

Point-source

Photos by Rob Hill and Nicholas Benner

Environmentally savvy students take action locally.

Kids are skipping rocks on Hinkson Creek, across from a rope swing over a deep hole. Dogs swim here, kayakers paddle by and an occasional angler wets a line. But since 2002, Hinkson Creek has been on the state's list of impaired waters: It is unfit for aquatic life and whole-body contact.

What happened to Hinkson is happening all over, and not just to water. People are using and abusing resources, such as clean water and air, at unprecedented rates.

Students at Mizzou are doing their part to rescue resources by getting to the root of the problem: people's behavior.

Social scientist Michele Baumer measures people's attitudes toward resources; journalist Rebecca Townsend reports on the health of those resources; and advocate Adam Saunders motivates people to act in their behalf.

Plans for the planet

Although he was just 4 or 5 years old at the time, Adam Saunders still recalls a magical scene that took place on his back porch in Springfield, Mo. "One of my parents brought home a caterpillar. I watched it make a cocoon, and later it hatched into a monarch butterfly." It's nothing that millions of other kids haven't seen, but for Saunders, it was his environmental epiphany, the moment when he knew the natural world would be his passion.

Now a senior studying forestry and statistics, Saunders has long since thrown off any cocoon that may have sheltered him from concerns of the world. As a leader in helping create a more sustainable campus and community, he sees his concern for

nature in a big-picture way. "For me, the environment is something I understand well. This is my niche. But I don't limit myself. The environment is also an issue of social rights, civil rights and health. It's all these things tied together."

Saunders puts his big ideas into practice. For starters, he is part of Sustain Mizzou, a group of student volunteers who

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organize and work for numerous projects. The group supplies workers for massive recycling efforts after home football games, supports a regional food bank by donating locally grown produce, and publishes an environmental news magazine.

This spring, Saunders worked with other campus groups to organize Spring Bike Fest, which was aimed at reducing car traffic that the University generates by offering free bicycling advice and safety gear.

"A lot of people have bikes, but if they have minor problems, things that can be fixed in five minutes, the bike just sits there," Saunders says. "For instance, I don't know how to adjust my brakes. It's embarrassing. I need to learn how to do that." So on April 10 and 11, bike mechanics set up shop at Lowry Mall and started tuning up two-wheelers for the good of the planet. Nearby, booths offered information on

safety and health related to biking.

Saunders' grand dreams include someday owning a company that would take farmland in Missouri's Bootheel and reclaim it for wildlife, wetlands and recreation. But for now he is thinking globally and acting locally through Sustain Mizzou. He hopes his legacy at MU will be a bigger and more robust Sustain Mizzou that takes on ever larger projects on an ever greener campus. "I want to keep environmental issues front and center at Mizzou," he says. — Dale Smith

Small habits, big change

The 18-mile stretch of Hinkson Creek that flows through Columbia is impaired by nonpoint-source pollution — biospeak for runoff from parking lots, lawn chemicals, road salt and everything else that flows downhill. Would Michele Baumer let her two sons, ages 8 and 10, swim in it?

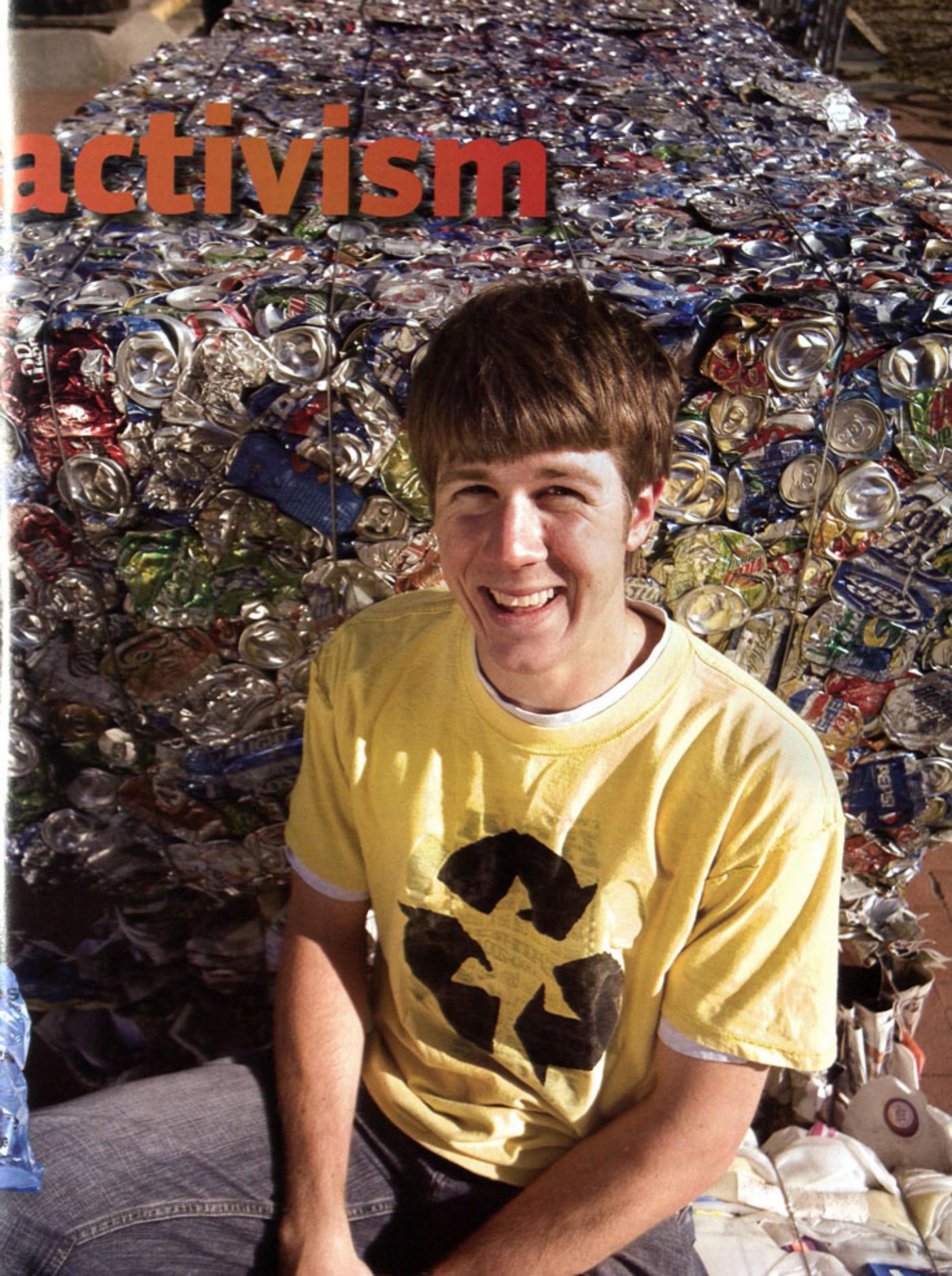
"Wade, yes. Swim, no," says Baumer, who conducted a survey of 10,000 residents who live in the Hinkson Creek watershed. The survey tried to gauge knowledge and attitudes about the creek so planners, regulators and educators can work together to improve its water quality.

The survey combines two of Baumer's passions: people and natural resources. Her degree in fisheries and wildlife launched her first job as a naturalist at a conservation area outside St. Louis

Adam Saunders is a leader of Sustain Mizzou, a student group dedicated to creating an ever greener campus through recycling projects and supporting locally grown produce.



activism





Columbia's Hinkson Creek may again become an outdoor playground if people who live in its watershed care enough to save it. Michele Baumer, a graduate student in rural sociology, applies the science of understanding people to pollution problems. "We know the biology," Baumer says. "Now we need to know how to motivate people to stop polluting."

in 1989. In that rapidly developing area, she watched the stream where she conducted wildflower tours erode and degrade.

"I absolutely loved my job, but I began to wonder if there was another way to reach people with a conservation message," Baumer says. "I'm trying to blend the biological science with the social science to see if that can help natural resources."

She enrolled as a graduate student in rural sociology at MU. Hinkson Creek caught her attention because north of Columbia it is still relatively pristine, turning into a chemical stew only as it winds through the town. She wondered if the people who lived within its watershed cared enough to save it.

Survey results are reservedly optimistic. Most respondents don't know the term "nonpoint-source pollution," but 85 percent believe small changes in habits affect water quality. Almost 70 percent know Hinkson Creek is polluted, and 94 percent believe in improving water quality through education.

The results posed more questions for Baumer: "They believe it, but do they do it? Who needs to be educated? How do we reach them?"

When her survey hit mailboxes, she was inundated with 120 phone calls and 80 e-mails. She answered them all and learned a lot in the process. One 94-year-old resident said the creek had improved immensely since he farmed near it 60 years ago when it stank from sewer discharges.

She conducted focus groups among 64 residents from rural, urban and suburban areas and learned that rural residents were relatively savvy about the importance of buffer zones along streams. Many urban and suburban residents were surprised to learn the stream was polluted by urban runoff, not agricultural wastes.

Baumer hopes her study will guide environmental educators, city planners and state regulators, eventually rescuing Hinkson Creek from pollution. Her sons may get to swim there yet. — *Kathy Love*

The world without spin

Journalism student Rebecca Townsend was serving her stint at the *Columbia Missourian* when she got an unlikely tip from assignment editor John Schneller: Look into sewers.

The article that resulted from her investigation on sewer permits scored a perfect trifecta. Three media outlets — print, radio and TV — publicized her story of how one-fifth of all sewer districts in the state operate on expired permits, including those in Boone County.

Townsend also discovered that the Department of Natural Resources (DNR), the state agency responsible for clean water, was taking inspectors who are supposed to monitor sewer districts out of the field to process permits, resulting in less oversight of leaking sewers.

Townsend, a graduate student with a focus on environmental and investigative reporting, says it is getting harder for

the general public to understand these issues. "Much of the information is highly technical, and there are so many people trying to spin it."

Her parents taught her to leave the world cleaner than she found it, and she attended a progressive high school in Bloomington, Ind., where students were expected to recycle. She learned about the complexity of environmental issues by writing for an agricultural newspaper in Indiana.

"Too often, people are so loud on either side of an issue, they drown out the truth," Townsend says. "I was more interested in exploring different sides of a story. It's important to understand nuances."

The sewer district story is a good example. She was impressed by the professionalism of the Boone County sewer district and learned that the DNR was too short-staffed to both process permits and inspect sewers.

"If people are too quick to draw lines, you can't accomplish anything for the environment," Townsend says. "You don't have to be an activist. Just invest yourself in your community."

Her research required her to spend hours poring over sewer permit applications and put her in touch with community and agency leaders. Why go to the trouble? "Environmental reporting isn't just about the scare of the day," Townsend says. "The journalist's role should be to consistently assess the health of the environment and let people know what you find." — Kathy Love III

Journalism graduate student Rebecca Townsend discovered that one-fifth of all sewers in Missouri were operating on expired permits. "Citizens need independent information, not spin," she says. "The journalist's job is to get out in the environment and learn the truth."

