

V(A). Planned Program (Summary)

Program # 6

1. Name of the Planned Program

Missouri Woodland Steward

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	45%			
131	Alternative Uses of Land	5%			
135	Aquatic and Terrestrial Wildlife	45%			
605	Natural Resource and Environmental Economics	5%			
	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	2.0	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
105311	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
109401	0	0	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

2010 0 0

Output #2

Output Measure

- Provide in-service training (ISE) session for regional natural resource program coordinators. This will include Missouri Master Wildlifer and Missouri Master Naturalist.

Year	Target	Actual
2010	1	0

Output #3

Output Measure

- Coordinate delivery of short courses to private landowners at selected locations across Missouri.

Year	Target	Actual
2010	15	6

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	50 percent of participants will increase their knowledge of forest ecology.
2	50 percent of participants will increase their knowledge of forest management.
3	50 percent of participants will increase their knowledge of wildlife ecological principles.
4	50 percent of participants will increase their knowledge of wildlife habitat improvement practices.
5	30 percent of participants will have a management plan in place after six months.
6	30 percent of participants will have engaged in at least one forest and/or wildlife improvement practice after six months.

Outcome #1

1. Outcome Measures

50 percent of participants will increase their knowledge of forest ecology.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Natural resource managers want their clients (landowners) to take responsibility for the stewardship of their woodlands. For that to happen, landowners need to have a basic understanding of plant growth as it relates to both individual trees and the larger forest stand.

What has been done

Six of the original Woodland Steward short courses were conducted in FY10 with 90 landowners participating, representing 28,800 acres. In addition, the Woodland Steward program was expanded to capture both youth and adult field days where various topics related to forest ecology were presented. In those events, over 1,700 direct contacts were made.

Results

Impact was assessed by observing a 2.3-point increase in pre- and post-Likert self-evaluations (1-5 scale) related to woodland management.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

Outcome #2

1. Outcome Measures

50 percent of participants will increase their knowledge of forest management.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Not only do forest landowners need to understand basic principles of forest ecology principles, they must also have a basic knowledge of simple forest management principles and practices to communicate effectively with resource professionals.

What has been done

Six of the original Woodland Steward short courses were conducted in FY10 with 90 landowners participating, representing 28,800 acres.

Results

Impact was assessed by observing a 2.5-point increase in pre- and post-Likert self-evaluations (1-5 scale) related to forest ecology.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

Outcome #3

1. Outcome Measures

50 percent of participants will increase their knowledge of wildlife ecological principles.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Natural resource managers want their clients (landowners) to take responsibility for the stewardship of their woodlands. For that to happen, landowners need to have a basic understanding of wildlife ecological principles.

What has been done

Six of the original Woodland Steward short courses were conducted in FY10 with 90 landowners participating, representing 28,800 acres.

Results

Impact was assessed by observing a 1.8-point increase in pre- and post-Likert self-evaluations (1-5 scale) related to wildlife ecology.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife

Outcome #4

1. Outcome Measures

50 percent of participants will increase their knowledge of wildlife habitat improvement practices.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Not only do forest landowners need to understand basic principles of wildlife ecology, they must also have a basic knowledge of simple wildlife management principles and practices in order to communicate effectively with resource professionals.

What has been done

Six of the original Woodland Steward short courses were conducted in FY10 with 90 landowners participating, representing 28,800 acres.

Results

Impact was assessed by observing a 2.0-point increase in pre- and post-Likert self-evaluations (1-5 scale) related to wildlife management.

4. Associated Knowledge Areas

KA Code	Knowledge Area
135	Aquatic and Terrestrial Wildlife

Outcome #5

1. Outcome Measures

30 percent of participants will have a management plan in place after six months.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Natural resource managers want their clients (landowners) to work with them and develop a plan that will meet their woodland objectives.

What has been done

Six of the original Woodland Steward short courses were conducted in FY10 with 90 landowners participating, representing 28,800 acres. Six-month follow-up mail surveys were conducted.

Results

Impact was assessed by six-month follow-up surveys. The surveys revealed that 57 landowners, representing 21,000 acres, did complete a management plan. This 63 percent success rate is slightly better than in past years, primarily due to increased availability of federal EQIP dollars for writing management plans.

4. Associated Knowledge Areas

KA Code	Knowledge Area
123	Management and Sustainability of Forest Resources

Outcome #6

1. Outcome Measures

30 percent of participants will have engaged in at least one forest and/or wildlife improvement practice after six months.

2. Associated Institution Types

- 1862 Extension

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	0	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Natural resource managers want their clients (landowners) to implement the management plan that was developed and not let it rest on a shelf, or in a filing cabinet, or in a computer file.

What has been done

Six of the original Woodland Steward short courses were conducted in FY10 with 90 landowners participating, representing 28,800 acres. Six-month follow-up mail surveys were conducted.

Results

Impact was assessed by six-month follow-up surveys. Of the 57 landowners who had prepared forest management plans, 50 individuals, representing 18,000 acres, implemented at least one management practice called for in their plan.

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

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

Brief Explanation

Output #1 was not met in the past year simply because no statewide annual conference was held.

Output #2 was not realized because retirements and resignations have left vacancies in the voluntary regional natural resource program coordinator role in many regions and no volunteers have come forward from the reduced staff. This is simply not a high priority in times of budget and staff reductions.

Output #3 was again significantly affected by the weak economy. Forest landowners in Missouri continue to be recreational forest landowners at best. Few manage their woodlands for profit from timber sales. And those that do have been reluctant to manage their woodlands when stumpage prices for traditional forest products remain very weak.

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- Time series (multiple points before and after program)

Evaluation Results

Program leaders will continue to conduct pre- and post-Likert self-assessments to monitor knowledge gain among program participants and to use six-month follow-up surveys to monitor implementation of management practices. Longer-term impacts such as increased forest growth, increased wildlife populations, and increased revenue from management activities will be monitored by meeting with participants at future field days and landowner conferences.

Key Items of Evaluation

Since January 2006, the Missouri Woodland Steward Program has reached 638 landowners, representing 107,800 acres. A simple cash flow analysis in terms of the

potential net present value (NPV) based on average Ozark forest inventory data can be summarized as follows:

- Liquidate forest now NPV = \$650/acre
- No management, but cut trees in 40 years NPV = \$85/acre
- Manage the forest NPV = \$835/acre

Estimated economic value (gain) of forest management on those 107,800 acres is \$80.85 million (\$750/acre) NPV compared with no management and even \$19.94 million (\$185/acre) over liquidating the forest asset today!