Dear Friends of Extension,

This 2011 Annual Report is presented by the Dent County Extension Council as an overview of the educational programs and services provided for the citizens of Dent County. The success of University of Missouri Extension programming in Dent County would not be possible without the help and support of individual volunteers, groups, organizations, businesses, local and county government officials, and the research-based information provided by the land-grant university system.

2011 has been an outstanding year for Dent County University of Missouri Extension. I hope you will take a few minutes to review this report and learn more about our accomplishments and commitment to education and service to the citizens of Dent County and south central Missouri.

Thank you again for your continued support of MU Extension, and as always, should you have suggestions or questions, please feel free to contact us.

Sincerely,

Becki Godi

2011 Extension Council Chair

Visit us!!
On Our Website: extension.missouri.edu/Dent
On Facebook: facebook.com/dentcountyextension
In Person:
Judicial Building
112 E. 5th Street
Salem, MO 65560
Dear County Commissioners and Associated Friends of MU Extension:

“Efficiency” and “Innovation” are two watchwords of citizens and government in our currently challenging economy. I am pleased to report that University of Missouri Extension has kept these words in the forefront and acted accordingly for the benefit of Missouri residents statewide.

Funded through the support of federal, state and county government; grants and contracts; fees for services; and private gifts, MU Extension leverages every dollar received to create expanded educational opportunities. Every dollar provided from counties is leveraged with an additional $6.00 to create a significant return on investment.

MU Extension creates value for citizens – including those who do not participate directly in its programs. For example:

- As a result, citizens learned how to avoid scammers, ensure safe drinking water and food, and recover from a disaster. MU Extension’s emergency management program helps communities, businesses, schools and residents reduce a community’s disaster recovery period. This action saves lives and countless dollars in emergency recovery operations and avoids job loss. Additionally, the whole community builds a greater sense of cohesion.

These are just two examples of MU Extension’s public value impact. I’m sure you will find many other examples in your local community.

I want to thank you for your support of MU Extension as a critical team player in your locale. Your ideas for improving our partnership are always welcome.

Sincerely,

Michael D. Ouart
Vice Provost and Director
Faculty & Staff Serving Dent County
University of Missouri Extension

Sarah Hultine
Community Development Specialist/CPD
Headquartered - Dent County

Melissa DuBois
Nutrition Program Associate
Headquartered - Dent County

Ted Cunningham
Livestock Specialist/CPD
Headquartered - Dent County

Linda Shelton
4-H Youth Program Associate
Headquartered - Dent County

Cary Terrill
Secretary
Headquartered - Dent County

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Headquartered—Phelps County

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Horticulture Specialist
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Ted Probert
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Pat Snodgrass
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Headquartered - Crawford County

Chantae Alfred
Family Financial Education Specialist
Headquartered - Phelps County

Ray Walden
Business Development Specialist
Headquartered - Phelps County
AGRICULTURE

Dent County Agriculture:
The 2007 U.S. Census of Agriculture revealed that there were 651 farms in Dent County with approximately 26,917 cattle and calves. The market value of agricultural products sold by these farms totaled $11,662,000, with $10,392,000 representing livestock and their products. This of course does not account for the many associated agricultural businesses and services rendered and in turn jobs provided and overall economic impact. However, it is clear from this information that livestock production and associated agricultural product sales and revenues have a significant economic impact in Dent County.

The following is an overview of Agriculture and Natural Resource programs provided by MU Extension for improved profits, management, and quality of life of farmers, ranchers and land-owners in Dent and surrounding counties.

South Central Missouri Cattlemen’s Tour:
The 2011 South Central Missouri Cattlemen’s Tour was held July 25-28. The tour, sponsored by University of Missouri Extension, included 36 participants from 6 counties in south central Missouri and made tour stops in 3 states.

Tour stops included Addison Biological Laboratories in Fayette, MO; The American Angus Association in St. Joseph, MO; Ohlde Cattle Company in Palmer, KS; The USDA Meat Animal Research Center in Clay Center, NE; North Platte Feeders in North Platte, NE; University of Nebraska West Central Research and Extension Center in North Platte, NE; Profit Maker Bulls in Paxton, NE; Heartland Cattle Company in McCook, NE; and Bill Hoertel and Ernie Schlatter Farms in Smith Center, KS.

Above: Participants of the 2011 Cattlemen’s Tour

Grazing Wedge-SARE Grant Project:
The Grazing Wedge is a forage management tool that has been utilized primarily by Dairy Graziers to better manage, utilize and understand forage growth and quality. In 2010, MU Extension/MU Commercial Agriculture Program was awarded a 3 year SARE (Sustainable Agriculture Research and Education) Grant to help implement Grazing Wedge forage management strategies on Missouri beef operations. This was done by selecting “pilot” farms to take weekly forage measurements and forage quality samples of their grazing system and apply that data to the Grazing Wedge management system.

In 2011, a “Grazing Wedge Cohort Group” was organized and 3 farm tour/pasture walks were held at cohort farms. Participants in this Grazing Group learn advanced grazing techniques as well as improved forage and livestock management strategies for their operations.

Winter Grazing Workshop:
This program is designed to provide education and training for livestock producers to extend their grazing season by utilizing stockpiled tall fescue as their primary winter feed. Topics covered included how to properly grow stockpiled tall fescue, nutrient requirements of differing classes of livestock during winter, fertilization options for growing stockpile, and allocation and strip-grazing of stockpile. Additionally, participants toured two farms where beef cattle were currently being managed on stockpiled tall fescue as the primary winter feed.

Grazing Study at MU Wurdack Farm:
In recent years, increases in feed costs and improved markets for heavier weight feeder cattle has spawned increased producer interest in finding methods of adding weight to farm raised feeder cattle. This study, completed during the summer of 2011, evaluated four different grazing systems for optimal animal performance, cost of gains and returns per acre. To see a summary of this research please visit http://aes.missouri.edu/wurdack/

Private Pesticide Applicator Training (PPAT):
Private Pesticide Applicator Training is a program which trains Missouri farmers and landowners proper safety and use of different chemicals, and enables them to purchase and use on their operations restricted use pesticides and herbicides. In 2011, over 40 Dent County residents
received PPAT and either were newly certified or
received re-certification for their enterprises.

Forage and Beef Conference:
This conference, held annually in Cuba, MO in February,
provides education on current management practices and
techniques regarding forage/grazing/livestock production
for the north central Ozarks. In 2011, this event attracted
over 200 participants from more than 14 counties, and
featured numerous speakers, as well as a trade show. The
Forage and Beef Conference is made possible through
partnerships with not only University of Missouri
Extension, but also area Soil and Water Conservation
Districts, Natural Resources Conservation Service, and
numerous other local businesses and organizations that
financially sponsor the event.

Quality Systems Assessment (QSA):
This program, developed by the Missouri Department of
Agriculture and the U.S. Department of Agriculture, gives
beef producers the opportunity to access domestic and
foreign export markets that specify cattle must be source
and age verified by a third party. The role of MU
extension in this program is to serve as the supply
evaluator, whereby, on-farm audits are conducted and
producers are qualified allowing feeder cattle to be
eligible to be sold as “source and age verified”.

South Ozarks Premier Beef Marketing Program
(SOPBM):
SOPBM allows producers to cooperatively market beef
calves in 50,000 lb semi-truck loads, and receive
performance and carcass data which allows them to make
management decisions about their cowherds. To date,
fifty-two producers have back-grounded twenty-four
groups and 10,895 head of cattle in the program. In 2011,
producers enrolled a total of 321 head of steers and
heifers for the spring and fall commingling groups.
Producers involved in SOPBM learn advanced marketing
and management techniques for their beef operations, and
improve profits from their beef enterprise.

Show-Me-Select Replacement Heifer Program:
The Show-Me-Select Replacement Heifer Program
improves herd reproductive efficiencies and farm
profitability through increased added value for Missouri-
raised heifers. In 2011 a total of 1,129 heifers in Missouri
were sold through the Show-Me-Select program grossing
over $1.9 million in revenue and averaging over $1,700
per head. In 2011, seven producers from this region
enrolled one hundred fifty-four heifers in the SMS
program. Two farms from the South Central Region
consigned thirty-four heifers in either the Spring or Fall
Southwest Sales with the heifers averaging $1,412. A
growing number of producers have been utilizing the
program to raise quality replacement females for retention
on the farm to improve the productivity of their herd.

Missouri Show Me Quality Assurance:
This program is designed to teach young livestock
producers the importance of quality assurance, consumer
acceptability and demand for meat products, food safety,
proper animal handling, and good management practices
for their livestock enterprise. In 2011 over 120 Dent
County youth and adults attended this training program.

Beef Day Youth Event:
In cooperation with the Beef Day Committee and the
Dent County Cattlemen’s Association, MU Extension
held its annual Beef Day Youth Education Event in
September, 2011. This program, which engages all 3rd
grade youth from Dent County, provides education on the
role and importance of agriculture in everyday life,
provides instruction on safety with regard to lawnmowers,
ATV’s, tractors, implements, electricity, and livestock,
and teaches young people about the different farm
animals including beef, sheep, horses, goats, pigs, poultry,
and dairy. Industry partners including the Missouri
Department of Missouri Farm Bureau, Missouri
Cattlemen’s Association, Hiland Dairy, as well as local
businesses and the Salem FFA, make this event a great
success.

Youth Livestock Involvement:
Dent County has over 125 young people actively engaged
in livestock projects through 4-H and FFA. While the
pinnacle of these projects is the local Dent County Fall
Festival, there are numerous other training and
educational programs that take place throughout the year
for these young people to improve skills and knowledge
of the animal agriculture industry. These include
programs regarding livestock nutrition, evaluation,
marketing, exhibition, selection, showmanship, animal
handling, etc. This involvement is critical to the
culmination of future generations of livestock producers.
MU Wurdack Farm:
Approximately 800 agriculture students from around Missouri took part in an extensive farm field day and approximately 125 producers attended the annual Fall Field day. Additionally, the farm hosted a Dung Beetle Field Day, featuring speakers on the benefits and management strategies related to improved dung beetle populations on grazing operations. The farm also hosted several educational programs/tours including the Advanced and Basic Grazing Schools, as well as programs for local schools, organizations, clubs, and organizations, highlighting the ongoing projects, demonstrations and programs at the farm.

Management Intensive Grazing School:
This series of workshops teach livestock producers how to improve management of their forage resources for improved profits of their farming operation. Concepts regarding soil fertility, plant health, forage species and suitability, animal requirements, water resources, fencing, system design, and grazing economics are included in this course. Four Grazing Schools were held locally in 2011, at MU Wurdack Farm, Houston, Rolla, and Vienna.

Soil Testing:
The Dent County Extension Center assists landowners with understanding the nutrient needs of their soils. 324 agriculture (does not include garden/yard/horticulture tests) soil test reports were received by the Dent County Extension Center in 2011, belonging to Dent County residents. Soil testing helps producers determine the best course of action for fertilizing pasture and crop ground.

Understanding Soil Fertility and Fertilizers:
This series of programs provides producers with a wide array of information including Soil Fertility Management, Evaluation of Farm Resources, Understanding of Soil Testing, How to Get a Useful Sample, Interpreting Soil Test Results and Basic Fertilizer Math. This program provides landowners with the tools to make better decisions on the timing and use of fertilizer based on their production goals.

Equine Education Workshop:
This series of workshops was implemented to address equine management and provide owners with the knowledge and skills necessary to improve their farm management practices for horses. The curriculum focused on pasture management for the horse and includes the following topics: Soil Fertility Management, Weed Control, Equine Nutrition Management and Training and upkeep of horses.

Additional Technical Services:
The Livestock Specialist serves in a number of additional capacities. These include Soil and Water District Secretary, executive board member of area county cattleman’s associations, member of the Advanced Grazier Group, and a member of numerous other agricultural organizations and sub-committees. Additionally, on-farm and office consultations, presentations and news releases on current issues are technical services provided to citizens of Dent County.

Horticulture
Dent County Master Gardener Program:
The mission of the Missouri Master Gardener Extension Program is “helping others learn to grow.” In 2011, twelve Dent County residents graduated from the Master Gardener Certification program held in Salem. These graduates bring the total Dent County Master Gardeners to 41. These volunteers contributed their time to community projects such as Craig Plaza, downtown planters, Bonebrake Center, Salem Farmers’ Market and the Salem Community Garden. In 2011, Master Gardeners donated more than 270 hours of volunteer time, valued at over $5,000.

Food Preservation:
With the high costs of fuel came the skyrocketing prices of food. A class was held at the Dent County Extension office to combat this problem. Many students participated in this class with 100 % stating the need for more education in this area. These students learned the safe process of pressure canning, including preparing food for canning and the benefits of home food preservation. Students now have the knowledge of how to make their food dollars stretch by preserving some of their own food. This class had 12 participants in Dent County in 2011.
FAMILY NUTRITION EDUCATION

University of Missouri Extension - Family Nutrition Education Programs (FNEP) reached 2,223 low-income participants with nutrition education in Dent County during 2011. FNEP provides information on nutrition, food safety, and physical activity for lifelong health and fitness. Melissa DuBois is the Nutrition Program Associate for Dent County.

Nutrition education for youths provides information in kid-friendly terms and lessons with hands-on activities. Activities include opportunities for taste-testing healthy foods and practicing skills that lead to good health. Education for adults includes nutrition, food safety, physical activity, and food resource management. Back-to-school Health Fairs and the interactive Food Power Young Adventure exhibit were also featured this year.

During 2011, both youth and adults were served through schools, community groups and agencies. The following is a list of the locations where participants were served:

Schools:

Agencies:
Salem Public Library, New Harmony Church Preschool, Dent County Health Department, MOCA, and the Baptist Camp.

Above: Melissa DuBois, teaches 3rd graders healthy nutrition at the 2011 Beef Day program

COMMUNITY DEVELOPMENT

The MU Extension Community Development program works collaboratively with communities to foster economic development, leadership development, community decision making, community emergency preparedness, and inclusive communities.

Youth Leadership Academy
- In 2011, 13 students in 9th and 10th grades participated in Dent County Youth Leadership Academy. Students learn team-building skills, parliamentary procedure, and civic education; interact with community leaders; and tour local sites to become more engaged in their local community. Student evaluations point to an increasing awareness of community: “I learned that in a small community without a lot of resources, volunteering is really important. If we want something to happen we have to be willing to help make it happen.”

Healthy Lifestyle Initiative
- The Salem Community Garden provides a place for over 20 families to grow healthy vegetables for their own family meals or donations to local food pantries. Over 50 pounds of food were donated in 2011.
- The new 501c3 organization “Council for a Healthy Dent County” became a partner with the Salem TCRC in 2011, and increased its programming in health and wellness to increase quality of life for Dent County residents. MU Extension specialists assisted with grant-writing, program development and implementation, and marketing.

Rural Development
Dent County Extension assists local residents and businesses to build stronger local economies through strategic planning, tourism development, local food systems marketing, and increased collaboration.

- Twenty elected and volunteer leaders from Dent and surrounding counties attended a Fundamentals of Economic Development workshop to learn new strategies for supporting and growing local businesses.
- Representatives from USDA Rural Development,
Missouri Department of Agriculture, and Dent County Commission attended a “Rural Development Tour” of Dent County hosted by Extension that featured some promising projects and strategies for viable rural development being implemented in Dent County.

- Salem Farmers’ Market entered the social media world with Extension’s help by creating a Facebook page that updates followers on upcoming events and specials at the market.

- Dent County Extension facilitated meetings for the development of a Downtown Salem Business Association working to increase sales, improve infrastructure, and create new events to promote the downtown business district to visitors and residents.

- A partnership with an MS&T engineering management class allowed local residents to identify community projects and work with students to create solutions. Students created engineering plans for local projects such as downtown parking, a memorial program, walking trails, and energy auditing that can be utilized by city and county government and non-profit organizations to implement the plans.

Building Partnerships
In 2011, Dent County Extension was represented on the boards of local organizations including Salem Area Community Betterment Association, Central Ozarks Private Investment Council, Top of the Ozarks RC&D, and The Community Partnership.

YOUTH DEVELOPMENT

In Dent County 190 youth participated in learning leadership, citizenship, and life skills through 4-H events and activities. One out of every four Missourians between the ages of 5 and 18 participated in a Missouri 4-H program in 2011.

To better understand how programs for youth contribute to positive youth development, the National 4-H Council sponsored the 4-H Study of Positive Youth Development. The ground-breaking national study confirmed what we already knew: Kids who are an active 4-H member have more caring adults in their lives, are more likely to engage in science programs and excel in leadership and volunteer service. Missouri active 4-H members over the past three years identify more adult mentors in their lives than non-4-H youth or youth who engage in 4-H opportunities less than two times a month. Life skills are defined in a variety of ways. 4-H, in recent years, has given special attention to youth interest, attitudes and engagement in science, engineering and computer technology. Active 4-H members spend almost ten times more of their out-of-school time engaged in science-based activities than their non-4-H peers. Missouri young people who are 4-H participants report significantly more leadership experiences and higher scores on internalizing the value of service that their non-4-H peers.

Volunteers create, support and are part of the 4-H community. Missouri 4-H volunteers responding to a survey report they contribute on average 100 hours per year. Valuing their time at $18.70 per hour, based on average Missouri incomes, the contribution of Dent County 4-H volunteers was worth over $127,000 in 2011! More importantly, these adults serve as mentors for our youth, priceless.

4-H Clubs: There are five Dent County 4-H Clubs offering long term educational experiences where 190 members learn life skills such as decision making, public speaking, and working with others. Members learn by doing under the guidance of 68 total youth and adult volunteers who teach projects ranging from aerospace and arts to shooting sports and woodworking. Clubs also involve children and teens in community service,
camping, and educational trips.

**Community Service** or service to others is a key part of the 4-H program. Dent County 4-H Clubs have a tradition of being involved in their communities, and did a wide variety of community service activities this year that included visiting nursing homes, canned food drives, making blankets for the elderly, helping at the Animal Shelter, cleaning streams on the Bonebrake property and adopting needy families to help at Thanksgiving and Christmas. One of the highlights of 2011 was the annual Foster Children Christmas Party. Partnering with the local DCS office, Dent County 4-H clubs worked together to provide food, singing, games, gifts, and a visit from Santa for 23 foster children and their foster families.

**4-H Member and Leader Opportunities:**


**Grassland Evaluation Contest** – A four member 4-H team attended the South Central District Grassland Evaluation Contest in Phelps County and took first place in the 4-H division of the competition.

**4-H Day with the St. Louis Cardinals & St. Louis Rams** – 4-H families enjoyed attending these games with other 4-Her’s from Missouri and Illinois

**Bob Kimm Sheep Clinic** – Dent County held a Sheep Clinic featuring Bob Kimm, a successful Suffolk’s producer from Dysart, Iowa. Adults and 4-H youth from the surrounding region attended the all day clinic.

**4-H Camp** – Thirteen Dent County youth and two teen counselors enjoyed camp crafts, swimming, sports, and activities with 125 young people from five counties at Camp Clover Point. Former Dent County 4-H’er, Orin Pogue, served as camp manager and current Dent County 4-H member, Lane Howard, served as a camp lifeguard for the 2011 4-H camping program.

**Achievement Day** – Sixty members, parents, and judges attended this annual event that included personal interviews, project exhibit judging, public speaking, demonstrations, and skits.

**4-H Horse Shows** – Twenty-two Dent County 4-H youth participated and earned awards in three local horse shows.

**Dent County Fall Festival** – Over 400 4-H projects and livestock were exhibited and judged at this year’s fair. 4-H/FFA members entered a combined total of 238 livestock entries and sold 135 market animals and hams for another record market sale, reaching over $143,000 in receipts.

**Shooting Sports** – Dent County held their first local Shoot with 13 Shooting Sports members participating in five different disciplines. Eighteen 4-H teens participated in 25 events at the MO State Shooting Sports Contest. Three Dent County youth took first place honors in their division in the state: Clayton Parker and Colton Fry each in one event and Lyndsey Parker in two events. Clayton Parker and Evan Howard placed second in their division in the state. The Dent County Air Pistol team took first place in the intermediate team division. Three members also attended several regional shoots. Shooting Sports projects include Archery, Air Rifle (BB and/or Pellet), Smallbore (.22 Cal) Rifle, Air Pistol, Shotgun, Smallbore Pistol, Muzzleloading, and Shooting Sports Safety.

**4-H Membership Recognition:** One hundred fifty 4-H members, Clover Kids, and volunteer leaders were recognized for their many accomplishments at the annual 4-H Recognition Banquet. Special awards were presented for outstanding achievement for both youth and adults.

**State 4-H Awards:** One 4-H youth, Dalton Smith, won a Level II State 4-H award and Teen Conference scholarship to recognize his achievement of excellence in 4-H.
**Business Development**

As entrepreneurs and innovators, Missouri’s small businesses are becoming a more diverse group that continues to make the state’s economy productive. There are approximately 500,000 small businesses in Missouri. Nearly 98 percent of all businesses with employees are categorized as small businesses. In assisting the owners and managers of those businesses, MU Extension contributes to a county’s economic development through growth in jobs, sales, innovation, technology development and commercialization.

In Crawford, Dent, Gasconade, Maries & Phelps Counties, during 2011, business counselors served 316 people and their companies with business start-up and management counseling, training, and other assistance. In addition, entrepreneurs and business owners in those counties reported the following economic impact and activity as a result of the services provided by the MU Extension Business Development Program:

- New jobs: 47
- Sales increases: $1,136,158
- Government contracts: $5,803,619
- New businesses: 6
- Jobs retained: 3
- Loans and investments in business: $806,000
- Acquired assets: $218,000
- Clients receiving business counseling: 103
- Business training attendees and conference participants: 213

Overall, the University of Missouri’s Business Development Programs (BDP) served 17,207 people and their businesses state-wide. The total impact for all businesses assisted by the BDP was:

- New jobs: 5,765
- Sales increases: $235,430,804
- Government contracts: $191,500,000
- New businesses: 249
- Jobs retained: 1,708
- Loans and investments in business: $199,474,000
- Acquired assets: $77,573,861
- Investment in commercialization: $151,567,881 in SBIR/STTR or research proposals submitted with $4,337,056 awards received
- Clients receiving business counseling: 3,095
- Business training attendees and conference participants: 14,111

### 2011 DENT COUNTY MU EXTENSION - FINANCIAL SUMMARY

Funding from county, city, gifts, state and federal monies makes MU Extension unique. Dent County funds support local office costs. State/federal dollars are used for specialist salaries, orientation, in-service costs and postage.

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