Activities

GOAL III: A HEALTHY, WELL-NOURISHED POPULATION

Key Theme: Human Nutrition

a. Description: The Agricultural Experiment Station’s human nutrition multi-state research project provided pertinent data which indicated specific behaviors related to food and nutrient intake. Studies have established correlations between specific behavioral constructs and measures of dietary quantities of selected nutrients. Data was collected from a sample of forty (40) male residents of the United States Soldiers and Airmen’s Home in the District of Columbia and from case studies of District of Columbia residents. Subjects were 65 to 82 years of age. Subjects completed surveys of their eating and nutritional habits, including food frequency (particularly fruits and vegetables), portion sizes, attitude, nutritional and dietary knowledge. In addition, case studies involved extensive interviews and observations related to eating behavior and knowledge, as well as overall life style. Findings indicated that food nutrient values and the role of supplements were often poorly recognized by seniors. As a result, many seniors do not consume adequate amounts of nutrients containing foods as recommended by the Food Guide Pyramid and Dietary Guidelines for Americans.

b. Impact: An improved understanding of nutrient requirements and the role of dietary constituents in disease prevention in the elderly has led to an increase in recommendations for some nutrients, especially those contained in fruits and vegetables. Nutritional status profiles have been extrapolated to indicate individuals at risk of Malnutrition. Data and information was shared with members of our technical committee and disseminated to elderly community residents. Studies showed that food choices for elderly adults were determined by tradition and habit as well as food knowledge.

- c. **Funding:** Hatch
- d. **Scope:** Multistate; Integrated Research and Extension

GOAL IV: AN AGRICULTURAL SYSTEM WHICH PROTECTS NATURAL RESOURCES AND THE ENVIRONMENT

Key Theme: Integrated Pest Management in Urban Gardens

a. **Description:** The IR-4 Minor Crop Pesticide Usage is an interregional project in which disease and insect infestation which impact the production of vegetables and ornamentals are monitored and recommendations are made concerning the control of these pests. In coordination with the Sustainable Agriculture project gardeners were informed about the types of pesticides to be used for disease and insect control. The IR-4 project has concentrated on monitoring the use of pesticides among the urban gardeners of the District of Columbia. The project director who is the State Liaison Representative for this northeast regional project attended seminars and meetings throughout the northeast at least twice this past year to gather information on new pesticides and new application techniques for using these pesticides to control vegetable and ornamental crop pests in the Washington Metropolitan area. The information gathered was included in field plot research at the University's Research Farm and also communicated to gardeners through seminars and workshops.

b. **Impact:** Based on the needs of urban and peri-urban gardeners, gardeners gained an increase in knowledge on the use of pesticides, to prevent disease and insect infestation, for growing vegetables and ornamentals without polluting our environment with toxic chemicals. Residents of the District of Columbia and the surrounding Metropolitan area were advised and shown how to use low-input agronomic and horticultural techniques to grow and sustain flowers and vegetables. Additionally, residents were educated in the use of cultural techniques, such as using composted waste as soil amendments, crop rotation and resistant plant varieties, instead of chemicals to control weeds, disease and insects.

- c. **Funding:** Match
- d. **Scope:** Multistate; Integrated Research and Extension

Key theme: Sustainable Agriculture

a. **Description:** Due to the increase in gardening in the District of Columbia, AES has continued to focus on teaching residents low input techniques for growing vegetables and ornamentals in the District of Columbia. More residents have requested soil testing for growing various vegetables and crops. Additionally, teachers participating in the "Ag in the Classroom" program received training in the use of low input techniques such as using cow manure and composted yard waste as soil amendments for growing vegetables and crops in urban areas. These teachers in have developed garden projects in order to educated their students on the principles of sustainable agriculture and generate an interest in gardening in their communities.

b. **Impact:** Several fact sheets were developed and disseminated to citizens of the District of Columbia. In addition, urban gardeners' knowledge was increased through workshops and field trips that focused on the used of sustainable agricultural techniques for growing vegetables and other plants without polluting our environment with toxic chemicals.

- c. **Funding:** USDA Grant; Hatch

- d. **Scope:** Multistate; Integrated Research and Extension

Key Theme: Sustainable Agriculture

a. **Description:** A newly initiated collaborative project between the Agricultural Experiment Station and the Water Resources Research Institute is the “ Effect of Pelletized Poultry Manure on Vegetable Production and Vadose Water Quality”. The Chesapeake Bay Agreement signed by leaders of Delaware, Maryland, Washington, DC and Virginia promises a 40% reduction in the Bay’s nitrogen and phosphorous level by the year 2010. This reduction campaign was initiated particularly because of a **pfeisteria** scare induced by the Bay’s excess phosphorous levels from over application of chemical fertilizer and poultry manure in crop production areas. On a scale of 100, the Bay’s environmental quality was graded as 27, which is extremely low. In fact, this grade did not change from the previous year, regardless of clean up efforts. Poultry manure produced from Delaware, Maryland, and Virginia (DELMARVA) poultry industries is still applied on farmland along with chemical fertilizer for crop production. However, a significant amount of unused manure is stored for future usage or remains to be disposed. Perdue AgriRecycle, Inc. cleaned, sterilized, and pelletized poultry manure for easy handling and movement in crop and vegetable production. This material has been analyzed for nutrient content; however, not much data is available to demonstrate it’s effectiveness in crop and vegetable production as well as its effect on ground water quality or **pfeisteria** proliferation. This project was designed to determine the effectiveness of pelletized

poultry manure as a soil amendment in vegetable production and its potential effect on DC water resources and to enhance the use of sustainable agricultural techniques by incorporating poultry waste as a soil amendment for growing plants.

b. **Impact:** Residents in Washington, DC grow vegetables in their backyards and could potentially use this material as a soil amendment. Use of palletized poultry manure could help keep our water resources clean by recycling animal waste as a soil amendment. This could also help the District of Columbia meet its commitment to help clean up the Chesapeake Bay by developing cultural techniques that will allow gardeners to use poultry manure without causing nutrients like nitrogen and phosphorous to leach into our waterways. Information generated will be used for extension and outreach to benefit the residents of Washington Metropolitan area.

c. **Funding:** Hatch and US Geological Survey

d. **Scope:** Multistate; Integrated Research; Water Resources Research Institute

FY 2004 Civil Rights Accomplishment Report

Equal Employment Opportunity

Equal Employment Opportunity continues to be a priority of the Agricultural Experiment Station (AES) and the Cooperative Extension Service (CES) at the University of the District of Columbia. Two additional CES program staff was hired: one full-time Ethiopian female Extension Agent in Environment and Natural Resources for water resources, and one part-time Black female Research Assistance for the development of child development/human relations curriculum and marketing resources with Family and Consumer Sciences. Also, several student interns were hired to expand the resources and programming efforts of our CES educational offerings. AES hired one African-American female any staff member. Staff members are hired based on their qualifications, which are the established employment personnel practice. All employees participated in a systematic annual performance appraisal process.

Staff Development

AES and CES recognize the importance of staff development and training skills as it relates to improving staff performance. AES has at least two Staff Development meetings each year to reinforce customer service skills, re-establish good working relationships with one another and improve our outreach services. Through our Performance Appraisal AES/CES staff members are given the opportunity to identify areas of training that would be beneficial to their growth and development. This results in staff receiving both formal and informal training. CES staff was continually given the opportunity to enroll in courses at the University, one of whom has completed his MBA. All CES program and support staff was offered the opportunity to attend staff development sessions during FY 2004. Members of the AES/CES staff received Civil Rights training during this reporting period.. Most of our CES staff has received the newly instituted DC procurement "PASS" electronic processing training. Other training included: Dietary Managers Association Conference, Health Disparities in the Minority Community conference at Bowie State University. "Introduction to Food Safety" course at Michigan State University, District of Columbia Association of Family and Consumer Sciences American Association of Family and Consumer Sciences, and IRS-VITA Certification Training to be trained to prepare income taxes for our low-income customers. Staffs on all levels attended at least one training session during this reporting period. Members of the CES staff received Civil Rights Compliance training and review in FY'04.

Program Delivery

Program delivery methods still serve the at-risk and underserved residents of the District of Columbia. Program activities and projects are delivered through more than 300 partnerships and collaborations with various organizations, agencies and businesses. AES expanded their partnerships to now include ROOT, Inc. (Reaching Out to Others Together, Incorporated), the Sierra Club, the Washington East Foundation, Department of Health, Environmental Health Administration, Chesapeake Bay Foundation, Casey Trees and Living Classroom.

The DC READS program recruited, hired and trained five new Hispanic tutors to work in the program and, a Hispanic student was the senior tutor at one of our sites. We also had brochures and registration forms printed in Spanish. A student was hired to work with a Hispanic team in the LifeSmarts program.

Some of CES' partners include, Community and Religious based groups, D.C. Housing and Finance, National Cooperatives Association, TEAM After-School- program, The D.C. Chinese Center, regional and local Americorp, National Arboretum, The National Zoo, the Cornell University, D.C. Public Schools, United Planning Organizations, Project Harvest, Deaf Reach, National Consumer League, AARP, Non-commercial food service providers, Employer sites, Day Care Centers, Food Service Industry, Latin American Youth Association, and Asian American Youth Association.

Special needs groups such as the homeless, diabetics and ethnic minorities have been served through the ethnic minorities congregate at certain sites and locations. Every effort is made to reach them at these sites.

CES CRED made special efforts to reach underserved groups in the District of Columbia by participating with the Hispanic and Korean Council. With the Hispanic/Latino group the Unit assisted with the DC Government/ Hispanic festival, which brought out 15,000 and with the DC Department of Employment Services CRED work with the Council on the issues of local jobs for neighborhood members. With IRS-VITA ,CRED passed out income tax information in 7 languages and had a series of program information produced in Spanish.

The Pest Management and Public Health program is delivered to house-holds that are referred to us by the DC Asthma Coalition and community groups.

This year the 4-H/Youth Development Program sought to include youth and adult partners from each of the 8 wards of the city. In Wards 6, 7, and 8 there are particularly depressed areas which are purposefully included in our program delivery. We further sought through referrals, to reach a variety of ethnic groups as well as youth with diverse backgrounds, which was achieved with the initiation of 4-H clubs in the District of Columbia Public School System. Two such examples are found in John Eaton Elementary School and Roosevelt Senior High School clubs in wards 3 and 4 respectively. Both schools have a large percentage of students of varying ethnic backgrounds to include, but are not limited to: Hispanics, African, West Indian, and Caucasian students.

CES Programs and activities are delivered in health clinics, churches, shelters, senior residence facilities, community sites, on-campus University facilities, detention centers, public/private/charter schools, recreation facilities, police precincts, and libraries to name a few. Educational programs, activities and research projects are provided through workshops, seminars, conferences, demonstration, skills laboratories, health assessment facilities, conference calls, e-mails, site assessments individual and small group consultations, print and electronic means, one-on-one contacts, in person or by telephone

AES's Water Environment Studies In Schools (WESS) has engaged over one hundred and twenty

(120) public school teachers from the D.C. Public schools in 10-day Teacher Training Institutes. The program provided “hands-on” educational approach that engaged university professors, public school teachers in the development of environmental educational modules according to the performance standards of the DC Public School system. The teaching modules were used in their classroom teaching activities.

The Adopt-A-Block program continues to be a very effective program in AES. The program has been expanded its partnership with Casey Trees, the Sierra Club, the Washington East Foundation, Living Classroom, Chesapeake Bay Foundation and the Department of Health, Environmental Health Administration. Four new environmental education modules were designed for teachers to incorporate in their classroom teaching activities This program has been established in ten (10) DC Public Schools located in Wards 7 and 8. An Environmental Education Summit is being planned for the spring of FY 2005. Students continue to maintain their projects for establishing and maintaining aesthetic school grounds, local neighborhood and selected community sites in Wards 7 and 8.

AES/CES are in the process of establishing an after school literacy program in several schools in Wards 7 and 8. This program will be teaching reading, math, and science from an environmental perspective.

Public Notification

Public Notification remains one of Agricultural Experiment Station’s and Cooperative Extension’s (AEA/CES) strongest Civil Rights elements. We have made numerous special efforts to assure that our clientele are informed of our activities, programs and research projects. CES published a Quarterly newsletter that was distributed throughout the Washington area. Special targeted groups and audiences were personally contacted, and informed about our programs, activities and research projects, and encouraged to participate. Pesticide Programs and activities are publicized though the DOH applicator mailing list and announcements in professional newsletters We continued to utilize brochures, flyers, posters, newsletters, press releases, public service announcements, radio, public/private/cable television, and written materials that were translated for our Hispanic and Asian communities. A variety of materials were posted in schools, doctor’s offices, clinics, and libraries as well as e-mailed to various organizations and agencies.

The Agricultural Experiment Station produce newsletters, fact sheets, reports and INFODOC (Information Document) publications that extend information to the general public regarding our research, investigative activities, educational and training activities and outreach.

Some CES programs and activities were publicized on channel 19 (the local cable network), the Cooperative Extension Service Newsletter and the internet via the National LifeSmarts Webpage as well as civic associations newsletters. A parade was held in North East Washington along 46th and Sheriff Road to announce the coming of the DC Reads program in the community. The children that attend the Randall Memorial United Methodist Church participated.

CRED reached over 25,000 district households, 1200 organizations and over 100,000 nationally through collaborative groups, PBS listings, memberships outreach, mass mailing and community fairs and educational events.

Whenever possible, educational and informational material is provided in the appropriate language, and/or interpreters are made available.

Equal opportunity and non-discrimination statements were placed on all educational materials released to the public. All programs, activities and research projects continue to be conducted in barrier free buildings at a variety of locations throughout the city in an effort to accommodate clientele with physical limitations.

Our diverse audiences and special interest clientele still include limited resource audience, youth at risk, underrepresented, single mothers, homeless women and men, and Asian and Hispanic residents. Additionally, several publications were issued through mass mailings.

The USDA poster, "...And Justice For All," remains prominently displayed in all offices and facilities used by the Agricultural Experiment Station and Cooperative Extension Service.

Civil Rights Training

Civil Rights training was conducted on May 27, 2004. The following agenda items were the focus of the training:

- Program Outreach
- Program Delivery Laws and Purpose
- Sexual Harassment
- American Disability Act Compliance

Civil Rights Training is part of the On-site Civil Rights Compliance Reviews, and is mandatory for AES/CES staff.

On-Site Civil Rights Compliance Reviews

An On-Site Compliance Civil Rights Compliance Review was conducted with the staffs of the Cooperative Extension Service June 7 – 8, 2004. The purpose of the review was to determine the extent in which Extension and Research programs were in compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendment of 1982, and other applicable Civil Rights rules and regulations.

In addition, office records, statistical data, including potential and actual participation in programs; plans of work, annual reports; membership and attendance records; planning process; collection and use of racial participation data; office facilities and arrangements; and staff training opportunities and other related management procedures were examined.

The results of the Review were as follows:

- Staffs used variety of mass media outlets, i.e., radio, TV and newspaper announcements to promote Extension activities.
- Staffs were familiar with the applicable civil rights laws, rules, regulations and instructions.
- Staffs have knowledge of the program and employment complaint procedures and are adequately informing staff leaders, customers, organizations, agencies and the general public on the correct procedures to follow for filing program and/or employment complaints.
- Staffs were given opportunity to participate in staff development and training opportunities in accordance with their work assignments.
- Planning committees have balanced membership based on race, national origin and gender.
- Mailing lists included racial/ethnic minorities and both sexes.
- Office space and related facilities were assigned to all staff on a nondiscriminatory basis.
- Appropriate actions have been taken to eliminate barriers for people with disabilities, and programs meet requirements for physical accessibility for mobility impaired customers.
- Staff used the proper procedures to determine if private groups and organizations that require extension services were in compliance with EEO regulations before services were rendered by Extension staff.

Deficiencies Found:

- Staffs were not adequately using the CES “Enrollment/Attendance Record” and determining the race and sex of the customers served.
- Not all staffs were using mailing lists showing that they were using all reasonable efforts to include all potential customers.
- Some staffs were not purging mailing lists annually.
- Some educational materials needed to be translated into other languages for potential customers.

Actions Taken:

- Staff were given sufficient time to correct CES “Enrollment/Attendance Record” and submit to the reviewer for clearance.
- Mailing lists were examined on a regular basis to determined if reasonable efforts were use to include all potential customers.

- Mailing lists were examined on a regular basis to determine if staffs were purging mailing lists.
- A recommendation was given to CES Administration informing them that translators needed to be employed and or staff needed training in speaking other languages, especially Spanish.

District of Columbia – University of the District of Columbia-1862

Clientele Contacts by Racial-Ethnic Group

Group	White not of Hispanic Origin	Black not of Hispanic Origin	Native American/Alaskan	Hispanic	Asian or Pacific Islander	Total
2000-2004 Projected	(145,014) 27.0%	(327,081) 61.0%	(998) 1.0 %	(43,332) 8.0%	(17,503) 3.0%	(533,928) 100%
2003 Actual	(5,678) 20.5%	(19,425) 70.1%	(64) 0.2%	(1,900) 6.9%	(629) 2.3%	(27,698) 100%

Clientele Contacts by Gender

Gender/Year	Male	Female	Total
2000-2004 Projected	(213,571) 40%	(320,357) 60%	(533,928) 100%
2003 Actual	(10,474) 37.8%	(17,218) 62.2%	(27,696) 100%

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**MULTISTATE EXTENSION ACTIVITIES AND
INTEGRATED ACTIVITIES
Appendix C**

Appendix C

**U.S. Department of Agriculture
 Cooperative State Research, Education, and Extension Service
 Supplement to the Annual Report of Accomplishments and Results
 Multistate Extension Activities and Integrated Activities
 (Attach Brief Summaries)**

Institution UNIVERSITY OF THE DISTRICT OF COLUMBIA
 State WASHINGTON, D.C.

Check one: Multistate Extension Activities
 Integrated Activities (Hatch Act Funds)
 Integrated Activities (Smith-Lever Act Funds)

Actual Expenditures

Title of Planned Program/Activity	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<u>Nutritional Risk and Antioxidant Status In the Elderly</u>	_____	_____	_____	_____	<u>80,000</u>
<u>Sustainable Agriculture</u>	_____	_____	_____	_____	<u>15,000</u>
<u>Muirkirk Farm Project</u>	_____	_____	_____	_____	<u>30,000</u>
<u>General Administration</u>	_____	_____	_____	_____	<u>10,000</u>
<u>Adopt-A-Block Life Science Project</u>	_____	_____	_____	_____	<u>15,000</u>
<u>Integrated Pest Management</u>	_____	_____	_____	_____	<u>5,000</u>
<u>Urban Gardening</u>	_____	_____	_____	_____	<u>5,000</u>
<u>Pelletized Poultry Manure Project</u>	_____	_____	_____	_____	<u>7,000</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
Total	_____	_____	_____	_____	<u>167,000</u>

 Director

 Date

Appendix C

**U.S. Department of Agriculture
 Cooperative State Research, Education, and Extension Service
 Supplement to the Annual Report of Accomplishments and Results
 Multistate Extension Activities and Integrated Activities
 (Attach Brief Summaries)**

Institution UNIVERSITY OF THE DISTRICT OF COLUMBIA
 State WASHINGTON, D.C.

Check one: Multistate Extension Activities
 Integrated Activities (Hatch Act Funds)
 Integrated Activities (Smith-Lever Act Funds)

Title of Planned Program/Activity	Actual Expenditures				
	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<u>Integrated Pest Management/FCS/HEP</u>	_____	_____	_____	_____	<u>24,839</u>
<u>Ag In the Classroom Programs/AES/FCS</u>	_____	_____	_____	_____	<u>5,000</u>
_____	_____	_____	_____	_____	-
_____	_____	_____	_____	_____	-
_____	_____	_____	_____	_____	-
_____	_____	_____	_____	_____	-
_____	_____	_____	_____	_____	-
_____	_____	_____	_____	_____	-
_____	_____	_____	_____	_____	-
_____	_____	_____	_____	_____	-
Total	_____	_____	_____	_____	<u>29,839</u>

 Director

 Date