

**V(A). Planned Program (Summary)**

**Program # 6**

**1. Name of the Planned Program**

Climate Change: Urban Forestry Program

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
123	Management and Sustainability of Forest Resources	20%			
124	Urban Forestry	80%			
	<b>Total</b>	100%			

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	1.6	0.0	0.0	0.0
Actual Paid Professional	0.0	0.0	0.0	0.0
Actual Volunteer	0.0	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
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
6115	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 was public and private landowners and agencies, community leaders and organizations, youth groups, and civic organizations.

**3. How was eXtension used?**

eXtension was not used in this program

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	776	3000	329	700

**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**

- Number of educational classes in tree identification

**Year                      Actual**

2012 3

**Output #2**

**Output Measure**

- Number of workshops/demonstrations in tree pruning

<b>Year</b>	<b>Actual</b>
2012	2

**Output #3**

**Output Measure**

- Number of educational classes in tree care

<b>Year</b>	<b>Actual</b>
2012	5

**Output #4**

**Output Measure**

- Number of one-on-one consultation with residents

<b>Year</b>	<b>Actual</b>
2012	123

**Output #5**

**Output Measure**

- Number of articles/publications on tree care and urban forest management

<b>Year</b>	<b>Actual</b>
2012	0

**Output #6**

**Output Measure**

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

<b>Year</b>	<b>Actual</b>
2012	3

**Output #7**

**Output Measure**

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

resource

<b>Year</b>	<b>Actual</b>
2012	3

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Increase the number of homeowners, landowners, policy makers who become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest by 10%
2	Increase the number of homeowners, residents and landowners, public and private agencies, and nonprofit organizations who increase their knowledge of the care and management of the urban forest by 10%
3	Increase the number of homeowners, landowners, municipalities who actively reduce, reuse, and recycle yard waste by 5%
4	Increase the number of residents who restore urban trees following hurricanes and tropical storms by 10%
5	Increase the number of landowners and residents who expand entrepreneurial opportunities from the urban and suburban forest resources by 10%

## **Outcome #1**

### **1. Outcome Measures**

Increase the number of homeowners, landowners, policy makers who become more aware of the potential economic, social, and environmental contributions of the urban and suburban forest by 10%

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

Change in Condition Outcome Measure

### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	323

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Ensuring that the next generation develops an appreciation for the benefits of trees is important as urban development continues to reduce forested areas of the Virgin Islands CES staff provides information to schools and youth groups through publications, lectures and walking tours.

#### **What has been done**

CES staff conducted a walking tour of trees on a portion of the St. Thomas campus. The students at the Guy Benjamin School on St. John were provided a poster display and lecture on the benefits of trees and products that could be made from recycled trees. Two groups of young people were provided with an educational coloring book entitled "Trees are Good".

#### **Results**

Two hundred seventy-three sixty-eight (273) students and twenty (20) adults representing the Calvary Christian Academy, Montessori, and E. Benjamin Oliver Schools increased the knowledge of tree identification and the role of trees in the environment. One hundred five (105) students and two adults became more aware of how trees contribute to the social and environmental well-being of their schoolyard and home. Thirty-seven (37) youth ages 7-10 from the 4-H summer academy on St. Croix and St. Thomas became more aware of the role that trees play in their environment. The youth have in their new coloring book, an age appropriate reference for their library.

### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
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123 Management and Sustainability of Forest Resources

**Outcome #2**

**1. Outcome Measures**

Increase the number of homeowners, residents and landowners, public and private agencies, and nonprofit organizations who increase their knowledge of the care and management of the urban forest by 10%

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Actual
2012	376

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Many trees have been pruned severely because they were planted in the wrong location. As the tree grows, the branches and root systems interfere with utility lines, roof guttering, windows, sidewalks and building foundations. To correct the damage can be costly to the home owner or the business man or the government agency that has to make repairs. Sensitizing the Virgin Islands? youth as to the importance of trees in the environment is important for the future of sustainable resource management. Providing age appropriate resources and educational opportunities is key to increasing awareness of the benefits of trees and effectively communicating best management practices.

**What has been done**

Extension staff assisted the UVI Queens Commemorative Committee in the selection and location of a Dog Almond Tree for 50th anniversary commemoration. Extension staff also provided instruction to the UVI staff on proper tree planting.

The Folk Life Festival on St. John provided Extension staff the opportunity to share information with the public on best practices for managing trees. Extension also presented a lecture and demonstration to 4-H summer academies on both islands about the care of trees.

**Results**

Six (6) members of the UVI Queens Commemorative Committee became more aware of the factors that are involved in selecting the right tree for the right place. Five (5) UVI Physical Plant

grounds men increased their knowledge of site preparation and proper tree planting techniques. Forty-eight (48) adults and eighty-seven (87) youth became more aware of the negative impact of cars repeatedly being parked under trees and how cavities result from poor pruning practices. One hundred eighty (180) youth and fifty (50) adults became more aware of the proper way of taking care of trees around their home and in public places especially as they pick kenep and other local fruits.

#### 4. Associated Knowledge Areas

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

#### Outcome #3

##### 1. Outcome Measures

Increase the number of homeowners, landowners, municipalities who actively reduce, reuse, and recycle yard waste by 5%

##### 2. Associated Institution Types

- 1862 Extension

##### 3a. Outcome Type:

Change in Condition Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2012	532

##### 3c. Qualitative Outcome or Impact Statement

###### **Issue (Who cares and Why)**

Yard waste including trees and tree parts continue to be a large percentage of the waste stream entering the territories landfills. Because of consent decrees issued by the federal government, the Waste Management Authority must close the existing landfills and develop alternative means of disposing of the waste stream. Trees, tree parts and other yard waste can be diverted from the waste stream turned into useful products such wood chips, mulch, and compost.

###### **What has been done**

The annual St. Thomas/St. John Agriculture and Food Fair provided CES staff with an opportunity to display a poster and interact with attendees about recycling fallen trees and tree parts for personal use and for profit. Charcoal, furniture, wood art, and wood chips were some of the products displayed that could be recycled from fallen trees. The students at the Guy Benjamin School on St. John were provided a poster display and lecture on the benefits of trees and products that could be made from recycled trees. CES participated in the annual Earth Day

Celebration sponsored by the Friends of the National Park.

### **Results**

Approximately 3000 persons attended the fair over the two days of the event with approximately 250 persons becoming more aware opportunities for reusing and recycling for fallen trees. One hundred five (105) students and two (2) adults from the Guy Benjamin School became more aware of how recycling trees and tree parts become a means of creating useful items or an opportunity to earn an income. The compost sample and compost bin display at the Earth Day celebration helped the approximately one hundred twenty-five (125) youth and fifty (50) adults increase their knowledge of how compost is made and became more aware of the benefits of compost.

### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
123	Management and Sustainability of Forest Resources
124	Urban Forestry

### **Outcome #4**

#### **1. Outcome Measures**

Increase the number of residents who restore urban trees following hurricanes and tropical storms by 10%

#### **2. Associated Institution Types**

- 1862 Extension

#### **3a. Outcome Type:**

Change in Condition Outcome Measure

#### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	100

#### **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 in some way depending on the severity of the storm. Urban trees in particular are adversely affected by storms because generally they are growing in less than ideal conditions thus, predisposing them to a higher risk of failure. If damaged trees aren't given corrective measures within a short time or have fallen trees aren't 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. Home and site visits by CES staff were also used to assist residents in recovering and preserving damaged and or fallen trees.

#### **Results**

It is hard to determine with any accuracy the amount of individual that actively were involved in restoring damaged and/or fallen trees. From observation, public and private maintenance crews, and nonprofit 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**

<b>KA Code</b>	<b>Knowledge Area</b>
123	Management and Sustainability of Forest Resources
124	Urban Forestry

#### **Outcome #5**

##### **1. Outcome Measures**

Increase the number of landowners and residents who expand entrepreneurial opportunities from the urban and suburban forest resources by 10%

##### **2. Associated Institution Types**

- 1862 Extension

##### **3a. Outcome Type:**

Change in Condition Outcome Measure

##### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2012	410

##### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

The reuse and recycling of organic waste is a key strategy in reducing the volume of items entering our landfills. Turning recyclable products into money making opportunities is a way for individuals within our community to earn additional income or become full time entrepreneurs.

#### **What has been done**

CES sponsored the 6th Annual Virgin Islands Woodworkers Expo at the UVI Great Hall on the Albert Sheen campus on St. Croix. Ten (10) individuals representing all three islands participated in demonstrations of their woodworking skills, provided one-on-one exchanges, and sold items that were made from reclaimed trees and tree parts. During the expo, demonstrations were given by selected woodworkers showing how tree parts can be turned into valuable works of art.

#### **Results**

Over the three-day period, approximately four hundred (400) adults and students attended the expo. Attendees became more aware of the potential for earning additional dollars or making a full time living from woodworking.

#### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
123	Management and Sustainability of Forest Resources

#### **V(H). Planned Program (External Factors)**

##### **External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

##### **Brief Explanation**

Staff shortages and competing programmatic challenges resulted in less than maximum output which led to lower than expected outcomes.

#### **V(I). Planned Program (Evaluation Studies)**

##### **Evaluation Results**

One- on- one and small group interviews were administered at the workshops and public events. They provided a good picture of as to the effectiveness the lectures, poster presentations and publications. Follow up surveying at short term (3month) 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**