

The Georgia Master Composter Program: Increasing Small-Scale Waste Reduction and Education

Abstract

The Georgia Master Composter Program is both an adult environmental education course and an Extension volunteer program addressing the growing demand for composting education across the state of Georgia. The 9-week program includes lectures by experts, hands-on learning, and field trips and differs from traditional master Extension programs because of the rigor of its hands-on component. Through collaboration with statewide organizations, program coordinators provide participants with current and scientifically accurate composting information. Upon course completion, volunteers share composting knowledge by volunteering in the community through an annual commitment. Participants widen the efforts of University of Georgia Extension, fulfilling composting education requests and fostering relationships with diverse community groups.

Keywords: [composting](#), [waste reduction](#), [organic waste](#), [environmental education](#), [Extension volunteer](#)

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There is a lack of knowledge among the public concerning food waste prevention, diversion, and management programs (Thyberg & Tonjes, 2016). Across the United States, local and state governments are identifying waste reduction opportunities (Levis, Barlaz, Themelis, & Ulloa, 2010). These opportunities often include recycling and composting, both of which have the ability to extend the life span of landfills through the reduction of recyclable materials, food scraps, yard refuse, and other organic materials entering the waste stream.

In addition to aiding in waste reduction, compost can be an effective soil amendment, especially in the southeastern United States, where topsoil is lacking due to excessive farming over the last two centuries (Bennett, 1933). Many urban soils are often compacted, with mixed soil layers, reduced nutrient availability, and possible soil contaminants (Gregory, Leslie, & Drinkwater, 2016; Reeves, Cheng, Kovach, Kleinhenz, & Grewal, 2014). The use of compost as a soil amendment can greatly improve the water- and nutrient-holding capacity of poor soils (May, Simpson, & Relf, 1994). Therefore, the building of knowledge and awareness regarding compost in a region is an important issue to consider.

Master composter programs have been developed nationwide, with a model similar to the well-known master gardener program. Whereas master gardener programs traditionally come from Extension, however, master composter programs are emerging from a variety of sources, including universities, botanical gardens, and community organizations.

The state of Georgia lags behind other states in waste reduction practices (Goldstein, 2017), and local Extension staff had begun receiving many requests for composting information and education from farmers and gardeners, teachers, students, and community members. Often-asked questions centered on creating a soil amendment, constructing compost bins to divert food scraps from landfills, and using a vermicomposting system for a farm or residence. Through community needs assessment, Extension staff determined that they were unable to meet the increasing demand for compost-related education. Consequently, in 2011, University of Georgia (UGA) Extension developed and implemented the Georgia Master Composter program, which is similar to the Georgia Master Gardener Extension Volunteer Program. The master composter program enables Georgia residents to learn research-based composting techniques and spread this information through approved volunteer opportunities. A partnership between UGA Extension and Athens–Clarke County's solid waste department, the master composter program is both an adult environmental education course and an Extension volunteer program. It is the first composting volunteer program of its kind in the state of Georgia.

The Georgia Master Composter program is open to adults with an interest in composting and educating others. The 9-week program includes lectures by professors and experts, hands-on learning, and field trips. Through collaboration with statewide organizations, program coordinators provide participants with current and scientifically accurate composting information. The 13 course instructors are university faculty, Athens–Clarke County staff, and small business owners. Class topics include introduction to composting, composting microbiology, composting fauna, vermicomposting, cautions on nonnative worms, chemistry of compost, local soils and weather, compost problem solving, curing, beyond traditional composting, tips on teaching, health and safety issues for the composter, composting special topics, uses of compost, and commercial composting. Also, each student receives the *Georgia Master Composter Handbook* and *Rodale Book of Composting*. The program differs from some other volunteer programs implemented by Extension in that it focuses on hands-on activities such as building vermicomposting systems and constructing backyard composting bins using recycled materials. During field trips, students tour backyard, community garden, small-farm, and commercial composting facilities. To culminate the course, each student prepares an educational project, display, or activity to present to the class. These projects are later used during the students' volunteer experiences and so provide an ideal opportunity for the students to share ideas with their fellow students, receive feedback, and gain teaching experience. For some master gardener programs, field time is recommended but not required. Georgia Master Composter program coursework is more hands-on, and field time is required.

Impact

Upon course completion, master composters share composting knowledge with others by volunteering in the community. Volunteers commit to 40 hr of volunteer service within the first year and 20 hr each year thereafter to retain certification. Participants have widened the efforts of Extension, fulfilling composting education requests and fostering relationships with community groups.

At the time of this writing, the master composter program had trained 63 participants. Nearly 65% of these participants had fulfilled the 40-hr volunteer commitment during their first year, and 92% reported that they would recommend the program to a friend (Table 1).

Table 1.

Master Composter Program Completion Rates and Amounts and Value of Service

Year	Number of students	Number of graduates	Hours volunteered^a	Contacts	Value of service^b
2012	15	9	384	796	\$8,225
2013	18	14	559	1,384	\$12,438
2014	11	6	528	1,508	\$12,281
2015	10	5	621	1,574	\$13,780
2016	9	7	388	1,274	\$9,234
Total	63	41	2,480	6,536	\$55,958

^aThe number of hours volunteered includes both graduates and nongraduates. ^bSource: Independent Sector. (2016). The value of volunteer time. Retrieved from <https://www.independentsector.org/resource/the-value-of-volunteer-time>

Master composter students complete their volunteer requirement through approved projects, accommodating a variety of educational requests. Master composter volunteers lead composting demonstrations for home gardeners, build compost bins at schools, and staff "Ask a Master Composter" booths at local farmers' markets and community events. These booths provide composting information through publications, displays, and a demonstration worm bin. Participants have staffed booths at over 150 farmers' markets and local events. Master composters also have successfully applied for a grant to provide composting educational programs to students, staff, and faculty at two colleges within UGA.

Several graduates have created composting businesses using the knowledge gained from the program. One business collects compostable food scraps from homeowners, small businesses, community events, and local farmers' markets. Another graduate sells bokashi fermentation systems to homeowners and plans to collect food scraps from grocery stores, restaurants, and cafeterias to ferment through the bokashi process. Yet another student is assisting restaurants in vermicomposting food scraps. These businesses not only divert waste from landfills but also provide composting education and awareness in the community.

Conclusion

The Georgia Master Composter program creates new visibility for Extension. Whereas many participants in similar Extension volunteer programs are retired, master composters range from 20 to 70 years of age and include small farmers, college students, commercial composting staff, entrepreneurs, parents, and homeowners interested in vegetable gardening. Over 50% of master composters were unfamiliar with Extension prior to participating in the program. Master composters continue to broaden the Extension network through performing volunteer work as well as through generating new partnerships with individuals and organizations.

Preliminary data on program volunteering shows that the volunteer aspect of master composters differs from that of master gardeners. There is some evidence that volunteers are nontraditional in their demographics, but also that the infrastructure for composting is not as strong as that for gardening. Future studies should examine reasons for becoming a master composter as well as the intentions and efforts of volunteers with regard to completing their community outreach commitments.

References

- Bennett, H. H. (1933). The cost of soil erosion. *The Ohio Journal of Science*, 33(4), 271–279.
- Goldstein, N. (2017). The state of organics recycling in the U.S. *Biocycle*, 58(9), 22.
- Gregory, M., Leslie, T., & Drinkwater, L. (2016). Agroecological and social characteristics of New York City community gardens: Contributions to urban food security, ecosystem services, and environmental education. *Urban Ecosystems*, 19(2), 763–794.
- Independent Sector. (2016). The value of volunteer time. Retrieved from <https://www.independentsector.org/resource/the-value-of-volunteer-time>
- Levis, J. W., Barlaz, M. A., Themelis, N. J., & Ulloa, P. (2010). Assessment of the state of food waste treatment in the United States and Canada. *Waste Management*, 30(8–9), 1486–1494.
- May, J. H., Simpson, T. W., Relf, D. (1994). Agents contribute to statewide program designs in yardwaste management. *Journal of Extension*, 32(4), Article 4FEA4. Available at: <https://www.joe.org/joe/1994december/a4.php>
- Reeves, J., Cheng, Z., Kovach, J., Kleinhenz, M. D., Grewal, P. S. (2014). Quantifying soil health and tomato crop productivity in urban community and market gardens. *Urban Ecosystems*, 17, 221–238.
- Thyberg, K. L., & Tonjes, D. J. (2016) Drivers of food waste and their implications for sustainable policy development. *Resources, Conservation, and Recycling*, 106, 110–123.

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