In this issue of *Rural Connections*, our authors discuss a myriad of topics ranging from tribal health and food sovereignty, preparing youth for today’s economy, participatory watershed assessment and planning, linking farmers with chefs, western county economies, illicit drug abuse in rural areas, aging in your home, and economic evaluation of center pivot VRI. It also includes an introduction by WRDC Director Don Albrecht.

**INTRODUCTION**

In this issue...

**BY DON E. ALBRECHT**

Under the capable leadership of WRDC Assistant Director Betsy Newman, *Rural Connections* helps disperse exceptional applied research and outreach programs being developed by talented professionals from the West. By sharing this information, especially across state lines, the Western Rural Development Center can help achieve our goal of assisting the land-grant institutions of the West and others to better meet the needs of rural communities and their residents. The articles in this issue of *Rural Connections* continue that tradition and describe truly outstanding research and outreach programs that address significant problems and concerns.

**ON THE COVER...**

**PREPARING YOUTH FOR TODAY’S ECONOMY**

A Multidisciplinary Extension Concern

**BY HARRIET SHAKLEE, KATHEE TIFFT, AND KATIE HOFFMAN**

Access to higher education is a top issue for the nation, and a focal concern of many states as well. Today’s information-based economy needs educated employees, with more and more jobs requiring undergraduate or higher diplomas. Despite recent educational gains among rural residents, rural college attainment remains 10 percent below the national average (Player, 2015).

For communities, the problem is one of human capital - how will we build a workforce ready for today’s economy? For families the challenge may be cultural - how can we make college-going a norm in our family? Familiar concerns may be financial - how can we recruit the funds four our children to be adequately trained? Finally, the youth themselves face a life challenge - how can I develop the personal skills, educational foundation, and financial resources required for adult independence? These multiple perspectives on higher education suggest the potential of a multidisciplinary approach, including fields of community, youth development, family development, and family financial management (Shaklee et al., 2014).

Fortunately, these are all areas of strength for Extension, with long roots in many communities. In fact, few other organizations and agencies have expertise in this diverse set of concerns. The present discussion considers ways for Extension to bring the resources of its several relevant disciplines to bear on the problem of higher education access and attainment. Read more.

**ENHANCING TRIBAL HEALTH AND FOOD SOVEREIGNTY AMONG THE KARUK, KLAMATH, AND YUROK TRIBES IN THE KLAMATH BASIN THROUGH COLLABORATIVE PARTNERSHIPS**

**BY JENNIFER SOMERWINE**

In 2012, the University of California Berkeley initiated a collaborative partnership with three tribes in the region - the Karuk, Klamath, and Yurok Tribes - together with local non-profit Mid Klamath Watershed Council, UC Cooperative Extension, US Forest Service, and UC Davis to evaluate barriers to and opportunities for reestablishing a sustainable regional food system that reflects Native values and promotes Tribal food sovereignty. This article discusses key successes, replicable highlights, and challenges from the first three years of this five-year initiative. By describing our approach to collaborative research, education, and outreach, we aim to share important lessons learned that may serve as a model for other tribal communities, non-profits, universities, and government agencies seeking to establish these kinds of partnerships. Read more.
POWER OF THE FORK
Linking Farmers with Chefs in Utah
BY SHIREE DUNCAN, ROSLYNN BRAIN, and KYNDA CURTIS

To help others recognize their purchasing power and to successfully link purchasing decisions to Utah farmers, land, and people, in 2012 the Utah Farm-Chef-Fork program was launched. This program is a collaboration between Utah State University Extension, the Utah Department of Agriculture and Food, and Slow Food Utah. Utah Farm-Chef-Fork combines university research with local expertise to provide workshops, farm tours, farm dinners, and additional opportunities to link farmers and chefs across the state. Read more.

EMBRACING UNCERTAINTY AND BUILDING COMMUNITY
Participatory Watershed Assessment and Planning for the Upper Gila River Arizona
BY KELLY E. MOTT LACROIX and MARK APEL

County Extension agents in the Upper Gila Watershed in rural southeastern Arizona have been working for decades on watershed issues and water education. In 2012-2014 these efforts were amplified by a grant from the Desert Landscape Conservation Cooperative that enabled the University of Arizona Water Resources Research Center and Cooperative Extension to partner with the Gila Watershed Partnership to work on watershed planning. The goals of the watershed planning project and grant were simple - establish baseline watershed conditions and build scenarios to help plan for the future of the watershed. The meandering path to accomplish those goals was, however, anything but straightforward. Read more.

ECONOMIC EVALUATION OF VARIABLE RATE IRRIGATION CENTER PIVOT TECHNOLOGY
BY BRIAN LEE

Variable Rate Irrigation (VRI) is a relatively new technology in agriculture that has the potential to become an integral part of precision farming systems. VRI systems are attached to center pivot irrigation sprinklers, and allow producers to save resources, time, and money. The systems allow for the more accurate application of irrigation water within an agricultural field. The motivation behind VRI is the desire of agriculture producers to raise crops more efficiently. For the purpose of this research, energy savings from pumping fewer gallons of water will be taken into consideration. Read more.

ILlicit DRUG ABUSE IN RURAL COMMUNITIES
BY YOON G. LEE

The objectives of this article were to explore to what extent rural residents were involved with illicit substance abuse such as marijuana and cocaine and to investigate factors associated with marijuana and cocaine consumption among individuals residing in rural communities. This study found that 38.2 percent of rural residents used marijuana, and that rural residents aged 30-49 were more likely to use marijuana than other age groups. Rural residents with poor health were more likely to use marijuana than those with good or excellent health. Male rural residents were more likely to use marijuana that females. Read more.

COUNTY ECONOMIES 2015
The Uneven Geography of Opportunity in Rural Western Counties
BY BRIAN KNUDSEN

2015 was a year of continued recovery and growth for small, western county economies. The majority (65 percent) of counties in the 13 western states are small and rural - i.e., they are counties with less than 50,000 residents. Small county economies of the West underwent accelerated recovery on unemployment rates and home prices in 2015. Almost three times more small western county economies recovered on home prices in 2015 than the previous year, while about twice as many returned to their pre-recession unemployment lows. Job growth was robust, with 83 percent of small county economies in the West posting employment gains in 2015. At the same time, however, economic output (GDP) recovery almost stalled. Read more.

HOPE FOR THE BEST AND PLAN FOR THE WORST
Can You Age-in-Place in YOUR Home?
BY MINDY OXMAN RENFRO

The Western Rural states are aging. It is expected that by 2025, Montana's population will be the fourth oldest state in the union. It's also estimated that by 2030, Montana will be one of ten states in the country to have more people over the age of 65 than under the age of 18, and it will be one of only six states to have 25 percent of its population aged 65 or older. Policy makers are reshaping Medicare; politicians are trying to protect Social Security...but what are each of us doing to be sure that we can age-in-place in our own homes? Each day 10,000 Baby Boomers (born between 1946 and 1964) are celebrating their 65th birthday and joining the ranks of "older adults." Accessible housing with universal design features is critical to our ability to house and care for this large aging demographic while protecting individual's wishes for dignity, control, and
independence. If we want to maintain control of our lives, we need to look ahead and plan. Read more.

ABOUT THE AUTHORS

DON E. ALBRECHT
Director
Western Rural Development Center
Utah State University

HARRIET SHAKLEE
Family Development Specialist
University of Idaho Extension

KATHEE TIFFT
Family and Consumer Sciences Extension Educator
University of Idaho Extension, Nez Pierce County

KATIE HOFFMAN
Family and Consumer Science Extension Educator
University of Idaho Extension, Lemhi County

JENNIFFER SOWERWINE
Assistant Cooperative Extension Specialist
University of California Berkeley

SHRIE DUNCAN
Extension Intern
Utah State University Extension

ROS LINNN BRAIN
Sustainable Communities Specialist
Utah State University Extension

KYNSA CURTIS
Agriculture and Food Marketing Specialist
Utah State University Extension

KELLY E. MOTT LACROIX
Senior Research Analyst
University of Arizona Water Resources Research Center

MARK APEL
Area Associate Agent Community Resource Development
University of Arizona Cooperative Extension

BRIAN LEE
Research Scientist
University of Wyoming

YON G. LEE
Associate Professor
Utah State University

BRIAN KNUDSEN
Research Analyst
National Association of Counties

MINDY OXMAN RENFRO
Clinical Coordinator and Project Physical Therapist
University of Montana

DID YOU MISS AN ISSUE?

Past issues of Rural Connections are available on our website. Read past issues today!