

ONE ON ONE CONSULTATIONS

Consultations regarding crop production (#48), pest management (#65), forage production (#52), and home horticultural (#46) questions; 211 total consultations with Ray County growers and agri-business clientele.

Examples of assistance provided: consulting on issues surrounding the yield benefit and value of N-Serve with fall and spring applied anhydrous applications, the fertility value of poultry litter, and the value of the corn rootworm (CRW) trait in corn hybrids when placed in environments with little to no corn rootworm pressure.

ON FARM MEETINGS

Met with six on-farm research producers to discuss 2007 research data and disseminate research reports. Several growers noted their intent to continue conducting on-farm research trials on their own and the majority of growers intend to implement many of the practices (i.e. disease control strategies in soybean production, use of nitrogen stabilizer with spring-applied anhydrous ammonia, etc). For those growers unable to attend the meeting, follow-up letters were sent with their copy of the 2007 OFR report. A majority of the 2006 and 2007 on-farm research reports were also formatted for online distribution, via the Ray County agronomy website.

2008 WEBSITE DEVELOPMENT & USER RATES

With continued development and promotion of the Ray County agronomy website, www.extension.missouri.edu/ray/ag.shtml, many clients are accessing the page frequently. YEAR-END Summary for 2008: 25,019 pageviews for time period of 1/1-12/31/08. This represents a large increase from the website's 2007 total of 14,694 pageviews. The website continues to gain momentum and readership, which is reflected in the latest web server stats for the time period of 11/1 - 12/31/2008. During this time period, the webpage received 6257 pageviews, with a daily average of 102.6. This is an excellent daily average and reflects growth, as the daily average for the time period of 8/1-10/31 was 64.3. Numerous growers and agronomists have commented on the effectiveness of my webpage.

MONITOR RAY COUNTY SITES FOR SOYBEAN RUST INFECTION

Monitor local soybean production field near Camden and kudzu location in Richmond for soybean rust infection, on a bi-weekly basis. Participate in nationwide soybean rust monitoring network, with Ray County status highlighted on website, www.sbrusa.net. Information regarding soybean rust infection severity and progress disseminated via grower listserv (160+ growers, agronomists); alerts/updates sent on as-needed basis.

GLYPHOSATE-RESISTANCE MU & ISU WATERHEMP RESEARCH

Sample multiple Ray County production fields for the presence of glyphosate-resistant weed populations in an effort to characterize waterhemp genetic diversity. These efforts will contribute to larger research agendas by both University of Missouri and Iowa State University. University of Missouri Extension weed scientists are specifically working to identify glyphosate-resistant weed populations on a by-county basis. Numerous growers throughout west central Missouri have expressed concern and a need for information regarding glyphosate-resistant weed populations. Because this is a critical topic for many crop producers, it was important for West Central MO to be well-represented in the MU research; this will provide local growers with excellent data and information.

BUSINESS DEVELOPMENT

In 2008, business development specialists & business counselors with MU Extension, Missouri Small Business & Technology Development Centers (MO SBTDC), Missouri Procurement Technical Assistance Centers (MO PTAC), MO Environmental Program, MO Career Options Project, and MO Market Development program served **12 people & their companies** with business start-up and management counseling, training, & other assistance.

RAY COUNTY UNIVERSITY of MISSOURI

University of Missouri Extension programs are directed by an elected council of ten citizens, representing a broad spectrum of occupations, interests, locations, race and creed within Ray County. Also the City of Richmond, Ray County Farm Bureau, & the Ray County Commission— have one appointment each to the Council.

2008 COUNTY COUNCIL OFFICERS

CHAIR: LeeRoy Martens Richmond
VICE-CHAIR: Scott Fifer Hardin
SECRETARY: Ashley Laughlin Lawson
TREASURER: Sandy Burns Richmond

2008 ELECTED COUNCIL MEMBERS

Scott Fifer District 1: Hardin
 Rachel Foster District 1: Hardin
 Tim Luther District 2: Lawson
 Cindy Mellon District 2: Lawson
 Ed Pridgen District 3: Rayville
 Ashley Laughlin District 3: Rayville
 Lee Roy Martens District 4: Richmond
 Cathy Harris District 4: Richmond
 Pete Butkovich District 5: Orrick
 Sherri Pennington District 5: Orrick

2008 APPOINTED COUNCIL MEMBERS

Allen Dale Ray County Commission
 Roger Rowan Farm Bureau
 Sandy Burns City of Richmond

Council meetings are held the 2nd Wednesday of each month at the: Ray County Farm Bureau Bldg, 108 W. North Main, Richmond, MO 64085

UNIVERSITY of MISSOURI EXTENSION STAFF
SERVING RAY COUNTY

Youth & Family Staff:
Nancy Coleman**
 Marsha Alexander
 Carole Bozworth
 Lynda Johnson
 Diana Milne
 Kathy Smith
 Dena Skinner

4-H Youth Development County Program Director
 Environmental Design
 Family Financial Education
 Health Nutrition Education
 Human Development
 Food Nutrition Program
 Food Nutrition Program

Agriculture:
Julie Abendroth**
 Vacant
 Marlin Bates
 Parman Green

Agronomy
 Livestock
 Horticulture
 Ag Business/Farm Management

Community Development:
 Charles St. Clair Community Development

Office Support Staff:
Elizabeth McGraw**
 Al Black
 Milly Carter

Secretary/Bookkeeper
 West Central Regional Director
 Regional Administrative Assistant

** Headquartered in the Ray County University of Missouri Extension Center in Richmond

2008 FINANCIAL SUMMARY

Funding from county, state and federal monies makes University Outreach and Extension unique. State/federal funds are used for specialist salaries, orientation, in-service costs and postage. Ray County funds support local office costs.

EXPENDITURES	RAY COUNTY FUNDS	STATE/FEDERAL FUNDS
Faculty wages/benefits	-0-	\$131,600.00
Secretarial wages/benefits	\$20,540.00	-0-
Staff Benefits	\$2,142.00	
PERSONNEL	\$22,682.00	\$131,600.00
Travel	\$4,000.00	\$ 1,700.00
Office Supplies/Equip	\$2,625.00	\$ 2,000.00
Rent	\$6,300.00	-0-
Communications	\$3620.00	\$ 4,730.00
Miscellaneous	-0-	\$ 2,400.00
SUBTOTAL	\$16,145.00	\$ 10,830.00
GRAND TOTAL	\$38,827.00	\$142,430.00



RAY COUNTY

2008 ANNUAL REPORT

OUR MISSION . . .

To serve Ray County by extending research-based knowledge and top quality educational programs to address the high priority needs of citizens at the local level. The University of Missouri Extension faculty help individuals and organizations turn knowledge into action, thus improving the quality of life for all.

Ray County
 University of Missouri Extension
 108 W N Main
 Richmond, MO 64085
 (816) 776-6961
 Fax: (816) 776-3955

Internet:
raycounty@missouri.edu

Web Site:
<http://extension.missouri.edu/ray>

Office Hours:
 8:30 a.m. to 12:00 p.m.
 1:00 p.m. to 4:30 p.m.
 (Monday through Friday)

*University of Missouri Extension
 EQUAL OPPORTUNITY/ADA INSTITUTIONS*

2008 RAY COUNTY EXTENSION PROGRAM HIGHLIGHTS

4-H YOUTH DEVELOPMENT HUMAN ENVIRONMENTAL SCIENCES

SPECIAL RECOGNITION TO 4-H MEMBERS

2008 4-H Ambassador Awards: Seniors:—Jade Flewelling & Eric Smith and Junior Ambassadors—Katelyn Hoskins & *John Landwehr*. Other 4-H Award winners: 4-H Graduates—Jade Flewelling; I Dare You Award: Jade Flewelling; Secretary—Ashley Mitchell; Treasurer—Jimmy Hamm; Historian—Shawn Marrant; Reporter—Catherine Pence; Clover Kids—Emily Martens; Outstanding Members—Jimmy Hamm, Carson Luther, Haley Jenkins, Darren Jenkins and Lauren Twyman; Fashion Revue—Whitney Martens, Carson Luther & Johanna Oliphant; Record Book Awards: Derick Bersano, Travis Luther, Kaitlyn Rowan & Carson Luther and National Shooting Sports—Justin Jones..

RAY COUNTY 4-H

2008 4-H in Ray County is a community of **244 4-H youths** learning leadership, citizenship and life skills. One of every ten Missourians between the ages of 5 - 18 participated in a Missouri 4-H program in 2008. Ongoing participation in extracurricular activities, such as 4-H, can lead to long-term payoffs. Regardless of family background, studies find that teens who consistently participate in extracurricular activities from eighth through 12th grade are 70% more likely to attend college. The College Board's Trends in Higher Education Series says that over their lifetime, college graduates will earn an average of \$2.5 million, or \$1 million more than peers with high school educations.

Communities reap long-term benefits by supporting programs like 4-H. Youth engaged in the programs are 60% more likely to vote than their non-engaged peers. In addition, 4-H youth are more likely to volunteer and contribute to their communities than youth participating in other youth programs.

A study commissioned by the Ohio State University offers this measure of the impact of 4-H programs: Assuming that a 4-H experience motivates just 10 percent of Missouri's 110,000 4-H members to receive a bachelor's degree, 11,000 degrees would be earned. In Ray County this would translate into 24 MU degrees. The College Board study suggests that this would mean an additional \$19,100 in earnings per year for those with a degree. **Increased annual earnings for just this group would be nearly \$210.1 million statewide and \$458,400.00 for Ray County.** (Source available upon request.)

Ray County has **9 4-H clubs** in the communities of Hardin, Lawson, Orrick, Richmond & Wood Heights, offer long-term educational experiences in which members learn life skills such as decision making, public speaking and working with others. Members learn by doing under the guidance of adult volunteers, who teach projects ranging from aerospace and arts to veterinary science and sport fishing. Clubs also involve children and teens in community service, camping and educational trips.

Community service is an important component of 4-H Club work. 4-H members contribute hundreds of hours to community service. Service Projects of clubs are: Making Weighted Blankets; Salvation Army: bell ringing, food pantry donations,

Shirkey's Nursing Home, flower planting & gift shop donations; elderly assistance; Ministerial Alliance donations; Adopt-A-Highway; Richmond Easter Egg Hunt; Relay For Life; Richmond Trick or Treat Street; Kids Helping Kids; Military packages, pick up trash, yard work, SAFE Kid Seminars, Humans Society, plant vegetable garden Lawson Nursing Home, VFW flower planting, Petting Zoo Toy Drive, and Christmas Lighting Night.

VOLUNTEERISM

4-H members are supported by **165 youth and adult volunteers**. Volunteers create, support and are part of the 4-H community. Missouri 4-H volunteers responding to a survey report they contribute on average 96 hours per year. Valuing their time at \$17.19 per hour, based on average Missouri incomes, the contribution of 165 Ray County 4-H volunteers was worth more than **\$272,290.00 in 2008!**

COMMUNITY DEVELOPMENT GRANTS

Ray County 4-H received grants of: 1) \$750 grant from United Way, 2) \$500 grant from Richmond Rotary and 3) 4 *BOAC grants* for a total of \$1500 from the MO Dept of Ag. As partners, Ray County FFA Chapters also received 4 grants. The BOAC grants totaled \$3000.00 for fairground improvements.

COMMUNITY INVOLVEMENT

Ray County businesses contributed \$53,280 to 4-H & FFA members for their project work achievements.

Community involvement is a vital role for MU Extension staff to be a part of & a contributor. 4-H staff person serves on various boards: Human Services Council of Ray County, Ray County Coalition Team, Community 2000 & Ray County Fair Inc. and Ray County Extension is a member of the Richmond Chamber of Commerce.

FAMILY NUTRITION PROGRAM

Family Nutrition Education University of Missouri Extension (UME) Family Nutrition Education Programs (FNEP) reached **655 low-income participants** with nutrition education in Ray County during FY'08. FNEP provides information on food safety, nutrition, & physical activity for lifelong health & fitness.

Nutrition education for youths provides information in kid-friendly terms and lessons with hands-on activities. Activities include opportunities for taste-testing healthy foods & practicing skills that lead to good health. Education for adults has: nutrition, food safety, physical activity, & food resource managing.

During FY'08, **588 youths and 67 adults** were served through schools (Lawson Elementary & Stet Elementary) community groups and agencies (Lawson WIC & Richmond WIC). In addition, there were **588 participants** at the Ray County Health Fair, and Food Power Adventure program was at the Orrick Elementary School with **200 participants**.

Evaluation data collected across the state reflects the positive impacts that occur in every county with FNEP. Within FNEP are two key programs, each with its own system for evaluating impact: the Family Nutrition Program (FNP) and the Expanded Food and Nutrition Education Program (EFNEP).

For youths who participated in FNP, results summarized for the state revealed many positive impacts (3,348 teachers gave feedback):

- 38% have participated in FNP for more than 3 years
- 99% (3,293 teachers) reported one or more changes in students after FNP.

For adults, across the state, who participated in EFNEP, results summarized for the state revealed the following

- 81% of graduates improved how they managed their food dollars
- 87% of graduates made healthier food choices

It has been a successful year in Ray County for FNEP. The program continues to grow in Ray County. A new FNEP staff member has been hired to help with the increased need.

FOCUS ON KIDS

Focus on Kids is the court-mandated class for parents who are separated, divorcing or going back to court on modifications. In Missouri, if parents have children under the age of 18, they must attend Focus on Kids (or another approved parent education program) before their court case is finalized. The Focus on Kids program was developed at the University of Missouri and has been taught statewide for over ten years. Diana Milne, a regional Human Development Specialist with University of Missouri Extension teaches the classes in Ray County. The class helps parents understand the impact that separation and divorce can have on children of all ages and emphasizes the importance of developing good skills in communicating, negotiating and compromising with the other parent. Above all, the class stresses how important it is to keep the kids out of the middle of parental disagreements.

Classes are taught every other month (6/yr). There were **47 parents** who attended the classes. Evaluations are completed after every class and the overall combined evaluation score of the FOK classes was 4.35 (based on a 5.0 scale).

HEART TO HEART

The Ray County Women's Heart Seminar was a community effort of University Extension, Ray County Health Department, United Christian Presbyterian Church and the American Heart Association. Heart disease is the number one killer of women over age 25 and goes undetected many times. Women need to take charge of their life!

Keynote speaker, Marcia McCoy, Director of the St. Luke's Mid America Women's Heart Institute, emphasized routine health check-ups and screenings to save women's lives.

146 women attended the community seminar, who learned gender specific risk factors, reducing risk mid-life & beyond and concerns regarding delay in treatment. 302 health screenings were administered to the women attending the seminar. In a survey of participants, 80% report that they plan to adopt more healthful habits, such as exercising more and eating healthy to reduce risk for heart disease.

AGRICULTURE & NATURAL RESOURCES

CORN PRODUCTION SHORT COURSE

A Corn Production 1-day short course was offered to area growers & agronomists in January. It provided high-level training for corn growers & agronomists from Ray & Lafayette Counties.

OBJECTIVE #1 To provide a corn production course to area growers and agronomists, geared specifically towards topics that would be applicable to them and West Central Missouri. Provide participants with the opportunity to discuss current agronomic topics with leading plant science specialists.

OUTCOME #1 34 individuals participated, with the following county breakdown: 16 (Ray), 11 (Lafayette), 3 (Carroll), 1 each (Platte, Clinton, Daviess, St. Clair). 94% rated the short course as either excellent or good (with excellent carrying 42% of total). Evaluation of speakers and presentations was consistently high, with all speakers receiving 84% in the good to excellent range. Numerous growers and agronomists noted their appreciation for the course, with specific comments of: "Very well organized and planned, nice job", "Like the hands-on samples, "It was truly one of the best extension programs out-state that I have attended.

OBJECTIVE #2 Educate growers & agronomists on yield determining factors in corn production, specifically investigating the relationship different stresses have on end yield/realized yield. Topics discussed: potential versus realized yield potential, yield components important in corn production, hands-on

identification of corn diseases and management techniques, Roundup Ready versus conventional herbicide programs, managing nitrogen fertilizer and strategies for reducing N loss, phosphorus and potassium fertilizer management, corn yield response to seeding rate and plant population across Missouri environments, and diagnosing pest problems in the field.

OUTCOME #2 100% of participants increased understanding of yield components important in corn production. 90% noted their understanding of foliar diseases & the importance of application timing had increased. 100% indicated they gained knowledge regarding fertility management, specifically methods to reduce nitrogen loss.

WOMEN LANDOWNERS AG CONFERENCE

148 women attended the Women as Landowners Ag-Conference that seeks to educate women landowners on financial planning, land lease agreements, considerations when buying or selling land, soil conservation and other natural resource issues, risk management and crop insurance, and methods to conserve home and farm energy use. Collaborate with Ray, Johnson, & Lafayette USDA FSA offices for preparation & promotion of event. Team with local steering committee of women landowners to determine presentation topics of interest.

PRIVATE PESTICIDE APPLICATOR TRAINING

PPAT sessions were offered in Ray (with 24 attending), Jackson, Platte, & Lafayette Counties, for a total of 82. 62/82 applicators rated the training as 'excellent' while the remaining 20/82 rated it as 'good'. The 3-hour course curriculum was tailored to west central Missouri cropping systems & conditions. This allows the course to be relevant and reflective of current pest and crop management topics, while maintaining the core objectives issued by the Missouri Department of Agriculture.

MEDIA EFFORTS

KMZU and KSIS Radio broadcasts, newspaper & newsletter articles provided timely, relevant agronomy information to wide audience base. Reports distributed to outlets every 3 weeks. Local grower, Rodney Thompson (Richmond, MO), highlighted in a High Plains Journal article which discussed Rodney's involvement in 2006 and 2007 on-farm research. The June 2008 edition of the High Plains Journal featured two articles of interest: (<http://www.hpi.com/archives/2008/jun08/jun9/Strip-tillprovidesthebestof.cfm>). The cover story titled 'Strip Till Provides the Best of Both Worlds' discusses the benefits of a strip tillage system and 'On-Farm Research Trials Show Positive Results' (<http://www.hpi.com/archives/2008/jun08/jun9/On-farmresearchtrialsshowpo.cfm>) highlights a 2007 on-farm research trial investigating spring applied anhydrous with and without N-Serve inhibitor.

GROWER E-MAIL LISTSERV

Communicate with over 160 growers and agri-business clientele on a regular basis via email listserv. Timely email updates regarding crop conditions, local MU Extension programming opportunities, and other farm-related information sent to listserv.

AGNEWSLINE Quarterly Newsletter:

Distributed to 90 Ray County growers and agri-business clients. Regional Specialists provide timely articles regarding ag-business management, crop and forage production, local food production, horticulture and other related agricultural topics.

HOME HORTICULTURE

33 phone and walk-in consultations regarding vegetable and flower gardening, lawn care, trees & shrubs, pest identification, and nutritional management. Provided recommendations on 23 soil tests.

COMMERCIAL HORTICULTURE

Provided fruit & vegetable production assistance to 18 Ray County growers.