In September 2016, the Healthy Acres, Healthy Communities Foundation (HAHCF) held its introductory event at Caras Nursery. The HAHCF Foundation was established to support the three main program areas combined in the Missoula Weed District and Extension: Land management, Youth Development, and Family and Consumer Sciences. The demand for educational solutions continues to grow in Missoula County. Each year we see the need to supplement our efforts with grants and donations.

A new facility for the Missoula County Weed District and Extension offices lends itself to individual and corporate investment in the facility and ongoing programs. Establishing a foundation opens the doors for additional funding support.

Providence Health Services provided the inaugural gift in the amount of $5,000. Thank you Providence Health Services, for recognizing the value of our youth education programs and the potential for future programs. Others supporting our foundation kickoff include Caras Nursery, Frost Top Orchards, Western Montana Growers Association and the MPG Ranch. Thank you all for your support.

In July, Missoula County Fairgrounds Advisory Council (MCFAC) forwarded a master plan recommendation for the Fairgrounds to the Missoula County Commissioners. Following a public comment period and further discussion with the City Council, the master plan for the Fairgrounds was approved by the Missoula County Commissioners at a public hearing in October 2016. We commend the County and City leadership for the thorough and inclusive process used to develop the plan.

Missoula County Weed District and MSU Extension has long been planning for a new facility as part of this master plan. We now have a layout with approximately four acres for the building and grounds. We look forward to finalizing a facility design, financial plan and utilizing our newly formed Healthy Acres, Healthy Communities Foundation to identify potential funding sources for areas such as the wet lab, demonstration gardens and demonstration kitchen.
Montana Invasive Species Advisory Council Completes Goals

*by Bryce Christiaens*

Through the leadership of Bryce Christiaens, the Missoula County Weed District played an instrumental role in the establishment of the Montana Invasive Species Advisory Council. Christiaens serves as the county weed district representative and the District serves as the fiscal agent for the council’s projects and operations. The council was created for the purpose of “advising the governor on a science-based, comprehensive program to identify, prevent, eliminate, reduce and mitigate the impacts of invasive species in Montana.”

In 2016, the council completed all three of its goals:

1. The assessment report, completed in March, compiled responses of over 120 individuals, representing 85 agencies/entities that manage invasive species, including federal, state, county, municipal and tribal government agencies, universities and non-profits.

2. Clear gaps and challenges were identified in relation to coordination of effort across agencies and taxa, species prioritization across taxa for prevention, early detection and control, perimeter defense, data sharing, standardized mapping and monitoring, regulations and funding. These gaps and challenges were presented to approximately 200 interested stakeholders at the Governor’s Summit on Invasive Species in Helena in April. Over the course of two days, stakeholders helped to refine the gaps and challenges, began providing possible solutions and created the beginning structure of the Montana strategic plan.

3. The third and final goal of completing a strategic plan for Montana’s approach to invasive species was accomplished in November. A draft framework was created from the results of the assessment and summit, and vetted through multiple listening sessions held across the state from Miles City to Pablo. The *Montana Invasive Species Framework* organizes prioritized invasive species tasks into five categories:

- **Coordination** focuses both on the need for a single coordinating entity as well as the clarification of invasive species laws into a single Invasive Species Act.

- **Prevention** focuses on the need to bolster our perimeter defense, a risk analysis for prioritizing invasive species based on potential impact and an analysis of high risk vectors of spread and associated regulations.

- **Early Detection** focuses on the need for data sharing, the potential for a statewide data coordinator and standardized mapping/monitoring efforts to aid in detection.

- **Rapid Response** focuses on the need for a standardized rapid response plan as well as the need for coordination and staff training across agencies in emergency response.

- **Control** focuses on the need for sustainable funding, research into the development of best management practices and staff development in underserved regions of the state.

All in all, it was a very successful year for the Montana Invasive Species Advisory Council. The assessment, a summary report of the Governor’s Summit on Invasive Species and the *Montana Invasive Species Framework* can all be found on the Council’s website at: [www.dnrc.mt.gov/divisions/cardd/MISAC](http://www.dnrc.mt.gov/divisions.Cardd/MISAC).
**MTBCP’s Statewide Growth Continues**  
*by Melissa Maggio-Kassner*

The mission of the Montana Biological Weed Control Coordination Project (MTBCP) is to provide the leadership, coordination, and education necessary to enable land managers to successfully incorporate biocontrol into their noxious weed management programs. MTBCP was established in 2013 and has grown significantly in three short years; increasing the number of people reached at workshops, number of workshops held, locations of workshops, number of collection days held, and number of insects distributed throughout the state.

In 2016:

- **34 days** spent collecting insects, up from 10 days in 2014 and 32 in 2015

- **Six insect species** collected (yellow toadflax stem weevils, Dalmatian toadflax stem weevils, leafy spurge flea beetles, leafy spurge stem borers, spotted knapweed root weevils, and spotted knapweed flower-head weevils)

- **Three insect species** (bindweed gall mite, loosestrife root weevil, and klamathweed beetles) were shipped from other states for field bindweed, purple loosestrife, and St. Johnswort management

- **42 counties** collected or received insects, an increase from 25 counties in 2014 and 35 in 2015

- **Seven other states received insects** (Colorado, North Dakota, South Dakota, Wyoming, Idaho, New York, and Washington)

- **Over 2.2 million** insects distributed (500,000 insects in 2014 & 1.76 million in 2015)

- **23 workshops** were coordinated or presentations were given in 23 counties, an increase from 19 workshops in 2014 and 15 in 2015

MTBCP will continue to focus on these priorities for at least a few more years before we survey to re-evaluate land managers biocontrol needs. There has been a steady increase of assistance provided by the Biological Weed Control program across the state of Montana. As long as the numbers continue to increase, we can be confident that these focus areas are still benefiting weed management programs in Montana.
On-farm research provides learning opportunities

by Seth Swanson

The MSU Extension Horticulture program has partnered with regional farmers as well as the Western Agriculture Research Station to carry out a variety of trials to help farmers and gardeners alike.

Through the support of the Specialty Crop Block Grant, we have been investigating annual strawberry production for the last two years. Strawberries are a high value specialty crop with varieties hardy enough to grow in Montana, but the high labor demands and pest management limit statewide production. Annual high tunnel production may reduce these issues and add diversity and profits to high tunnels/hoop houses. This could also be a great option for home gardeners. Through the farm partnerships in this project, we have had opportunities to extend learning moments into teaching moments.

- From planting to harvest and data collection, 25 students at the PEAS farm were directly involved and learned about the challenges that many small producers in Montana face and how this research could benefit producers.

- The strawberry research was showcased to over 200 people at four field days, workshops, and tours. Post-workshop survey results indicated that all survey participants who are not currently growing strawberries would after learning about annual production, and that most already growing strawberries would consider annual production.

Bringings organics to the MSU diagnostic labs

by Seth Swanson

The MSU Extension Horticulture has been involved with the Montana Organic Association (MOA) for several years, and has contributed to the organization of MOA’s annual conferences. The agenda for the 2015 Montana Organic Association annual conference was packed full of great speakers, sessions, and timely content; and the pre-conference tours were no different. Since the conference was hosted in Bozeman this past year, there was a unique opportunity to visit some of the resources Montana State University has to offer. As one tour group headed to learn about the livestock processes of two local farms, the other group went onto the MSU campus to visit four analytical laboratories: Schutter Diagnostic Lab, Seed Potato Lab, Regional Pulse Diagnostic Lab, and the Montana State Seed Lab. This provided a unique opportunity for 30 conference attendees to learn about the valuable resources provided by Montana State University as well as MSU Extension, which most of these organic producers had never utilized.
Better connections through Missoula’s farmer’s markets
by Seth Swanson

For the fourth consecutive year, the Missoula County MSU Extension and Weed District has hosted an informational booth at the Clark Fork Farmer’s Market in Missoula. For 26 weeks each year, staff provide information, answer questions, and inform community members about upcoming programs. This year, the group took a more proactive role and hired Tori Heath (participant in 2016 Master Gardener program) to direct outreach efforts to improve our connection with the community. As a result, we had greater interaction, multiple radio and television interviews of guest attendees, and an increase in specified inquiries at the MSU Extension office. This was a valuable approach in increasing our abilities to connect with the Missoula community and to share the type of work done at the MSU Extension office.

Plant Clinic continues as valuable resource to community
by Sandy Perrin

Providing options for a healthier environment in which to live, work and play, the Missoula County MSU Extension Plant Clinic provides leadership and education on least toxic option pest management materials, soil test analysis, pest and plant identification, gardening advice, and plant recommendations. Whether giving recommendations on tree thinning or removal, when to spray apple trees for the worms that get into the fruit, or identifying a poisonous weed in a horse owner’s pasture; the Plant Clinic makes direct impacts on many community members.

Throughout every growing season, the Plant Clinic performs field monitoring and trapping for a variety of horticultural pests.

Monitoring codling moth traps in orchards to develop regionally specific pest management recommendations.

This provides valuable and timely information to share on our Pest Alert Hotline which disseminates management recommendations throughout the community. Additionally, this information along with on-site diagnostics, helps to provide management options for the nearly 2,000 calls, emails, and walk-in questions that the Plant Clinic receives from community gardeners, landscape professionals, and regional farmers.

In addition to providing direct assistance in diagnostics or management decisions, the Plant Clinic participated in a variety of educational events throughout the community:

- Demonstrated how to easily grow fresh salad greens and herbs in containers at the Natural Grocer Food store.
- Instructed a class of 25 Ravalli County Master Gardeners on Integrated Pest Management options for the most prevalent local insects and diseases.
- Collaborated with Missoula City Parks Department to train local residents on maintaining the plants in the roundabouts in their neighborhood.
- Worked with 4-H members and leaders to develop a plan to fertilize their gardens and lawns by taking a soil test to determine what amendments are needed.
- Presented classes to the Missoula Garden Club on spring lawn cleanup and preparation for the growing season, and what apple varieties are locally available.
- Collaborated with local nursery owners to organize tour sites for the Montana Nursery and Landscape Association Fall Tour which hosted 50 people from around the state.
- Collaborated with Kelly Moore, FCS Agent, on several classes on how to grow and utilize salad greens, as well as use local apple varieties.

Extension /Weed District informational booth at the Clark Fork Farmer’s market, showcasing Five Valleys Seed Library.
Preserving Missoula  
by Kelly Moore

In order to be an effective Family Consumer Science MSU Extension Agent in Missoula County, one must be familiar with community leaders, the needs of the community, and available resources. That knowledge is essential in the development and maintenance of vital partnerships and programs that enhance the health and well-being of Missoula County citizens. Food preservation, local foods, food safety/ServSafe, financial education, Grandparents Raising Grandchildren, Powerful Tools for Caregivers, pre-diabetes education, and other human development programs continue to be topics of great interest that provide partnership opportunities for MSU Extension in the community.

Approximately 90% of FCS annual office calls are related to food preservation, especially canning. In response to this demand, eight canning classes were offered this past year with an average of eight participants per class: two beginning water bath canning classes, two beginning pressure canning classes focusing on canning vegetables, a fruit leather dehydration class, two jam making classes, two salsa making classes, and one pickle making class. In the surveys taken at the completion of canning classes, 98% of participants said they learned something that would help them in future canning endeavors and that the introductory classes provided helpful hands-on learning absent in other lecture-only canning classes they had been to before.

During one October huckleberry jam making class, 16 Native American participants (organized in conjunction with the Missoula Urban Indian Health Center) of all ages came together on a Friday evening, with several gallons of huckleberries in tow. Together, we talked, measured, stirred, and waited for the magic of pectin, heat, and patience to transform the huckleberries into a jar of jam that everyone would be proud of. Only two people in the group had ever canned before, so the applause that erupted when the jars sealed at the end of the water bath process, was to this agent’s delight, signified ultimate success! A meat pressure canning class has been consistently requested; one is scheduled for late January and another for July 2017.

First time pressure gauge checks were up this past year as were returning checks (48). Several families brought in multiple pressure canner gauges to be checked so that they could all can together last September. Helping decipher recent Montana Cottage Food Industry mandates, giving out local food directory information, fielding nutrition label questions, and providing information on family financial planning issues (in conjunction with the MSU Extension-led, Missoula Financial Educator’s Alliance) helped promote Extension programming and introduced more people to MSU Extension and The Missoula County Weed District Office.

Improving financial literacy in Missoula County is a goal shared by the MSU Extension-led Missoula Financial Educator’s Alliance. Representatives from area credit unions, financial planning offices, human resource organizations, and financial counseling services meet quarterly at the Extension office to share program information and develop a directory of services that provides free information. Two small group estate planning classes were held this past year where participants were encouraged to actively participate in the improvement of their financial health by becoming more organized and informed using readily available resources such as MSU MontGuides and “Solid Finances.”

Representing Missoula County as a MSU Extension Agent instills a great sense of pride and responsibility. The opportunities to make change, build trust, develop relationships, gain understanding, and provide useful information come every day. It becomes more important each day to create a safe and comfortable space for people to learn in and to be heard. Which makes for a healthier Missoula County.
Buy-Eat-Live-Well
by Diann Pommer

MSU Extension’s Expanded Food and Nutrition Program (EFNEP) has assisted limited resource audiences in gaining knowledge, skills, and attitudes to change behaviors necessary for healthier diets for nearly 50 years. EFNEP targets youth and limited-resource adults with children and reaches individuals through a series of lessons and demonstrations.

This year, Missoula EFNEP was excited to partner with the homeless women and children at the Union Gospel Mission. A participant in her thirties was struggling with taking what she knew about healthy eating and applying it to her everyday life. She learned how to make a grocery list and plan ahead to make quick, affordable and healthy meals for her family. She commented “I never knew making a grocery list was important. I’m glad I know how to make one now.”

The EFNEP program developed a new partnership with the Missoula Urban Indian Health Center to do the series group classes. A single dad brought his two children to one of the classes offered. The son’s favorite foods were cheese and sour cream. The fish tacos made in class substituted plain non-fat yogurt for the sour cream and the son really liked it. He told his Dad he wanted to try swapping it more often. The next week, the family came to class again and the son told how they bought plain yogurt and had it on their tacos over the weekend.

EFNEP adult classes graduated 97 families this year. They learned to plan and prepare meals based on the USDA “My Plate” guidelines, make healthier food choices, and increase their physical activity. EFNEP welcomed two new nutrition educators this year; Julia Goar and Bonnie Medlin. As a result we are looking forward to increasing participation of families and youth.

EFNEP Nutrition educators from Missoula County taught first, third and fifth graders in schools where at least 50% of the student population were receiving free or reduced price meals. The series of nutrition lessons was taught to 835 students. Learning this information on healthy nutrition and physical activity resulted in 76% of students making healthy choices, 54% participating in more physical activity, and 26% eating more vegetables.

Missoula EFNEP keeps nutrition issues moving forward in the county with its involvement with Missoula County Public Schools Graduation Matters/Nutrition Subcommittee, Eat Smart Coalition as well as Harvest of the Month at Hawthorne School.
Marketing efforts help 4-H members increase profit and save money for college

by Campbell Barrett

4-H members learn responsibility, financial management, decision making and record keeping skills by participating in the market animal projects. Many members save enough money through the sale of their animals over the years to pay for all or part of their college education. Through observation and statistical analysis, it became apparent that the number of buyers at Western Montana Fair’s 4-H and FFA Livestock Auction had declined, and that sale prices received by youth participants were suffering.

In 2014, a Livestock Sale Marketing Committee was formed with goals of improving the experience for buyers, teaching marketing skills to 4-H youth and families, and improving the average price per animal sold at the fair. The committee, comprised of 4-H youth and adult volunteers with guidance from the 4-H Extension Agent, developed easy-to-use marketing tools for members, contacted past buyers for ideas on improving the sale, and solicited donations from local businesses to sponsor radio, print and television advertising to promote the sale.

Each spring at Market Animal Quality Assurance workshops, youth are taught to think like entrepreneurs with bringing a product to market. They are all small-scale ag producers with one steer, hog, lamb or goat to sell. They learn how to speak to business owners, identify and invite potential buyers to the livestock auction, keep records of project expenses and set financial goals. They learn that, even in the inflated 4-H market, where average sale prices are far above regular market prices, profit margins are slim, and budgeting is an important tool.

Since 2013, the last livestock sale prior to the creation of the marketing committee, the average price per animal sold at the Western Montana Fair 4-H and FFA Livestock Auction has increased 23.3%. At the 2016 fair, local youth sold 260 animals for a total of $467,904.43. This money goes directly to the 4-H members, who use it to pay feed bills, purchase show equipment, buy animals for next year’s project, and save for college or other financial goals. One graduating senior said “...because of 4-H, I am able to attend college and have some money to use for living that I don’t have to take out college loans for.”

Brooklynn Newbary with the 2016 Grand Champion Market Steer.