

Macalester Today

Household Words

All Tech-ed Out

Back from the Brink

Eco Abode

Baby Love

Cross Cultural Rap

Repairing the World



Eco Abode



Too often living green means having lots of **green**.
Macalester's new **EcoHouse** is out to change that.

from the ground up

[read it»](#)**HOUSEHOLD WORDS**

IN DEFENSE OF BOREDOM

[read it»](#)BY | **DANNY LACHANCE** PHOTOGRAPHS BY | **GREG HELGESON**

These days, if you're giving yourself a green makeover, you'll probably start by picking up the yellow pages. Troubled about the impact of your gas burning on global warming? Buy a Toyota Prius. Worried about the inefficiency of global food markets? Buy locally grown produce. Concerned about the carbon footprint you leave behind as you tie the knot? Hire a green wedding planner.

It wasn't always this easy. If you were trying to go green in 1970, the first thing you would have picked up wouldn't have been the yellow pages, but a brick to plop into your toilet tank, says environmental studies professor Chris Wells.

"After the first Earth Day, there was a big emphasis on personal responsibility," says Wells, also a historian of U.S. environmental thought. Putting a brick in a toilet was something people knew they could do to consume less water: "It took the then-standard five-to seven-gallon toilet tank and, by displacing a brick's worth of water, turned it into a smaller tank."

For some, the shift from do-it-yourself environmentalism to buy-it-in-a-catalog environmentalism is alarming. Environmentalism, after all, is supposed to be about reducing consumption, not expanding it. Some fear that by framing environmentalism in terms of consumer choice, collective action and advocacy for large-scale policy change may become less likely.





EcoHouse residents brave winter on their front steps (clockwise from

lower right): Austin Werth, Heidi Evans, Avery Brown, and Kim DeLanghe. (DeLanghe replaced Rachel Brunner this term.)

This is a discussion I'm having with sophomores Rachel Brunner and Heidi Evans as they hoist the top off the toilet they share with fellow sophomore Avery Bowron and junior Austin Werth. Together these four are the pioneering inhabitants of EcoHouse, Macalester's newest on-campus theme house.

Since last fall, they've been living in a 1950s ranch house on Vernon Street that the college has transformed into a live-in lab for testing conservation products and strategies. The house has been retrofitted with energy-saving supplies, adaptations, and equipment—everything from compact fluorescent bulbs to a hotwater heater powered by solar panels. Armed with monitoring equipment and a commitment to sustainable living, the residents of EcoHouse are testing how well technology-supplemented conservation efforts work in real-world conditions.

The house is the brainchild of Wells, who led his spring 2007 environmental studies senior seminar students through multiple phases of the project's design: conducting research about sustainable living and home design, envisioning the house's features and philosophy, and writing grants to secure funding. The Xcel Energy Foundation responded favorably with a \$5,000 grant. The college provided the rest of the project's seed money, as well as the house, which it had purchased in 1994. Meanwhile, Macalester senior Justin Lee spent summer 2007 spearheading house renovations, overseeing everything from insulating walls to installing a dualflush toilet.

Peering over the edge of the toilet, we see a large black plastic device—a lumpy, shoebox-shaped water regulator—the 21st century's answer to the brick in the tank. Push down the toilet handle, and you replace 1.1 gallons of water in the bowl; pull it up, and you replace the now-standard 1.6 gallons.

"Not very exciting," Bowron says. He has a point. Despite the home's extensive renovations, it looks less like an environmentally savvy home of the future and more like the modest 1950s rambler it is. But in a way, that lack of flashiness is the point, the EcoHouse residents explain as we sit down for a communal dinner (vegan stew prepared by Brunner). They're rejecting the elitism that has recently surrounded green living by demonstrating how modest changes to a modest house can make a big difference.

"This project is about trying to make conservation feasible and accessible," says Bowron. "It's a demonstration of 'this is possible; it's not outrageous to do this,' which could make it easier in the long run for people to support legislation that will change building codes."

The home's new energy-conserving refrigerator, for instance, was ranked in the top 10 percent of Energy Star-rated appliances in terms of energy conserved, but at \$550 is by no means top of the line in terms of

price.

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The goal is to normalize rather than fetishize environmentalism to educate community members about how they might make changes to their own homes that don't require a sense of ongoing sacrifice—or adopting a style that seems foreign to them. "It's less about 'turn the water off when you're brushing your teeth' and more about 'there's an aerator in my faucet, so I'm saving water all the time,'" Bowron explains.

What draws them together, members of EcoHouse say, isn't a desire to see who can consume the least, but a desire to figure out how to consume efficiently and live collectively. Indeed, Evans says that the house motto might be summed up by an aphorism the group collectively created using magnetic poetry on their refrigerator: "Green is always better and more delicious."

going green

Senior Justin Lee spent the summer of 2007 overseeing the renovations to Macalester's new EcoHouse. Here are the changes he directed:

1. Insulating outside walls with blown-in cellulose
2. Repainting the house's interior with low-volatile-organic-compounds paint
3. Replacing all lighting with compact fluorescent bulbs
4. Replacing asphalt shingles with a 70-year steel roof
5. Adding new gutters, an attic ventilation system, and aluminum-wrapped fascia and soffits
6. Installing solar-thermal panels on the garage for heating water
7. Installing Energy Star-rated refrigerator, dishwasher, vent hood, and front-loading washing machine
8. Installing a new kitchen sink made from recycled aluminum
9. Replacing counters with Paperstone, made from recycled paper and cashew resin
10. Transforming kitchen cabinets into a kitchen island
11. Installing low-flow aerators in sinks
12. Installing a low-flow showerhead
13. Installing a dual-flush toilet
14. Installing a bathroom mirror found at the ReUse Center
15. Installing a solar tube light fixture in the bathroom ceiling
16. Adding an energy-efficient bathroom vent fan
17. Replacing basement windows with glass block
18. Adding a worm farm composting bin in the basement






Selected from an applicant pool of 12, each of the house's four residents brings a relevant eco-history to the project. Brunner was just 11 when she attended her first environmental conference, the annual meeting of Canada's Society for Ecological Restoration. She sat through a speech on climate change, which was a new concern at the time, and finally understood the source of her mother's passion for sustainability. "This wasn't just 'trees are good.' This was systemic, trying to grapple with the scope of an issue that nobody was really talking about."

Evans's mother told her stories about the cooperative lifestyle she had lived in her twenties, and the battles between the hippies and the Marxists over whether environmentalism or egalitarianism should be their first priority. As a kindergartener, Bowron told his teacher he wanted to "plant trees where there had been clear-cuts" when he grew up.

As for Werth, he grew up on a farm in northern Colorado, where his family raised their own steers,

chickens, and turkeys, and where eating locally, being thrifty, and conserving resources were a way of life.

To create a sense of community, the four shop and prepare meals together. "We like the symbolism of having the kitchen in the middle of the house," Evans says. "It represents how a community is formed around food."

They've also been engaging the community beyond Macalester. Dozens of people toured the house when it was part of the 2007 Minnesota Solar Tour. And local media outlets such as Fox 9 News, Minnesota Public Radio, and the Minneapolis Star Tribune have carried stories about it. As more people become concerned about their impact on the environment, Wells explains, the hunger for the kind of information provided by EcoHouse will increase.

"Most of us live in existing housing," he says. "And if you live in this neighborhood, where most of the houses were built in the 1920s, how much can you really do? That's the informational black hole we're trying to address."

Once all the house's energy monitoring systems are in place, its residents will record and post data on the Web, making it accessible to the public. Open workshops given by EcoHouse students on their experiments in energy-efficient living will help Twin Citians put their own goals into practice.

"We haven't yet hit the point where this stuff is normal," Wells says. "It's still fringe. So part of what we hope to do is to help push past that. It's a lot easier for homeowners to make some of these investments if they know someone else who has done it, and if they know that it has worked, saved money, reduced energy use, and measurably improved environmental relationships."

Ultimately, EcoHouse is trying to break down the split between grassroots "brick-in-the-toilet" environmentalism and elitist consumer-oriented environmentalism. These days, bricks-in-the-toilet may be something that we buy in the form of dual-flush toilets, but that kind of change can and should accompany largescale structural change, Wells says.

"If people would like to buy a heating system for their home that will have a substantially lower environmental impact, it's good they have the option. It's even better if that option is affordable. And it's best if that option is built into a set of requirements that manufacturers must adhere to," Wells says. "The key is to push forward projects like this one, which are working hard to make information on environmental products accessible, democratic, and free. There's a balance between how people choose to behave, how they buy, and what they insist on politically. Ideally, it should all work together."

With EcoHouse, it just might. 

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The Greening of Mac

EcoHouse is by no means the only environmental initiative at Macalester. Here's a roundup of other green programs on campus:

- SUSTAINABILITY COORDINATOR:** Suzanne Savanick Hansen, the college's first sustainability manager, started work in January. Her full-time position was established to help fulfill the responsibilities of the Presidents' Climate Commitment, a nationwide commitment to lowering emissions on college campuses that President Brian Rosenberg signed onto last year. The sustainability manager is charged with "coordinating the environmental efforts and activities on campus, providing expertise in environmental sustainability, and helping Macalester take a more proactive approach to managing environmental impact," vice president of student affairs Laurie Hamre told *The Mac Weekly*.
- BUILDING PROJECTS:** The two biggest building projects on campus are both going green. The Macalester Athletic and Recreation Center (MARC), slated for completion in the fall, includes various adaptations that will minimize its energy use and environmental impact. The Institute for Global Citizenship building, breaking ground in May, is going further, attempting to achieve a LEED (Leadership in Energy and Environmental Design) Platinum certification. This standard, established by the U.S. Green Building Council, is the group's top rating, which has thus far been achieved by fewer than 30 buildings worldwide.
- CLEAN ENERGY REVOLVING FUND (CERF):** CERF helps make green retrofits possible to older buildings on campus, says environmental studies professor Chris Wells, who chairs the fund. Despite limited resources, CERF has managed to make small-scale improvements, such as blowing insulation into the walls of a college-owned student house and launching water conservation projects at Cultural House and the George Draper Dayton dormitory. CERF also recently launched a project to replace all the four-foot fluorescent bulbs on campus with more efficient bulbs. Energy savings are then paid back into the fund.
- CARBON AUDIT:** This spring's senior seminar in environmental studies, co-taught by Savanick Hansen and Wells, will undertake a carbon audit of the college—another part of satisfying the presidential climate commitment.
- GREEN HOUSE WORKSHOPS:** A grant application written by last year's environmental studies senior seminar yielded a \$5,000 grant from Xcel Energy. That money will be used this spring for community program planning, which will ultimately lead to Eco House-sponsored environmental workshops.
- SENIOR GIFT:** The class of 2008's senior gift will go toward funding sustainability initiatives on campus. Savanick Hansen will help decide where to use the money, which the class hopes will amount to nearly \$40,000.