

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

**Program # 12**

**1. Name of the Planned Program**

Global Food Security: Food Availability

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	10%			
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	5%			
205	Plant Management Systems	15%			
216	Integrated Pest Management Systems	10%			
307	Animal Management Systems	15%			
315	Animal Welfare/Well-Being and Protection	5%			
401	Structures, Facilities, and General Purpose Farm Supplies	5%			
601	Economics of Agricultural Production and Farm Management	20%			
602	Business Management, Finance, and Taxation	10%			
608	Community Resource Planning and Development	5%			
	<b>Total</b>	100%			

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

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

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Actual	10.7	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
354790	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
532185	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

#### Agriculture Enterprise Areas

In 2009 the State of Wisconsin reformed the Farmland Preservation Program to reinvigorate preservation of Wisconsin's working lands through new programs that encourage exclusive agricultural preservation zoning, provide for establishment of agricultural enterprise areas, and facilitate the purchase of agriculture conservation easements. Realizing that land owners, municipal officers and others would benefit from interpretation and explanation of the new legislation, UWEX educators set about preparing materials to explain the law and its possible local application, and facilitated formation of working groups to explore how the new legislation might benefit each county.

#### Wisconsin Crop Management Conference

University researchers publish the results of their on-farm field trials each year, and these results are communicated to growers, crop advisors, ag suppliers and others in large part through the three-day Wisconsin Crop Management Conference presented by Wisconsin Cooperative Extension in partnership with University of Wisconsin-Madison College of Agricultural and Life Sciences and Wisconsin Crop Production Association colleagues.

### 2. Brief description of the target audience

The statewide interdisciplinary Fruit Team, Grains Team, Livestock Team, colleagues and partners provide timely research-based education and assistance for livestock producers, forage and grains producers, field crop and vegetable producers and workers, fruit growers and workers, food processors and entrepreneurs, food coalitions and cooperatives, agriculture service providers, agronomic retail and wholesale suppliers, local and tribal officials, state and federal regulatory agencies.

Of 70,630 adults reached through direct teaching methods in 2010, 95.2 percent were white, 0.3 percent were African American, 0.2 percent were Asian American, 0.1 percent were American Indian, and 4.1 percent were of other identity; 75.3 percent were male and 24.7 percent female; 0.8 percent were identified as Latino. In 2010, community partners and the 406 volunteers trained made additional teaching contacts. The 1,625 agricultural professionals who attended the 2010 Wisconsin Crop Management Conference from Wisconsin, Minnesota, Iowa, Illinois, Indiana and Michigan produce a large multiplier

effect as Wisconsin Cooperative Extension research-based recommendations ultimately reach an increasing portion of the Great Lakes Region crop production sector including farmers.

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

**1. Standard output measures**

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Plan</b>	{NO DATA}	{NO DATA}	{NO DATA}	{NO DATA}
<b>Actual</b>	70630	0	0	0

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

**Patent Applications Submitted**

Year: 2010  
 Plan:  
 Actual: 5

**Patents listed**

- Conley, S. P. 2009. Diagnosing early season soybean injury.
- Conley, S. P. 2009. Yellow soybean at the V2 growth stage.
- Conley, S. P. 2009. Wheat stand assessment and N timing.
- Conley, S. P. 2009. Identifying the hollow stem and jointing growth stages in wheat.
- Conley, S. P. 2009. Anthesis (flowering) in wheat.

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

**Number of Peer Reviewed Publications**

2010	Extension	Research	Total
<b>Actual</b>	36	12	48

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

**Output Target**

**Output #1**

**Output Measure**

- {No Data Entered}

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

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

O. No.	OUTCOME NAME
1	Enhance the economic and environmental sustainability of agribusinesses
2	Build the capacity of the agriculture service and support industry

**Outcome #1**

**1. Outcome Measures**

Enhance the economic and environmental sustainability of agribusinesses

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

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

**Issue (Who cares and Why)**

Preserving prime agricultural land in Wisconsin becomes increasingly important as farmland continues to disappear. In 2009 the State of Wisconsin reformed the Farmland Preservation Program to reinvigorate preservation of Wisconsin's working lands through new programs that encourage exclusive agricultural preservation zoning, provide for establishment of agricultural enterprise areas, and facilitate the purchase of agriculture conservation easements. Many landowners and local government officials expressed interest in learning about the intricacies of this new legislation, especially about how it may impact their land and municipalities, and about how they might begin filing petitions for Agricultural Enterprise Area designation.

**What has been done**

A number of UWEX educators in a number of counties took the lead in educating communities about the new legislation, and in helping them preserve local ag lands through use of the new laws. For instance, Pete Kling developed communication lines with key decision makers in Polk and St. Croix counties, and he facilitated a meeting attended by landowners and county staff to establish two work groups charged with submitting petitions for the Rush River Legacy Agricultural Enterprise Area (AEA) in St. Croix County and the Squaw Lake AEA in St. Croix and Polk counties. Similarly, UWEX educator Alex Crockford headed up a team to develop a proposal and petition for the designation of an AEA in Langlade County. And Randy L. Knapp worked with farm families to complete petitions for the development of an AEA in Chippewa County.

**Results**

In December 2010, the Rush River Legacy AEA and the Squaw Lake AEA were approved and will give producers an added incentive to grow and expand their operations while protecting 18,289 acres of farmland for future generations. In August 2010, 62,000 acres of farmland were recognized as the Antigo Flats AEA in Langlade County, the largest AEA in Wisconsin. And two petitions in Chippewa County were accepted as part of the AEA pilot project.

Workshops and educational opportunities provided by UWEX educators in other counties have prepared farmers and county officials to make best use of the new legislation both to preserve agricultural land and to improve profitability through tax credits.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
608	Community Resource Planning and Development

**Outcome #2**

**1. Outcome Measures**

Build the capacity of the agriculture service and support industry

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Condition Outcome Measure

**3b. Quantitative Outcome**

Year	Quantitative Target	Actual
2010	{No Data Entered}	1625

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

**Issue (Who cares and Why)**

Each year following on-farm field trials, university researchers fine-tune their best management recommendations and publish results for Wisconsin field crop, forage, fruit and vegetable producers. Some results are incorporated into state and federal agency regulations governing agricultural programs, zoning, large farm licenses, state animal feeding operation permits, and farmland preservation tax credits. Growers, their crop advisors, and agronomic suppliers need to know about all the new research and new regulations.

**What has been done**

Wisconsin Cooperative Extension, in partnership with University of Wisconsin-Madison College of Agricultural and Life Sciences and Wisconsin Crop Production Association colleagues, organized the annual three-day educational program called the Wisconsin Crop Management Conference, a conference where new research and regulations could be presented to growers and ag professionals by more than 20 campus specialists and researchers, by extension state specialists and county agents, and by staff of the Wisconsin Department of Agriculture, Trade and Consumer Protection; the Department of Natural Resources; and the USDA Natural Resource Conservation Service. Conference proceedings would be provided to attendees, and would be made available to the public through Steenbock library and online at: <http://www.soils.wisc.edu/extension/wcmc>.

### Results

In 2010, 1,625 agricultural professionals attended the Wisconsin Crop Management Conference. They came from Wisconsin, Minnesota, Iowa, Illinois, Indiana and Michigan. Professional attendees earned Certified Crop Advisor continuing education units in nutrient management, soil and water management, pest management, crop management, and professional development. In their evaluation, 85 percent of agriculture service providers agreed or strongly agreed that extension resources help improve services to their customers; 78 percent agreed or strongly agreed that extension recommendations improve their own or their clients' profitability; 68 percent agreed or strongly agreed that extension has helped expand their professional networks; and 64 percent agreed or strongly agreed that extension resources have reduced their own or their clients' environmental impact.

### 4. Associated Knowledge Areas

KA Code	Knowledge Area
102	Soil, Plant, Water, Nutrient Relationships
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants
205	Plant Management Systems
216	Integrated Pest Management Systems
601	Economics of Agricultural Production and Farm Management

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

#### External factors which affected outcomes

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

#### Brief Explanation

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

#### 1. Evaluation Studies Planned

- During (during program)
- Time series (multiple points before and after program)
- Case Study
- Other (Comparisons between different groups of individuals or program participants experiencing different levels of program intensity.)

### Evaluation Results

#### Overview

During 2009 and 2010, UW-Extension conducted a comprehensive evaluation of its work in

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providing educational information and services to agricultural service providers in Wisconsin, stimulated by the question, "Why do we need a county agricultural agent when we have the crop consultant?" While agricultural Extension traditionally targeted farmer-producers, increasingly agricultural service professionals - crop consultants, sales representatives, veterinarians, dairy nutritionists, lenders, etc - have become a target of Extension's educational programming as a way to spread information more broadly and effectively. Yet, little was documented about UWEX's extent and value of this work; thus, the call for this evaluation. The study involved surveys of agricultural service providers (935 respondents), county extension agents (68 respondents) and state extension specialists (50 respondents) plus 18 key informant interviews.

### **Evaluation Findings**

#### Nature and scope of UW-Extension's work with agricultural service providers

The findings verify that significant UW Cooperative Extension services are being provided to and used by agricultural service providers (ASPs) across Wisconsin. Ninety-four percent of the UWEX county agents and 86% of UWEX specialists surveyed conduct meetings and/or work with agricultural service providers. Besides direct education through meetings, field days, conferences and workshops, UWEX personnel transfer knowledge and expertise to ASPs through collaborative work, joint research projects, validating agricultural information, networking and communications.

Ninety-five percent of the 935 surveyed agricultural service providers use UWEX. Two-thirds of ASPs who use UWEX have worked with UWEX for 15 or more years. UW-Extension is the primary source of professional development for 34% of the ASPs. Nearly all of the ASPs use at least one of Extension's delivery methods "frequently" or "all the time". UW-Extension meetings/workshop/conferences and newsletters or other publications are used the most frequently. The greatest proportion of ASPs (77%) works with UWEX to validate information by comparing it to UWEX information. Agricultural service providers generally feel that information provided by UWEX is research-based, trustworthy, consumer friendly, and accessible.

#### Outcomes and impacts of UW-Extension work with agricultural service providers

The agricultural service providers included in this sample give UW-Extension high marks in terms of the impact the institution has had on the agriculture sector in Wisconsin. Virtually all agree that UWEX's efforts have improved management in agriculture and contributed to the scientific understanding of agriculture. Seventy percent of the sampled ASPs reported that UWEX provides them with at least 10 percent of their annual new agricultural information. The majority of the responding ASPs report that UWEX has improved their service to their customers (85%). Three-quarters of the sample feels that UWEX increased their effectiveness by 10 percent or more. Agricultural service providers reported that UWEX recommendations have improved their own/clients' profitability (78%). Other benefits include expanding professional networks, reducing own or clients' environmental impact and increasing/maintaining client base.

#### Ways UW-Extension can improve its work with agricultural service providers

Nearly one-third of the ASPs who responded to the survey provided suggestions for ways to improve UWEX programming and work with ASPs. The evaluation study team used content analysis to examine the 319 comments and sort them by relevant themes. The three main themes that emerged were 1) collaborate with agricultural service providers more, 2) improve communication efforts, and 3) need more cutting edge research.

### **Interpretations**

The results of this evaluation study provide valuable insights into UW-Extension's work and impact with agricultural service providers. The sample of ASPs whose opinions are summarized in this report appears to be very representative of the overall population of professionals serving the agriculture sector. UWEX has been successful in establishing and maintaining long-term relationships with the diverse groups of ASPs in WI. The results clearly indicate that the longer a person has worked in the agriculture sector, the older he/she is, and the longer the association with UWEX, the more frequently he/she utilizes UWEX's educational services. The ASPs who responded to the survey provide a generally positive assessment of the role and impact of Extension on Wisconsin's agricultural sector. Most see Extension as providing reliable and unbiased information. They see room for improvement in communication efforts, collaborations, and in providing more up-to-date research results.

### **Recommendations**

The evaluation study team recommends that the information gathered and analyzed in this study be used and extended in two general ways. First, UW-Extension should communicate the results of this study to key stakeholders involved in the agriculture sector in order to increase awareness of UWEX's work and impacts with agricultural service providers. Second, UWEX should use the results of this evaluation to improve their relationships and work with ASPs. Some specific actions UWEX can take include making presentations and/or distributing summary publications to key stakeholders and facilitating discussions with UWEX State Specialists and County Agents to consider responses to ASP's open ended question responses.

### **Key Items of Evaluation**

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