

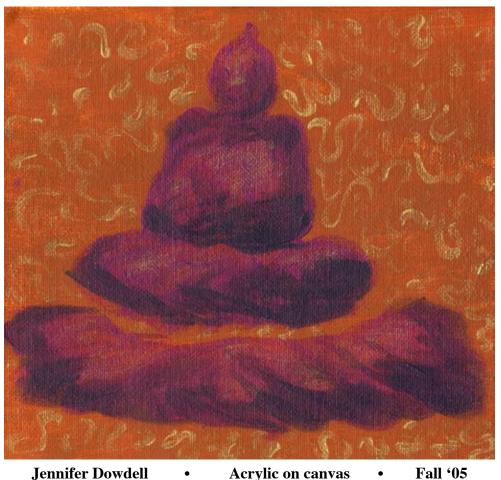
Envisioning a Greener Dana

by Justin Schott (RPB M.S. 2007)

A few weeks ago I was the last bleary-eyed student in the second floor computer lab, an occurrence I always find disconcerting. Eager to escape Dana's confines before 1:00 A.M., I was hastily shoving papers into my backpack when the hum of electricity became suddenly audible. Perhaps I was the only human around, but not the only being with a pulse. First there was the whir of the color printer, followed by the bright blue buzz of a few monitors, then the glow of five ornamental fixtures in the balcony alcove. I walked over to the windows and looked down at the well-illumined commons, wondering if anyone was present. For whatever reason, our absentee use of electricity struck a chord that night. Rather than bolting for the door I became curious about how many devices I could power down, about just how quietly our Dana building could sleep.

For the next ten minutes, I dashed up and down the stairs, turning off monitors, duplicate printers, hall and classroom lights, and lowering the make-believe thermostats. I even took the risk of reaching a blind hand into the women's bathrooms to shut the lights. There were discoveries in the mail room, the copy room, the kitchen; even in the bowels of the basement there was juice to be conserved. In all, there were about fifty monitors and perhaps

L.A. Photo of the Month



two dozen light switches. When I had done all I could, I stepped outside, took a breath of fresh air, and listened to the pleasant hush of a moonlit Dana. Ahh, peace at last.

My sincerest apologies to anyone who has been vexed by a seemingly broken computer screen, a dead printer, or a dark adventure at the john in recent weeks. Sometime when you need a mental break I encourage you to take a stroll through the halls with an eye toward the unnecessary consumption of electricity. The best part is that once you start noticing these

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Contact: Lori Kumler lkumler@umich.edu

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The Deenstell



Compostable Times is published monthly by SNRE Student Gov, and currently edited by Doug Glancy and Kerry Duggan. Send submissions, questions, or rants to SNREnewsletter@ umich.edu.

Rosina's Road notes...

Greetings from the Galapagos Islands! Actually I am writing this as I fly home... A favorite image already has been submitted to the Photo Contest and I promise to devote my space in the March newsletter to sharing highlights of this fabulous trip.

This month, I want to report on two new developments – a student-led initiative and information on the new core courses.

I want to salute Cynthia Koenig for her efforts to make Visit Day on March 17 "carbon-neutral" for the many admitted students who will be traveling to campus to learn more about our program before making their decisions to enroll.

Carbon-Neutral Visit Day will reinforce the school's commitment to sustainability – a value that is prominent across all degree programs – and introduce new students to the Sustainable Systems academic plan.

Current U.S. travel options are carbon intensive. For example, a round trip commercial airline flight between New York and Detroit (at 1.26 lbs CO2/passenger-mile) would generate approximately 1260 lbs of CO2, while driving from Chicago to Detroit (at 0.89 lbs CO2/vehicle-mile) would generate approximately 250 lbs of CO2.

The school is working with Native Energy (www.nativeenergy.com) and Michigan Interfaith Power and Light (www.miipl.org) – organizations that orchestrate the purchase of carbon off-sets – in order to make Visit Day truly carbon-neutral. The money used to purchase the necessary off-sets will go to Native Wind (www.nativewind.org), a nonprofit that finances small, renewable energy projects that are in development on Native American reservations in the Dakotas.

This is the second carbon-neutral event sponsored by SNRE. The first was the June 2005 conference, Reframing the Climate Change Debate: Jobs, Trade, Security and a Revised Research Agenda. The school also has a pre-existing relationship with Native Energy. Representatives spoke at the student-organized and student-run Environmental Justice Climate Change Student Conference that was held in March 2004.

Many thanks to Professors Michael J. Wiley, Mark Hunter, Arun Agrawal and Tom Lyon for designing the new natural science and social science core courses. I am equally grateful to the many faculty members who worked over the past year on the course development as well. Both courses are important new additions to our master's curriculum and both were overwhelmingly approved by our faculty. Here are brief descriptions of each:

The natural science core course reviews the principal concepts and processes that operate in ecological systems. Beginning with simple interactions between water, the atmosphere and basic life processes, the course develops a dynamic view of ecosystems, covering the principles of energy flow and the cycling of matter, population growth and regulation, evolution, natural selection and behavior, tropic interactions, ecological networks and community change. The course also introduces students to some of the dominant habitats on earth, including rivers, lakes, wetlands, forests, tundra, deserts, urban and agricultural systems.

The social science core course reviews the principal concepts and techniques in the

The Deenstell

social sciences that are relevant to environmental management, policy and governance. The course draws from anthropology, economics, ethics, management, political science and sociology. Beginning with individual behavior, the content will gradually build an understanding of increasingly complex systems, moving from social groups to markets to corporations to governments to international organizations. The course aims to help students understand how people make choices about the environment, and how these choices are aggregated through networks, organizations and institutions. It also aims to expose students to a toolbox of techniques that can be used to diagnose human and social actions and identify strategies to influence individual and institutional choices.

In the next several weeks, the Student Government will host sessions to discuss the new core courses and the specifics of each syllabus.

Rosina

Jim on life and Bureacracy...

February has been a fairly hectic month for me. I have been involved in the admission of both Master's and Ph.D. candidates for next year, as well as the review of the overall School curriculum and fields of study. In all cases, we have submitted materials to the student government for their evaluation and feedback, in order for student ideas to be taken into consideration. However, there is still a lot of work to be done, and this process is moving forward as quickly as possible.

Decisions on the ceremony for commencement and the honors awards continue. Faculty have nominated candidates for all honors awards, and decisions will be made in the next few weeks. The honors convocation will most likely be in mid April, and the commencement ceremony is April 29. The commencement speaker and other details are still being formulated.

Beyond School bureaucracy, I continue to work on editing papers for a symposium, as well as becoming involved in another symposium on Northern pike to be held at the American Fisheries Society meeting at Cornell University in September. It remains a challenge to accomplish all of these tasks and do them well, but I am committed to them and to the students for their progress.

Finally, the Master's Project students have all submitted their proposals and presented them at the meeting of the 701 course. I think the process turned out well and the students have all identified interesting and useful projects.

As we disperse for spring break, I hope all of you are able to enjoy the time and use it productively, if that is your goal. I know my plan to hike down the Grand Canyon will be enjoyable!

Jim

Don's going's on...

Over the past month, I've worked on a pretty diverse set of projects. Working with Larissa Sano and a wide range of faculty from across campus, we submitted a proposal to an internal UM competition for the NSF IGERT program, focused on some innovative doctoral training opportunities. I serve on the Science Commit tee for the NSF CLEANER (Collaborative Large-Scale Engineering Analysis Network for Environmental Research) program, and on a Subcommittee of the EPA Board of Scientific Counselors charged with reviewing their STAR Graduate Fellowships Program and their Greater Research Opportunities Fellowships for Graduate and Undergraduate Environmental Study Programs. Both have been pretty active this past month.

The SNRE Research Committee has been drafting a revision of the Appointment and Promotion Guidance document for our research-track faculty and we hope to

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Interview with Larissa "Fish Killer" Larson



1. How did you get the nickname "fishkiller"?

I was working in Chicago as the project manager for several lagoon restoration projects. The most notable one was North Pond in Lincoln Park. We were tasked to improve water quality by decreasing turbidity caused in large part by the population of carp inhabiting the pond. We

arranged to shock the pond in order to remove and relocate the desirable species leaving the carp behind. Unfortunately, the quantity of fish in the pond was grossly underestimated. The shocking occurred late on a Friday and resulted in thousands of pounds of fish floating to the surface when we had arranged for only a yield of 200 pounds of fish. That's how I got my nickname.

2. Who's your planning idol, and why?

I draw a lot of inspiration from Jane Jacobs author of The Death and Life of Great American Cities (1960). Jane did not have a formal education in architecture, urban planning or the like but by looking hard she could see what many trained people couldn't. I make all of my students read it.

Also, Timothy Beatley, whose concern for place, is another mentor.

3. Why do your students win so many awards?

I'm secretly very competitive but I don't always like to be the focus of attention. Instead, I much prefer being the behind the scenes support person and talking with my students. My students have pretty interesting ideas; together we come up with things that are pretty unique. I'm also good at filling out entry forms. I learned very early on not to be afraid to try.

4. What are you doing in your front yard right

now?

I have removed my grass and I have replaced it with a collection of native plants not in a prairie style but more in groupings. I look at it like an artists' pallet. My goal is to create swaths of color with groups of flowers. So far I've been pretty successful. My yard blooms from early spring to the first frost. My front yard is also getting me a bit of attention from my Burns Park neighbors.

My front yard is also my proving ground. I'll take risks in my own yard that I won't take on a project. I'll also try out plants to see how durable they are and whether they might be suitable for more institutional or commercial environments.

5. If you could have a night out on the town with Robert Kennedy or Gary Hack, who would it be?

To ask this question, my students really know me well. I might add Robert Fishman to that mix to make things even more nuanced. My choice would depend on what we were going to do. For example, Gary Hack's perspective on urban character and international trends in development would make him a great person with which to see a foreign film. But, if I were going to a Michael Moore documentary, I'd ask Robert Kennedy. Lastly, Robert Fishman would be great if I were heading to Borders and wanted to talk about obscure literature.

6. What is your favorite project and why?

Working for the Nature Museum in Chicago and creating the butterfly and prairie garden. The employees of the nature museum were highly educated entomologists and botanists. I learned a great deal from them in the way in which they viewed the plants and trying to figure out how to translate their learning objectives into an aesthetically pleasing environment. The experience was delightful made even more so because they've maintained it quite well.

7. What's your favorite FLO fact?



"Tell me the landscape in which you live, and I will tell who you are." - a quote from Professor Larson's Website by Ortega y Gassett

Frederick Law Olmsted. He really didn't know what he wanted to do with his life until he was 40. It was then when his eclectic mix of interests seemed to come together in landscape architecture.

8. What are three favorite places that you've lived, and why?

Phoenix, Arizona because it was an arid, forlorn desert environment that I'd never before experienced. I learned how fragile the environment was even though it appeared so rugged and brutal. I also learned not to take water for granted.

I also enjoyed living in Chicago. I really liked the politics and the remnants of the political machine still in evidence. And, of course, the urban-ness and the somewhat abrasive but upfront character of the people.

I would also include Owen Sound on Georgian Bay among my three favorite places. My mother and I lived there with my grandparents until I was 10 years old. Owen Sound embodied small town Canadian living where the hockey arena was the focus of life and where the people exhibited a wholesome optimism and interest in the world despite being geographic disconnected from it. I'm also proud that we elected an African-Canadian mayor.

9. Tell us something we don't know about Canada.

Recently a lot of auto manufacturers have begun to open plants in Oshawa, Canada because of the socialized healthcare system. Building a car in the United States costs \$1,500 more than in Canada because of the healthcare burden on private companies that is passed onto car buyers. So, by doing something that makes sense socially, Canadians are also finding that it makes sense economically.

Don's Going's on... Continued from page 3...

have it ready for the Executive Committee in the near future. We have also completed a data base of faculty research publications and we're working with the web team to integrate the information into our recruiting materials. I am also working with members of the Executive Committee – the space cadets -- on a new space allocation policy that will hopefully streamline our process and better balance usage in the future.

On the more personal agenda, I am working on an analysis of the potential impacts on the Gulf of Mexico "dead zone" from drill-rig discharge waters, refining forecasts of hypoxia in the Chesapeake Bay, and coediting a book with Joan Nassauer (with great support from Jenn Dowdell) titled "From the Corn Belt to the Gulf: Assessing Alternative Agricultural Futures". Finally, I hosted a Hooper Seminar at my home where "Murphy" did his best (unsuccessfully) to distract Beth Sparks-Jackson's presentation!

> **Groundhog Ode** By David J. Jude (SNRE Research Scientist)

Woodchuck sitting by the road Eating tail and wart of toad The day was hot in the steaming sun He sat like Budda and did not run Nibbling roadside veggie stew Bloating up, he grew and grew Then explosion, guts all over Eyes in trees, butt in clover Bugs elated, crows delighted Plants are happy, bacteria excited A mess afoul, so rancid rank No shadow seen on the road's west bank.



Cost-Benefit Analysis of a Grad-Student

By Deepak. S (RPB PHD)

Abstract: Grad students are little different. They have characteristics that clearly discern them from the rest of the population. Most of them are intriguing, interesting people. Interest and intrigue notwithstanding, how might we evaluate the value and impacts of graduate study? One way is to perform a cost-benefit analysis.

Methods and Results:

I developed five characteristics of a typical graduate student as follows:

- 1) Sleep Deprivation Amount of average sleeping time per day.
- 2) Geek Quotient Ever answered a question in class when 40 other people did not even understand the question?
 - 3) Space-Time Void Ever walked down the road wondering why that equation did not work or the model crashed..
- 4) Time spent in Dana or Ross Amount of time spent in school
- 5) Coffee-philic Dig coffee? How many cups a day?

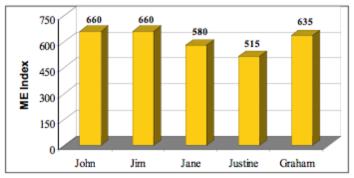
Experimental data was obtained from a select group of grad students in SNRE and ERB. Each student completed a simple questionnaire to rank their five characteristics using a scale of 1-5 (1 being 'do not embody the characteristic' and 5 being 'perfectly described by the characteristic'). For confidentiality I call the participants John, Jim, Jane, Justine and Graham. Experimental data is summarized in Table 1.

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Table 1:	Kankings	provided by	v the	individuals

	Characteristics	Weight	John	Jim	Jane	Justine	Graham
	Sleep deprivation	50	4	4	4	2	4
	Geckiness	45	4	4	4	4	4
	Space-Time Devoid	35	4	3	3	- 4	4
	Time spent in Dana and/or Ross	25	4	3	3	3	3
	Coffee-philicity	20	2	5	1	1	2

Weighting factors were used to assess societal impact because not all of these characteristic affect the society in the same way. Think of it like this, you drinking five to six toffee-nut lattes or hazelnut cappuccinos is not as worse as not getting enough sleep and being 'crankypants' with all your mates in school. Similarly spending all the time you are awake in Dana or Ross is not as bad as being a total 'Geek'. The weighting factors are also presented in Table 1. To calculate impact then I multiplied the individual rankings for each category with the weighting factor and added them up for each of individual to arrive at a final impact score, the 'ME Index'. For example, Jane's ME Index is 580 ([4x50] + [4x45])+ [3x35] + [3x25] + [1x20] = 580). The ME Index for John, Jim, Jane, Justine and Graham is presented in figure 1. John and Jim have the same ME Index, so they both exert the same impact on the society. Graham and Jane are a little lower and Justine is the lowest of all. She is a great student and she exerts the lowest cost impact on the society. The society does not suffer that much to keep her going.

Figure 1: ME Index of the individuals



Conclusion: So, what do you think? You think the societal impacts (costs) exerted by the 4 J(s) during getting a degree is lower than the benefit which they provide to the same society (if and) when they graduate? Is their benefit-cost ratio > 1? Of course, UM SNRE-ERB students ROCK! I am sure the societal benefits derived from them in the future are a trillion times more than the hard time they put us through now!

random thoughts...

Envisioning a Greener Dana Continued from 1...

things, it takes only a flip of your finger to make a difference.

Right now I imagine some of you are saying to yourselves, "Wait? Aren't we running on 100% wind and solar power anyway? What's the big deal? And aside from that, what does a few watts here or there really matter?" Our solar intake is scant, maybe just enough to power that behemoth output display in the commons on a sunny day. Concerning wind power - yes, it's wonderful that SNRE has contracted with American Wind to meet our energy demands with a clean, renewable source. As great as wind is, however, it is not without environmental costs, such as the embodied energy and resources invested in infrastructure and the number of deaths experienced by birds that haven't evolved to steer clear of the massive blades. And of course wind energy is not free, and more of our financial resources go to paying our energy bills. Less is still more.

Since that embryonic night, I've been making the rounds before I leave, sometimes taking an accomplice with me to liven things up. I admit it's not always an easy task when I'm burned out and sick of work; I'm not batting 1.000. But deep down, a part of me knows this is right, I feel it every time I tuck our Dana in for the night. It may be a small difference I'm making but one that is palpable, full of meaning. It is an opportunity to take a step toward becoming the person I long to be, a person who lives by his convictions and quietly models thoughtful environmental stewardship. Even my fears of looking like an oddball have been allayed. The few people who have asked what I was doing thought it was worthwhile and encouraged me. Often, I think we're more afraid to follow our gut than we ought to be. Sadly, this revelation didn't occur until my final semester. Much more remains to be done, which opens a door for you and me to take pride in our role as caretakers of the Dana building. The Dana building is not just a lifeless cluster of offices and classrooms; it is a precious space whose character is determined by how we relate to it. All of the nifty, green, gold-LEED-standard efficiency measures of the new Dana function best in concert with human efforts to conserve. Devices do not turn themselves off (at least not on their present settings), nor do printers use both sides unless we tell them to, and composting toilets won't do their dirty work unless we actually poop in them (or bring in our poop from home!)

There are still four beastly vending machines in the kitchen, and our classrooms and offices cry out for the life of a green plant or two. What would you do if you had the liberty of becoming Dana's green consultant?

I am advocating two new paths for SNErds. First, I propose an Adopt-Your-Dana program through which students, staff, and faculty can adopt a hallway, classroom, or other space. They might be responsible for promoting awareness of how to conserve resources in that particular niche of the building, for providing feedback on the location's actual environmental performance, or for greening the space with images of nature, be they living or captured in pictures and words. SNRE could provide tiny seed grants for adopters to make these desired improvements. A second suggestion is a green office and lab certification program, reminiscent of other ecolabeling schemes. Offices and labs would be evaluated on criteria such as reusing paper, unplugging unused appliances to avoid standby power losses, and growing bushels of organic vegetables hydroponically. Ok, that last one may be a bit of a stretch.

Ideally these suggestions will be taken up formally by student government. Over time, the culture of the Dana building could emerge as a shining example of sustainability for the U of M campus. I have been assuming that this vision of a greener Dana is common to us all, that we would not be here if it were otherwise. Whether your concern stems from the beauty and fascination of fellow creatures, from the fate of current and future generations of fellow humans, from spiritual reasons, or simply from the belief that a world without nature is bleak and inharmonious—whatever your passions are, we all find a common root in our deep love for the environment. Every day we have a chance to nurture that root, to grow closer in practice to the ideals we pursue. I hope you will reflect on your daily jaunts about the building and consider how you can exercise your vision of a greener Dana.

Gotta run - I've got a date with some very lovely fluorescents on the third floor.

Wanna help Justin out? Contact him at: Justin Schott: jbschott@umich.edu

random thoughts...

This is How I Feel Sometimes

Imagine yourself in the following circumstance: You have just awakened from sleep to find yourself on a tar paper raft floating away from shore. With you an the raft are a couple of hundred people most of whom seem completely oblivious to their situation. They are drinking beer, barbecuing ribs, fishing, or sleeping. You look at the rickety vessel and say to yourself, "My God, this thing is going to sink any second."

Miraculously, seconds go by and it is still afloat. You look around to see who's in charge. The only people you can find who appear to have any authority are some pompus-looking characters operating a gambling casino in the middle of the raft. In back of them stand heavily armed soldiers. You point out that raft appears dangerous. They inform you that it is the safest and most wonderful vessel ever constructed, and that if you persist in suggesting otherwise the guards will exercise their brand of persuasion on you. You go back away, smiling, and move to the edge of the raft. At this point, you're convinced that with those idiots at the helm, the raft can't last more than another minute or so.

A minute goes by and still the damn thing is afloat. You turn and gaze out to the water. You notice now that the raft is surrounded by many sound-looking canoes, each carrying a family of indigenous fishers. Men on the raft are systematically forcing people out of the canoes and onto the raft at gunpoint, and shooting holes in the bottoms of the canoes.

A few seconds elapse. You see and feel water lapping at your shoes, but amazingly enough the raft itself is still afloat, and nearly everyone is still busy eating, drinking, or gambling (indeed, the activity around the casio has heated up considerably.) You hear someone in the distance shouting about how the raft is about to sink. You rush in the direction of the voice only to see its source being tossed unceremoniously overboard. You decide to keep quiet, but think silently to yourself, "Jeez, this think can't last more than another couple of minutes! What the hell should I do?"

You notice a small group working to patch and reinforce one corner of the raft. This at least, is constructive behavior, so you join in. But it's not long before you realize that the only materials available to do the patching are ones cannibalized from elsewhere on the raft. Even though the people you're working with clearly have the best of intentions and are making some noticeable improvements to the last few square feet on which the've worked, there is simply no way they can render the entire vessel "sustainable," given its size, the amount of time required, and the limited availability of basic materials. You think to yourself that there must be some btter solution, but can't quite focus on one.

As you sit there, you hope and pray that this is all some nightmare from which you will soon awake, or that there is some means of escape-for everyone that you haven't seen yet.

Adopted from <u>Power Down</u> by Richard Heinberg

Working on setting up fall classes? Not sure which ones to take? To get the skinny on what's in and what's out, check out the Student Gov C-Tools site to see ranking of all classes in Ann Arbor.

Doug's Random Ramblings

So a couple of nights ago my brain went a rambling. It does that from time to time as anybody who knows me is aware. Anyway, I had just finished reading this article about acidification of the worlds oceans. Needless to say, but this is not a good thing.

Anyway, back to what I originally wanted to talk about. So my brain went a rambling and I began to think about how many people we have on the planet. Now as any observant 4 year old knows, we've got a lot of people here. In China and India, they have even more, but that is beside the point. Basically, there are scientifically more people alive today than have lived throughout the rest of the history of the world. Now, that's really a lot of people. Again, not good.

But, back to what I was thinking about. So, I got to thinking, "Damn, that's a lot of people." And I thought, "Well, there at least need to be some smart ones in the lot." And then I remembered that statistic about more people alive today, and I actually started to feel a little better. I was still upset, because my mind was still rambling and I wasn't falling asleep, but I did feel better. And that wasn't bad.

But you ask, why did I feel better? Because if there are more people alive today than the entirety of human history, statically there need to be at least a few Newtons, Einsteins, and Franklins. In short, while we may lack the will to solve many of our problems, we surely have the brainpower. And that, my friends, is defiantly a good thing.

The key is lighting the way. Obviously we can all play a role in bettering the future, but I feel our most powerful role could be to elucidating the challenges we face to those darn Edisons

WHATS GO'IN ON?

Deans Speaker Series March-April 2006

Matthew Coolidge

Founder and Director of Programming Center for Land Use Interpretation (CLUI) March 16, 2006 Michigan Theater 5:00 PM Co-sponsored by the School of Art and Design, Penny W. Stamps Distinguished Lecture Series

"Considering Anthropogeomorphology: Programs and Projects of the Center for Land Use Interpretation"

Matthew Coolidge has lectured widely on contemporary landscape matters and studied human-induced changes to landscape since founding CLUI in 1994. He has authored many books, including The Nevada Test Site: a Guide to the Nation's Nuclear Proving Ground. During his environmental science and contemporary art studies at Boston University, Coolidge investigated land use issues.



Jonathan Patz, MD, MPHDirector- Global Environmental Health Initiative
University of Wisconsin-Madison
April 3, 2006
Dana Building
Room 1040
5:00 PCo-sponsored by the Cooperative Institute for Limnology

and Ecosystems Research and the Great Lakes Environmental Research Laboratory

"Implications of Global Climate Change on Human Health"

Jonathan Patz, MD, MPH is Associate Professor of Environmental Health and Population Health Sciences at the University of Wisconsin-Madison, where he directs a university-wide initiative on Global Environmental Health. Patz has served as co-chair for the health sector expert panel of the US National Assessment on Climate Variability and Change, convening lead author for the United Nations/World Bank Millennium Ecosystem Assessment, and lead author on several United Nations Intergovernmental Panel on Climate Change reports and World Health Organization monographs on climate change.



Andrew C. Revkin Environment Reporter-The New York Times April 10, 2006 Hale Auditorium 5:30 PM Co-sponsored by the Knight Wallace Fellows Program at Michigan

"The Daily Planet: A Journalist's Search for Sustainability, from the Amazon to the Arctic"

Andrew Revkin, an award-winning author and journalist, has spent more than 20 years covering subjects ranging from murder in the Amazon to global change; from 9/11 to the Indian Ocean tsunami. Since 1995, he has been an environment reporter for The New York Times, first covering regional issues and, starting He was the first Times reporter to file stories and photos from the Sarah's Shout-out...

Welcome back, all you fun-loving environmentalists!

Just a couple of fun updates from your.student.gov:

Remember when the biggest threat to the ozone was bad bangs? Relive the good old days, and help us celebrate the return of a classic: The SNRE 80s PARTY is back - brought to you by the Erb Community Committee & SNRE Student Gov. So mark your calendars for this Saturday, March 11, 9pm. Located at 436 S. First St, a couple blocks down from the Blind Pig. Beverages and food provided. Shoulderpads and oversized sweaters mandatory.

Graduating folk, here's your shot at immortality: submit graduation speeches (approx 5 minutes in length) to Sarah (sjhines) by this Sunday. The author of the "chosen speech" (to be determined by OAP and Student Gov) will read his/her speech at SNRE graduation in April.

Stay tuned for upcoming details regarding SNRE Happy Hour & Visit Day, as well as Natural Science Core Course review!

Got an event in April? Send it to snrenewsletter@umich. _____edu

in 2000, global change. North Pole.

WHERE IN THE WORLD?



The written history of this country began in the 7th century, when Arabs established trading posts along the northwest coast. Immediately preceding the fall of France in the Second World War, Germany initiated planning to forcibly deport all of Europe's Jews to the country. It is also home to some of the broadest biodiversity on earth. Finally, the country's economy took a brief downturn during the 1980s when Coca-Cola, the world's leading purchaser of vanilla, switched to the New Coke formula that contained synthetic vanillin.

First response with the correct answer will get a free drink at the next happy hour. Send submissions to snre.newsletter@umich.edu

Best Bush qutoes on the Envrionment

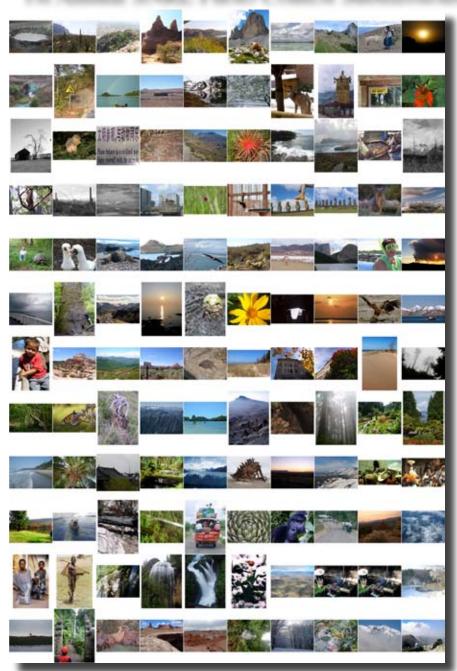
"It isn't pollution that's harming the environment. It's the impurities in our air and water that are doing it."

"I believe that human being and fish can co-exist."

"I believe we are on an irre versible trend toward more freedom and democracy -- but that could change."*

*This quote is not about the environment, but it was too hard to pass up.

1st Annual SNRE Photo Contest Submissions



What to do from here....

So the photos are in, and now its time to check them out. The photos are divided into two groups, one of people and animals, and one of landscapes. So go to http://web.mac.com/michiganmac/ to checkout the pictures. A link to vote will be sent later in the week. Thanks for the turnout, your.student.

gov