

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Home Grounds, Gardening, and Home Pests

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	20%	15%		
111	Conservation and Efficient Use of Water	20%	40%		
125	Agroforestry	0%	5%		
205	Plant Management Systems	40%	15%		
216	Integrated Pest Management Systems	20%	10%		
608	Community Resource Planning and Development	0%	10%		
806	Youth Development	0%	5%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2011	Extension		Research	
	1862	1890	1862	1890
Plan	26.0	4.0	0.0	0.0
Actual Paid Professional	16.7	1.5	0.0	0.0
Actual Volunteer	107.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
250099	113209	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
582540	113209	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
1761455	160159	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

a. Master Gardener (MG) is designed to recruit & train volunteer leaders to assist county offices of the ACES in disseminating knowledge and information relative to landscaping and gardening applicable to their area of Alabama .

1) Volunteer training consists of 10 to 14 weeks of training in garden related subjects such as: soil nutrition, pest ID and management, plant ID and management, water management, etc. Classes are a coordinated effort between the REA's, CEC 's, County Agents, and various MG associations

2) MG Interns are expected to participate in the state-wide activity, Master Gardener Helpline. There are 11 MG offices in Alabama .

(1) ACES staff build and sustain partnerships with the local MG volunteer associations to maintain their support programs

(2) Printed training materials are provided

(3) A webpage is provided as support for the MG Helpline

(4) A web available database is provided for service records

b. The Alabama Smart Yard (SY) program is created to provide current, research-based instruction through a series of subject-matter workshops. The objective is to provide in-depth instruction related to best management practices; managing pests, water, and soil, plant selection, and other resource inputs that affect both gardening success and surrounding environments. Master Gardeners will conduct demonstrations and workshops on the same topics for the public.

1) Under the direction of HGGHP REAs, workshop/demo planning and implementation is a collaborative effort with CECs, Certified MG's, state Extension Specialists and possibly local professional horticultural experts.

c. The programs under the Urban Home Grounds, Gardens and Pest Management PPA focus on various aspects of horticulture, including water conservation (e.g., rain water harvesting), community and ornamental gardening, and environmental landscaping. These programs aim to promote food security and a more sustainable environment. The key goals of these programs are to conserve natural resources, increase consumer knowledge about food production, increase the ability of consumers to obtain safe secure food, educate consumers on natural, organic and conventional agricultural practices, ultimately increasing locally grown foods and improving the use of agricultural chemicals.

1). Over 35 workshops/seminars/demonstrations were conducted by Home Grounds Specialists and UREAS.

2). In-service and professional development trainings to support program delivery included the Southern Regional Water Conference and the ACES Urban Update,

3). Several partnerships/collaborations were formed or continued including those with Garden clubs promoting beautification and ecotourism projects and multiple public schools.

4). A total of 27 home grounds media articles were written and disseminated.

Water Conservation, Environmental Stewardship, Interactive Learning Lab, Garden Support Programs and Demonstrations: a) A total of 26 home grounds and related news articles were written. b) A total of 2,000 clients visited the Rainwater Collection publication online and spent 170 hours viewing the publication. The printed version was distributed to over 1,000 program participants. c). Rainwater collection reduced the nitrogen entering creeks and streams by 150 pounds and reduced potable water use by 1.3 million gallons.

Beyond Rain Barrels: Supplementing the Shiitake Mushroom Program: a). A new Beyond Rain Barrels training was conducted for agents and specialists to supplement the shiitake mushroom program. b). Agents and specialists attended a rainwater collection in-service training. c). Farmers attended the Small Farm Management Shiitake and Rainwater hands on workshop (fall), Organic Production Field Day (summer), and Agricultural Risk Management & Business Develop Workshop--Intensive Training Shiitake

Mushrooms (spring). Shiitake mushroom and Rainwater Catchment presentations were made at the aforementioned events. d). Eleven county agents and three specialists participated in 29 rainwater collection programs throughout Alabama. Rainwater workshops were conducted at Green U, Green Living Expo, and county rainwater workshops and demonstrations. e) Over 300 Rainwater Collection for Irrigation and 100 Shiitake Mushroom Production and Shiitake Proceedings publications were distributed.

2. Brief description of the target audience

- a. MG - The program is specifically designed to train community volunteers who will disseminate research-based information. Master Gardeners are essential to the mission of the ACES
- b. ASY - the target audience is non-commercial gardeners
- c. The target audience for the Urban Home Grounds Programs are primarily individuals in urban and nontraditional communities within the MSAs of Alabama. This includes educators in public schools, youth, civic groups, seniors, business owners, homeowners and small scale and/or limited-resource farmers .

3. How was eXtension used?

eXtension was used to enhance professional development of staff and volunteers

V(E). Planned Program (Outputs)

1. Standard output measures

2011	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	77045	36622255	31184	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2011
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2011	Extension	Research	Total
Actual	5	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- a. MG = 8. 1) Increase public awareness of resource management related to home gardens, grounds and pests for 1,500 Helpline clients. 2) 500 new volunteers for the ACES (sign the MOA, complete training, report minimum of 50 volunteer hours) 3) 20 volunteer training classes 4) Maintain 14 MG offices to support state-wide Helpline 5) Maintain web based resources for volunteer records (service hours and Helpline call data) 6) Volunteers conduct surveys of Helpline clients 7) Maintain 1,300 partnerships with Certified MG's 8) Encourage 140,000 volunteer service hours with the ACES and in local communities b. SY = 7. 1) 25 Public workshops and demonstrations 2) 1,000 workshop participants 3) 6 Master Gardener volunteer trainings in subjects related to Smart Yards (water management, sustainable practices, IPM) 4) 3 Agent trainings in Smart Yards material 5) Media stories for increased public awareness 6) Printed materials for participants 7) Evaluate workshops & trainings with a pre/post tests

Year	Actual
2011	0

Output #2

Output Measure

- Volunteer hours for urban and new nontraditional horticulture programs

Year	Actual
2011	200438

Output #3

Output Measure

- \$ Value of volunteer time in urban and new nontraditional horticulture programs.

Year	Actual
2011	3608676

Output #4

Output Measure

- \$ Value of grants funded for rainwater collection, shiitake production, horticulture therapy, IPM

Year	Actual
2011	0

Output #5

Output Measure

- Meetings and workshops held about community gardening, ornamental gardening,

environmental landscaping, rainwater collection, beekeeping farmers' markets, shiitake mushrooms, and high tunnels.

Year	Actual
2011	136

Output #6

Output Measure

- Attendance by clientele at small fruit, shiitake mushroom, rainwater collection, farmers' market, beekeeping, high tunnel, community gardening and other educational meetings.

Year	Actual
2011	24809

Output #7

Output Measure

- Donations received for farmers' market and rainwater collection workshops.

Year	Actual
2011	0

Output #8

Output Measure

- Income generated from plant sales that sustain horticulture therapy programs.

Year	Actual
2011	0

Output #9

Output Measure

- Number of beekeeping, shiitake mushroom, rainwater collection demonstrations. Output Measure

Year	Actual
2011	48

Output #10

Output Measure

- Number of success stories written on urban and new nontraditional horticulture programs.

Year	Actual
2011	21

Output #11

Output Measure

- Total number adopting recommended pesticide use/management practices, Total number trained on urban and community gardening practices, Total pounds of produce that resulted from these urban gardens, Total pounds of produce that resulted from these community gardens,
Not reporting on this Output for this Annual Report

Output #12

Output Measure

- \$value grants for Alabama Smart Yards and tornado recovery tree plantings

Year	Actual
2011	52000

Output #13

Output Measure

- # media stories written for Smart Yards

Year	Actual
2011	533

Output #14

Output Measure

- # hours professional development attended

Year	Actual
2011	423

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	knowledge gain for MG Intern pre/post tests
2	volunteer support for local ACES programs from Certified MG's
3	volunteers change a resource management habit or start a new management technique in their home landscape
4	Helpline clients try a new management technique in their home landscape
5	knowledge gain for SY wksp/demo participants
6	knowledge gain for SY trainers
7	knowledge gain for all Urban program participants
8	adoption of rainwater collection system for non commercial garden
9	gallons of community water saved
10	Perceived value of horticulture therapy programs
11	new jobs for troubled youth
12	intermediate behavior change improvement in UHI youth, %/each
13	long term behavior change and adoption of water conservation methods by homeowners, %/each
14	% increase in activity levels of urban horticulture therapy participants
15	expand crop diversity for producers selling at Moulton and Guntersville markets (NNHE program, #crops/each/40
16	Acres of rainwater irrigated fruit and vegetables
17	increase sales and profits of fruit and vegetable growers at the Guntersville and Moulton farmers' markets, \$/yr

18	High Tunnels used extend fruit and vegetable market season resulted in profit increase, \$
19	Number of registered honeybee colonies in Birmingham metro, Morgan, and Lawrence Counties
20	Number of beekeepers added
21	Acres of fruit and vegetables pollinated by Alabama beekeepers.
22	Honey production by beekeeper demonstrators, Total pounds
23	Income generated from fruit, vegetable, rainwater, high tunnel demonstrators
24	increase the production of fruit, vegetable, mushroom, high tunnel crops irrigated with rainwater catchment (long range by 2014), \$
25	gallons of water collected (saved) and used on crops
26	Rainwater and raingarden workshops conducted
27	citizen adoption rate of rainwater collection systems (%)
28	Total number served on water conservation and irrigation practices -knowledge gained on conservation and irrigation practices -Total number of gallons of rainwater conserved as a result of these practices -Total number that adopted recommended rainwater irrigation practices to make use of water conserved = 157 -Total number of publications developed and distributed -Total number of workshops, field days and seminars conducted

Outcome #1

1. Outcome Measures

knowledge gain for MG Intern pre/post tests

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
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2011

30

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Master Gardener training is designed as recruitment of volunteers not only assisting ACES, but also their communities at large

What has been done

trained 394 volunteers total

Results

of the 8 class groups tested a 30% knowledge increase was measured

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #2

1. Outcome Measures

volunteer support for local ACES programs from Certified MG's

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	107

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Extension lacks sufficient staff to serve its clients. Volunteers are a critical element of job

accomplishments.

What has been done

trained 394 new Interns and maintained relationships with 1302 veteran vol's

Results

total of 107 FTE's were donated by vol's, or 200,438 total hours

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #3

1. Outcome Measures

volunteers change a resource management habit or start a new management technique in their home landscape

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	100

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Master Gardener vol's are role models in their communities. If they adopt new, more sustainable practices, their neighbors are more likely to also adopt these practices

What has been done

through training classes and by volunteering at ACES workshops, they learn new methods for landscape/gardne management

Results

100% will begin or increase their choice to purchase/use pest resistant plant varieties; 95% will begin or increase their consideration of a pest's life cycle to optimize management; 99% will begin or increase their use of soil testing to avoid over-fert; 94% will begin or increase the action to compost yard waste; 100% will begin or increase their action to first research information BEFORE problem solving; 100% will begin or increase their assistance to others in garden problem solving

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #4

1. Outcome Measures

Helpline clients try a new management technique in their home landscape

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

knowledge gain for SY wksp/demo participants

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	93

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

residential gardeners have great potential to impose negative impacts to the environment, their yards and their health according to their management practices in the home landscape/garden

What has been done

workshops and demonstrations were conducted as Alabama Smart Yards

Results

participants increased their knowledge: by 93% for rain barrel construction; by 91% for stormwater runoff contaminants; by 77% for calculating rain harvesting volume from roof tops; by 88% for IPM in home landscapes/gardens; by 85% for pruning home fruit crops; by 92% for insect ID (beneficial/pest)

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
216	Integrated Pest Management Systems

Outcome #6

1. Outcome Measures

knowledge gain for SY trainers

Not Reporting on this Outcome Measure

Outcome #7

1. Outcome Measures

knowledge gain for all Urban program participants

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
125	Agroforestry
205	Plant Management Systems
216	Integrated Pest Management Systems
608	Community Resource Planning and Development
806	Youth Development

Outcome #8

1. Outcome Measures

adoption of rainwater collection system for non commercial garden

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	95

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

harvested rain water from residential roof tops is a valuable on-site resource often wasted to stormwater runoff - keeping it on site also reduces the non-point pollution this can cause (contaminants, erosion, loss of nutrients, eutrophication, etc)

What has been done

Alabama Smart Yards workshops offers rain barrel trainings and hands-on construction seminars

Results

along with knowledge gained by participants, they also took home barrels to install themselves - initial surveys revealed that 74% of participants planned to install their barrels and/or made more - a followup survey revealed that 95% did install (replies from 44% of total participants)

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
125	Agroforestry

Outcome #9

1. Outcome Measures

gallons of community water saved

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	5000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

harvested rain water is a valuable resource that could supplement irrigation needs during times of drought

What has been done

we surveyed 126 workshop/demo attendees - they reported a 93% knowledge gain for construction - many installed their rainbarrels and several added more after learning from our workshops

Results

one followup survey revealed that 95% of participants did go home to install their barrel - half of those added more barrels - if this is true and our average rainfall in 2011 was 54", then each barrel filled at least once - for just one barrel per reporting participant that's potentially 5,900 gallons of total harvested rain water - giving out a total of 341 total barrels thru the year, it is likely that much more was collected - reducing stormwater impacts and increasing use of on-site resources

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water

Outcome #10

1. Outcome Measures

Perceived value of horticulture therapy programs

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
608	Community Resource Planning and Development
806	Youth Development

Outcome #11

1. Outcome Measures

new jobs for troubled youth

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water

125	Agroforestry
205	Plant Management Systems
608	Community Resource Planning and Development
806	Youth Development

Outcome #12

1. Outcome Measures

intermediate behavior change improvement in UHI youth, %/each

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
608	Community Resource Planning and Development
806	Youth Development

Outcome #13

1. Outcome Measures

long term behavior change and adoption of water conservation methods by homeowners, %/each

Not Reporting on this Outcome Measure

Outcome #14

1. Outcome Measures

% increase in activity levels of urban horticulture therapy participants

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

{No Data Entered}

What has been done

{No Data Entered}

Results

{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems

608 Community Resource Planning and Development
806 Youth Development

Outcome #15

1. Outcome Measures

expand crop diversity for producers selling at Moulton and Guntersville markets (NNHE program, #crops/each/40

Not Reporting on this Outcome Measure

Outcome #16

1. Outcome Measures

Acres of rainwater irrigated fruit and vegetables

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	5

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
125	Agroforestry
205	Plant Management Systems

Outcome #17

1. Outcome Measures

increase sales and profits of fruit and vegetable growers at the Guntersville and Moulton farmers' markets, \$/yr

Not Reporting on this Outcome Measure

Outcome #18

1. Outcome Measures

High Tunnels used extend fruit and vegetable market season resulted in profit increase, \$

Not Reporting on this Outcome Measure

Outcome #19

1. Outcome Measures

Number of registered honeybee colonies in Birmingham metro, Morgan, and Lawrence Counties

Not Reporting on this Outcome Measure

Outcome #20

1. Outcome Measures

Number of beekeepers added

Not Reporting on this Outcome Measure

Outcome #21

1. Outcome Measures

Acres of fruit and vegetables pollinated by Alabama beekeepers.

Not Reporting on this Outcome Measure

Outcome #22

1. Outcome Measures

Honey production by beekeeper demonstrators, Total pounds

Not Reporting on this Outcome Measure

Outcome #23

1. Outcome Measures

Income generated from fruit, vegetable, rainwater, high tunnel demonstrators

Not Reporting on this Outcome Measure

Outcome #24

1. Outcome Measures

increase the production of fruit, vegetable, mushroom, high tunnel crops irrigated with rainwater catchment (long range by 2014), \$

Not Reporting on this Outcome Measure

Outcome #25

1. Outcome Measures

gallons of water collected (saved) and used on crops

Not Reporting on this Outcome Measure

Outcome #26

1. Outcome Measures

Rainwater and raingarden workshops conducted

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	20

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

rain water is an under-utilized on-site resource for residential gardeners and even farmers

What has been done

workshops and demonstrations were hosted

Results

participants learned (93% of participants increased their knowledge) and adopted installation of rain barrels or cisterns

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems

Outcome #27

1. Outcome Measures

citizen adoption rate of rainwater collection systems (%)

2. Associated Institution Types

- 1862 Extension
- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
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2011

95

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
111	Conservation and Efficient Use of Water
205	Plant Management Systems
608	Community Resource Planning and Development

Outcome #28

1. Outcome Measures

Total number served on water conservation and irrigation practices -knowledge gained on conservation and irrigation practices -Total number of gallons of rainwater conserved as a result of these practices -Total number that adopted recommended rainwater irrigation practices to make use of water conserved = 157 -Total number of publications developed and distributed -Total number of workshops, field days and seminars conducted

2. Associated Institution Types

- 1890 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2011	40

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Water conservation is becoming critically important to Alabamians. The Beyond Rain Barrels:Supplementing the Shiitake Mushroom Program was created to provide water conservation and home grounds training to citizens, extension educators, and leaders in the community, at schools and agriculture and environmental clubs and organizations. The program emphasized rainwater collection to attract participants, but provided training on all aspects of

home, farm, neighborhoods and communities.

What has been done

Several workshops/seminars/demonstrations and other extension activities were conducted by the unit. Examples include: Plasticulture & Drip Irrigation; Rainwater Harvesting and Rain Barrels, Smart Yards, and Waterwise Solutions for Businesses.

Rainwater catchment training for 40 agents and specialists was conducted to supplement the shiitake mushroom program.

Two current shiitake mushroom producers expanded production by 140% (70 logs), one other producer has plans to double their log numbers later this year, and a new producer intends to put in 2,000 logs over the winter.

Farmers (92) attending the Small Farm Risk Management Farm Tours (fall (61) spring (16), Organic Production Field Day (summer (15)), inoculated 77 additional logs. Shiitake mushroom and Rainwater Catchment presentations were made at the aforementioned events.

There were 212 participants attending Green U, Green Living Expo, and 29 county rainwater workshops and demonstrations.

There were over 600 participants at all conferences, field days, workshops and tours for shiitake mushrooms and rainwater collection.

Current and new shiitake producers collected over 10,000 gallons of rainwater for shiitake production.

Over 300 Rainwater Collection for Irrigation and 100 Shiitake Mushroom Production and Shiitake Proceedings publications were distributed.

Results

Agents attending the rainwater collection training had a 97% knowledge gain in knowledge and 75% said that as a result of the workshop they would change their training practices.

On site surveys of producers that attended the Intensive Shiitake Mushroom training in 2011 all indicated that the workshop was excellent and 93% indicated they obtained enough information to inoculate shiitake mushrooms on their own.

4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
111	Conservation and Efficient Use of Water
205	Plant Management Systems
608	Community Resource Planning and Development

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Government Regulations
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)
- Other (grant\$ and staff changes)

Brief Explanation

Extreme weather conditions, like the tornados in April of 2011 had a significant impact on ACES's horticultural and environmental programs. These events also created a demand for more educational programs that focused on the aftermath of severe storms . The economy, population changes, and the willingness of workshop attendees to participate in the programs are other external factors that affected program delivery.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Results for selected Urban Home Grounds, Gardens as Pest Management Programs were as follows:

1. After the plasticulture workshop 81% of the participants felt they might or would definitely start using mulch as a result of the workshop information presented; 90% might or definitely would install drip irrigation; 80% fertigation; and 100% planned to share the information learned. Participants increased knowledge about plasticulture by 113%, fertigation by 100%; and marketing advantages by 136%.

2. A new Beyond Rain Barrels training was conducted for agents and specialists to supplement the shiitake mushroom and Smart Yards programs. Training emphasized rainwater collection containers, harvesting potential, equipment, connectors, filters, and all aspects of water conservation for home, farm, neighborhoods and communities.. One post survey was conducted by phone to evaluate potential and actual adoption of rainwater collection in shiitake production. Eight participants responded to the phone survey. Half of the respondents began or completed research on shiitake production and 38% on rainwater. One-fourth plan to cut as many as 2,000 logs, this fall, for shiitake production and one respondent has already installed an 1100-gallon rainwater collection system. Additional workshops were hosted under ASY for 431 total participants. Initial surveys revealed that 74% would install the barrels made and one follow up survey with 55 replies showed a 95% installation rate.

3. A total of 505 participants adopted recommendations or changed their behavior as a result of Home Grounds, Gardens and Pest Management activities. The Home Grounds programs also increased the number of citizens that were aware of the need for improving food security.

4. Alabama Smart Yards wksps (ASY) measured knowledge gain from ~500 participants. Results showed tremendous learning for IPM strategies in home

landscapes/gdns (88% increased their knowledge); pest/beneficial ID (92%); pruning home fruit crops (85%)

5. Master Gardener volunteers showed a 30% knowledge gain from the 8 groups tested. These new vol's also committed to adopt or increase the following behaviors: 100% will choose pest resistant plant varieties; 95% will consider a pest's life cycle to optimize mgt; 99% will soil test before fertilizing; 94% will compost; 100% will share their new knowledge with others

Key Items of Evaluation

Personal face-to-face contact with stakeholders to determine challenges.

2. ASY - adoption of principles taught: 73% will apply IPM principles at home; 60% will grow fruits/vegetables at home; 71% will prune home fruit crops for improved production; 95% did install a rainbarrel or cistern

3. MG's - gave a total of 107 FTE's - assisted Agents by handling 4000 Helpline calls - Extension staff support was able to maintain 11 Helpline offices and productive relationships - MG's in Baldwin, Lee, Madison, Mobile, Tuscaloosa, and Elmore counties hosted educational wksp's to supplement Extension efforts - Elmore and Lee co. MG's hosted monthly series - Autauga co MG's maintain and 11 year old demo/food garden for community (1000+ # produce) - demo gdns maintained in Randolph, Lee, Montgomery, Elmore, Etowah teaching ASY principles, historic plants and hosting school groups - Mobile supports 3 school gardens in effort to affect childhood obesity - Randolph MG's are teaching school students about growing food to encourage better eating habits - Tuscaloosa MG's helped create and continue to support a diverse Outdoor Classroom at Verner Elementary - MG's host info booths/plant clinics at public venues like Alabama Nat'l Fair, Nat'l Peanut Fest and local farmer's mkts - Huntsville MG's coordinate a 7 yr hort therapy program - Jefferson MG's maintained a sensory gdn at Glenwood Autism Ctr - many MG's assist Habitat for Humanity with landscape designs, installations and teaching the new homeowners how to care for their landscapes - celebrating 30 yrs of MG we planted 89 civic trees in donation to 2011 storm recover; several 100 more are planned for planting in 2012 - MG's learn much through our ACES training and then go on to share this with their communities - maintaining their support is critical to our Home Grounds team's success (36 ACES staff nurture relationships w/these 1,696 vol's)