

Wisconsin Agricultural Education & Workforce Development Council

2012 Annual Report

Introduction

Wisconsin Act 223, enacted on 4/7/2008, created the Wisconsin Agricultural Education and Workforce Development Council. To review the complete Act go to <http://www.legis.state.wi.us/2007/data/acts/> WisAct 223. In September of each year a report is required to be delivered to the Legislature, Governor and other specified Institutions. The Report must include the following:

1. A summary of the activities of the Council during the fiscal year ending on the preceding June 30.
2. The Council's reaction to the annual agricultural program reviews prepared by the Department of Public Instruction for primary and secondary schools, the WI Technical College System, the University of Wisconsin System and the University of Wisconsin Extension-Cooperative Extension with input from or review by the University of Wisconsin System administration.
3. A list of current and anticipated challenges related to agricultural education.
4. Recommendations of the Council, including any recommendations related to the structure of the Council or the termination of the Council.
5. Dissents of any Council member related to the activities and recommendations of the Council.

Agricultural Education and Workforce Development Council Purpose

The Council shall seek to do all of the following:

1. Increase the hiring and retention of well-qualified employees in industries related to agriculture, food, and natural resources.
2. Promote the coordination of educational systems to develop, train, and retrain employees for current and future careers related to agriculture, food, and natural resources.

3. Develop support for employment in fields related to agriculture, food, and natural resources.
4. Recommend policies and other changes to improve the efficiency of the development and provision of agricultural education across educational systems.
5. The council shall seek to accomplish the purposes by advising state agencies on matters related to integrating agricultural education and workforce development systems, including all of the following:
 - The coordination of programs.
 - The exchange of information related to educational and workforce development needs.
 - The monitoring and evaluation of programs.
6. The council shall identify criteria for evaluating the success of its activities, shall evaluate the success of its activities using those criteria, and shall annually report the results of the evaluation in the annual report.

Executive Summary

The following is the Executive Summary of the accomplishments of the WI Agricultural Workforce Development Council (hereinafter referred to as the Council) for the year ending June 30, 2012. An excellent source of information on the Council is located at <http://wiaglink.org/>. Activities of the Council focused on specific initiatives to meet our purpose of **ensuring the availability of a strong, well-educated workforce for agriculture, food and natural resource systems**. The Council has become more action oriented and our accomplishments are as outlined in the following:

1. Council Structure Development/Activities

- Ten new members joined the Council out of a total of 34 positions with three positions remaining vacant. The following members joined in the last year: Terri Dallas-Agribusiness Representative; Patrick Link-Agribusiness Representative; Elizabeth Henry-Plant Ag Business Related Representative; Tony Savarin-Food Product & Food Processing Business Representative; Corey Kuchta-Engineering, Mechanical, Electronic & Power Services Relating to Ag Representative; Bill Herr-Member of a School Board of Education; Tom Thieding-WI Economic Development Corporation Representative and Dale Schultz-Senate Agriculture Committee Chair. Council Member changes after 7/1/12 include: John Lehman-Senate Education Chair and Kathleen Vinehout-Senate Agriculture Chair. Open positions on the Council include: a Board Member representative of the Agriculture, Trade & Consumer Protection Board, School District Administrator and a designee of the Secretary of Agriculture, Trade and Consumer Protection. Please see <http://wiaglink.org/> to review the Council Membership Chart.

- In June 2012, the Council recognized three members that had completed their Council Membership term: Allan Hermann-Engineering, Mechanical, Electronic and Power Services Relating to Agriculture Representative, Doug Wilson-Agribusiness Representative and Mark MacPhail-Food Product & Food Processing Business Representative. All three were instrumental in the Council's development, organization and leadership.
 - The Council Executive Committee was totally reorganized as a result of the expiring terms and the need to expand committee membership. The past chair was added to the Executive Committee to assist in transition. The new Executive Committee is comprised of the following members: Paul Larson-Chair; Patrick Link-Vice Chair; Mark MacPhail (Ex Officio-Past Chair); Ben Brancel; Pam Jahnke; Tony Evers; Sharon Wendt; Becky Lezvow; Corey Kuchta; Rich Miller; Carrie Mickelson; Cal Dalton and Lori Weyers.
 - Conducted new Council member orientation and briefings.
 - Conducted Legislative & Government Agency briefings.
 - Participated in a Tour and received an update of the Dairyland State Academy Agriculture Center of Excellence at Northcentral Technical College in Wausau, WI.
 - Served on a Panel of Presenters on agriculture, food and natural resources workforce development at the Federal Reserve Bank of Chicago Economic Development Conference held in Wausau, WI.
 - Received and reviewed employment and agricultural economic growth reports.
 - Developed and maintained "Ag Convener" status as the agriculture, food and natural resources, jobs and employment expert for the Workforce Development Board of SC, WI. Council members have been appointed to the Workforce Development Board of South Central, WI Ag Sector Team.
2. Wisconsin Agriculture Education Foundation, Inc. (Foundation), is responsible for obtaining financial support of the Council:
- The Foundation Board of Directors was expanded and the Foundation leadership changed as follows: Paul A. Larson, Chairman; Allan D. Hermann, Vice Chairman; Nile Beck, Treasurer; and Keith Gundlach, Secretary. Additional Foundation Board of Directors includes: Shari Graffunder, Kimberly Houser, David Kruse, Bridgett Neu, Mike Compton, Darlene Arneson, Mark MacPhail, Sam Skemp and Ex-officio members: Jeff Hicken, Randall Zogbaum, Richard Kemme and Jack Ourada.
 - Jack Ourada was contracted to serve as the Executive Director of the Council and Project Coordinator of the Foundation for the period of 7/1/11-6/30/12.

- The Workforce Development Board of South Central WI contracted the Foundation to administer the Agriculture Sector Partnership Grant in the amount of \$284,855. This Grant ended 7/31/11.
- Completed a Foundation audit on Grant and Foundation income and expenses for the fiscal year 7/1/10–6/30/11. No significant issues were reported.
- Contracted Filament Marketing, LLC to develop and maintain the Why Ag Campaign and website. The www.whyag.com website was launched at the School Counselor Convention held in February 2012.
- The Foundation is the funding arm for the Council. The Foundation continues to solicit financial support from private industry. This has become a significant challenge for the Foundation and a threat to the viability of the Council.
- Developed the 2011–2012 budget & strategic Plan.
- Provided \$2,500 in Agricultural Grants to enhance the ability to provide education and for professional development to Secondary and Post-Secondary school

3. Industry Partnership Training Grant Summary

- Effective 8/1/10 through 7/31/11. The Grant overlapped into two fiscal years of the Council.
- The Grant was awarded to the Workforce Development Board of South Central Wisconsin.
- Purpose: The Grant focused on the training that is required to prepare new and incumbent workers in both on farm and off farm career pathways.
- Amount of the Grant: \$284,855.00. Amount of the Grant funds used: \$226,917.99. .
- Additional local leveraged resources provided \$224,787.67.
- Partner Organizations: WI Department of Agriculture, Trade & Consumer Protection and the WI Agricultural Education & Workforce Development Council as the Agriculture Industry Convener.
- The Workforce Development Board of South Central WI contracted with the WI Agriculture Education Foundation, Inc., (WAEF) to administer the Grant.

4. Summary of Educational Goals/Training: 232 participants were trained using \$111,959.25 of the total grant funding.

- Future Fields: Collaborator- Department of Agriculture, Trade and Consumer Protection, (DATCP)
 - Training assistance provided to 27 farmers relative to seeking and applying for off-farm employment. Total grant funds used \$20,155.02.

- WI Agribusiness Academy: Collaborator-UW Extension
 - Leadership training provided to 16 (16 completed Sessions 1–3 & 13 completed Session 4) agribusiness people in the four scheduled workshop. Total grant funds used \$32,407.23. Additional Information:
- Meat Processing Boot Camp: Collaborator-Specialty Meat Development Center
 - Orientation to meat processing careers provided to 22 participants at two workshops (Eau Claire & Green Bay). Total grant funds used \$4,408.67.
- Introduction to Dairy Processing: Collaborator-Dairy Business Innovation Center
 - Orientation to dairy processing careers provided to 16 participants. Total grant funds used \$4,659.19.
- Farmstead Dairy Processing HACCP Training: Collaborator- Dairy Business Innovation Center
 - 22 farmstead dairy processors completed Hazard Analysis Critical Control Point, (HACCP) training at sessions held in Appleton, Siren and at UW-Madison. There were 13 one-on-one follow up sessions completed in June & July. Total grant funds used \$18,051.04.
- Orientation to Agriculture Careers: Collaborator-WI Technical College System
 - Orientations to agriculture careers were held in two sessions (MATC-Madison & FVTC-Appleton) with 17 participants. Total grant funds used \$5,007.00.
- Landscape Technician Training: Collaborator-Wisconsin Landscape Contractors Association
 - Landscape certification was taught at two sessions held at MATC-Mequon & FVTC-Appleton on 7/16/11 with 76 participants. Total grant funds used \$20,071.11.
- Food Processing HACCP Training: Collaborator-Midwest Food Processors Association
 - Food Processing HACCP training was held at UW River Falls with 36 participants. Total grant funds used \$7,200.00.

5. Grant Activities that Support Agriculture Sector Development

- Support funding for the WI Agriculture Education & Workforce Development Council Executive Director.
- Promoted agricultural career pathways statewide.
- Development and maintenance of the Why Ag Campaign including website development and materials to raise the understanding and awareness of agricultural food & natural resources industry career opportunities.

- Link partner websites to promote career opportunities in the Agriculture Industry.
 - Developing a sustainable strategy and plan for agriculture industry partnerships.
6. Why Ag Initiative: A website and campaign designed to encourage the workforce to consider agriculture, food and natural resources as a career option. The goal is to link employers with a qualified workforce. This Initiative also is an important part of attracting young and displaced workers to consider careers in agriculture, food and natural resources:
- Developed and implemented an initial campaign outline.
 - Summarized and refined the Why Ag key messages and talking points.
 - Developed and summarized job skills & the requirements for agriculture, food and natural resources career pathway jobs.
 - Created and distributed Why Ag logo and marketing materials.
 - Officially launched the WhyAg.com website at the School Counselor Conference in February 2012. Please visit: <http://www.whyag.com/>.
 - Provided for the ongoing maintenance and promotion including solicitation of website Sponsors.
7. Support Agriculture, Food & Natural Resources Education
- Participated in the annual WI Association of Agricultural Educators Convention. Natalie Killion and Mark MacPhail represented the Council serving on a Panel of Presenters providing suggestions on promoting agricultural education.
 - Tracked state budget impact on agriculture, food and natural resources education and developed a position paper in response.
 - Provided support and assistance to maintain the resources for agricultural education.
 - Promoted agriculture, food & natural resources career pathways document.
 - Completed a presentation to the School Counselor Conference and introduced the www.whyag.com website as a resource for Counselors to help young people explore careers in agriculture, food and natural resources.
 - Supported the Milwaukee Public School System in their development and reintroduction of agricultural education programs.
8. Building Alliances, Relationships and Sponsors:
- Leveraged the Council's unique Public/Private Partnership as a recognized convener for agriculture, food and natural resources.
 - Develop relationships with private industry and trade associations to understand agriculture, food and natural resource systems workforce needs and to ensure financial sponsorship.
 - Continue the strong partnership and working relationship with the Department of Agriculture, Trade and Consumer Protection to meet the workforce growth

and development needs of agriculture, food and natural resource system businesses.

- Serve as a member and partner with the Workforce Development Board of South Central WI to meet the workforce needs developed by the Ag Sector Team.
- Position the Council to be a strong partner with the WI Economic Development Corporation for agriculture, food and natural resources system job growth.
- Work with the WI Department of Workforce Development to recognize agriculture, food and natural resources as a featured partner on their Job Center website.

9. 2012–13 Council/Foundation Plans

- Develop sustainable funding and resources for the Council and Foundation.
- Provide for the continued development of the Why Ag website including ongoing maintenance and sponsorship.
- Continue implementation of the Why Ag initiative and campaign.
- Complete data collection on the number of agriculture, food and natural resources jobs to identify how many jobs exist, impact of retirements, projected effect of emerging careers and total economic impact of agriculture, food and natural resources systems businesses..
- Support Agriculture Education to maintain the resources and commitment to developing a future workforce.
- Leverage our Public/Private Partnerships expanding our collaboration with private industry, educators, government agencies, trade associations and others.
- Connect and promote the Council regionally and locally with agriculture, food and natural resources sector employers, employment groups and supporters.
- Continue to research and make application for grants and private foundation funding for career employment training and to ensure a qualified workforce for agriculture, food and natural resources.

Annual Agriculture Program Reviews

Agriculture Education in Wisconsin's PK–12 Public Schools

Agricultural education continues to prepare students for careers in the agricultural industry, while developing students' leadership skills through FFA and their Supervised Agriculture Experience, (SAE). Today's agricultural education departments have developed a comprehensive structure that includes areas such as biotechnology, veterinary science, alternative energy, food science, horticulture and landscaping. With such variety, students are

being prepared for the 21st Century. The question is are there enough students learning about agriculture to meet the needs of the industry?

Program Status

- Over 44,000 students on average per year take agricultural education courses. This amounts to 6.7% of the total population of career and technical education courses.
- Almost 19,000 agricultural education students are also members of the Wisconsin Association of FFA.
- Three new agricultural education programs were established this past year. Owen-Withee, Southwestern and Highland will be offering agricultural education courses as well as an FFA Chapter.
- Over 4,000 FFA members competed in career development events ranging from agricultural mechanics to environmental and natural resources.
- The Department of Public Instruction, (DPI), continues to implement an agriculture/science equivalent credit process to award science credits for agriculture courses. Over 70 schools and over 160 courses have been approved.
- Over 160 agricultural education departments use the Center for Agricultural and Environmental Research and Training, (CAERT), a lesson library, online textbook and assessment program which is aligned to the Wisconsin Model Academic Standards. This program is similar to Project Lead the Way, (PLTW), in providing rigorous and relevant teaching materials in agriculture education.
- The implementation of career clusters and pathways in Agriculture, Food and Natural Resources as well as Science, Technology, Engineering and Mathematics, (STEM), expands career development opportunities and helps transition secondary to post-secondary.

Wisconsin Technical College System

The Wisconsin Technical College System (WTCS) provides the state with the critical, essential technical occupations on which we all rely. The Systems' 16 colleges equip graduates with real world, hands-on experience they apply to specific occupations that provide us all with security and quality of life. The technical colleges stimulate local economic development by providing a well-educated workforce based on local occupational needs, as well as providing the innovation to meet emerging opportunities, for local business and industry. From biotech to electronics to health care to public safety – great paying jobs await technical college graduates.

The technical colleges have a long history of offering high quality programs in agriculture and natural resource career pathways. In the 2012–2013 school year, these programs include 19 applied associate degree programs, eight 1-year technical diplomas, two 2-year technical diplomas, three short-term technical diplomas, and two apprenticeships offered at 14 of the 16 colleges. These programs offer students education and training in a wide variety of agriculture and natural resource related professions including farm business, dairy herd management, veterinary technician, and laboratory science technician (see Figure 1).

FIGURE 1 - WTCS Agriculture Programming

Program Number	Agriculture, Food and Natural Resources	Blackhawk	Chippewa Valley	Fox Valley	Gateway	Lakeshore	Madison Area	Mid-State	Milwaukee Area	Moraine Park	Nicolet	Northcentral	Northwest WI	Southwest WI	Waukesha County	Western	WI Indianhead
		31-006-1	Agri-Business Specialist	■													
10-006-2	Agri-Business/Science Technology			■										■		■	
10-070-1	Agricultural Equipment Technology						■										
32-070-1	Agricultural Power & Equip. Technician													■			■
31-003-2	Agriculture Equipment Service Technician			■													
31-070-4	Agriculture Equipment Technology											■					
10-003-2	Agriculture Power Equipment			■													
10-006-3	Agri-Science Technician		■														
10-001-5	Arboriculture – Urban Forestry Tech.							■									
50-091-1	Dairy Grazier Apprenticeship											■					
31-091-1	Dairy Herd Management					■								■			■
10-091-4	Dairy Science											■					
10-320-2	Enology												■				
10-506-2	Environmental Engineering Waste & Water Tech												■				
10-506-1	Environmental Health & Water Quality Technology								■				■				
30-090-1	Farm Business & Production Management	■	■	■		■	■	■					■	■		■	■
31-080-4	Farm Operation			■				■									
10-001-1	Horticulture		■		■												
30-001-5	Horticulture (basic)						■										
31-001-1	Horticulture Technician			■		■											
32-001-2	Horticulture/Landscape Specialist			■													
30-001-3	Horticulture/Landscape Technician	■															
10-506-4	Laboratory Science Technician			■													
31-506-4	Laboratory Science Technician Assistant	■															
10-001-4	Landscape Horticulture					■			■				■				■
10-057-1	Natural Resources Technician			■													
10-091-6	Veterinary Science											■					
10-091-1	Veterinary Technician						■										
10-320-1	Viticulture												■				
50-527-1	Wastewater Plant Operator									■							
10-527-2	Water Quality Technology									■							
31-058-1	Wildland Fire Crew			■													
10-058-1	Wildland Firefighter			■													
10-482-1	Wind Energy Technology			■		■				■			■				

Graduates from agricultural programs in the Wisconsin Technical College System have a very high success rate of employment in their chosen field (see Figure 2). The Wisconsin Technical College System conducts graduate follow-up surveys six months after graduation on graduate's success rate finding employment as well as median starting salary. For Agricultural programs, the 2010 survey indicates that 95% of Wisconsin Technical College System graduates were employed and 88% were employed in an agriculture related field. The median starting salary for these graduates was \$29, 118. These numbers show there are very good employment opportunities for the systems graduates.

Figure 2. Agribusiness Division – All

Program Name	No. of Grads	Re-sponses	In Labor Force	Number Employed	Percent Employed	Number Employed Related	Percent Employed Related	Seeking Employment	Median Salary Hourly	Median Salary Annually	Ave. Hours / Week
<i>Associate Degree Totals</i>	234	178	159	147	92%	128	87%	12	\$12.92	\$29,118	43
<i>Short-Term Technical Diploma Totals</i>	183	60	49	48	98%	43	90%	1	\$12.19	\$40,000	63
<i>One-Year Technical Diploma Totals</i>	70	56	43	41	95%	36	88%	2	\$9.17	\$23,110	48
<i>Two-Year Technical Diploma Totals</i>	30	29	29	29	100%	26	90%	0	\$11.23	\$29,118	50
<i>Agribusiness Division Totals</i>	517	323	280	265	95%	233	88%	15	\$11.63	\$29,118	48

The Agricultural Programs in the Wisconsin Technical College System provide an excellent opportunity for Wisconsin's students to obtain the skills necessary for a successful career in agriculture and natural resource fields.

The University of Wisconsin System

Agriculture and natural resources, (forestry and forest products), continue to be significant perennial contributors to the Wisconsin economy. Career Pathways associated with these economic engines include Agribusiness, Animal Systems, Environmental Services, Food Products and Processing, Natural Resources, Plant Systems, and Power, Structural and Technical Systems. Recruiting and educating students for these professions is vital to growing the Wisconsin economy. Baccalaureate programs in agriculture and natural resources are offered by UW-Madison College of Agricultural and Life Sciences (CALs); UW-Madison School of Veterinary Medicine (UW-SVM); UW-Platteville School of Agriculture (SOA); UW-River Falls

College of Agriculture, Food and Environmental Sciences (CAFES); and UW-Stevens Point College of Natural Resources (CNR) that prepare students for careers in these professions.

Enrollments in UW-System colleges and schools of agriculture and natural resources continue to experience rapid growth. During 2011–12 the number of undergraduates reached 7261, which represented a 2.8% increase over 2010–11. In addition, about 1025 students pursued advanced degrees, (MS and PhD), bringing the total enrollment in agriculture and natural resource programs to 8275 students.

Enrollment in Agricultural and life science programs in CALS at UW-Madison grew steadily during 2011–12, increasing by 4.6% compared to 2010–11. Increased enrollments were observed in agricultural business management, agronomy, animal science, biological systems engineering, biology, food science, forestry science, and Community and Environmental Sociology contributed significantly contributed to growth in CALS at UW-Madison. In contrast, enrollments in agricultural and applied economics, dairy science, horticulture, and landscape architecture declined compared to 2010–11. Please visit the following web links for more information regarding agriculture and life science programming at CALS (UW-Madison Home: <http://www.wisc.edu/>; College: <http://www.cals.wisc.edu/>; Career Services: <http://www.cals.wisc.edu/students/careerServices/>; Farm and Industry Short Course: <http://fisc.cals.wisc.edu/>).

<i>Institution/Program</i>	<i>Enrollment and Graduation Statistics</i>		
	<i>2011–12 Enrollment</i>	<i>Percent Change from 2010-11</i>	<i>Graduates</i>
<i>University of Wisconsin-Madison/College of Agriculture and Life Sciences</i>			
<i>Agriculture Business Management</i>	65	8.3	27
<i>Agriculture Applied Economics</i>	25	-26.5	31
<i>Agronomy</i>	28	7.7	14
<i>Animal Science</i>	174	8.8	26
<i>Poultry</i>	4	33.3	2
<i>Microbiology</i>	148	0	68
<i>Biochemistry</i>	471	-3.7	148
<i>Biological Systems Engineering</i>	128	24.3	31
<i>Biology</i>	1238	10.2	431
<i>Dairy Science</i>	77	-10.5	35
<i>Entomology</i>	9	12.5	11
<i>Food Science</i>	116	11.5	38
<i>Forestry Science</i>	32	33.3	10
<i>Genetics</i>	279	5.7	72
<i>Horticulture</i>	44	-4.3	21
<i>Landscape Architecture</i>	101	-12.9	26
<i>Agricultural Education</i>	3	-25	
<i>Life Sciences Communication</i>	109	-1.8	45

<i>Nutritional Sciences</i>	265	3.1	76
<i>Plant Pathology</i>	8	60.0	8
<i>Community and Environmental Sociology</i>	59	18.0	24
<i>Soil Science</i>	33	-2.9	18
<i>Wildlife Ecology</i>	104	-5.5	33
TOTAL UNDERGRADUATE ENROLLMENT/CALS	3520	4.6	1195
TOTAL GRADUATE ENROLLMENT/CALS	966	-14	
TOTAL ENROLLMENT IN CALS	4486	457	

Enrollment in agriculture and natural resource programs in the School of Agriculture at UW-Platteville grew about 3.2% in 2011–12. Significant enrollment increases occurred in the agribusiness (13%), soil and crop science (18.2%), and animal science (4.6%). However, sharp enrollment declines were observed in ornamental horticulture (-29%), agricultural education (-14.7%) and reclamation, environment and conservation (-12.3%). Enrollment increases over the last several years also resulted in a record number of UW-Platteville agriculture student interns in the workplace during 2012. Over 110 School of Agriculture student interns were employed by agriculture and natural resources firms in Wisconsin, Illinois, Iowa, Minnesota, North Dakota, Texas, New Mexico, Arizona, Indiana, and South Dakota. Please visit the following web links for more information regarding agriculture programming at UW-Platteville.

(UW-Platteville Home: <http://www.uwplatt.edu/>; School website: <http://www.uwplatt.edu/soa/>; Majors and minors: <http://www.uwplatt.edu/soa/major.html>; Faculty and Staff: <http://www.uwplatt.edu/soa/personnel/index.html>; Pioneer Farm: <http://www.uwplatt.edu/pioneerfarm/>).

<i>Institution/Program</i>	<i>Enrollment and Graduation Statistics</i>		
	<i>2011–12 Enrollment</i>	<i>Percent Change from 2010-11</i>	<i>Graduates</i>
<i>University of Wisconsin-Platteville/School of Agriculture</i>			
<i>Agribusiness</i>	228	12.9	41
<i>Agricultural Education</i>	58	-14.7	15
<i>Animal Science</i>	293	4.6	56
<i>Ornamental Horticulture</i>	25	-28.6	7
<i>Reclamation, Environment and Conservation</i>	50	-12.3	6
<i>Soil and Crop Science</i>	65	18.2	14
TOTAL UNDERGRADUATE ENROLLMENT/SOA	719	3.2	139

Undergraduate enrollment in agriculture, food and environmental sciences in CAFES at UW-River Falls (UWRF) declined slightly (1.2%) during 2011–12. Enrollment increases were observed in Agribusiness (4.3%), agricultural engineering technology (14.3%), agricultural studies (5.3%), and animal science (4.9%). In contrast, undergraduate enrollments in agricultural education (-8.3%), conservation (-5.8%), dairy science (-9.6%), and horticulture (-22.1%) were down. Fall 2012 marks the 100th year of agricultural programming at UWRF. CAFES will continue to celebrate its Centennial Year through April 2013. Please visit the following web links for more information regarding the agriculture, food and environmental science program at UW-River Falls (UW-River Falls Home: <http://www.uwrf.edu/>; College website.

<http://www2.uwrf.edu/college-of-agriculture/>; Program: <http://www2.uwrf.edu/college-of-agriculture/majors.htm>; Faculty and Staff: <http://www2.uwrf.edu/college-of-agriculture/people.htm>; Laboratory Farms: <http://www2.uwrf.edu/college-of-agriculture/farms.htm>; Internship Office: <http://www2.uwrf.edu/college-of-agriculture/internship.htm>).

<i>Institution/Program</i>	<i>Enrollment and Graduation Statistics</i>		
	<i>2011--12 Enrollment</i>	<i>Percent Change from 2009--10</i>	<i>Graduates</i>
<i>University of Wisconsin-River Falls/College of Agriculture, Food and Environmental Sciences</i>			
<i>Agricultural Business</i>	169	4.3	39
<i>Agricultural Education</i>	100	-8.3	15
<i>Agricultural Engineering Technology</i>	72	14.3	16
<i>Agricultural Studies</i>	60	5.3	12
<i>Animal Science</i>	453	4.9	76
<i>Conservation</i>	114	-5.8	24
<i>Crops and Soils</i>	62	0	16
<i>Dairy Science</i>	123	-9.6	29
<i>Environmental Science</i>	50	-3.8	7
<i>Food Science</i>	30	-9.1	8
<i>Geology</i>	42	-2.3	9
<i>Horticulture</i>	67	-22.1	16
<i>Land Use Planning</i>	17	-10.5	8
<i>TOTAL UNDERGRADUATE ENROLLMENT/CAFES</i>	1359	-1.2	275
<i>TOTAL GRADUATE ENROLLMENT/CAFES</i>	15	-66	7
<i>TOTAL ENROLLMENT AT UW-RF/CAFES</i>	1374	-1.9	282

Undergraduate enrollment in the College of Natural Resources at UW-Steven’s Point increased by about 3% to 1,663 during the 2011–12 academic year. Programs exhibiting the greatest enrollment increases were soil science (11.5%), resource management (5.5%), and forestry (3.7%). Please visit the following web links for more information regarding the natural resources programs at UW-Steven’s Point.

(College website: <http://www.uwsp.edu/CNR/>; Undergraduate Programs: http://www.uwsp.edu/cnr/undergrad_programs.aspx; Graduate Programs: <http://www.uwsp.edu/cnr/Graduate/index.aspx>; Faculty and Staff: <http://www.uwsp.edu/cnr/faculty.aspx>

Quick Facts: <http://www.uwsp.edu/cnr/quickfacts.aspx>).

Institution/Program	Enrollment and Graduation Statistics		
	2011–12 Enrollment	Percent Change from 2009–10	Graduates
University of Wisconsin-Steven’s Point/College of Natural Resources			
<i>Forestry</i>	396	3.7	79
<i>Resource Management</i>	328	5.5	47
<i>Soil Science</i>	107	11.5	25
<i>Fisheries and Water Resources</i>	260	0.8	45
<i>Paper Science</i>	72	-1.4	3
<i>Wildlife</i>	500	0.6	84
<i>Total Undergraduate Enrollment/CNR</i>	1663	2.8	283
<i>Total Graduate Enrollment/CNR</i>	44	-10.2	
<i>Total enrollment at UW-SP/CNR</i>	1707	2.5	

Over 1,892 undergraduates received baccalaureate degrees in agriculture and natural resources from UW-System institutions, up 58% over 2010-11. About 85% of graduates responding to employment surveys reported that they were either employed or pursuing graduate study. UW-Madison awarded 1195 baccalaureate degrees in agriculture and life science programs. Agriculture and natural resource programs at UW-Platteville, UW-River Fall and UW-Steven’s Point awarded 139, 275 and 283 baccalaureate degrees, respectively.

University of Wisconsin Extension – Cooperative Extension

University of Wisconsin-Extension Cooperative Extension provides research-based education, technical assistance, and consultation through four program areas — Agriculture and Natural Resources; Community, Natural Resource and Economic Development; Family Living; and 4-H Youth Development. Within the Agriculture and Natural Resources Extension (ANRE) program area, county educators and state specialists work with numerous partners to:

- 1) Create a vibrant and robust agricultural economy
- 2) Support healthy, accessible and safe food systems
- 3) Protect valued natural resources.

ANRE faculty and staff also teach through the UW-Madison Farm and Industry Short Course and 4-H Youth Development agricultural programs. This unique network — 96 state specialists on the Madison, Platteville and River Falls UW campuses, 85 agricultural educators in 68 of Wisconsin's 72 counties, public and private educational partners and growers — fosters collaboration, innovation, economic and workforce development, improving both farm management practices as well as scientific understanding of agriculture.

ANRE faculty and staff are key contributors to two Wisconsin Agricultural Education and Workforce Development Council Industry Partnership Training Grant programs – the Wisconsin Agribusiness Academy and Preparing for a Career in the Meat Industry. Through the Wisconsin Agribusiness Academy, participants develop leadership qualities that are in demand and valued by every agricultural company. Preparing for a Career in the Meat Industry workshop participants learned from experts meat production and job skills needed in the meat processing industry, increasing their understanding from 52% in the pre-test to 85% in the post-test.

ANRE statewide teams include dairy; fruit crops; grains; farm and risk management; food industry research, service and training; livestock; forages; nutrient management; fresh market and commercial vegetable crops; small farms; horticulture; and bioenergy. In 2011, leaders sought statewide input on critical and emerging issues requiring a multi-disciplinary response, resulting in two cross-program teams – Community Food Systems and Engaging Young People to Sustain Communities, Families and Farms. Agricultural service providers such as crop consultants, cooperative or private business sales staff, veterinarians, dairy nutritionists, lenders and others increasingly turn to extension for professional development training and support, and validation of best management advice they share with customers. A comprehensive evaluation study documents how partnerships with trained agricultural service providers help Cooperative Extension state specialists and county educators bolster Wisconsin's agricultural economy.

Other examples of UW-Extension Agricultural Workforce Development Programs:

1. Nearly 1600 agricultural professionals, mostly from Wisconsin, attended the 2011 Wisconsin Crop Management Conference. Through trainings with more than 30 extension

campus specialists and county agricultural agents, those attending earned Certified Crop Advisor (CCA) continuing education units in nutrient management, soil and water management, pest management, crop management, and professional development. Providing educational training to this level of professional results in a large multiplier effect as Cooperative Extension research-based recommendations reach more Wisconsin farmers. Extension Integrated Pest Management and other specialists reinforce this work through regional professional development trainings for Wisconsin's 620 CCAs who earn 40 hours of continuing education units every two years to remain certified.

2. Helping small food processors is an excellent way to increase the availability of safe, wholesome products made in Wisconsin. Partnering with the Wisconsin Department of Agriculture, Trade and Consumer Protection, a food safety-training program was developed for small food processors. Since 2009, 333 small business owners and entrepreneurs have completed Wisconsin Acidified Canned Foods Program trainings as they prepare to develop and market their products. Cooperative Extension training and support has also allowed these businesses to develop new products and has provided economic growth for local economies. Along with needed trainings, a web site now helps small food processors navigate the course of "recipe to reality", providing convenient information on licensing and product testing, sample process forms, and contact information for process approval.
3. Using the Agronomy Management Assessment Center training process developed by UW-Extension, twelve agronomy managers assessed their capacities in nine attribute areas: communications, planning, organizing, leadership, decision-making, managing resources, empathy, teamwork initiative, and creativity. This program is conducted in collaboration with the Wisconsin Crop Management Association. Program participants indicate they never participated in a program where they received so much individual attention. They also found the program valuable from a career promotion perspective.
4. Wisconsin has more than 200 farmers' markets. UW-Extension has provided training and resources to improve farmers' market managers marketing and promotion skills needed to realize their markets' full potential. A Wisconsin Farmers Market Association with a nine-member board and committees has been established, and a web site to support farmers' market managers has been developed.

The extension 4-H Youth Development program connects directly with youth from pre-K to one year past high school graduation. Through 4-H, young people engage in their communities and develop skills to navigate the challenges of a complex world. More than 36,000 youth are enrolled members of 4-H clubs in Wisconsin. Another 285,000 Wisconsin youth get involved in 4-H and other Cooperative Extension programs through special educational opportunities at school, in after school programs, or at neighborhood or youth centers. Professional 4-H Youth Development educators work with more than 20,000 trained adult volunteers and nearly 3,000 youth in carrying out 4-H Youth Development programs in local communities. One important program focus of 4-H is the Science, Technology, Engineering and Mathematics, (STEM), program enrolling 5,321 youth in 2011. Through 4-H Youth Development programs, youth have the opportunity to explore and master many fields related to agriculture and the sciences.

In 2011:

- 5,247 youth enrolled in 4-H crops and agronomic plants curricula.
- 4,852 youth enrolled in 4-H dairy cattle curricula.
- 7,309 enrolled in 4-H beef, sheep and swine projects, many with the goal of producing a quality meat animal.
- Bilingual Dairy Worker Trainings teach Spanish-speaking youth best management and safety skills.
- 4,500 youth are certified each year in Meat Animal Quality Assurance required for participation in county and state fair swine, beef and sheep projects and auctions.
- 120 youth delegates explored careers while attending National 4-H Dairy Conference seminars on the UW College of Agricultural and Life Sciences campus, sparking an interest in attending college to pursue a specialized educational degree. More than half (54%) indicated they would pursue a career in agriculture.

Agricultural Education Challenges

Pre-K through 12 Public School Challenges

- Shrinking supply of qualified agriculture education teachers has become a major challenge. Over the last two years, 25 agriculture education teachers retired or chose a different profession. This represents 8% of the agriculture education teaching profession.
- Expanding agriculture education programs in Wisconsin. Currently there are 253 school districts offering agriculture education out of the 426 school districts.
- Expanding agriculture education programs in urban school districts.
- Sustaining rural agriculture education programs during periods of declining Pre-K-12 enrollments.
- Expanding the number of agriculture/science equivalency approvals - 70 out of the 253 programs have approved agriculture/science equivalency credit.
- Continuing to counter false impressions that agriculture education is not a rigorous agri-science course offering.
- Promoting quality curriculum and instructional facilities for an agriculture education program to meet the STEM needs.

Wisconsin Technical College System Challenges

Challenges:

- Financial –
 - Lack of resources to add staff or programming
 - Operational costs in Farm Business Production Management Program
 - One-on-one time for instructor and each farm in the program
 - Mileage for the instructor
- Agricultural Industry Image –
 - Uncertainty and risk inherent in farm businesses
 - Negative perception of agriculture related careers
 - Lack of family support for children to enter agriculture related careers
 - Lower wages and longer work hours than other competing career options
- Student demographics
 - Declining number of high school graduates
 - Smaller number of students growing up on farms
 - Increased competition from other career paths
 - Fewer new producers (FBPM)
 - Lack of career awareness
 - Lack of Career Pathway awareness for students and their families

University of Wisconsin System Challenges

We are optimistic that the block grant funding created in the 2011–2013 Wisconsin state budget will allow UW System campuses to retain savings and reallocate resources where they are needed to support continued growth. Additional language in the bill authorizing the Board of Regents to provide supplemental pay plans, establish a personnel system and collective bargaining unit that reflects the uniqueness of academic institutions and establish travel policies for UW System employees, will be beneficial. In addition, flexibilities regarding capital building improvement projects, purchasing and acceptance of gifts will allow UW-System campuses to be more responsive to their needs as they continue to grow and service the residents of Wisconsin. However, even with these flexibilities, the UW System and its campuses face significant challenges in the areas outlined below.

Providing Adequate Resources for Students and Faculty

- Fiscal Resources
 - \$250 million in cuts for the 2011–2013 biennial budget
 - \$2.4 million reduction for UW-System (25% of UW-System budget).

- \$47.4 million GPR cut annually to reflect increased state employee contributions for health insurance and retirement benefits.
- Capital Resources
 - Limited funding for purchase of technology and equipment.
 - Lengthy approval process for building projects that does not keep pace with program growth.
- Student Tuition and Fees
 - Resident undergraduate increases limited to 5.5% in 2011–12 and 2012–13.
 - Deletes current law language limiting increases in resident undergraduate tuition.
 - May reduce the access of higher education to low and middle income families.
 - Reduced state dollars has forced UW-System institutions to shift support of our programs to students by increasing their tuition and fees and expanding undergraduate enrollments.

Recruiting and Retaining Students, Faculty and Staff

- Student Recruitment
 - Agriculture programs face fierce competition from other majors and career paths with more "flash".
 - Career areas with higher wages have greater appeal and continue to challenge our ability to attract and retain women and students of varied racial and ethnic heritage.
 - The number of high school graduates in Wisconsin and surrounding states is expected to decline for the next five years.
 - Insufficient resources and staff will limit our ability to serve our undergraduate and graduate student populations effectively.
- Faculty and Staff
 - Recruitment
 - Insufficient resources to add staff or programming.
 - Starting salaries as much as 32% below peer institutions.
 - Increased employee costs associated with health and retirement benefits.
 - Political polarization unattractive to those that may come from other states.
 - Retention
 - Salaries for Wisconsin higher education professionals are not keeping pace with our peer institutions, resulting in the loss of valuable talent to institutions in other states.

- Significant increases in employee contributions for health insurance and retirement benefits affect our efforts to retain quality talent.
- Fifty-two (52) position reduction for UW-System Administration.

Council Structure Recommendations

The activities and results of 2011–2012 continue to strengthen the commitment to fulfill the Vision of the Council. All of the functions as originally identified remain and are still necessary for Wisconsin’s Agriculture, Food and Natural Resources Systems to succeed. The Council should remain in place to carry out the following functions as defined by the Act:

1. Increase the hiring and retention of well-qualified employees to industries related to agriculture, food and natural resources.
2. Promote the coordination of educational systems to develop, train and retrain employees for current and future careers related to agriculture, food and natural resources.
3. Develop support for career pathways and employment in fields related to agriculture, food and natural resources.
4. Recommend policies and other changes to improve the efficiency of the development and provision of agricultural education across educational systems.
5. The Council shall seek to accomplish the purposes by advising state agencies on matters related to integrating agricultural education and workforce development systems.

Council Member Approval of Activities & Recommendations

The WI Agricultural Education & Workforce Development Council 2012 Annual Report was distributed electronically to all Council Executive Committee Members and Council Members. Each Council Member was requested to review the Annual Report to provide their approval or dissent of the Council. Chair Paul Larson requested that any dissent to the Council activities should be given along with recommendations for the Council to consider. Subsequently the Council received member approval of its activities and 2012 Annual Report.

Wisconsin Agricultural Education & Workforce Development Council
Report Contacts:

Paul Larson, WAEWD Council Chair plarson@freedomschools.k12.wi.us
Agriculture Educator, Freedom High School

Jack Ourada, Executive Director 608-235-7148
N2826 French Road jack.ourada@wisconsin.gov
Appleton, WI 54913 <http://wiaglink.org/>