

Wisconsin Agricultural Education & Workforce Development Council

2011 Annual Report

Introduction

The Wisconsin Agricultural Education and Workforce Development Council was created by Wisconsin Act 223, enacted on 4/7/2008. 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.

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, 2011. Activities of the Council focused on specific initiatives to become more action oriented and are as outlined in the following:

1. Council Structure Development

- The WIRED (Workforce Innovation & Regional Economic Development) Grant with the DATCP funded an LTE position for the Executive Director from January 1, 2010 through June 30, 2010.
- 15 new members joined the Council out of a total of 34 positions with four positions remaining vacant. The following members joined in the last year: Becky Levozow-General Ag Representative; Earl Gustafson-Natural Resources Representative; Richard Miller-Green Industry Representative; Andrea Brossard Martin-Animal Ag Representative; Dave Kruse-Appointed Teacher; Natalie Killion-Appointed Counselor; Lori Weyers-Technical College District President; Ben Brancel-Secretary of Agriculture, Trade & Consumer Protection; Scott Baumbach-Secretary of Workforce Development; Paul Jadin-CEO of the Economic Development Corporation; Cathy Stepp-Secretary of the Department of Natural Resources; Dan Kapanke-Senate Agriculture Committee Chair; Luther Olson-Senate Education Committee Chair; Lee Nerison-Assembly Agriculture Committee Chair; and Steve Kestell-Assembly Education Committee chair.
- Conducted new Council member orientation and briefings.
- Conducted Legislative & Government Agency briefings.
- Received and reviewed employment and agriculture 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.
- Leveraged the Council’s unique Public/Private Partnership (See #3 Industry Partnership Training Grant, on the next page, as an example of this in action).

2. Wisconsin Agriculture Education Foundation, Inc. (Foundation), is responsible for obtaining financial support of the Council

- The Board of Directors was expanded and Foundation leadership changed as follows: Paul A. Larson, Chairman; Allan D. Hermann, Vice Chairman; Bridgett Neu, Treasurer; and Keith Gundlach, Secretary.
- Updated Foundation Bylaws.

- Jack Ourada was contracted to serve as the Executive Director of the Council and Project Coordinator of the Foundation for the period of 8/1/10–6/30/11.
- Extended Jack Ourada’s contract for the 2011–2012 year.
- The Workforce Development Board of SC, WI contracted the Foundation to administer the Agriculture Sector Partnership Grant in the amount of \$284,855.
- Contracted Filament Marketing, LLC to develop the Why Ag Campaign and website.
- Conducted five fund raising meetings to request financial support.
- 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 schools. 2011 Grants requests for funding doubled.

3. Industry Partnership Training Grant Summary

- Effective 8/1/10 through 7/31/11.
- 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. A request for an extension of the remaining funds has been made to fund development of local Agriculture, Food & Natural Resources Sector teams.
- 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 SC, WI contracted with the WAEF (WI Agriculture Education Foundation, Inc.) 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-DATCP (Department of Agriculture, Trade and Consumer Protection)
 - 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:

- Agenda one: <http://fyi.uwex.edu/theacademy/files/2011/01/Session-one-agenda.doc>
 - Agenda two: <http://fyi.uwex.edu/theacademy/files/2011/01/Session-Two-agenda.doc>
 - Agenda three: <http://fyi.uwex.edu/theacademy/files/2011/01/Session-3-agenda1.doc>
 - Agenda four: <http://fyi.uwex.edu/theacademy/files/2011/01/Session-4-Agenda.doc>
- 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
 - A total of 22 farmstead dairy processors completed HACCP (Hazard Analysis Critical Control Point) training at sessions held in Appleton, Siren and @ 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 2 sessions (MATC-Madison & FVTC-Appleton) with a total of 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 (Hazard Analysis Critical Control Point) 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. Total grant funds used \$63,155.

- Promoted agriculture career pathways statewide.
 - Development of the Why Ag Campaign including website development and materials to raise the understanding and awareness of agriculture food & natural resources industry career opportunities. Grant funds used \$46,200.00.
 - 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.
- Developed an initial campaign outline.
 - Summarized Why Ag key messages and talking points.
 - Developed and summarized job skills & the requirements for career pathway jobs.
 - Created Why Ag logo and marketing materials.
 - Implemented WhyAg.com website. Please visit: <http://www.whyag.com/>.
 - In process of development of the website launch, ongoing maintenance plan and sponsorship needs.
7. Support Agriculture, Food & Natural Resources Education
- Participated in the annual WI Association of Agriculture Educators Conference.
 - Tracked state budget impact on agriculture, food and natural resources education and developed a position paper in response.
 - Initiated and developed an agriculture education planning calendar.
 - Promoted agriculture, food & natural resources career pathways document.
 - Endorsed the FFA Publication “Agriculture Education in Wisconsin”.
 - Developing a presentation for the School Guidance Counselor Conference and strategy to support school guidance counselors.
 - Offering support to the Milwaukee Public School System to develop agriculture education programs.
8. 2011–12 Council/Foundation Plans
- Develop sustainable funding and resources for the Council and Foundation.
 - Launch Why Ag website including development of ongoing maintenance and sponsorship.
 - Continue implementation of the Why Ag initiative and campaign.
 - 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

Agriculture education continues to prepare students for careers in the agriculture industry, while developing students' leadership skills through FFA and their Supervised Agriculture Experience (SAE). Today's agriculture 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 education to meet the needs of the industry?

Program Status

- Over 44,000 students on average per year take agriculture education courses. This amounts to 6.7% of the total population of career and technical education courses.
- Over 18,400 agriculture education students are also members of the Wisconsin Association of FFA.
- Two new agriculture education programs were established this past year. Horicon and Almond-Bancroft will be offering agriculture education courses as well as an FFA Chapter.
- Over 4,000 FFA members competed in career development events ranging from agriculture 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 60 schools and over 150 courses have been approved.
- Over 160 agriculture 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. Wisconsin's technical colleges respond to the needs of their communities by helping one person at a time and by bringing people and jobs together.

The systems' 16 colleges equip graduates with real world, hands-on experience they apply to specific occupations that provide us all with security and a high 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 2011–2012 school year, these programs include 11 associate degree programs, six one year technical diplomas, one two-year technical diploma, two short-term technical diplomas, and two apprenticeships offered at 14 of the 16 colleges. These programs offer students 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 | PROGRAM TITLE | Blackhawk | Chippewa Valley | Fox Valley | Gateway | Lakeshore | Madison Area | Mid-State | Milwaukee Area | Moraine Park | Nicolet Area | Northcentral | Northeast WI | Southwest WI | Waukesha County | Western | WI Indianhead |
|---------|--|-----------|-----------------|------------|---------|-----------|--------------|-----------|----------------|--------------|--------------|--------------|--------------|--------------|-----------------|---------|---------------|
| 10-001 | Horticulture | | X | | X | | | X | X | | | | X | | | X | |
| 10-003 | Agriculture Power Equipment | | | X | | | | | | | | | | | | | |
| 10-006 | Agri-Business/Science Technology | | X | X | | | | | | | | | | X | | X | |
| 10-057 | Natural Resources Technician | | | X | | | | | | | | | | | | | |
| 10-070 | Agriculture Equipment Technology | | | | | | X | | | | | | | | | | |
| 10-091 | Dairy Science | | | | | | | | | | X | | | | | | |
| 10-091 | Veterinary Technician | | | | | | X | | | | | | | | | | |
| 10-320 | Enology | | | | | | | | | | | | X | | | | |
| 10-320 | Viticulture | | | | | | | | | | | | X | | | | |
| 10-506 | Laboratory Science Technician | | | X | | | | X | X | | | | | | | | |
| 10-527 | Water Quality Technology | | | | | | | | | X | | | | | | | |
| 30-001 | Basic Horticulture | | | | | | X | | | | | | | | | | |
| 30-001 | Horticulture/Landscape Technician | X | | | | | | | | | | | | | | | |
| 30-090 | Farm Business & Production Management | X | X | X | | X | X | X | | X | | | X | X | | X | X |
| 31-001 | Horticulture Technician | | | X | | X | | | | | | | | | | | |
| 31-003 | Agriculture Equipment Service Technician | | | X | | | | | | | | | | | | | |
| 31-006 | Agribusiness Specialist | X | | | | | | | | | | | | | | | |
| 31-080 | Farm Operation | | | X | | | | X | | | | | | | | | |
| 31-091 | Dairy Herd Management | | | | | X | | | | | | | | X | | | X |
| 31-506 | Laboratory Science Technician Assistant | | X | | | | | | | | | | | | | | |
| 32-070 | Agriculture Power & Equipment Technician | | | | | | | | | | | | | X | | | X |
| 50-091 | Dairy Grazier Apprenticeship | | | | | | | | | | | X | | | | | |
| 50-527 | Wastewater Plant Operator | | | | | | | | | X | | | | | | | |

Graduates from agriculture programs in the Wisconsin Technical College System have a very high success rate at being employed in their chosen field (see Figure 2). The Wisconsin Technical College System conducts graduate follow-up surveys six months after graduation on graduates' success rate in finding employment as well as median starting salary. For agriculture programs, the 2010 survey indicates that 93% of Wisconsin Technical College System graduates were employed and 85% were employed in an agriculture related field. The median starting salary for these graduates was \$27,017. These numbers show there are very good employment opportunities for the system's graduates.

FIGURE 2 - Agribusiness Division – All

| Program Name | Program Number | 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> | | 196 | 155 | 139 | 130 | 94% | 105 | 81% | 9 | \$11.89 | \$26,001 | 42 |
| <i>Short-Term Technical Diploma Totals</i> | | 82 | 48 | 37 | 37 | 100% | 35 | 95% | 0 | \$10.35 | \$32,000 | 59 |
| <i>One-Year Technical Diploma Totals</i> | | 73 | 59 | 49 | 43 | 88% | 37 | 86% | 6 | \$11.29 | \$31,198 | 53 |
| <i>Two-Year Technical Diploma Totals</i> | | 20 | 17 | 17 | 16 | 94% | 15 | 94% | 1 | \$11.30 | \$29,638 | 50 |
| <i>Agribusiness Division Totals</i> | | 371 | 279 | 242 | 226 | 93% | 192 | 85% | 16 | \$10.91 | \$27,017 | 48 |

The agriculture 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. Even though the technical colleges have had success in providing this education for our students, there are challenges to continuing this success in the future. Some of those challenges are listed later in this report.

The University of Wisconsin System

Agriculture and natural resources (forestry and forest products) are the largest 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 have experienced rapid growth. During 2010–11 the number of undergraduates reached almost 7,400, which represents a 7.4% increase over 2009–10. In addition, about 1,400 students pursued advanced degrees (MS, DVM, PhD) bringing the total enrollment in agriculture and natural resource programs to just under 8,800 students.

Agriculture and life science programs in CALS at UW-Madison experienced the greatest growth, increasing by 14.6% during 2010–11. Increased enrollments in microbiology, biological systems engineering, biology, food science and wildlife contributed significantly to growth in CALS at UW-Madison. In contrast, enrollments in genetics, nutritional sciences and horticulture declined compared to 2009–10. Declining enrollment in horticulture and ornamental

horticulture programs has occurred since 2006 at all three campuses (UW-Madison, UW-Platteville and UW-River Falls) and could be explained by our sluggish economy and proliferation of horticulture programs in the UW-Technical College System. 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/>).

Enrollment in the UW-Madison School of Veterinary Medicine increased about 4% during 2010–11. Over 300 students were enrolled in the Doctor of Veterinary Medicine which typically enrolls 80 students each year into the four-year professional degree (DVM) program, (60 seats are reserved for Wisconsin residents). About 25% of DVM students select food animal as their primary career interest, (35% for those entering during 2011), and about 6% are select mixed animal practices, (combining food animal, equine, and small animal practice). The Food Animal Veterinary Medical Scholars Program Research is a recruiting initiative aimed toward attracting undergraduates and high school students with long-term interests in a career in food animal medicine. The SVM Comparative Biomedical Sciences (CBMS) graduate program provides advanced research training in a variety of topics related to diseases of animals and man. Funding sources available to support research training include training grants from the National Institutes of Health, Merck-Merial, Pfizer, and the Walter and Martha Renk Endowed Laboratory for Food Safety. Please visit the following web links for more information regarding programming at the UW-Madison School of Veterinary Medicine (Home: <http://www.vetmed.wisc.edu/home/> and Teaching Hospital <http://uwveterinarycare.wisc.edu/>).

Agriculture and natural resource programs in the School of Agriculture at UW-Platteville also experienced significant growth in 2010–11, increasing by 11.7%. This marks the fifth consecutive year of double-digit growth for UW-Platteville agriculture programs. Significant enrollment increases occurred in the agribusiness (21%); agricultural education (23.6%); animal science (7.6%); and reclamation, environment and conservation (16.3%) programs. While enrollment in soil and crop science held steady, the number of undergraduates pursuing a degree in ornamental horticulture declined by 12.5%. Enrollment increases also resulted in a record number of UW-Platteville agriculture student interns in the workplace during 2011. Over 90 student interns were employed by agricultural firms in Wisconsin, Illinois, Iowa, Minnesota, Indiana, Pennsylvania 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/>).

Undergraduate enrollment in the College of Natural Resources at UW-Stevens Point increased by 7.5% to just over 1,600 during the 2010–11 academic year. Programs exhibiting the greatest enrollment increases were forestry (15.8%), paper science (10.4%), soil science (21.5%) and wildlife (10.2%). In contrast, a 9% enrollment decrease was observed in the resource management program. Overall, enrollment in natural resource programs at UW-Stevens Point has grown by 21.5% since 2007. Please visit the following web links for more information regarding the natural resources programs at UW-Stevens 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>).

Undergraduate enrollment in agriculture, food and environmental sciences in CAFES at UW-River Falls (UWRF) increased by 1.6% during 2010–11. The greatest enrollment increases were observed in Agribusiness (32.8%), Crops and Soils (19.2%), Geology (16.7%), Environmental Science (10.6%) and Agricultural Education (9%). Enrollment declines were observed in Horticulture (-7.5%) and Agriculture Engineering Technology (-6%), Animal Science (-7%), Dairy Science (-6.2%) and Food Science (-2.9%). Enrollment declines in Animal Science and Dairy Science resulted due to self-imposed caps on undergraduate enrollment. UWRF will not have the same cap in place for 2011–12 and will likely see growth in these programs back to pre-2010 levels. Overall enrollment growth in CAFES significantly exceeds the rate in other individual colleges as well as the total university rate at UWRF. In the past year new faculty positions have been added in Animal Science and in Agricultural Business to support anticipated future growth. Fall 2012 will mark the 100th year of agricultural programming at UWRF and they will be celebrating a Centennial Year from April 2012 to 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>).

Over 1,200 undergraduates received baccalaureate degrees in agriculture and natural resources from UW-System institutions. About 84% of graduates responding to employment surveys reported that they were either employed or pursuing graduate study. UW-Madison awarded 670 baccalaureate degrees in agriculture and life science programs and 81 DVM, MS and PhD degrees from the School of Veterinarian Medicine. Agriculture and natural resource programs

at UW-Platteville, UW-River Fall and UW-Stevens Point awarded 123, 256 and 165 baccalaureate degrees, respectively.

| <i>Institution/Program</i> | Enrollment and Graduation Statistics | | |
|---|---|----------------------------|------------------|
| | 2010–11 Enrollment | Change from 2009–10 | Graduates |
| University of Wisconsin-Madison/College of Agriculture and Life Sciences | | | |
| <i>Agriculture Business Management</i> | 69 | 4 | 19 |
| <i>Agriculture Applied Economics</i> | 35 | 9 | 13 |
| <i>Agronomy</i> | 29 | 3 | 9 |
| <i>Animal Science</i> | 156 | 22 | 29 |
| <i>Poultry</i> | 3 | -1 | |
| <i>Microbiology</i> | 171 | 44 | 32 |
| <i>Biochemistry</i> | 530 | 62 | 94 |
| <i>Biological Systems Engineering</i> | 106 | 30 | 19 |
| <i>Biology</i> | 1342 | 240 | 159 |
| <i>Dairy Science</i> | 86 | 3 | 22 |
| <i>Entomology</i> | 8 | -1 | 5 |
| <i>Food Science</i> | 107 | 18 | 21 |
| <i>Forestry Science</i> | 26 | 1 | 5 |
| <i>Genetics</i> | 266 | -13 | 55 |
| <i>Horticulture</i> | 50 | -6 | 13 |
| <i>Landscape Architecture</i> | 115 | 1 | 20 |
| <i>Agricultural Education</i> | 3 | -5 | |
| <i>Life Sciences Communication</i> | 120 | 13 | 43 |
| <i>Nutritional Sciences</i> | 260 | -15 | 60 |
| <i>Plant Pathology</i> | 6 | 5 | 2 |
| <i>Community and Environmental Sociology</i> | 55 | 25 | 14 |
| <i>Soil Science</i> | 38 | 10 | 7 |
| <i>Wildlife Ecology</i> | 114 | 22 | 28 |
| | | | |
| TOTAL UNDERGRADUATE ENROLLMENT/CALS | 3695 | 471 | 670 |
| TOTAL GRADUATE ENROLLMENT/CALS | 965 | -14 | |
| TOTAL ENROLLMENT IN CALS | 4660 | 457 | |

| <i>Institution/Program</i> | Enrollment and Graduation Statistics | | |
|--|---|----------------------------|------------------|
| | 2010–11 Enrollment | Change from 2009–10 | Graduates |
| University of Wisconsin-Madison/School of Veterinarian Medicine | | | |
| <i>Veterinarian Medicine – DMV</i> | 315 | 12 | 81 |
| <i>Comparative Biomedical Sciences – MS</i> | 21 | 0 | 10 |
| <i>Comparative Biomedical Sciences – PhD</i> | 30 | -3 | 12 |
| | | | |
| TOTAL ENROLLMENT AT UW-MADISON/SVM | 366 | 9 | 103 |

| <i>Institution/Program</i> | Enrollment and Graduation Statistics | | |
|--|---|--------------------------------|------------------|
| | 2010–11 Enrollment | Change from 2009–10 | Graduates |
| University of Wisconsin-Platteville/School of Agriculture | | | |
| <i>Agribusiness</i> | 202 | 35 | 33 |
| <i>Agricultural Education</i> | 68 | 13 | 9 |
| <i>Animal Science</i> | 280 | 20 | 64 |
| <i>Ornamental Horticulture</i> | 35 | -5 | 7 |
| <i>Reclamation, Environment and Conservation</i> | 57 | 8 | 3 |
| <i>Soil and Crop Science</i> | 55 | 2 | 7 |
| | | | |
| TOTAL UNDERGRADUATE ENROLLMENT/SOA | 697 | 73 | 123 |

| <i>Institution/Program</i> | Enrollment and Graduation Statistics | | |
|--|---|--------------------------------|------------------|
| | 2010–11 Enrollment | Change from 2009–10 | Graduates |
| University of Wisconsin-River Falls/College of Agriculture, Food and Environmental Sciences | | | |
| <i>Agricultural Business</i> | 162 | 40 | 27 |
| <i>Agricultural Education</i> | 109 | 9 | 15 |
| <i>Agricultural Engineering Technology</i> | 63 | -4 | 12 |
| <i>Agricultural Studies</i> | 57 | 0 | 16 |
| <i>Animal Science</i> | 432 | -33 | 73 |
| <i>Conservation</i> | 121 | 5 | 28 |
| <i>Crops and Soils</i> | 62 | 10 | 12 |
| <i>Dairy Science</i> | 136 | -9 | 32 |
| <i>Environmental Science</i> | 52 | 5 | 5 |
| <i>Food Science</i> | 33 | -1 | 7 |
| <i>Geology</i> | 43 | 6 | 3 |
| <i>Horticulture</i> | 86 | -7 | 20 |
| <i>Land Use Planning</i> | 19 | 1 | 6 |
| | | | |
| <i>Total Undergraduate Enrollment/CAFES</i> | 1375 | 22 | 256 |
| <i>Total Graduate Enrollment/CAFES</i> | 25 | 5 | |
| Total Enrollment at UW-RF/CAFES | 1400 | 27 | 256 |

| <i>Institution/Program</i> | Enrollment and Graduation Statistics | | |
|---|---|--------------------------------|------------------|
| | 2010–11 Enrollment | Change from 2009–10 | Graduates |
| University of Wisconsin-Stevens Point/College of Natural Resources | | | |
| <i>Forestry</i> | 382 | 52 | 41 |
| <i>Resource Management</i> | 311 | -26 | 27 |
| <i>Soil Science</i> | 96 | 17 | 18 |
| <i>Fisheries and Water Resources</i> | 258 | 18 | 25 |
| <i>Paper Science</i> | 73 | 7 | 6 |
| <i>Wildlife</i> | 497 | 45 | 48 |

| | | | |
|---|-------------|------------|-------------|
| | | | |
| <i>Total Undergraduate Enrollment/CNR</i> | <i>1617</i> | <i>113</i> | <i>165</i> |
| <i>Total Graduate Enrollment/CNR</i> | <i>49</i> | <i>-4</i> | <i>18</i> |
| <i>Total enrollment at UW-SP/CNR</i> | <i>1666</i> | <i>109</i> | <i>183</i> |
| | | | |
| <i>TOTAL UW-SYSTEM UNDERGRADUATE ENROLLMENT</i> | <i>7384</i> | <i>537</i> | <i>1214</i> |
| <i>TOTAL UW-SYSTEM GRADUATE ENROLLMENT</i> | <i>1039</i> | <i>-9</i> | |
| <i>TOTAL UW-SYSTEM ENROLLMENT</i> | <i>8423</i> | <i>528</i> | |

University of Wisconsin Extension – Cooperative Extension

The University of Wisconsin Extension–Cooperative Extension (UWEX), provides research-based education, technical assistance, and consultation in all of Wisconsin’s 72 counties. Cooperative Extension in Wisconsin is comprised of 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 and safe food systems, and 3) protect valued natural resources.

Although ANRE faculty and staff are not primarily engaged in workforce development for K–12 and university students, county and campus-based faculty work on issues important to all Wisconsin agriculture and horticulture industries and its thousands of employers.

Approximately 80 county-based educators address the needs and serve the residents of the state’s 72 counties. These county-based educators are connected to a network of about 100 campus-based Extension faculty and staff on three UW-System campuses, UW-Madison, UW-Platteville and UW-River Falls. Working together, educational programs are delivered and applied research is conducted leading to new knowledge. ANRE faculty and staff are also closely involved in teaching within the UW-Madison Farm and Industry Short Course and they are extensively involved in 4-H and Youth Development agricultural programs.

The ANRE program area is divided into working teams that focus on issues that 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. Programs are need and research-based, almost always developed in partnership with those affected. Increasingly, ANRE faculty and staff are providing educational programs and technical training to agricultural service providers including crop consultants, sales representatives, veterinarians, dairy nutritionists, lenders and others. A comprehensive evaluation study of ANRE’s work with agricultural service providers documents Extension’s role and value in providing on-going professional development and training for these agricultural professionals.

During the past year, ANRE faculty and staff were key contributors to two Wisconsin Agriculture Education and Workforce Development's Industry Partnership Training Grant programs – the Wisconsin Agribusiness Academy and Preparing for a Career in the Meat Industry workshops. 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 had a unique opportunity to learn basic information on meat production and job skills needed in the meat processing industry, preparing them for potential future careers in the meat industry.

The Extension 4-H Youth Development program connects directly with youth in grades K-5 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. 4-H programs are designed to deliver the essential elements of youth development: belonging, mastery, generosity, and independence. Over 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 over 17,000 adult volunteers and nearly 3,000 youth volunteers in carrying out 4-H Youth Development programs in local communities. One important program focus of 4-H in Wisconsin and nationally is the Science, Engineering, Technology, and Mathematics (STEM) program. Through 4-H Youth Development programs young persons have the opportunity to explore and master many fields related to agriculture and the sciences.

Agricultural Education Challenges

Pre-K through 12 Public School Challenges

- Expanding agriculture education programs in Wisconsin. Currently there are 250 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 - 49 out of the 250 programs have approved agriculture/science equivalency credit.
- Continuing to counter false impressions that agriculture education is not a rigorous agriculture/science course offering.
- Promoting quality curriculum and instructional facilities for an agriculture education program to meet the STEM needs.

Wisconsin Technical College System Challenges

- Lack of financial resources to add staff or programming
 - Operational costs in Farm Business Production Management Program (FBPM)
 - One-on-one time for instructor and each farm in the program.
 - Mileage for the instructor.
- Agriculture Industry Image
 - Uncertainty and inherent risk 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. Also 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 effectively serve our undergraduate and graduate student populations.
- 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 in 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 impact our efforts to retain quality talent.
- Fifty-two (52) position reduction for UW-System Administration.

Council Structure Recommendations

The activities and results of 2010–2011 provided a boost to 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 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 2011 Annual Report was distributed electronically to all Council Members and reviewed by an Annual Report Evaluation subcommittee. Each council member was requested to review the Annual Report and Council Activities to provide their approval or dissent of the Council. Chair Mark MacPhail 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 2011 Annual Report.

Wisconsin Agricultural Education & Workforce Development Council

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