

2009 Annual Report

Delivering Science-Based Education to Yavapai County Citizens

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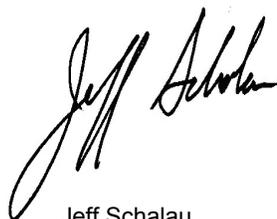
The faculty and staff of the University of Arizona Cooperative Extension respectfully submit this report of program accomplishments to the Board of Supervisors and citizens of Yavapai County. This report highlights the impacts of Cooperative Extension programming from January 1 to December 31, 2009.

The University of Arizona Cooperative Extension transfers science-based knowledge from the University of Arizona campus to communities statewide and provides leadership in the application of that information to address local issues and needs. In Yavapai County, major program areas are 4-H Youth Development, Agriculture, Community Resource Development, Natural Resources, Animal Science, and Family and Consumer Science.

Our success is based on valuable partnerships between individuals, other educational institutions, county departments, citizen's groups, cities and towns, and state and federal agencies. The University of Arizona College of Agriculture and Life Sciences provides education, leadership, and expertise. Each day, Cooperative Extension Agents, Specialists, and office support staff work together to deliver quality educational programs to Yavapai County residents.

In 2009, Cooperative Extension served 32,834 Yavapai County residents through our programs and services. In addition, 269 citizens served as Cooperative Extension volunteers. These valuable volunteers enhanced Extension programming by helping Cooperative Extension educators deliver relevant educational programs and information to the citizens and communities of Yavapai County. The contribution of these trained volunteers totaled 24,520 hours of service for an estimated value of \$496,530.

Finally, we would like to acknowledge and thank the Yavapai County Extension Advisory Board for their support and assistance in identifying and addressing high priority issues in Yavapai County.



Jeff Schalau
County Extension Director



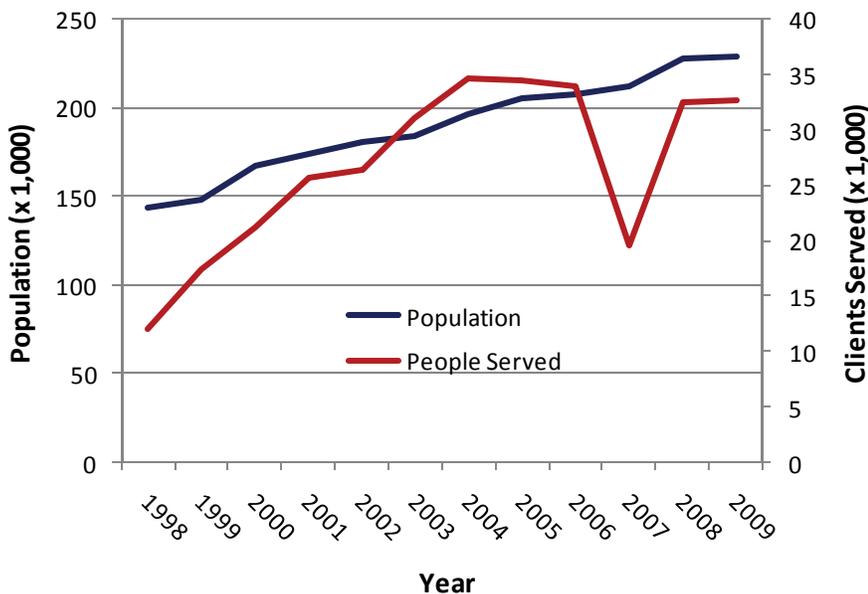
Nora Graf
Chair, Extension Advisory Board



Yavapai County Cooperative Extension 2009 Overview

Our Mission: Yavapai County Cooperative Extension provides science-based education and information that addresses local issues and needs in the fields of agriculture, animal science, family consumer sciences, horticulture, natural resources, and positive youth development to enhance the economic, social, and environmental well-being of individuals, families, and communities.

Yavapai County Population and Numbers of County Residents Served



- Yavapai County’s population has increased by 54% over the past 10 years.
- 2009 data shows a slight increase in clients served over 2008. Like other Yavapai County Departments, Cooperative Extension took a 7.5% budget reduction in 2009. In addition, we had a 15% cut in our state budget allocation during 2009.
- Yavapai County Cooperative Extension has strived to maintain the highest level of service to county residents under these dire budget circumstances.

In 2009, many Yavapai County residents were negatively impacted by the economic downturn facing our entire nation. According to Arizona’s Economy, a quarterly publication by the University of Arizona Eller College of Management, Yavapai County experienced a 3.1% drop in employment and 14.1% drop in retail sales during 2009. Also in 2009, Yavapai County Cooperative Extension received an unprecedented number of inquiries about home gardening and food preservation. We responded by offering monthly vegetable gardening seminars, two food preservation workshops, and Master Gardeners answered hundreds of specific questions about home vegetable gardening on our office hotlines.



Yavapai County Cooperative Extension 2009 Summary

Yavapai County Citizens Served in 2009

Program Area	Educational Outreach	Office Contacts	Totals
4-H Youth Development	923	8,028	9,131
Animal Science	391	145	536
Community Resource Development	1,504	1,490	2,994
Family and Consumer Science	533	1,507	2,040
Horticulture	5,901	4,247	10,148
Natural Resources	4,130	3,864	7,994
Totals	13,382	19,461	*32,843

* Does not include 170,824 web page views logged on the Yavapai County Cooperative Extension Web Site during 2009

Our educational efforts focus on:

Animal Science	V Bar V Ranch Experiment Station, Livestock Nutrition, Grazing Behavior, and Quality Assurance
Community Resource Development	Small Acreage Landowner Education, Ranching in the Future, Economic Development, Business Opportunities Network
Family Health & Well-Being	Early Care Education, Early Brain Development, Nutrition Education, and Leadership
Firewise/Defensible Space	Wildfire Risk Reduction, Defensible Space Education for landscapers and the general public, and Forest Health
Food Safety	Certified Professional Food Manager Certification, Consumer Education, and High Altitude Cooking
Horticulture	Master Gardener training and volunteer support, Arizona Certified Nursery Professional training, Insect and Disease management, and general assistance
Noxious/Invasive Weeds	Weed Management Area Coordination, Agricultural Pesticide Certification, and Public Education
Positive Youth Development	4-H Youth Programs, 4-H Leader training/support, and Youth Leadership
Rangeland Management	Sustainability of grazed rangelands for ranchers and agency personnel, and Rangeland Monitoring
Water Resources	Master Watershed Steward volunteer support, well water testing, Septic System Education, Project WET (Water Education for Teachers)



Food Safety Education and Leadership

Food Safety Management Training

Food safety is a high priority public health issue. According to the Center for Disease Control (CDC), every year, millions of people in the United States suffer from food-borne illness, hundreds of thousands are hospitalized and thousands die. The Food Safety Education team at Yavapai County Cooperative Extension provides research-based food safety information and education through one-on-one contacts, telephone, e-mail, publications and community workshops for industry representatives and consumers of Yavapai County to ensure that their food is safe. Web site links are available for industry, consumers, and K-12 educators at Yavapai County Cooperative Extension Web site: www.cals.arizona.edu/yavapai/.

Yavapai County Cooperative Extension designed and currently offers for food service industry managers a certification course, which is held monthly in Prescott and Cottonwood. The course, recognized worldwide, is aligned with the most recent FDA Model Food Code and provides certification through the Prometric Certified Professional Food Manager Program. In 2009, the program trained 195 participants with a passing rate of 99% on the required exam. A major goal for the Cooperative Extension Food Safety Team in 2010 is to create a training class for food managers on how to create a food safety plan for their food establishment. The Yavapai County Community Health Department will be working in partnership with the food safety team to accomplish this goal.

Food Safety Industry Council

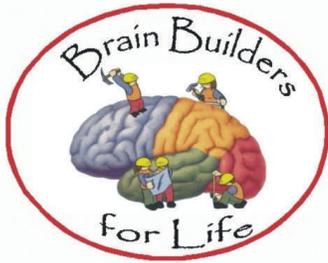
The Food Safety Industry Council promotes and maximizes food safety to protect the public through education, research and policy provided by leadership of representatives from the food industry, consumers, academia and the regulatory agency. The Council is appointed by the County Board of Supervisors and represents 15 appointed members along with ex-officio members representing the University of Arizona Yavapai County Cooperative Extension and Yavapai County Environmental Health. The Council members achieved several major goals in 2009. These included: revising and finalizing the Food Handler Training Class; creating a series of 10 Food Safety Fact sheets to be used by food industry managers for training purposes with food workers; establishing guidelines for recognition for the 5 year Golden Plate recipients; and continued review of existing and proposed food policies in the Yavapai County Health Code.



Certified Professional Food Managers class participants calibrating thermometers.



Early Care Education



The Early Care Education program provides current research-based education and information for childcare providers and parents, and works in collaboration with early education providers and the First Things First Council in Yavapai County to address the needs of families with children zero to five years old.

Brain Builders for Life-Prenatal to Age Three

The Brain Builders for Life program (BBFL) is a research-based training curriculum developed by a University of Arizona Cooperative Extension faculty team. The BBFL program is a 16 hour interactive training with a focus of integrating early brain development and typical child development for children prenatal to age three. The training covers domains of child development including brain development, cognitive, physical, emotional and social, and adaptive development.

The Brain Builders for Life program was offered in three northern counties; Navajo/Apache, Coconino, and Yavapai. Sixty participants successfully completed the BBFL training. Funding for this program was provided by the Department of Economic Security.



Marta Stuart, Family Consumer and Life Science Agent, demonstrates how the brain is wired at a BBFL Institute.



FOOD PRESERVATION

The Food Preservation program offered information, education and public service to the residents of Yavapai County interested in preserving their food. Information on canning, drying, freezing and storing food was provided by the Family Consumer and Life Sciences Agent, Marta Elva Stuart.

Two Safe Canning Principles workshops were presented in Yavapai County in Cottonwood and Prescott. Fourteen participants attended the workshops. Twenty-five consumers brought their food pressure canners to the Cooperative Extension office to be tested for accurate pounds per square inch (PSI) and a canning equipment safety check. Safe USDA canning recipes were also provided.



4-H Youth Development

Yavapai County 4-H Program Overview

As the youth development outreach program of the University of Arizona and the land-grant system of the USDA, the 4-H program in Yavapai County upholds the research-based educational concepts of the University which are integral to teaching life-skills, leadership, and citizenship to the youth of Yavapai County. These programs are delivered by Stephanie Shank, 4-H Youth Development Agent, and Michelle Stevens, 4-H Instructional Specialist, and assisted by 59 dedicated and enthusiastic adult volunteers.

4-H Volunteers' enthusiasm sparked the formation of a Yavapai county 4-H Leaders' Association. This formalized group will assist with formulation, facilitation and implementation of the Yavapai County 4-H Youth Development Program as well as aid in the direction and expansion of 4-H in Yavapai County.

In 2009, 4-H clubs engaged 219 youths with their communities and provided them with valuable life experiences and learning opportunities in a variety of project areas. The ten most popular projects in Yavapai County were swine, horse, beef, rabbits, sheep, leadership development, dogs, poultry, goats, and foods and nutrition. Non-traditional 4-H programming included entomology activities.

Community service is an integral part of the 4-H Youth Development program. Members each contribute at least six hours of service to their community. 4-H Clubs also teach leadership skills as youth serve as 4-H club officers.

Older 4-H members in Yavapai County have formed a Yavapai County 4-H Teen Council. Their focus is to provide 4-H teens an opportunity to practice leadership skills, be an avenue for youth input to the 4-H program, and to encourage interaction between 4-H teens throughout Yavapai County and Arizona.

Several special events were planned and organized for the Yavapai County 4-H members. 4-H Club Officer training was held to teach members how to carry out the duties, roles, and responsibilities of the offices for which they had been elected. Leadership, recognized as an essential life skill that develops at a young age, was the focus of two youth workshops providing the opportunity for youth to recognize their own leadership capabilities and develop and practice additional leadership skills.

Special 4-H Events, Fairs and Exhibitions

The 2009 4-H/FFA EXPO was held at the Prescott Rodeo Grounds April 21-25. The EXPO was the principal 4-H event where **200 4-H and FFA youths** exhibited their projects. Featured were contests for public speaking, small and large livestock conformation, showmanship, still exhibits, displays, and a livestock auction. Santa Cruz County Extension Agent, Dean Fish, assisted youth and adult volunteers. Yavapai County 4-H members also showcased their projects and skills at the Verde Valley and Yavapai County Fairs. Several Yavapai County 4-H members also participated in other regional or statewide events such as 4-H Camp, the Arizona 4-H JOLT (Journey of Leadership for Tomorrow) Conference, the Arizona State Fair, and the Arizona National Livestock Show.



...To Make the Best Better.



Wildfire Defensible Space Education

In 2004, Gene Twaronite was hired with Yavapai County Title III Forest Project Funds to provide defensible space education programs in conjunction with the Prescott Area Wildland/Urban Interface Commission (PAWUIC) and local fire departments. These programs emphasize a horticultural approach, including proper pruning, thinning, and the use of fire-resistive plant materials and hardscape elements, to modify and reduce fuel loads around the home while maintaining landscape health and natural beauty.

In 2009, Gene served **522 residents** in the communities of Black Canyon City, Congress, Prescott, and Sedona. Gene also provided direct education at public events such as the County Fair, and assisted as a resource instructor in the course, *Wildland Fire Risk & Hazard Severity Assessment*, at the 2009 Arizona Fire Academy. He also gave a presentation on fire-resistive landscaping for Master Gardeners in Flagstaff.

Based on an initial program needs assessment, Cooperative Extension continues to focus on its unique and highly successful course, *Wildfire-Defensible Landscape Professional* – a 12-hour, certificated course in the art and science of defensible space landscaping targeted at the nursery and landscape profession. A list of individuals who have completed the course (currently at 64) is available to both homeowners and local fire departments on our website (cals.arizona.edu/yavapai/anr/defspace/). The classes are alternately offered in Prescott and Sedona; this year the course was offered in Prescott.

Yavapai County Cooperative Extension thanks the Yavapai County Board of Supervisors for its past support of our defensible space education program through the Title III Forest Project Funds. We also wish to thank the Prescott Area Wildland-Urban Interface Commission, together with the Hidden Valley Ranch HOA, for agreeing to fund our program in 2010.



Gene Twaronite working with Wildfire Defensible Landscape Professional class in Sedona



Community Resource Development

The Community Resource Development (CRD) position exists to better address and understand the environmental, land use, economic and social changes that rural Arizona is currently experiencing due to a rapid influx of new residents and an increase in development. During the course of 2009, Area Agent Erik Glenn served **2,994 people** in a variety of CRD programs.

Small Acreage Landowner Education

Many of rural Arizona's newest residents have recently moved from urban settings. In order to better integrate these newcomers into the existing fabric of rural counties, it is vital that they learn the skills and information necessary for successful rural living. In addition, it is important that small-acreage landowners mitigate impacts upon their land, water, plant and animal resources. Over \$7,000 in program funding was obtained this summer to hire a temporary specialist who can develop an Arizona-specific curriculum for small-acreage landowners. That curriculum—first in written form and later as an online course—should be finished by the summer of 2010. In addition, a series of publications for this audience is proceeding. The first few publications have been posted on the CRD Website (see below); additional titles are currently being written.

Arizona Economic Development Course

Forty-five students, representing **10 of Arizona's 15 counties**, attended the week-long 2009 Arizona Economic Development Course. Participants heard from expert speakers on economic development topics such as retention & expansion of existing businesses, entrepreneurship and workforce development. In addition, the attendees spent time working in groups on a real-world community problem requiring creative solutions.

Arizona's Changing Rural Landscapes Website

In 2008, the CRD program created a Website called *Arizona's Changing Rural Landscapes* (ag.arizona.edu/rurallandscape) to educate public and private stakeholders about exurban growth in Arizona and the effect that growth is having on landscapes, economies and people. The site contains interactive maps, tools, publications and other resources for governmental officials, landowners and citizens. New resources were added throughout 2009, in particular the first set of many publications for small-acreage landowners. The site saw approximately **3,300 visits & 8,300 page views** during the course of the year.



Ranching in the Future Workshops

With rural population growth and “lot splits” continuing to impact northern Arizona, it's more vital than ever to help keep ranchers and other landowners in business and also pass their operations on to the next generation, thereby preserving both a cherished lifestyle and open space. In partnership with the Central Arizona Land Trust, Agent Erik Glenn developed a new series of workshops to give landowners additional tools they need to succeed, including information on estate planning, land protection options, alternative income sources and ways to participate in county planning processes. Over the course of the year, three one-day workshops were held in Yavapai County, with a total of **73 attendees**.



Yavapai County Master Gardener Program

The Yavapai County Master Gardener program teaches interested citizens to become valuable horticultural volunteers in their communities. Extension Agent Jeff Schalau taught and coordinated the 2009 Master Gardener Training Course and managed the program in conjunction with Mary Barnes, Master Gardener Volunteer Coordinator. After 15 weeks of practical training, class members become Associate Master Gardeners. The Training Course is offered to 40 residents each spring and alternates yearly between Prescott and the Verde Valley. After volunteering 50 hours they become Certified Master Gardeners. Each subsequent year, Master Gardeners provide a minimum of 25 hours of volunteer service and six hours of continuing education to maintain their certification.



Yavapai County Master Gardeners answering questions from customers at the Camp Verde Farmer's Market.

In 2009, **159 Master Gardeners** contributed **15,979 hours of volunteer service** to citizens and institutions of Yavapai County. This included **3,707 face-to-face**, **1,185 phone**, and **290 E-mail contacts**. Master Gardener Volunteer Coordinator, Mary Barnes, maintained records, facilitated communication, conducted program planning, tracked volunteer activities, and updated the Yavapai County Master Gardener Web Site. Ms. Barnes' valuable volunteer service is integral to Yavapai County Cooperative Extension's success. Master Gardener, Nora Graf, edited and managed the monthly newsletter *Yavapai Gardens* and has initiated an MG blog. Master Gardeners also provided volunteer service to school gardens (8), museums (3), one hospital, staffed educational displays at 13 public events, coordinated Master Gardener Association meetings/activities (10), and organized the Yavapai County Master Gardener recognition picnic. The Master Gardener Speaker's Bureau also gave presentations to 21 community groups. Yavapai County continues to have one of the most vibrant and successful Master Gardener Programs in Arizona.

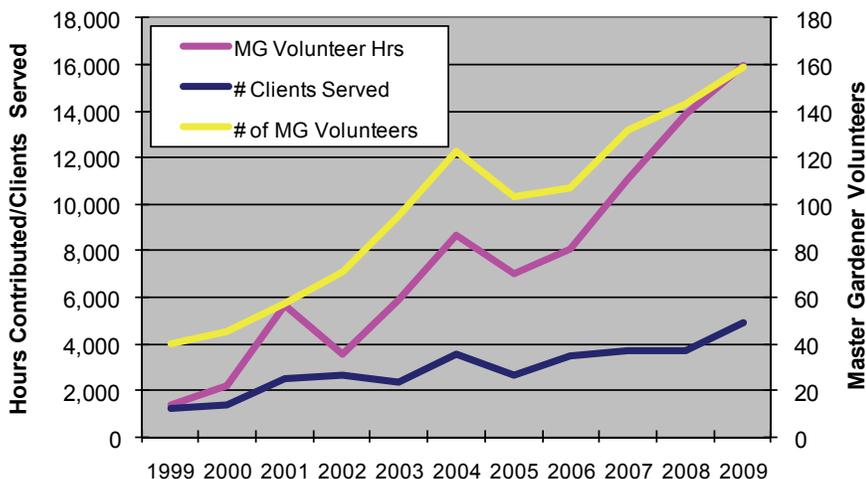


Figure 1. Ten year of Master Gardener volunteer hours contributed, clients served and active Master Gardeners.

Ten Year Retrospective

Over the past ten years, Yavapai County Master Gardeners have steadily increased their capacity to deliver science-based horticultural information (Figure 1). Landmark accomplishments are noted below:

- 2000 – Master Gardener Web Site launched
- 2001 – Master Gardener Assn. organized
- 2002 – Volunteer Coordination enhanced
- 2004 – Volunteer Projects Comm. initiated
- 2007 – Mentoring Program initiated
- 2008 – Fundraising initiated
- 2009 – Speaker's Bureau enhanced



Other Yavapai County Horticulture Programs

BACKYARD GARDENER

The **Backyard Gardener** is a weekly gardening column that has appeared in four Verde Valley newspapers (19,500 combined circulations) since April 1998. Jeff Schalau has developed and maintained the Backyard Gardener website which contains all columns written from 1998 to the present. The site is searchable, has a chronological archive, and contains a clientele feedback form which generates hundreds of E-mail questions/comments each year. The Backyard Gardener web site contains over 550 columns and had 131,415 page views during 2009.



Fruit Tree Pruning and School Habitats

Each year, Jeff Schalau conducts **Deciduous Fruit Tree Pruning Workshops** in various locations in Yavapai County. In 2009, he held five workshops (Cornville, Prescott Valley, Chino Valley, Prescott, and Williamson Valley) and reached **312 participants**. These workshops not only teach people about proper pruning and cultural practices, but also showcase local producers and their orchards. First graders are also learning about orchard care through a partnership with the Highlands Center for Natural History (HCNH). Several Quad-City schools have developed school gardens/habitats where Jeff and Master Gardeners assisted by teaching students about sustainable horticultural practices as well as local flora and fauna.

Arizona Highlands Garden Conference

Master Gardeners in Yavapai, Coconino, Gila, and Navajo Counties planned, organized, and delivered the Tenth Annual Arizona Highlands Garden Conference on September 19, 2009, at the DuBois Conference Center of Northern Arizona University in Flagstaff, AZ. The conference was attended by **210 Arizona Master Gardeners and gardening enthusiasts** from across northern Arizona as well as the Phoenix and Tucson areas. The conference theme was "From the Ground Up."

Keynote speakers for the event included Jeff Lowenfels, author of *Teaming with Microbes—A Gardener's Guide to the Soil Food Web*, and author Brad Lancaster who presented the program "Turning Water Scarcity into Water Abundance with Rainwater Harvesting."

Water Smart™

In 2009, The Upper Verde River Watershed Protection Coalition (UVRWPC) requested review and updates to 10 pre-existing WaterSmart Cards. These 3 1/2" x 8 3/8" cards were designed to be quick reference guides for local consumers. Jeff Schalau served on a five member committee that reviewed and edited the existing cards. The revised cards contained xeriscape principles, low water use plants (trees, shrubs, cacti/succulents, grasses, perennials, and annual wildflowers), winterizing irrigation systems, planting and irrigation tips, and invasive landscape plants to avoid.

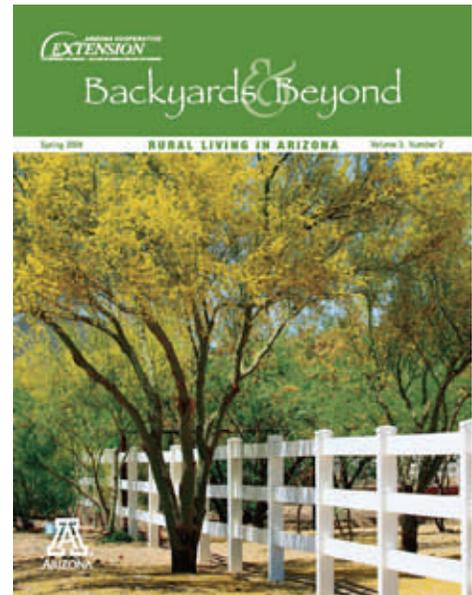


Natural Resource Education

Backyards and Beyond Magazine

Backyards and Beyond is a quarterly magazine that addresses small acreage land management and rural living. Four issues were published in 2009 by the University of Arizona. Agent Jeff Schalau served on the editorial board and authored multiple articles. Topics addressed included: rural zoning; open range laws; nuisance wildlife; animal feeding; climate; gardening; food production and processing; plant diseases; ATV safety; farm safety; defensible space; invasive species; native plant laws; septic systems; wells; and much, much, more.

Grant funding was used to support this year's publication costs and subscriptions are being offered to sustain its publication. Back issues and subscription information is available on the web at: ag.arizona.edu/backyards/.



Yavapai County Local Drought Impact Group (LDIG)

Jeff Schalau co-chaired the Yavapai County Local Drought Impact Group (YCLDIG). YCLDIG activities included: development and dissemination of a Drought Tolerant Plant List for the Verde Valley and publication of an article about the Arizona DroughtWatch website in the Prescott Active Management Area Newsletter. Yavapai County Cooperative Extension also hosted two distinguished climate change lecturers from the UA Laboratory of Tree Ring Research on Oct. 29, 2009 in Prescott: Dr. Malcolm Hughes presented *Our Changing Climate* and Dr. Tom Swetnam presented *Fire in the Changing West*. Ninety seven people attended and many questions followed the presentations. The Prescott Courier Newspaper also published a feature story about the lecture.



Youth from across Arizona come to Mingus Springs Camp each summer to learn about natural resources management.

Natural Resources Conservation Workshop for Arizona Youth (NRCWAY)

NRCWAY is a field-based workshop for youth entering grades 8-11 focused on Arizona's natural resources in the areas of forestry, water, wildlife, soils, plants, geology, GPS, and orienteering. Participants discovered nature by conducting experiments and completing outdoor projects. Thirty youth from across Arizona participated in 2009. NRCWAY is sponsored by the Arizona Section, Society for Range Management (SRM) and delivered in collaboration with Cochise County Extension agents Kim McReynolds and Susan Pater. Agent Jeff Schalau was also a camp counselor/presenter/local area coordinator for NRCWAY held at Mingus Springs Camp and Outdoor Learning Center July 6-10, 2009. Yavapai County 4-H Youth Development agent Stephanie Shank also presented sessions on entomology and shooting sports at the 2009 NRCWAY.



Range Management and Livestock Production

Rangeland Monitoring

Animal Science Area Agent, Jim Sprinkle, Agriculture and Natural Resources Agent, Jeff Schalau, University of Arizona Range Specialist, Doug Tolleson, and Research Specialist, John Kava, assisted in initiating rangeland monitoring programs and subsequent data collection on four ranches in Yavapai County. These monitoring efforts brought ranchers and land management agency professionals together and allowed them to make effective management decisions that ensure livestock grazing is sustainable. Doug and John also started **Range Rocks!** - a high school program designed to get students out on the V Bar V to gain real-world science and work experience on a large range livestock operation. Students learned plant identification, vegetation monitoring techniques, to see firsthand the effects of adaptive management on soil, plant, and animal resources.



Interagency team at the Yavapai Ranch Spring Meeting.

Livestock Nutrition/Range Management at the V Bar V Ranch

The V Bar V is an 80,000 acre ranch owned and operated by the University of Arizona College of Agriculture and Life Sciences Experiment Station. Dr. Doug Tolleson came to the University of Arizona from Texas A&M in January 2008, and has implemented several extension and research activities at the V Bar V Ranch since he arrived. Some of these are highlighted below.

Doug has initiated **Nutritional Monitoring at the V Bar V Ranch**. Fecal samples are sent to the Grazingland Animal Nutrition Lab at Texas A&M for determination of diet crude protein and digestible organic matter via near infrared spectroscopy (NIR). This is to establish a baseline diet quality pattern for the ranch and to incorporate fecal sampling into routine ranch management activities. After 2-3 years of calibration, the ranch will be able to use NIR to analyze fecal samples to determine diet quality, forecast nutrient supplementation required, and ultimately improve herd performance on the ranch and beyond.



Doug Tolleson, V Bar V Ranch Range Management Specialist.

Doug is also collaborating with the US Forest Service and Texas A & M to develop a model that uses standard rangeland monitoring techniques already used by the US Forest Service and the University of Arizona to measure and predict wildland fire fuel loading and subsequent fire behavior. It is called **Burning Risk Advisory Support System for Grazinglands (Brass-G)**. As part of this project, three permanent weather stations have been purchased and are scheduled to be installed in early 2010. These will become part of the Yavapai County Flood Control District Network.

Blue Collar Plants is a project spearheaded by Range Research Specialist, John Kava, in collaboration with Sue Smith and other Yavapai County Master Gardeners. It is a web based photo database that will help those interested in identifying range plants "with their working clothes on", i.e. what do these plants look like at various times of the year, stages of growth, and when grazed. The preliminary version of this website and plant collection has been launched (<http://prescottnatives.com/index.php>).

Water Resources Education



Ms. Edessa Carr, University of Arizona Cooperative Extension Water Resource Program Coordinator, provided face-to-face education to a total of **2,596 students** and **458 adults** with an additional **1,770 students** taught by trained Project WET facilitators. **One hundred and eighty two (182) volunteers** contributed **1,576 hours of service** in assisting to deliver the above mentioned programs.

Youth Education

A collaborative project with the Sharlot Hall Museum brought **494 third through sixth grade students** and their teachers to the museum campus for an educational program. This program was closely tied to the featured exhibit *Water: Quest for the Solution*. Trained Project WET (Water Education for Teachers) docents guided students through four Project WET lessons.

Wild Over Water, a direct outreach program, brought trained Project WET docents into **14 local fourth grade classrooms** during the 2009-2010 academic year. Each docent visited their adopted class on four different occasions, each time presenting a separate lesson. A total of **420 students** learned about the importance of water. Several pre-service teachers were involved and gained valuable classroom experience.

The **Second Annual Verde Valley Water Festival** was also a success. This community supported event held at Dead Horse Ranch State Park brought **330 fourth grade students** from Verde Valley schools to learn about their local watershed and their role in taking care of water as a precious resource. Over **120 volunteers** were trained to present lessons to the student participants.

One hundred and twenty seventh grade students participated in the **Cottonwood Middle School (CMS) Water Audit**. CMS students were assisted by **20 community volunteers** in calculating water usage under existing conditions. Water saving fixtures were installed and water conservation practices implemented at the school. Students and volunteers then recalculated water savings. Yavapai County Cooperative Extension sponsored local teachers who presented this project at the National Science Teachers Association national conference in Phoenix. This project also received the Governor's Excellence in Rural Development Award for Future Leaders.

A major focus in Yavapai County has been to promote and present Arizona Project WET. Here, K-12 teachers attended a one day workshop that provided training to help in the integration of water resource education into their curriculum. A total of **216 teachers** attended Project WET trainings in 2009-2010 and are using this curriculum in their classrooms.



Students conducting a Project WET watershed activity.

Adult Education

Staff helped support Prescott Creeks Watershed Improvement Council and the Oak Creek Canyon Task Force, recipients of ADEQ water quality improvement grants.

Cooperative Extension also delivered three Private Well Owner's Workshops in Prescott and Cottonwood. Over **110 people** learned about the basics of well construction, testing of water, interpreting test results, preventing well contamination and treatment options for various contaminants.

Yavapai County Cooperative Extension has offered Private Well Water Testing to consumers since 1997. Self-administered water quality test kits were provided at low cost to **300 private well owners**. This allowed well owners to test their well for arsenic and other contaminants.



Yavapai County Cooperative Extension Faculty and Staff

Jeff Schalaus	County Director, Agriculture & Natural Resources Agent, jschalau@ag.arizona.edu
Erik Glenn	Area Assistant Agent, Community Resource Development, erikg@ag.arizona.edu
Stephanie Shank	Assistant Agent, 4-H Youth Development, sshank@ag.arizona.edu
Jim Sprinkle	Animal Science Area Agent, sprinkle@ag.arizona.edu
Marta Stuart	Family Consumer and Life Sciences Agent, mstuart@ag.arizona.edu
Doug Tolleson	Assistant Range Management Specialist, V Bar V Ranch Experiment Station
Edessa Carr	Program Coordinator, Water Resources, edessa@cals.arizona.edu
Lori Brandman	Program Coordinator, Family Consumer Sciences, brandman@ag.arizona.edu
Michelle Stevens	4-H Instructional Specialist, msteve31@ag.arizona.edu
Karen Pizzuto	Administrative Associate, kpizzuto@ag.arizona.edu
Pamela Denney	Administrative Assistant, pdenney@ag.arizona.edu
Lisa Gerber	Office Specialist, lgerber@ag.arizona.edu

Yavapai County Cooperative Extension Advisory Board

Nora Graf	Board Chair, Master Gardener
Angela Teskey Peterson	Co-Chair, 4-H Leader/Rancher
Dan Black	Master Watershed Steward
Jeanne Briggs	Food Safety/Nutrition
Paul Groseta	Rancher
Trudy Birkemeyer	Rancher
Gary Mortimer	Nurseryman/Rancher

Other University of Arizona Faculty in Yavapai County - 2009

Janick Artiola, Water Quality Research Scientist, SWES
Jim Christenson, Assoc. Dean & Director, Cooperative Extension
Mike Crimmins, Climate Specialist, SWES
Bob Collier, Department Chair, Animal Sciences
Peder Cuneo, Specialist, Animal Science
Tom DeGomez, Specialist, Forest Health
Lynne Durrant, FCS Agent, Mohave County
Candice Rupprecht, Master Watershed Steward Coordinator
Kitt Farrell-Poe, Water Quality Specialist, Yuma
Dean Fish, ANR Agent, Santa Cruz County
Larry Howery, Rangeland Specialist, SNR
Malcolm Hughes, Regent's Professor, Laboratory of Tree Ring Research
Chuck Hutchinson, Director, Office of Arid Land Studies
Chris Jones, ANR Agent, Gila County
Colin Kaltenbach, Director, Agric. Experiment Station
Mike Kilby, Specialist, Plant Sciences Department (retired)
Bob Kattng, Specialist, Dept. of Animal Sciences
John Kava, Research Specialist, V Bar V Ranch
David Kopec, Turf Specialist, Plant Sciences Department
Patty Merk, Agent, Family Consumer Sciences, Maricopa County

Carl Olson, Associate Curator, Entomology
Suzanne Ornelas, Associate Director, CALS Development/Alumni
Bob Peterson, 4-H Agent, Pima County
Channah Rock, Water Quality Specialist, SWES
Candice Rupprecht, Master Watershed Steward Coordinator
George Ruyle, Rangeland Program Chair, SNR
Eugene Sander, Vice President Outreach and Dean, CALS
David Schafer, Resident Director, V Bar V Ranch
Ursula Schuch, Commercial Horticulture Specialist, Plant Sci.
Kerry Schwartz, Arizona Project WET Director
Brent Strickland, 4-H Agent, La Paz County
Tom Swetnam, Director, Laboratory of Tree Ring Research
Doug Tolleson, Range Management Specialist, V Bar V Ranch
Russ Tronstad, Specialist, Agric. and Resource Economics
Beth Tucker, Director, Coconino County
Kristine Uhlman, NEMO Coordinator, SNR
Kai Umeda, Area Turf Agent, Maricopa County
Juanita Waits, FCS Agent, Maricopa County
Gary Woodard, Associate Director, SAHRA

YAVAPAI COUNTY COOPERATIVE EXTENSION OFFICES

840 Rodeo Dr, Bldg C
Prescott, AZ 86305
phone: (928) 445-6590
fax: (928) 445-6593

2657 E Village Drive
Cottonwood, AZ 86326
phone: (928) 646-9113
fax: (928) 646-9108

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