

GEORGIA STATE-WIDE HOME COMPOSTING PROJECT

Dr. Wayne McLaurin - Professor, University of Georgia
Dr. Gary Wade - Professor, University of Georgia
Dr. Horace Hudson - Professor, University of Georgia
Mr. Leamon Scott - Georgia Department of Community Affairs
Ms. Lynn Cobb - Georgia Department of Community Affairs

Landscape trimming constitutes 20% of Georgia's waste stream each year, amounting to 1 million tons of material and costing the taxpayers \$90,000,000 for disposal. The 1990 Georgia Solid Waste Management Law mandated a 25% reduction in all materials going into Georgia landfills by 1996. Moreover, landscape trimmings were banned from all Georgia landfills in 1996. Public officials and consumers needed an efficient and economical means for dealing with the escalating environmental problem and for meeting the requirements of the new state law which mandated

1. The separation of yard trimmings and solid waste.
2. A ban on the disposal of yard trimmings at waste facilities.
3. The sorting and composting of yard trimmings.

The Georgia Cooperative Extension Service had long been an advocate of waste reduction through composting and had developed educational composting materials. In response to the passage of the bill and to the national CES Waste Management initiative these materials were expanded. As a result of these materials, we obtained a grant from the Georgia Department of Community Affairs (DCA) and the Environmental Protection Division (EPD). With this grant we wrote The Georgia Home Composter Handbook and along with the DCA developed the first statewide home composting training program in the United States.

Due to the tremendous amount of yard waste being generated and the need to keep the yard trash off the curb, the Department of Community Affairs initiated the statewide Home Composting Program. A grant from the EPA was the kickoff for conducting the statewide program and for providing educational materials for each participant. The University of Georgia became involved in putting together educational materials for the workshops.

PERSONNEL

This project involved three state specialists from the Cooperative Extension Service, who provided educational implementation and scientific support; personnel from the state Georgia Department of Community Affairs, who sponsored the program and selected the demonstration sites; state and local members of the Georgia Clean and Beautiful Commission, who assisted in site selection and coordination, and the Environmental Protection Agency, which provided funding. Meeting participants were community leaders, interested citizens, and city and county officials.

MATERIALS

The Home Composter Handbook, a comprehensive 152-page reference manual on the science of composting provided a key component of this statewide educational program. The Home Composter Handbook was published in 1992 and, due to demand, the second and third editions were published in 1993. The Handbook was designed so that each chapter stood alone and sections could be easily removed for reprinting and newspaper publication as well as for Master Composter presentations. The handbook has been adopted by the Department of Community Affairs as the official composting guide for local governments in Georgia.

Another informational bulletin used was Composting and Mulching - A Guide to Managing Organic Landscape Refuse, Circular 816, University of Georgia Cooperative Extension Service Publication.

Also, each site selected received a set of laminated posters titled *What's In Our Garbage?*, *Best Ever Compost*, and *How Does Composting Work?*. Small scale models of three composting structures were given each site (barrel composter, wire bin, and turning unit). The Home Composting Handbook was available for each participant and was sent to each county Extension office in the state. A slide set *Recycling Organic Landscape Refuse* was also given each site, as well as copies of the following one-page, three-fold handouts:

Composting - Feed Your Landscape - Not the Landfill, U of Ga CES MP426 Mulching - Feed Your Landscape - Not the Landfill, U of Ga CES MP438
Grasscycling-Feed Your Landscape - Not the Landfill, U of Ga CES MP427

Each site received camera-ready copies of these three handouts for duplication purposes. The handouts were designed to permit application of local logos. To date over 300,000 of these handouts have been printed.

PROGRAM

In 1992, the Cooperative Extension Service and the Georgia Department of Community Affairs (DCA) teamed up to develop a statewide train-the-trainer program on horticultural waste recycling and curbside waste reduction.

The Extension/DCA team established three goals for the program:

1. To educate residents about the problems associated with solid waste disposal.
2. To encourage individual actions to reduce curbside waste.
3. To establish a network of community-based education programs on horticultural waste recycling.

As part of the CES response to its national mandate and to the state Solid Waste Act, training meetings were originally conducted at 10 locations throughout Georgia and expanded to more sites later. In conjunction with these meetings permanent Home Composting Demonstration Sites were constructed that still serve as visual displays to aid composting efforts in these communities. The Department of Community Affairs gave each composting site a grant of \$2,000.00 and encouraged the recipients to design the site to the best advantage for educational use. The only stipulation was that it be a walk through display with sufficient bins and appropriate signage for maximum educational effect.

The training program was conducted through workshops designed to give home composting instruction to selected community residents who would in turn train others with the knowledge they received.

METHODS

These meetings were held at designated locations throughout the state. At each of these locations a permanent outdoor composting demonstration display had been set up; each display included various types of bins and compostable materials and offered a self-guided tour with the appropriate signage at each stop.

The instructional effort involved using these outdoor displays as well as handouts, slide sets, videos, posters, hands-on demonstrations, and lectures. The demonstration team gave presentations designed to acquaint participants with the amount of organically-generated compostable waste that currently goes into the landfills and the simple, "fail-safe" procedures they could use to turn this waste into an effective mulch/soil amendment for personal and community use.

During the full day's training program attendees learned about training volunteers, involving the community, selling the idea to and obtaining support from community officials, mulching, grasscycling, planning and implementing composting systems, buying or building compost structures, selecting waste materials (what and what not to compost), identifying basic biological composting processes in both aerobic and anaerobic composting, and acquiring

further composting information. In addition, time was spent visiting and becoming familiar with the composting site.

During the meetings the demonstration team discussed with those present composting techniques developed for home owners. Team members also covered the basic biological processes in both aerobic and anaerobic composting including bacterial, fungal, and other organisms involved in the decomposition of organic materials, the effect of moisture and temperature, and the selection of waste materials that can be incorporated into home composting. Also, the demonstration team offered participants information on ways to involve the community and individuals within the community in the implementation of home composting.

Directed especially to city/county officials present was information about the impact on waste reduction that could be made by full-scale participation in a home composting initiative.

RESULTS

In total, the program created ninety-four permanent composting demonstration sites throughout Georgia. These demonstration sites are now being used by the surrounding communities as teaching sites for the training of additional composting volunteers. To date, over 900 persons have been trained in home composting, as well as techniques and systems for relaying this information to others. Government officials have quickly endorsed this program because it is simple, cost effective, and sound. Mr. Jim Higdon, Commissioner, Georgia Department of Community Affairs, said "With your help, we have laid the foundation for a program which is sure to have a significant and positive impact on Georgia's solid waste stream".

USE

The Georgia Home Composting Program is currently being used as a model in 22 states that have requested the program, materials, and information. Additionally, the home composting program was awarded a Certificate of Environmental Achievement by The National Environmental Awards Council citing it "as a model of environmental excellence". The Program was recognized in the fourth edition of the Renew America Environmental Success Index as an outstanding educational program. The Georgia Home Composting Program has been recognized by Biocycle, Resource Recycling, Solid Waste and Power, Alternatives, and Composting News magazines as the first state-wide home composting program in the nation. According to Leamon Scott, Director of the Governmental Management Division, Georgia Department of Community Affairs, "National publicity generated by the program has led to the distribution of information and materials to a multitude of agencies and individuals in other states".

According to Robin Mitchell, Solid Waste Officer of the United States Environmental Protection Agency, The Home Composter Handbook has been adopted by the EPA for use in its programs and has been made a reference in the Solid Waste Information Clearinghouse as well as EPA Headquarters in Washington, D. C. In addition, it is listed in EPA's Grant Output Directory as exemplary of current materials on home composting.

There is a continuing effort to meet the needs of the counties and municipalities concerning their composting projects. Since the project was completed, there has been over 75 additional composting meetings held in various counties and towns throughout Georgia. In addition, 11 training sessions for county agents and school personnel and 57 invited lectures have been requested of the Extension staff. The Extension staff will be working with the county agents and the Department of Community Affairs to continue conducting compost informational meetings as needed.