

# HOME COMPOST EDUCATION REPORT 2002-03

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**This is a report of activities for the second year (July 1, 2002 to June 30, 2003) of the three-year contract from July 1, 2001 to June 30, 2004**

## **Program Goal and Contracted Tasks**

To reduce landfill inputs by teaching home composting through volunteer Master Gardeners (MG) at public events, schools, community gatherings, resource desks, and workshops.

- Provide home composting information via direct contact with 5,000-10,000 county residents at selected major public events such as the Sonoma County Fair, Harvest Fair, Home and Landscape Shows, Herb Festival, Citrus Fair, Sonoma-Marin Fair, Celtic Festival, etc. where large numbers of people are gathered.
- Distribute 10,000 educational brochures at the above events.
- Provide outdoor hands-on workshops at demonstration sites when significant audiences can be guaranteed.
- Provide 30-50 school classroom presentations plus worm composting materials for students and teachers to divert school waste and to effect behavioral change in students.
- Provide a resource desk and phone line to answer composting questions 5 days per week and 4-6 hours per day.
- Collect names of home composters to conduct a survey in 02-03 and 03-04 on composting habits and information on their sources of composting information.
- Estimate landfill tonnage diversion based on survey data from 1994-97 and the number of people receiving composting information in 2000-01

## Background

Since 1993, the University of California Cooperative Extension (UCCE) has provided compost education for county residents with funding from the Sonoma County Waste Management Agency (SCWMA).

In the last nine years, the program reached 124,331 residents with composting brochures, bin distribution programs, educational booths at large public events, library talks, farmers



market booths, seminars, and by providing a resource desk for call-in questions in Santa Rosa and Sonoma. Each year large numbers of people have been reached by concentrating efforts at educational booths at well-attended public events. Additionally last year, 2,017 children were contacted as students at school classroom presentations (25-30 students per class). Exact contact numbers are not kept for school educational programs nor are the numbers of students counted toward the waste diversion estimates.

Since its inception, the program reached 3,105 residents through compost workshops and clinics. These are in-depth instructional seminars where the participants spend considerable time (1-2 hours) learning about composting and in some cases, making a compost pile. In 2001-02, 349 people were taught through workshops, even though we have not focused on this educational method. Through this contact method (1994-97 & 2001-2002) we developed a

database of participants for survey purposes.

Three years of survey results (1994-97) documenting home composting by trained workshop and educational event participants provide the benchmark for tonnage diversion. Almost 70% of workshop contacts began or increased composting and reduced their input into the waste stream by 19.5 gallons per household per month. Home composters names and addresses were gathered this last year and will be gathered in FY's 02-03 and 03-04 to update the survey data benchmark for tonnage diversion.

The Compost Education Program is operated primarily by volunteers. The budget reflects maintenance of current educational efforts and a focus on expanding contacts beyond workshops and clinics due to diminishing attendance at workshop sites.



**Table 1. Master Gardener Program Home Composting Education at Large Events, Community Gatherings, and Workshops**

EVENT	DATE	# OF CONTACTS
Sonoma Co. Fair booth & demo garden	7-23 to 8-5 (14 days)	8,867
SRJC Herb Festival	9-21	218
Sebastopol Celtic Festival	9-28 & 29 (2 days)	57
Sonoma County Harvest Fair	10-4 to 10-6 (3days)	612
Petaluma Library Classes	2-1 & 2-8 (2 days)	126
Guerneville Library Classes	3-8 & 3-10 (2 days)	27
Spring Home & Garden Show	3-14, 15, 16 (3 days)	528
Petaluma Community Garden demo	4-12	36
CA Nat.Plant So. Wildflower Festival	5-10	128
Petaluma Art & Garden Festival	6-8	270
Seb Farmers Market Earth Day	6-22	103
<b>TOTAL</b>	<b>31 Event Days</b>	<b>10,972</b>

**Other Educational Events**

The Master Gardeners presented information on composting at 232 small-scale events throughout the year. They distributed brochures, made short presentations on home composting and worm composting, and answered questions about starting a home compost pile for 1,212 people (584 at farmers markets and 628 at library series classes). The event dates and contact numbers are listed in Tables 2 and 3. The farmers markets have booths where Master Gardeners provide information on plant culture, pest control and composting. The library series events focus on a specific gardening topic and include information and handouts on home composting. Some of the library series talks specifically focus on composting or worm composting



**Table 2. Master Gardener Program Home Composting Education Program Contacts at Farmers Markets**

EVENT	DATE	# PEOPLE CONTACTED
22 Healdsburg Farmers Mkts.	May through September	75
31 Sebastopol Farmers Mkts.	May through November	89
82 Sonoma Farmers Mkts.	April - Oct. & Fridays all year	124
22 Santa Rosa Farmers Mkts.	May through Sept.	90
30 Windsor Farmers Mkts.	March through October	61
26 Petaluma Farmers Mkts.	May through October	145
<b>TOTAL FARMERS MARKET CONTACTS</b>		<b>584</b>

**Table 3. Master Gardener Program Home Composting Education Program Contacts at Library Series Talks**

Petaluma Library Series	163
Sonoma Library Series	92
Guerneville Library Series	76
Healdsburg Library Series	106
Windsor Library Series	66
Santa Rosa Library Series	125
<b>TOTAL LIBRARY SERIES CONTACTS</b>	<b>628</b>

**Table 4. Master Gardener School Presentations**

**School Presentations**

Master Gardeners made 46 school presentations in classrooms of 25 - 30 students; a total of 2,017 students (K-12) were contacted. The demonstrations were for the length of a normal class period. They were done to develop an environmental awareness and to encourage the recycling of organic waste products from the classroom and school. Most presentations included the establishment of a worm box in the classroom. Fliers were sent home with students to encourage parents to compost and recycle. See table 4 for a list of schools and presentation dates.



SCHOOL	DATE
1 @ The Camp School	7-16
1 @ Green Acres School	8-5
2 @ Env. Discover Center	9-4
1 @ Forestville School	9-27
1 @ Oak Grove School	10-8
2 @ Mountain Shadows	10-9
1 @ Sun Ridge Charter School	10-11
1 @ Lincoln Junior High	10-17
3 @ Healdsburg Junior High	10-30
1 @ Olivet School	11-7
1 @ Analy Pre-school	11-8
3 @ Lincoln School	11-12
2 @ Willowside Middle School	11-13
3 @ Valley Vista School	11-18
2 @ Mary Collins School	11-25
1 @ Cloverdale High School	12-10
1 @ Occidental Arts and Ecol. Ctr.	3-1
2 @ Lincoln Headstart	3-14
1 @ Grant School – Petaluma	3-20
1 @ St. Johns School	4-1
3 @ Oak Grove	4-4
1 @ The Wright Place	4-7
2 @ Kawana School	4-14
1 @ New Horizons	4-14
3 @ Penngrove School	4-15
1 @ Santa Rosa Coop	4-29
1 @ Santa Rosa Headstart	4-30
1 @ Mark West School	5-5
2 @ Golden Circle of Friends	5-7 & 8
<b>46 Presentations at 28 Schools</b>	

## **Educational Brochures**

The Master Gardeners printed and distributed 10,000 copies of educational brochures about home composting at events, workshops, and schools presentations. Master Gardeners developed all of the educational brochures, other than the Shepherd's Guide, Worm Digest, and Composting Matters.

- *More Hints for Composting*
- *Composting Matters Activity Book*
- *Recycling Tips For Gardeners*
- *Abono Natural (Home Composting in Spanish)*
- *Worm Composting*
- *Home Composting In Sonoma County*
- *Shephard's Home Composting Guide*
- *Worm Digest*
- *Putting Worms To Work And Keeping Them Happy*



## **Resource Desk**

The Master Gardeners maintain a phone answering service for gardening questions in both Santa Rosa and Sonoma five days per week. Trained Master Gardeners answered questions related to home composting from 375 people and sent many of those people an appropriate handout on home composting. These contacts, with name and address, are a potential source of feedback from our postcard survey on behavioral change in handling compostable materials in the home landscape and for dealing with organic kitchen waste.

## **Conclusions & Recommendations**

This last fiscal year, 2002-2003, was the second year in a 3-year contract. The home composting program has been teaching backyard composting to homeowners, apartment dwellers, and school children for ten years. Every year we evaluate the program and make changes to meet the goal of reaching the largest number of people in the least time consuming and most rewarding ways for the participants and the Master Gardener volunteer trainers. The group is committed to including composting information as an essential part of gardening. Last year 18 Master Gardeners participated in the home compost educational effort as trainers and made 14,531 total contacts:

- Major Events and Workshops– 10,927
- Farmers Markets and Library Series – 1,212
  - School children – 2,017
  - Phone Desk - 375

Home composting education has become an integral part of the Master Gardener program and the volunteers are committed to it. A composting curriculum has been added to the core-training program for all new Master Gardeners, new trainers are added each year, good publications and handouts have been developed, and there is timely coordination of activities. The Master Gardeners are proud of the success of the home composting program. If the Sonoma County Waste Management Agency continues to fund the program for coordination support, it could continue indefinitely.

A concentration of efforts toward providing information at events where there are already people present has greatly increased our numbers of contacts the last few years. Many of those contacts are made during short conversations at Master Gardener educational booths, especially the demonstration garden at the Sonoma County Fair. Attendance was excellent at well-publicized workshops and composting demonstrations, which were targeted toward new gardeners at library series courses. These participants are new to composting, as they are new to gardening in many cases. It is a large audience. Making home composting an integral part of home gardening should create a whole population of gardeners that integrate composting in with their everyday gardening activities. These well-attended demonstrations are a continuation of similar events conducted last year where short workshop presentations are accompanied with good handouts on home composting.

### **Summary of Project Failures**

We need to fulfill the commitment to conduct a survey of people who have received information from the UC Master Gardener home composting program, primarily from mini presentations and handouts. We want to do this in order to determine if our efforts are encouraging people to start composting and ultimately reducing their input of materials into the landfill. We did not get the composting survey sent out to people who had received information about home composting. The delay was due to a new policy requirement by the University to have all research dealing with human subjects go through a review process. This took several months, was beyond our control, and was a new requirement for which we had received no prior warning.

### **Future Considerations for the Project**

We will have the completed survey ready to send out in the fall of 2003 and spring of 2004. It is a postcard sized survey questionnaire that was developed in conjunction with the Sonoma County Waste Management Agency. Contact numbers and some names and addresses were collected to conduct the survey. It will help shape our future educational program structure and update the 1994-97 survey statistics used to estimate landfill diversion.

Our recommendation is to continue the countywide home compost education program delivered through the University of California Cooperative Extension volunteer Master Gardeners. The program is flexible enough to include special efforts and new ideas for increasing the numbers of contacts or improving the volume of materials diverted from the waste stream. The focus should continue to be to provide short presentations and handout

materials to county residents and encourage home composting and reduction of compostable materials entering the landfill, plus the side effect of increasing overall awareness of the waste stream.

In order to continue reaching large numbers of people, booths will continue to be set up at appropriate events to inform people about home composting. It is more efficient to go where the people are rather than try to attract them to an event to teach them how to compost. We have determined that information delivered in short talks accompanied by handouts reach the largest numbers of people.

We continue to teach a few traditional workshops that are stand-alone programs, which demonstrate home composting with hands on methodology. When only a few of these are done each year, if they are well publicized, and when they are held at easily accessible locations, they have been fairly well attended. There are a couple of Master Gardener compost trainers that are willing to continue to teach them if an audience can be generated. Other venues of information delivery such as school community gatherings have also been successful and will be explored more for presentations where adults and students interact and where Master Gardener volunteers can deliver a home composting workshop.

Continuation of training sessions in school classrooms is recommended. Sending information materials home with school children should encourage parent participation. It might be necessary, at some point, to gather information from school children that have attended one of the school presentations to determine their knowledge of home or vermicomposting. Potential behavioral changes would be determined and if any changes have occurred at home, due to the information presented.

This next year's budget will provide for printing of essential educational materials and operating supplies. The part-time program coordinator position is essential in providing the volunteer training, support, and supervision to conduct the program. Some funds had to be diverted from supplies and expenses to pay for increased benefits costs for the program coordinator. This is a UC position and last year their benefits program changed, which increased our personnel costs.

Continuation of this project will maintain the backyard compost diversion effort by county residents and fill the need for information about home composting. This project will continue to serve as a model for other counties interested in the reduction of their waste stream.



## Tonnage Diversion Estimates

The home composting program had direct contact with 12,514 people in FY 2002-03 at eleven large events (31 days); 206 farmers markets, workshops, and library presentations. The home compost education program also distributed 10,000 composting brochures through educational booths, the Master Gardener desk, and through school presentations (2,017 youth). Total contacts for the year were 14,531. Calculations for the tonnage diversion estimates are based on direct adult contacts only.

University of California surveys in FY's 1994-95, 1995-96, and 1996-97 strongly indicated that close to 70% of the people contacted started or increased home composting. On the average they reduced their garbage input of kitchen scraps by 2.5 gallons / household / month and yard waste by 13.2 gallons / household / month. In FY 1996-97 surveyed home composters also indicated that they diverted 37.3 gallons per month from the curbside organic waste pick up program due to home composting. Based on these figures the diversion increase for FY 2002-03 due to the addition of new home composters was:

- 12,514 people X 70% = 8,760 beginning or increasing home composting
- **Kitchen scraps\*** diverted = 63.5 tons per month = 762.1 tons per year = 1,301.6 cubic yards per year
- **Yard waste\*** diverted = 242.8 tons per month = 2,913.9 tons per year = 6,827.5 cubic yards per year
- **Curbside pick-up** diverted = 686.2 tons per month = 8,234.0 tons per year = 19,419.9 cubic yards per year.
- **TOTAL DIVERTED = 11,910.0 tons per year = 27,594 yd<sup>3</sup> per year**

*\* Weight and volume calculations for kitchen scraps are based on 70% moisture (5.8 lbs./gallon)(1,171 lbs./yd<sup>3</sup>). Weight and volume calculations for yard waste are based on 50% moisture (4.2 lbs./gallon)(848 lbs./yd<sup>3</sup>).*

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