

V(A). Planned Program (Summary)

Program # 10

1. Name of the Planned Program

Community Gardening and Outreach

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	20%		35%	
136	Conservation of Biological Diversity	20%		35%	
205	Plant Management Systems	25%		30%	
806	Youth Development	35%		0%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	3.0	0.0	0.0	0.0
Actual Paid Professional	3.1	0.0	0.1	0.0
Actual Volunteer	26.9	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
146868	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
65420	0	5946	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- Ongoing outreach efforts to increase knowledge, change behavior and improve conditions related to environmental quality, community well-being and social equality;
- Delivery of sustainable horticulture and urban agriculture outreach to school children and to residents in the urban population center in the state;
- Installation of demonstration sites for use in such research and Extension programs; and
- Development and dissemination of fact sheets, websites and newsletters.

2. Brief description of the target audience

- Decision makers and policy analysts (local, state and federal agencies)
- The general public
- Early adopters (i.e. Master Gardeners, Master Composters)
- Agricultural producers
- School-aged children
- Urban populations
- Municipal planners
- Private sector firms engaged in watershed management, landscaping, onsite wastewater treatment and/or private wells
- Various NGOs (land trusts, environmental nonprofit organizations)

3. How was eXtension used?

eXtension was used to survey other State Coordinators of Master Gardener Programs nationwide to inform decision-making at URI.

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	121000	250000	5000	100000

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

Patent Applications Submitted

Year: 2012
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2012	Extension	Research	Total
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Peer reviewed publications

Year	Actual
2012	0

Output #2

Output Measure

- Fact sheets, bulletins and newsletters

Year	Actual
2012	15

Output #3

Output Measure

- Public service announcements, news releases/articles

Year	Actual
2012	16

Output #4

Output Measure

- Website development and refinement

Year	Actual
2012	7

Output #5

Output Measure

- Books and monographs

Year	Actual
2012	0

Output #6

Output Measure

- Abstracts

Year	Actual
2012	0

Output #7

Output Measure

- Workshops or Conferences hosted or co-hosted

Year	Actual
2012	31

Output #8

Output Measure

- Presentations and short courses

Year	Actual
2012	80

Output #9

Output Measure

- Student training

Year	Actual
2012	10

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Increase in target audiences (households) gaining research-based knowledge of landscape management practices that minimize contamination of surface and groundwater with pesticides and fertilizers.
2	Increase in target audiences (household) gain of science-based research of landscape design and management practices that minimize degradation of wildlife habitat and biodiversity and contamination of surface and groundwater with pesticides and fertilizers.
3	Increase in knowledge and critical-thinking skills of students in grades K-12 related to individual environmental stewardship, sustainable horticulture, urban agriculture and energy.
4	Expanded impact of Extension and alleviation of Extension staff time required to administer and extend the reach of public education in RI through the recruitment, training, support, management, recognition and retention of URI Master Gardener volunteers to deliver outreach messages on behalf of staff.
5	Maintain and enhance Master Composter Training to extend the educational reach of Extension by recruiting, training and managing volunteers to educate and encourage RI citizens to compost. In addition to the core training, compost workshops will be added throughout the year for the general public.
6	Establish and maintain demonstration gardens in partnership with URI Master Gardener volunteers that serve as field classrooms for Rhode Islanders interested in growing their own food; donate produce grown in the demonstration gardens to local food banks to increase nutrition in underserved communities.

Outcome #1

1. Outcome Measures

Increase in target audiences (households) gaining research-based knowledge of landscape management practices that minimize contamination of surface and groundwater with pesticides and fertilizers.

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Increase in target audiences (household) gain of science-based research of landscape design and management practices that minimize degradation of wildlife habitat and biodiversity and contamination of surface and groundwater with pesticides and fertilizers.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	2000

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Rhode Island is the second most densely populated state in the United States, and the negative impact land development and poor landscape management practices have on habitat quality and quantity and water quality are profound.

What has been done

In partnership with state and local regulatory agencies and nonprofit organizations, Extension staff have designed and delivered training programs that target homeowners, Master Gardener and Composter volunteers and college students interested and/or engaged in landscape design and/or management. Practical tips regarding landscape design and management techniques that protect habitat and surface and groundwater are shared, and through more rigorous training modules, professionals are able to expand their portfolio of services to include stormwater management techniques for water quality protection and invasive plant management for habitat preservation.

Results

A group of people numbering 2,000 are now aware (as of 2012) of the link between backyard landscape management and environmental degradation. Of those 2,000, nearly 500 professionals now count invasive management, stormwater management, planting design for habitat and ecological cultural practices among their new skills and/or business services.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
136	Conservation of Biological Diversity
205	Plant Management Systems

Outcome #3

1. Outcome Measures

Increase in knowledge and critical-thinking skills of students in grades K-12 related to individual environmental stewardship, sustainable horticulture, urban agriculture and energy.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	5500

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Much of Rhode Island's youth, especially in low income urban settings, lack access to nature and hands-on science education to supplement classroom learning. This is evidenced by the low science scores on NECAP testing (only 29% of high school students demonstrated proficiency in science) and few students entering into the STEM career field.

What has been done

The URI Learning Landscape Program, Eco-Exploration Camp and family outreach events provided experiential science learning opportunities to students in grades K-12. Half day field trips were offered in the winter and spring in both Kingston, RI and Providence, RI, with reduced admission and bus scholarships available for students from low income backgrounds, allowing us to reach a diverse audience. This program covered topics such as seed starting, composting, the

water cycle and watersheds, native mammals and birds, insects and pollination and ecosystems and adaptations. The Eco-Exploration Summer Camp held at a community garden in Providence connected elementary and middle school students from urban communities to the biodiversity found in city greenspaces, the origin of their food, native species and other issue-based topics. These programs are aligned with RI Grade Span Expectations for life and earth science, as well as for written and oral communication and environmental stewardship.

Results

Children from suburban and urban areas without access to gardens and experiences in the natural world had the opportunity to learn about environmental science while reinforcing skill development underway in their classroom curriculum. Students were exposed to science content and STEM career paths by visiting University-run programs.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
136	Conservation of Biological Diversity
205	Plant Management Systems
806	Youth Development

Outcome #4

1. Outcome Measures

Expanded impact of Extension and alleviation of Extension staff time required to administer and extend the reach of public education in RI through the recruitment, training, support, management, recognition and retention of URI Master Gardener volunteers to deliver outreach messages on behalf of staff.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	775

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The ability of URI Extension staff to extend science-based information to address community

environmental, economic, social and aesthetic challenges to the general public is limited by funding and time restraints due to other projects.

What has been done

The 2013 Master Gardener Program core training was conducted from January - May of 2012 to train volunteer interns in sustainable horticulture and agriculture basics and practice to 110 new recruits; Extension staff supported the volunteer association in the development and implementation of a year-long continuing education program for veteran volunteers, volunteer recognition activities and community outreach programs and projects to keep volunteers engaged to deliver outreach messages on behalf of Extension staff.

Results

The active URI Master Gardener base grew to 575 individuals in 2012 donating over 49,000 hours of volunteer time delivering outreach messages on behalf of Extension staff.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
136	Conservation of Biological Diversity
205	Plant Management Systems
806	Youth Development

Outcome #5

1. Outcome Measures

Maintain and enhance Master Composter Training to extend the educational reach of Extension by recruiting, training and managing volunteers to educate and encourage RI citizens to compost. In addition to the core training, compost workshops will be added throughout the year for the general public.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	306

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Organic materials that are compostable in backyards make up almost 30% of the waste stream in Rhode Island. Transporting and landfilling these materials is expensive from both an economic and environmental standpoint.

What has been done

URI Master Composter volunteer who have successfully completed the core training volunteer year-round by staffing information booths, phone and email consultations, managing community compost sites and delivering public presentations through the URI Speakers Bureau.

Results

(82) active URI Master Composter volunteers donated over 3,000 hours of time in 2012; advanced and supplemental compost workshops and lectures were attended by over 300 participants.

4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
136	Conservation of Biological Diversity
205	Plant Management Systems
806	Youth Development

Outcome #6

1. Outcome Measures

Establish and maintain demonstration gardens in partnership with URI Master Gardener volunteers that serve as field classrooms for Rhode Islanders interested in growing their own food; donate produce grown in the demonstration gardens to local food banks to increase nutrition in underserved communities.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	8

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Food security and lack of access to healthy food continues to be a problem for many individuals and families in Rhode Island, especially in urban areas.

What has been done

URI Master Gardener volunteers have developed a total of (8) demonstration vegetable gardens in (6) different Rhode Island communities to showcase sustainable vegetable gardening techniques and practices through actual garden management throughout the season and via free educational workshops hosted at each of the gardens.

Results

In 2012, over 12,000 pounds of produce was grown and donated to local food pantries and the RI Community Food Bank. The demonstration gardens and educational workshops hosted at the gardens have helped to improve the lives of Rhode Island citizens through encouragement of healthy lifestyles and nutrition and environmental and economic sustainability.

4. Associated Knowledge Areas

KA Code	Knowledge Area
205	Plant Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges

Brief Explanation

The ability to deliver programs and services was impacted by funding as fee programs and grants are used to supplement federal dollars received.

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Written or digital evaluations were distributed and collected for each presentation, program, class and workshop offered in 2012 to assess changes in attitude and behavior as a result of program implemented by Extension staff and trained volunteers.

Key Items of Evaluation