



Welcome to Lewis & Clark County Extension

The Extension Service is a partnership between Lewis & Clark County, Montana State University and the United States Department of Agriculture. This three-way partnership provides educational programs in the areas of Agriculture/Natural Resources, 4-H Youth Development, Community Development and Family and Consumer Sciences. The Lewis & Clark County Extension Office is located on the west side of the Exhibit Hall at the Fairgrounds. This location provides easy access, good parking and a friendly atmosphere for the public.



Brent Sarchet, Janet Cerovski, Allison Flynn, Catherine McNeil

Building Partnerships with the Career Training Institute

The YouthBuild program is a collaborative project of the Career Training Institute (CTI) and the Helena College University of Montana. The program helps low-income young people ages 16-24 work towards a GED or high school diploma while learning job skills by building affordable housing for homeless and low-income people. The program encompasses all the following: alternative school, job training and pre-apprenticeship, community service, leadership development, civic engagement, youth development, long-term mini-community and community development. This year, YouthBuild built a house in the new Glacier Point subdivision north of Helena. After the house was completed, the Extension Office supervised the group in landscaping. The students learned the basics of irrigation systems and installation, landscape design and proper planting techniques. They gained hands-on skills that will benefit them throughout their lives. YouthBuild is an entirely youth run program where they make the decisions regarding their experience. The Extension Office also provided programming on parliamentary procedure to help the group effectively run their meetings to make group decisions.



Extension Agents also provided free workshops to CTI clientele. One workshop helped participants remain thinking positive through tough economic times. It provided activities and discussion to assist them in looking towards a positive future. Another workshop provided family financial budgeting and planning ideas and resources. The participants learned how to effectively establish a family budget and work towards financial freedom.



The YouthBuild house before and after landscaping.

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4-H Youth Development

Making a Difference in the Lives of Youth

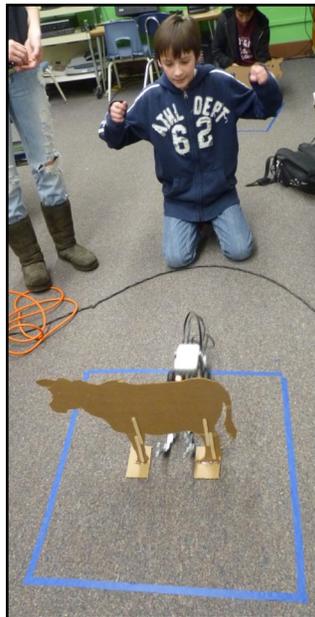
Lewis & Clark County Extension strives to make a difference in the lives of youth through various programming efforts. In 2012, Extension educators reached 774 youth in Lewis & Clark County through educational programs using the following delivery methods:

- Organized 4-H Clubs – 389 members
- Special Interest/Short Term Programs—190
- School Aged Child Education Programs—168
- Overnight Camping Programs—101
- Day Camping Programs—36
- School Enrichment Programs—10

Strengthening Afterschool Partnerships

Through partnerships with schools, 4-H can be delivered in more than one way and impact the lives of more youth in the county. 4-H Afterschool experienced huge growth during this past year by providing programming at six elementary schools in Lincoln and Helena. The primary area of programming was science, specifically robotics, gardening and aerospace. In this partnership, 4-H brings research based curriculum to a new audience and strengthens the existing program. Most of the programs were at schools with 21st Century Learning Centers. These are low performing and high poverty areas. 4-H Afterschool can bring resources and opportunities to youth that they may not otherwise have access to. Program coordinators at afterschool sites saw changes and impacts with the youth involved:

- “Changes and impacts I witnessed in my group were my kids willingness to work with different partners/groups because the project was so fun. They were exposed to and learned a lot of science they might not otherwise have been introduced to and got to stretch what they already knew. Kids have fun and learn good stuff that they can apply in other areas of their lives—and they build other relationships—not just within SACC [School Aged



A student at Bryant Elementary School in Helena celebrates success with his robot.

Child Care] but with folks outside their program/in their community.” -Liese Zebrun-Gero, Central Elementary School, Helena

- “The robotics lessons incorporated science, math, technology and creativity problem solving. I also saw the students working together in groups with minimal behavioral issues. They were very eager to learn and look forward to the days when the program was held. I saw the students parents involved in the process which is a goal of the 21st Century program an also very difficult thing to happen at this school.” -Cori O’Connell, Bryant Elementary School, Helena
- “I have observed the 4-H afterschool program is an excellent resource and an asset in our curriculum bringing in new activities and creating new interests in the children.” - Susan Held, Jefferson Elementary School, Helena

Looking into the future of 4-H Afterschool in Lewis & Clark County, the program can only continue to grow. There are eleven public elementary schools in Helena alone plus one in East Helena, Lincoln and Augusta. Future challenges will be making sure there are enough resources to deliver high quality programs to match the need.



Students in Lincoln plant vegetables in the community garden during an afterschool program.

True Colors of 4-H Leaders

Being a 4-H Volunteer Leader isn’t always easy. However, the Extension Office is dedicated to providing the tools and resources to leaders to make their job as simple as possible. In



4-H Leaders, Dennis Deaton and Cody & Susan Mitchell, seem to enjoy the training.

March, a training was offered which over thirty people attended, both youth and adults. The True Colors Training was taught by Rachel Vardiman, 4-H/Youth Development

Educator, with the University of Wyoming Extension. This is a personality leadership assessment where leaders can learn more about themselves and how to better work with others. The goal of the program was to increase teamwork in the 4-H program and provide skills that are useful in multiple areas of 4-H and life. The program ended with leaders being able to take this knowledge and use it to enhance their 4-H program areas whether it be clubs, projects or events. Of those who completed the evaluation, 92% planned to use something they learned. Examples cited include improving club meetings, working with 4-H committees and improving the 4-H Council and Foundation. Participants also cited that the most valuable things they learned were “knowing types of personalities and how to deal with them” and “remembering that everyone has strengths in a group”.

Leading Camp Counselors to Success

Each year dozens of excited young 4-H members gather at Lewis & Clark County 4-H Camp. This is their time to learn new skills, make friends and have fun. It is also the culmination of months of hard work by the teen Camp Counselors who organize the big event. These Camp Counselors are responsible for the educational programming, recreation, group dynamics and well being of the campers. This year, the Extension Office along with 4-H leaders worked to redesign the Camp Counselor Training to give the teens the tools they need to be successful at camp. At every camp planning meeting, counselors also went through a training session. Topics included youth development, basic camper needs, team building, responsibilities, risk management and more. The Counselors then used their skills to plan and execute a camp to be a positive learning environment for young campers.



Counselor, Shane Mitchell, assists camper Molly Stetzer during an archery workshop.

Enhancing Life Skills in Market Livestock 4-H Projects

Even though only a fraction of Lewis & Clark County 4-H members live on a farm or ranch (2%), youth involved in market livestock projects are building life skills which they will use later in life no matter what career path they choose. These life skills learned include responsibility, goal setting, record keep-



MSU Scientist, Lisa Surber, uses ultrasound technology to evaluate carcasses traits for Delaney Krenning's lamb at the Fair.

ing, decision making and communication. Some of the most popular 4-H projects in the county are swine, beef and sheep. The members working with a majority of these animals live on small acreage properties or use facilities provided by friends or neighbors. Opportunities are provided to these youth so they have the most accurate and up-to-date information necessary for them to raise their animals.

All 4-H members with market livestock participate in Quality Assurance (QA). QA teaches youth about proper care and management, handling techniques, carcass and product quality and animal health. This year over ninety youth were recertified or newly certified in wholesome quality assurance practices. Over 90% of participants planned to use something new they learned in their 4-H project as a result of the training.

The Extension Agents teamed up to conduct a Feed & Nutrition Workshop. In the past, this workshop was provided by a local feed company. For the first time, participants were able to receive unbiased research based information to help make healthy nutrition choices for their animals. Nearly 92% of participants planned to use information gained at the workshop. Additionally, 4-H volunteers provide many species specific workshops to help members continue to gain knowledge of their animals on a variety of topics.

After the Fair, members with market livestock received data on their carcasses. This year, 24 swine, 6 lambs and 6 steers received awards for high quality carcasses. Also for the first time ever, members with



4-H members, Noelle Hamilton and Logan McNeil, measure beef carcasses after Fair.

meat goats received evaluation data on their animals. This data helps members evaluate how successful they were at caring for their animals throughout their project. This helps them

choose livestock in the future as well as adjust their care and management. The ultimate goal is to provide a high quality product to consumers while building life skills that youth will use no matter what they do for the rest of their lives.

Impacting Military Kids Through 4-H

Through the 4-H Military Partnership Grant and the Operation Military Kids Camp Grant, Lewis & Clark County has been able to bring 4-H projects and programming to more than 100 military youth in various ways. By partnering with the School Aged Child Care (SACC) program in the Helena School District, military kids were able to learn about Robotics and Aerospace 4-H projects. At the National Guard Yellow Ribbon events, military youth learned about photography and were able to work on the Mobile Technology Lab to create Zoom Albums for a deployed loved one. 4-H provides a stable program and sense of belonging to military kids no matter where they live.

One of the highlights of the program was the Speak Out for Military Kids event. Youth, both non-military (4-H) and military, spent a weekend retreat planning, organizing and developing this event. On April 7 at Grandstreet



General Walsh talks to a military child about taking care of his family during his dad's deployment at the Military Child Celebration.

Theatre, the kids presented "The Diary of a Military Kid – A Celebration" to a very receptive audience of more than 150 people, both military and non-military.

Finally, through the Camp Grant, Lewis & Clark County was able to provide two overnight camps for military youth. One was for youth 6-10 years old where they learned skills from the following 4-H projects: food & nutrition, photography, outdoor adventures and communications. The other was a family camp that provided, not just youth but entire families, access to 4-H projects by having them work on them together. The parents were given the opportunity to see firsthand what 4-H has to offer and why it is a great program.

Helping Teens Prepare for the Next Step

Both Extension Agents teamed up again to provide an opportunity for teens to explore careers in agriculture and gain



4-H members look at aquatic insects while learning about careers from Fish, Wildlife & Parks Fisheries Biologist, Trevor Selch.

skills to prepare for the next step after high school. Participants visited various agricultural organizations and businesses in the Helena Valley to learn about different career opportunities.

They also learned about different educational options after high school, talked to current college students and were provided resources for financial aid. As a result of the program, 100% of the participants were more aware or somewhat more aware of different agricultural career opportunities, educational options and college majors. This was the second year of this program to fill a need in the community to expose youth to agricultural careers, which go beyond traditional farming and ranching. This year's program explored fisheries biology, veterinary science, organic farming, agricultural communications, and culinary arts.

Science Solves Crimes

In a country where there is a pressing need for young people to enter career fields related to science, engineering and technology, 4-H is exciting and engaging youth in these areas. In August, the Extension Office held the second annual 4-H Science Day Camp. At the camp, participants became spies for a day to learn how to use science to solve crimes. Additionally, campers learned many life skills that will benefit them later in life. Skills learned included problem solving, communication, teamwork and critical thinking. In fact, 90% of participants felt they could use information to solve problems, knew how to solve problems and thought science was fun as a result of their experience at camp.



Participants in the 2012 4-H Science Day Camp: Crime & Spy Science.

Agriculture, Natural Resource & Family & Consumer Sciences

Master Gardener Program

In the spring, Level I and, in the fall, Level II of the Master Gardener Series was taught in Helena. The Master Gardener classes continue to be well received by the public. Incorporation of local experts coming to the classes and visiting with the participants contributed to the classes' success. People attending the classes appreciated the opportunity to ask the local experts questions about gardening in Lewis & Clark County.

Frequent comments from class participants included: "I am utilizing the information I learned everyday;" "I am able to help my neighbors with their gardening and landscaping questions and projects;" and "My garden is much more productive as a result of taking the class."

Past class participants have started a business growing produce and are now selling at the Helena Farmers' Market and through the Helena Local Foods website. Class participants have lent their expertise, knowledge and sweat through various gardening and landscaping projects throughout the county including collaboration work with the Helena Community Gardens, Exploration Works, Food Share, Splashes of Joy, elementary schools and the Extension Office. Some of the projects the Extension Office and Master Gardeners have partnered on include: building a community hoop house at the People's Garden which is located at the Fairgrounds, renovating the pond and pruning trees at Broadwater Elementary School's habitat area, organizing a Master Gardener Family picnic and garden tour, researching, sourcing and planting historically accurate plant species for the Original Governor's Mansion, building an All American Selection Garden, and assisting the Fish Wildlife and Parks Wild Center with their outdoor plant exhibits. The Growing Zone newsletter, a col-



Montana Master Gardeners at 2012 Master Gardener Conference in Rexburg, ID.

laboration of the Extension Office and local Master Gardeners, continues to be published five times a year and is distributed to the public through local businesses. Master Gardeners and the Extension Office continue to have a booth at the Helena Farmers' Market to answer gardening questions and provide informational handouts to the public.

The Extension Office took a group of Helena Master Gardeners to the Master Gardener Conference in Rexburg, Idaho this summer. The conference was one day filled with amazing gardening and horticulture educational classes. Everything from plant propagation to landscape design and tree pruning was offered. The Extension Agent and Master Gardeners came away with some great ideas for future gardening and horticulture classes in Lewis & Clark County.

Educating the Community in Horticulture and Gardening

Fruit tree grafting, cold frames and organic gardening were the topics of this year's workshop series. In February, a cold frame presentation was taught in conjunction



Grafting workshop participants busy grafting their fruit trees.

with the Helena Garden Club's monthly meeting. With our short growing season, there is a lot of interest in different techniques to help extend the growing season, and cold frames are a good option for people to consider.

A hands-on fruit tree grafting workshop was taught in April. Over 20 people attended the workshop and got hands-on experience grafting their own fruit trees. Each participant left with a grafted apple, pear or plum tree. Extension Horticulture Specialist, Toby Day, assisted with teaching the grafting class.

Gardening enthusiasts came together on an evening in July to learn about successful organic gardening techniques. The workshop was taught in the People's Garden at the Fairgrounds. Teaching outside at the garden gave people the

chance to actually see organic practices being used versus looking at pictures on PowerPoint. It gave people the opportunity to get ideas for their own garden. It was a fun teaching opportunity that will be expanded next year.

Producers Add Value to Their Forage Crops Through the NWSFF Program

Over 450 acres of alfalfa, grass and barley straw were certified under the Noxious Weed Seed Free Forage Program (NWSFF). Producers with certified forage are able to receive a premium price for their hay and straw. During inspections, the location of any noxious weeds are located on a field map, so the producers know where the weeds are located in the field to assist with treatment and monitoring of the weeds.

Assisting the Public in Integrated Pest Management (IPM)

The first step in IPM is identifying the pest. Over 300 insects and plants were brought into the office for identification this year. After proper identification, management options were provided on the specific pest(s). Proper identification can save people hundreds of dollars in unnecessary treatments.



Swarm of honey bees removed from bushes in a RV Park north of Helena.

The office also made over 60 house visits throughout the county helping identify plant diseases, insects and plants. Tree health and diseases continue to be a concern for residents of the county and comprised the majority of the house calls. The office received many calls on bees and wasps. Several people were assisted with the relocation and removal of bees and wasps this year including the Helena Middle School and a local pawn shop. Lots of spiders were brought into the office this year, and a large percentage of them were identified as Hobo spiders.

During the spring and summer, plant, insect and disease identification is a primary focus. Proper identification not only gives people piece of mind and assurance of exactly what they have, but it can benefit them financially with re-

duced costs in managing the pest, purchasing a pesticide or paying for a service that may not be necessary when they can typically handle the pest by themselves. Along with identification, we have the opportunity to educate the public on various related topics including pest management, reading a pesticide label and the proper use of pesticides.

People Learn How to Safely Preserve Their Food

Two evening, hands-on, food preservation workshops were taught during the summer in the kitchen at the Lewis & Clark County Fairgrounds. Participants got the opportunity to learn hands-on how to use a pressure canner and water bath



Food Preservation Workshop participants busy preparing green beans.

canner. Seventy-five percent of the pressure canning class participants had never used a pressure canner before. The education the participants gained was important to ensure they canned food safely. In difficult economic times, the knowledge, hands-on experience and reference material gained through the workshop will help families save money on food costs, and enable them to eat safe and nutritious food throughout the year.

The Extension Office tested approximately 20 pressure canner gauges this year. An inaccurate gauge could result in improperly preserved food, which may result in the food causing a food borne illness. This service helps ensure that people have the resources and tools necessary to preserve food safely. The Extension Office also has a pressure canner and water bath canner that are available for public use.

Poultry Expert Comes to Helena

The interest in small scale poultry production is on the rise. In response to this growing interest, the Extension Office brought poultry expert Jim Adkins from the International Center for Poultry, based in North Carolina, to Helena in May to teach two workshops. The first workshop was an introduction to poultry judging. There is a shortage of poultry and other small animal judges across the country. The workshop was organized to help get more people trained to be poultry judges to address the shortage and demand for

judges especially for small rural county fairs.

The second workshop was an all day workshop on heritage breeds of poultry and basic poultry management. The all day



Poultry expert, Jim Adkins, talking about poultry handling during the poultry workshop.

workshop concluded with tours of local small flocks. People attending the workshop came away with the knowledge necessary to have a successful and profitable poultry operation. The farm tours gave people the opportunity to see other poultry operations and gain ideas from each other. Many class participants indicated an interest in turning

their poultry operation into a part-time business. One participant indicated a desire to make it a full-time business and retire from her current job.

Creating Awareness for Blood Pressure

According to the Centers for Disease Control and Prevention, one in three U.S. adults, an estimated 68 million people, have high blood pressure. High blood pressure is a major risk factor for heart disease, stroke, congestive heart failure and kidney disease. Through a grant to help spread awareness, the Extension Office set up a booth at the farmers' market offering free blood pressure tests along with free publications on high blood pressure and sodium reduction. People can also come into the office and test their blood pressure. A local professional chef helped teach a cooking class on how to add flavor without salt and provided basic



Master Gardeners also helping with the blood pressure booth at the Helena Farmers' Market.

recipes and cooking techniques for utilizing the produce from the garden.

Beekeeping Popularity Continues to Grow

In March, the Extension Office hosted the second annual beekeeping workshop in Helena. Over 50 people attended the one day workshop at the Fairgrounds. The presenter list included Ruth O'Neil from MSU-Bozeman, David Baumbauer from the MSU Plant



Honey bees enjoying the flowers of Phacelia tanacetifolia planted at the Fairgrounds.

Growth Center in Bozeman, and Cam Lay from the Montana Department of Agriculture. Many class participants indicated aspirations of starting beekeeping as a hobby or business. Other participants indicated a desire to expand their current beekeeping operation and specialize in certain aspects of beekeeping such as queen rearing. Participants indicated that the workshops have assisted them in furthering the success and profitability of their bee adventures.

Two Private Applicator Training (PAT) Workshops Taught This Spring

An all day private applicator initial training was taught in March in Helena with over thirty participants. The initial trainings gave people the opportunity to receive their private applicator license and receive valuable basic information on safe pesticide use. Another private applicator training was taught in April in Augusta. Private applicators have to accumulate six credits every five years in order to maintain their license. Providing several classes a year enables more applicators to remain current on their credit requirements, and keeps them up-to-date on the latest pesticide information.

With assistance from Cecil Tharp, MSU Extension Pesticide Education Specialist, and local Master Gardeners, a series of YouTube recordings are being developed on pesticides in the environment and pesticide safety. The first two completed recordings are on herbicide injury in the garden. The recordings can be viewed on the county website.

Enhancing 4-H Through Volunteerism

Reaching over 750 youth in Lewis & Clark County is made possible through the support and dedication of over 100 volunteer leaders. Volunteers provide support including educational programs, organizational leadership and event organization. In Lewis & Clark County alone, these volunteers provided over 5,000 hours of service and resulted in \$107,782 in service given back to the program in 2011-2012.

Through partnering with Jobs for Montana's Graduates Foundation, the Extension Office was able to provide incentives for two volunteers through the AmeriCorp Program. Anna Merchen and Danielle Beveridge each contributed a



AmeriCorp Volunteer, Anna Merchen, assists a camper during the 4-H Cloverbud Day Camp she organized.

minimum of 300 hours of volunteer service to Lewis & Clark County 4-H and received an \$1,175 educational award. Through this partnership, they also encouraged others to volunteer and became part of a nationwide network of AmeriCorp alumni. Through their service, they worked with 4-H After-school, camps, conducted educational workshops and provided support during Fair. Their programs had a big impact on the

youth involved by providing high quality educational opportunities that allowed youth to build life skills.

From the Garden to the Table

Many youth today don't know where their food comes from. However, 4-H can help reestablish this link to help them identify the source of their food. Lewis & Clark County 4-H partnered with Lincoln Public School's Afterschool Program



Students in Lincoln learn the process of threshing wheat at the community garden.

and the Lincoln Community Garden to highlight this process through the Montana Wheat Story. In the spring, youth participated in workshops on wheat varieties and the plant growth process. They planted wheat among other vegetables in the community garden and cared for it all summer. In the fall, students returned to harvest the wheat, thresh and mill it for baking. They then made bread-in-a-bag, and took it home to share with their families. This educational experience emphasized growing produce locally and the process food takes to get to the home. It gave youth a closer connection to agriculture in their own community and school.

Contact Us



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Montana State University Extension is an ADA/EO/AA Veteran's Preference Employer and provider of educational outreach.

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