

Advanced Concepts in Water Smart Landscape Design

Advanced Training for Master Gardener Volunteers



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The Team

- Cory Tanner, Urban Horticulture Extension Agent, Clemson Extension
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- Kerry Smith, Master Gardener Coordinator, Auburn University
- Eve Brantley, State Water Quality Coordinator Auburn University
- Frank Henning, Region IV LGU-EPA Liaison
- Paul Pugliese, Agriculture & Natural Resources County Extension Agent, University of Georgia
- Marco Fonseca, Master Gardener Coordinator, University of Georgia
- Ellen Bauske, Program Coordinator, UGA Center for Urban Agriculture



UGA Center for Urban Agriculture

www.gaurbanag.org

Population Growth

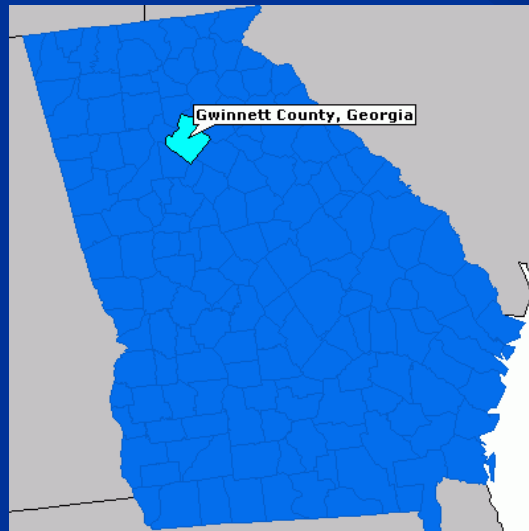
State	2000 Census	2007 Estimate	% Increase
Alabama	4,447,100	4,627,851	4
Georgia	8,186,453	9,544,750	16.5
South Carolina	4,012,012	4,407,709	10

U.S. Census Bureau, http://factfinder.census.gov/servlet/DownloadCenterServlet?_ts=243795054718



Why train Master Gardener Volunteers?

- Gwinnett County Georgia
- Population: 757,104 (2006)
- Gwinnett County ANR Agents: 2



Gwinnett Co., GA

- Green Industry – 1,000 companies
- Parks and Recreation – 36 parks
- School System - 101 schools
- County Government Grounds
- County Employee training



Master
Gardener
Volunteers

Demonstration
gardens

Plant Samples

Radio
programs

School
gardens

Personal
Contacts

News articles

Educational
displays

Phone calls

Television
programs

Newsletters

Educational
programs

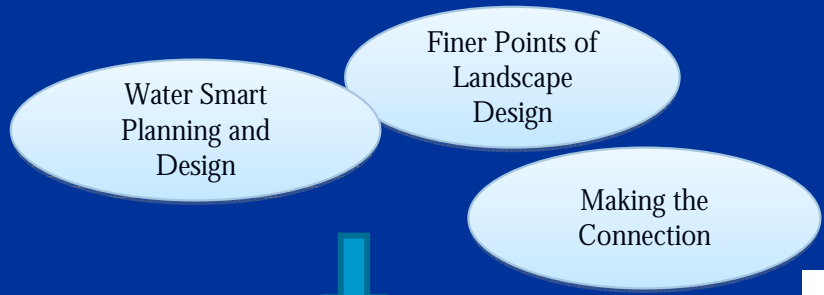
Homeowners



Schematic of Training



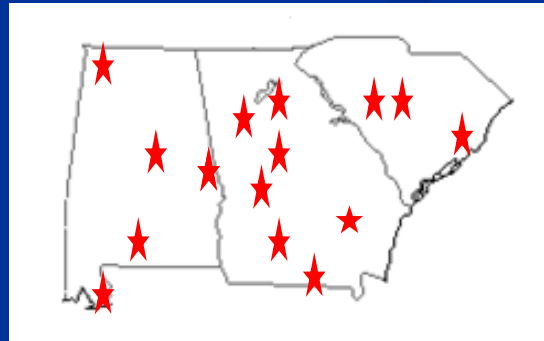
State teams develop training modules and resources for afternoon activities



- UGA Center for Urban Agriculture Coordinated teams
- Project was funded by the Southern Region Water Program



Presentations available online.



Agents reinforce training with appropriate hands-on activities.



Objectives

- Create an advanced MG training in water issues, with curriculum.
- Expand MGs knowledge from home landscape to watershed
- Team-teach in Alabama, Georgia, and South Carolina using internet education technology.
- Supply Agents with teaching and demonstration resources to accompany the training.
- Empower MGs and Agents to educate homeowners on water issues



WaterSmart Objective



Communities that maintain healthy lawns and gardens, use less water, and strive to improve the environmental impact of their landscapes

Think Outside the Banks



Understand connections between landscape & water

ADVANCED CONCEPTS IN



LANDSCAPE DESIGN

Advanced Master Gardener Training:

August 19th

“Landscape Planning and Design”

Cory Tanner and Tim Davis, Clemson University Cooperative Extension

September 16th

“Finer Points of Landscape Design: Function, Maintenance and Management”

Frank Henning, University of Georgia Cooperative Extension

October 14th

“Making the Connection: Our Landscape, Our Stream, Our Watershed”

Eve Brantley and Kerry Smith, Alabama Cooperative Extension

This series of three advanced Master Gardener training modules is designed as specialized training to learn how home landscapes can significantly impact both water quality and quantity. Morning lectures and afternoon hand-on activities will enable Master Gardeners to develop local programs as required for Advanced Certification. Concepts included: practical landscape design, how to minimize the environmental impacts from pesticides, fertilizers, yard waste, manage erosion and stormwater runoff.

This unique regional training is a collaborative effort between Cooperative Extension and Master Gardener programs in Alabama, South Carolina, and Georgia. Ask your local county Extension agent about broadcast locations in your state and how to register!



The screenshot shows a WebCT interface for a course titled 'Water Resources'. The top navigation bar includes 'myWebCT', 'Resume Co', and 'Control Panel'. Below this is a 'View' tab and a 'Designer Op' tab. A dropdown menu shows '- Course Menu -' with a sub-menu path 'Homepage > Course Co'. The main content area features three whiteboard icons, each with a corresponding title: 'Day 1 Landscape Planning and Design (Conditional)', 'WSConservation2', and 'Water Wise Gardening - resources for day 1 pr'. The bottom of the page shows a folder icon labeled 'Evaluations'.

WebCT

Control Panel

- Course Menu -

These are t
documents



Logos



Meeting Notes



Afternoon Activities



Day 1 Landscape Planning and Design
(Conditional)



WSConservation2



Water Wise Gardening - resources for day 1 pr



Evaluations

Objectives Day 1

Landscape Planning and Design

- Understand the water cycle and watershed concepts
- Be able to conduct a landscape assessment for Water Smart management
- Design a water smart landscape



Objectives Day 2

The Finer Points of Landscape Design

- a) Identify common pollution sources
- b) Understand stormwater runoff collection, conveyance, and treatment
- c) Reduce the impact of common landscape pollutants (filtration, infiltration)
- d) Learn about efficient irrigation



Agent Led – Onsite Activities

Day 2: The Finer Points of Landscape Design

- Rain gardens, Porous pavement, or other filtration or infiltration practices
- Rain harvesting – develop alternate water sources
- Irrigation audits – improve conservation



Objectives

Day 3: Making the Connection: Our landscape, Our stream, Our watershed

- a) Understand non-point source pollution in watersheds and your responsibilities
- b) Use visual, chemical and biological characteristics of the stream to measure health (any surface water)
- c) Learn about community volunteer opportunities – importance of taking action!!!!



Agent Led – Onsite Activities

Day 3: Making the Connection: Our landscape, Our stream, Our watershed

- Streamside Revegetation
- Stream Cleanup
- Stream Assessments
Visual, chemical &
biological (bacteria &
macro invertebrate)



Video Links

Advanced Concepts in Water Smart Landscape Design

- Day 1: Landscape Planning and Design

<https://connect.clemson.edu/watersmart1/>

- Day 2: The Finer Points of Landscape Design

http://apps.caes.uga.edu/urbanag/adv_mg_training_day2.cfm

- Day 3: Making the Connection: Our landscape, Our stream,our watershed

- <https://connect.auburn.edu/p14819434/>

Water Smart Successes

State	Number of Locations	Number of Participants
GA	11	181
AL	6	52
SC	3	51
TN	1	9
Total	21	293

Average score on pre- and post-training evaluations

	Day 1 Landscape Planning and Design		Day 2 Finer Points of Landscape Design		Day 3 Making the Connection	
	Pre- training	Post- training	Pre- training	Post- training	Pre- training	Post- training
GA	71	85	66	86	74	93
AL	72	80	66	87	71	92
SC	70	80	62	82	72	89
TN	-	-	80	91	78	84
Total	71	83	66	86	74	92

Impact

- Estimate the number of homeowners you assist with landscape questions this year.

16,135 Homeowners

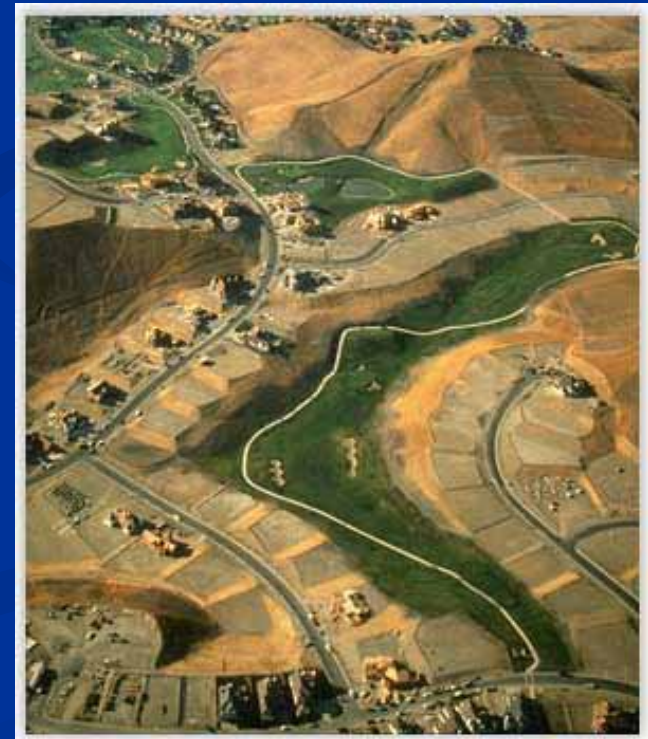
- How many of these homeowners will benefit from what you have learned in this training?

12,021 Homeowners

Impact

- Will you change the way you have been doing something as a result of this training?

94% said “Yes”



Travel Money Saved

Travel for Henning from Athens, GA

2,988 miles to 21 locations @ \$0.55 per mile

= \$1643.40

≈ \$6,000



Water Smart Training

- \$10,000 from SRWP
- Year 1
12,021 homeowners +
293 MGs + 30 Agents
≈ \$0.81 per person
- **No cost in
subsequent years.**



Questions?



UGA Center for Urban Agriculture

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