**2008 HIGHLIGHTS**

- **EXTENSION MOVE**
- **AGRICULTURE/COMMUNITY**
- **WEED MANAGEMENT**
- **4-H/YOUTH DEVELOPMENT**

The Role of MSU Extension in Lewis & Clark County is to extend practical and scientific knowledge to the county residents about Agriculture and Natural Resources, Youth Development, Community Development, and Family & Consumer Sciences. Extension links a network of MSU specialists to local residents; creating a unique collaboration of local, state, and national resources.

**EXTENSION MAKES THE MOVE**

Lewis & Clark County Extension moved to their new office at the Lewis and Clark County Fairgrounds. The new exhibit building houses the Extension Office and the Fairgrounds Administration. The move adds easy access and a pleasant atmosphere for staff and clientele.

**AGRO-EMERGENCY PREPAREDNESS**

The county prepares itself for the unknown natural or man made agricultural emergency with the support and work of the extension staff. The county commission directed extension to produce an Agricultural Addendum for the county emergency plan that was functional for emergency commander use. The addendum was completed and approved by the commission in early 2007. The agro-emergency addendum has been used by extension and other state/regional agencies for training and educational exercises.

**4-H Outreach to Military Families**

Since 2004, Lewis & Clark County has participated in a grant provided to Montana to encourage military youth to participate in 4-H. This project has gone through various phases, including the development of a new 4-H club, the American Heroes 4-H Club, targeted specifically at military families. Additionally these youth have had the opportunity to participate in special project offerings including the roll-out of the Lego Robotics and FilmMaking projects, as well as a Day Camp which resulted in many youth not previously involved in 4-H having the opportunity to participate in Positive Youth Development activities. To capitalize on this foundation and further develop 4-H opportunities for Lewis & Clark military families, a special internship has been developed for 2009 which will focus on further developing this partnership.
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Championing Positive Youth Development

Lewis & Clark 4-H annually offers over 400 members the opportunity to become engaged learners through the Experiential Learning process in projects as varied as Shooting Sports, Swine, Woodworking, Cooking, Teen Leadership, and Dog Obedience under the guidance of over 100 volunteer adult leaders. The Experiential Learning Model encourages youth jump into activities with a “Do – Reflect – Apply” approach that encourages them to “Learn by Doing.”

In 2008 Lewis & Clark County 4-H members participated in:
- County Project Events
- Community Service Projects
- Demonstration Day
- Grand Foods
- County 4-H Camp
- Last Chance Stampede & Fair
- Montana Rec Lab
- Montana 4-H Congress
- Fall Ambassador Training
- Authored local media articles
- Presentations to local groups
- State Leadership Forum
- State Shooting Sports match
- National Archery Finals
- Statewide Livestock Judging
- National 4-H Congress
- Citizenship Washington Focus
- Host Japanese Exchange
...and much more!

Innovation within Tradition
The Experiential Learning Model utilized in 4-H allows youth to get direct experience and learn through trial, error and success! As part of a national push to develop new opportunities for youth to gain skills in Science, Engineering, and Technology, Lewis & Clark 4-H has recently introduced two exciting new projects:

TerraPod Filmmaking:
This project was developed in cooperation with the MSU graduate program in Science and Natural History Filmmaking, and was awarded Program of Distinction status nationally. Youth have the opportunity research and learn science topics, while creatively filming, editing, and composing a brief movie about the topic.

Lego Robotics:
Combining the sequential skills of computer programming with the design, engineering, and fun of building a robot with Legos, this project provides a unique opportunity for youth to develop an understanding and affinity for engineering and science.

Snapshot of Lewis & Clark 4-H

*over 400 members
* over 100 leaders
* 1,552 total fair entries

Top Projects

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Life Skills Development: A 4-H Emphasis

While it is always rewarding to watch a child gain new knowledge or develop additional mastery, it sometimes comes as a surprise to learn that Project Knowledge is not the end goal of 4-H Project areas. Each of the 4-H projects are developed such that youth are learning valuable Life Skills along the way. In Beef, Sheep, and Swine projects, not only are youth learning about the agriculture industry and specific aspects of the species they are raising, but they are learning Responsibility, Record-Keeping, and Planning skills that will serve them regardless of their profession. Projects like Photography can be used to provide youth with an opportunity to learn Self-Motivation, Problem Solving and other necessary skills. Youth involved in Shooting Sports learn Focus, Safety, Goal Setting, and even Social Skills.

Lewis & Clark 4-H Paintball just completed its third year as a 4-H Project. While there has been a lot of fun and physical exercise, not to mention providing a unique opportunity for youth to interact and come out of their shell, the most rewarding results have been through Life Skill Development. The project activities have all been built around developing Teamwork, Leadership, and Communication skills, as youth learn to work together effectively to complete a common objective. In order to develop a better understanding as to just how well this process was working toward actually developing these Life Skills, participants were provided an opportunity to participate in a survey in which they were asked to identify whether or not they used or were familiar with certain aspects of Teamwork and Leadership skills before and after participation. Every Life Skill indicator measured showed improvement, with large increases in multiple Leadership indicators, an example of which is shown to the right.

Insect Hits Area Pine

A major concern and frustration for homeowners and landowners from Helena to Lincoln is the discoloration and the dying of the pine trees. The Mountain Pine Beetle has invaded the area and is actively wiping out stands of deciduous trees. Extension along with the Department of Natural Resources and Helena National Forest staff put on a six week educational series on beetle management. Presenters provided information and publications on the insect cycle, prevention and management of the beetle. Aesthetics, wildfire potential, and economics are topics that are being discussed in the seminars by the public and professionals because of what the beetle has the potential to create for a community.

Horticulture

Extension staff handle over 400 plus calls, walk-ins and home visits annually on horticultural subjects. Economic conditions have strengthened the use of extension resources that support landscape preservation and growing produce while conserving water. Public safety on preserving garden and meat products has increased the pressure cooking testing program (20 in 2008) by extension over the past two years.
TAKE A BITE – The Craig and Helena Valley Mosquito Districts put on an awareness campaign that was promoted and developed by extension. The public awareness centered on West Nile Virus prevention, adulticiding and larviciding of mosquitoes, and district operations. With financial support from the districts two videos and a flier were produced and distributed to the public at local fair, equine and homeowner exhibits, horse clubs and feed stores for viewing.

SHELTERBELT PLANS AND PLANTINGS
The Extension Office in Lewis and Clark County over the past four years has helped 104 property owners with the design and/or purchase of 43,118 seedlings for shelterbelt plantings through the state nursery program.

PRIVATE APPLICATOR TRAINING – Twelve new licenses were issued in 2008 to individuals wishing to use restricted herbicides to manage noxious weeds. Educational programs have been offered to 265 private applicators in Lewis and Clark County for credits to recertify in 2009. Training programs were coordinated, developed and instructed by extension professionals from Broadwater and Lewis and Clark counties, by Montana State University specialists and chemical company representatives. Plant identification, management methods, chemical selection and handling, inventory procedures, and record keeping were the main educational topics presented.

CERTIFIED FORAGE TO BE USED – To prevent the introduction and spread of noxious weeds Extension service and the Weed District, working with the fairgrounds administration, developed a five year noxious weed management plan for the fairgrounds. The fair board approved the plan and imitated a policy to use certified forage for all livestock events – stock shows, rodeo events, stall renters, etc to prevent the introduction of new noxious weeds to the facility. Extension inspections in Lewis and Clark County have certified 586 acres of Montana Noxious Weed Seed Free Forage for 18 hay and straw producers. A total of an estimated 1530 tons of Montana Noxious Weed Seed Forage is available to those bringing livestock onto the fairgrounds.

USE OF INSECTS BENEFIT LANDOWNERS
– Augusta High School Insectary, extension service and weed district staff monitor, evaluate, collect and distribute insects to control leafy spurge, knapweed, toadflax and musk thistle to private and public lands. Insect use is an environmentally sound program in reducing weed seed production and the use of herbicides. Over 400 insect sites are located in Helena, Wolf Creek, Lincoln and the Augusta areas.
NOXIOUS WEED MANAGEMENT

**WEED EATERS:*** Extension coordinates and communicates with nine landowners and two livestock producers to manage weed seed production through grazing. A flock of 1200 sheep and goats cover over 10,000 acres in the Spokane Hills managing leafy spurge, knapweed and toadflax seed maturity while maintaining the quality and quantity of the native grass growth. The grazing project, in its fifth year, is supported by the Montana Sheep Institute, Montana State University specialists, Department of Natural Resources, Bureau of Land Management, Bureau of Reclamation and Broadwater County Weed District. Presently the project is funded by the Weed Trust Funds and private contributions. In 2009 the data from the Montana Sheep Institute and Montana State University specialists will be used to evaluate financial benefits of the grazing program to the landowners and the livestock producers so that it will be self sustaining. Grazing is a viable and environmentally sound method to manage and reduce noxious weed seeds.

**WAR ON WEEDS (WOW):*** Community programs to manage noxious weeds has been successful in Lewis and Clark County through the efforts of Extension and the Weed District. Presently there are 10 community grants and producer projects in the county. All projects are coordinated, monitored or advised through extension efforts. Education and awareness of programs are held in Lincoln, Augusta, Helena, Canyon Creek Spokane Hills, Wolf Creek and East Helena promoting grant funding for noxious weed reduction by extension service. 2008 project funds are estimated at $116,196 from grants and $169,729 from private and public landowners. A major project, coordinated by extension, is a management area 35 miles along the Missouri and Little Prickly/Wolf Creek tributaries. This area is to manage properties that have become infested by noxious weeds. Ownership of parcels was a concern until the weed district initiated a compliance program one year ago on the properties. Landowners – county, Montana Department of Transportation, Bureau of Land Management, Fish Wildlife and Parks, Department of Natural Resources, Burlington Northern Rail Road and ranchers – through the coordination and facilitation of extension, have come together in a positive atmosphere to reduce the transportation and spread of noxious weeds.

**COMPLAINTS TO COMPLIANCE:** If success is determined by numbers, the noxious weed complaint and compliance process gets a high rating. Through the advisory and facilitation of extension the weed district has successful initiated a volunteer program and process for compliance. The process educates landowners, initiates management of noxious weeds on individual properties, and has the backing of the law. The final step of the process allows penalties attached to the land if not in compliance of managing noxious weeds.

![Graph showing complaints and compliance from 2005 to 2008]

Explore YOUR MSU Resource in Lewis and Clark County
MSU OUTREACH – Resources and materials available.
We are located at 100 W. Custer, on the county fairgrounds. Our office phone number is (406) 447-8346 and the web site is: www.co.lewis-clark.mt.us/departments/extension.html

Horticulture
- Insect and disease management
- Yard and garden management
- Trees and shrub management

Agriculture
- Farm and ranch management
- Crop and livestock management
- Biological and pesticide management
- Soil and forage evaluations
- Forage Certification
- Private Applicator Training/Licensing

Family & Consumer Sciences
- Credit and money management
- Estate Planning
- Food preservation and safety
- Pressure gauge testing

4-H/Youth Development
- Project Curricula

Community Development
- Water quality
- Land stewardship
- Small acreage operations
- Leadership development

Noxious Weed Abatement
- Noxious weed identification material
- Methods of weed abatement
- Spray equipment for rent

......and MORE!

Working together to bring the residents of Lewis & Clark County practical knowledge and support for local needs.