

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

**Program # 5**

**1. Name of the Planned Program**

Range Management

- 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	40%	0%	40%	0%
121	Management of Range Resources	60%	0%	60%	0%
	<b>Total</b>	100%	0%	100%	0%

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

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

Year: 2014	Extension		Research	
	1862	1890	1862	1890
<b>Plan</b>	20.0	0.0	15.0	0.0
<b>Actual Paid</b>	19.8	0.0	26.3	0.0
<b>Actual Volunteer</b>	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
261774	0	824743	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
261774	0	1342357	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2167375	0	3387383	0

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

**AgriLife Extension and AgriLife Research**

Primary activities in this program were focused on development and conducting of research and educational programs to support proper management and restoration of native rangelands for clientele. Applied research and result demonstrations to support improved rangeland management were also conducted. Training and support for County Extension Agent and Specialist training was provided on appropriate and timely aspects of rangeland management. Emphasis was placed on continued development of appropriate publications, websites, online courses, and other teaching materials.

Work of AgriLife Research and AgriLife Extension is conducted jointly where research-based information is generated and transferred to clientele.

**2. Brief description of the target audience**

**AgriLife Extension and AgriLife Research**

The target audiences for this program include federal and state agencies, youth and adults. The adult audiences specifically include traditional landowners, operators, absentee landowners, and "new", novice landowners that either just bought land or have made a career off the land and has returned to it.

**3. How was eXtension used?**

We have two training courses on the eXtension moodle site and are active in the eXtension ask the expert community.

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

**1. Standard output measures**

2014	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	44446	204523	13894	0

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

**Patent Applications Submitted**

Year: 2014  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

2014	Extension	Research	Total
<b>Actual</b>	0	205	205

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- # of group educational sessions conducted.

<b>Year</b>	<b>Actual</b>
2014	1717

**Output #2**

**Output Measure**

- # of research-related projects.

<b>Year</b>	<b>Actual</b>
2014	90

**Output #3**

**Output Measure**

- # of result demonstrations conducted.

<b>Year</b>	<b>Actual</b>
2014	229

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

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

O. No.	OUTCOME NAME
1	% of Land Managers who report increased knowledge leading to better decision-making for wise pesticide use.
2	% of livestock producers who report increased knowledge of rangeland monitoring, watershed management, weed and brush control.

## **Outcome #1**

### **1. Outcome Measures**

% of Land Managers who report increased knowledge leading to better decision-making for wise pesticide use.

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

- 1862 Extension
- 1862 Research

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

Change in Knowledge Outcome Measure

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

<b>Year</b>	<b>Actual</b>
2014	57

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

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

Brush management is a major landowner-concern in Texas to maintain pasture productivity and wildlife habitat. Brush Busters provides landowners with do-it-yourself methods for brush maintenance, including use of pesticides.

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

Extension Ecosystem Science and Management (ESSM) Specialists provide support to County Programs in a variety of manners including applied research/demonstration support, problem solving and presentations at county educational events. During 2014, Unit personnel made 172 presentations supporting 257 county educational events with 8,764 clientele attending. Unit members conducted 15 group trainings involving 403 Extension-faculty and completed 12 Extension publications.

With continuing scattered drought across the state, grazing management is as important as ever for range recovery and ranching survival. The Texas A&M Beef Cattle Short Course Range Management Workshop: The Wonderful World of Grass was conducted. Four ESSM Extension Unit members made presentations featuring stocking rates, implications of weed presence, a virtual tour of healthy and unhealthy range examples, and prescribed burning and wildfire mitigation.

#### **Results**

One hundred seventy-three landowners participated in this workshop. A retrospective-post evaluation indicated an average increased understanding of eight teaching points of 64% (52 to 87%). Evaluation respondents represented 61 different Texas counties as well as Louisiana,

Maine, and Mexico and reported owning or operating 444,467 acres. Ninety-seven percent of respondents indicated that information received would help make better management decisions. Adoption of 4 management practices presented during the workshop ranged from 70 to 100%.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
121	Management of Range Resources

#### Outcome #2

##### 1. Outcome Measures

% of livestock producers who report increased knowledge of rangeland monitoring, watershed management, weed and brush control.

##### 2. Associated Institution Types

- 1862 Extension
- 1862 Research

##### 3a. Outcome Type:

Change in Knowledge Outcome Measure

##### 3b. Quantitative Outcome

Year	Actual
2014	69

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

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

Brush management is a major landowner-concern in Texas to maintain pasture productivity and wildlife habitat. Brush Busters provides landowners with do-it-yourself methods for brush maintenance.

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

The Texas A&M Beef Cattle Short Course Brush Buster Workshop was conducted. Six ESSM Extension Unit members demonstrated equipment needs and application methods for featured brush species.

###### **Results**

One-hundred seventeen landowners participated in this workshop. A retrospective-post evaluation indicated average increased- understanding of nine topics presented of 83% (47 to 111%). Participants represented 68 counties and reported owning or operating 380,160 acres for

an average of about 4,937 acres per person. Total estimated acreage represented was 577,629. One-hundred percent of those returning the evaluation indicated that the information received would help make better management decisions. One-hundred percent of these participants indicated that they planned to do some form of brush management in the near future.

#### 4. Associated Knowledge Areas

KA Code	Knowledge Area
112	Watershed Protection and Management
121	Management of Range Resources

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

##### External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes

##### Brief Explanation

Drought conditions continue to exist in the state.

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

##### Evaluation Results

Fifteen educational events were evaluated using retrospective-post evaluations during 2014. Two examples of these evaluations are listed below.

For the Texas A&M Beef Cattle Short Course Range Management Workshop, average increased understanding of eight teaching points was 64% (52 to 87%). Ninety-seven percent of respondents indicated that information received would help make better management decisions. Adoption of 4 management practices presented during the workshop ranged from 70 to 100%.

For the Texas A&M Beef Cattle Short Course Brush Busters Workshop, average increased- understanding of nine topics presented was 83% (47 to 111%). One-hundred percent of those returning the evaluation indicated that the information received would help make better management decisions. One-hundred percent of these participants indicated that they planned to do some form of brush management in the near future.

There was an estimated economic benefit to clientele of \$18.7 million through seven educational events that were evaluated and in which Unit personnel were involved.

#### Key Items of Evaluation