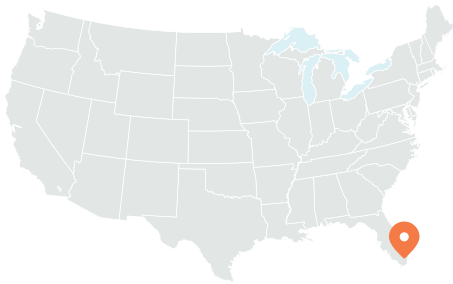




Miami-Dade County, Florida

▲ Demonstration of an Earth Machine™ composting bin at a workshop held in Miami-Dade County. Source: Miami-Dade County



POPULATION

2,712,945

BIN TYPE AND PRICE TO RESIDENTS:

Earth Machine™ – free

BINS DISTRIBUTED:

445

TRAINING AND EDUCATION:

Training required to obtain bins

Program Summary

Miami-Dade County's program is a partnership between Miami-Dade County Solid Waste Management (SWM) and the University of Florida/Institute of Food and Agricultural Sciences Miami-Dade County Extension (UF Extension Miami-Dade). The program is mostly carried out through the UF Extension Miami-Dade, but SWM provides the funding. After attending a backyard composting workshop organized by UF Extension Miami-Dade, residents can obtain a voucher for a free Earth Machine™ at the SWM office. SWM buys the bins and holds them until a resident picks one up with a voucher that verifies s/he has attended a compost class.

The County decided the Earth Machine™ was best for its program for multiple reasons: the bin is durable and easy to transport in a car, other municipalities use the Earth Machine™ in their home composting programs, and ORBIS/Norseman (the manufacturer) is set up to deal with government accounts.

SWM's home composting program contributes to Miami-Dade County's GreenPrint plan. SWM states the following on its composting web page:

This pilot program is a model of environmental stewardship integrating interagency collaboration, cost-efficiency, and community involvement to raise awareness and make prudent use of resources to help preserve our Miami-Dade County natural environment.¹²

¹² "Home Composting," Miami-Dade County, accessed April 14, 2018, <http://www.miamidadegov/solidwaste/home-composting.asp#4>.

Budget

The program has no set budget.

Staff

The Urban Horticulture Agent and Master Gardener Coordinator at the UF Extension Miami-Dade runs outreach and education. Volunteers who have completed the Master Gardener certificate course teach the classes.

Partners

SWM procures the funding for the program, and orders, stores and distributes the bins; UF Extension Miami-Dade carries out education and outreach.

Impact and Benefits/Costs

The coordinator of Miami-Dade's home composting program, Adrian Hunsberger, collected data on composting amounts from participant volunteers and calculated the program's impacts.¹³

Impact

After taking the composting class, 25 participants volunteered to document their experience with the program bin for three months (see Appendix C for how they were instructed to self-collect the data). On a per-month basis, each participant composted an average of 8.52 gallons of indoor materials (that is, kitchen scraps) and 19.61 gallons of outdoor materials (such as plant clippings). This totals 28.1 gallons on average per volunteer participant per month. Miami-Dade County has distributed 445 bins. Thus, program participants home compost an estimated 12,500 gallons of indoor and outdoor materials per month (or 150,000 gallons per year).

Costs

Miami-Dade County has purchased bins in four different rounds:

- January 2017 – 100 units at \$64.14 per unit (\$6,414)
- October 2015 – 125 units at \$61.90 per unit (\$7,738)

- April 2015 – 125 units at \$61.90 per unit (\$7,738)
- September 2014 – 120 units at \$119.64 per unit (\$14,357)

The County's total costs have been \$36,244. The cost for storage and handling of the compost bins is minimal and was absorbed by the Home Chemical Collection Program.

Marketing and Outreach

To promote the program, UF Extension Miami-Dade posts fliers, issues press releases (see Appendix A), places articles in its Green Bytes newsletter, and publicizes the workshops on its online calendar. The County's website, miamidade.gov, also advertises the program on the main solid waste management page.

Training and Education

Workshops

UF Extension Miami-Dade organizes home composting workshops taught by Master Gardener volunteers and the Urban Horticulture Agent. The workshops give formal training in proper home composting techniques and management. The schedule is posted on the extension website's calendar of events and the classes are held in public places such as libraries and parks.¹⁴ Some of the workshops offered also cover education on worm composting and rain barrels.

Online Materials

Miami-Dade County maintains educational materials on its home composting web page.¹⁵ There is a brief overview of the composting process and the difference between "green" and "brown" materials. The website also has links to more in-depth educational material: a brochure made by the Miami-Dade County Extension (see Appendix A) and two educational web pages maintained by other University of Florida county extension offices.

¹³ Personal communication via email, Adrian Hunsberger, February 23, 2017.

¹⁴ See UF/IFAS Extension Miami-Dade County website, <http://sfyl.ifas.ufl.edu/miami-dade/>.

¹⁵ See Miami-Dade County Solid Waste Management website, <http://www8.miamidade.gov/solidwaste/home-composting.asp>.

Survey Study

In 2015, the County Extension collected survey results from 200 workshop participants in the home composting program.¹⁶

When asked if they would start composting after the class,

- 66% said “yes,”
- 2% said “maybe,”
- 2% said “no,” and
- 20% already composted.

When asked if they felt more confident composting because of the program, 90% of participants said “yes” and 10% said “maybe.”

When asked if they were willing to share their new knowledge, 88% said “yes” and 12% said “maybe.”

When asked to score on a scale of 1 to 5 (5 being best),

- Self-assessed knowledge gained = 4.6
- Satisfaction = 4.8
- Usefulness of the material = 4.8

Contact

Adrian Hunsberger, M.S., Urban Horticulture Agent and Master Gardener Coordinator at University of Florida/IFAS Extension Miami-Dade County

Phone: 305-248-3311 ext. 236

Email: aghu@ufl.edu

Links

County’s home composting website

- <http://www8.miamidade.gov/solidwaste/home-composting.asp>

¹⁶ Ibid.