



2014 | EXTENSION  
**IMPACTS**



UNIVERSITY OF WYOMING

# 2014 | EXTENSION IMPACTS



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# GOT JOB SKILLS?

Unique  
camp  
teaches  
4-H'ers  
these  
valuable  
assets



*"I learned that being responsible is about  
being aware of more than just you."*

## SITUATION

Camping is a tried-and-true method for campers and camp counselors to engage youths. Campbell County 4-H has used a work-based learning approach to camp counseling the past five years. The target population is teen camp counselors who are part of the volunteer staff for our 4-H camp. In a work-based learning approach, teens learn workforce skills employers desire through hands-on applications. The workforce skills emphasized are the life skills that transfer to a variety of work settings. Life skills focus on an individual approach to work, interaction with others, and the application of skills to work tasks and roles. The experiential nature of camp and the highly engaging counselor role provides an excellent opportunity to develop these skills.

Based on a review of resources, it was clear that preparing youths for the workforce has taken on new meaning in the knowledge economy of the 21st century. Employers, educators, and community leaders are concerned about a lack of connection between skills young adults have and those needed for workplace success.

A typical job for a teen does not provide opportunities that might enhance their development and help build conceptual abilities necessary for workplace success. The complementary nature of the positive youth development model used in 4-H allows for integration with an intentional workforce preparation program in the traditional camp setting.

The program consists of five components: application, interview, training and planning, serving as a counselor at camp, and a follow-up performance appraisal. Applications and interviews serve the practical purpose of selecting counselors; they are also used to prepare teens for situations such as college applications and job interviews. Youths are taught how to think of their skills as marketable assets. The interview allows teens to have the real-life practice of a job interview in a safe, secure setting with trusted adults and peers.

The training component, in addition to training camp-specific topics, has added a correlation of workforce skills teens will engage with in camp. This intentional focus teaches teen counselors how the skills they utilize are an asset for potential employers, and teen counselors are shown how to showcase the camp counseling skills in resumes.

The follow-up performance appraisal is a replication of an appraisal that would occur in a professional job setting and allows for the self-reflection necessary for individual growth.

This project is a collaborative effort between the University of Wyoming Extension in Campbell County, Campbell County Substance Abuse Prevention Advisory Council,

Campbell County Public Health Department, Campbell County School Board, and Wyoming National Guard Counter Drug Agency. These agencies have worked with the 4-H Young Leader and Camp programs to develop the life skills as workforce skills program. The collaboration to share lesson plans and strategies to introduce workforce concepts allowed for additional professional insight into the development of a successful program. The professionals from collaborating agencies also provided valuable implementation data through focus groups. In addition, each agency sends staff members to camp. These staff members work with teen counselors throughout the week.

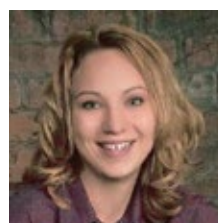
Grants from the Campbell County Public Recreation District mill levy fund since 2007 has allowed this program to expand the training portion allowing teens to attend camp at zero cost. The funding has allowed expanding the training portion to two full days on-site and allows teens to stay an extra night following the main portion of camp. The time allowed by the extra night allows timely onsite performance appraisals. The financial assistance has doubled the number of youths in the program.

## IMPACTS

After two days of training prior to campers arriving, each counselor completed a survey to rate their confidence in knowledge gained with life and workplace skills learned while in the training. Team camp counselor meetings are held at the close of each day. They share the experiences they had that day. Events are reviewed giving each team member a chance to give and receive input on their work. This is designed to replicate team projects in the workforce.

Counselors made comments that reinforced their understanding of camp counseling skills and workforce connections:

- *"The interview process will help me forever. It was a great first experience. I was really nervous, and now I know that interviews are a place that it's good to be self-confident."*
- *"I have learned that input from others can be very helpful, sometimes they see things that you don't."*
- *"What I learned as a camp counselor will help me in the real world."*
- *"I learned that being responsible is about being aware of more than just you."*



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# MASTER GARDENER VOLUNTEERS beautify communities,

## SITUATION

Master Gardeners are trained volunteers who provide educational resources to residents, communities, and horticultural producers in Wyoming. People must complete a minimum of 40 training hours through local extension offices to become a Master Gardener and commit to 40 hours of volunteer service in their communities following training. Volunteers may stay active by volunteering and receiving continuing education each year. Individual Master Gardener programs are coordinated at the county level including trainings, volunteer activities, and continuing education. Statewide support is provided by the state coordinator, who provides support to local programs through teaching Master Gardeners, training county-based program coordinators on current and relevant horticultural topics, implementing program policies, assisting with volunteer management, and conducting needs assessment. The needs identified through assessment help provide direction and identify priorities used in program planning, education, and evaluation of the Master Gardener program. An online volunteer reporting system tracks volunteer activities, continuing education, and Master Gardener contacts.

University of Wyoming Extension offers the Master Gardener program in 17 counties. New Master Gardener programs began in Albany and Washakie counties in 2013. The first year of data collected from the online volunteer

reporting system allowed for tracking volunteer numbers and activities for the first time on a statewide basis. Prior to 2013, the impact of the University of Wyoming Extension Master Gardener volunteers was not measured, and the actual number of Master Gardener volunteers in the state was unknown. The reporting system shows 121 Master Gardeners received training in 12 counties in 2012-2013. There are 534 Master Gardeners in 14 counties (Fremont, Uinta, and Sublette counties not reporting) in Wyoming. Of the 534 Master Gardeners, 225 (42 percent) reported volunteer activities. Master Gardeners reported 10,904.5 volunteer hours, 2,216 continuing education hours, and 34,174 total contacts.

## IMPACTS

Master Gardeners benefit their communities by extending knowledge of horticulture through volunteer service. They offer unbiased, research-based information to home gardeners, crop producers, and green-industry professionals. Their volunteer activities include community beautification, community gardens, demonstration gardens, educational conferences and workshops, garden tours, greenhouse and high tunnel production, office support, diagnosing plant samples brought into extension offices and other venues, plant sales, school gardens, yard calls, and youth programs.



## strengthen horticultural activities



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Master Gardener coordinators received training in using the online reporting system. Evaluations indicate the online reporting system is user-friendly, easier for educators to keep track of volunteers and volunteer activities, and Master Gardeners find the system useful. Each year, the reporting system will help the University of Wyoming Extension capture the total number of Master Gardener volunteers in each county and in the state, the total number of volunteer hours reported in each county and in the state, the total number of contacts in each county and in the state, and all of the volunteer projects in which Master Gardeners are involved.

Long-term impacts of the Master Gardener program include diversified and more profitable horticultural production systems, community beautification that enhances

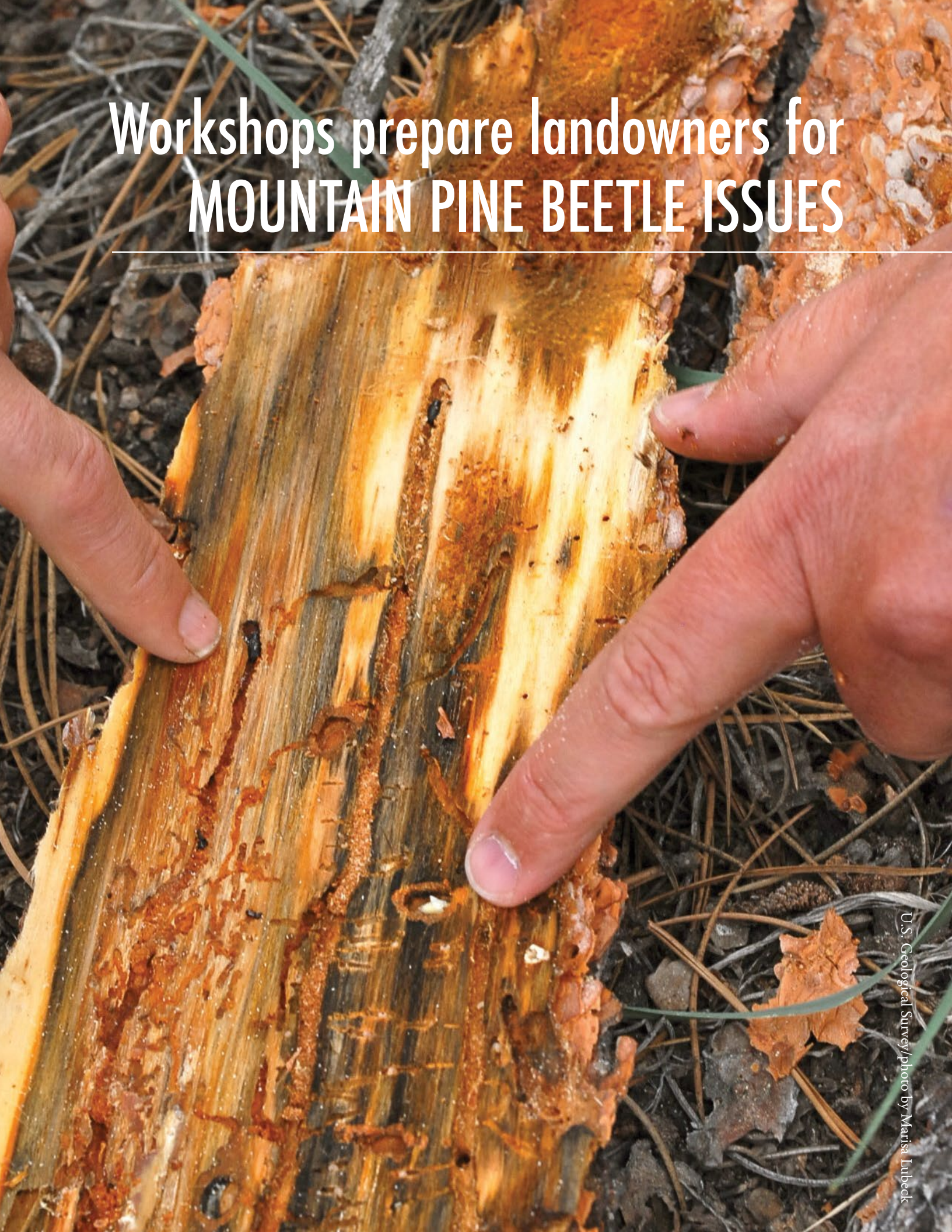
the aesthetic value of Wyoming communities, increased production of local foods, increased numbers of individuals growing their own food, increased access to healthy foods, increased adoption of sound pest management practices, and increased economic and environmental sustainability.

Master Gardeners reported  
10,904.5 volunteer hours, 2,216  
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34,174 total contacts.



# Workshops prepare landowners for MOUNTAIN PINE BEETLE ISSUES

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## SITUATION

The Black Hills Forest is the second-largest timber producing forest in the nation. In Crook County, timber harvested from public and private lands is a large economic contributor to the town of Hulett and the major employer in the area. Mountain pine beetle (MPB), *Dendroctonus ponderosae*, is a native insect found in many western forests. MPB bores holes into mature, living pine tree species in the summer and fall and deposit eggs that develop into larvae that eat the cambium layer and kill the tree. MPB in the fall of 2011 was identified as moving into the Black Hills region and would soon be a major problem in the Wyoming Black Hills based on the scale of the infestation recorded in the southeastern Black Hills. Forests that have not had wildfires and timber harvests are most affected. Workshops were developed to educate the public by determining needs of private landowners who might be affected by MPB.

The most up-to-date information would be shared with stakeholders during workshops in various towns throughout northeast Wyoming. Workshops were developed through cooperation between Wyoming State Forestry (WSF), Crook County Natural Resource District (CCNRD), and the University of Wyoming Extension. UW Extension, with the help of CCNRD, would facilitate all workshops. This included finding towns with affected private landowners, advertising the workshops, and determining workshop locations. WSF would instruct at the workshops.

Two workshops were in March 2012 and four workshops December 2012 through February 2013. Workshops were held in Hulett, Pine Haven, Sundance, Beulah, and Aladdin. Instruction focused on MPB identification, looking for MPB activity, different management techniques,



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and education of neighboring landowners. Trees that contained MPB were displayed at the workshops, and participants were allowed to chip away bark and properly identify MPB trees. There were 32 people who attended the four workshops December 2012 through February 2013, and 24 attended the two workshops in 2012. Participants were from Wyoming and South Dakota.

## IMPACTS

Those who attended the workshops were surveyed. All gained knowledge related to MPB identification and management strategies. Participants said the workshop met their needs. Several attendees provided feedback several months after the workshops that they had taught a neighbor about MPB or made management changes to their properties.

Short-term impacts from the MPB workshops include a gain of knowledge for proper identification of MPB, ips beetle, and turpentine beetles; a better understanding of the MPB life cycle and where and how that can be used for proactive control; and what control methods exist for detouring and eliminating MPB. An intermediate impact will be an increased desire from private landowners to survey their properties for MPB activity or potential at-risk areas. Landowners well-prepared for MPB infestation will have a higher likelihood of not losing an entire stand of trees and have the potential for immediate timber production following an event.



## Wyoming MASTER WOOL GROWER PROGRAM bolsters sustainability

### SITUATION

The number of sheep producers in Wyoming is under continual downward pressure. Many factors contribute to this decline such as drought, market pressure, and trade. Many can be mitigated with proper risk management strategies. Many producers attending the Wyoming Master Cattleman program also have sheep operations. These producers indicated the need for a similar program focused on sheep and wool production. The Wyoming Wool Growers Association also indicated the need for a similar program at an advisory input meeting for agricultural organizations hosted by the president of the University of Wyoming.

“All participants indicated value was created, and 60 percent indicated more than \$5,000 in value gained.”

The objective was to promote the sustainability of Wyoming woolgrowers using comprehensive production strategy and risk assessment programs. Producers receive training on goal setting, insurance options, risk management strategies, and financial enterprise analysis. Producers also receive information on marketing and innovative herd management strategies. To reinforce the tools taught, participants practice risk assessment and partial budgeting at the end of each production strategy session. The Western Center for Risk Management Education contributed \$11,500 in partial funding to assist with development and delivery of the information.

The project was accomplished through five, 4-hour workshop sessions at two Wyoming locations. Eighteen participants completed the program with at least 15 at each session. Additionally, three sessions were presented at the November 2012 Tri-State Wool Growers meeting. More than 50 participants from Idaho, Utah, and Wyoming were taught in these three sessions.

## IMPACTS

Participants who completed programs in the two Wyoming locations evaluated the program. They rated each of the eight total topics taught with the following scale: 1 = Poor 5 = Excellent.

\* The average score for all eight classes was 4.26. The lowest-rated class received a 3.93, and the highest-rated class received a 4.73.

- Participants were asked if they had used tools or concepts taught in the program to make decisions on their ranches. Ninety-three percent indicated they had.
- Participants were asked to estimate the value created from attending this program. All indicated value was created, and 60 percent indicated more than \$5,000 in value gained.
- Finally, participants were asked if they would recommend this program to other producers. One hundred percent indicated they would.

## Individual Examples of Success:

One of the producers in the program was considering increasing the number of livestock on his ranch but was having trouble deciding if he should enlarge the size of his sheep herd or his cow herd. He brought real numbers and data from his ranch to class. With the information, the group worked through a partial budget to help him make a more informed decision.

After attending the program, one producer found himself considering an alternative cull ewe strategy. He sought help from the project director to complete a full partial budget analysis on the strategy. The analysis showed a clear benefit to the new strategy.



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*First Lady Carol Mead visits a Cent\$ible Nutrition Program demonstration.*

# CENT\$IBLE NUTRITION PROGRAM

## HELPS LIMITED-RESOURCE FAMILIES EAT BETTER

### SITUATION

The Cent\$ible Nutrition Program (CNP) provides nutrition education for low-income families. County-based educators teach participants how to feed their families better for less money. Areas of emphasis taught through an established and tested curriculum includes three components:

- 1) food resource management includes practices related to menu planning, thrifty shopping, and awareness of supermarket persuasion techniques.
- 2) Food safety includes safe handling, preparation, and storage of food, and
- 3) Dietary quality includes eating and lifestyle behaviors consistent with the *Dietary Guidelines for Americans* and *MyPlate*.

Adult participants enroll in a series of 17 lessons designed to fit participants' needs. Core elements include food preparation, food safety, food resource management, basic nutrition, and menu planning.

Four youth curricula provide a solid foundation in healthful nutrition choices, food safety practices, food preparation, and lifestyle physical activity. They also provide an avenue for reaching adults through parent letters, recipes, suggested family discussion topics, and coupons for enrolling in the adult lessons. *Grazing with Marty Moose* (five 1-hour lessons) is for second or third grade classes. *Munching through Wyoming History* (five 1-hour lessons) complements Wyoming history for fourth grade. *WIN Kids* includes up to thirteen 30-60 minute lessons for fifth and sixth grade. *Happy, Healthy Me* (five 1-hour lessons) is designed for pre-kindergarten through first grade and is adapted from the University of California.



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## 41.5 percent reported serving or eating more than one kind of fruit each day more often.

### IMPACTS

Adults who enroll in a series of lessons complete pre- and post-surveys that include 18 behavior questions, a 24-hour food recall, and demographic data. Participants are asked to share success stories in the post-survey. Youths complete pre- and post-assessments to capture knowledge and behavior changes.

#### ADULTS

The following outcomes were reported by 1,728 adult participants.

- 84 percent showed improvement in one or more food resource management practice.
- Families reported saving \$49.71 per month or \$596.52 per year. The total reported savings for one month for all participants was \$35,800.
- 51.5 percent reported planning meals ahead of time more often.
- 48 percent reported comparing prices before purchasing food more often.
- 45.5 percent reported shopping with a grocery list more often.
- 38 percent reported running out of food before the end of the month less often.
- 45 percent reported making food from scratch more often.
- 92 percent showed improvement in one or more nutrition practices.
- 52 percent reported thinking about healthy food choices more often when deciding what to feed their families.
- 42 percent reported preparing foods without adding salt more often. Daily sodium intake decreased from 3,767 to 3,343 milligrams (decrease of 425 mg).
- 63 percent reported using the Nutrition Facts labels to make food choices more often.
- 41 percent reported they or their children eat something in the morning within two hours of waking more often.
- 64 percent reported an increased familiarity with MyPlate.
- 41.5 percent reported serving or eating more than one kind of fruit each day more often.

#### Food Safety

- 63 percent showed improvement in one or more food safety practice.
- 27 percent reported letting meat and dairy foods sit out for more than two hours less often.
- 54 percent reported thawing frozen foods at room temperature less often.
- 26 percent reported washing hands with soap and warm running water before preparing food more often.
- 29 percent reported separating raw meat, poultry, and fish from vegetables, fruits, and prepared food products more often.

#### Physical Activity Practices

- 39 percent reported being physically active for at least 30 minutes per day four or more days per week more often.

#### YOUTH

There were 4,170 youths participating in the *Grazing with Marty Moose*, *Munching through Wyoming History*, and *WIN Kids* curricula and reported the following outcomes through pre- and post-assessments. *Happy, Healthy Me* is the curriculum used for pre-kindergarten through first grade: 940 youths completed the series.

- 81 percent improved knowledge or skill(s) necessary to choose foods consistent with federal dietary guidelines.
- 44 percent improved knowledge or skill(s) related to handling food safely.
- 35 percent improved physical activity practices.
- 86 percent improved in one or more core area.



## SITUATION:

Management of finances, death, and distribution of assets are issues every family and individual in Wyoming faces. The details are unfamiliar and overwhelming for many who are reluctant to face the emotional and legal stresses required to be adequately prepared. The Financial Literacy Issue Team of the community development initiative determined there were no public documents written specifically considering Wyoming statutes and end-of-life issues, property distribution, probate, and many other estate requirements. Although some general online, self-help materials and forms can be found, none are written specifically with the Wyoming resident in mind.

The financial literacy team determined that, because of the number of communities, the distance between tours made traditional face-to-face extension program delivery impossible. The team's efforts to create online financial literacy materials brought a request for extension to participate in a Jackson seminar planned for Women in Transition.

Funds from an internal UW Extension grant and a partnership with Long, Reimer, Winegar, Beppler, LLP law firm with offices in Wyoming, Colorado, and Utah to assist in writing

estate planning documents addressing Wyoming laws, created a series of bulletins (*Planning Ahead, Difficult Decisions*) about end-of-life issues. The law firm assigned Aaron Lyttle, one of its associate experts in estate law, to the project.

The topics of the *Planning Ahead, Difficult Decisions* bulletins served to frame the financial literacy component of a workshop developed for the Women in Transition seminar, which reached 81 participants. Evaluations from the seminar prompted a request from the Senior Center of Jackson Hole to host the workshop. A series was created working collaboratively with Beck Zaist, director of the Senior Center, entitled Putting Your Affairs in Order. The success of the series in Jackson brought requests from area senior centers for the program. The series was offered in collaboration with five senior centers in the West Area (Lincoln, Sublette, Sweetwater, Teton, Uinta counties). Kelly Blue, attorney at law, co-presented in the Kemmerer series.

The Putting Your Affairs in Order curriculum expanded program content developed by the financial literacy issue team for its webinar presentations and created three face-to-face workshops: Who Gets My Good Stuff; So Now You're The Executor; and Putting the Important Papers Together. The



# PUTTING YOUR

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workshop series was offered in Jackson, Big Piney, Pinedale, twice in Thayne, and Kemmerer by the respective communities' senior centers. Two hundred and seven participated in the Putting Your Affairs in Order series. There are additional workshop series scheduled in the West Area for the coming program year.

### IMPACTS:

A sample follow-up survey revealed 21 percent of participants had a plan for dispersing non-titled property prior to the class. Fifty-eight percent had begun to create a list for dispersing their properties. The comment that was offered repeatedly, "I have a plan for how to talk with my children now," substantiated the classes' objective to assist with determining a plan, goals, and what's fair in one's distribution process. Less than 10 percent of the respondents indicated they understood the responsibilities of an executor prior to the session. Evaluations revealed that all participants better understood the role and responsibility of an executor. After the Taking Care of My Important Papers session, participants were asked, "In response to the question prior to this session I had my important papers organized, and 90 percent of respondents indicated "No"; 3

percent indicated "kind of." After the session, participants indicated they were going to make working on the important papers part of their routine paper handling strategy.

Individuals who are approaching their senior years were equipped with information to use in putting their affairs in order. Attendance grew each week at every community. Participants encouraged others in the community to join the upcoming class. The Putting Your Affairs in Order workshop series provided information, resources, and strategies on where to begin an overwhelming task. The series served as a reassurance for some they have things moving in the direction they desired and affirmed they were addressing their goals. The series served to make the difficult topic of what will happen upon one's death easier to address.

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**AFFAIRS IN ORDER** series  
provides guidance to seniors

# Participants report ***SIGNIFICANT IMPROVEMENTS*** to

## SITUATION

Successful ranch management requires a diverse set of skills utilizing an integrated approach to decision making in a complex, dynamic production system. The High Plains Ranch Practicum (HPRP) is a hands-on learning experience that uses an integrated learning approach in which participants are taught tools, information, and skills to improve ranch management. The practicum is taught by University of Nebraska-Lincoln and University of Wyoming Extension educators and specialists. Industry experts are auxiliary instructors.

The HPRP courses include eight-10 days of classroom and hands-on instruction over a nine-month period focused on understanding forage resources, beef cow production, unit cost of production, risk management, marketing, and family working relationships. Presentations, case studies, small group problem sets/discussions, field experiences, and tours are used as learning opportunities. Curriculum is developed and based on current research and information pertaining to ranch management. Information on impact to participants is from follow-up survey data from 117 participants in practicums from 2007

through 2012. Forty-nine individuals or operations returned completed surveys.

## IMPACTS

The HPRP had six classes complete the course from 2007 through 2012. A follow-up survey was sent one to three years after completion of each class to identify how knowledge gained and skills learned affected participant management practices, stewardship of natural resources, and business profitability. Participants evaluated and compared the percentage of time the management skills and tools were utilized before versus after taking the class.

- Participants showed on average a 40-percent or greater increase in the time they utilize cow body condition scoring for decision making.
- Participants showed on average a 25-percent or greater increase in the time they evaluate supplemental protein sources, feed costs, calculate unit cost of production, and utilize a marketing plan.

High Plains Ranch Practicum participants report changing management practices, enhanced natural

resources, and improved profitability as a result of knowledge gained. Forty-nine operations managing 636,000 acres and 17,000 cattle made management changes that increased profit by more than \$440,000, as reported in the survey.

Participants were asked to identify practices they changed.

- 80 percent or more made changes in their uses of a business plan, unit cost of production, and replacement heifer development.
- 70 percent or more made changes to communication and interaction in their family businesses and working relationships.
- 60 percent or more made changes in their use/source of protein supplements and marketing of cattle/cull cows.
- 40 percent or more made changes to their time of calving, time of weaning, use/source of minerals, and use of crop residue.

Ranching is a business based primarily on use of grazing resources. A significant portion of instruction focused on helping students learn more about their grazing resources and how to effectively and sustainably manage them. Participants evaluated and compared the percentage of time these practices and skills were utilized in decision making before versus after taking the class.

- Participants showed a 40-percent or greater increase in the percent of time they utilized grazing and precipitation records.



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*“The biggest change is in my heifer development program. I have seen great increases in my cattle as a result of implementing these practices.”*

## ranch profitability

The following are a sample of statements participants reported they made as a result of knowledge gained:

“I was already moving toward changing our calving season, but the practicum really helped me formulate a plan to make the transition as well as implementing new management strategies as it related to later calving season and also in range management practices.”

“I purchased drought insurance and instituted a rotational grazing plan. I am developing stock water and was approved for a Conservation Stewardship Program contract. I also am designing a low-stress cattle handling/loading facility.”

“We changed cows from fall calving to May/June. Cows are grazing more crop residues, and we are going to drill oats/peas/radishes/turnips for feed. “

“The biggest change is in my heifer development program. I have seen great increases in my cattle as a result of implementing these practices (presented in the practicum).”

“We have done a better job of measuring the unit cost of production (UCOP). I think the UCOP presentations are extremely valuable. We gained knowledge and have changed some practices related to animal handling and vaccinations.”



- Participants showed a 30-percent or greater increase in the percent of time they utilized plant identification and plant growth in development.
  - Participants showed a 25-percent or greater increase in the percent of time they utilized a change in pasture rotations from year to year, performed a range condition assessment, and utilized a drought management plan.
- Long-term profitability and productivity is important to a cattle ranch's success. More than 70 percent of practicum participants reported knowledge gained increased profitability of their cattle enterprises.



# HIGH TUNNELS TEACH YOUTHS

healthy eating,  
gardening,  
entrepreneurial  
and  
grant writing  
skills

## SITUATION

The national 4-H mission has the mandate Healthy Living, which is targeted to ensure youths and their families make healthy food and food preparation decisions and the behaviors in which they engage.

The 6,700-foot elevation in Uinta County limited the 4-H gardening group to only raising tomato plants in pots. The county is in USDA planting zone 3 to 4, which limits the number of growing days for gardening. Gardening conditions at high altitudes are quite different from those at lower altitudes. Gardening techniques must be adapted to increase the success of growing produce.

The 4-H gardening group set out to build a high tunnel to grow fruits and vegetables. A high tunnel is similar to a greenhouse but is made out of inexpensive but durable PVC pipe that form “bows” or “ribs” that fit into slightly larger diameter pipes driven 2 or 3 feet into the ground. A UV-resistant greenhouse plastic covers the frame. Cooling is through passive ventilation from the roll-up sides and by opening doors at both ends. Heat is trapped during the day and retained by the covered plastic at night. An irrigation line is often the only external connection.

## Youths taught more than 50 individuals how to successfully raise produce in high-altitude environments



The Uinta County gardening group saw gardening as a teaching tool to healthier eating for not only 4-H members and their families but by providing locally grown produce to the local community and sparking additional healthier eating habits for them.

Youths started plants indoors under artificial lights and learned how to use growing aids such as fans, heat controls, and growing mediums, and later transplanted the seedlings outside.

After starting plants inside, the 4-H gardening group built the high tunnel. Youths engaged in grant writing sessions in which they learned how to properly write a grant by doing research and identifying specifics such as implementation timelines, stakeholders, partners, and budgeting. A portion of property was donated for building the high tunnel. The youths, with the help of adults, wrote two grants that secured supplies needed to build the high tunnel. With the assistance of master volunteers, parents, and volunteer leaders, youths worked as a team to not only learn how to design and build their own high tunnel, but what warm and cold crops to plant inside, how to ventilate the tunnel, and maintain moisture levels.

The project culminated in the group taking the produce they raised, both in the high tunnel and in their backyard gardens, to the local farmers market. 4-H members sold fresh tomatoes, egg plants, squash, carrots, kohlrabi, onions, leaf lettuce, and snap beans. The money paid for a water system to the high tunnel this spring.



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### IMPACTS

A high tunnel was built, but youths learned many skills that contribute to the core of the National 4-H Healthy Living mission mandate. They grew in the areas of healthier eating, entrepreneurial skills, grant writing, and sharing the learning mission with their families and community members by showing others what can be accomplished by gardening in Uinta County, which many believed could not be accomplished.

Specifically:

- A team of 14 youths secured two grants totaling \$2,209 to build the high tunnel.
- Youths worked, as a team, individual and community plots in the high tunnel to successfully raise fruits and vegetables.
- 100 percent of the youths learned how to start seedlings by using artificial lights and temperature controls then transplanting them outdoors.
- 64 percent of the youths raised produce in their own backyard gardens; this was the first time gardening for 45 percent of the group.
- More than \$150 was raised at the local farmers market from produce raised by the youths.
- Youths taught more than 50 individuals how to successfully raise produce in high-altitude environments.
- 100 percent of the youths' families consumed produce raised in the garden venues.

The success of this project prompted expansion plans that include learning how to assemble a watering system in a high tunnel and an additional high tunnel being built in a neighboring community. Youths who participated in this program will teach other youths how to write a grant, start plants indoors, and build a high tunnel.



# UW Extension Outreach: Transcending borders the way of the CHEATGRASS

## SITUATION

Cheatgrass (*Bromus tectorum* L.), or downy brome, is a cool-season, invasive annual grass introduced to the United States from Eurasia. Some people suggest it is the most common plant in the western United States, persisting on almost 99 million acres of rangeland. Cheatgrass has been credited for altering wildfire regimes and impacting plant species richness, which affects wildlife habitat and livestock forage quality and quantity.

Organized efforts to discuss and manage cheatgrass have occurred for years throughout the west and more recently in Wyoming.

A number of studies undertook to understand the ecological effects of cheatgrass. A 2009 study throughout Wyoming and Colorado took a different approach – To what degree do land managers, ranchers, and natural resource professionals perceive cheatgrass to be a problem in their areas? The study suggested a need to teach land managers

how to identify the invasive grass, its potential negative effects, and information about different control methods.

The Rocky Mountain Cheatgrass Management Project (RMCMP), a partnership between the University of Wyoming and Colorado State University, hit the ground running with extension programming in 2013 with outreach efforts to address the needs of land managers throughout the two states. The year's accomplishments included offering workshops in Pinedale and Douglas and in Meeker, Colorado. The workshops addressed several of the needs identified in the 2009 study.

The first half of each workshop was classroom-based. Participants were introduced to the 'Cheatgrass Management Decision Framework' (see chart page 21) presented in the *Cheatgrass Management Handbook: Managing an invasive annual grass in the Rocky Mountain region* (the handbook is online at <http://wp.natsci.colostate.edu/rmcmp/>). The second half of each workshop was field-based and tailored to meet the needs of local participants.



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*“The field trip was great. I overheard many discussions about identification of plants ...”*

The Pinedale field tour highlighted and discussed the Sublette County Invasive Species Taskforce’s efforts to control cheatgrass. Their efforts closely followed the Cheatgrass Decision Framework presented in the handbook. The field component in Douglas was hands-on and focused on monitoring methods and how to collect data. The Meeker field tour included three stops at research trials, including two at replicated oil and gas well pads.

Each workshop had the same four presenters. There were 22 participants from Wyoming, Idaho, and Colorado at the Pinedale workshop, and a guest speaker from the taskforce. Forty-nine participated from eastern Wyoming and Nebraska at the Douglas workshop, including agency professionals and ranchers. Thirty people attended the workshop in Meeker, and two guest speakers from Colorado State University Extension, and the Colorado Parks and Wildlife.

## IMPACTS

A survey assessed pre- and post-workshop cheatgrass knowledge and what changes participants anticipated making in their management of invasive species, specifically cheatgrass, as a result of the workshop.

Participant knowledge increased for all key points in the pre- and post-self-assessment of those who completed and submitted the workshop evaluation. The three key

points in which participants reported their knowledge increased the most on a scale of 1 to 5 (1 = low and 5 = high) were:

- **Knowledge of the current options for chemical control:** Pre-workshop average knowledge 2.77; post-workshop average knowledge 4.21
- **Familiarity with selecting an appropriate monitoring technique for the question of interest:** Pre-workshop average knowledge 2.72; post-workshop average knowledge 4.08
- **Familiarity with ways to prioritize locations for cheatgrass management actions:** Pre-workshop average knowledge 2.78; post-workshop average knowledge 4.12

Respondents reported they could apply the information they learned to the area they manage (average 4.34 on a scale of 1 to 5, with 1 being strongly disagree to 5 being strongly agree). Additionally, they reported more confidence in their ability to identify cheatgrass and to develop a management strategy (average 4.29 on a scale of 1 to 5, with 1 being strongly disagree to 5 being strongly agree).

Respondents were asked what they would do differently when they manage invasive species, specifically cheatgrass.

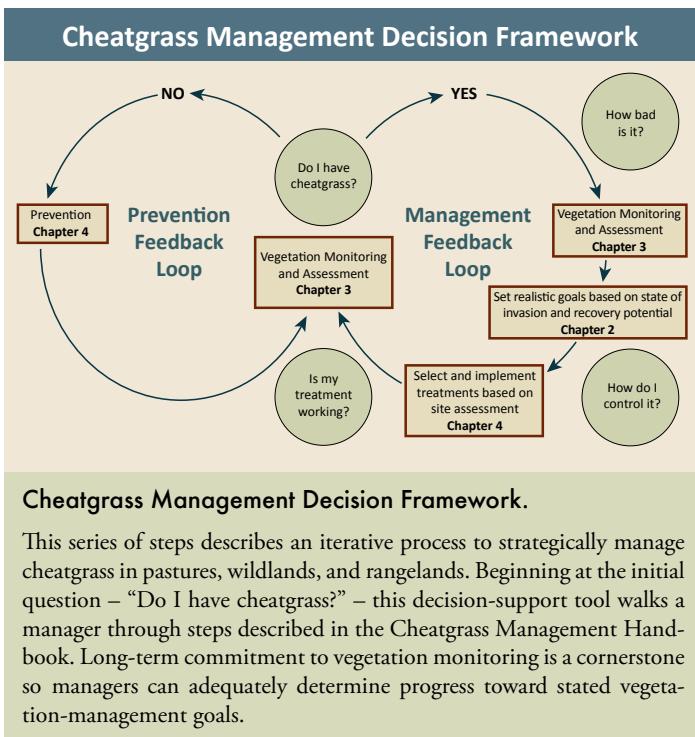
- Prioritize location, and deciding which management plan to use
- Evaluate stage of invasion and appropriate response. Build monitoring into management
- Consider evaluating/surveying human dimensions related to management

Workshop participants noted a number of strengths of the workshop including:

- Field work was helpful in determining cheatgrass infestation levels
- Multidisciplinary approach
- Multiple speakers, short and pertinent presentations. Diverse audience. Good to see collaboration between CSU and UW.
- The field trip was great. I overheard many discussions about identification of plants ...

Participants were provided an electronic and/or hard copy of the *Cheatgrass Management Handbook: Managing an invasive annual grass in the Rocky Mountain region* they can use to learn more about cheatgrass and to find a significant amount of the information they learned during the workshop.

Visit <http://wp.natsci.colostate.edu/rmcmp/> to learn more about the RMCMP.





## DO-IT-YOURSELF GARDENING series gets gardeners **GROWING**

### SITUATION

Wyoming gardeners are very persistent and determined; they have to be to put their own food on the dinner table. Even with the challenging climate, many people are interested in gardening. Another descriptor for Wyoming gardeners could include “self-reliant” – that is why they are growing their own food. However, as self-reliant as they may be, being armed with knowledge and skills helps them persevere against the elements and be rewarded with a bountiful crop.

University of Wyoming Extension and Carbon County Higher Education Center partnered to provide the tools for successful gardening and focusing on self-reliance. A series of do-it-yourself (DIY) gardening classes were designed to be

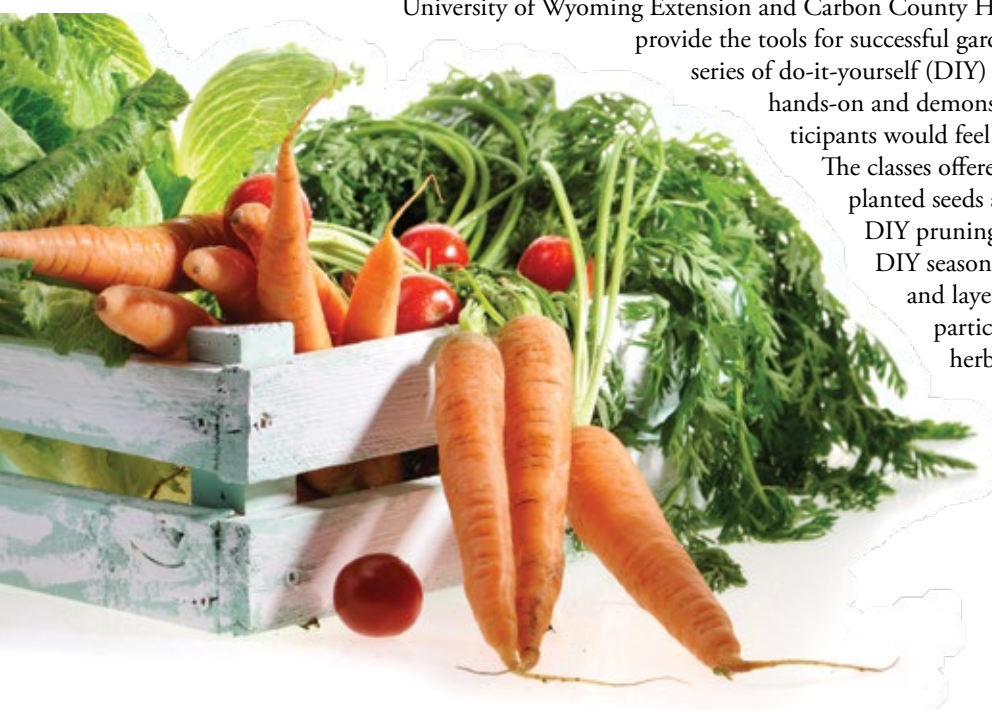
hands-on and demonstrate gardening techniques to ensure participants would feel comfortable completing projects at home.

The classes offered were: DIY seed starting – participants planted seeds and looked at different lighting designs;

DIY pruning – participants pruned trees and shrubs;

DIY season extension – participants built a low tunnel and layered compost; and DIY spiral herb bed –

participants built a spiral herb bed and sampled herb-inspired dishes.



The goals were: 1. Give participants skills and confidence to build their own projects. 2. Increase cost savings. 3. Enable participants to grow their own food.

Attendance was open, and the entire series was not required. Sixty-two people attended the four classes with 11 participants who attended several of the classes in the series.

## IMPACTS

Participants enjoyed the classes, and the hands-on teaching style was the key to success. Average overall rating for the series was 4.9 (1-5 scale; 1=Poor, 5=Excellent; 40 surveys returned).

Knowledge gained from the series was captured through post-class surveys. The overall average knowledge of the subject before and after presentations increased from 2.6 to 4.3 (1=Very Little, 5= A Lot). In a follow-up survey, 100 percent responded they had shared the information they learned in class with someone else.

Not only did participants enjoy the class, they saved money. The follow-up survey sent in the fall of 2013 showed that 50 percent saved more than \$20, and 25 percent saved more than \$50. One hundred percent responded they would save more in the future.

A few responses from participants when asked if they had built/used anything from class include:

- My husband and I built a seed starting setup in our basement. I was so pleased with the results that we are planning on expanding it this winter. John and I also built the spiral bed, which he rigged up for irrigation, as well.
- Started several squash plants, planted them in our alley! And now harvesting and sharing. It is wonderful!
- Had raised all the vegetables in my garden space from seeds in the spring.

The skills learned in this workshop series apply beyond the topics of the classes. One participant commented: "I have confidence that I can build/ don't need to purchase expensive packages." This will result in cost savings for years to come. The DIY Gardening Series was very successful in arming Wyoming gardeners with knowledge, skills, and confidence to grow their own food.



“Started several squash plants, planted them in our alley! And now harvesting and sharing. It is wonderful!”



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Community development team  
uses innovative methods to train  
**STATE LICENSING BOARD MEMBERS**



## SITUATION

Licensing boards in Wyoming protect the public. They provide reasoned and thoughtful feedback to all applications and other actions brought before the board and act in the best interest of the public and of the profession they are serving. Even though each licensing board is unique, the role of each board member is essentially the same: do what the statutes have charged their board to do, including:

- Approve new licenses
- Decide on renewal of licenses
- Determine when any disciplinary action may be required against existing licensees

The primary responsibility of board members, as a whole and individually, is to ensure compliance with legal and ethical obligations of the board, including any related agency. Board members' legal obligations are determined by law, rules, regulations, by-laws, executive orders, written policies, and procedures.

The attorneys in the Office of the Attorney General (AG) serve licensing boards in an advisory capacity and as their prosecuting attorneys. Advisory attorneys advise the boards in deliberation and represent the board when required. The prosecuting attorney is the representative of the applicant review committee and determines whether there is sufficient evidentiary basis for denial in contested cases. The attorneys in the AG office have also regularly provided training to licensing board members around the state.

In the fall of 2011, Ryan Schelhaas, senior assistant attorney general from the Office of the Attorney General, contacted the southeast area extension community development educator interested in incorporating adult learning principles to better engage board members, strengthen learning, and encourage increased

attendance at the trainings. The area CDE educator worked with Schelhaas and other AG staff members to incorporate adult learning principles into their 2012 and 2013 State Licensing Board trainings in two primary ways: serving as a resource to the AG's office staff in planning the training, and helping them incorporate participant engagement activities into presentations.

State licensing board members and staff members from around Wyoming traveled to Cheyenne August 20, 2012, and June 25, 2013, to attend the revised board training. Fifty three attended the 2012 session, and 47 attended the 2013 session.

Attorneys from the AG's office provided an overview of board responsibilities, information on public meetings, public records, and rule making. In 2013, one session focused on public meetings and engaged participants in a lively session in which they had the opportunity to use a remote response system during a mock meeting to "chime in" when the mock meeting participants erred. Schelhaas and the area CDE educator led an interactive session on governmental ethics. In both years, participants were led through a role playing exercise to better understand the investigation process. Tara Kuipers, northwest area educator with the community development team, concluded the day with a workshop on being an effective board member.

## IMPACTS

According to Schelhaas, "The board members enjoyed the training and continually commented that they appreciated the new interactive format and use of real-life scenarios as it facilitated the sharing of ideas, opinions, thoughts, and questions." He further noted that, "The training allowed for many great

discussions among attendees and presenters, which required everyone to really think about the information being presented and apply it to real-life scenarios."

In 2012, 94 percent of evaluation respondents either agreed or strongly agreed they have a better understanding of their role as a board member after attending this training. In 2013, 100 percent either agreed or strongly agreed they have a better understanding of their role as a board member. When asked how they would rate the overall training, 100 percent of the evaluation respondents selected either 4 or 5 (indicating good or excellent) in 2013, and 94 percent selected either 4 or 5 in 2012.

When asked about the most valuable aspect of the training, one participant cited "*The overall view of how the board works and the view from the attorneys involved.*" Another listed, "*Good discussion about public meetings and public records act. Really like the clicker voting and discussion. I like the mix of AG plus extension service speakers.*" And a third respondent said, "*I appreciated hearing from all the attorneys and their opinions and interpretations. It gave me a lot to think about in my role as an ED. I also enjoyed the investigation scenario experience.*"

When the participants were asked what they would do differently as a result of the training, one participant said they would "*listen better and work harder to get the info out there.*" Another said they would "*be [a] more thoughtful board member*" and a third said they would "*be very careful about maintaining appropriate behavior as [a] representative of the state.*"



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## Sublette County 4-H YOUTH BUSINESS

### SITUATION

Current trends in public education continue to focus on increasing accountability measures, rigor, and high-stakes testing leaving less time during a school day for education focusing on life or “soft” skill development. Youths are getting fewer opportunities to learn trades and skills that are the basis of entrepreneurship in our country. This has created the need for more informal, out-of-school time focusing on soft-skill training such as time and financial management, marketing, and recordkeeping.

In 2008, the Wyoming 4-H program received funding from the Daniels Fund to establish and implement career development and preparation programs throughout the state. Each county had been offered resources and flexibility in career development education efforts and implementation. Sublette County 4-H made the decision to focus on youth entrepreneurship to build soft skills among our youths. Beginning in 2009, the Sublette County 4-H program has organized an annual youth business ventures contest. Additional funding for the annual contests has come from a renewal of the Daniels Fund grant and the ability to utilize unused portions of the state 4-H Daniels Fund grant pool and via monies allocated to the program from the Trover Family Foundation and other local donors.



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*“I have learned that you have to work really hard to build your business, and sometimes it just doesn’t happen very fast.”*

## VENTURES

# invests in 12 youth enterprises over five years

Each year, a contest is advertised throughout Sublette County open to all youths ages 8-18. A committee of local small-business professionals is organized to serve as the awards selection committee. Youths are invited to a pre-contest, educational opportunity on business proposal development and presentation. The selection committee guides youths through not only creating a business proposal but education surrounding marketing strategies, risk management considerations, and mentoring possibilities. Youths with completed business proposals are invited back to present their business ideas to the committee to be considered for funding.

### IMPACTS

Twelve small businesses have been funded for a total of \$10,148.42 since inception of the Sublette County 4-H youth business ventures program. Youth business owners range in age from 9-15. Currently, nine of the businesses are still open in Sublette County, and one additional business has since relocated but has continued to operate in Natrona County. Only one of the businesses had less than a two-year survival rate, and two businesses will celebrate five-year anniversaries this spring. One of the youth businesses reported having earned a net income of more than \$8,000 since beginning and a 50-percent business growth

rate the past two years. Another youth assessed their business as highly successful having earned a total net income of \$6,500 and a gross income of nearly \$30,000.

When asked specifically what was learned from being a young business owner, the youths reported:

“Being a business owner is tons of work.”

“Being a business owner has meant that sometimes I have to work holidays and days I don’t want to,” and

“I have learned that you have to work really hard to build your business, and sometimes it just doesn’t happen very fast.”

The 4-H youth venture contest and education provided to increase skills for Sublette County youths is truly a success. The impact is documented by the sustainability of the businesses started by the seed money provided through the contest.





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of WYOMING  
EXTENSION