Advancing the Western Agenda

Community and Economic Development
Natural Resources Management
Nutrition and Health
Food Systems
Energy

Western Extension and Research Directors

present the

2015 Awards of Excellence

July 8, 2015

Western Region Joint Summer Meeting, July 6-10, 2015

Doubletree by Hilton, Breckenridge, CO

State Program Winners

University of California Sudden Oak Death Response Team

Abstract: When large numbers of tanoaks and oaks began dying in coastal California forests, UC advisors, specialists and faculty organized themselves to address the problem. Once the causal agent was identified, it was found to also cause major disease in commercially valuable, internationally traded, horticultural plants. The role of UC Cooperative Extension became all the more important because of this cross-disciplinary nature and the need for simultaneous basic research, applied management techniques, professional education, and broad public outreach education. With the coordination of partnering agencies in a statewide task force, hundreds of thousands of people have been reached via both in-person (lectures, meetings, symposia) and online (website, e-newsletter, social media) means, ensuring that policymakers, land managers, and homeowners have access to the latest science vetted by a diverse group of experts. This multi-agency, coordinated approach has been highlighted as a model for response to future pest outbreaks.

Team Members, Titles and Locations

Specialists

Maggi Kelley, UC Berkeley
Matteo Garbelotto, UC Berkeley
Doug McCreary, emeritus
Rick Standiford, UC Berkeley

Faculty

Dave Rizzo, UC Davis
Richard Dodd, UC Berkeley Jim MacDonald, UC Davis

Advisors

Steve Tjosvold, UCCE Santa Cruz/Monterey
Yana Valachovic, UCCE Humboldt/Del Norte
Ellie Rilla, UCCE Marin
Steve Swain, UCCE Marin
David Lewis, UCCE Marin

Staff

Janice Alexander, UCCE Marin
Katie Palmieri, UC Center for Forestry
Chris Lee, UCCE Humboldt/Del Norte
Lisa Bell, UCCE Sonoma
Kerri Frangioso, UC Davis
Doug Schmidt, UC Berkeley
Brendan Twieg, UCCE Humboldt/Del Norte
Dan Stark, UCCE Humboldt/Del Norte
Brice McPherson, UC Berkeley
Many graduate students

State Program Winners

Utah Community-Based Conservation Program

Abstract: Utah State University Extension, through the Community-Based Conservation Program (CBCP), in partnership with the Utah Governor's Office, federal, state, industry, and private partners began working with stakeholders in 1996 to organize 11 community-based local sage-grouse working groups (LWGs) throughout Utah. The CBCP enhanced information flow and stimulated involvement in incentive-based conservation. The CBCP assisted federal, state, and local governments, private landowners, and wildlife managers in learning more about sage-grouse ecology as they developed and implemented strategies to achieve species conservation, and community social and economic objectives. The success of the program was directly related to early involvement of local leadership, CBCP facilitation, and access to emerging ecological and sociological research. The CBCP process has translated conservation planning and research to habitat management, and habitat management to population stability. Sage-grouse population trends in the CBCP area have stabilized. The CBCP provided the basis for Utah's ongoing Greater Sage-grouse Conservation Strategy.

Team Members

Current

Dr. Terry Messmer, Program Director, Logan, UT

Ms. Rae Ann Hart, Staff Assistant, Logan, UT

Dr. S. Nicole Frey, Extension Assistant Professor, Cedar City, UT

Ms. Lorien Belton, Community-based Conservation Specialist, Logan, UT

Dr. David Dahlgren, Community-based Conservation Specialist, Logan, UT

Former

Mr. Todd Black, Wildlife Manager, Deseret Land and Livestock, Woodruff, UT

Ms. Sarah Lupis, Assistant Director, Western Association of Agricultural Experiment Stations, Colorado State University, Fort Collins, CO

Ms. Leslie Elmore, Oklahoma State University, Stillwater, OK

Multi-state Research Winner

W3122 Beneficial and Adverse Effects of Natural, Bioactive Dietary Chemicals on Human Health and Food Safety

Abstract: Bioactive chemicals are found naturally in foods or introduced during food processing and cooking. These chemicals can have both beneficial and undesirable effects on human health. Since 1971, this multidisciplinary group of scientists from 15 U.S. universities and the USDA-Agricultural Research Service (Appendix A) have advanced our understanding of bioactive dietary chemicals, thus identifying ways to improve human health and safety and expand agricultural markets.

The herbal products and food supplement industry is valued at an estimated $20 billion per year in the U.S. and is continuing to grow. Effective products could reduce medical costs and provide farmers with new specialty crop opportunities; however, inadequate quality control and understanding of potential toxicity could allow harmful substances to enter the food supply. For example, certain fungal compounds found in corn, ground nuts, and tree nuts can damage DNA and promote cancer. Phytoestrogens in soy, especially concentrates, cause certain types of tumors. Conversely, omega-3 fatty acids produced by plants and algae and concentrated in certain fish species can promote health.

The work that W3122 researchers have conducted has increased our understanding of the complex relationship between bioactive dietary chemicals and human health, which is of paramount concern to consumers, agricultural producers, food processors, health professionals, and policymakers charged with maintaining a safe and nutritious food supply.

Team members on next page

Multi-state Research Winner

W3122 Beneficial and Adverse Effects of Natural, Bioactive Dietary Chemicals on Human Health and Food Safety

Team Members

Nicholas T. Bello - Rutgers University
Abby D. Benninghoff - Utah State University
Leonard Bjeldanes - University of California, Berkeley
Randy Burd - University of Arizona
Hong Chen - University of Illinois
Roger Coulombe - Utah State
Michael S. Denison - University of California, Davis
Yuhua Z. Farnell - Mississippi State University
Mendel Friedman - USDA/ARS-California
Girish Ganjyal - Washington State University
Mingruo Guo - University of Vermont
William Helferich - University of Illinois
Emmanuelle Meuillet - University of Arizona
Pratibha V. Nerurkar - University of Hawaii
Daniel K. Nomura - University of California, Berkeley
James J. Pestka - Michigan State University
D. Ramkishan Rao - NIFA
Marie-Louise Ricketts - University of Nevada
Ronald T. Riley - USDA-ARS/Georgia
Donato Romagnolo - University of Arizona
Pushparajah Thavarajah - North Dakota State University
Nancy D. Turner - Texas AgriLife Research
Tiffany Weir - Colorado State University
David E. Williams - Oregon State University
Meijun Zhu - Washington State University

Regional Qualifying Programs

Experiential History Education: 4-H Western Heritage Project

Montana State University Extension

Abstract: The 4-H Western Heritage Project is an experiential, participatory, living history program for 9- to 19-year-old youth. A 2010 national assessment found that 88 percent of America's high school seniors were deficient in U.S. History knowledge. Knowing history improves the ability of people to understand culture and society and to be better citizens. By incorporating informal, active learning, the 4-H Western Heritage program addresses these deficiencies. Participants utilize role-playing, games, self-directed learning, group projects, creativity and support from enthusiastic leaders to learn all about the American Frontier from 1860-1900, including its successes and failures, and racial and social issues. History can serve as an example that informs decisions of today. This project connects youth to America's history in a vibrant, real, transformative way.

Team members

Todd Kesner, Interim Director, Montana 4-H Center for Youth Development

Will Abbot, 4-H Volunteer, Living Historian and Photographer

Katelyn Andersen, Ravalli County MSU Extension Agent

2014 Montana Farm Bill Producer Education

Montana State University Extension

Abstract: Montana State University Extension offered multi-platform producer education programming on the new safety net programs in the 2014 Farm Bill and innovative decision tools designed to assist producers in electing Farm Bill programs. To do this, MSU Extension partnered with the USDA Risk Management Agency and Farm Service Agency, which allowed comprehensive meetings that included program details as well as an overview of available decision tools, and extensive question-and-answer sessions. These meetings actively engaged a wide array of producers from all corners of the state, including all American Indian Reservations, and reached over 3,100 producers in Montana. To complement these meetings, Extension maintained a 2014 Farm Bill website, broadcasted a series of webinars, held three day-long trainings for agents, and

travelled to nine locations, including five American Indian Reservations with portable computer labs to assist producers in using computer-based decision tools designed for the 2014 Farm Bill.

Team Members

George Haynes, Professor and Extension Specialist

Kate Binzen Fuller, Assistant Professor and Extension Specialist

Bruce Nelson, State Executive Director, Montana Farm Service Agency

Eric Bashore, Director, Billings Regional Office, Risk Management Agency

Memorial Middle School Agricultural Extension and Education Center

New Mexico State University – Cooperative Extension Service

Abstract: The Memorial Middle School Agricultural Extension and Education Center (MMSAEEC) youth agricultural science center was established in 2006 by the New Mexico Legislature in collaboration with a public school district and the New Mexico State University Cooperative Extension Service. Since inception, the MMSAEEC has delivered inquiry-based learning and experiential education programs to over 1,200 youth attending Memorial Middle School in Las Vegas, NM. Youth are engaged in high quality real-world agriculture and natural resource science activities, experiments, and research at the MMSAEEC facilities throughout the school year. Results indicate that the MMSAEEC model is having significant impacts on youth development, including: skill development, attitude toward learning, and long-term cognitive development. The results demonstrate that Extension has a role to play in enhancing learning through non-traditional and rigorous school enrichment programs. Scholarly products include: curriculum, workshops, tours, 4-H science trunks, public presentations, and peer-reviewed publications.

Peter Skelton, Program Director, Extension Specialist, Associate Professor, State 4-H Office

New Mexico Youth Ranch Management Camp (NMYRMC) "Educating tomorrow's leaders in ranch management today"

New Mexico State University – Cooperative Extension Service

Abstract: The New Mexico Youth Ranch Management Camp (NMYRMC) started in 2011 as an effort to address the fact that nationally, the average in the ranching community continues to increase as more young people opt to leave the ranch for careers outside of production agriculture. As a result, the fabric of rural economics, as well as our ranching tradition stands to be lost. In a rural state like New Mexico, these are significant implications.

The next generation will face a multitude of business-based production, environmental, and economic challenges. The NMYRMC is tailored to introduce 15 to 19 year old participants to new science-based concepts, advanced technologies, and applied skills, used successfully on commercial beef cattle operations to increase long-term sustainability. Youth leave this experience with an expanded toolbox of new skills, practices, and an appreciation on how their newly acquired skills and practices relate to the cash flow of a ranch in the Southwest.

Team Members

Patrick Torres, Northern District Director

Tom Dean, Southwest District Director

Tom Dominguez, Otero County Extension Agent

Sonja Jo Serna, IT Multimedia Specialist

Jack Blandford, Luna County Extension Agent

Doug Cram, Wildland Fire Specialist

Blair Clavel, Harding County Extension Agent

John Wenzel, Extension Veterinarian

Marcy Ward, Extension Livestock Specialist

Sam Smallidge, Wildlife Specialist

Summer Eaton, Wildlife Program Assistant

Nick Ashcroft, Range Management Specialist

Leigh Ann Marez, Guadalupe County Extension Agent

Steve Lucero, Sandoval County Extension Agent

Jerry Hawkes, Department Head, Extension Animal Sciences and Natural Resources

Sierra Nevada Adaptive Management Program

University of California Agriculture and Natural Resources

Abstract: The University of California's SNAMP Public Participation Team (PPT) integrated outreach and research to foster public involvement in forest research and management through the Sierra Nevada Adaptive Management Project (http://snamp.cnr.berkeley.edu/). SNAMP is a long term adaptive management experiment developed in response to conflict around management of 11 national forests in the Sierra Nevada in which UC played the role of a neutral third party science provider. The UC team committed to robust public involvement by staffing outreach workers in local communities that hosted over 287 in person outreach events between 2005 and 2014 with attendance of 8,400. Distance outreach included a comprehensive website, research briefs, newsletters, blogs and other social media. Impacts included project transparency, increased learning, shared understanding, improved relationships, improved commitment to and skills for collaboration and increased consensus on forest management. The work of the integrated team was critical to the overall success of SNAMP.

Team Members

Public Participation Team: Kimberly Rodrigues, Director, UCANR Hopland Research and Extension Center, Hopland CA; Maggi Kelly, Professor of Geography and Extension Specialist, University of California, Berkeley; Lynn Huntsinger, Professor of Range Management, University of California, Berkeley; Susan Kocher, Natural Resources Advisor, University of California Cooperative Extension Central Sierra; Anne Lombardo, Community Education Specialist, University of California Cooperative Extension, Mariposa County; Kim Ingram, Community Education Specialist, University of California Cooperative Extension, Placer County; Adrianna Sulak, Post doctoral research, University of California, Berkeley.

University of California Science Team: John Battles, Professor of Forest Ecology, University of California, Berkeley; Peter Hopkinson, Academic Coordinator, University of California, Berkeley; Scott Stephens, Professor of Fire Science, University of California, Berkeley; Rocky Gutierrez, Professor of Forest Wildlife, University of Minnesota; Zach Peery, Professor of Forest and Wildlife Ecology, University of Wisconsin, Madison; Qinghua Guo, Professor of Engineering,

University of California, Merced; Roger Bales, Professor of Engineering, University of California, Merced; Martha Conklin, Professor of Hydrology, University of California, Merced.

Little Books and Little Cooks

University of Nevada Cooperative Extension

Abstract: University of Nevada Cooperative Extension's Little Books & Little Cooks program addresses nutrition, school readiness, literacy and parenting. It teaches both parents and their children (ages 3-5) milestones of early learning and literacy, and good nutrition, through a seven-week experiential educational program. Topics include: proper hand-washing procedure, food safety and kitchen safety rules, USDA MyPlate, benefits of cooking with children, multicultural foods, parents' feeding style and hunger and fullness cues, picky eating behaviors, and importance of eating fruits and vegetables. By reading children's books about nutrition and healthy eating, as well as cooking and eating together, children and parents learn about healthy eating and nutrition, and gain positive parent-child interaction skills. This program offers children a way to learn important pre-kindergarten skills, including math, science, physical development, health and nutrition, literacy development, social development and creative arts, as well as to try new, nutritious foods.

Team Members

YaeBin Kim, Early Care and Education Specialist

Heidi Petermeier, Program Officer

Madeleine Sigman-Grant, Maternal and Child Health, and Nutrition Extension Specialist

Regina Miller, Community Based Instructor

Lisa Houser, Community Based Instructor

Olga Soto, Community Based Instructor

Joann Trujillo, Community Based Instructor

Nevada Radon Education Program

University of Nevada Cooperative Extension

Abstract: University of Nevada Cooperative Extension's Radon Education Program is a statewide program funded by the Nevada Division of Public and Behavioral Health through the State Indoor Radon Grant from the U.S. Environmental Protection Agency. The program educates Nevadans about the health risks of radon, the leading cause of lung cancer among nonsmokers in the U.S., so citizens can make informed decisions to lower their risk. Radon is a naturally occurring, odorless, tasteless and colorless radioactive gas that can accumulate in buildings and homes. Testing is the only way to determine if a home has a problem; however, Nevada lacks regulations concerning testing, fixing and building new radon-resistant homes. The only way citizens learn about the risk is through education. Since inception, the program has helped educate Nevadans by providing low-cost test kits, information, technical assistance, programs, presentations and literature. It has also created partnerships, innovative educational approaches and easy-to-access resources.

Team members

Susan H. Howe, Radon Education Program Director

Jamie Roice-Gomes, M.A., Radon Education Coordinator

Monroe Mountain Working Group

Utah State University

Abstract: The Monroe Mountain Working Group (MMWG) is a collaborative group of 20 stakeholders who have been working for over four years to develop and implement activities on Monroe Mountain in central Utah to restore aspen. The group includes state agencies, county commissioners, Farm Bureau, sportsmens' groups, conservation groups, and grazing permittees. The MMWG, working in conjunctions with the USDA-Forest Service (who administers most of the land in the project area) has achieved notable successes, including a significant infrastructure project to improve rest rotation grazing (supported by an EA) and

the recent completion of a Draft Environmental Impact Statement for roughly 40,000 acres of mechanical thinning and prescribed fire. Three USU Extension faculty have played a critical role in the success of the MMWG by serving as members of the working group, providing facilitation and staff support, designing and conducting original research, strengthening relationships with ranchers, and serving as a liaison to county commissioners.

Team Members

C. Kim Chapman, Area Agent and Professor, Richfield Utah

Steven Daniels, Specialist and Professor, Logan Utah

Jody A. Gale, Area Agent and Associate Professor, Richfield Utah

Women, Farms & Food

Washington State University

Abstract: Farming is risky business and women farmers benefit from the support of other women. Women farmers also face unique challenges in balancing demands from both the farm and family and taking care of themselves. Women, Farms & Food addresses the risk management needs of women farmers, providing women in agriculture with exactly what they need to be successful. It is a woman-farmer–driven project, primarily planned, facilitated, and taught by women.

Technology is used to bring educational opportunities to an increasing number of farmers, allowing the annual Women in Ag conference to present headline speakers simultaneously at 28 locations in 4 states, while remaining regionally focused with local facilitators and presenters. Follow-up workshops allow attendees to study topics of their choice, and employ teaching methods that suit gender-specific learning styles. As a result, women make documented behavior changes, reducing their business risk while improving profitability and quality of life.

Team members on next page

Women, Farms & Food

Washington State University

Team Members

Margaret A. Viebrock, Project Manager, WSU Extension – Douglas County
Chris Bieker, Program Chair, USDA Farm Service Agency, Spokane
Debra Hansen, Marketing Chair, WSU Extension – Stevens County
Wendy Knopp, Program Committee, Northwest Farm Credit Services, Spokane
Janet Schmidt, Program Committee and Evaluation,
WSU Extension – Whitman County
Jo Lynne Seufer, Conference Materials, USDA Risk Management Agency, Spokane
Diana Roberts, Program Committee, WSU Extension – Spokane County
Patricia Munts, Site Facilitation, WSU Small Farms Program, Spokane

Voluntary Stewardship Program

Washington State University Extension

Abstract: In 2007, Washington's Governor and Legislature – alongside agricultural, tribal, environmental and local government representatives – asked the Williams D. Ruckelshaus Center to assist in resolving long-standing conflict over protection and enhancement of environmentally "critical areas" on agricultural lands under Washington's Growth Management Act. This decades-old conflict had spawned lawsuits, court appeals, legislative barriers and a voter initiative. The Center convened the participants to work on solutions. After university fact-finding and three years of facilitated/mediated discussion, the parties reached agreement on a framework for a Voluntary Stewardship Program (VSP) and turned the agreement into legislation, which was signed into law by the Governor. VSP is a new approach for counties to lead a watershed-based, collaborative stewardship planning process that uses incentives to promote agricultural and environmental stewardship. Of Washington's 39 counties, 28 elected to participate. The Center also has partnered with American Farmland Trust to conduct proof-of-concept pilot projects on the ground.

Team Members

Michael Kern, Director, The Williams D. Ruckelshaus Center

Rob McDaniel, Director, Community & Economic Development, WSU Extension

Amanda Murphy, Project and Research Specialist, WSU Extension

Kelsey Gray, Retired, WSU Extension

Jim Reid, The Falconer Group/Part-Time Practitioner, UW School of Public Affairs

Jon Brock, Associate Professor Emeritus, UW Evans School of Public Affairs

Jerry Cormick, Principal, CSE Group

Ann Seiter, Technical Writing and Editing Consultant

Julie Horowitz, Policy Advisor, Office of the Governor of Washington

Rich Innes, Senior Fellow Meridian Institute

William Budd, Emeritus Faculty, School of the Environment, WSU

Cheryl Rajcich, Operations Manager, William D. Ruckelshaus Center

Aubri Denevan, Communications Specialist, William D. Ruckelshaus Center

Debra Akhbari, Arrotney, Helsell Fetterman

Dennis Canty, American Farmland Trust

Christy Carr, American Farmland Trust

Western Region Joint Summer Meeting hosted by:

Colorado State University College of Agricultural Sciences and Colorado State University Extension

Colorado State University does not discriminate on the basis of race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity or expression, or pregnancy. Colorado State University is an equal opportunity/equal access/affirmative action employer fully committed to achieving a diverse workforce and complies with all Federal and Colorado State laws, regulations, and executive orders regarding non-discrimination and affirmative action. The Office of Equal Opportunity is located in 101 Student Services.