

# Mizzou Weekly



## Healthy for Life

Staff Council gets update on wellness programs.

Page 2

## Boosting the Benefit

MU research adds millions to economic development efforts.

Page 3

June 24, 2010

University of Missouri  
mizzouweekly.missouri.edu

## Branching Out

Campus boasts six state-champion trees.

Page 2

## Artisanal archery

### CUSTOM CRAFTED

Staff member's hobby has become a passion

**T**ab Leach walks tall and carries a bent stick. By day, he is a building systems control technician, installing or servicing the many controls that keep MU's buildings ventilated and heated or cooled.

Evenings and weekends, however, are devoted to his hobby of crafting shapeless pieces of wood into traditional longbows or formless pieces of stone into arrowheads. In the industry, he is known as a bowyer and a flint knapper.

The longbows, made from a single piece of natural wood, have been used for thousands of years in Africa, Europe, the Americas and Asia for hunting or warfare.

Leach caught the bow-making fever after a friend of a friend, who had made one, showed it to him. Soon he set up shop and started building bows in a 12-by-15 chicken coop that served as his workplace for 10 years.

"I didn't have a coach, and learned mostly from books and making mistakes," says Leach, who moved from Alaska to Missouri 15 years ago. "On the fourth try, I made a bow that I still have."

Since then, he has made more than 50 bows, some of which he has sold, but the majority is on display in his home. None of them is built one-size-fits-all, he says. Each bow is customized to the individual, using two basic

guidelines: the draw weight of the bow — how many pounds the bow is going to pull — and the draw length of the person — to keep an archer from becoming fatigued when shooting.

To produce a proper bow, Leach relies on Osage orange, commonly known as hedge wood. "Osage is the premier bow wood of Missouri, if not the United States," he says. "It makes a resilient bow that holds up over a long period of time. I haven't found that with other woods."

He searches for straight pieces of Osage orange in January and February when the sap is out of the wood. Only about one out of 100 trees will contain the right wood for his bows. The hunt usually nets six to eight logs, five to six feet long. Leach then begins the most time-consuming task: preparing the wood.

He splits the logs into quarters, skins off the bark and puts on a coat of shellac to keep wasps from burrowing inside and depositing wood-eating larvae. The wood is stored in his garage for one year before it is ready to use.

Leach says he can turn an aged log into a stringed bow in six hours, using knives, files, scrapers and a few other tools. "It's not a finished product, but it can shoot."

Historically, bowstring material would be sinew, the tissue that connects muscle to bone. Leach chooses to use Dacron, a synthetic material which, unlike sinew, is not affected by moisture or heat.



Rob Hill photo

**TAKE A BOW** Tab Leach, a building systems control technician at Mizzou, spends his spare time handcrafting traditional longbows from native Osage orange wood. Leach is a self-taught "bowyer" who even makes his own stone arrowheads. He passes his skills and knowledge to others by giving demonstrations and offering bow-making classes at his farm.

His cedar shaft arrows — all made with the same weight and flex for consistency — are tipped with arrowheads he makes mostly from burlington chert [flint] and fletched with turkey feathers. Additionally, he makes all the equipment associated with archery like finger guards, arm guards and quivers

[the satchels that hold the arrows].

Today, traditional longbow making is thought to be a dying art, but Leach is determined to see the practice carried on in the future. He passes his skills and knowledge to others by giving demonstrations throughout the state and by offering bow-

making classes at his farm. "I enjoy working with people," he says. "It is a good feeling to see someone craft something and to help them do that."

With questions about bow making or to inquire about enrolling in a class, e-mail leachtr@missouri.edu.

## EPA is fired up about Mizzou's energy-efficient power plant

**I**t has burned corncobs, used tires, waste wood and switchgrass, all in an effort to keep people comfortable. With a capacity of producing up to 66 megawatts of electricity and 1.1 million pounds of steam per hour, the University of Missouri's Power Plant is responsible for supplying energy and cooling and heating for buildings that total more than 13 million square feet, including three hospitals, the research reactor and several research facilities.

Recently, the U.S. Environmental Protection

Agency (EPA) recognized the power plant with a 2010 EPA Energy Star Combined Heat and Power (CHP) award recipient, making it one of only three universities in the nation recently recognized with the honor.

"MU is very proud of Energy Management's track record of improving campus energy efficiency while reducing energy costs and lowering emissions," says Gary Ward, associate vice chancellor, Campus Facilities. "We are looking forward to adding a new biomass boiler

to our CHP system in 2012 to build on the success we have already achieved."

The EPA award recognized those power plants that produced energy efficiently while decreasing air pollution. MU's operating efficiency is more than 70 percent, compared to conventional fossil-fueled power plants, which are only about 30 percent efficient, according to the EPA. Other universities recognized at this time were the University of California in San Diego and Fairfield University,

located in Fairfield, Conn.

"Combined heat and power is an efficient, clean and reliable approach to generating power and thermal energy from a single fuel source," says Susan Wickwire, chief of the EPA's energy supply and industry branch. "CHP plays an important role in reducing the environmental impact of power generation. We applaud the University of Missouri's effort because the improvement in efficiency translates to a reduction in total fossil fuel use, reduced

emissions of air pollutants and carbon dioxide, the leading greenhouse gas contributor to global climate change."

MU has been producing heat and electricity using combined heat and power since 1892. The system uses nearly 38 percent less fuel than typical systems using onsite thermal generation with purchased electricity. MU's system also reduces carbon dioxide emissions by an estimated 107,000 tons per year. This reduction is equivalent to the annual emissions from more than 17,900 passenger vehicles.

SEE POWER on Page 2

**A summer standby**

One of Mizzou's best-loved summer traditions is the Department of Theater's Summer Repertory series, and this summer the season starts July 8 with a pair of comedies and a trio of "Comedies in Concert."

*The 25th Annual Putnam County Spelling Bee*, directed by James Miller, chronicles the experience of six adolescent outsiders vying for the spelling championship of a lifetime. It opens at 8 p.m. July 8 at Rhynsburger Theatre in the Fine Arts Building. Additional presentations will be at 8 p.m. July 9, 10, 16, 22 and 24, and

at 2 p.m. July 11 and 25.

Steve Martin's *Picasso at the Lapin Agile*, directed by Cheryl Black, places Albert Einstein and Pablo Picasso in a Parisian café in 1904 just before the renowned scientist transformed physics. It will be presented in Rhynsburger Theatre at 8 p.m. July 15, 17 and 23, and July 29-31, and at 2 p.m. July 18 and Aug. 1.

The three Comedies in Concert will be presented at the Corner Playhouse: *The Sudden Glide*, written and directed by David Crespy, will be at 8 p.m. July 13; *Solidarity* by Frank Lasik, directed by Matt Fotis, will be at 8 p.m. July 20;

and *The Burgundy Slipper* by Andy Pierce, directed by Emily Rollie, will be at 8 p.m. July 27.

For ticket information, go to theatre.missouri.edu or call 882-PLAY.

**When lightning strikes**

Lightning is responsible for more deaths and property loss nationwide than tornadoes, hurricanes and floods combined, says Robert Schultheis, MU Extension natural resources engineering specialist. This week is Lightning Safety Awareness Week.

"Lightning kills about 400

people, injures about 1,000 and causes a quarter-billion dollars worth of property destruction each year," Schultheis says. "In Missouri we can usually expect lightning to occur an average of one in every six days."

Damage often extends to homes and electronics. "You can have a lot of different types of damage, from direct hits that could start fires to power surges that are so great that they will run through wiring and blow out all your electronic equipment," he says. "I've known people who have had lightning melt the nails that hold down siding on their homes."

One way to mitigate the danger is to install what is commonly known as a lightning rod. Lightning protection systems, consisting of air terminals on the top of a structure and copper or aluminum cables running to grounding rods, can save a home from costly repairs.

Although a lightning protection system may seem like a simple thing to install, Schultheis advises homeowners to consult professionals.

**Staff Advisory Council gets update on University's wellness programs**

**HEALTHY FOR LIFE**

Programs focus on weight management, exercise, smoking cessation and stress reduction

At the June 10 Staff Council meeting, Jenny Workman gave an overview of various programs offered to MU employees by Healthy for Life, The T. E. Atkins University of Missouri Wellness Program.

Workman, program manager, said Healthy for Life began in 2004 as a pilot in the MU Heath System with a generous donation from Curator Thomas Atkins, and since 2007 has been available to all campuses in the University of Missouri System.

In general, the programs, geared toward weight management, physical activity, smoking cessation and stress reduction, focus on benefit-eligible employees, their spouses and retirees, but many programs are open to all faculty and staff. Programs are free or at low cost and accessible. For complete descriptions of each, visit wellness.umsystem.edu.

Need to whittle a little from the waist? Healthy for Life offers Weight Watchers at Work

and Eat for Life. The 13-week Weight Watchers at Work classes generally are offered during the lunch hour. Employees can join an established group or start one with a minimum of 15 people. For information on cost, call 884-1312 or e-mail mailto:wellness@umsystem.edu.

Eat for Life is a 10-week course that helps participants learn to have healthy relationships with their food and bodies. It is taught in group classes and offered online over Blackboard. For more information, e-mail rossyl@umsystem.edu

Get up and get moving by enrolling in the million step pedometer program or the 500-mile ride to wellness odometer program. For information on costs and registration, call 884-1312 or e-mail wellness@umsystem.edu.

Need help kicking the habit? Several programs are offered to both members and nonmembers of the UM Choice Health Care Program. With questions, call 884-1312 or e-mail wellness@umsystem.edu.

Employees interested in stress reduction opportunities have their choice of noontime sitting

meditation, mindfulness-based stress reduction or massage therapy. For more information on meditation classes, e-mail rossyl@umsystem.edu. To schedule appointments for massage therapy, call 884-1312 during regular business hours Monday through Friday.

In addition to programs that keep employees health and fit, Healthy for Life provides blood pressure and cholesterol screenings for faculty, staff and retirees throughout the year at health fairs. Workman said this fall the wellness program will provide free flu shots on campus.

Anyone interested in promoting health in the workplace, may sign up to be wellness ambassadors who distribute information in their departments as well as keep Healthy for Life informed of wellness needs in their areas. With questions, call 884-1312.

In other business, the council •Discussed upcoming elections. Ballots will be mailed in July.

•Announced a tentative date of May 16-20, 2011, for Staff Recognition Week.

•Proposed an open meeting to discuss the recent benefits

survey with Betsy Rodriguez, UM vice president for human resources. Details will be posted at staffcouncil.missouri.edu.

•Heard from council member Angel Anderson, executive staff assistant in the Chancellor's Diversity Initiative, about a proposed diversity summit Oct. 20 and 21 on campus, with discussion centering on workplace climate.

**POWER from Page 1**

MU is recognized as a national leader in energy efficiency and conservation, reducing energy usage by 10 percent per square foot and greenhouse gas emissions by 12 percent per square foot since 1990. Over the past 20 years, MU has saved an average of \$6.6 million annually.

Power Plant staff work directly with researchers to search for alternative fuels and more efficient means to heat, cool and power the campus. Currently, MU's forestry department is helping develop specifications for fuel for the biomass boiler to ensure the health and value of Missouri's forests, while other forestry faculty are exploring the feasibility of growing woody biomass to use in the power plant.

**Hunger persists in U.S.**

A recent MU study found that food insecurity and hunger among children still persist, even in food-secure households and despite food assistance programs.

Children are considered food insecure if, in the last year, they did not eat enough, did not eat for a day, skipped a meal or were hungry because their family could not afford adequate food. "We found that household food security does not equate to food security for children within those households," says ManSoo Yu, assistant professor of social work. "This is alarming considering previous research that indicates food insecure children are more at-risk for being overweight, having poor health and poor academic performance."

Yu found that informal assistance through churches, food pantries and soup kitchens, was related to improved child food security. Participation in the food stamp program was related to increased food security among children in Caucasian households, but not in African-American households.

**Mizzou campus boasts six state-champion trees**

**BRANCHING OUT**

Trees in urban areas provide many benefits

Six trees on the University of Missouri campus have been named state champion trees by the Missouri Department of Conservation. At a June 23 ceremony in Peace Park, the Mizzou Botanic Garden received certificates from the Missouri Department of Conservation for each of the trees.

Trees in urban areas provide many benefits, and for that reason the state of Missouri recognizes the largest specimen of each type

of tree in the state. Besides adding curb appeal, trees help clean the air, curb stormwater runoff, increase property value, sequester carbon and reduce energy costs.

MU's staff of certified arborists work year-round to ensure the health of the nearly 6,000 trees on campus. Mizzou Botanic Garden recognizes the educational and health benefits trees provide and is thrilled to have six of Missouri's largest trees," says Pete Millier, the botanic garden director. "We take pride in the beauty of our campus, and one large part of that beauty is the number of healthy trees that we

have on our campus."

American Forests and the Missouri Department of Conservation use a formula to assess a point value — based on circumference, crown spread and height — to determine champion trees. Mizzou Botanic Garden's six award-winning trees are:

- Blackhaw (*Viburnum prunifolium*) Circumference: 24 inches, height: 19 feet, spread: 21 feet

- Buttonbush (*Cephalanthus occidentalis*) Circumference: 7 inches, height: 12 feet, spread: 18 feet

- Roughleaf dogwood (*Cornus drummondii*) Circumference: 13 inches, height: 26 feet, spread: 21 feet

- Fringetree (*Chionanthus virginica*) Circumference: 9 feet, height: 13 feet, spread: 21 feet

- Black Maple (*Acer nigrum*) Circumference: 87 inches, height: 77 feet, spread: 14 feet

- Sugarberry (*Celtis laevigata*) Circumference: 131 inches, height: 81 feet, spread: 73 feet

A map locating each of the six trees is online at gardens.missouri.edu.

**MizzouWeekly**

Volume 31 No. 32  
mizzouweekly.missouri.edu

A publication for the faculty and staff of the University of Missouri, published every Thursday during the academic year and twice a month during the summer by Publications and Alumni Communication, a department of University Affairs, 407 Reynolds Alumni Center, 882-7357. News deadline is noon Thursday the week before publication. Annual subscriptions are available for \$30.

Editor John Beahler

Advertising Melissa Schaller, Scott Reeter

Photographers Nicholas Benner, Rob Hill, Rachel Coward

Designer/writer Sue Richardson

# Mizzou research adds millions to economic development efforts

## BOOSTING THE BENEFIT

MU research equivalent to 20 companies with revenues of \$12 million each

While economic woes are in the news nearly every day, MU researchers have experienced the opposite trend as they have attracted record levels of grant money to the region to study problems in disciplines that include electrical and computer engineering, physics, biological sciences, agriculture, medicine, psychology, business and literature.

“Reaching these record milestones, particularly given today’s challenging economic climate, reaffirms the place of MU’s faculty investigators among the nation’s leaders in research, scholarship, public service and economic development,” says Rob Duncan, vice chancellor for research. “Original thinking and discovery are vital to the continued health of our national economy; in tough times we need more, not less, support for the scientists, scholars and students whose innovative thinking will lead our nation’s return to prosperity.”

During fiscal year 2009, MU researchers spent more than \$543 million on research, instruction and public service. This is an 11 percent increase from the previous year when researchers spent roughly

\$489 million and a 38 percent increase from five years ago.

“Much of this money was spent in the local or state economy through the creation of jobs that support this research or purchasing vital equipment to complete the studies,” Duncan says. “Studies have shown that MU research creates millions in economic development dollars. For example, the money generated by MU last year was roughly equivalent to 20 companies with revenues of \$12 million each.”

The future also looks promising as researchers received more than \$573 million in awards during the 2009 fiscal year. Some recent research awards include:

- \$6.8 million to the School of Medicine to encourage rural doctors to start using electronic health records. Experts say the increased use of electronic medical records could save lives.

- \$3.1 million grant to the College of Veterinary Medicine to expand research on biological joint technology, or using living tissue to replace damaged joints.

- \$5 million grant to the Department of Physics in the College of Arts and Science to increase physics instruction in Missouri high schools.

- \$1.4 million to the College of Engineering to develop technology that would detect falls and atypical behavior among retirement community residents.

- \$1.5 million to the Bond Life Sciences Center and the MU School of Journalism to address the difficulties of communicating science to the public.

Researchers also benefited from funds made available through the American Recovery and Reinvestment Act. Currently, MU has been awarded more than \$64 million for 91 projects through this funding.

Mizzou officials also have been working to take the discoveries resulting from this research and create new businesses. In fiscal year 2009, Mizzou researchers filed 68 patent applications and the university received more than \$10 million in licensing income from MU inventions. This is up from the 49 patent applications filed and \$6 million received in royalty income in fiscal year 2008.

“We’re working with our researchers every day to develop the best strategies for moving their discoveries from the lab to the marketplace,” says Chris Fender, director of the Office of Technology Management and Industry Relations. “Commercializing these new technologies is a sure way to help boost the economy of the state through the creation of new jobs and new revenue streams.”

The entire research report for 2009 is available online at [research.missouri.edu/2009/](http://research.missouri.edu/2009/).

# calendar



## Exhibits

**Bingham Gallery:** “Lifetime Achievement Showcase — Part Three” highlights the creative accomplishments of Jerry Berneche and Brooke Cameron, professors emeriti of art, with a retrospective of paintings, prints and drawings produced by these artists through Aug. 26. The museum, located in the Fine Arts Building, is open from 8 a.m.-5 p.m. weekdays.

**Museum of Anthropology:** “Persian Arms and Armor: A Hero’s Tradition,” an exhibit of arms and armor from 19<sup>th</sup> century Persia and illustrations from the Persian epic *Shahname* is on display through July 30. The museum, located in 100 Swallow Hall, is open from 9 a.m.-4 p.m. weekdays.

**Museum of Art & Archaeology:** “The Voyage of a Contemporary Italian Goldsmith in the Classical World: Golden Treasures of Akelo” features works in gold by a contemporary goldsmith who rediscovered ancient techniques of the Greeks, Etruscans and Romans through Sept. 26. The museum, located in Pickard Hall, is open from 9 a.m.-4 p.m. Tuesday-Friday and from noon-4 p.m. Saturday and Sunday.

**State Historical Society** “Picturing the Way West: Landscapes from the Pacific Railway Survey” is on display in the corridor gallery through Nov. 30. Gallery hours are 9 a.m.-4:30 p.m. Monday to Thursday.

## Courses & Workshops

### Monday, June 28

**Computer Training:** “Dreamweaver CS4 2: Introduction to CSS” will be offered at 1 p.m. in N3 Memorial Union. Registration is required online at [training.missouri.edu](http://training.missouri.edu) or call 882-2000.

### Tuesday, June 29

**Computer Training:** “Taking Control of Your Calendar With Outlook” will be offered at 8:30 a.m. in N3 Memorial Union.

### Wednesday, June 30

**Computer Training:** “Photoshop CS4: Retouching” will be offered at 1 p.m. in 4D11 East Ellis Library. Registration is required online at [training.missouri.edu](http://training.missouri.edu).

### Thursday, July 1

**Computer Training:** “InDesign CS4 3: Layout & Advanced Typography” will be offered at 8:30 a.m. in N3 Memorial Union. Registration is required online at [training.missouri.edu](http://training.missouri.edu) or call 882-2000.

### Thursday, July 8

**Museum Kids Workshop:** “World of Art: 24 Metals in the Museum” will be offered for children in grades K-8 from 2-3:30 p.m. in the Cast Gallery at the Museum of Art and Archaeology. Registration is required; call 882-9498.

# Statewide program increases use of electronic health records

## TARGETING TECHNOLOGY

Records promote high-quality, safe, efficient patient care

Electronic health records can provide a patient’s entire medical history and a wealth of other information at the click of a button. They also have the potential to save countless lives and billions of dollars. Now, the University of Missouri has a two-year, \$6.8 million cooperative agreement to help patients throughout the state benefit from increased use of this health information technology.

The Missouri Health Information Technology (HIT) Assistance Center was created by MU with funding from the U.S. Department of Health and Human Services. The assistance center will help thousands of primary care providers throughout Missouri select electronic health records best suited to their practices. The center will then help the providers use the technology to improve quality, safety and efficiency in patient care.


The center will assist 3,200 primary care providers in better understanding electronic health records through a variety of outreach and education programs. Providers will learn how the technology can help improve the quality of care, as well as the federal incentives for using electronic health records. Of the 3,200 care providers, 1,200 will be selected to receive services that will help them achieve meaningful use of electronic health records. The HIT Assistance Center will especially target primary care providers who serve uninsured, underinsured and medically underserved populations, especially those in rural areas.

“Our focus is helping primary care providers select, adopt and begin meaningful use of electronic health records,” says Grant Savage, the project’s principal investigator and chair of health management and informatics. “We see this as a way to dramatically improve the quality of care for the neediest people in Missouri.” Missouri patients could

particularly benefit from the electronically enhanced tracking and sharing of information about health risks and diseases. “Missouri rates for cardiovascular disease, cancer, kidney disease, infant mortality, obesity and smoking are among the worst in the nation,” says Karen Edison, the project’s co-principal investigator and director of MU’s Center for Health Policy.

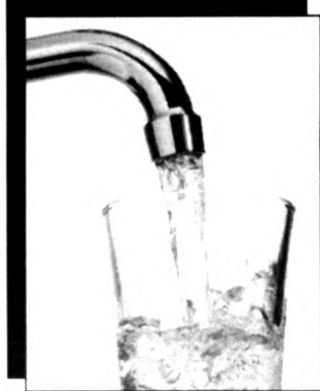
“Electronic health records are another important tool that can empower patients and physicians in their efforts to improve health,” she says. “Studies have also found that primary care providers are at the forefront of practicing preventive medicine, which is essential for improving population health and reducing overall health costs.”

Missouri’s rankings among all 50 states and the District of Columbia are 40th for cardiovascular disease, 40th for cancer, 36th for kidney disease, 35th for infant mortality and 34th for obesity. Missouri also ranks 48th among states for rates of adult smoking.



**Environmental Health & Safety**

web: [ehs.missouri.edu](http://ehs.missouri.edu)  
[ehs@missouri.edu](mailto:ehs@missouri.edu)  
 (573) 882-7018

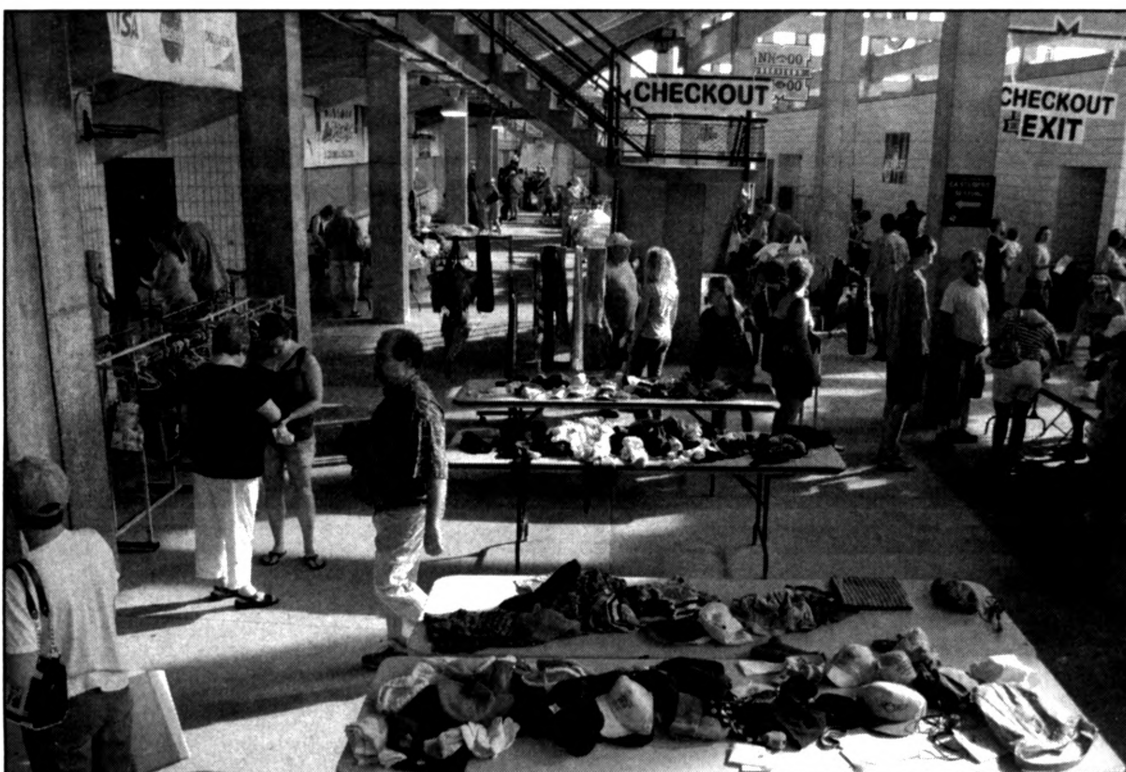


## PUBLIC NOTICE

The University of Missouri operates a public water system and is required by law to report annually to the EPA and the public on the state of the quality of the campus water supply. For calendar year 2009, the campus water supply met all EPA quality standards with no regulatory violations.

More information is available at <http://ehs.missouri.edu/env/drinking-water.html> or you can contact EHS for a copy of the 2009 Consumer Confidence Report.

“Working with the campus community to provide a safe and healthful environment.”



Rachel Coward photo

**SOMETHING FOR EVERYONE** The annual Tiger Treasures rummage sale brought nearly 1,400 people to Memorial Stadium June 5 shopping for bargains among the items departing students donated when they left town for the summer.

## A Tiger treasure trove

### RESCUING CAST-OFFS

Campus rummage sale raises \$14,000 for United Way agencies

There was a little bit of everything on sale to bargain hunters at the June 5 Tiger Treasures rummage sale: a table loaded with baseball caps, stacks of carpet, rows of small household appliances that once helped make a residence hall room a little more homelike for Mizzou students. There were even old Halloween costumes.

Until a few years ago, all this and more would have been discarded when MU students cleaned out their dorm rooms and left for the summer. But the nearly 1,400 shoppers who flocked to MU's annual rummage sale took it all off their hands and got more than a few bargains in the process. They also kept nearly 15 tons of cast-offs out of the local landfill and raised \$14,000 to benefit area United Way agencies, says Steve Burdic, MU's sustainability coordinator.

Now in its fourth year, Tiger

Treasures is sponsored by the MU sustainability office, Campus Facilities and United Way as a way to recycle what departing students would normally throw away. The event is free, but early bird shoppers pay \$5 to get in at 6 a.m. to get first crack at the merchandise. "Those people are pretty active shoppers," Burdic says. "There are lots of good bargains."

Some of the hot ticket items at each sale include small appliances, housewares and clothing. As the annual sale has become established, more people are including it in their early summer calendar. "It's actually turned into quite a bit of fun," Burdic says.

## Action-packed education

### HEALTHY SCHOOLS

Activity breaks improve attention spans, reduce discipline problems

This spring, first lady Michelle Obama launched "Let's Move," a new campaign to combat childhood obesity. The initiative seeks to improve school nutrition programs and promote physical activity.

One Missouri elementary school is seeing the benefits of incorporating physical activity in its classrooms with the adoption of the Active and Healthy Schools Program. The program, implemented by University of Missouri researchers, has helped to increase kids' activity levels, improve their attention span and reduce discipline problems.

The Active and Healthy Schools Program is being tested at Leslie Bell Elementary School in Lexington, Mo., with the guidance of Steve Ball, associate professor of exercise physiology and MU Extension state fitness specialist.

As a part of the program, students participate in 3 to 5 minute activity breaks throughout the day.

The breaks include activity-based games such as jumping, walking or climbing stairs and may occur inside or outside of the classroom. After breaks, teachers resume schoolwork and students' attention levels are restored.

"The kids love the activity breaks because it gives them something active and fun to do," says Amanda Fienkeldie, guidance counselor at Leslie Bell Elementary School. "Since the program began, discipline referrals among kids with chronic behavior problems have decreased, and there is a significant improvement in their academics, participation and ability to stay on task."

In addition to activity breaks, students and faculty wear

pedometers to fuel competition among students and teachers and increase the number of their steps. Activity zones are placed throughout playgrounds to engage students in different activities, including hula-hoop, jump-rope and games. Signs and pictures with healthy messages about nutrition and activity are displayed in classrooms and throughout the school.

"The idea is to help schools demonstrate to kids the importance of physical activity and nutrition," Ball says. "The program encourages small changes that schools can build on to gradually create an environment that reflects health and fitness."

Prior to implementing the program, teachers were instructed on how to manage activity breaks without disrupting academic schedules. Ball presented research explaining how the program can improve learning, decrease discipline problems and increase physical activity in students at a young age, which makes them more likely to be healthy as adults.

"Now, the kids are more excited about PE and recess," says Gayle Frerking, physical education teacher at Leslie Bell Elementary School. "Students are starting to participate more in youth basketball, dance and gymnastics programs. What they're learning in school is being spread outside the school and into the community."

Initial research for the Active and Healthy Schools Program was conducted at Arizona State University. In the initial study of the program at a school in Arizona, researchers found significant increases in students' steps and a reduction in absences and school nurse visits. The researchers also received positive feedback from parents, students and school personnel.



Full Service Bar   Parking Garage Access   Walk from Campus   Locally Owned

ORDER 2 ENTREES & GET A  
**FREE APPETIZER**  
Must present this coupon.



**Voted Best Thai restaurant in town!**

Lunch 11-2 Mon-Sat   Dinner 5-9 Mon-Thurs   Dinner 5-10 Fri-Sat

**811 CHERRY ST.   874-3284**

## classifieds

### FOR SALE

Pine Straw Mulch \$10 per bale. 1 bale covers approx. 50 sq. ft. 573-356-4861

Snapper riding mower. 8 hp, 28" cut, grass-catcher. Runs great! \$350. 573-356-4861

2006 AWD V-8 Mercury Mountaineer. Metallic Gold, 40,300 miles. Always garaged, very good condition. Fully loaded except DVD and sunroof. Selling below KBB price. 573-474-9252

Ping pong table in excellent condition, full size, net, all accessories included. \$125.00. 573-289-8170

The classified advertising section is open to faculty and staff members and retirees.

Home phone number required.

No campus numbers will be printed.

Rates: 30-word maximum \$9

Deadline: Noon Thursday of week before publication.

No refunds for cancelled ads.

Mizzou Weekly Classifieds: Make check payable to University of Missouri and send to Classifieds, Mizzou Weekly, 407 Reynolds Alumni Center, Columbia, Mo. 65211

University Libraries  
University of Missouri

### Digitization Information Page

Local identifier                      MizzouWeekly(print)

### Source information

Format                                      Newspaper  
Content type                                Text with images  
Source ID                                  Duplicate copies University Archives weeded out  
Notes

### Capture information

Date captured                              July-December, 2022  
Scanner manufacturer                      Plustek OpticBook  
Scanner model                                A300 Plus  
Scanning system software                    Book Pavilion  
Optical resolution                            600 dpi  
Color settings                                8 bit grayscale for majority of pages;  
    24 bit color for color illustrations/portraits/photographs  
File types                                      tiff  
Notes

### Derivatives - Access copy

Compression                                Tiff: LZW compression  
Editing software                              Adobe Photoshop 2022  
Resolution                                    600 dpi  
Color    same as captured  
File types                                      pdf created from tiffs  
Notes    Images cropped, straightened, and brightened.