

HOME GREEN



Resident Henry Hellmuth hangs his laundry to dry on a clothesline behind Sustainahouse at 210 N. College Ave. Sally Waldman, Monica Everett, Kat Seal and Hellmuth, far left, try their hand at growing some of their own food. Left, Sustain Mizzou members join residents for a potluck dinner at the house.

HOME

Six students take over one old house with a mission to use less and conserve more. Welcome to MU's Sustainahouse. Story by Tara Ballenger. Photos by Rob Hill.

IN A PERFECT WORLD, sustainable living would be plucked right off the pages of a Sharper Image catalog — solar panels would power ultra high-efficiency appliances, and stylish zero-emissions cars would rule the roadways.

For the average American, that's far from reality. But a group of six Mizzou students wants to show by example that anyone, even the cash-strapped college crowd, can lead a more sustainable life.

Undergraduates Monica Everett, Kat Seal, Henry Hellmuth, Li Tang, Sally Waldman and Claire Friedrichsen are the

proud new residents of Sustainahouse, a project designed to bring like-minded students together for a community living experience that emphasizes environmental responsibility.

Student environmental group Sustain Mizzou chose the roommates from a pool of applicants, and they moved in just before fall classes. The six-room brick bungalow at 210 N. College Ave. was built in the 1920s and fits right in with the East Campus neighborhood that many MU students call home. Going green in such living quarters is a

challenge they welcome.

"It's more realistic," says Hellmuth. "We wanted to show what college kids would actually be able to do [to be more sustainable]."

Since most college students cannot afford \$10,000 solar panels or other costly energy-saving technology, Sustainahouse inhabitants are keeping things basic.

The group plans to recycle, compost, grow a vegetable garden, get around by bicycle and keep an eye on electricity and water consumption in hopes of showing peers that the path to sustainability can be inexpensive — and even fun. |||



Above, setting rules for the community and discussing goals for Sustainahouse are topics as residents, from left, Henry Hellmuth, Kat Seal, Sally Waldman, Li Tang, Monica Everett and Claire Friedrichsen, convene on the living room floor in August. Shared duties include hauling food scraps from Sustainahouse to a neighborhood compost enclosure, performed by Waldman, right.

SEE HOW SUSTAINAHOUSE RESIDENTS COPE AS WEATHER COOLS | MIZZOMAGAZINE.COM

LIVING WITH LESS

Medical resident Lincoln Sheets has pared down his personal possessions to about 100 items. Story by Stephanie Detillier. Photos by Nicholas Benner.

LINCOLN SHEETS can't skip laundry day, but it's not much of a chore for him anyway. His wardrobe — every shirt, sock, undergarment and pair of pants he owns — totals fewer than 25 pieces and can be washed in a single load.

Sheets, MD '11, a first-year family and community medicine resident at MU, says that is just one of the benefits he has reaped from limiting his possessions to 100 items.

Shortly after Sheets started medical school at Mizzou, his wife showed him a 2008 *Time* magazine article about the "100 Thing Challenge," a minimalist experiment to limit personal possessions. "She plopped it in my lap and said, 'This reminds me of you,'" he recalls. "Then she was so sorry she had done so because she wasn't expecting me to do anything with it."

When Sheets adopted the challenge as his New Year's resolution, he had no clue how many items he owned (more than 700) and gave himself a more realistic goal (reduce to 500 items). He placed a garbage bag in his closet and started adding clothing that he wanted to give away to friends or to Goodwill. Before he knew it, he was down to about 150 items.

"The first 600 or so things were no-brainers," he says. "I had a ton of camping equipment that I only used once or twice a year, books I'd never read again and clothes I hadn't worn in two years."

Because he had come that far, he figured he'd continue whittling his belongings down to 100. It wasn't easy; what remained were Sheets' favorite, highest-quality items. He held on to a pair of \$150 boots for a while before eventually giving them to a hiker friend.

"Every decision I made required pushing past that urge to hold on," Sheets says. "As I

got closer to 100 things, I felt more successful. It was like sticking to an exercise plan or a studying plan."

Sheets planned to maintain the 100-possession limit for a year, but he says he has continued the challenge because it's been surprisingly easy. He now owns 86 things, including a stethoscope, blood pressure cuff, rain poncho, jumper cables, *Leonard Maltin's Movie Guide*, bicycle helmet and toiletries. Aside from his car, bicycle, motor-bike and a few other items, everything the

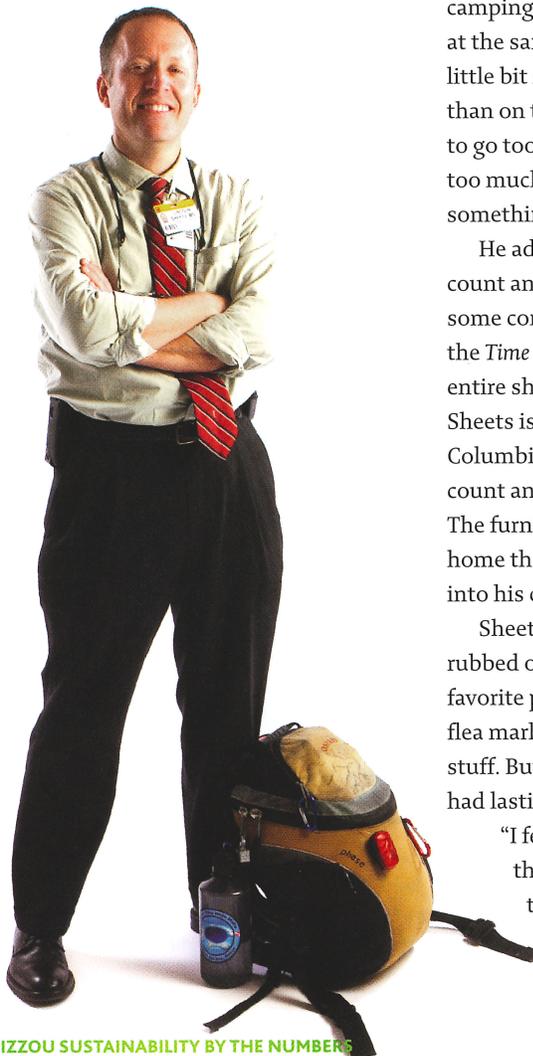
48-year-old owns fits into his backpack, which makes traveling easy. When Sheets realizes that he needs something for a temporary use, he tries to borrow, instead of buy.

"I have a friend who I had done a lot of road trips and camping with, and he has a garage full of man stuff. I'm always borrowing something from him, and every time I do he teases me about my 100 things *plus his*," Sheets says. "But I think of that as a virtue of this project. Not everybody I know who likes to camp needs duplicate camping stoves. We won't be using them at the same time. It's kind of nice to be a little bit more dependent on other people than on things. Of course, I'm careful not to go too far. If I'm borrowing something too much, I need to buy it and get rid of something else."

He admits that deciding what items to count and how to count them can cause some controversy. One woman quoted in the *Time* article, for example, considers her entire shoe collection as one possession. Sheets is living with his mother-in-law in Columbia during his residency and doesn't count any of her furniture or possessions. The furnishings in his Springfield, Mo., home that belong to his wife don't figure into his calculations either.

Sheets says his new lifestyle hasn't rubbed off much on his family: His mother's favorite pastime is buying antiques at the flea market, and his wife has a garage full of stuff. But for Sheets, the 100-thing limit has had lasting benefits.

"I feel like the more I prove to myself that I'm OK without a bunch of things, the more I really am OK without a bunch of things," he says. ■■■



MIZZOU SUSTAINABILITY BY THE NUMBERS



On a daily basis, Lincoln Sheets carries 39 of his 86 possessions in his backpack.

- | | | | |
|----------------------------|-------------------------|--------------------------|--------------------|
| 1. Backpack | 11. Toothpaste | 21. Kelly forceps | 31. First aid book |
| 2. Sentimental rock | 12. Swimming goggles | 22. C256 tuning fork | 32. Passport |
| 3. Rosary from the Vatican | 13. Head lamp | 23. Forehead thermometer | 33. Padlock |
| 4. Razor | 14. Deodorant | 24. Sunglasses | 34. Collared shirt |
| 5. Shampoo | 15. Toothbrush | 25. Water bottle | 35. Protein powder |
| 6. Hand lotion | 16. Locking pliers | 26. Pens | 36. Book |
| 7. Eye drops | 17. Batteries | 27. Razor | 37. Undershirt |
| 8. Eyeglasses | 18. Medical tape | 28. Stethoscope | 38. Socks |
| 9. Dental floss | 19. Medical scissors | 29. Lunch | 39. Shorts |
| 10. Pain reliever | 20. Blood pressure cuff | 30. Laptop computer | |

LIVING THRIFTY

11/11/11 07:30 PM USER: SD

DESCRIPTION:

MU ALUMNA RAISES AWARENESS
OF EXCESSIVE CONSUMPTION
WITH PHOTOGRAPHS OF THRIFT
SHOPS IN 39 STATES.

STORY BY STEPHANIE DETILLIER

PHOTOS BY JENNA ISAACSON



To celebrate their fourth wedding anniversary on June 23, 2011, Jenna Isaacson and Ed Pfueller exchanged gifts. From Isaacson, Pfueller received a personalized leather belt and western shirt. From Pfueller, she got a few tops and a Route 66 wall sign. All were purchased from a St. George, Utah, thrift store — a symbolic idea considering that their anniversary fell in the middle of Isaacson's cross-country thrift shop tour.

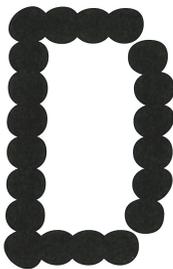
At the Goodwill outlet in Nashville, Tenn., items are sold by the pound. Emily fills her cart with \$39.76 worth of toys that she will use in her business working with children.



ELECTRONIC TESTING
STATION
ESTACION DE PRUEBA DE APARATOS ELECTRONICOS

YOUR PURCHASES GIVE...
Confid





uring summer 2011, Isaacson, BJ '01, of Washington, D.C., drove a 19-foot camper through 29 states to photograph thrift store shoppers and good finds. She hopes the project, which she

blogs about at allthriftystates.com, will raise awareness about excessive consuming habits and change the perception of many who believe thrift stores are places to donate, not shop.

"When I got my first job making money, I quickly realized that I could buy one shirt for \$40 or go to the thrift store and get 10 shirts for \$40," says Isaacson, who buys most of her wardrobe secondhand.

Isaacson has long been a thrifty shopper. Growing up in Kansas City, Mo., she accompanied her now 97-year-old grandfather to secondhand stores in Quincy, Ill., where he'd buy her something with his senior discount.

"It was a cool way to be introduced to thrift stores," she says. "He taught me to appreciate secondhand goods, and I carried that lesson with me through weight gains and losses, buying clothes for my first job and getting furniture for my apartments."

In 2010, Isaacson, a laid-off newspaper photographer now working as an independent visual journalist, began taking photos of items in various thrift stores during her visits to friends and family in 10 states, including Virginia, Maryland and Texas. The personal project combined her three loves — photography, people and thrift stores — and allowed her to learn the personalities of the communities she visited.

Isaacson began posting the thrift store photos on her blog, and in September 2010, she learned about Kickstarter, a website that allows people to pledge money to fund creative projects. Isaacson had no idea whether others would be interested, but she proposed a plan to document thrift stores in

all 50 states. The response was overwhelming. By April 2011, she raised \$7,600 through Kickstarter, and in July, she secured a \$6,400 sponsorship from Goodwill.

Isaacson, who inherited "trucker blood" from her truck-driving father, used the funding to embark on a 9,000-mile journey through 29 additional states in seven weeks. She averaged 200 miles a day. Her work continues.

Among her favorite thrift store finds: A bowling pin fashioned into a lamp, a \$10 print of *Where Have All the Flowers Gone?* by Judith Hahn (the original hangs in the Smithsonian) and a T-shirt with the slogan "Sponsored by ... Your Mom."

"I usually go to the T-shirts first," she says. "What people will wear on their chests

says a lot about who they are."

Isaacson, who is still raising money to visit the 11 remaining states on her list, hopes to turn her photography project into a documentary, book or traveling art gallery.

After seeing rows and rows of items people have discarded, she has found easy ways to cut down on waste. For one, don't buy new gift baskets. The majority of the secondhand shops stock unwanted baskets that have been cast aside after the Easter candy, fruit or canned nuts have been consumed.

Also, skip the kitschy souvenir shops. "You can find a Las Vegas souvenir in every thrift store," she says, "except those in Las Vegas."

More: allthriftystates.com |||

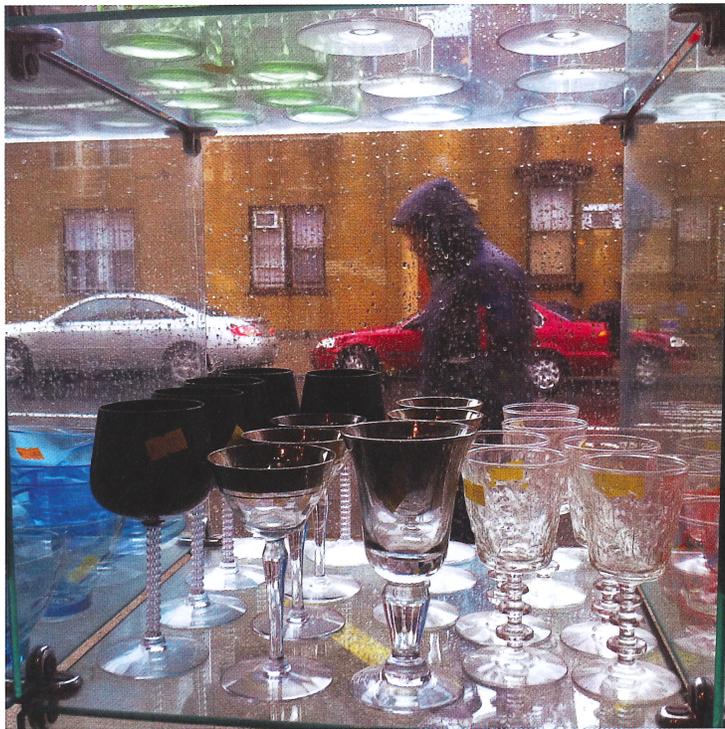
"WHEN I GOT MY FIRST JOB MAKING MONEY, I QUICKLY REALIZED THAT I COULD BUY ONE SHIRT FOR \$40 OR GO TO THE THRIFT STORE AND GET 10 SHIRTS FOR \$40."



Downtown Coeur d'Alene, Idaho, is a thrifty place. This photo was taken from the front window of the Women's Center Thrift showing the Idaho Youth Ranch Thrift Store across the street.



A bridal boutique inside of an Omaha, Neb., Goodwill Reserve store is one of a handful of Goodwill's boutique stores that appeals to a hip, trendy crowd.



A grid of glasses in a display case appeals to customers at a vintage thrift store in Brooklyn, NY.

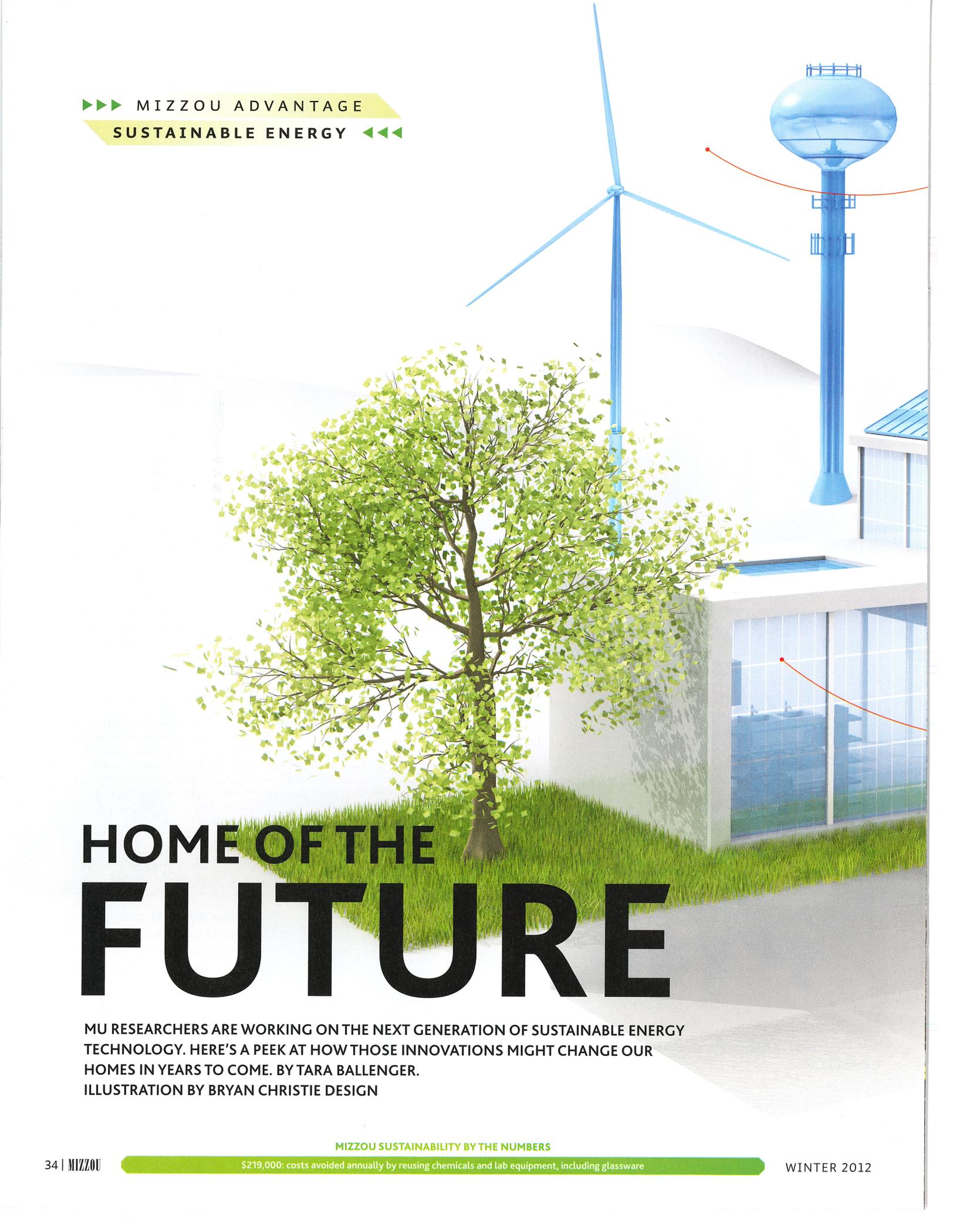


Above: Barbie and children Malia, 4, and Kace, 6, shop at the Bozeman [Mont.] Community Thrift, which also offers customers free loaves of bread and sells locally raised organic eggs.

Left: Photojournalist Jenna Isaacson, BJ '01, wants people to know thrift stores are places to shop for used clothing, not just to donate them.

MIZZOU SUSTAINABILITY BY THE NUMBERS

▶▶▶ MIZZOU ADVANTAGE
SUSTAINABLE ENERGY ◀◀◀



HOME OF THE FUTURE

MU RESEARCHERS ARE WORKING ON THE NEXT GENERATION OF SUSTAINABLE ENERGY TECHNOLOGY. HERE'S A PEEK AT HOW THOSE INNOVATIONS MIGHT CHANGE OUR HOMES IN YEARS TO COME. BY TARA BALLENGER.
ILLUSTRATION BY BRYAN CHRISTIE DESIGN

MIZZOU SUSTAINABILITY BY THE NUMBERS

WIND POWER

Because the wind doesn't always blow, the key to making it a reliable energy source is the ability to store the power for later use. Atmospheric scientist Neil Fox and engineer Noah Manning hope to solve that puzzle by using wind energy to pump water into a water tower so it can be stored for later hydroelectricity production.

The cycle starts when the wind turns the blades of the windmill, creating energy that is used to pump water into a tower for storage. To produce energy later, the water is released, driving another turbine that creates electricity, similar to a small-scale dam.

SUPER-EFFICIENT SOLAR

Chemical engineering Professor Patrick Pinhero is part of a national research team developing a flexible solar panel that can harvest more than four times as much of the sun's energy as today's solar cells. The team is placing tiny antennas on thin pliable sheets that could eventually be incorporated into rooftop shingles and other building materials instead of being mounted on top of them.

Current photovoltaic systems make use of only 20 percent of the sun's rays, but the microscopic antennas Pinhero is using have a circuitry capable of processing as much as 90 percent of the light spectrum, including infrared, which isn't visible to the human eye.

ORGANIC SOLAR CELLS

When the right combinations of carbon-based (organic) molecules are sandwiched between two electrodes, they create an electricity-generating film thin enough to be installed over entire rooftops or in awkward crevices unreachable by traditional solar cells.

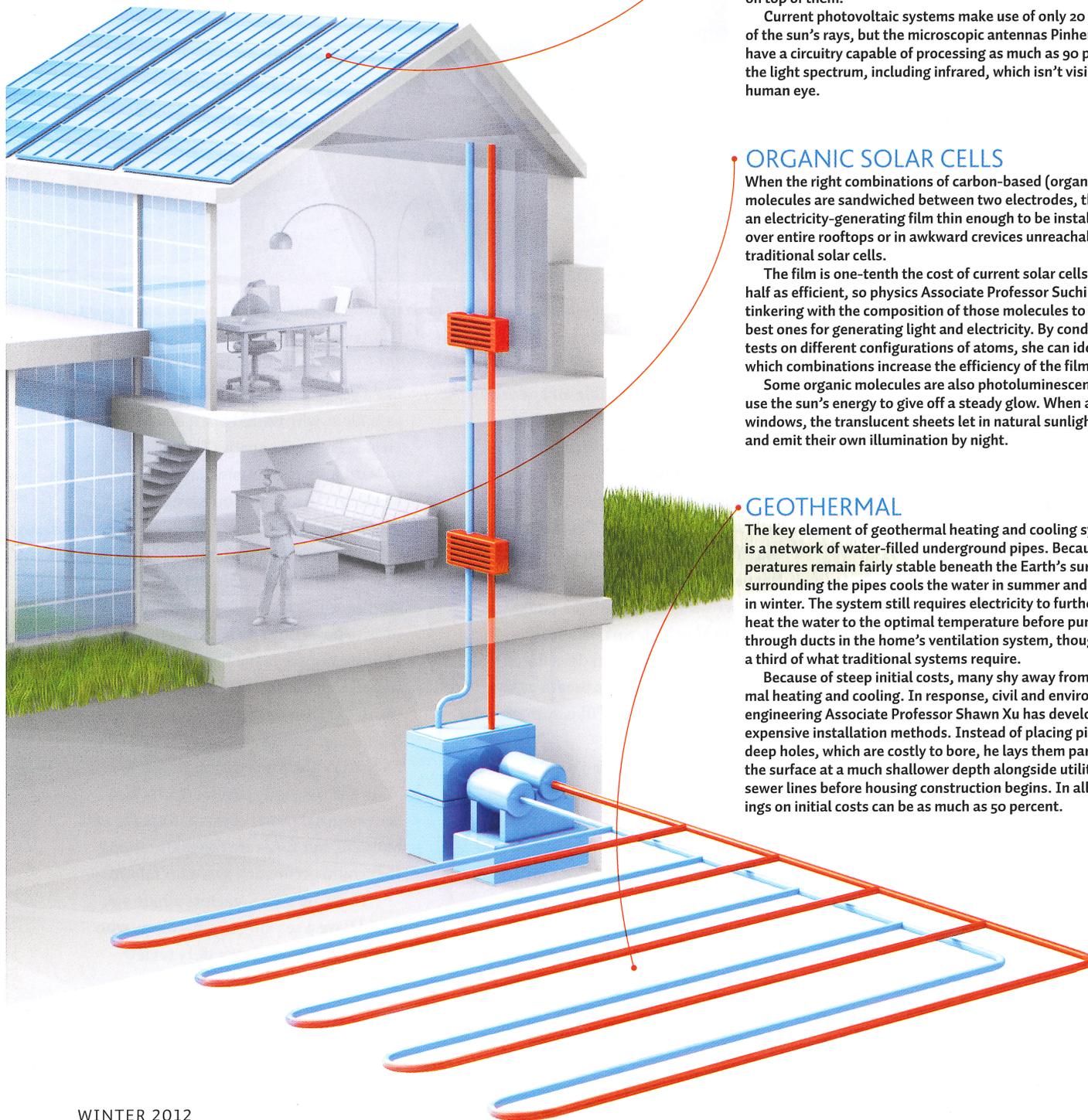
The film is one-tenth the cost of current solar cells, but only half as efficient, so physics Associate Professor Suchi Guha is tinkering with the composition of those molecules to find the best ones for generating light and electricity. By conducting tests on different configurations of atoms, she can identify which combinations increase the efficiency of the film.

Some organic molecules are also photoluminescent — they use the sun's energy to give off a steady glow. When affixed to windows, the translucent sheets let in natural sunlight by day and emit their own illumination by night.

GEOTHERMAL

The key element of geothermal heating and cooling systems is a network of water-filled underground pipes. Because temperatures remain fairly stable beneath the Earth's surface, soil surrounding the pipes cools the water in summer and warms it in winter. The system still requires electricity to further cool or heat the water to the optimal temperature before pumping it through ducts in the home's ventilation system, though it's just a third of what traditional systems require.

Because of steep initial costs, many shy away from geothermal heating and cooling. In response, civil and environmental engineering Associate Professor Shawn Xu has developed less expensive installation methods. Instead of placing pipes in deep holes, which are costly to bore, he lays them parallel to the surface at a much shallower depth alongside utility and sewer lines before housing construction begins. In all, the savings on initial costs can be as much as 50 percent.



MAKING NUCLEAR CLEAR

Dale Klein, former Nuclear Regulatory Commission chair, aims to clear the air about nuclear energy as a sustainable resource.

ATOMIC ENERGY has a unique set of public relations challenges. To most Americans, a monolithic nuclear cooling tower has a different connotation than a gently twirling windmill, shimmering solar panel or even the soot-smudged face of a coal miner.

So when it comes to sustainable energy, the power of the atom might not top most people's lists. Dale Klein, former chairman of the U.S. Nuclear Regulatory Commission, isn't most people.

Although he has returned to academia as the associate vice chancellor for research at the University of Texas System, Klein remains an international figure who carries the message of nuclear power as a sustainable alternative.

"Any sustainable energy plan needs to include nuclear," says Klein, BS ME '70, MS '71, PhD '77. "It's compact, and it generates power when the wind is not blowing or the sun's not shining."

Nuclear power is also far more efficient than other sources, according to Klein. When a molecule of any fuel is burned, it produces carbon dioxide and roughly two electron volts of electricity. The splitting of a uranium atom, however, creates 200 mega electron volts, or approximately 100 million times the juice.

Klein says the nuclear industry has not done a good enough job educating the public about its safety. Yet there have been only three major reactor accidents in the history of civil nuclear power — Three Mile Island in 1979, Chernobyl in 1986 and Fukushima in March 2011.

Public fear of power plant safety and nuclear waste is partly due to the

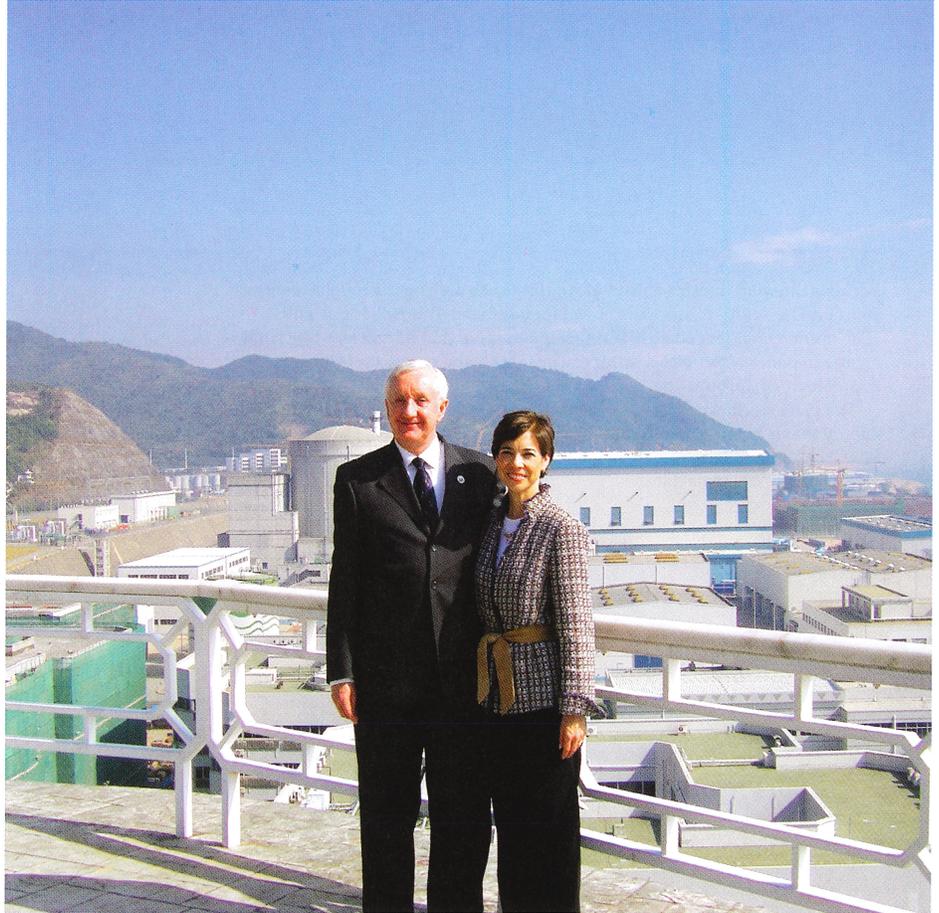


Photo courtesy of Dale Klein

Dale Klein, one of the world's foremost experts in nuclear power, recently visited a nuclear power plant in China with his wife, Becky.

"mystic" — silent, invisible and odorless — nature of radioactivity, according to Klein. But it also has to do with the mushroom cloud.

"Things nuclear are viewed differently," Klein says. "People have said that if electricity had been brought into the public awareness by way of the electric chair, we wouldn't have light bulbs."

So on March 11, 2011, when an earthquake and tsunami devastated Japan, the world held its breath as the nuclear power plant in Fukushima faced a historic crisis.

When the magnitude 9.0 quake hit, it shut down the facility's off-site electricity. The plant's seismic triggers automatically turned off the reactors and activated the backup diesel engines to keep the cooling pumps running. About an hour later, the tsunami wave flooded the engines and batteries, making it impossible for workers to open valves or move switches. The result was a nuclear meltdown.

"If you shut down a reactor, it's not

like a gas stove where the heat goes away," says Klein, who visited plant owner Tokyo Electric Power Company (TEPCO) in July to learn from the disaster. "It's more like an electric stove, and you have to remove [residual] heat."

The Fukushima disaster has prompted much of the nuclear industry to focus on similar scenarios in which a plant loses off-site power and its backup engines. Klein's example is the Palo Verde Nuclear Generating Station in Wintersburg, Ariz., which has analyzed a plan to run only critical equipment during a blackout, extending its battery life from eight to 72 hours.

In the U.S., only coastal plants face the potential threat of an earthquake and tsunami, but there are other situations that could occur such as a dam failure.

"There are some reactors where you could have a sea surge," says Klein, who also chairs the nuclear safety review board of the United Arab Emirates. "U.S. nuclear power plants are looking at beyond-design events and what

can be done to protect the public and the environment under those extreme conditions.”

Then there’s the issue of waste disposal. For complex political and financial reasons, the U.S. is the only major nuclear nation that doesn’t recycle spent fuel rods. Some opponents believe recycling will lead to the proliferation of nuclear weapons because the process produces plutonium as a byproduct, but Klein believes recycling is the best long-term solution.

“The plutonium that you get out of recycled nuclear spent fuel is not the kind of material you would use for a tactical or strategic nuclear weapon,” Klein says.

The industry has produced about 65,200 metric tons of used nuclear fuel in the past 40 years, according to the Nuclear Energy Institute. The NEI website provides the example that if the receptacles were to be stacked end-to-end and side-by-side, they would cover a football field about seven yards deep.

“All commercial nuclear countries expect that geological disposal — in a formation that has been stable for millions of years and likely will be stable for a million years in the future — will be the ultimate solution,” Klein says. “From a storage standpoint, it’s not a safety issue but a perception and a political issue.”

Klein believes the nuclear industry, academia and the government are equally obligated to educate the public and alter this perception. For any successful and sustainable plan to succeed into an unpredictable future, Klein says it’s important for the U.S. not to put all of its eggs in one “energy basket.”

“I grew up on a farm in Clarksburg, Mo., so I’m very familiar with the need to protect the environment,” Klein says. “I think nuclear is an environmentally sound way of generating electricity. It’s not perfect. If there were a perfect source, we wouldn’t be having energy debates. But it should be one of the energy sources in our tool box.” ■■

— Marcus Wilkins

COAL, WIND, PETROLEUM AND WOOD

During a career at engineering firm Black & Veatch, Ron Wood grappled with energy problems and solutions.

IN THE 42 YEARS he spent at Black & Veatch Corp., Ron Wood often contemplated the American energy-consumption conundrum. How will the United States continue to satiate its ever-increasing appetite for energy?

It’s a dynamic problem constantly complicated by new technologies, fuel sources, economic trends and numerous hypothetical outcomes. That might be why Wood, BS EE ’64, appreciates starting with a simple, philosophical approach.

“The most effective sustainability solution is the wise use of the energy that we already have,” says Wood, former president and CEO of the billion dollar energy division of Black & Veatch. “If we could teach two generations of primary school kids to turn the lights out, it would be a significant move forward for this nation.”

In the case of electricity, the U.S. Energy Information Agency predicts a 28 percent increase in demand from 2010 to 2035. According to Wood, if that were to be met using exclusively 500 megawatt coal-fired plants, it would require an alarming construction rate of a new facility every 4.4 weeks during the next 24 years at a cost of \$395 billion. If the demand were to be satisfied using just wind power — available only about 40 percent of the time — it would require 27 new 1.5 megawatt wind turbines every day until 2035 with a whopping \$790 billion price tag.

In the U.S., 40 percent of the total energy consumed is in the form of electricity (about half of which is derived from coal). Another 40 percent is consumed for mobility (derived mostly from foreign oil). The remaining 20 percent goes for everything else, from space heating to industrial use.

For Wood, the most important components of sustainability pertain to education and efficiency. That’s why he likes the opportunity Mizzou students have to help businesses address these issues. An applied engineering



Photo by Nicholas Benner

Ron Wood wants people to understand that sustainable means responsible energy decisions.

course, for example, teaches industrial and commercial energy audits, waste assessments, water audits, full-cost accounting and greenhouse gas calculations.

The benefits of energy savings go beyond corporations. MU Extension works with state and federal agencies to provide farmers affordable assessments of their energy use and recommendations to increase efficiency. Those might include new lighting and better heating systems for livestock barns or solar panels to provide renewable electricity for their homes. If the Extension staff finds that improvements could reduce energy use by 15 percent or more, the program will offer grants, rebates or low-interest loans to help fund the upgrades.

“The least expensive unit of electric power generation that we can create is the one that we avoid using,” Wood says. ■■ — Marcus Wilkins



THE MYSTERY OF RED LAKE

NEAR COLUMBIA LIES A BODY OF WATER WHOSE ACID-LOVING BACTERIA MAY EVENTUALLY MAKE BIOFUEL CHEAPER FOR US ALL. STORY BY DALE SMITH PHOTO BY ROB HILL

A

AT FIRST BLUSH, the idea of turning biomass into ethanol and other fuels might sound like a clever alternative to the financial and environmental costs of petroleum. Some of biofuel's manufacturing steps, such as harvest and fermentation, sound as happy as hops at a brewery. But intervening steps that prepare biomass for fermentation create extreme acid conditions, and every step increases the final product's cost. Researcher Gary Stacey, professor of plant sciences at MU,

and Melanie Mormile, professor of biological sciences at Missouri University of Science and Technology, are doing some extreme science in hopes of keeping costs down.

In the current process, manufacturers begin by treating biomass with acids to break down its cellulose for fermentation. But then they must treat the biomass with more chemicals to neutralize the acids before adding enzymes that ferment the material into fuel.

If researchers could find enzymes that work in the acid conditions, manufacturers could skip the neutralization step and pass

on the savings to consumers. But where does one find acid-loving enzymes?

Enter Mormile, who studies organisms that thrive in extreme conditions and has collected microbes from lakes as far away as Australia. But it turns out that a promising site informally known as Red Lake lies just north of Columbia at the former Peabody Coal mine. Red Lake is a low area where water collects after rain and groundwater travel through coal seams. Along the way, the water picks up not only metals including iron (the red in Red Lake) but also sulphur. When sulphur dissolves in water, the result

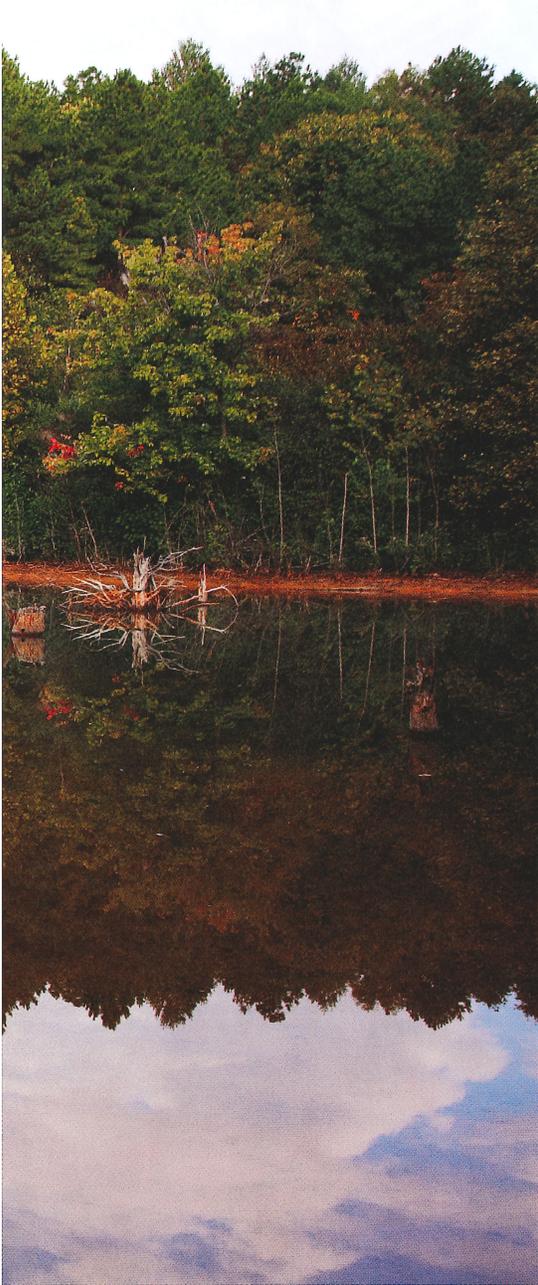


Photo by Rob Hill

Red Lake, located in Rocky Fork Lakes Conservation Area north of Columbia, is a source of acid-loving bacterial enzymes that might speed the biofuel fermentation process and make energy cheaper for everyone.

a single gene from that bacterium, which limited what we could get from the environment.” But using new metagenomics technology, scientists can sample, say, Red Lake sediment and extract DNA from all the microorganisms in the mud. “After we sequence

the DNA, we can identify enzymes. If we find something interesting, we can go back to that DNA and clone it out. This method gives us a much better sense of the diversity of the organisms in that environment.”

The Red Lake samples will be sequenced soon, so stay tuned. Ninety percent of microorganisms are still unknown to science. Mormile and Stacey might find a new bacterium whose enzymes makes biofuel cheaper for everyone. ■■■

FIELD REPORTING

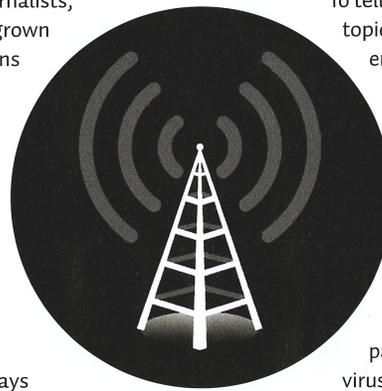
As public debate about global warming, pollution, water shortages and the organic movement intensifies, issues about food are often at the center of the controversy. For journalists, explaining how food is grown and why it matters means first understanding the science, then making it relevant.

“Being able to relate the information in a way the reader or listener can understand is the most significant barrier” to reporting on environmental issues, says Eric Durban, BJ ’09.

Durban, based out of High Plains Public Radio in western Kansas, is one of six multimedia reporters for Harvest Public Media, a news organization covering agricultural issues, including how farming relates to sustainability.

Harvest is a collaboration among public radio stations in Kansas, Iowa, Nebraska and Missouri, including Mizzou’s National Public Radio (NPR) station, KBIA-FM. It was launched with a grant from the Corporation for Public Broadcasting as one of seven local journalism centers nationwide. Each center focuses on one topic, and Harvest’s location in the nation’s breadbasket makes agriculture a natural choice.

The question of how farming affects the environment (and vice versa) can be polarizing, says Donna Vestal, BJ ’84, of KCUR, an NPR station in Kansas City, and the editor of Harvest.



“It deals with sustainability, feeding the world and the economics of survival for many people in this country,” she says. With so much at stake, tensions between farmers, consumers and environmental activists can run high.

To tell stories about these topics, Harvest reporters cover the often-complicated science of sustainability. Recent stories include how a fungus killing Missouri bats could lead to farmers needing more pesticides to control bug infestations, plant pathologists’ war against viruses that attack wheat

in Kansas and how the unique properties of cellulose in corn make the quest for successful biofuel production a difficult endeavor.

The stories appear on Harvest’s website, harvestpublicmedia.org, and may be aired on any member station or picked up by local or national media, including NPR.

Janet Saidi, an assistant professor in the journalism school and the news director of KBIA, says that the station’s membership in Harvest also provides valuable experience for journalism students because they can contribute to the pool of stories that Harvest collects and distributes to local and national media.

“There was certainly a learning curve,” says Durban, who didn’t have much science journalism experience before starting at Harvest. “I’m learning something new every day.” ■■■

— Tara Ballenger

MIZZOU SUSTAINABILITY BY THE NUMBERS

500: hours a month campus WeCar members pay \$9 an hour to rent one of four cars