

V(A). Planned Program (Summary)

Program # 4

1. Name of the Planned Program

Urban Forestry

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
123	Management and Sustainability of Forest Resources	20%			
124	Urban Forestry	80%			
	Total	100%			

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	1.6	0.0	0.0	0.0
Actual	1.6	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
52000	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
42000	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
10162	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Partnerships were established and strengthened with public and private agencies, and community leaders and groups to provide education, information, and technical advice to the general population. This was achieved through the use of publications, seminars, mass media, field days and exhibits as well as

personal contacts.

2. Brief description of the target audience

The targeted audience were public and private landowners and agencies, community leaders and organizations, youth groups, and civic organizations.

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	500	5500	400	500
Actual	995	7000	186	300

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

Patent Applications Submitted

Year: 2010
 Plan: 0
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	0	0	
Actual	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of educational classes in tree identification
 Not reporting on this Output for this Annual Report

Output #2

Output Measure

- Number of workshops/demonstrations in tree pruning

Year	Target	Actual
2010	4	2

Output #3

Output Measure

- Number of educational classes in tree care

Year	Target	Actual
2010	4	4

Output #4

Output Measure

- Number of one-on-one consultation with residents

Year	Target	Actual
2010	130	170

Output #5

Output Measure

- Number of public service announcements

Year	Target	Actual
2010	2	2

Output #6

Output Measure

- Number of articles/publications on tree care and urban forest management
Not reporting on this Output for this Annual Report

Output #7

Output Measure

- Number of fairs and exhibits displaying best management practices and other information pertaining to the Urban Forestry

Year	Target	Actual
2010	2	3

Output #8

Output Measure

- Number of seminars on economic opportunities available through using and/or recycling forest resource

Year	Target	Actual
2010	1	1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of residents, landowners, policymakers who will become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest
2	Number of residents and landowners, public and private agencies, and nonprofit organizations who will increase their knowledge of the care and management of the urban forest
3	Number of homeowners, landowners, municipalities who will actively reduce, reuse, and recycle yard waste
4	Number of residents who will restore urban trees following hurricanes and tropical storms
5	Number of landowners and residents who will expand entrepreneurial opportunities from the urban and suburban forest resources

Outcome #1

1. Outcome Measures

Number of residents, landowners, policymakers who will become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	450	640

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Trees play a major role in creating a certain ambiance in the location where they are growing. Properly planted trees help to reduce the ambient temperatures, increase overall well being of residents. They also reduce the chances of: utility lines interference, sidewalks and pavements being raised, branches being severely pruned or worse the tree having to be completely removed. When trees are not planted properly, they become targets of poor management practices. Branches that touch buildings or are near utility lines are severely pruned. Large sections of the roots are severed in order to install sidewalks or underground utilities. Often this pruning is done by untrained utility company workers, landscape maintenance crews, home owners and public and private sector work crews.

In an attempt to help parents to become more involved with their children's education, the V.I. Department of Education launched Parent's University. This program provides parents with an opportunity to become educated/re-educated about subjects their children are learning in school. Ultimately, the goal was to provide parents with the necessary tools and information to be able to assist their children with homework. One of the broad subjects covered was Science. Current science curricula include the growth and development of trees and other plants as part of the study of the environment. This was an opportunity to provide the parents with information about trees that would augment the lessons learned by the students in the classroom.

What has been done

The annual Woodworkers Expo was held to showcase the economic benefits of recycling trees, and parts of trees, that would have otherwise gone into the landfill.

Radio appearances were the primary means of providing information and technical advice to the general public. Educational posters and handouts were made available. Extension staff made a presentation on the subjects of The Benefits of Trees and How Trees Handle Wounds.

Results

Approximately six hundred (600) residents became aware of the economic benefits of turning felled trees and parts of trees into potential income generating products.

Through personal contact, and anecdotal information, ninety-eight percent (98%) of attendees reported that they are now more aware of the economical and environmental benefits of trees.

The nine (9) parents who attended the Parent University class increased their awareness of how trees affect their lives other than by providing shade and modifying temperature.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

Outcome #2

1. Outcome Measures

Number of residents and landowners, public and private agencies, and nonprofit organizations who will increase their knowledge of the care and management of the urban forest

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	800	723

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Local utilities have been increasing their efforts to reducing power line losses caused in part by tree branches touching the power lines. In some instances the trees were planted below the power lines and eventually grew into the lines. Other situations, the tree canopies were cleared for the installation of new power lines but over time, the branches grew back. Homeowners, businesses, and organizations plant trees for symbolic, therapeutic, environmental, and others reasons. Often extension staff encounter situations where these tree branches are touching the roofs of building or have become entangled in utility lines, and cause upheaval of sidewalks and roads because they were improperly planted. Many trees in the Virgin Islands are being encroached upon by urban expansion and are growing in places that are not conducive to their optimum growth and development. In cases like these, hard decisions have to be made regarding the long term future of the tree(s) or the structure that is being impacted in a negative way by the trees presence.

What has been done

The annual Agriculture and Food Fair of the Virgin Islands provides CES the opportunity to impact a large clientele over a three day period in a concentrated effort. Extension staff provided literature and conducted one on one consultation with attendees on the subject of planting the right trees in the right places. This was accompanied by a display of various situations depicting negative interactions between trees and buildings, utility lines, and plumbing infrastructure. Home visits and one-on-one contacts with residents, and public and private landscape crews have been used to provide them with current tree management information. Radio appearances have also been used to provide general information to a broad audience. On-site visits provided an additional opportunity for hands-on practical demonstration and information transfer. Extension staff made a presentation to participants of the Parents University educational sessions on the subjects of The Benefits of Trees and How Trees Handle Wounds. Extension staff met with the Pastor and representatives of the Lutheran Church of the Reformation on St. Thomas to provide them with the pros and cons of cutting portions of the roots of a very large mahogany tree that is in the middle of a driveway. Several options of saving the tree were also discussed.

Results

Approximately 430 individuals were directly impacted and thousands more indirectly by the display and interaction with Extension staff. For the nine (9) participants, both subjects were very informative but the subject of how trees handle wounds was an eye opener. This was new information for all of the attendees. They also learned about placing the right tree in the right place during the question and answer session. Seventeen (17) individuals representing two agencies participated in the two day tree Pruning Trees for Hurricane Preparedness workshop. Each participant was also provided with literature for future reference. Sixty three (63) youth and eight (8) adults from the St. Croix WMA summer cleanup program and sixty (60) youth and eight (8) from the St. Thomas W.M.A. Clean and Preen summer cleanup program learned about the benefits of trees to the community and the environment. The St. Croix group of sixty (60) also learned about the fundamentals of pruning trees including a live demonstration. Extension staff provided guidance to the seven (7) member crew of the Department of Public Works and four Water and Power Authority line clearing crew as they worked to upgrade the trees and the rest of the landscape in the Educator's Park.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry

Outcome #3

1. Outcome Measures

Number of homeowners, landowners, municipalities who will actively reduce, reuse, and recycle yard waste

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	150	14

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The percentage of yard waste in the territories landfills is high. Landfill fires are sustained by the wood piles dumped or stored throughout the facility. Shredded yard trimming makes an ideal mulch and reduces the waste stream going into the landfill. Stems, trunks, and branches, can be reused in arts and crafts. More residents should become more aware of the benefits of recycling the yard waste.

What has been done

The 4th annual Woodworkers Expo was used as a means educating the public on how trees and tree parts could be recycled and reused.

Results

Over six (600) residents became more aware of the options for reusing and recycling tree parts. Nine (9) woodworkers demonstrated their skill in taking trees destined for the landfill and turning them into works of art.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources
124	Urban Forestry

Outcome #4

1. Outcome Measures

Number of residents who will restore urban trees following hurricanes and tropical storms

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	250	250

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Tropical storms are a fact of life in the territory. Trees in general are negatively affected depending on the severity of the storm. Urban trees in particular are adversely affected by storms because they are growing in less than ideal conditions thus, predisposing them to a higher risk of failure. If damaged trees are not given corrective measures within a short time or have fallen trees that are not erected right away, then chances of survival begin to diminish as time goes on.

What has been done

Appearances on local talk shows were the primary means of disseminating general information to residents whose trees were damaged by storms.

Results

It is hard to determine with any accuracy the amount of individuals that actively were involved in restoring damaged and/or fallen trees. From observation, public and private maintenance crews, and non profit organizations were actively involved in tree restoration. Through onsite visits and telephone contacts, technical advice was provided to residents, landscapes crews, and any organization that was involved in forest restoration.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

124 Urban Forestry

Outcome #5

1. Outcome Measures

Number of landowners and residents who will expand entrepreneurial opportunities from the urban and suburban forest resources

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	9	9

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Other ()

Brief Explanation

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)

Evaluation Results

Pre and Post tests were administered at the workshops. They provided a good picture of the effectiveness of the lectures. There is still a need to restructure some of the questions in order to receive the most accurate responses. Follow up surveying at short term (3 month) and long term (6-8 months) will still need to be administered in order to ascertain the level of behavioral changes that have occurred.

Key Items of Evaluation