The Western Extension Directors Association (which includes 13 states in the West, including Nevada) produced a list of goals and objectives to define Extension’s role as we enter our next century of work as a part of the land-grant university system (see http://bit.ly/1FxkNfj). The document includes a few key phrases: “demand-driven,” “locally relevant” and “globally informed.” For me, these are what make Extension a valuable resource for Nevada’s communities.

Extension’s next century will see continued rapid increases in the amount of information readily accessible and available online. A recent estimate suggests that the entire Internet could be published using 4.54 billion pages of paper. This includes a massive amount of entertainment, but also includes good information that could be useful in developing the best solutions to issues in the many economic, cultural and environmental settings in Nevada. However, without a clear understanding of how this information is useful, it can be at best unhelpful and at worst harmful.

Extension’s strengths come from having faculty and staff who live and work in Nevada’s communities and who produce and translate information that is locally relevant. This has been Extension’s goal throughout its 100-year history. But what does this mean in the age of the Internet and search engines, particularly in Nevada?

Our annual program highlights reflects just some of the ways we serve the state in the broad missions of youth development, community development, horticulture, agriculture, natural resources management, and health and nutrition. It reports on accomplishments from urban programs (our Master Gardener Program in Washoe and Clark Counties), rural programs (our focus on irrigation research), important emerging issues (drought, fire and invasive weeds) and ongoing challenges associated with food deserts and nutrition education. It reports on new initiatives for youth involved in 4-H and educational programs for our Native American populations. And much more.

Our dedicated faculty and staff accomplish something that cannot be replaced by online search engines. They design programs from careful assessments of what communities need (“demand-driven”), use resources that they feel will make an effective program (“globally informed”), and deliver information and constantly check results to be sure that our audiences are better off after participating in our programs (“locally relevant”). Just as in Extension’s past century, our programs evolve to meet needs with the best information available. This publication demonstrates that Extension remains a trusted source of demand-driven, locally relevant information from our globally informed faculty and staff.

Cover photos (left to right):
- (Top) Youth participate in science-based learning at 4-H S.T.E.M. Day Camp – see Page 3.
- Drought affecting Nevada – see Page 7.
- Junior Master Gardeners learn gardening, science and more – see Page 6.
- Lake Mead at its lowest level since 1930s – see Page 13.
- Healthy Eating on a Budget participants at the Nevada Department of Welfare and Social Services, Belrose, plan a “mock” menu from grocery store ads – see Page 11.
- 4-H High-Powered Rocketry Club completes successful launch – see Page 4.
- Runners in the Wildfire Awareness Half Marathon and 5K raise wildfire awareness and funds for the Wildland Firefighter Foundation as part of the Living With Fire Program’s activities – see Page 10.

2014 ACCOMPLISHMENTS

1,587,587
Visitors to the www.unce.unr.edu website

$5,051,485
Funding procured by faculty and staff in grants

36
New educational publications, fact sheets and curricula published by faculty
CONTENTS

Meeting needs of Nevada’s youth and families: Programs provide science-based learning, literacy education, child care training and more
- S.T.E.M. camps, robotics and summer camps provide hands-on learning
- Learning takes off with rockets

Addressing today’s horticulture issues: Much more than growing tomatoes
- Showing aging gardeners easier ways to do what they love while staying healthy and active
- Developing bioplastic compostable plant containers
- Junior Master Gardeners: Educating tomorrow’s gardeners
- Gardening in Nevada: Residents identify class topics to address today’s gardening and horticulture challenges

Living With Drought: Leading collaborative efforts to help Nevadans and Ag Producers “Live With Drought”
- Native Waters on Arid Lands and Water for the Seasons
- Workshops provide agricultural producers information for short-term help and long-term planning
- Applying research and developing groundwater management strategies to achieve sustainability
- Dean Mark Walker appointed to Nevada Drought Forum and convenes multistate efforts

Tackling natural resources challenges: With drought comes increased risk of wildfire, spread of noxious weeds
- Weed Warriors Program provides education and training for weed-control efforts
- Weed Extravaganza helps Nevadans battle weed challenges with the latest information
- Articles provide information on “Nevada’s Priority Agricultural Weeds” identified by needs assessment
- Living With Fire Program receives national Wildfire Mitigation Award for its leadership role in promoting fire adapted communities

Helping to fill health and nutrition gaps: Food deserts, nutrition and food-safety education
- Teaching parents and school children nutrition, food safety and more
- Helping low-income seniors and families make good nutrition choices
- Federally Recognized Tribes Extension Program: The Hoop House Project
- Veggies for Kids: Encouraging kids at reservations and rural schools to eat vegetables, make healthy choices

Promoting community and economic development: Helping communities plan their own paths
- Helping Moapa Valley be resilient during challenging times

FISCAL YEAR 2014 FUNDING

- Temporary bridge funds $477,900, 2%
- Gifts $244,265, 1%
- Sales $572,797, 3%
- Grants $4,330,714, 22%
- State $3,447,035, 18%
- County $7,902,440, 41%
- Total Federal $2,505,249, 13%
Cooperative Extension focuses heavily on addressing the needs of Nevada’s children, youth and families. Addressing the needs of younger children, there are training programs for Nevada’s child care providers, early literacy programs, and programs aimed at establishing good health and nutrition habits. For older children and teens, many programs focus on college and career readiness. There are also educational programs for family violence prevention; as well as programs providing mentoring, tutoring and training for high-risk youth and juvenile offenders.

Both rural and urban youth across Nevada participate in Cooperative Extension’s 4-H Youth Development Programs, where they engage in experiential learning, learning by doing. There are project clubs for those with particular interests, such as raising an animal, photography, wildlife or snowboarding. There are also afterschool programs, school enrichment programs enhancing learning in the classroom, programs for military families and summer camps. Besides teaching youth leadership, citizenship and life skills, Nevada’s 4-H programs also incorporate S.T.E.M. (science, technology, engineering and math) learning into all programs, following the national 4-H initiative. Programs such as robotics and rocketry specifically focus on S.T.E.M. learning.

During the summer, three special three-day camps are held in Clark County. Two of the camps, one for ages 7-11 and one for ages 10-14, are S.T.E.M. camps, focusing solely on S.T.E.M. activities. The third camp is a robotics camp, for youth ages 7-11. Several other counties in Nevada also offer 4-H robotics clubs or activities, including Elko, Humboldt, Lander and Washoe Counties.

In addition, each summer, the 4-H camp at Lake Tahoe hosts 4-H clubs from around the state. For seven days, the camps offer a variety of experiential learning activities, heavily incorporating S.T.E.M. learning.

Program Partners: Nevada Department of Education; University of Nevada. Reno College of Education; Carson City School District; Carson City Parks and Recreation Centers; Clark County School District; Clark County Community Centers; Clark County Fair; Clark County Shooting Sports; Desert Pines Equine Medical and Surgical Center; Desert Research Institute; Tonopah High School; Mineral County High School; Wells, Jackpot, Owyhee, Gabbs and McDermitt Combined Schools; Floyd Lamb State Park; Las Vegas 51’s; Las Vegas Wash; Sandy Valley Ranch; Von’s; Wet N’ Wild
LEARNING TAKES OFF WITH ROCKETS

In March 2015, in conjunction with Reno Rocketry, Cooperative Extension launched the 4-H High-Powered Rocketry Club.

“The goal of the STEM-based program was to guide students through the process of constructing a high-powered 6-foot-high rocket from scratch, and to fly it successfully, reaching an altitude of at least 3,000 feet and a speed of at least 400 miles per hour,” explained Washoe County 4-H Mentor and Club Leader Kevin Clifford.

The club's members, ages 13-19, also needed to reach these goals within a certain budget and timeframe.

“The project is a simplified version of how a space agency would operate on a mission,” Clifford said.

The students assumed various roles, including mission control director, recovery specialist, electronic specialist, propulsion specialist, marketing specialist and finance manager. They met several times a month for instruction, did independent research and worked together several days to build the 6-foot, 4-inch fiberglass and carbon fiber rocket.

On June 7, the club arrived early in the morning to launch north of Reno at White Lake in Cold Springs. After about an hour of preparation, including loading the on-board video camera, flight computer, ejection charges and motor, the rocket was ready to launch.

The club fired it off, and watched in awe with other spectators as the rocket’s 83-second flight far surpassed the altitude and speed goals of the mission (see numbers at right). The rocket safely descended, thanks to two parachutes the crew had loaded and computer-programmed to deploy at certain times to ensure a safe landing.

“A 4-H rocket club from California was there, and they were very impressed that our club took on such a large rocket project. They said it inspired them to try something new,” said Sarah Chvilicek, Washoe County 4-H Youth Development Program coordinator. “That’s really what this is about – inspiring youth to push themselves and engage in science and technology activities. Hopefully, they will consider college and career tracks to put those skills to use.”

Other counties in Nevada are also engaged in 4-H rocketry activities, including Lincoln, Nye and Clark Counties.

**Program Partners:** Reno Rocketry, Reno Diagnostic Center, Nevada Hand Therapy, Wolves in Nevada, Kirk Cattle, family and friends of club members
The class is valuable because it really puts emphasis on being aware of how you’re gardening, or doing anything. It’s good to reinforce how you’re kneeling or picking things up. We discussed some things you can do to alleviate pain as you go – that was really beneficial.”

— Karen Beatty, participant

Addressing today’s horticulture issues: Much more than growing tomatoes

As more people of all ages seek to grow their own food and use horticulture practices to preserve a healthy environment, Cooperative Extension is addressing the needs of diverse audiences and today’s challenging climate and conditions. Our Master Gardener Program continues to provide intensive training to those who become part of our cadre of 460+ volunteers providing information and programs to more than 70,000 Nevadans annually.

GARDENING SMARTER AS WE MATURE

170
People participated in the Gardening Smarter as We Mature workshop series

SHOWING AGING GARDENERS EASIER WAYS TO DO WHAT THEY LOVE WHILE STAYING HEALTHY AND ACTIVE

The Gardening Smarter as We Mature workshops began in spring 2015 under the direction of Extension Educator JoAnne Skelly to meet the demand for classes for older gardeners. The classes focused on the biomechanics of the body, covering gross and fine motor skills, core strengthening, cardiovascular health, strength and endurance. Participants learned how their bodies work and how they could reduce injuries and stress on the body as they garden. They also learned practical gardening applications, such as simplifying gardening life, using ergonomic tools, prioritizing tasks, using lower-maintenance plants and gardening in raised beds. Workshops were offered statewide and were taught by Cooperative Extension’s Exercise Physiology and Public Health Specialist Anne Lindsay and Social Horticulture Specialist Angela O’Callaghan.

RESEARCH

DEVELOPING BIOPLASTIC COMPOSTABLE PLANT CONTAINERS

After nearly 10 years of developing and testing 28 different composites of biodegradable plant containers, Nevada Cooperative Extension Horticulture Specialist Heidi Kratsch, in partnership with researchers at Iowa State University, has sent about a dozen of the best performing composites to nurseries to test their marketability.

“The trick was finding composites that held up well during plant production, without falling apart, yet biodegraded once in the soil – both in Iowa soils and Nevada soils,” Kratsch said. “Consumers are demanding pots that degrade.” Kratsch has also conducted a nationwide survey on consumer preferences centered around biodegradable plant containers.

This biocontainer, consisting of 80 percent polyhydroxyalkanoate (PHA) and 20 percent Dried Distillers Grains and Solubles (DDGS) was one of the best performing prototypes. PHAs are made from renewable carbon-based feedstocks, and DDGS are byproducts of corn ethanol production. The material is 100 percent renewable. These pots biodegraded almost 50 percent in both Iowa and Nevada soils after one year, and biodegraded 100 percent in home and municipal composting piles. The containers also held up well during plant production.

Program Partners: U.S. Department of Agriculture’s National Institute of Food and Agriculture, Iowa State University, University of Illinois, various nurseries
MASTER GARDENERS

JUNIOR MASTER GARDENERS: EDUCATING TOMORROW’S GARDENERS

The Junior Master Gardener Program began at the national level in 1997, and in Clark County in 2001, where the program is open to youth ages 7-12. The eight-chapter curriculum contains hands-on activities for grades 3-5. Children experience gardening activities while learning about plants, water, soil, vegetables and more. They also learn leadership skills, service, safety and community service from this 4-H program.

Besides Cooperative Extension offering the course as an outside-of-school eight-session course, Junior Master Gardener Program Coordinator Karyn Johnson works with teachers who use the curriculum to give simple lessons that augment vocabulary and support literacy and math while getting students outside the classroom. Their vocabulary in life science-related topics substantially improves after using these concepts in gardening programs.

Program Partners: ViraGrow, Pavestone, Cemex, First Choice Tree Service, Home Depot, Master Gardeners, parents, friends, family, teachers, students

JUNIOR MASTER GARDENERS pick peppers at the Children’s Demonstration Garden at Cooperative Extension’s Lifelong Learning Center in Las Vegas.

GARDENING IN NEVADA: RESIDENTS IDENTIFY CLASS TOPICS TO ADDRESS TODAY’S GARDENING AND HORTICULTURE CHALLENGES

Gardening in Nevada is a series of free classes held Tuesday evenings in February and March in Reno at Bartley Ranch Regional Park’s Western Heritage Building. Since the program began more than 15 years ago, it has grown, and sessions are now often standing-room only. Topics are adapted to address the current interests of residents. Some of the 2015 topics included:

- Sustainable Gardening (to preserve our environment and provide sustenance)
- GMOs (genetically modified organisms): Facts and Fallacies
- Growing Succulents (low-water-use plants, needed for drought conditions)
- Attracting Native Pollinators (as populations decline)
- Caring for Fruit Trees and Successful Vegetable Gardening (as more people are growing their own food)

Program Partners: Washoe County Regional Parks and Open Space

I think the best part of Junior Master Gardeners is the experience of learning about the plants, and the knowledge you get when you take the classes, especially the insect chapter, because we learned about bugs and got to touch them!”

— Junior Master Gardener student 11-year-old Miguel

The Gardening in Nevada series provides tremendous value to our community, informing our residents how to take care of plants in a desert environment, grow vegetables here and more. The caliber of presenters that Extension provides is top-notch.”

— Colleen Wallace Barnum, Washoe County district park manager

953 people attended Gardening in Nevada sessions in 2015

42,638 Hours were volunteered by Nevada Master Gardeners in 2014
The prolonged and severe drought has brought unprecedented challenges to Nevadans, especially to the state’s agricultural and livestock producers. With the U.S. Department of Agriculture having designated every county in Nevada a Primary Natural Disaster Area due to drought, Nevadans are looking for information to help them cope. Under the direction of Dean Mark Walker, Cooperative Extension’s www.LivingWithDrought.com website is becoming the place to turn for relevant, research-based information.

Cooperative Extension, in collaboration with many partners, continues to conduct educational programs and research to help Nevadans deal with this year’s drought and plan for future climatic change. Engagement throughout the state is two-way, with Extension educators providing information, as well as doing a lot of listening to guide future educational and research programs.

“**What sets Cooperative Extension apart from Google and other general resources, and makes it so important to the land-grant mission and the communities we live in and serve, is the local relevancy of our advice and assistance.**”

— University of Nevada Cooperative Extension Dean and Director Mark Walker

---

**NATIVE WATERS ON ARID LANDS**

Funded by the U.S. Department of Agriculture’s National Institute of Food and Agriculture, this five-year, $4.5 million program will integrate research and Extension to help Great Basin and Southwestern tribal communities develop plans, policies and practices for sustainable agriculture and water management. Other collaborators in the project include the University of Arizona and Utah State University; First Americans (1994) Land-Grant Consortium (FALCON); Federally Recognized Tribal Extension Program instructors in Nevada and Arizona; U.S. Geological Survey; Ohio University; and tribal members from Nevada, Utah, Arizona and New Mexico.

---

**WATER FOR THE SEASONS**

Funded by the National Science Foundation and the U.S. Department of Agriculture, this $3.8 million program will integrate science and water policy research with extensive community outreach to identify the expected impacts of climate change and solutions for protecting valuable water resources in northern Nevada’s Truckee-Carson River system. The project aims to serve as a model for other areas with snow-fed arid-land systems in the American West. The University’s partners in the project include the Desert Research Institute and U.S. Geological Survey.
Cooperative Extension Dean Mark Walker and Doug Boyle, associate professor in the University’s College of Science and Nevada state climatologist, have been appointed to the Nevada Drought Forum by Gov. Brian Sandoval, who described the group as “some of the best minds in Nevada’s scientific, government and industry sectors” to address the drought situation. In addition, Walker has convened a multistate group representing the Western land-grant universities to share data and insights related to the regional drought and other climatic changes.

In some rural Nevada communities, such as Diamond Valley in Eureka County, the groundwater table is dropping at alarming rates. Agricultural producers know that something has to change, or within a decade or two, there will be insufficient water to support agriculture. Diamond Valley has enlisted the help of Extension Educator Steve Lewis to help them develop a groundwater management strategy to maintain their groundwater supply.

In relation to declining groundwater supplies, Extension Educator Seth Urbanowitz and Alternative Crops and Forage Specialist Jay Davison are each conducting research projects with local farmers in eastern Nevada. Urbanowitz’s research in White Pine County involves producers using soil moisture sensors and improving irrigation equipment maintenance to improve water use efficiency.

Davison’s research in Eureka County, in collaboration with University of Idaho Extension Water Management Engineer Howard Neibling, is also incorporating the use of soil moisture sensors and is testing the use of low-energy spray application irrigation systems that are only one foot off the ground to reduce evaporation and wind drift, thereby conserving water and energy.

Davison’s research on low-water-use alternative crops for growers in Nevada is ongoing, as he assists with exciting new prospective crops, such as hops.

APPLYING RESEARCH AND DEVELOPING GROUNDWATER MANAGEMENT STRATEGIES TO ACHIEVE SUSTAINABILITY

The workshops are often in collaboration with other agencies, University educators and partners, and some are supported by U.S. Department of Agriculture funding, including their Southwest Climate Hub. Many Cooperative Extension faculty members are involved in these efforts, with Extension Educators Staci Emm and Steve Lewis, and Water Resources Specialist John Cobourn taking the lead.

DEAN MARK WALKER APPOINTED TO NEVADA DROUGHT FORUM AND CONvenes MULTISTATE EFFORTS

Cooperative Extension Dean Mark Walker and Doug Boyle, associate professor in the University’s College of Science and Nevada state climatologist, have been appointed to the Nevada Drought Forum by Gov. Brian Sandoval, who described the group as “some of the best minds in Nevada’s scientific, government and industry sectors” to address the drought situation. In addition, Walker has convened a multistate group representing the Western land-grant universities to share data and insights related to the regional drought and other climatic changes.
The threats posed by wildfire and noxious weeds are not new to Nevada. However, drought makes conditions ideal for opportunistic noxious weeds to outcompete desirable vegetation for what little moisture there is. And, with less moisture and more dry weeds comes increased risk of wildfire. Cooperative Extension has been addressing these issues for decades, but more than ever, this work is taking center stage.

DEALING WITH NEVADA’S WEEDS

WEED WARRIORS PROGRAM PROVIDES EDUCATION AND TRAINING FOR WEED-CONTROL EFFORTS

The Weed Warriors Program, created by Extension Water Quality Education Specialist Sue Donaldson in 1998, focuses on identifying and managing Nevada’s noxious weeds that can overtake recreational areas, roadsides, and other urban and rural sites. The program has provided educational workshops, field tours and weed-control events, and was the impetus for creating several groups that now coordinate noxious weed management efforts in their areas. The program’s current emphasis is an eight-hour, two-day Integrated Pest Management course for local, state and federal agencies and some of the 30 Cooperative Weed Management Areas in Nevada.

Program Partners: Truckee Meadows Weed Coordinating Group, Nevada Department of Agriculture, Crop Production Services

The Truckee Meadows Weed Coordinating Group organizes the weed-control segment of Keep Truckee Meadows Beautiful community cleanup efforts, shown here.

“The training opened my eyes to the need for educating ranchers and community on weeds and controlling them.”

— 2014 Weed Warriors participant

WEED EXTRAVAGANZA HELPS NEVADANS BATTLE WEED CHALLENGES WITH THE LATEST INFORMATION

The Weed Extravaganza is an annual three-day event coordinated by Extension Natural Resources Specialist Kent McAdoo at the California Trail Interpretive Center near Elko. The event gives land managers, ranchers and agricultural producers the latest information on controlling invasive weeds and includes the Elko County Weed Summit, a field trip demonstrating how to identify weeds, the Pesticide Applicator Training/Weed Identification and Management Workshop, and a chance to take the certification exam. Nearly 400 people have attended these trainings since 2007, including participants from five states.

Program Partners: Elko County Association of Conservation Districts, Humboldt Watershed Cooperative Weed Management Area, Nevada Department of Agriculture, Nevada Weed Management Association, Bureau of Land Management
ARTICLES PROVIDE INFORMATION ON NEVADA’S PRIORITY AGRICULTURAL WEEDS IDENTIFIED BY NEEDS ASSESSMENT

In 2010, Extension Educator Brad Schultz was part of a Cooperative Extension team that published the Nevada 2008 Weed Management Extension Program Needs Assessment, which identified the 26 most problematic weeds for Nevada’s agriculture producers and public land managers. The list became known as “Nevada’s Priority Agricultural Weeds,” and in August 2013, Schultz began publishing a series by the same name in The Progressive Rancher Magazine and Nevada Rancher Magazine, which reach 32,000 people each month. The articles inform producers and land managers about these weeds and how to control them.

**Program Partners:** Articles – Extension Natural Resources Specialist Kent McAdoo. 2008 needs assessment – agriculture producers and public land management agencies who completed the needs assessment survey; Cooperative Extension colleagues Earl Creech (currently at Utah State University), Loretta Singletary, Jay Davison, Lisa Blecker

FIRE ADAPTED COMMUNITIES

LIVING WITH FIRE PROGRAM RECEIVES NATIONAL WILDFIRE MITIGATION AWARD FOR ITS LEADERSHIP ROLE IN PROMOTING FIRE ADAPTED COMMUNITIES

The Living With Fire Program, begun in 1997 by Extension Natural Resources Specialist Ed Smith and co-managed by Smith and Marketing Specialist Sonya Sistare, was presented in March 2015 with a national Wildfire Mitigation Award for its leadership role in promoting fire adapted communities, one of three national goals set in the 2009 National Cohesive Wildland Fire Management Strategy. Fire adapted communities are ones whose residents work together to be able to survive a wildfire with little assistance from firefighters.

Smith and Sistare have developed guides to establishing a fire adapted community, one for the state and five for specific counties. They have also established the Nevada Network of Fire Adapted Communities, with 80 current members. Living With Fire Volunteer Ann Grant also received a national Community Wildfire Preparedness Pioneer Award. These awards are the highest national honor presented for significant impact in wildfire preparedness and mitigation.

**Program Partners:** Living With Fire – Bureau of Land Management, Nevada Division of Forestry, Sierra Front Wildfire Cooperators, U.S. Forest Service, Lake Tahoe Regional Fire Chiefs Association, Nevada State Fire Marshal Division and more than 130 program collaborators. National Wildfire Mitigation Awards sponsors – National Association of State Foresters, International Association of Fire Chiefs, National Fire Protection Association, U.S. Department of Agriculture Forest Service

“Living With Fire has been way ahead of the curve. The program really helped set the stage for fire adapted communities becoming a national goal. They have been very generous in allowing what they’ve done to be used nationally, and it’s been a great success.”

— Mike Brown, fire chief for North Lake Tahoe Fire Protection District and first vice president of the Nevada Fire Chiefs Association

Of the homes in Ann Grant’s Skyland community at Lake Tahoe are in compliance with defensible space requirements, thanks to her volunteer work since 2005
Helping to fill health and nutrition gaps:
Food deserts, nutrition and food-safety education

More than 150,000 Nevadans live in low-income food deserts, where healthy food such as fruits and vegetables are scarce. This often results in diets high in sugar, fats and sodium, and consequently, increased rates of various diseases and conditions. Many Nevadans also lack reliable information on nutrition, food safety and budgeting. Cooperative Extension is addressing these issues, which affect rural and urban Nevadans of all ages and cultures, by providing educational programs and ways to help people grow their own nutritious foods.

HELPING SENIORS, PARENTS AND CHILDREN
MAKE HEALTHY CHOICES WITH LIMITED RESOURCES

In 2014, EFNEP participants’ post-test results indicated:

86% Used the Nutrition Facts on the food labels
83% Showed improvement in food-safety practices
60% Showed an increase in physical activity

“ If it wasn’t kidnapping, I would have taken the instructor home. My family and I will never eat the same again.”

— Program participant referring to Cooperative Extension Community-Based Instructor Carol Hendrix

TEACHING PARENTS AND SCHOOL CHILDREN NUTRITION, FOOD SAFETY AND MORE

The U.S. Department of Agriculture’s federally funded Expanded Food and Nutrition Education Program (EFNEP) began in 1969. Now, Mary Wilson, coordinator of the program in Nevada and Cooperative Extension nutrition specialist, teaches food safety, nutrition and resource management to low-income parents and their children in Clark County. The program partners with schools with at least 50 percent of students eligible for free or reduced-price lunches to provide information in small groups. In 2014, the program affected 1,899 family members. Program materials are culturally sensitive and available in Spanish and English.

Program Partners: Clark County School District, Spring Valley Library, Cambridge Recreation Center, Acelero Learning Clark County, HopeLink of Southern Nevada

HELPING LOW-INCOME SENIORS AND FAMILIES MAKE GOOD NUTRITION CHOICES

With more than 314,000 Nevadans receiving Supplemental Nutrition Assistance Program (SNAP) benefits in 2012, Cooperative Extension Nutrition Specialist Mary Wilson created Healthy Eating on a Budget for Clark County adults receiving these benefits. In conjunction with the Nevada Division of Welfare’s Job Readiness workshops, she developed eight, one-hour lessons on good nutrition, food safety and food resource management to help low-income families adopt healthy eating habits and extend their benefit dollars. Last year, the program affected 988 family members, and this year, it expanded to Washoe and Lincoln Counties.

Program Partners: Nevada Department of Welfare and Social Services, Clark County School District, Caliente Senior Center, Pahranagat Valley Senior Center, Panaca Fire Station/Hall, Pioche Fire Station/Hall

In 2014, Healthy Eating on a Budget participants’ post-test results indicated:

65% Showed improvement in one or more food-safety practices
51% Showed improvement in eating more than one kind of vegetable each day
48% Increased their consumption of vegetables by at least ½ cup per day
HELPING NEVADANS IN RURAL OR REMOTE AREAS GROW FOOD AND MAKE HEALTHY CHOICES

FEDERALLY RECOGNIZED TRIBES EXTENSION PROGRAM: THE HOOP HOUSE PROJECT

The Federally Recognized Tribes Extension Program: The Hoop House Project began in 2012 to address the lack of nutritious foods available in many northern Nevada tribal communities. The program, led by Cooperative Extension’s Tribal Coordinator Randy Emm, Hoop House Coordinator Reggie Premo and Community-Based Educator Victor Williams, helps construct hoop houses and provides training on how to use them to grow food. The project also provides food for seniors and those in need, and opportunities for social interactions and growing traditional Native American food.

Program Partners: Barrick Gold Corporation, National Institute of Food and Agriculture, U.S. Department of Agriculture Strike Force Initiative, tribal volunteers, schools and local agencies on the reservations.

VEGGIES FOR KIDS: ENCOURAGING KIDS AT RESERVATIONS AND RURAL SCHOOLS TO EAT VEGETABLES, MAKE HEALTHY CHOICES

Veggies for Kids encourages kindergarteners to third-graders in low-income rural Nevada communities to increase their physical activity and consumption of fruits and vegetables by providing a garden, hoop house and hands-on gardening activities at their schools. Extension Educator and Program Director Staci Emm helped establish the program in 2000 at three schools on reservations to help Native American children. The program now also includes three schools targeting Hispanic students, and a cultural component, with classes taught in Paiute or Spanish and exposure to Native American or Hispanic foods.

Program Partners: U.S. Department of Agriculture’s Supplemental Nutrition Assistance Program – Education, and Natural Resource Conservation Services; Owyhee, Natchez, Schurz, Hawthorne, Yerington and Smith Valley Elementary Schools.

Teacher Judy Halterman plants vegetables in a hoop house with kindergarteners and first-graders at Yerington Elementary School.

Since 2012:

30 Hoop houses built

10 Reservations have received hoop houses and training

Veggies for kids has had an amazing impact on my students’ lives. I have heard them discuss healthy choices and portion sizes outside of the ‘Veggies for Kids’ class time. More importantly, I have witnessed my students making healthy choices for snacks and lunch! I was truly amazed to see my third-graders embrace the ‘Veggies for Kids’ motto, ‘Eat smart, play hard, drink water, not soda.’

— Kristina Thran, third-grade teacher at Smith Valley Elementary

We knew what we wanted, but we weren’t quite sure we could accomplish it. But with the help of the hoop house people, it came together. We are so excited because we did grow things. That was our expectation—to get enough to help the community out.”

— Cherry Knight, environmental specialist for the South Fork tribe

422 Students completed the Veggies for Kids Program in 2014
Promoting community and economic development: Helping communities plan their own paths

Throughout the state, rural and urban communities must constantly address community and economic development challenges.

For example, some communities have been hurt by drought that has caused a decrease in outdoor tourism or agriculture industries. Other communities have been impacted by increased competition for gaming tourism, a decrease in construction from the recession, or closure of a major business or military facility. Sometimes rapid growth in the local economy brings challenges that community leaders are not prepared to address – providing adequate safe housing or water supply, for example, or helping small business owners wanting to expand to meet increased local demand.

Extension educators live and work throughout our state, acquiring hands-on knowledge of the issues our communities face. With assistance from Extension specialists and colleagues at the University’s Center for Economic Development and Small Business Development Center, they help Nevada communities collect and analyze socio-economic data and develop strategic economic development plans. They survey residents to find out what they want in terms of community growth, development and lifestyle. And, they help communities identify potential new industries or areas of economic growth.

Small business owners and entrepreneurs get help developing budgets, acquiring business licenses and more.

The “bathtub rings” surrounding Lake Mead show how far the water has dropped in recent years. The reservoir is the nation’s largest. Photo courtesy of Vernon Robison, editor, Moapa Valley Progress.

Lake Mead is at: 37% of its capacity, the lowest it has been since the 1930s.

COMING PLAY IN OUR DIRT

HELPING MOAPA VALLEY BE RESILIENT DURING CHALLENGING TIMES

Like the sprawling, fast-paced city of Las Vegas, the Moapa Valley sits in Clark County, but about 60 miles northeast of the City. Homeowners and agricultural producers throughout the county are facing water supply challenges posed by Lake Mead’s declining levels, partially induced by the prolonged drought. However, small towns in the Valley, such as Logandale and Overton, are feeling an extra pinch in their pocketbooks due to the lake’s declining levels.

“These are rural communities, and they relied a lot upon Lake Mead’s recreational opportunities to bring tourism to the area,” explained Extension Educator Carol Bishop. “Now, as the lake dries up, and marinas and boat launches are forced to close, our tourism is also drying up.”

With her background in economics, Bishop is helping the Valley find ways to revitalize the economy. She advised interested community members to form a nonprofit, the Moapa Valley Revitalization Project, and helped them complete the process. Now the Project’s website brands the Valley as “Southern Nevada’s Outdoor Playground,” and says, “Come Play in Our Dirt.”

continued on next page
Bishop instructed the group on grant writing and edited proposals for them, resulting in the Nevada Commission on Tourism granting the group funds to establish the Off-Highway Vehicle Festival, to be held twice a year in the Valley to continue to draw tourists. The first one is scheduled for November 2015, and the second in March 2016.

In addition, Bishop worked with the Revitalization Project and the Moapa Valley Chamber of Commerce to help them obtain grants from the Commission for printing and digital promotion of the area as a visitor destination.

“This area is still a wonderful outdoor playground, even with the Lake's declining levels,” Bishop said. “There is a lot of pride here, and the people here love this Valley. Many of them want to start new businesses or expand their current ones.”

Bishop is helping in that regard as well, helping farmers who lease property and want to own their own property or expand, to apply for loans. She helps entrepreneurs of all kinds create “enterprise” budgets to see if they can have viable, profitable businesses. She then helps them decide what type of business they should establish (sole proprietorship, partnership, etc.), and walks them through the process of obtaining state and county licenses, inspections, etc.

“Even though we are out here in the Valley, we still have to jump through most of the same hoops as Las Vegas businesses do,” Bishop explained. “We’re part of the same county, and there is a lot of legwork that has to be done to establish a business here. But, we’re getting a variety of businesses the help they need – from farmers to yoga studios. It’s a lot of work, but a lot of fun.”

Program Partners: Moapa Valley Revitalization Project, Moapa Valley Chamber of Commerce, Nevada Commission on Tourism, local businesses

NEVADA RADON EDUCATION PROGRAM

HAVE YOU TESTED YOUR HOME?

Radon is a radioactive, odorless, colorless and tasteless gas that enters homes from the ground and can cause lung cancer.

2007-2014:

- 15,727 homes in Nevada returned valid test results
- 1 in 4 had elevated levels of radon

The Nevada Radon Education Program is a program of University of Nevada Cooperative Extension and is funded by the Nevada Division of Public and Behavioral Health. The program has been working to raise awareness of the dangers of radon in the home since 2007.

For more information on test kits and radon:

www.RadonNV.com
888-RADON10 (888-723-6610)
University of Nevada Cooperative Extension

UNIVERSITY OF NEVADA
COOPERATIVE EXTENSION MISSION

To discover, develop, disseminate, preserve and use knowledge to strengthen the social, economic and environmental well-being of people.

A partnership of Nevada counties; University of Nevada, Reno; and U.S. Department of Agriculture

OFFICES

Carson City/Storey County
2621 Northgate Lane, Suite 15
Carson City, NV 89706-1619
775-887-2252

Churchill County
111 Sheckler Road
Fallon, NV 89406-8951
775-423-5121

Clark County
8050 Paradise Road, Suite 100
Las Vegas, NV 89123-1904
702-222-3130

Neighborhood Clark County
P.O. Box 126
1897 N. Moapa Valley Blvd.
Logandale, NV 89021-0126
702-397-2604

Southern Clark County
55 Civic Way
Laughlin, NV 89029
702-299-1333

Douglas County
P.O. Box 338
Minden, NV 89423-0338
1325 Waterloo Lane
Gardnerville, NV 89410
775-782-9960

Elko County
701 Walnut St.
Elko, NV 89801-5032
775-738-7291

Eureka County
P.O. Box 613
701 S. Main St.
Eureka, NV 89316-0613
775-237-5326

Humboldt County
1085 Fairgrounds Road
Winnemucca, NV 89445-2927
775-623-6304

Lander County
815 N. Second St.
Battle Mountain, NV 89820-2326
775-635-5565

Lincoln County
P.O. Box 728
360 Lincoln St.
Caliente, NV 89008-0728
775-726-3109

Lyon County
P.O. Box 811
504 S. Main St.
Yerington, NV 89447-0811
775-463-6541

Mineral County
P.O. Box 810
205 S. A St.
Hawthorne, NV 89415
775-945-3444

Nye County
P.O. Box 231
#1 Frankie St., Old Courthouse
Tonopah, NV 89049-0231
775-482-6794

1651 E. Calvada Blvd.
Pahrump, NV 89048
775-727-5532

Pershing County
P.O. Box 239
810 Sixth St.
Lovelock, NV 89419-0239
775-273-2923

Washoe County
4955 Energy Way
Reno, NV 89502-4105
775-784-4848

White Pine County
950 Campton St.
Ely, NV 89301-0210
775-293-6599

www.unce.unr.edu

The University of Nevada, Reno is committed to Equal Employment Opportunity/Affirmative Action in recruitment of its students and employees and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, sexual orientation, genetic information, gender identity or gender expression. The University of Nevada employs only United States citizens and aliens lawfully authorized to work in the United States. Women and under-represented groups are encouraged to apply.

Copyright © 2015 | University of Nevada Cooperative Extension