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(a few tons) are small compared to some of the facilities (thousands of tons), but every little bit helps keep the air cleaner. The Iowa Environmental Law Society set a goal this semester to raise money to bid this March. In recent years the price at the auction fluctuated near the \$200 mark, but last year (2005) the clearing price rose to \$690. When the ELS arranged to make its bid this March the going price was near \$900! Given this high price, the ELS opted to bid \$425 for one ton in the 7-year advance auction, saving our extra money for next year. (Since we have to go through the student organization business office, we are forced to set our bid price early, increasing the risk that the market will change again before the bidding.) We just found out that our bid made it! You can see our name on the EPA website as owners of a one ton SO₂ allowance! This entire process was a great learning experience. Thanks to all of you who helped our fundraising efforts. We are really excited about this program and hope that the law school community continues to support our efforts in this area.

A lot of the factual information in this article came from the EPA website. Please go to http://www.epa.gov/ airmarkets/trading/index.html and follow the links to follow up on anything you read in this article. Additionally, please feel free to contact harmony-mappes@uiowa.edu with questions and comments.

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Maguoketa Caves State Park

10970 98th St.; Maguoketa, IA 52060 Email: maquoketa@dnr.state.ia.us Phone: 563.652.5833

In the mood for spelunking? If you are up for a bit of a drive, Maquoketa Caves State Park has caves, picnic sites, six miles of trails, and twenty-nine campsites. The Interpretive Center offers information about the geology of the cave formations, park history, and more. The Interpretive Center is open on weekends during the summer, or by arrangement with the park office.

City Park

200 East Park Road; Iowa City, IA 52240 Parks Phone: 319.356.5107 Recreation Division Phone: 319.356.5100

City Park offers shelters, cooking grills, multi-use fields, tennis courts, basketball courts, sand volleyball, two ponds, jogging paths, bike trail, a boat ramp, canoe dock, an outdoor pool (open Memorial Day to labor Day), and lots of open grassy space, perfect for falling asleep in the sun while "studying."

Trail System

Throughout the area

Perfect for walking, running, or bicycling, Iowa City, Coralville, and North Liberty offer a comprehensive paved trail system that connects the three communities.

by: Christine Ralston



ELS Board Members:

Harmony Mappes, Co-President Beth Chesterman, Co-President Ioel Boon. Treasurer Kelly Hanker, Philanthropy Chair Christine Ralston, Membership Chair E. J. Flynn, Activities Chair

1L Positions:

Sandy Sears, Newsletter Editor Chris Moseng, Webmaster and Newsletter Design Christine Eichinger, Recycling Coordinator



Sulfur Dioxide. Sulfur dioxide (SO₂) is a sulfur atom bound to two oxygen atoms. These three little atoms combine to form a powerful molecule. Sulfur dioxide is typically released as a gas when sulfur-containing fuels (such as coal) are burned. Some sources of SO₂ emissions include metal processing facilities, cement manufacturing facilities, petroleum refineries, locomotives and large ships. After being emitted from these facilities, the sulfur dioxide dissolves in the water vapor where it becomes an acid and can interact with other molecules to produce harmful effects.

Harmful Effects. Sulfur dioxide can cause respiratory problems, particularly to children, the elderly, and individuals with asthma. Some of these are short term complications, while others have long-lasting effects on individuals who have been exposed to the gas in higher doses. The gas can also interact with other molecules forming particulates which are also associated with respiratory illnesses. Sulfur dioxide is a major factor in acid rain which can harm plants, animals, soil and water resources, as well as cause damage to man-made structures, such as buildings and statues. Additionally, sulfur dioxide decreases visibility in the atmosphere, particularly in national parks. The pollutant is also capable of traveling over long distances, making the negative effects of the SO₂ a problem even far away from the point of emission.

Government & EPA Efforts. Under the Clean Air Act, the federal government set up a program to reduce acid rain by reducing sulfur dioxide emissions. Existing major industrial facilities were limited to a maximum amount of SO₂ that each facility could emit. The act also created a market system of "allowances" for the pollutant. These are marketable "rights" to pollute SO₂. These allowances serve as an overall total "cap" on the amount of sulfur dioxide that can be emitted. Facilities needing to emit SO_2 in their operations must buy the necessary allowances. The allowances operate in the market, just as any other limited resource. This creates an incentive for facilities to develop and install pollution control technologies so the facility can avoid the need to buy allowances and sell any surplus

ELS SUCCESSFULLY BIDS ON POLLUTION ALLOWANCES



by: Harmony Mappes and Joel Boon

allowances. At some point it will be more cost effective to implement pollution control devices and sell allowances rather than use all of them. New facilities entering the market are not given any allowances to begin with, but must buy into the market if they need to emit SO_2 . No matter what an individual facility emits, the total cap will not be exceeded. Additional Clean Air Act restrictions prevent a facility from emitting too much SO₂ in one geographic area, regardless of the number of allowances the facility holds.

How this works. The EPA operates this "allowance" system under its "Acid Rain Program." One way to purchase the allowances is at the annual auction the EPA holds each March, where allowances go to the highest bidder(s) until no more are available that year. (If your bid does not make it, you get your money back.) There are two types of allowances sold at the auction: the "spot" auction, which are for allowances first usable the year of purchase, and the "7-year advance" auction, which are for allowances first usable seven years out. Allowances are bought and sold in tons.

ELSGoal. Many environmental groups bid on allowances at the auction. This removes them from the market, effectively lowering the cap even more, reducing emissions and creating more • SUVs clean air. Organizations such as the Acid Rain Retirement Fund do participate, as numerous environmental law societies and organizations across the country. These purchases

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- North Liberty
- Book Review

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ELS MEMBERS IN THE COMMUNITY

As the mayor of North Liberty, Iowa, I'm in a unique position to enhance a local appreciation of environmental concerns and promote an application of environmental innovations.

While serving on the ICCSD school board, we passed a \$39 million bond referendum for the construction of three new schools and additions to seven existing schools. Shortly thereafter, the board invested in cutting-edge environmental innovations for the Elizabeth Tate High School, Van Allen Elementary School and North Central Junior High School. Consequently, Van Allen won designation as the first ever "Leadership in Energy and Environmental Design (LEED)" public school building in Iowa.

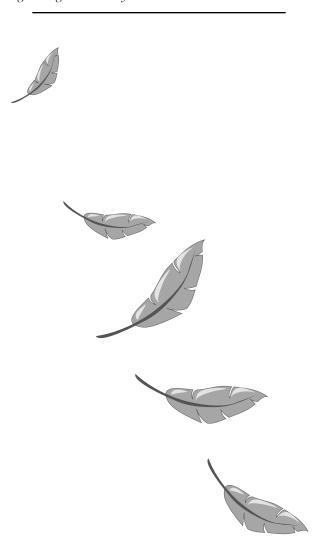
LEED recognizes achievements and promotes state-ofthe-art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. All three new schools feature geothermal heating and cooling and daylighting, a process involving strategically-placed windows that reduce glare as well as both heat loss and gain. Now in their first full year of operation, Van Allen and Elizabeth Tate will use only 30-40% of the energy that other recently-built schools of similar size in Iowa typically use.

From the mayor's seat I have begun to work with other governmental entities, our city staff and city council on the following additional "green" initiatives:

• Wind turbine placement on the North Liberty wastewater treatment plant site to generate wind power. Since the treatment plant contiguous with the Van Allen boundary we will be able to make use of the anemometer study that the ICCSD completed in 2003 in conjunction with the physics department of Cornell College in Mt. Vernon. There is sufficient wind to allow construction of a \$900,000 25-30 year wind turbine that could pay for itself in 12-15 years.

• Transit connections to Coralville and Iowa City and a likely work vanpool to Cedar Rapids will come to North Liberty when the new fiscal year begins July 1. As a city councilor I led a transit task force. We learned that between Iowa City transit, UI Cambus, Coralville transit and Five Seasons (Cedar Rapids) transit, there are 6.2 million fixed route transit rides within fifteen miles of North Liberty, but none into or out of North Liberty, despite our distance of only fifteen miles from those four transit systems. • Green noise break. As the land in western North Liberty develops and housing begins to abut the eastern edge of I-380, we are moving to incorporate into developers' agreements the mandate to plant a "green" noise break of evergreen trees. This should help with abatement of noise pollution. While Des Moines and Minneapolis have recently spent hundreds of thousands to construct prefabricated noise breaks, North Liberty will join an increasing number of communities who will accomplish this by means of carefully planted evergreen trees.

Dave Franker, 2L, is a native of Sioux City, IA. Dave taught German in the Iowa City area community for nearly two decades, including several years as a teaching assistant at the University of Iowa. From 2001-2004 Dave was a member of the Iowa City Community School District school board (which also includes Coralville, Hills and North Liberty). He delayed law school entrance one year to make a run for the United States Congress, losing to long-time Rep. Jim Leach for the 2nd District seat in Iowa in November 2004. In January 2005, Dave was appointed to serve the final year of an unexpired North Liberty City Council term. In November 2005, Dave was elected, as a write-in candidate, to a four year term as mayor of North Liberty, the fastest growing community in Iowa.



RENEWABLE ENERGY

Once thought strictly an environmental issue, renewable energy has become an issue that fuses the traditionally irreconcilable interests of Market, National Security, and Environment.

Renewable energy seems to be the buzzword these days. It has become so politically acceptable that most elected officials are at least interested, if not completely invested, in the idea of making renewable energy a real portion of the United States energy platform.

Their talk has been followed with substance, due in large part to a substantial push at the state level. In 2005, Iowa Governor Tom Vilsack passed Executive Order 41, which requires Iowa's utility companies to obtain 10% of their electricity from renewable sources by 2010, and 20% by 2020.¹ Most notable, however, is the fact that Iowa joined 24 other states that have enacted similar requirements.²

While the states have taken the lead, the federal government has also made advances in promoting renewable energy. Perhaps most significant is the goal that 10% of the nation's electricity be from renewable sources by 2020.³ While this is considerably less of a push than the states themselves have established, it still marks at least some progress.

The push for renewable energy serves the interests of many political constituencies. Those concerned about national security advocate for energy diversification because they believe it will strengthen America's position in relation to oil-producing nations. Environmentalists advocate for renewable energy because, unlike fossil fuel, its use emits no carbon dioxide into the atmosphere, and therefore does not contribute to global warming.⁴ Others back renewable energy because of the positive effects it is likely to have on America's economy: it promises both the potential to produce quality jobs as well as the potential to decrease the cost of fossil fuel by reducing demand. There are many benefits to an America that utilizes renewable energy in a significant way, but it is the fact that persons across the political spectrum agree on this fact that makes the push for renewable energy unique.

So, if renewable energy is the answer, what's the hold up? There are two hurdles that prevent renewable energy from making in-roads into the national energy platform. The first hurdle is the cost. Renewable energy costs more than fossil fuel. But it's worth noting that the price for renewable energy has dropped significantly over the past 10 years. In fact, energy providers offer options for consumers to pay a small additional cost per month to be powered by renewables. For example, Alliant Energy offers a program called "Second Nature" where customers may pay \$3, \$6, or \$12 more per month on their electricity bill in order to be powered by 25%, 50%, or 100% renewable energy.⁵ While this is a great option for some consumers, the bottom line still prevents some families from taking advantage of this unique program.

The second hurdle, which to a large extent causes the first, is that the renewable industry needs both a better infrastructure and more competent technology. Renewable energy's lack of infrastructure as an industry will delay their integration into America's market. Unlike coal, supported by large-scale infrastructure since World War II, the merits and technologies of renewables are just now being unveiled.⁶ As a result, production is more expensive than its coal counterparts.⁷

Moreover, some renewable energy plants depend on location to a much greater extent than their fossil fuel counterparts. Wind turbines, for example, require an average wind speed of 14 mph or higher to be efficient; this and other considerations must be taken into account when locating a site for a renewable energy plant.⁸ If the government or the private market can create solutions to these infrastructural hurdles, renewable energy will become more efficient. Increased efficiency will decrease market price, which in turn will increase demand and thereby reveal the benefits of renewable energy to all.

Hurdles aside, there is good reason to both push for and to expect an American economy that incorporates at least a portion of renewable energy. Yet in the midst of America's optimism, proponents of renewable energy on each side of the political spectrum give pause, confused by the seeming paradox that renewable energy creates: could it be that the next great environmentalist will be the next great capitalist?

by: Adam Zenor

7. Id

^{1.} http://www.nrel.gov/analysis/sren/sren41.html

^{2.} http://www.ucsusa.org/clean_energy/. UCS projects the 24 states that have enacted renewable electricity standards or renewable energy funds will increase their renewable energy capacity 32,200 MW by 2017—a 238 percent increase over 1997 levels. This increase will provide enough electricity for more than 20 million typical U.S. homes and reduce annual carbon dioxide emissions—the main heat-trapping gas causing global warming—by 77.5 million metric tons by 2017. This level of carbon dioxide reduction is equivalent to taking 11.5 million cars off the road or planting 18.6 million acres of trees (an area approximately the size of West Virginia).

^{3.} http://www.energy.gov/2459.htm

^{4.} http://www.renewableenergy.com

^{5.} http://www.alliantenergy.com/docs/groups/public/documents/pub/p013103.hcsp

^{6.} http://www.alliantenergy.com/docs/groups/public/documents/pub/p014410.hcsp

^{8.} http://www.eere.energy.gov/RE/wind.html

SEARCHING FOR UTILITY IN "SPORT UTILITY" by: E.J. Flynn

We've all seen the promotions depicting the chic, trendy "soccer parent" effortlessly transporting seven well-behaved children over rugged terrain, past wild animals, through a gauntlet of construction hazards and overgrown brush, all while listening to Beethoven and sipping a favorite beverage from a leather cup holder. In essence, these cars are sold on three propositions: versatility, luxury, and safety.

However, potential versatility, perhaps the S.U.V.'s largest selling point, is rarely utilized. In fact only 5 percent of S.U.V.s are ever taken "off road."¹ In terms of luxury, most of these vehicles are built on frames originally intended to support trucks and other truly utilitarian vehicles.² The government even classifies these vehicles as "light trucks" for purposes of enforcing fuel efficiency.³ While a frame built primarily for commercial carrying capacity can effectively haul a load of rocks, it cannot offer the consistently smooth ride of a luxury sedan, particularly over time, regardless of its cost. The laws of physics mandate that larger moving parts, which weigh three times more, will require more maintenance; each part, including brakes, wheels, axles, and engine, will deteriorate exponentially faster.

Thus, even if a new S.U.V. ran as smoothly as a comparable luxury sedan of the same year, it would inevitably deteriorate at a much faster rate, given the same usage conditions. If not immediately fixed, the "luxury" of the S.U.V. experience diminishes with each pothole, grinding gear, and rumbling brake rotor. In terms of safety, while the passenger often feels more insulated, this security is illusory, as the deluge of Ford Explorer news stories coining the term "Exploder" illustrate.

In the last 20 years, S.U.V. and "light truck" sales have grown from 2 percent to 25 percent of the all new cars sold in the U.S., pumping approximately 237 million tons of CO2 into the air each year.⁴ America's cars and light trucks produce more CO2 than all but four countries in the world.⁵ A recent study, for example, has revealed that, over 124,000 miles of usage, a Ford Excursion (13 mpg) will emit 134 tons of CO2 into the atmosphere; a Jeep Grand Cherokee (18 mpg), 96 tons; a Ford Taurus (23 mpg), 74 tons; a Honda Civic (36 mpg), 48 tons; and a Honda Insight (65 mpg), 27 tons.⁶

Fortunately, by most estimates, consumers worldwide are now purchasing fewer S.U.V.s than one year ago. General Motors, for example, posted net losses of \$8.6 billion⁷ as U.S. large S.U.V. sales fell 18.7 percent in 2005.⁸

The interesting question, however, remains as to whether this shift is solely a function of rising gas prices or a function of a genuine cultural change, or both. Despite spending over \$300 per month on gas and citing numerous "quality problems" one family, for example, simply traded in its Hummer H2 for a more-efficient S.U.V., a Honda Element.9 Apparently, they are not alone. Of those S.U.V. purchasers that responded to a recent survey, 47 percent reported buying another S.U.V. as their next car.¹⁰ Sales of the Mercedes M-Class S.U.V., for example, rose 15 percent during 2005¹¹ and at least one source reports that S.U.V. sales rose 5.7 percent in February, 2006.¹² In light of this trend, Mercedes plans its new full-size G-Class for Spring 2006. Similarly, Lexus will develop a new luxury LX sport utility and a new Navigator luxury S.U.V. is scheduled to be available within weeks.13

"It's been clear to me that the world is changing," noted Bill Ford Jr., CEO of Ford Motor Company.¹⁴ The question, however, is whether this change is purely an economic reaction to gas prices or a cultural reaction that has been building in the face of unprecedented and needless consumption of dwindling resources. Given the faith of several major companies in the former explanation, demonstrated by yet another line of larger S.U.V.'s, one might think the change is purely about temporary individual necessity. On the other hand, these same companies have developed and sold a considerable number of hybrid S.U.V.s.¹⁵ This corporate attempt to hedge sales appears to reflect the current uncertainty among consumers. Fortunately, as the hybrid versions improve, the economic and social considerations of consumers will both be served.

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Global Warming and Energy, available at: http://www.sierraclub.org/

3. Id.

 Micheline Maynard, Trading the Hummer for a Honda, NEW YORK TIMES, Mar. 18, 2006, available at: http://www.nytimes.com/2006/03/18/ business/18trucks.html.

globalwarming/suvreport/suvthreat.asp.

^{4.} The S.U.V. Info Link, available at: http://www.suv.org/environ.html.

Id.
Id.

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Gina Chon, Companies Hone S.U.V. Sales Pitches to Focus on Roominess for Families, THE WALL STREET JOURNAL, Mar. 6, 2006, available at: http://www.mailtribune.com/archive/ 2006/0306/biz/stories/03biz.htm.

avaiiable at: htt Id.

^{10.} Id. 11. Id.

Frank Giovinazzi, S.U.V. Sales Up 5.7 Percent in February, 2006, CAR BUYER'S NOTEBOOK, Mar. 5, 2006, available at: http://www.carbuyersnotebook.com/archives/ 2006/03/suv_sales_up_57.htm.

^{13.} Id.

^{14.} Johnathan Fahey, To S.U.V. or Not to S.U.V., FORBES, Apr. 20, 2005, available at:

http://www.forbes.com/manufacturing/2005/04/20/cz_jf_0420ford.html.

^{15.} Id.

BOOK REVIEW Planetwalker: How to Change Your World One Step at a Time, by John Francis, Ph.D.

Planetwalker is a personal tale about John Francis's journey. After the 1971 oil spill in San Francisco Bay, John decided to stop using motorized transportation. A few years later he also stopped speaking-a decision that lasted the next seventeen years. John then set a goal to walk and sail across the globe. This book covers his initial walking adventures and his journey from California out east. As John walks through towns, along interstates, across a desert, and through Yellowstone, he communicates through bits of notes, improvised sign language, and his ever present companion-a banjo. He learns a lot along the way-from the people and experiences, as well as through more formal education. John completes three degrees on his journey-all without speaking. Eventually he helps draft oil spill regulations while working for the Coast Guard. John's story is one of an environmentalist determined to make a difference in his own way, learning and teaching through his silence and his walking. His acknowledgment of the connection between the environmental crisis and the human spirit is a strong but subtle theme throughout the book.

Planetwalker is not what I would describe as a pageturner. But rather, like a long walk, one feels the urge to keep going—one step—one page—at a time. Also like a good walk, at the end of the book you are left with many thoughts and images upon which to reflect. Anyone who identifies with environmentalism, or the idea of a pilgrimage, would likely enjoy *Planetwalker*.

This book is difficult to find in book stores, but can be easily ordered online at www.planetwalk.org.

by: Harmony Mappes

Outdoor Activities in the Area

It's a beautiful day and you don't feel like outlining? Here are several local outdoor activities that will be good for your body and your soul, if not your GPA...

Lake Macbride State Park

3525 Highway 382 NE; Solon, IA 52333 Email: lake_macbride@dnr.state.ia.us Phone: 319.624.2200 Boat Rentals 319.624.2315

Lake Macbride State Park has four picnic shelters, two campgrounds, and five miles of scenic trails upon which you can walk, run, or bike. The lake offers swimming, fishing, and boating opportunities.

Coralville Reservoir

Office: 2850 Prairie Du Chien Rd NE Iowa City, IA 52240-7820 Phone: 319.338.3543 x 6300

The Coralville Reservoir offers hiking trails, swimming, and boating. The 1993 flood revealed the Devonian Fossil Gorge, where you can look at fossils from the Devonian era. Sugar Bottom Mountain Bike Trail is also at the reservoir. The trail has ten miles of one way, off-road, single-track trail for riders of all skill levels. Trails are marked according to difficulty levels. Sugar Bottom Trail is closed for 24 hours after significant rainfall to minimize erosion.

F.W. Kent Park

2048 Hwy 6 NW; Oxford, Iowa 52322 Picnic Shelter Reservations: 319.645.2315 Naturalist Phone: 319.645.1011

F.W. Kent Park is a 1,082 acre park 3 miles west of Tiffin on Highway 6. The park has a 27 acre lake, 9.5 miles of hiking trails, seven historic country road bridges, six open shelters for picnics, a campground, and a beach. There is also a Conservation Education Center at the park. You can contact the naturalist to schedule conservation-related programs at the Center.

