

EXTENSION'S CONNECTION WITH WYOMING

CONNECT

A woman with short brown hair, wearing a green polo shirt and dark shorts, is crouching in a garden. She is holding a carrot with both hands and looking up towards the sky with a smile. In the background, there is a wooden deck with a table and chairs, and some greenery.

Backyard
Beginnings in
Casper is helping
a new generation
discover the joys
of gardening and
become fearless
in flora!

See story on page 4.



UNIVERSITY OF WYOMING
COOPERATIVE EXTENSION SERVICE



The extension programs highlighted in this CONNECT magazine are selected because they reflect the more innovative and timely work underway in UW extension.

Each year as I prepare to write my introduction and reactions, I read the articles with the intent to identify the central theme of the issue from the content of the articles.

Since our work is driven by local interest and need, I believe, if I can identify the theme of CONNECT, I can understand the direction of innovation in UW extension programming as well as trends in the interests and needs of our clients. It appears to me this issue of CONNECT is all about sustainability and healthy eating.

We in Wyoming are not alone in this.

EXTENSION INFORMATION BASED ON UNBIASED RESEARCH

Sustainable agriculture, producing your own food, gardening, canning, and slow food are strong contemporary interests across our country. There are many sources for information on sustainability and healthy eating, but extension is the most reliable, as it rests on a base of University of Wyoming and other land-grant university research.

Sustaining rangeland resources for the future and sustainable ranching strategies and practices have always been at the center of UW extension's programs. The Ranch Practicum, one of our marquee ranch management programs, is highlighted here. It is particularly focused on the long-term financial sustainability of a ranch. The success of Wyoming's ranches is an important factor in the long-term development of the state, its wildlife, and its people.

CASPER PROJECT EXPLAINS WIND, SOLAR POWER PROJECTS

The wind and solar renewable energy demonstration at the Agricultural Resource and Learning Center in Casper responds to needs of those who want to take advantage of the abundant wind and sun in Wyoming to live a more independent and

sustainable lifestyle. Many in our state are interested in living in remote locations off the electrical grid. This demonstration provides a starting place for clients to investigate and learn of opportunities to harness the ultimately renewable wind and the sun to power their homes or businesses.

A discussion of sustainable lifestyles in an outdoors state like Wyoming invariably turns to gardening and producing food from the sun, water, and the soil. The Backyard Beginnings program provides a nice start to those interested in gardening but have no experience. Food preservation workshops, like the one taught in Sheridan and highlighted here, are taught in many communities in the state to support folks' aspirations to grow and preserve their own food.

WYOMING, MONGOLIAN 4-H'ERS ASPIRE

A favorite highlight of mine is the UW extension effort to help develop a 4-H program for Mongolian youth. This story features actions of our state 4-H specialists to take advantage of opportunities, a Mongolian contact familiar with the 4-H program and wanted help getting started, and U.S. State Department funds available to facilitate such a project. The payoff for Mongolian youth is obvious. The payoff for Wyoming youth is also substantial.

I hope you enjoy reading these highlights as much as I have. We are proud of the work presented here as well as all of the work of our extension educators and specialists. I would love to hear from you. If you have questions, comments, or suggestions, please call me at (307) 766-5124 or email me at glen@uwyo.edu.

Regards,



Glen Whipple
Associate Dean and Director
UW Cooperative Extension Service



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– Glen Whipple

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For an interactive, online version of CONNECT, visit
<http://bit.ly/rtjyuT>

BACKYARD BEGINNINGS

Michelle Dollentas, left, of Casper and Karla Case, Cent\$ible Nutrition Program coordinator, peruse vegetables Dollentas planted while taking the Backyard Beginnings course.



BACK TO BASICS



Popularity of course for those truly beginning gardeners shows educators there is a need to fill

A class tested by Natrona County wind and temperatures could have sprouted and died but instead grew into people's lives last summer.

Qualifying for the Backyard Beginnings course in Casper was easy – know nothing about planting a seed.

"What it boiled down to, we marketed this 'If you've planted zucchini seed, don't bother to come, but, if you haven't, this class is for you,'" recalls Tom Heald, a former extension educator in Natrona County.

The class had its beginnings months before between Heald and Karla Case, Cent\$ible Nutrition Program coordinator in the county. The CNP educators had started a garden in the community garden area just south of the Natrona County office.

"It was a beautiful garden," says Case. "That had to lead to something!"

Case's gardening experience consisted of tossing a few zucchini seeds out on the ground at her home.

"The thing that astounded me is Karla is a registered dietitian but didn't know what a weed looks like versus the tomato plant," says Heald. "That floored me. She

got six months of kidding on that one. But, she bet me there were lots of people like herself. I said no way."

He lost.

The class was born.

HIGH REGISTRATION FOR CLASS

More than 70 registered and 56 attended throughout the course. "Karla touched on something," notes Heald. "I knew people did not know about gardening and soils but not to the depth as a society."

"There are a lot of people looking for that information," says Case. "For me, even working with Master Gardeners in the office, I didn't know who to go to."

There was also the intimidation factor, she says. "Tom's teaching style got them excited. He did talk at their level. I was very appreciative of that. Even though I work with Master Gardeners, I was intimidated to go to them and ask 'what does hardening off mean?' That's a shame. I would Google it. That's not good. You need someone to tell you about Wyoming soil, the altitude. I realized there would be more people like me."

Heald said, based on what he was seeing, he had to change his teaching approach.

"I had to reconfigure it in my own mind," he says. "I know what soil is, but people in the class said soil is the stuff you get at Wal-Mart. Soil is in our bones. I think of fields and gardens. But the vast majority thought of soil as a bag of garden soil. It forced me to rethink everything I teach."

Heald used the rich soils of Iowa as a starting point. The fertile soil was created over thousands of years from tall grass prairie dying and enriching the soil with organic matter. Wyoming soils become Iowa soils, he told class members, by adding organic material.

FOUR EDUCATORS COMBINE EXPERTISE

Case provided the nutritional facets, and former extension educator Milt Green provided gardening expertise and the financials of gardening – is growing one's own vegetables more expensive and what are the benefits outside the numbers?

County horticulturist Donna Cuin also contributed.

"My part was to provide down-to-earth information that is digestible to the uninitiated gardener,"

says Cuin. "I provided background information on why some of the hands-on practices, demonstrated by the other educators, works and how the plants benefit from proper cultural practices of gardeners."

She provided handouts and demonstrated proper use of gardening tools.

"I think I also brought to the class a touch of reality that much of the materials or equipment that is marketed to gardeners is not

well-suited to use in our high plains desert environment and that anything that is purported to be too good probably won't work here," she notes. "Using basic gardening techniques is much more reasonable in our tough climate than a lot of gadgets portray."

She added the class is an essential element of bringing awareness to people that food comes from the land, and the land must be taken care of if it is to continue to take care of us.

"The key to the success of this class in my mind was keeping the lesson segments short and uncomplicated so that it was not overwhelming to the participants," says Cuin. "We each taught in 15- to 20-minute segments in order to keep the class sessions short; they were each only 1 ½ hours long."

The project was the first to be cross-disciplined at the Natrona County office.

"The fact the four of us worked together for the first time, who would have thought? All of us seemed to be on the same page," notes Case.

Heald says he's seen a shift in what the public wants from extension.

"As I reflect on my 26 years with extension, it's always been science-driven," he notes. "Twenty-six years of having to know something about alfalfa for the alfalfa farmer or beef cow rancher. Now I think extension is going full circle, back to its roots as extension educators – teaching people the land and not necessarily a whole bunch of science – high touch and throwing away the high tech."

Heidi Bjornson, who moved to Casper from Utah, enrolled in the Backyard Beginnings class to learn how to grow vegetables that weather Casper's weather.





Michelle Dollentas needs only to step from her deck to pick menu items for that night's dinner.

EMPHASIS ON FRESH VEGETABLES, HEALTHY DIET

Michelle Dollentas says, on a knowledge scale of 1-10 with 10 being the highest, she's now a 6 or 7 after taking the season of gardening classes.

What's the difference between 'Michelle then' and 'Michelle now'?

"'Michelle now' wants a greenhouse," she quickly replies and laughs.

She and her fiancé were spending their first summer

in their home while she took the classes.

She knew she wanted a garden.

Her finance grumped a little about building a garden fence. He doesn't like vegetables.

She does. She won.

"It was so cool to see it start to finish," says Michelle, who was born in Hawaii but has lived most of her life in Casper. "I was

pulling up sod, building the fence, and producing the pumpkins on the ground. It was so worth it. It was like a journey, a long journey, and there were parts I succeeded and parts I learned a lot from and what to do next summer. Was definitely a learning process."

Gardening is not that common among her generation, says Michelle.

"I'm definitely a different crayon in the box,"

she quips. "At 23, I was the youngest in the class of 50-some people."

Michelle likes knowing the vegetables are fresh and the flavors can't be beat. Eating nutritiously is vital to her.

"I suffer from several female-related health issues, so I have to watch what I eat. I'm pretty health conscious, and I changed my diet. That's how this started, really."

She also likes having only to step out the door for food. Michelle can stand at the edge of her deck off the second-story kitchen and survey her garden.

"My mom came over one night, and I went grocery shopping out there – zucchini, onions, tomatoes, and brought them back to the kitchen and cooked a meal. It was so fresh. Was just like, 'wow!'" she recalls. "I'm no Rachael Ray, but I'm on my way."

The area is fenced with room to expand to the property edge.

"Originally, I wanted the whole area," she notes, "but I was pushing it. My fiancé said that's a big enough space, but I wanted more. But I think if I had too much more, it would have been too much to keep up with. I needed to be more realistic. I'm essentially

feeding myself. If I were to produce more, I'd probably sell at the farmers market."

Still, she learned from the summer and is already tweaking her garden. She plans to build raised beds, and she'll switch the pumpkins, sunflowers, and corn locations to a sunnier area. The pumpkins and squash won't go in the raised beds, she says; they get too big.

She may have more "aha" moments in addition to those last year.

"I think being able to go out and pick basil and make my own pesto sauce, that was an 'aha'," she says. "Seeing the miniature pumpkins on the ground growing, that was a huge 'aha' for me. As I stand back and look at it now, that in itself was a huge 'aha,' just to see all the accomplishments we did."

Suggests next year's course starts earlier

Dollentas suggests along with Heidi Bjornsen that, if the course is offered again, a January class be held.

"I wanted to start my seeds inside a little bit earlier," Michelle says. "I didn't really know how to do it or where or when to start. I guess I started in April or May, and I think the instructors did a great job. I loved having four teachers, and each had different backgrounds. That made the class so strong. They all worked together to bring everything."

BACKYARD GARDEN

There was already a garden spot at the house Heather Fransted and her husband, Eric, bought.

"We put some tomatoes and herbs in and let it do its thing," says Heather. "We had some strawberries and sunflowers come up. This year, I saw the ad about the class and decided to take it."

She knew she could do better.

Heather had helped her mother, who still lives in Casper, garden as a child, but she never continued. "That's why I took the class. I wanted to figure out what to grow here. I didn't even know what zone this is," she quips.

The Fransteds like to buy organic; however, it's



Heather Fransted says she'll use raised beds and move her garden area to a sunnier location.

PROVIDES FRESH VEGETABLES, FAMILY TIME

too expensive for a one-wage earner household, she notes. “We wanted to have fresh vegetables without having to buy organic,” she says.

The garden would provide fresh vegetables grown without chemicals.

Gardening also provides her children with where food comes from.

“I think it’s very healthy for kids to see where their food comes from, to get their hands into it, and understand the difference between good food and not-so-good food,” Heather says. “My 4-year-old loved digging in the dirt, planting the seeds, and loves picking tomatoes – and the same with strawberries.”

The Fransteds raised lettuce, spinach, several varieties of tomatoes, green onions, peppers, zucchini, carrots, peas, green beans, and broccoli.

“We had talked about what would grow here,” she says, “and which to plant early. I learned that, with some plants, it’s better to be already started, like tomatoes and broccoli. I had bad luck. Period. The plants I bought died, and the ones from seed didn’t do well. But, I was

really amazed at the Roma tomatoes.”

She also wasn’t sure how to plot the garden. “I read the packages, but it can be confusing,” she notes. “For peas, I wanted to plant two rows next to each other, but I didn’t know how bushy they would be, how tall, or if they were climbing. I tried planting other vegetables around other plants. The zucchini were too close to the onions. Everything bushy was in the center. Next year, I’ll try to plan that out better.”

Like Michelle Dollentas, she will use raised beds next year. The soil around the house is too poor.

“We had a hard time getting it to a consistency to work with,” Heather says. “We tried to rototill-in healthy organic matter this past spring, but it was awful. It made it worse. It’s clay and would lump up. Over the summer, the dirt broke apart and it looked like an earthquake in the garden.”

The raised beds will have better soil and be in a sloped area of the yard where the plants will bask in more sun.

She learns best by the hands-on experiences and adds the course instructors



Logan Fransted gets some lawn time while his mother, Heather, right, and Karla Case view the garden.

WELCOME SPRING ACTIVITY AFTER LONG WINTER

Long winters can create lots of anticipation for getting into a garden when spring finally breaks.

“It’s a great stress reliever, especially in the spring after being cooped-up all winter,” says Heather. “That was my thing to do. Not a mommy thing, but my thing. It was so nice to feel the sunshine, a little bit of breeze. It was so comfortable to be out in the backyard again.”

When Alexander, 11 months, or Logan, 3 ½ years old, were being troublesome, she’d take them out in the backyard.

“Especially for my 3-year old, we could go out to the garden, and he could either do gardening with me or not or find his trucks or ride his bike,” says Heather.

were great about answering questions.

“I love that they knew what they were talking about,” she says. She recommends more hands-on experiences for future

classes, perhaps visiting the community garden more.

“Everybody loved that,” she recalls. “I also think they should incorporate the Master Gardeners into the class.”

Wyoming-Mongolia 4-H sister

A 4-H program developed in Mongolia transferred a Wyoming idea across the world through a summer book club.

Two former UW students in the College of Agriculture and Natural Resources, Batmunkh Tsendajush, and his wife, Sergelen Vanganjal, conceived the idea. Tsendajush and Vanganjal, both natives of Mongolia, enrolled their children in the 4-H program in Laramie while attending UW and had an idea for a similar program upon returning home.

"I was thinking about what I had to do for our kids before going back to Mongolia and how to develop some kind of after-school programs where kids can develop and learn life skills," Vanganjal says.

"The purpose and philosophy of the 4-H program exactly matched the goal of the program, which I had in mind. These kids can accomplish a lot and contribute good things to the country. Afterschool



4-H specialist Kim Reaman teaches hand gestures to the 4-H pledge at a 4-H club meeting in Mongolia.

programs are very important for Mongolian kids."

Vanganjal created the 4-H book club in Ulaanbaatar, the capital of Mongolia, at which students created art relating to books or role-played – anything expressive to communicate about the literature. The programs are still only in the capital city, but there are hopes to create programs in libraries around the country, Vanganjal says.

She also notes the program contains a reading program in English, art (drawing), theater, and health.

"We are planning to start environmental, agricultural programs such as gardening and horticulture with the help of the Ministry of Environment, Mongolia, and some other programs such as photography and making milk products with the help of

Peace Corps volunteers," she says.

UW SPECIALISTS PITCH IN

UW 4-H specialists Warren Crawford and Kim Reaman traveled September 15, 2010, to Mongolia in hopes of developing this program.

"Serg had a passion for the program. She asked for our help, and we're in a position to be able to contribute to help her be successful," Reaman adds as a

clubs could create global family

reason for her involvement in the program.

Crawford says creating a program from scratch was an opportunity and challenge he just couldn't pass up. He also says that, in U.S. 4-H programs, there is an emphasis on global awareness, and this program would help prepare American youth to work in a global society.

"One of the things we're still hoping to build is a cultural sharing project," Crawford says. The project will create sister clubs between the 4-H programs in Mongolia and Wyoming in which participants share traditional aspects of their cultures.

An initial interaction for the sister club project came to fruition in 2011 with a student exchange. A \$222,596 grant from the United States Department of State Bureau of Education and Cultural Affairs allowed students to travel to Mongolia for the international exchange June 14-July 15.

In efforts to develop the project, Crawford and Reaman conducted training and meetings with groups interested in the 4-H program while in Mongolia.

The 4-H specialists trained and consulted with 30 librarians from around the country who act as 4-H leaders and run the programs. They also discussed including activities like gardening, music, and arts and crafts.

Reaman says these topics could be covered throughout the year with the changing seasons bringing in new topics, allowing for activities for the growing number of participants in the winter.



Kim Reaman and Sergelen Vanganjal, executive director of Mongolian 4-H, award certificates and 4-H pins to first-year members.

PROGRAM PARTICIPATION INCREASES

Crawford says the increase in participation is one of the project's biggest successes; it showed there were volunteers willing to help and that parents of the participants wanted to get their children involved and provide opportunities to learn and use life skills like self-sufficiency, communication, and traditional craft making.

They hope to find volunteers interested in the projects the students want and who will be able to teach the needed skills, Reaman says.

Crawford says finding volunteers in Mongolia is difficult because the idea of volunteering is foreign in a developing nation. He did say, however, there were approximately 30 potential volunteers at the meetings, so raising support is a work in progress.

One idea Crawford and Reaman hope to implement with the right volunteer support is the creation of a traditional dish by Wyoming and Mongolian 4-H groups.

The cooking would be videotaped and posted on YouTube for the other



Wyoming 4-H specialist Warren Crawford leads a team-building activity at a 4-H club meeting.

4-H group to watch. Many Mongolian students speak English in some manner, so they would tape the programs in English for the American students to understand and be able to practice their English.

ONLINE CAPABILITIES BOLSTER EFFORTS

Many public areas in Mongolia have Internet capabilities, Reaman notes. Also, Facebook is popular among Mongolian youth and will allow them to easily keep in touch with their

American counterparts.

Students could also share traditional arts and horticulture online. Reaman and Crawford also hope to apply outdoor activities like gardening because the Wyoming and Mongolian climates are remarkably similar, Reaman says. They hope the two groups can share and connect because of this similarity (see story page 13).

Vanganjal notes the agricultural projects will be one of the

biggest connections between Mongolian and Wyoming 4-H.

"In terms of connecting Mongolian 4-H with Wyoming 4-H, we want to be part of Wyoming 4-H and learn from their experience," she says.

Crawford said the project will benefit Wyoming 4-H'ers as well.

"We hope to grow both programs by expanding the world views of all of the participants," he says.

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by expanding
the world views
of all of the
participants."

— Warren Crawford

For the Wyoming 4-H'ers,
"When they have a real life
connection, it makes [the
idea of another culture]
more real and allows them
to learn and share."

WYOMING 4-H'ERS TO MONGOLIA

This learning process
continued during the
international exchange
when six chaperones and 29
students spent four weeks
in Mongolia in the sum-
mer. They interacted with
Mongolians and shared
each culture. The students,
ages 15 to 17, came from
Wyoming and 13 Western
states, with hopes of send-
ing as many Wyoming
students as possible. The
students were selected
through an application and
interview process.

The Americans also
spent two weeks with host

families and participated in
educational programs about
environmental interactions.

Crawford hopes fund-
ing might be found to bring
the Mongolian students to
the U.S. to make it a true
exchange and to allow the
groups to maintain a strong
connection even when the
Americans return.

"It's always going to
be a work in progress,"
Reaman says of both the
Mongolian and American
4-H programs. "I think
they're off to a great start in
Mongolia."

Individuals who wish
to make a donation toward
the development of global
citizens through 4-H inter-
national programming can
make a financial contribu-
tion to the Wyoming 4-H
Foundation. All donations
are tax exempt. If inter-
ested, contact Steve Mack,
director of the Wyoming
4-H Foundation, at (307)
766-2528 or smack@uwyo.
edu.

"The most important
thing to communicate is
how much potential 4-H in
Mongolia has and how ben-
eficial it can be to the youth
in Mongolia," Reaman says.



*Kim Reaman
presents a 4-H
pin to a first-year
4-H member.*

4-H: CREATING BONDS ACROSS CONTINENTS

GROUPS INTERESTED IN HELPING: the Peace Corps, which wanted to donate training materials, the Asia Foundation, which wanted to donate water testing kits, and the U.S. ambassador in Mongolia, who hopes to hold a reception for group members next summer upon their return. National TV in Mongolia wants to partner to broadcast the programs to improve reading levels in the country

AGRICULTURAL SIMILARITIES

MONGOLIA: 5,000 feet above sea level, winter from November to late April, average rainfall is 10 inches, average summer temperature 65 degrees Fahrenheit, average winter temperature minus 13 degrees Fahrenheit

WYOMING: average elevation is 6,700 feet with much between 4,000-5,500 feet above sea level in northeast, approximately 5 to 16 inches of precipitation, long winters and short growing seasons, average summer temperature 85-95 degrees Fahrenheit, winter 5 to minus 5 degrees Fahrenheit



THE MISSION:

Host an event that helps inform low-income individuals in Wyoming and the various agencies' staff members who help them how the Cent\$ible Nutrition Program can help them eat better for less

SUCCESSFUL?

Read and decide

Seth Stefanik of Triumph High School in Cheyenne applies cream cheese to apricot halves.

A Add a dash of creativity, a pinch of competition and you have a recipe for the Cent\$ible Nutrition Program (CNP) Commodity Chefs project.

Chefs and cooks from local restaurants and organizations in several counties crossed spatulas to see who could produce the most popular and tasty recipes based on commodity foods available from local food banks.

The events helped spread the CNP mission of providing information to Wyoming families and individuals with limited income that helps lead to affordable, available, adequate, and nutritious food.

"This came out of trying to think of a creative way to bring awareness to hunger and challenges for low-income families in Wyoming," says Mary Kay Wardlaw, CNP director in the College of Agriculture and Natural Resources. CNP educators are part of extension in Wyoming counties.

"People are so drawn to cooking shows and the competing chefs, the idea came from that," she says. "Why not do a cooking competition with local chefs and cooks using commodity foods?"

FROM DULL TO SUBLINE

The ho-hum commodity foods were revved to downright elegant by the chefs and cooks. The commodity foods included:

- canned spaghetti sauce (meatless),
- white rice,
- canned refried beans,
- canned diced tomatoes,
- instant quick oats,
- canned green beans,
- and canned applesauce.

Here's a sampling of what lucky audiences tasted:

Jalapeno Garlic Tilapia Pasta, Cheesecake in a Glass, Tex-Mex Dip, Bran-Peach Muffins, Oatmeal-Blueberry Cookies, Kielbasa Rotini, Apple-icious Parfaits, Pepper Parmesan Beans, Pear 'n' Apple Cobbler, Tomato Spinach Spread, Jasmine Rice, and Thai Noodles with Peanut Sauce.

Although the tasty dishes were important, so, too, was spreading the word of what CNP can do for those who qualify for the program.

"I think this event brings awareness to poverty and hunger issues in Wyoming and the services and agencies out there to help people,"

says Wardlaw. "We're the piece that helps people make it happen in the kitchen three times a day or however frequently. We're that piece of the puzzle that actually teaches people how to do it, how to get it on people's tables and into their family's mouths."

BIG HORN COUNTY PILOT PROGRAM

Big Horn County's Commodity Chef was the pilot program. Two professional chefs, one from the Hideout Ranch and another with the Trapper Lodge, both

"I think this event brings awareness to poverty and hunger issues in Wyoming and the services and agencies out there to help people."

Mary Kay Wardlaw



Grandmother Myrna Bybee, mother Juanita Bybee, and granddaughter Jordon Hunt competed against others in the Johnson County Commodity Chef challenge.



Laramie County Cent\$ible Nutrition Program coordinator Karen Hruby organized the Commodity Chef event in Cheyenne. Donn Randall, left, of the Wyoming Business Council, was emcee.

in Shell, participated, says Gretchen Gasvoda, who was the CNP educator in Big Horn County.

The chefs shared cooking skills and techniques to the crowd. TCT West, the local network, filmed and broadcast the event several times on public access TV.

"I thought this event was a great success in the amount of agency people who expressed interest in participating as judges as well as comments they shared during filming," Gasvoda says. "It was a positive experience for networking and sharing each agency's needs as well as what they have to offer."

Each community had a different format. More than 65 attended the event in Buffalo, which had five families competing against each other. Niobrara County High School juniors and seniors in the culinary arts classes competed in Lusk. Teams from Community Action Partnership, Natrona County Detention Center, Salvation Army, and the ProStart Culinary Arts Program competed in front of more than 45 people in Casper. Six teams vied for top dish at the event in Uinta County, covered by the local newspaper. Two chefs from Riverton joined participants from Lander and Riverton alternative high schools in competition

at the Armory Building. Three chefs, including the governor's chef, joined students from Cheyenne's Triumph High School culinary arts studies in the Laramie County event. First Lady Nancy and then-Governor Dave Freudenthal attended the event.

PEOPLE'S CHOICE AWARDS SELECTED

CNP educators were encouraged to have an emcee speak with audience members and participants and agency representatives. The dishes were served and people's choice awards presented, including most

flavorful dish, most creative dish, fewest ingredients, least expensive, and dish most likely to make at home.

"We had a list of five or six kinds of foods that were pretty typical from a food bank," says Wardlaw. "The chefs could use those as a basis to build from. We were looking for recipes that would not have too many ingredients, not cost much, and be relatively simple to prepare. Oh my gosh, the foods were awesome."

The other effort of Commodity Chef is focusing on hunger in Wyoming.

"Another piece of this is helping people, particularly those of us who aren't limited in resources, to understand that we do have a lot of families struggling in Wyoming," says Wardlaw, "and it's not always as visible as in a large city where there might be a part of town that has a homeless shelter. Poverty might not be as visible in Wyoming. I think there are times we forget there are people living in poverty and who struggle to put food on the table. Keeping people aware of that is important for our overall program. We are there to help people through those difficult times."

"I think there are times we forget there are people living in poverty and who struggle to put food on the table. Keeping people aware of that is important for our overall program."

Mary Kay Wardlaw



Cheyenne's Triumph High School culinary arts students helped craft foods that put taste buds on notice!

Natrona County energy demonstration

Free is a great four-letter word.

That's what the Natrona County Commissioners will pay for the energy used at the Agricultural Resource and Learning Center in Casper within about a year.

A bundle of entities contributed resources to build the \$67,000 renewable energy demonstration project that has solar panel faces soaking up sun and turbine blades

reaching the Casper wind. The public can see the wind and solar energy components and how a battery and non-battery system works.

"That's the premise of this project," says Tom Heald, former Natrona County educator. "We want to literally show folks the cables, the solar panels, the wind turbine, and the construction that went into it. And what does a battery pack look like?"

GRAND OPENING

About 40 people, including the county commissioners, local legislators, and members of the public, attended a grand opening of the project in June last year.

"The unveiling is just one component," says Heald. "The Natrona County extension office is a meeting place for the entire state. People will be able to walk about the facility and see exactly how energy is being utilized and generated."

The building is one of the first extension service offices in the nation with power supplied by both wind and solar technology.

A television screen in the lobby shows the amount



Those touring the renewable energy project can see how the solar panels and wind generator can be used on- or off-grid.

of energy generated by each solar panel and by the wind turbine.

Ballooning energy prices in 2006 prompted the idea of a public demonstration project.

"When energy prices started to soar, it seemed the reasonable thing to do," notes Heald. In 2007, the county commissioners thought so, too, and approved \$10,000 toward the project if the extension service would match.

It did.

PROJECT COMES TO LIFE

Working with Gene Theriault of SunPower Energy in Casper, the project came to life.

"It essentially came out to be about a \$67,000 project," says Heald. "We wanted to show folks what a grid-tied system and an off-grid system is like. We have two of the only ways we can generate energy. We wanted to show the two technologies and the off- and on-grid system. Then, other funders came in – the UW School of Energy Resources and the Rocky Mountain Power BlueSky Grant."

The demonstration unit shows four different systems: wind and battery, solar and battery, wind and solar with battery, and wind and solar without battery.



project open for all Wyoming to view

The facility is more than what most residents would have onsite, says Milt Geiger, extension service energy coordinator.

"Folks are not used to having power generated onsite," he says. "The demonstration project is a tool where people can get behind the panels and learn about the turbine. It provides a comfort level for people who want to generate their own power."

The 6.4-kilowatt system provides about 70 percent of the energy needs of a 2,000 square-foot home, notes Heald.

"The big winner in this is Natrona County," he says. "Their \$10,000 investment will pay back within two years. Their upfront contribution will save the county thousands of dollars going into the future. Going forward, it's all free."

A real-time website will enable monitoring of power generation online. Signs will be posted at the site for self-guided tours.

WHY CONSIDER SOLAR, WIND POWER

"Renewable energy isn't cheap, but we have to put that in perspective," says Heald. Payouts will vary depending upon the system chosen and demands.


Such systems are an option if a property is being developed more than 2 miles from an electric grid. The cost of running an electrical line is about \$18,000 per mile.

"The early adopters are also putting systems in, such as professionals, doctors, lawyers, and are split into two camps: the world

is going kaput and I want to protect the environment. The other camp is the world is going kaput, I don't trust the grid, and I want to be self-reliant.

"I tend to look at renewable energy like I would planting a wind break," explains Heald. "The smartest thing people can do is do this while young in life and have it when you really need it later in life. If a young couple makes an investment upfront, by the time they are in their 40s, their energy is free."

There are many ways



The 6.4-kilowatt system can provide about 70 percent of the energy needs of a 2,000 square-foot home.

to calculate paybacks (see "How to determine if that renewable energy project makes economic sense" in the Summer 2010 *Barnyards & Backyards* magazine), says Geiger. More information about renewable energy is available at www.uwyo.edu/renew-energy/

Geiger likes the public access aspect to the project.

"It's nice to see something tangible and to discuss the problems and successes," he notes. "It's a very transparent project. And there are not many tools extension has that have a payback."



Extension educator Dallas Mount describes how to gauge a rangeland's health with Cody Wolf, right, and the rest of the ranch practicum class.

IT'S HEADS UP, HANDS ON

Ranch Practicum's up-to-date information, hands-on learning helps last session's members net about \$25 more per head for total economic impact of \$195,000

The High Plains Ranch Practicum takes participants from where pencils touch paper under fluorescent lights to where the earth meets the horizon under wide open skies.

For a good handle on the practicum, go to <http://bit.ly/r1p9Y2>, close your eyes and listen.

You'll hear cows bawling and not instructors droning.

"The applied and hands-on methods appeal to ranchers who are used to working outside instead of sitting in a classroom," says Dallas Mount, extension educator based in Wheatland. Mount, along

with University of Nebraska Extension educator Aaron Berger, started the practicum (<http://hpranchpracticum.com/>) four years ago.

Last year's class members reported the course's information would on average net an additional \$25 per head of cattle managed. The total economic impact

for producers in that class approached \$195,000, says Mount.

HANDS-ON BODY CONDITION SCORES

This warm day, sprinkles coaxed pasture aroma from the grasses and dry dirt as practicum members held notebooks in hands

that would later touch cows held in a chute to determine body condition scores. The producers were putting into practical use what they had learned under the fluorescent lights back at the James C. Hageman Sustainable Agriculture Research and Extension Center near Lingle.

"We could have sat in a classroom and looked at pictures of cows," says Berger, "but when you get out and actually get your hand on a cow, see how that feels, let her out of the chute and you see the differences in cows and you talk about it with everyone else – all of a sudden it becomes much more real when you use all your senses to acquire that knowledge than just a picture on a screen of what you are looking for."

Participants body scored about a dozen cows this day. The cows were held in a chute while members touched and pushed, then observed the look of the cows as they strode out of the chute and invariably turned to look back at those looking at them. Berger would discuss each cow's characteristics with practicum members before she would be put in a pen and

the next cow was held in the chute.

PRODUCERS LEARN NEW TRICKS

Steven Lease, a producer from near Bridgeport, Nebraska, was asked if an old dog could learn new tricks.

"Difficult. It's difficult," says Lease, who has a 200-250 head cow-calf operation between Harrisburg and Bridgeport. "The things that we learn we like to stick with and so a lot of times you get somebody to tell you something new and, unless there is really a good reason to change, it's hard to change an old habit."

He plans to.

"I'm definitely learning things," says Lease. "Yesterday, we talked about grasses and went out in the field and looked at examples of native grasses. I never really realized, even though I know there are a lot of species out there, how much of a difference in diversity there is in a pasture."

The Wyoming practicum was adapted from the successful practicum built in Nebraska. That practicum is centered in the Sand

The time, energy, fuel and support of friends and family were worth every bit. This practicum may have saved our ranching operation from folding.

– Practicum participant



A gorge allows ranch practicum members insight into what's beneath the rangeland surface.

Hills environment.

"We focus on a broader ecosystem and have a more in-depth focus on ranch economics," says Mount.

That afternoon's body condition exercise was meant to put all participants on the same page of a definition of a body condition score.

GETTING EVERYONE ON SAME PAGE

"When we say a cow is a 5, they can understand what that means and what kind of condition she is in," explains Mount. "The idea of the practicum is that we make decisions on the ranch from the system perspective, and systems



Aaron Berger, University of Nebraska Extension educator, says he hopes the practicum provides take-home tools ranchers can put to immediate use.

Too busy being busy?

The practicum meets eight times from June to the first week of January with sessions at the James C. Hageman Sustainable Agriculture Research and Extension Center near Lingle and the Panhandle Research and Extension Center at Scottsbluff, Nebraska.

Instructor Aaron Berger says he at times hears people say they have no time to attend workshops.

"I understand ranching is busy," says Berger. "But, if you are so busy you can't take away any time, why do you think anything is ever going to change on your ranch if you don't change some things?"

"I hope people gain some tools here that allow them to be effective managers to the point they can build more margin time in," he continues. "If you are so busy you never have time to leave and never examine why you are so busy – is there anything you could do management-wise that could change that and would make life more fun and enjoyable? – then I think you missed an opportunity in participating in something like this."

The High Plains Ranch Practicum is supported by a grant from Risk Management Education.

perspective means we are not just looking at nutrition, not just at reproduction, not just the range and forage or the economics, but looking at all these things together as a ranch system."

Body condition scoring is only one tool that allows Mount, Berger, and participants speak the same language. Participants developed their own grazing plans for an example ranch.

"When you have one or two times to go through a plan and do it yourself, I think it takes people to the point to where you can say 'I can do this. I can take this home.' Same thing for the body condition scores," notes Mount. "As we move through the practicums, we really try to focus on a lot of hands-on activities where we actually have people do the things we would like them to take home and learn and be able to apply."

NOT ONLY PRODUCERS IN PRACTICUM

Ranchers aren't the only participants. Joe Davis, a realtor from Casper, had a notebook in hand that day. He handles farm and ranch properties and decided to enroll in the practicum after

"As we move through the practicums, we really try to focus on a lot of hands-on activities where we actually have people do the things we would like them to take home and learn and be able to apply."

– Dallas Mount

hearing about it from extension educators.

"This is a great program," says Davis, who was not raised on a farm or ranch. "What I'm learning here is all new – to be able to talk to someone about the way you guys look at it and I look at is separate businesses. I look at the land as an asset and what can we do to financially restructure and recapitalize the operation. This is something I need to know so that, when I'm talking to a rancher, I know if he needs to come down here and go to school. Almost every one of them I talk to does."

Laura Pulver, left, and Jennifer Merrill turn their attention to a cow and apply what they learned about body condition scores.



SUCCESS BASED ON PRODUCER FEEDBACK

Mount and Berger say they enjoy feedback from the ranchers after a practicum.

“We gauge our success upon the feedback the rancher participants provide us,” says Mount. “Did we provide you with new tools and knowledge to make your ranch business more successful? Is your ranch more profitable as a result of attending?”

They’ll also get phone calls, says Berger.

“Like, ‘Hey, been thinking about making this decision and, as a result of the practicum, this is why we’ve changed some things,’” he relates. “I’ve had a number of different comments from people who make management decisions like changing their calving dates, weaning, changing what they feed in terms of supplement – really dollar-type savings that are

making a difference in their profitability. That is really gratifying.”

Some selected responses from participants:

- The time, energy, fuel, and support of friends and family were worth every bit. This practicum may have saved our ranching operation from folding.
- The practicum has opened my eyes to a number of issues I never paid attention to.
- The practicum encouraged me to analyze my operation from nearly (if not all) aspects. It’s something everyone needs to take the time to do. The practicum gave me some organization and a “path to follow” to start putting steps together.
- There is probably not a better investment in terms of return on dollars spent than being here. The rest of my family needs to be here.



Living & Working on the Land

THE BUILDING BLOCKS OF SUCCESS

C
Chicken tractor.

No, not a poultry production service but a portable chicken coop, and, while the chickens are not in the driver's seat, they do add a helping hand to the work.

Two wheels attached to an enclosed coop allow a producer to roll it within a pasture, where the chickens in the coop then fertilize, till, and eat bugs on the land.

Helpful tips on how to build the chicken tractor and many others were the focus of the Living and Working on the Land Conference (LWLC) conference aimed at helping new producers.

Led by the University of Wyoming Cooperative Extension Service (UW CES) and groups like the Wyoming Business Council, LWLC brought new producers together to connect while helping them better manage their land and production.

As new producers take on businesses and change the face of agriculture, conference planners offered



The ACRES (Agricultural Community Resources for Everyday Sustainability) student farm at the University of Wyoming is increasing interest in local foods production.

the training and resources to help, notes Cole Ehmke, extension specialist in agricultural entrepreneurship and personal finance in the Department of Agricultural and Applied Economics.

The typical agricultural producer has been a farmer

with a large commercial acreage, says Ehmke.

New producers now include women, American Indians, and producers on smaller residential acreages, he says. These new groups may not have an agricultural or production

background. The conference was directed at helping them better manage their property and production.

"People did learn a lot, and it convinced people to look seriously at how they market," Ehmke says.

The conference drew 131 participants from Wyoming and bordering states. There were several from Nebraska, Colorado, and Montana and even a few from as far as Minnesota, Ehmke says.

The conference "brings together a bunch of folks with a wide variety of backgrounds and who are all interested in pursuing some kind of enterprise. It was a good variety of people and interesting speakers, and people got a lot out of it," says Jenny Thompson, a UW CES extension educator and small acreage outreach coordinator.

JOEL SALATIN DRAWS ATTENDEES TO CONFERENCE

Ehmke says Joel Salatin's previous keynote

addresses encouraged participants to come; people either came to hear him speak and had an interest in the topics or were intrigued by the workshops at the conference, and Salatin's appearance clinched their decision. Salatin, who operates Polyface Farms Inc., in Virginia, is a well-known farmer and lecturer, known for his innovative farming and marketing techniques.

Barbara Hauge of Wilson liked that Salatin was the keynote speaker, and said, "I liked the energy of Joel Salatin's presentation and many of his ideas."

Salatin and the conference focused on sustainably managing land resources, including the interaction between land animals and crops, and developing better marketing techniques.

These techniques will help producers better market their products, but

"Many people were interested in getting ideas, interested in getting started, and interested in what other people were doing,"

– Cole Ehmke

Ehmke says some attendees didn't have a profit motive but wanted to get a model for what good management looks like.

"Many people were interested in getting ideas, interested in getting started, and interested in what other people were doing," Ehmke says. The conference allowed new producers to learn how to manage their properties while also allowing them to connect with other new producers

and make important networking connections.

New producers "were interested in learning how to do it," and more experienced producers had the chance to "learn how to do it better," Ehmke says.

BREAKS ALLOW DISCUSSION, NETWORKING

One way producers were able to learn and network was through question-and-answer sessions at the end of the lectures, says Dallas Mount, a UW CES educator and presenter on farm and ranch management economics at the conference.

He also says the breaks between sessions were fairly long so participants were able to interact with presenters and each other.

"This time between breaks is one of the most beneficial parts of conferences," Mount says.

The conference brought in a diversity of viewpoints and topics.

"It covered some practical things that applied to the participants' lives," Thompson says. "It allows



Joel Salatin

people to meet other folks who are doing things in the region, so it is a very good networking opportunity to get ideas for enterprises."

Hauge also liked being able to network with colleagues, saying, "I liked being around people who are looking to improve and try things."

Hauge also enjoyed speaker Diane Peavey's presentation on creative solutions to maintain operations in an increasingly suburban society titled, "From sheep to breathing space: Reassessing what we have and how it can work for us."



PRESENTATIONS AVAILABLE ONLINE

Want to see a presentation again? Videos of presentations at the Living and Working on the Land Conferences are at <http://blocksofsuccess.uwagec.org/>

Hauge said Peavey's presentation and teaching through storytelling were the most beneficial and interesting parts of the conference.

The topic was just one of many different topics covered during the conference. Participants were interested in producing just about anything the topics covered, but there were several participants who expressed they would have

liked a session on bee keeping, which may be an idea for the future, Ehmke says.

Other topics covered included fruit and herb production in Wyoming, direct marketing and marketing claims, and farming with a sharp pencil – a financial management workshop showing fixed and variable costs of production and the different points of profitability in producing.

TOURS WELL-ATTENDED

The conference taught these areas through hands-on experience in a Wyoming setting, including local tours and food. Ehmke says the participants immensely enjoyed the tours.

The tours to the James C. Hageman Sustainable Agriculture Research and Extension Center near Lingle and to RoLynn Acres' and Meadow Maid Foods took place at the same time

and participants chose one to attend. Ehmke says participants wished they could have attended both, so future conferences may hold only one main tour and one preconference tour.

Hauge says the most beneficial aspect of the conference was the field trip, as well as hearing from the speakers and attendance at the forums.

Changes other than tour adjustments will be minor for future LWLC conferences, Ehmke says. Future conferences may have a post-conference workshop to show participants how to actually carry-out some of the procedures learned during the conference.

Ehmke says the mix of session types, presenters, and tours all seem to work and that organizers would like to keep that solid combination. Changes in future conference will also depend on funding, Thompson says.

USDA Risk

Management paid for the conference and for the distribution of materials for attendees and for those unable to attend the conference. Part of this extended distribution included videotaping sessions and posting them online at <http://blocksofsuccess.uwagec.org/>.

ATTENDEES SAW BUSINESS OPERATIONS DURING TWO TOURS

TOUR 1. The tour started at RoLynn Acres', owned by Ron and Lynn Pulley, where participants viewed Wyoming Heritage Hogs, the mule-footed hog, a heritage breed raised and then sold directly to consumers. Participants then saw Meadow Maid Foods, a community-supported agriculture venture of market garden and grass-fed beef meat sales. The

tour ended with a stop at the Torrington Thursday Farmers Market.

TOUR 2. The tour started at the James C. Hageman Sustainable Agriculture Research and Extension Center (SAREC) near Lingle. Extension beef specialist Steve Paisley overviewed livestock research. Production economics/systems analyst John Ritten and research associate Jerry Nachtman discussed renewable energy projects. Bob Baumgartner, farm manager, discussed research to reduce iron chlorosis, the yellowing of plant leaves due to iron deficiency. He discussed this research with pinto, black, and Navy beans by planting different types of grass species, like annual ryegrass and oats.

Other topics included the skeleton of a newly constructed high tunnel and a new, green dormitory.



*Professor Pete Stahl, left,
during a reclamation
workshop.*



TRAINING WYOMING:

Responsible reclamation and restoration

When land is not properly restored after mineral extraction, it can become useless and lose its value.

Unreclaimed land can continue to degrade the environment in nearby areas.

Researchers and faculty members in the Wyoming Reclamation and Restoration Center (WRRC) teach through outreach workshops the importance of restoring disturbed land after extracting minerals.

Restoration 101 topics: soils, weed problems, wildlife issues, water and hydrology, revegetation, and monitoring.

“There is an obvious need for these workshops,” says Rachel Mealor, University of Wyoming Cooperative Extension Service (UW CES) range specialist. When economic times are difficult, reclamation and reclamation experts can be the first to be let go in an energy company.

“We need to educate others on the basics of removing topsoil and

seeding,” she says. “Specialists know this, but others may not. We need to educate as many people as we can.”

Reclamation 101 courses have been taught in towns including Rawlins and Gillette to increase awareness and improve reclamation techniques.

Reclamation 101: Components of Successful Reclamation delivers restoration basics and offers

suggestions when developing a reclamation plan after extracting, says Mealor. The course teaches the importance of managing water, wildlife, weeds, and soil in disturbed ecosystems, she says.

Each course of the same level offers similar information, but workshop specialists try to tailor information to the issues in that region. Workshops have presented information about reclamation disturbances with natural gas extraction, problematic soils in southwestern Wyoming, and problems with surface coal mining and bentonite mining, says Pete Stahl, director of the WRRRC.

The idea sprang from WRRRC's three-fold mission



Professor Pete Stahl is director of the Wyoming Reclamation and Restoration Center.

(see story page 29). The workshops provide a background in reclamation to professionals in the natural resources field, thus fulfilling item three of the WRRRC mission statement, says Stahl.

Helping to fulfill this mission is Assistant Professor Jeff Beck, wildlife specialist for the trainings. Beck discusses the effects of energy development on wildlife like sage-grouse, mule deer, elk, and pronghorn in the 101 course.

Beck says the training teaches the direct effects on wildlife, like habitat loss and mortality, and teaches about larger, indirect impacts. Those can include behavioral changes in wildlife to avoid an area that has undergone extraction without proper reclamation. Beck also lectures about man-made effects like noise and traffic that make the area less friendly to wildlife.

Weed control and prevention is also covered.

"We talk about how to develop strategies for managing weed problems that might negatively impact reclamation," notes Brian Mealor, extension weed specialist.

Some of these strategies help prevent weed

populations from growing in reclaimed areas, controlling weed populations already present, and identifying problem weeds in rangelands and areas of reclamation, says Mealor, an assistant professor in the Department of Plant Sciences.

The training also includes experiential learning experiences. A recent session visited an extraction site to evaluate soils, Stahl notes.

The team evaluated how suitable the soil was for reclamation in the area. "We dug a soil pit and evaluated the properties of the soils we exposed by testing the soil's pH balance, electrical conductivity, and texture," says Stahl, a professor in the Department of Renewable Resources. "Some areas are so poor it may be hard to

reestablish vegetation, so you may need a different site [to help restore it]," he says.

Following the evaluation, the team recommended leaving the soils in place and replacing the topsoil. Topsoil is removed prior to extraction and must be replaced to replant vegetation, Stahl says.

This type of applied instruction is appreciated.

"I really liked the hands-on approach, especially with the soil," notes Leena Horton of EnCana Oil & Gas in Riverton. "So much is dynamic with the soil, and we tend to forget. The workshop worked as a refresher course for me and was very helpful in the way that it was presented," says Horton, a UW College of Agriculture and Natural Resources graduate.

The workshops and WRRRC are made possible through funding from the state of Wyoming. The WRRRC was established in the renewable resources department by faculty members researching reclamation and restoration, with research prior to the center dating back to the 1970s, Stahl says. In the early 2000s, initial funding came from the dean of the College of Agriculture and Natural Resources. The state fully funded the center in 2006 with a \$2 million grant by Gov. Dave Freudenthal from the Abandoned Mine Land fund. The College of Agriculture and Natural Resources is working to raise another \$10 million to create a permanent endowment.

Between 20 and 60 people have attended each of the 101 courses from agencies like the Bureau of Land Management (BLM), private industries, natural resource extraction reclamation consultants, and government regulatory agencies, Rachel Mealor says. Thirty-nine participants attended the 201 workshop held in Rock Springs from similar agencies.

Brian Mealor said the opportunity for attendees to meet in a forum setting is one of the greatest benefits of the trainings.

"Different groups get together and discuss the challenges they face with reclamation and also identify areas where we at the University of Wyoming can help them improve their reclamation success," he says.

Beck notes people have good questions and the courses are a good time for them to meet each other.

"I think it gets people who are practitioners into one forum atmosphere where we all look at the whole process of reclamation and wildlife," Beck says. "Here, all of the issues are discussed, and we present what we know. We are trying to



Extension soils specialist Jay Norton examines a soil profile during a reclamation workshop.

find better solutions for everyone."

One solution this forum setting provided for arid areas like Wyoming was to take smaller bits of subsoil and obtain better reclamation from them rather than diluting the topsoil with so much subsoil, Dennis Doncaster of the Rock Springs BLM office says.

Doncaster says this open setting and

problem-solving time was the most beneficial aspect of the training.

Horton also said that networking was the most helpful part of the workshops, including "getting to meet with other people in the industry and talking about the problems they've come up against and what some of their solutions have been."



Wyoming Reclamation and Restoration Center

The Wyoming Reclamation and Restoration Center is an interdisciplinary program housed within the College of Agriculture and Natural Resources and works closely with the School of Energy Resources. Its mission is to:

1. Train students to facilitate land reclamation and restoration projects based on applied and theoretical ecological principals
2. Research best management practices in reclamation of disturbed lands
3. Provide extension and outreach to clientele seeking practical solutions for restoring, reclaiming, or rehabilitating disturbed lands.

FARM TO PLATE PROJECT ENGAGES



Youth get a first chance to taste some of their produce.



An informal survey showed more than 75 percent of the 50 students in the K-5 afterschool program had never harvested or had eaten a fresh vegetable from a garden



PINEDALE YOUTH, RESIDENTS IN FOOD PRODUCTION

A Pinedale afterschool program that has youth raising vegetables for themselves, their school, and their community hits all four H's in 4-H.

They're using their **heads** to learn financial and marketing skills, their **hands** to raise vegetables that will improve **health**, and their **hearts** for service to the community.

The Farm to Plate project sprouted from a Sublette County Afterschool Advisory Board brainstorming session focusing on ways to wean children from sedentary lifestyles that can lead to obesity, says Robin Schamber, 4-H educator in the county.

Culprits include video and computer games, television viewing, prepackaged and fast food on a regular basis, and lack of exercise. Coupled are trends of decreased outdoor activity and unstructured play and an increase in attention deficit disorder.

"As several members of the Sublette County

4-H Afterschool Advisory Program had long desired to implement a community garden in the Pinedale area, this quickly became an area of focus for this group," says Schamber.

MANY YOUTH ID GROCERY STORE AS FOOD SOURCE

An informal survey showed more than 75 percent of the 50 students in the K-5 afterschool program had never picked or had eaten a fresh vegetable from a garden. "In fact," says Schamber, "many of

the participants could only identify the grocery store as a source for obtaining produce."

Schamber and Laurie Latta, who provides consultative services to UW for the Sublette Community Partnership Program, applied for a Learn and Serve grant through Serve Wyoming to implement the Farm to Plate project. The grant emphasizes youth would be in an intergenerational and community service learning project

that would result in raising produce for healthy snacks in the program and made available for their elementary school's salad bar.

The children also would learn the value of citizenship by giving back to their community through produce donations to local food banks.

There was more. The students would learn business skills by selling the produce at farmers markets as an entrepreneurial business venture.

"The overarching goal of the business aspect of the project is to invest the youth in their own program as well as develop business and real-life decision making, marketing, planning and financial management skills," notes Schamber.

HIGH TUNNEL EXTENDS GROWING SEASON

Harsh weather conditions required the youth to extend the growing season. Jeff Edwards, UW CES educator in Goshen County, agreed to be a collaborator for the project and held a



Beds are prepared and planted in the greenhouse.



Afterschool program youth set up their booth and sell produce at the farmers market in Pinedale.

demonstration project to build a high tunnel greenhouse funded through the Learn and Serve Grant by Serve Wyoming.

The project ignited community involvement. A local businessman donated nearly an acre of land near the elementary school, and the town of Pinedale gave permission for the project to use water from a nearby stream for irrigation.

Community members assisted youth in developing business and marketing plans, and the youth created a logo for their business.

A group of 22 volunteers assisted by Edwards erected two high tunnel greenhouses.

"As word of the project began circulating, many new collaborators within the community signed on," notes Schamber.

Local Boy Scouts volunteered to build raised planting beds, the town provided liability and structural insurance, the local Soil Conservation District agreed to assist with landscaping and design, and many gardening enthusiasts dug in.

SEEDS SOWN IN AUGUST

By that August, the first seeds were sown. By late fall, youth harvested fresh radishes for the school cafeteria salad bar. Produce from their final harvest was donated to the local food bank.

"We have more and more collaborators who have come on board," says Latta. "They are interested and watching it grow and unfold. It was really gratifying to go to the open house they held to see the plants in the greenhouses, and the youth were having a contest to name the greenhouses. It has come a long way since when we dreamed this up."

The winning name? Wind River Gardens.

Planning for next year is already under way, notes Schamber. The goal is to market produce at the local farmers market. Requests for money to pay for equipment to provide green power to the water and

venting systems – and serve as community education on renewable energy – have already gone out. Eric Peterson, former Sublette County extension educator, was instrumental in assisting with the alternative energy aspect of the project as well as putting together an electronic data logging system that will enable a number of youth research projects.

Because the afterschool program primarily runs through the school year, the youth are making plans to keep the gardens productive through the summer by opening them up to community members in exchange for a share of their produce to sell at the local farmers market.

Latta believes national emphasis in local foods and healthier lifestyles has played a role in the community involvement.

"I think it is timely for what is going on nationally and in our own community," she says.

FOOD PRESERVATION ENJOYS RESURGENCE IN SHERIDAN COUNTY

Local demand prompted extension program

While Mother Nature baked, food preservation course members canned.

Sheridan streets sizzled with typical summer temperatures and preserving fall produce seemed far away but about a dozen people in Kentz Willis' course were getting prepared.

He says local demand prompted the food preservation program.

"This was an interest in the community," says Willis, nutrition and food safety educator. "One of my volunteers, Adrienne Tatman, called me my first week on the job and asked if I did preservation workshops. I said, 'Well, not yet, but I should.' We put this class together, and it went really well. There's been a good response from the community – we're filling up classes about every year."

Mothers and daughters, husbands and wives, and



Patty Bell-Usher learns how to can salsa during a food preservation course in Sheridan.



Young Ava Johannesmeyer has hands-on canning instruction.

singles interested in learning or relearning how to preserve meats and produce fill class rolls.

HANDS-ON TRAINING AND INFORMATION

Volunteer Peggy Cullen, a former Family and Consumer Sciences educator, offers her expertise in the hands-on canning while Willis reinforces important preservation information by using a Jeopardy-like game. For example, members learn

how much longer produce should be in a boiling water bath per 1,000 feet increase in elevation to kill dangerous microorganisms.

"I like giving them some confidence to go home and try it and feel they can do it," says Cullen, who that night was helping people chop tomatoes and onions and preserve salsa using a boiling water bath. Course members prepared and placed salsa in canning jars

then gently lowered them into the boiling water bath. After a prescribed time (per elevation!), the jars were again gently lifted out of the water and placed on a counter to cool. A unique "click" – the sound of the lids sealing – prompted a laugh from Cullen. "That's the sound you want to hear – the sweet sound."

She had shown members how to make jelly earlier in the class.

INTEREST HAS INCREASED

"I think what's happened is there was a period when no one was interested," Cullen says. "Now, there is resurgence in growing food. I think there is a generation that is picking it up again."

As science progresses over the years, some techniques previously used are no longer considered safe. For example, paraffin is not used to seal jars. Mold could infiltrate tiny cracks in the wax. "We now know those molds can really be harmful to immune-compromised people," Cullen says. "You can't see the mold, but it can be down in there."

Sheridan resident Paula Wittmer used to can produce when she and her husband, Terry, lived in Iowa. That was 11 years ago.

The couple retired to the Sheridan area.

"I figured I could use a refresher in pressure canning, and I didn't know the differences between Iowa and here would be quite so much as they are, particularly with the elevation."

Willis says the emphasis is on food safety.

"We're trying to teach them to understand the recommended procedures," he notes, "why they are



Food and safety educator Kentz Willis uses a Jeopardy-like game to build food safety and food preservation knowledge.



Former extension educator Peggy Cullen says she believes food canning and preservation is undergoing resurgence among the younger generation.

recommended, and also where they can find good, reliable resources on the Internet as there are many sites that are not so good. There are a lot of really great extension websites.”

EXTENSION PROVIDES CORRECT INFORMATION

Cullen echoes Willis.

“If not here, where will they get the information?” she asks. “I don’t know what’s out there on the Internet. It’s kind of neat for us. This gets back to our basics. That’s how women got into it. For the men, it was with better yields. For the women, in the early 1900s, it was the canning clubs and teaching them what they knew then as safe canning. So, it’s kind of

coming back to some of those basic things.”

Cullen was with the extension service 35 years, starting in Washington state then Oregon, then Colorado State University before joining UW CES in Natrona County in 1978. She retired in 2005 but did not hesitate to help when asked.

“I missed the contact with the people,” she says. “One of the couples here tonight is here because they are my friend’s egg customers. I happened to get to visiting with them when they came to get eggs and told them about the workshop. And, when we do farmers markets, we are providing a lot of local food for people. It’s very rewarding.”

Sheridan has two farmers markets and a strong movement in local foods, says Willis. “Our attendance here in the class reflects that.”

Still, he never really knows what is retained by course participants when they walk out the door.

“I like when we receive feedback at the end of the class,” he says. “I always like it when I run into them in town later on and they say they are canning now or they changed the way they were doing things. It feels good when they come back or recommend a friend.”



Ashley Roberts and Matt Garriott know the answer to a Kentz Willis question.



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